



Liberty Mutual Surety
Attention: LMS Claims
PO Box 34526
Seattle, WA 98124
Phone: (206) 473-6210
Fax: (866) 548-6873
Email: HOSCL@libertymutual.com
www.LibertyMutualSuretyClaims.com

Liberty Mutual Insurance Company BID OR PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we, E T MacKenzie Company of 8197 Jackson Road Ann Arbor MI 48103 (hereinafter called the Principal) as Principal, and Liberty Mutual Insurance Company, with its principal office in the City of Boston, MA (hereinafter called the Surety), as Surety, are held and firmly bound unto City of Ann Arbor, 301 E Huron Street, Ann Arbor, MI 48104 (hereinafter called the Obligee) in the penal sum of Five Percent of Bid Dollars (5% of Bid) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns.

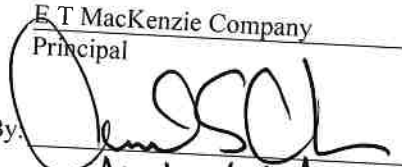
THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas, the Principal has submitted the accompanying bid dated 3/14/2022 for Stadium/Washtenaw Area Utility Improvements, RFP#22-15.

NOW, THEREFORE, if the Obligee shall make any award according to the terms of said bid and the Principal shall enter into a contract with said Obligee in accordance with the terms of said bid and give bond for the faithful performance thereof within the time specified; or if no time is specified within thirty days after the date of said award; or if the Principal shall, in the case of failure so to do, indemnify the Obligee against any loss the Obligee may suffer directly arising by reason of such failure, not exceeding the penalty of this bond, then this obligation shall be null and void; otherwise to remain in full force and virtue.

Signed, sealed and dated: 3/14/2022

E T MacKenzie Company
Principal

By:


President
Michael S. Marké



Liberty Mutual Insurance Company

By:


Marcia J Miller
(Attorney-in-fact)



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8207319-013057

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Cloyd W. Barnes; Curtis M. Peterson; David G. Chapman; Marcia J. Miller; Nathan G. Chapman; Robert G. Chapman; Ryan A. Peterson

all of the city of Lansing state of MI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 10th day of February, 2022.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 10th day of February, 2022 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 14th day of March, 2022.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.



Equal Opportunity Employer

E.T. MacKenzie Company - Ann Arbor

One of The MacKenzie Companies

8197 Jackson Road
Ann Arbor, MI 48103
Phone: (734) 761.5050
www.mackenzieco.com



RFP# 22-15 STADIUM / WASHTENAW AREA UTILITY IMPROVEMENTS

March 14th, 2022

E.T. MacKenzie Company
8197 Jackson Road
Ann Arbor, MI 48103
(734) 761.5050 (P)



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In addition, please find the attached exhibits as discussed in the RFP narrative, as necessary:

1. EXHIBIT A.1 Work Experience and Qualifications of Key Personnel
2. EXHIBIT A.2 Reference Letters, Current and Completed Projects
3. EXHIBIT A.3 Quality Control Program Participation
4. EXHIBIT A.4 Major Subcontractor Utilization
5. EXHIBIT B.1 OSHA Approved Safety Program
6. EXHIBIT B.2 EMR Documentation
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9. EXHIBIT B.5 Anticipated Major Subcontractor Safety Documentation
10. EXHIBIT C.2 Davis Bacon Wage Decision
11. EXHIBIT D.2 Equal Opportunity Program and Employee Handbook
12. EXHIBIT D.3 Affirmative Action Program



Section A Qualifications, Experience and Accountability

E.T. MacKenzie Company was founded in 1982 in Grand Ledge, Michigan. It has now grown to include offices in Lansing and Ann Arbor. Having several different entities under the MacKenzie Company umbrella provides us with a broad spectrum of knowledge, resources and experience. We have been recognized locally and nationally for innovation, project designs, safety records, and our ability to perform within budget and on schedule.

E.T. MacKenzie Company specializes in large and small scale earthwork operations, public utility construction, road construction, landfill construction, wastewater treatment facility construction, rehabilitation of sewerage infrastructure, site demolition, material recycling, soil and groundwater remediation, environmental consulting, site concrete construction, landscaping and bridge construction. Our large and broad equipment inventory allows us to perform deep and difficult utility construction that most other contractors are not equipped to handle. All of these services are offered throughout our regional divisions and are self-performed.

The Ann Arbor Division of E.T. MacKenzie Company has been in operation since 1992 and has successfully completed many project within the City limits; both private and public in nature. We strive to complete all projects on time and within budget.

Providing comprehensive and regional services gives E.T. MacKenzie more control to reach a profitable and timely outcome for the owner. Benefits include:

- Expedited response and dispatch
- Value engineering
- Risk management
- Regional familiarity
- Aggressive scheduling
- Minimized work disruptions

E.T. MacKenzie Company has a distinct advantage to most other contractors because of our ability to self-perform a large quantity of work scopes. Our management structure includes one lead project manager that will draw upon the resources of the entirety of E.T. MacKenzie Company, allowing our specialized project managers and superintendents to provide timely and effective implementation of the project schedule and goals. This system of management provides the owner a singular contact for the project while allowing E.T. MacKenzie to utilize our vast resources and expertise at all times.

E.T. MacKenzie Company is a Michigan Corporation, licensed by and in the State of Michigan.



A.1 Qualifications and Experience

Please find attached, as EXHIBIT A.1, the work experience of key management and supervisory personnel.

A.2 References

Please find attached, as EXHIBIT A.2, reference materials, current projects and completed projects within the last five years

A.3 Evidence of Quality Assurance Program

As formal Quality Assurance (QA) programs are not required by specification for civil construction projects, including in the City of Ann Arbor (with the exception of specific DOT Quality Control (QC) requirements as discussed below), E.T. MacKenzie Company does not have a standardized QA program.

The nature of underground utility construction is such that are too many site specific variables related to the installation process to apply a standardized or uniform procedure. To attempt to do so would, in many cases, result in the potential of “putting a square peg in a round hole” leading to inferior workmanship and quality.

In lieu of a standardized procedure, our supervisors and foremen are trained to identify site and project specific issues that require additional care and attention. Supervisorial personnel constantly review the project site conditions and progress in such a manner that allows us to plan for and address potential complications and quality issues before they are encountered.

All supervisorial personnel review and follow the local municipal standards for construction and technical specifications to insure that all installations are made as required. All supervisorial personnel work with the designated Municipal Inspector to maintain quality standards as required by specification. All supervisorial personnel assigned to the City of Ann Arbor projects keep a copy of the City Standard Specifications for Construction on the project site at all times to allow for constant consultation.

On specific DOT projects, as it relates to hot mix asphalt (HMA) and Portland cement concrete installations (PCC), QC programs may be required by specification. E.T. MacKenzie Company has participated in such programs as required. Please find an example of one such E.T. MacKenzie Company QC programs attached as EXHIBIT A.3.

A.4 Major Subcontractor Utilization

Please find attached, as EXHIBIT A.4, our anticipated major subcontractor utilization.



Section B Workplace Safety

E.T. MacKenzie Company performs regular safety meetings conducted by our staff Safety Director as he visits and inspects jobsites on a regular basis. We have safety training films to train on topics such as excavation, overhead and underground utilities, lifting, personal protective equipment, etc. Offsite training is also held for CPR / first aid, confined space, OSHA 10 hour, Hazwoper and many other categories.

Supervisors hold weekly tool box talks with their site crews, discussing various valuable safety standards. The majority of our training is documented with individual employee certifications, while some training, such as tool box talks, is documented by an employee sign-off sheet.

All employees are provided with personal protective equipment and safety materials. All employees are required to read and acknowledge the E.T. MacKenzie Company Safety Program prior to the commencement of any work.

B.1 Safety Training Program

Please find attached, as EXHIBIT B.1, our OSHA approved safety program.

B.2 EMR Documentation

Please find attached, as EXHIBIT B.2, our EMR documentation.

B.3 Craft Safety Training Documentation

Please find attached, as EXHIBIT B.3, our Craft Employee safety training documentation.

B.4 Safety Record

Please find attached, as EXHIBIT B.4, our safety record documentation. Please find attached, as EXHIBIT B.5, our anticipated major subcontractor safety documentation.



Section C Workforce Development

C.1 Master / Journeyperson / Apprentice Ratio

Master, journeyperson and apprentices are not utilized by E.T. MacKenzie Company, as we are a merit based employer.

C.2 Pay Rate Documentation

As required with City of Ann Arbor capital projects, we compensate our employees at the same Davis-Bacon wage scale that ALL contractors are required to utilize. Please find attached, as EXHIBIT C.2, the required wage decision that E.T. MacKenzie Company will utilize for this project per contract specifications.

C.3 Registered Apprenticeship Program Documentation

E.T. MacKenzie does not participate in a Registered Apprenticeship Program, as we are a merit based employer.

C.4 Skill Assessment Documentation

All employees participate in regular performance reviews, in class training and on the job training by their immediate foreperson, superintendent, supervisor and upper management to maintain a high level of efficiency on a variety of subjects. Regular equipment training, operation and safety meetings are organized and attended by all field employees. Additional support and supplemental training is provided by qualified personnel on a case by case basis to insure that all employees are working in a safe and productive manner.



Section D Social Equity and Sustainability

D.1 Local Workforce Utilization

City of Ann Arbor: 1 EACH (0.5%), Washtenaw County: 3 EACH (2%)

D.2 Equal Opportunity Program Documentation

Please find attached, as EXHIBIT D.2, our Equal Opportunity Program Documentation and Employee Handbook

D.3 Affirmative Action Program

Please find attached, as EXHIBIT D.3, our Affirmative Action Program.

D.4 Sustainable Products, Technology and Practices

E.T. MacKenzie Company is committed to sustainable and responsible construction. As such, we employ the following practices:

- Utilization of bio-blend diesel fuels
- Recycling program for waste oil products
- Recycling program for all used batteries
- Recycling program for demolished concrete products
- Repurposing program for clearing debris / waste wood
- Recycling program for steel and scrap metals
- Utilization of food grade hydraulic fluid, where possible
- Utilization of engine idle timers to reduce emissions

E.T. MacKenzie Company owns and operates an updated fleet of mainline equipment (operated more than 300 HR / Year). Our current off-road fleet of equipment has an average model year of 2018, 82% of which meets the Tier 4 Final emission standards. 85% of our on-road fleet of equipment meets the Tier 4 Final emission standards.

In addition, we participate in the Washtenaw County Pollution Prevention Program (PPP-0004528).

D.5 Environmental Record

E.T. MacKenzie Company does not have any environmental violations.



Section E: Schedule of Pricing / Cost

<u>Description</u>	<u>Item</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Protective Fencing	130	FT	215	\$5.60	\$1,204.00
Tree Removal, 8" or Larger	135	EA	8	\$1,785.00	\$14,280.00
Exploratory Excavation (0-10' deep)	140	EA	6	\$2,575.00	\$15,450.00
Project Supervision, Max \$40,000.00	201	LS	1	\$38,500.00	\$38,500.00
General Conditions, Max. \$60,000.00	202	LS	1	\$53,714.25	\$53,714.25
Digital Audio Visual Coverage	203	LS	1	\$1,500.00	\$1,500.00
Minor Traffic Devices, Max \$50,000.00	204	LS	1	\$14,000.00	\$14,000.00
Clean-Up & Restoration, Special; Max \$15,000	205	LS	1	\$7,250.00	\$7,250.00
"No Parking" Signs	206	EA	50	\$120.00	\$6,000.00
Certified Payroll Compliance and Reporting	207	LS	1	\$1.00	\$1.00
Allowance for Unforeseen Site Conditions	208	DLR	50000	\$1.00	\$50,000.00
Remove Concrete Curb or Curb and Gutter - Any Type	211	FT	1388	\$6.10	\$8,466.80
Remove Concrete Sidewalk and Drive - Any Thickness	212	SFT	2946	\$1.40	\$4,124.40
Sidewalk Ramp Grading	215	EA	11	\$39.50	\$434.50
Sewer, Any Size or Depth, Remove	216	FT	238	\$7.00	\$1,666.00
Drainage Structure, Any Size or Depth, Remove	217	EA	9	\$100.00	\$900.00
Additional Depth Structure Adjust/Repair	218	FT	20	\$525.00	\$10,500.00
Remove and Replace Sanitary Sewer Lead	220	FT	20	\$165.00	\$3,300.00
Water Main Pipe Abandonment, Modified	221	LS	1	\$25,250.00	\$25,250.00
Abandon Gate Well	223	EA	2	\$1,625.00	\$3,250.00
Temporary Water Main Line Stop, Additional Rental Day	225	EA	2	\$550.00	\$1,100.00
Temporary Water Main Line Stop, Less than 8 inch	226	EA	3	\$13,000.00	\$39,000.00
Temporary 8 inch or 12 inch Water Main Line Stop	227	EA	4	\$17,700.00	\$70,800.00
TOTAL THIS PAGE (BF-1) (Also to be entered on BF-4)					\$ 370,490.95

Section E: Schedule of Pricing / Cost

Description	Item	Unit	Estimated Quantity	Unit Price	Total Price
Machine Grading, Modified	230	SYD	9278	\$17.15	\$159,117.70
Subgrade Undercutting - Type II	231	CYD	20	\$125.00	\$2,500.00
Sand Subbase Course, Class II - C.I.P.	232	CYD	120	\$76.00	\$9,120.00
21AA Aggregate Base Course - C.I.P	233	TON	1510	\$30.50	\$46,056.00
21AA Limestone, C.I.P.	234	CYD	20	\$91.50	\$1,830.00
HMA Pavement Leveling/Top - LVSP	241	TON	1600	\$166.00	\$265,600.00
HMA Approach	242	TON	97	\$300.00	\$29,100.00
HMA Hand Patching	243	TON	20	\$350.00	\$7,000.00
Concrete Curb or Curb and Gutter - All Types	246	FT	1214	\$39.50	\$47,953.00
4 Inch Concrete Sidewalk	247	SFT	5069	\$8.50	\$43,086.50
6 Inch Concrete Sidewalk Ramp	248	SFT	1165	\$10.90	\$12,698.50
6 Inch Concrete Drive or Sidewalk - High Early	249	SFT	569	\$10.90	\$6,202.10
Integral Sidewalk Retaining Wall, 6 inch to 18 inch	250	SFT	100	\$105.00	\$10,500.00
Integral Sidewalk Retaining Wall, 19 inch to 36 inch	251	SFT	50	\$105.00	\$5,250.00
Driveway Opening, Conc, Detail M - High Early	252	FT	240	\$40.00	\$9,600.00
Detectable Warning, Cast In Place	253	SFT	110	\$31.00	\$3,410.00
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	254	FT	608	\$6.50	\$3,952.00
Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar	255	FT	59	\$14.00	\$826.00
Pavt Mrkg Cover, Type R, Black	264	FT	1100	\$3.00	\$3,300.00
Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp	265	FT	4833	\$2.50	\$12,082.50
Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp	266	FT	8400	\$2.50	\$21,000.00
Pavt Mrkg, Wet Reflective, Type R, Tape, 24 inch Stop Bar	268	FT	40	\$14.00	\$560.00
Lighted Arrow Board, Furnish and Operate	269	EA	5	\$600.00	\$3,000.00
Sign, Portable Changeable Message, Furnish and Operate	270	EA	2	\$2,200.00	\$4,400.00
Plastic Drum - Lighted, Furnish and Operate	271	EA	256	\$30.00	\$7,680.00
Barricade Type III - Lighted, Furnish and Operate	272	EA	35	\$100.00	\$3,500.00
Temporary Sign, Type B, Furnish and Operate	273	SFT	789	\$4.50	\$3,550.50
Temporary Sign, Type B, Furnish and Operate, Special	274	SFT	6	\$4.50	\$27.00
TOTAL THIS PAGE (BF-2) (Also to be entered on BF-4)					\$723,700.80

Section E: Schedule of Pricing / Cost

<u>Description</u>	<u>Item</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Channelizing Device, 42 Inch, Furnish and Operate	275	EA	20	\$20.00	\$400.00
Pedestrian Type II Barricade; Temp	276	EA	20	\$85.00	\$1,700.00
Sign Cover	277	EA	8	\$25.00	\$200.00
Temporary Pedestrian Ramp	278	EA	2	\$1,425.00	\$2,850.00
Temporary Pedestrian Mat	279	EA	2	\$100.00	\$200.00
Audible Message Device	280	EA	1	\$120.00	\$120.00
Fertilizer, Chemical Nutrient, CI A	281	LBS	32	\$1.00	\$32.00
Mulch Blanket, High Velocity	282	SYD	677	\$5.75	\$3,892.75
Seeding, Mixture THM	283	LBS	32	\$5.50	\$176.00
Topsoil Surface, Furn, 4 inch	285	SYD	677	\$18.00	\$12,186.00
Underground Sprinkling Systems, Restore	286	LS	1	\$1.00	\$1.00
Adjust Structure Cover	291	EA	32	\$1,010.00	\$32,320.00
Adjust Monument Box or Gate Valve Box	292	EA	8	\$800.00	\$6,400.00
Dr Structure Covers	293	LBS	13970	\$1.60	\$22,352.00
Sacrificial Anode, 17 LB	294	EA	4	\$1,100.00	\$4,400.00
6-Inch Wrapped Underdrain	295	FT	1000	\$17.00	\$17,000.00
12" CL IV RCP Storm Sewer Pipe, Trench Detail I	320	FT	266	\$172.00	\$45,752.00
Sewer Tap, 12 inch	326	EA	2	\$1,300.00	\$2,600.00
Sewer Tap, 24 inch	327	EA	4	\$1.00	\$4.00
Dr Inlet Structure, 24 inch dia	340	EA	12	\$3,075.00	\$36,900.00
Dr Inlet Junction Structure, 36 inch dia	341	EA	1	\$3,725.00	\$3,725.00
Dr Inlet Junction Structure, 48 inch dia	341	EA	3	\$3,200.00	\$9,600.00
Dr Structure, Adj, Add Depth	347	FT	10	\$475.00	\$4,750.00
6 inch Class 50 DIP w/polywrap, Trench Detail I	400	FT	10	\$335.00	\$3,350.00
8 inch Class 50 DIP w/polywrap, Trench Detail I	401	FT	1118	\$200.00	\$223,600.00
TOTAL THIS PAGE (BF-3) (Also to be entered on BF-4)				\$ 434,590.75	

Section E: Schedule of Pricing / Cost

<u>Description</u>	<u>Item</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
12 inch Class 50 DIP w/polywrap, Trench Detail I	404	FT	477	\$175.00	\$83,475.00
8" 22.5° Bend	411	EA	1	\$900.00	\$900.00
8" 45° Bend	412	EA	7	\$900.00	\$6,300.00
8" 90° Bend	413	EA	1	\$900.00	\$900.00
8" x 6" Reducer	414	EA	5	\$700.00	\$3,500.00
12" 22.5° Bend	416	EA	1	\$1,200.00	\$1,200.00
12" x 12" x 12" Tee	418	EA	1	\$1,850.00	\$1,850.00
8" x 8" x 8" Tee	419	EA	2	\$1,850.00	\$3,700.00
12" x 12" x 6" Tee	435	EA	1	\$1,850.00	\$1,850.00
12" x 12" x 8" Tee	422	EA	2	\$1,850.00	\$3,700.00
Fire Hydrant Assembly	440	EA	3	\$6,200.00	\$18,600.00
8" Gate Valve-in-Box	442	EA	1	\$3,100.00	\$3,100.00
12" Gate Valve-in Box	441	EA	1	\$4,600.00	\$4,600.00
6" Gate Valve-in Well	442	EA	1	\$7,250.00	\$7,250.00
8" Gate Valve-in Well	443	EA	1	\$7,250.00	\$7,250.00
12" Gate Valve-in Well	444	EA	1	\$8,350.00	\$8,350.00
12" x 12" x 8" Tapping Sleeve Valve-in Well	446	EA	1	\$15,000.00	\$15,000.00
Excavate & Backfill for Water Service Tap and Lead	460	FT	331	\$265.00	\$87,715.00
Erosion Control, Inlet Protection	702	EA	21	\$140.00	\$2,940.00
Erosion Control, Silt Fence	703	FT	250	\$2.75	\$687.50
Planting, Tree (Large Shade)	810	EA	26	\$1,050.00	\$27,300.00
Planting, Tree (Medium)	811	EA	6	\$950.00	\$5,700.00
Planting, Tree (Small)	812	EA	6	\$875.00	\$5,250.00
TOTAL THIS PAGE (BF-4) (Also to be entered below)				\$301,117.50	
TOTAL FROM PAGE BF-1				\$370,490.95	
TOTAL FROM PAGE BF-2				\$723,700.80	
TOTAL FROM PAGE BF-3				\$434,590.75	
TOTAL FROM PAGE BF-4				\$301,117.50	
TOTAL BASE BID				\$1,829,900.00	

E.T. MacKenzie Company – RFP# 22-15 Stadium / Washtenaw Area Utility Improvements

Section F Authorized Negotiator / Negotiable Elements

F.1 Authorized Negotiator

The following individuals are authorized negotiators for E.T. MacKenzie Company:

Michael Marks, President, 517.627.8408, mmarks@mackenzieco.com
John Niemiec, Division Manager, 734.761.5050, jniemiec@mackenzieco.com
Art Arendt, Project Manager, 734.761.5050, aarendt@mackenzieco.com
Duston Kipke, Project Manager, 734.761.5050, dkipke@mackenzieco.com
Andy LaHaie, Project Manager, 734.761.5050, alahaie@mackenzieco.com

F.2 Alternate Items for Consideration Statement

None provided.

F.3 Alternate Time of Completion Statement

None provided.



Section G Required Attachments

Please find the required RFP attachments following this page.



ATTACHMENT B
GENERAL DECLARATIONS

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, General Information, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered 1, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

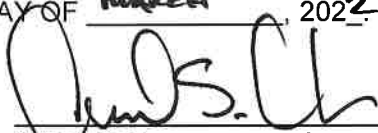
In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 14TH DAY OF MARCH, 2022.

E.T. Mackenzie Company
Bidder's Name

8197 JACKSON ROAD
A², MI 48103
Official Address

(734) 761.5050
Telephone Number


Authorized Signature of Bidder

Michael S. Marks, President
(Print Name of Signer Above)

juemee@mackenzieco.com
Email Address for Award Notice

ATTACHMENT C
LEGAL STATUS OF BIDDER

(The bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:


* A corporation organized and doing business under the laws of the State of Michigan, for whom Michael S Marks, bearing the office title of President, whose signature is affixed to this Bid, is authorized to execute contracts.

NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority

• A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):

* An individual, whose signature with address, is affixed to this Bid: _____ (initial here)

Authorized Official  Date MARCH 14TH, 2022

(Print) Name Michael S Marks Title President

Company: ET Mackenzie Company

Address: 8197 JACOBSON ROAD, A2, MI 48103

Contact Phone ((734) 761.5050) Fax () N/A

Email jmemiec@mackenzieco.com

ATTACHMENT D
PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall be deemed a material breach of the terms of the contract and grounds for termination of same by the City.

FT Mackenzia Company
Company Name

[Signature] 03.14.22
Signature of Authorized Representative Date

Michael S Marks, president
Print Name and Title

897 Jackson Road, A², MI 48103
Address, City, State, Zip

(34) 761.5050 / jniemiec@mackenzia.com
Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

ATTACHMENT E

LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here No. of employees__

The Contractor or Grantee agrees:

- (a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits

Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

ET Mackenzie company
 Company Name

[Signature] 03.14.22
 Signature of/Authorized Representative Date

Michael S Marks, president
 Print Name and Title

8197 Jackson Road
 Street Address

A², MI 48103
 City, State, Zip

(734) 761.5050
 Phone/Email address

m.eme@mackenzieco.com
 Phone/Email address

Attachment F

**CITY OF ANN ARBOR
LIVING WAGE ORDINANCE**

RATE EFFECTIVE APRIL 30, 2021 - ENDING APRIL 29, 2022

\$14.05 per hour

If the employer provides health care benefits*

\$15.66 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

**For Additional Information or to File a Complaint contact
Colin Spencer at 734/794-6500 or cspencer@a2gov.org**



ATTACHEMENT G

Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)
N/A	

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:

ET Mackenzie company		(734) 761.5050	
Vendor Name		Vendor Phone Number	
	03.14.22	Michael S Marks, President	
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorized Representative	

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

ATTACHMENT H

DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

E.T. Mackenzie Company
Company Name

[Signature] 03.14.22
Signature of Authorized Representative Date

Michael S Marks, President
Print Name and Title

8197 Jackson Road, A², MI, 48103
Address, City, State, Zip

(734) 761.5050 / jmarks@mackenzieco.com
Phone/Email Address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

EXHIBIT A.1 Work Experience and Qualifications of Key Personnel





E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 231.6810

adunn@mackenzieco.com

Adam Dunn

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Estimator / Project Manager
2017 - Present

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

C.A. Hull Co., Inc.
Project Manager
2016 - 2017

- Managed all functions of multiple construction projects of varying types from award to completion.

Project Engineer
2010 - 2015

- Estimated, scheduled and coordinated construction projects and prepared and submitted all necessary reports.

Laborer
2009

ADDITIONAL QUALIFICATIONS

- Certified Storm Water Operator
#C-20186
- Bid2Win
- Viewpoint
- Primavera P6 Scheduling
- Autodesk Revit

EDUCATION

Bachelor Degree, Interdisciplinary Studies
with a focus in Construction Management
Eastern Michigan University
2015

Continuing Education Units
Dale Carnegie Training
2016



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

f (734) 761.5323

c (734) 249.0430

alahaie@mackenzieco.com

Andrew LaHaie

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Estimator / Project Manager

2020

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

Merlo Construction Co., Inc.

Project Manager / Estimator

2017 - 2020

- Project manager for the entire project lifecycle, including bidding and estimation for concrete foundations, earthwork and utility contracts.

6K Construction Co., Inc.

Project Manager / Estimator

2014 - 2017

Mannik Smith Group

Project Geologist / Environmental Consultant

2008 - 2014

EDUCATION

Bachelor of Science in Hydrogeology

Eastern Michigan University

2008

ADDITIONAL

QUALIFICATIONS

- Construction Management
- Field Management
- Certified Storm Water Operator #C-21499
- Bid2Win
- Agtek Earthworks
- Planswift
- OnScreen TakeOff



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

f (734) 761.5323

c (734) 277.9632

aarendt@mackenzieco.com

Art Arendt

Project Manager

Project manager overseeing commercial, residential, and industrial site development and underground utility projects.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Manager

2018

- Oversee and coordinate construction projects including underground, road, and mass grading projects.

RIPA and Associates, Tampa FL

Project Manager

2015 - 2018

- Project manager on multiple projects of varying complexity and scope. Often relied upon to serve as PM and sole superintendent from start to completion.

Project Engineer

2011 - 2013

- Tracked jobsite quantities for billing purposes, and reviewed and submitted documents and RFI's to the necessary entities.

Skilled Laborer

2009 - 2011

- Worked on a pipe crew; learned valuable hands-on experience.

Pepper Construction, Tampa FL

Assistant Project Manager

2014 - 2015

- Assisted project managers and superintendents on multiple DOT projects. Learned requirements and needs related to DOT roadway construction.

EDUCATION

Bachelor Degree

Major in Marketing, Minor in Management

Kent State University

CERTIFICATIONS

- Certified Storm Water Operator, License #C-20288
- 30-Hour OSHA, Cert #36-601451774



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 204.2612

bpuskala@mackenzieco.com

Benjamin J. Puskala

Survey Technician

Determining exact measurements and property boundaries. Providing data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering and construction purposes.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Survey Technician

2004 - Present

- Surveying, construction layout and topographical and boundary work. Provides 3D models, construction staking and accurate line and grade for successful and timely projects.

KEBS Inc.

Survey Crew Chief

1999 - 2004

- Topographical and boundary surveys. Primarily responsible for construction layout and establishing control for GPS surveys.

EESG

Survey Crew Chief

1998 - 1999

- Survey layout on state highway projects. Responsible for grade calculations, road and bridge alignments.

MDOT

Co-op Student

1998

- Inspection of bridges focusing on section loss measurements on beam ends.

EDUCATION

Engineering Technology Associate Degree

Lansing Community College

1996 - 1998

ADDITIONAL

QUALIFICATIONS

- 40-Hour OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- Pipe Patch Factory Trained Installer
- Trained Scaffold User
- OSHA & MIOSHA Training



E.T. MacKenzie Company
o (517) 627.8408
f (517) 627.4470
c (517) 204.0089
cmaureretmc@gmail.com

Chad Maurer

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

2014 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Davis Construction

Foreman

2001 - 2014

Jack B. Anglin

Foreman / Operator

1992 - 2001

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-18385
- Confined Space Entry Training
- CPR & First Aid Certificate
- OSHA & MIOSHA Training

Other Training Including But Not Limited To:
Generator, Manlift & Material Handling

EDUCATION

Waverly High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 930.7871

cspencer@mackenzieco.com

Charles Spencer

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Estimator / Project Manager
2020

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

R. Carlson and Sons
Mokena, IL
Construction Engineer
2017 - 2020

- Performed all necessary tasks to construct project from start to finish, from pre-bid meetings to overseeing project to completion and final billing.

VanDrunen Farms
Mokena, IL
Chemical Engineering Intern
2017

City of Pontiac
Pontiac, IL
Engineering Intern
2014 - 2017

EDUCATION

Bachelors of Science,
Chemical Engineering
Olivet Nazarene University
2017

ADDITIONAL QUALIFICATIONS

- Certified Storm Water Operator
#C-21333
- OSHA 10-Hour Safety Training
- Construction Management
- Bid2Win
- Surveying
- Materials Testing and Inspection
- Field Management



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

f (734) 761.5323

c (734) 216.0833

cargersinger@mackenzieco.com

Charles F. Argersinger

Bridge Manager

Bridge manager with over thirty years' experience estimating and managing bridge projects, including coordination of subcontractors and scheduling.

BRIDGE EXPERIENCE

- Simple steel span bridges
- Suspended steel span bridges
- Concrete beam bridges
- Box beam bridges
- Pedestrian bridges
- Steel structures
- All structural concrete
- All sizes box culverts
- Timber bridges

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Bridge Manager

1992 - 1995

1999 - Present

- Responsibilities include estimating, site planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections

WWA, Inc.

Bridge Manager

1995 - 1999

Argersinger-Morse Construction, Inc.

Division Manager

1968 - 1991

- First worked as a truck driver and concrete manager before promoting to company's division manager.



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 202.0571

crickmanetmc@gmail.com

Charles Rickman

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

2002 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Midwest Bridge Company

Carpenter / Supervisor

2000 - 2002

WWA Inc.

Laborer

1991 - 2000

ADDITIONAL

QUALIFICATIONS

- 40-Hours OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- CPR & First Aid Certificate
- OSHA & MIOSHA Training
- Confined Space Entry Training
- Qualified Rigging/Signalperson
- Telescopic Lift Truck Training
- Articulating Aerial Manlift

EDUCATION

Western High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 202.0446

dclark2391@aol.com

Dale E. Clark

Shop Manager

Supervising and overseeing all shop maintenance operations.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Shop Manager

2005 - Present

- Supervises and coordinates activities of mechanics and other employees engaged in the maintenance and repair of company fleet, including trucks, equipment and all tools.

Mechanic

1990 - 2005

General Car & Truck Leasing

Mechanic

1987 - 1990

Summit Steel Processing Corp.

Mechanic

1984 - 1987

EDUCATION

Lansing Community College

2 Years

Courses: Diesel Engines, Machine Shop, Welding & Hydraulics.

Ithaca High School

Diploma

ADDITIONAL

QUALIFICATIONS

- Brake Inspector Certification
- CPR / First Aid Certificate
- Forklift Training
- Mine Safety Training
- Truck Driving Safety Class
- Compressed Gas Cylinder Training



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

f (734) 761.5323

c (734) 216.0855

dkempheretmc@gmail.com

Daryl B. Kempfer

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

2007 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Equipment Operator

1998 - 2007

G & W Construction

Equipment Operator

1996 - 1998

Chie Contracting

Equipment Operator

1994 - 1995

L & K Construction

Labor/Equipment Operator

1991 - 1994

ADDITIONAL QUALIFICATIONS

- MI Storm Water Operator License #C-18363
- OSHA & MIOSHA Training
- CPR & First Aid Certificate

EDUCATION

Clinton High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 749.0509

dkrepsetmc@gmail.com

David Kreps

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

1992 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Rumsey & Sons

Foreman

1986 - 1992

- Foreman of pipe crews.

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-01711
- Confined Space Entry Training
- 40-Hours OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- CPR & First Aid Certificate
- OSHA & MIOSHA Training
- Trained Scaffold User
- Truck Driving Safety Class

EDUCATION

Olivet High School

Diploma



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

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dmcnamaraetmc@gmail.com

Dennis J. McNamara

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Superintendent, Ann Arbor Division

1996 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

J&D Construction

Superintendent / Field Supervisor

1989 - 1996

Den-Ron, Inc.

Part Owner

1981 - 1989

Delta Construction

Field Supervisor

1978 - 1981

American Excavators

Heavy Equipment Operator

1975 - 1978

ADDITIONAL QUALIFICATIONS

- Confined Space Training
- OSHA & MIOSHA Training
- CPR & First Aid Certificate
- Competent Person Excavation Training

EDUCATION

Monsignor Orafferty (Catholic Central)

High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

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dhughesetmc@gmail.com

Donavon Hughes

Bridge Foreman / Supervisor

Supervisor overseeing all bridge construction operations, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Bridge Foreman

2000 - Present

- Supervisor for bridge construction. Responsibilities include layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

WWA Inc.

Highway/Road/Bridge Work

1990 - 2000

ADDITIONAL

QUALIFICATIONS

- Crane Operator Permit
- Confined Space Entry Training
- 40-Hours OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- CPR & First Aid Certificate
- OSHA & MIOSHA Training
- Railroad Safety Training
- Qualified Rigging/Signalperson
- Telescopic Lift Truck Training
- Articulating Aerial Manlift

EDUCATION

Leslie High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

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c (517) 881.5099

ds@mackenzieco.com

Dustin Schneemann

Project Manager

Project manager and estimator for site development and underground utility projects, overseeing day-to-day operations at project site.

EDUCATION

BS, Construction Management
Eastern Michigan University
2006

ADDITIONAL QUALIFICATIONS

- MI Storm Water Operator License #C-18172
- OSHA Training 10 Hour
- Excavation and Safety Training
- Kiewit Field Supervisory School
- Kiewit LSP (Leadership Succession Program) Member 2012-2013
- Microsoft Office Proficient
- Scheduling Software – Project, Primavera
- Estimating / Cost Control – Bid2Win, Hard Dollar, Heavy BID, KES (Kiewit Estimating System)
- Experience with SAP Business Applications
- Micro Station 3D Modeling
- SharePoint Administration

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Manager

2014 - Present

Oversee and coordinate construction projects including underground, road, and mass grading projects, and prepare proposals and bids.

Peter Kiewit & Son Co. South Central District

2007 - 2014

Grading/Traffic Control/Utility Manager (2013-2014)

Civil Discipline Manager (2012-2013)

Lead Estimator (2012)

Superintendent (2009-2011)

Field Engineer (2007-2009)



Ann Arbor Division - E.T. MacKenzie Company

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dkipke@mackenzieco.com

Duston Kipke

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company - Ann Arbor Division

Estimator / Project Manager

2014 - Present

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

Michigan Pipe & Valve

Estimator

2012 - 2014

E.T. MacKenzie Company - North Carolina Division

Entry Level Estimator / Project Manager

2009 - 2011

Slusarski Excavating and Paving

Internship

Summer 2008

Slusarski Excavating and Paving

Laborer / Equipment Operator

2002 - 2007

EDUCATION

Bachelor of Science

Construction Management

Eastern Michigan University

2009

ADDITIONAL QUALIFICATIONS

- Construction Management
- Field Management
- Certified Storm Water Operator #C-18163
- Bid2Win
- OSHA Confined Space Standards 2016
- AGTEK



Mackenzie Companies

o (517) 627.8408

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et@mackenzieco.com

Erdmen T. MacKenzie

Consultant

Established MacKenzie Companies in 1982. Transferred ownership to family in 2015 and remains active in day-to-day operations.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Consultant

2015 - Present

Owner / Chief Operating Officer

1982 - 2015

- Directly supervised all departments within the excavating/contracting companies. Oversaw all day-to-day operations, including personnel management, estimating, scheduling of projects, trucking operations, real estate acquisition, coordination of activities between affiliate companies, and management of aggregate assets. Specialized in negotiations and acquisitions.

E.T. MacKenzie of Florida, Inc.

Consultant

2015 - Present

Owner / Chief Operating Officer

1994 - 2015

American Excavators

Vice-President

1972 - 1982

Worked from 1965 - 1972 as a truck driver and heavy equipment operator.

AFFILIATE COMPANY OWNERSHIP

- MacKenzie Recycling Corporation
- Site Services
- MacKenzie Oil and Gas
- M&D Company
- MacKenzie Company NC, LLC
- Strawberry Farms, LLC
- Nixon Road Holding Company, LLC

PROFESSIONAL AFFILIATIONS

- Member – Michigan Infrastructure and Transportation Association
- Member – Associated Builders and Contractors
- Member – Builders Exchange of Central MI
- Member – National Utility Contractors Assoc.
- Member – National Demolition Association
- Member – Gulf Coast Builder's Exchange
- Member – National Assoc. of Home Builders
- Board Member – various local charities



E.T. MacKenzie Company

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ehorstmanetmc@gmail.com

Eric Horstman

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

1987 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Tony Woodrell

Concrete, Steel & Building Work

1974 - 1978 and 1982 - 1987

American Excavators

Dozer Operator

1978 - 1982

ADDITIONAL QUALIFICATIONS

- MI Storm Water Operator License #C-16089
- CPR & First Aid Certificate
- OSHA & MIOSHA Training
- 40-Hour OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- Mine Safety Training
- Current Welding Certificate

EDUCATION

Lansing Community College

Mechanical Engineering Courses

Williamston High School

Diploma



E.T. MacKenzie Company

o (517) 627-8408

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c (517) 749.0494

Gene Haindel

Foreman / Operator

Site foreman and heavy equipment operator for large site commercial, residential and industrial projects.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman / Operator

1991 - Present

- Jobsite foreman performing day-to-day operations including, but not limited to, demolition operations, environmental site investigations, building and asbestos inspections, environmental clean-ups (underground and above ground storage tank removals and disposals, contaminated soil removals and disposals), excavations and site remediations.
- Proficient heavy equipment operator for all sizes of hydraulic excavators, backhoes, loaders, dozers, man lifts, trenchers, skid steers, on-site trucks and boom trucks.

Bierlein Industries

Heavy Equipment Operator

1987 - 1991

Day Excavating

Laborer

1983 - 1987

ADDITIONAL

QUALIFICATIONS

- Hazwoper 40-hour and 8-hour updates
- MI Storm Water Operator License #C-10348
- OSHA & MIOSHA Training
- Cadmium and Lead Awareness Training
- Asbestos Inspector Training
- Asbestos Contractor/Supervisor Training
- Scaffold User Training
- Yearly medical monitoring and respirator fit testing
- CPR & First Aid Certificate

EDUCATION

Mason High School

Diploma



E.T. MacKenzie Company

o (517) 627.8408

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hh@mackenzieco.com

Heather Hufnagel

Human Resources Director

Human Resources Director with over 25 years of progressive experience administering benefit programs, company policies and procedures, recruitment, employee files and maintenance.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Human Resources Director

1993 - Present

- Administers benefit programs (401K/PS, medical, unemployment, EAP, Aflac, and workers' compensation) including enrollments and terminations. Processes required documents through payroll and insurance providers to ensure accurate record keeping and proper deductions. Serves as COBRA Administrator, manages annual open enrollment period and processes monthly billings from insurance providers. Acts as a liaison between employees, insurance providers and to resolve benefit related problems and ensure effective utilization of plans and positive employee relations. Administers occupational health services program in relation to company policies.
- Prepares government and other reports related to EEO compliance or other HR functions.
- Writes, revises and edits company policies and procedures and related documents as needed.
- Conducts new employee orientations.
- Publishes Company quarterly newsletter.
- Prepares and maintains employee files and all required documentation. Provides reports to the President of the Company.

F.D. Hayes Electric Co., Inc.

Billing Manager

1988 - 1993

- Responsibilities include calculating and processing of invoices and interacting with customers to ensure billings are received in proper format and on a timely basis. Calculation of cost/income reports for major projects.

EDUCATION

Master of Labor Relations and Human Resources

Michigan State University

1995

Bachelor of Science, Employment Relations

Michigan State University

1992



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jvanlerberg@mackenzieco.com

Jeremy R. Vanlerberg, P.E.

Project Manager / Estimator

Estimating and managing site development, underground utility, road, and bridge projects, and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Estimator / Project Manager

Jan 2021 - Present, Jun 2015 - Jul 2016

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of sitework, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain, roads and bridges.

State of Michigan, Department of Transportation

Engineer Manager Licensed-3

Dec 2019 - Dec 2020

- Supervision, administration, engineering and professional development of a bridge design unit comprised of engineers and technicians.

Transportation Engineer Licensed Specialist 2

Jan 2019 - Dec 2019

Co-op - Bridge Design and Concrete Testing

May 2009 - Dec 2010

Hardesty & Hanover, LLC

Structural Engineer III

Jan 2011 - Jun 2015, Jul 2016 - Dec 2020

Stantec Consulting

Engineering Technician

Dec 2005 - May 2009

Anderson-Fischer and Associates

Field Work

Apr 2001 - Dec 2005

ADDITIONAL

QUALIFICATIONS

- Professional Engineer, Michigan
- FHWA-NHI-130055 Safety Inspection of In-Service Bridges
- Certified Storm Water Operator #C-18177
- Bid2Win
- Viewpoint
- Bluebeam

EDUCATION

Bachelor Degree: Civil Engineering

Michigan State University

2010

Bachelor Degree: Park, Recreation & Tourism

Michigan State University

2008

CONTINUING EDUCATION

ASCE - 2-Day Project Management Training

Half Moon Education Inc. - Construction Law & Construction Contract Workshop



E.T. MacKenzie Company

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jhilboretmc@gmail.com

James Hilborn

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

2000 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Barnhart & Son

Foreman

1992 - 2000

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-10351
- Confined Space Entry Training
- Lead & Asbestos Awareness Training
- CPR & First Aid Certificate
- OSHA & MIOSHA Training
- Truck Driving Safety Class

EDUCATION

Associate Degree, Diesel Technology

Bay De Noc

1980 - 1982

White Pine High School

Diploma



Ann Arbor Division - E.T. MacKenzie Company

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jniemiec@mackenzieco.com

John W. Niemiec

Division Manager / Project Manager

With nearly 20 years' experience, John directs our Ann Arbor Division's operations and estimates, bids and manages residential, commercial and industrial projects.

EDUCATION

BS, Civil Engineering, Civil Concentration
Lawrence Technological University
May 1998

ADDITIONAL QUALIFICATIONS

- Member, Chi Epsilon Honor Society, Lawrence Tech Chapter
- Captain, AISC Lawrence Tech Steel Bridge Team
- Passed Part 1, State of Michigan Fundamentals of Engineering Exam
- Certified Storm Water Operator
- Highly proficient in Agtek Software Suite, Bid2Win Estimating Software and all MS Office Software applications.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Division Manager

Dec 2005 – Present

- Responsibilities include managing Ann Arbor Division and estimating, site planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections.

Project Manager / Project Estimator

Sept 1998 - Dec 2005

Bartlett Nuclear

Fermi1 Nuclear Power Plant

Radwaste Shipping Engineer

May 1998 – Sept 1998

Detroit Edison

Fermi1 Nuclear Power Plant

Radwaste Shipping Technician

May 1994 – Dec 1997



E.T. MacKenzie Company
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kdavis@mackenzieco.com

Katherine A. Davis

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Estimator / Project Manager
May 2021 - Present

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of sitework, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

Michigan State University
Industrial Systems Engineer
Oct 2017 - May 2021

- Maintain FRIB Continuous Improvement Committee and manage, facilitate and support other teams and processes.

Pacific Gas & Electric Company
Diablo Canyon Power Plant, California
Project Manager

Apr 2015 - Aug 2017

- Managed a variety of outage and on-line mechanical and civil projects associated with plant operation.

M.J. Ross Construction Inc., California
Estimator / Project Manager

Apr 2005 - Dec 2014

- Responsible for bidding and negotiating contracts, project management and coordination of commercial, public works, and private underground utilities and civil improvement projects.

ADDITIONAL QUALIFICATIONS

- Certified Storm Water Operator #C-22319
- Project Management Certification
- Bid2Win
- Viewpoint

EDUCATION

Master of General Engineering with Industrial Engineering Specialization

California Polytechnic State University
2006

Bachelor of Science, General Engineering
California Polytechnic State University
2006

Bachelor of Arts, Education
University of Michigan
1994



E.T. MacKenzie Company

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okietoews@yahoo.com

Kirk D. Toews

Assistant Project Superintendent

Assisting in the on-site management of large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Assistant Project Superintendent

2006- Present

- Assist Supervisor for large site development and underground utility projects. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers.

Heavy Equipment Operator

2000 - 2006

- Operated various equipment including dozers, loaders and backhoes. Proficient with GPS and other jobsite equipment.

Luckinbill Inc.

Utility Crew Supervisor

1976 - 2000

- Supervised utility crews and operated heavy equipment.

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-18371
- 40-Hour OSHA Hazwoper
- OSHA & MIOSHA Training
- Lead, Cadmium & Chromium Training
- Confined Space Entry Training
- CPR & First Aid Certificate
- Flagger Certification

EDUCATION

Harrison High School

Diploma



E.T. MacKenzie Company

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ldriver@mackenzieco.com

Linn B. Driver

Division Manager

Environmental services division manager with over thirty years of project management experience, oversees all environmental and demolition projects.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Division Manager

1989 - Present

- Responsible for all phases of project oversight for the environmental services division including marketing, budgeting, personnel, estimating, project scheduling, project close-out and client follow-up. Works closely with the Michigan Environmental Protection Agency, State of Michigan and Department of Environmental Quality.

E.W. Sparrow Health Group

Facilities Engineer

- Assisted department heads in planning and scheduling of construction projects.

National Machine Repair, Inc.

Secretary / Controller

M. Davis Construction, Inc.

Vice President

EDUCATION

MS, Public Administration

Western Michigan University

1990

BS, Business Administration

Aquinas College

1985

PROFESSIONAL CERTIFICATIONS

- Licensed Builder in the State of Michigan

ADDITIONAL QUALIFICATIONS

- 40-Hour OSHA Hazwoper
- OSHA & MIOSHA Training
- Roadway Worker Training (Railroad)



E.T. MacKenzie Company

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mphillips@mackenzieco.com

Mark V. Phillips

Project Manager / Estimator

Estimating, managing and contracting of concrete projects for both private developments and municipal projects.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Manager / Estimator

1999 - Present

- Responsibilities include estimating, site planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections.

State of Michigan Department of Corrections

Corrections Officer

1998 - 1999

Kares Construction Co.

Laborer

1997 - 1998

Brown Concrete

Concrete Finisher

1990 - 1997

EDUCATION

Michigan Concrete Association Courses

2017

Concrete Field Testing Technician

Decorative Concrete Technician

Flatwork Finisher Certification

Lansing Community College

Various Courses, 2 years

Grand Ledge High School

Diploma

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-18160
- OSHA & MIOSHA Training
- CPR & First Aid



E.T. MacKenzie Company

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mcooley@mackenzieco.com

Mary Cooley

Project Manager

Project manager and estimator for site development and underground utility projects, with 15 years experience overseeing day-to-day operations at project site while managing multiple projects and teams simultaneously and coordinating with subcontractors and general contractors.

EDUCATION

Associates Degree, Civil Technology

Lansing Community College

2010

Associates Degree, Accounting

Baker College of Owosso

1995

ADDITIONAL QUALIFICATIONS

- MI Storm Water Operator License #C-10887
- MDOT Certifications: Asphalt and Concrete Paving Inspection, Bridge Construction and Rehabilitation Inspection
- First Aid Card

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Manager

2015 - Present

- Oversee and coordinate construction projects including underground, road, and mass grading projects, and prepare proposals and bids.

Eye Construction Co. LLC

Project Manager

2002 - 2015

- Managed and directed overall construction including site work and underground utility installation, prepared estimates and reviewed, recommended and approved project design.

Nilson Builder's Inc.

Construction Coordinator

2001 - 2002



E.T. MacKenzie Company

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mfiasky@mackenzieco.com

Matthew W. Fiasky

Project Superintendent

On-site management of large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Superintendent

2010 - Present

- Superintendent for large site development and underground utility projects. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers.

Foreman

1995 - 2010

Pipe Layer

1988 - 1995

Angelo lafrate

Pipe Layer

1987 - 1988

Barnhart Construction

Pipe Layer

1982 - 1987

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-15650
- Asbestos Contractor Supervisor, Cert#CSR16011202
- 40-Hour OSHA Hazwoper
- OSHA & MIOSHA Training
- Lead, Cadmium & Chromium Training
- Confined Space Entry Training
- CPR & First Aid Certificate
- Mine Safety Training
- Pipe Patch Factory Trained Installer
- Roadway Worker Training (Railroad)

EDUCATION

Everett High School

Diploma



E.T. MacKenzie Company

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mtunnell@mackenzieco.com

Matt Tunnell

Project Manager / Estimator

Project manager and estimator for site demolition and environmental projects, overseeing day to day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Project Manager / Estimator

2019

- Estimates, bids, schedules and supervises demolition projects and assists with environmental projects including UST/AST removals and installations, site investigation and site remediation including hazardous/contaminated soil removals.

Mersino Dewatering

Project Engineer / Manager

2016 - 2019

- Design effective dewatering and bypass systems, manage the installation process, and secure permits, financial documentation, subcontracts and all other necessary documentation for each project.

United States Airforce

Firetruck Mechanic

2002 - 2006

- Responsible for marketing, estimating, contract negotiating, health and safety plans, pre-construction submittals and workforce, subcontractor and equipment coordination.

EDUCATION

BS, Geology

University of North Carolina

2013 - 2016

LICENSES & ADDITIONAL QUALIFICATIONS

- MI Storm Water Operator License C-21492
- 40-Hour Hazwoper
- Respirator Fit Testing
- Medical Monitoring



Mackenzie Companies

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mmarks@mackenzieco.com

Michael S. Marks

President

Michael Marks learned this business from the ground up, having first worked in multiple capacities on our jobsites and within our offices. Now, with over thirty years of experience, he is an experienced leader who plans, develops and establishes policies and objectives of business organization in accordance with board directives.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company / E.T. MacKenzie of Florida, Inc.

President

2015 - Present

Michigan Vice President of Operations

2006 - 2014

- As Vice President, then President, responsibilities include overall company management including planning business objectives, developing policies, establishing responsibilities and reviewing, evaluating outcomes.

Ann Arbor Division Manager

1996 - 2006

- Managed all operations for Ann Arbor Division and estimated, bid and managed residential, commercial and industrial projects.

Estimator / Project Manager

1991 - 1996

- Responsible for business administration and company operations including employee management, estimating, purchasing, negotiating contracts and coordinating and managing individual projects.

Operator / Laborer

1984 - 1991

- Worked with various field crews during summer months with varying field functions from laborer to operator for various types of equipment.

EDUCATION

Bachelor of Arts, Humanities with an emphasis in English, History and Philosophy

Michigan State University

1991

ADDITIONAL

QUALIFICATIONS

- ABC Greater Michigan, Board of Directors
- OSHA & MIOSHA Training
- Mine Safety Training
- Confined Space Training
- CPR & First Aid



E.T. MacKenzie Company

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mpeters@mackenzieco.com

Michael T. Peters

Senior Project Manager / Geologist

More than thirty years of experience managing geological, hydro-geological and environmental investigations, including project management services for environmental site investigations, site assessments and remedial activities, and preparing technical work plans, asbestos inspections and reports for both the public and private sector.

EDUCATION

BS, Geology
Michigan State University
1974

BS, Zoology
Michigan State University
1976

CERTIFICATIONS

- Professional Geologist (CPG) #9360
- Asbestos Inspector #A40166
- Construction Storm Water Operator #C-10363
- Industrial Storm Water Operator #I-02452
- Petroleum Geologist (AAPG) #3888
- Underground Storage Tank Prof. (CP) #635

ADDITIONAL QUALIFICATIONS

- Hazwoper 40 hour Site Supervisor
- Cadmium, Chrome and Lead Awareness
- CPR & First Aid
- Respirator Fit Testing
- Medical Monitoring

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Senior Project Manager
2000 - Present

- Responsible for all phases of project oversight for the Environmental Services division.
- Duties include project management for site investigations, asbestos inspections, remedial activities, site assessments, and preparing technical work plans and reports.

DLZ Michigan, Inc.
Program Manager/Hydrogeologist

Applied Science and Technology, Inc.
Project Manager/Hydrogeologist

Advanced Environmental Concepts, Inc.
Project Manager/Hydrogeologist

BHR Petroleum, Inc.
Environmental/Exploration Geologist

Orion Energy Corporation
Environmental/Exploration Geologist

Michigan Oil Company
Environmental/Exploration Geologist

Hunt Energy Corporation
Exploration & Development Geologist



E.T. MacKenzie Company

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pcoscarelli@mackenzieco.com

Pasquale Coscarelli, P.E.

Estimating Specialist

Analyzes blueprints and other documentation to prepare estimates.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Estimating Specialist

2000 - Present

- 3D modeling for machine control staking and construction staking. Quantifying earthwork, building, foundation and utility excavations. Material take-offs for demolitions, site improvements and utilities. Drafting, layout, engineering and engineered plan formatting/production for civil engineering and construction related projects, including topographical and boundary surveys, demolition, site plans, layout, staking and utility plan/profiles, and grading and erosion control plans.

Desine Inc.

Engineering Technician

1997 - 2000

- Inspection, documentation and certification of road construction, including subgrade prep., proof rolling, undercut stabilization, stringline grade check and compaction, and curb installation. Placement and documentation of bituminous yield and thickness. Directed excavations for perk test/soil identification and drainfield subsurface preparations. Performed water, storm and sanitary sewer inspection and documentation, including witnessing, bedding, installation, backfill, compaction and material conformance. TV inspection, mandrel and pressuring testing. Developed recorded as-built drawings for water, sanitary and storm sewer system. Stormwater operator and soil erosion control inspections.

Ayres, Lewis, Norris & May, Inc.

Engineering Technician

1996 - 1997

- Performed water and sanitary sewer inspection and documentation.

EDUCATION

Bachelor of Science, Civil Engineering

Michigan Technological University

1996

ADDITIONAL QUALIFICATIONS

- Professional Engineer, state of Michigan
- MI Storm Water Operator License #C-01737
- MI Industrial Storm Water Operator License #I-02963
- Computer Knowledge: Agtek Earthwork 3D Construction Software Suite, TOPCON Office 3D, Bentley Powerdraft/Microstation Geopack, Civil CAD Software, Autodesk AutoCAD, Microsoft Excel, Haestad Method, KY-2, Hydraulic System Analysis Program, Primavera Project Manager and Lotus.



E.T. MacKenzie Company

o (517) 627.8408

f (517) 622.3799

c (517) 749.0491

pemmons@mackenzieco.com

Phillips C. Emmons Jr., CPG

Senior Project Manager / Geologist

Nearly thirty years of experience managing bid estimates, contracts, documents and supervising projects with an emphasis in environmental work.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Geologist, Project Manager

1990 - Present

- Estimates, bids, schedules and supervises environmental projects including UST/AST removals and installations, demolition, site investigation and site remediation including hazardous/contaminated soil removals.

Dominion Exploration

Senior Exploration Geologist

1983 - 1990

- Responsible for oil and gas prospect development, oil and gas drilling operation oversight and subsurface mapping.

Hunt Energy Corporation

Exploration Geologist

1981 - 1983

- Responsible for oil and gas prospect generation, oil and gas drilling operation oversight and subsurface mapping.

EDUCATION

BS, Geology

Marshall University

1976 - 1981

CERTIFICATIONS

- Professional Geologist (CPG) #9326
- Asbestos Contractor Supervisor CSR17012602
- MI Storm Water Operator License #C-10345
- Petroleum Geologist (AAPG) #52992-7

ADDITIONAL QUALIFICATIONS

- 40-Hour OSHA Hazwoper
- Lead, Cadmium & Chromium Training
- CPR & First Aid
- Roadway Worker Training (Railroad)
- OSHA & MIOSHA Training
- Trained Scaffold User
- Respirator Fit Testing
- Medical Monitoring



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 202.0706

pparker@mackenzieco.com

Philip Parker

Project Manager / Estimator

Estimating and managing site development and underground utility projects and overseeing day-to-day operations at project site.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Estimator / Project Manager
2021 - Present

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

Barton Malow Company
Project Engineer II
2016 - 2021

- Managed all functions of multiple construction projects of varying types from award to completion.

Johnson & Sons Excavating
Laborer
2013 - 2015

- Installed underground utilities, performed inspections, worked on mass grading sites and performed equipment and vehicle maintenance.

ADDITIONAL

QUALIFICATIONS

- Certified Storm Water Operator
#C-22544
- Bid2Win
- Viewpoint
- Confined Space Training
- OSHA 10 Certified

EDUCATION

Bachelor Degree
Construction Management
Michigan State University
2019

High School Diploma, 3.97 GPA
Goodrich High School
2015



Mackenzie Companies

o (517) 627.8408

f (517) 627.4470

c (517) 588-9353

rmcelhaney@mackenzieco.com

Ronald McElhaney

Safety Director

Inspects and monitors construction and other sites and ensure safety compliance, and arranges and/or provides ongoing safety training.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company / E.T. MacKenzie of Florida, Inc.

Safety Director

2019

- Complete weekly job site safety inspections and written site reports.
- Conduct fire and safety inspections for company-owned buildings.
- Compile accident reports and conduct investigations.
- Train supervisors.
- Train and certify employees in confined space entry, fork truck, first aid and CPR, flagging, mine safety and other safety standards.
- Work with various state and federal agencies on MIOSHA and OSHA standards.
- Purchase and prepare safety materials for supervisors.

Toolos Contracting Group

Safety Director

2017 - 2018

Granger Construction

Safety Manager

2016 - 2017

Searchlight Safety

Contracted Site Safety Manager

2015 - 2016

OnSite Innovations

Construction Safety Director

2011 - 2015

EDUCATION

Master of Science in Administration

Ohio University

2012

Bachelor of Science in Athletic Training

Michigan State University

2009

ADDITIONAL QUALIFICATIONS

- 40-Hour OSHA Hazwoper
- OSHA 510
- OSHA 30-Hr Training
- OSHA 10
- LARA MIOSHA Level 1
- MIOSHA Recordkeeping/Cost of Injuries
- Confined Space Entry
- CPR & First Aid Certified
- Equipment Operator Permit
- Traffic Control Operations
- Silica Training
- Competent Person Fall Protection
- Supervisor's Role in Safety & Health
- Human Factors Engineering
- Elements of a S/H Management System



Ann Arbor Division - E.T. MacKenzie Company

o (734) 761.5050

f (734) 761.5323

c (734) 216.0835

rcurbyetmc@gmail.com

Russell J. Curby

Foreman

Managing large site development projects, including coordination of subcontractors and scheduling.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company

Foreman

1994 - Present

- Supervisor for site development. Responsibilities include construction site layout and planning, equipment and labor coordination, procurement of materials, contracting with subcontractors, scheduling and coordinating of subcontractors, coordination with local municipalities, site safety, creating and maintaining field documents, inspections and coordination with customers to assure project meets or exceed needs and expectations.

Pipe Layer

1991 - 1994

D.N. Higgins Company

Pipe Layer

1991

Saline Construction

Pipe Layer/Equipment Operator/Truck Driver

1984 - 1991

United States Marine Corp.

1980 - 1984

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator License #C-01705
- 40-Hour OSHA Hazwoper
- OSHA & MIOSHA Training
- Lead, Cadmium & Chromium Training
- Confined Space Entry Training
- CPR & First Aid Certificate
- PipePatch Factory Trained Installer

EDUCATION

Construction Management

Eastern Michigan University

1984 - 1990

Industrial Technology

Central Michigan University

1976 - 1980

Pioneer High School

Diploma



Mackenzie Companies
o (517) 627.8408
f (517) 627.4470
c (517) 202.2847
sm@mackenzieco.com

Stephanie L. MacKenzie

Corporate Secretary / Treasurer

Stephanie MacKenzie began her lifelong career at MacKenzie Companies over thirty years ago, learning many facets of our operations. First working as a laborer/operator in the field, she also held various office positions. Now, as our Corporate Secretary / Treasurer, she is in charge of managing all office and IT operations.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company / E.T. MacKenzie of Florida, Inc.

Corporate Secretary / Treasurer

2015 - Present

Office Operations & IT Management

1990 - Present

- Management of day to day office & IT operations. Supervise, train, hire and direct administrative support team. Plan, direct, & evaluate the operations of computer systems and processing. Develop policies and procedures for computer & paperwork processing, procedures, & integrity of systems and output for headquarters and all branch offices. Develop and implement marketing materials, media & company presence. Plan and coordinate company functions and travel.

E. T. MacKenzie Company

Field Employee & Accounts Payable/Job Cost Clerk

1984 - 1988

EDUCATION

Audio Engineering

The Art Institute of Fort Lauderdale

University of Miami w/internship

1988 - 1990

Lansing Community College

1986 - 1988

ADDITIONAL

QUALIFICATIONS

- 40-Hour OSHA Hazwoper
- CPR & First Aid Certified
- OSHA & MIOSHA Training
- Estimating Sitework Construction 04PO119-18, Construction Estimating Institute of America, 1996



E.T. MacKenzie Company

o (517) 627.8408

f (517) 627.4470

c (517) 712.1272

sbultema@mackenzieco.com

Steve Bultema

Estimator / Project Manager

Over thirty years of experience managing bid estimates, contracts, documents and construction of sitework projects.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company
Estimator / Project Manager
2010 - Present

- Responsible for bidding and negotiating contracts, project management and coordination of projects in the areas of site-work, earthwork, mass grading, and site utilities including sanitary sewers, storm sewers, watermain and roads.

Bultema Brothers Road Contractors
Various Positions
1977 - 2009

- Thirty-two years of work in the family business first included laboring, operating equipment and supervising of projects. In the more recent years, job title was that of project manager, estimator and president.

ADDITIONAL

QUALIFICATIONS

- Certified Storm Water Operator #18156
- OSHA & MIOSHA Training

EDUCATION

Kelloggsville High School
Diploma



Mackenzie Companies

o (517) 627.8408

f (517) 627.4470

c (517) 231.8443

thomasemackenzie@gmail.com

Thomas E. MacKenzie

Vice President / Superintendent

Tom MacKenzie learned this business from the ground up, having first worked in multiple capacities on our jobsites. Now, with over thirty years of experience, he is an experienced vice president and superintendent in charge of managing the construction of large commercial, industrial and residential developments.

PROFESSIONAL EXPERIENCE

E.T. MacKenzie Company / E.T. MacKenzie of Florida, Inc.

Vice President

2015 - Present

E.T. MacKenzie Company

Superintendent

2010 - Present

- General superintendent for company with work consisting of trucking, grading, demolition, bridge construction, and underground utilities, both as general contractor and subcontractor. Responsibilities include planning, scheduling and coordinating jobs, scheduling trucks and equipment, and assisting with bidding.

Foreman

2000 - 2009

Heavy Equipment Operator

1987 - 2000

ADDITIONAL

QUALIFICATIONS

- MI Storm Water Operator, License #C10353
- 40-Hour OSHA Hazwoper
- OSHA & MIOSHA Training
- Confined Space Entry Training
- CPR & First Aid Certificate
- Mine Safety Training
- Roadway Worker Training (Railroad)

EDUCATION

Grand Ledge High School

Diploma

EXHIBIT A.2 Reference Letters, Current and Completed Projects





Andy Schor, Mayor

PUBLIC SERVICE DEPARTMENT

7th Floor City Hall
124 West Michigan Avenue
Lansing, Michigan 48933
(517) 483-4455
FAX: (517) 483-6082
www.lansingmi.gov/pubserv



March 7, 2022

City of Ann Arbor
301 E. Huron Street
Ann Arbor, Michigan 48104

RE: Recommendation for E.T. MacKenzie Company

To Whom It May Concern:

Regarding E.T. MacKenzie Company, this company has completed several large-scale utility construction projects for the City of Lansing Public Service Department; primarily, projects associated with the City's Combined Sewer Overflow (CSO) Program. The CSO Program's "sewer separation" construction projects are typically multiyear projects that result in replacement or rehabilitation of all public sewers and public watermain within the project area, which results in the need for complete reconstruction of the public roadway, including new concrete facilities (i.e., new curb & gutter, ADA ramps, etc.).

Based on the magnitude and scope of the CSO Program's construction projects, only construction contractors with great resources and ability can bond for and complete these large projects. E.T. MacKenzie Company has demonstrated time and again that they do have the equipment, personnel, and experience to successfully complete these projects. In addition, the company has demonstrated that they provide very high-quality workmanship based on the negligible amount of subsequent corrective needs. Notably, regarding the CSO Program construction measures described above (i.e., new public utilities, roadway, etc.), E.T. MacKenzie Company has performed most of these activities with their own staff forces; as opposed to using multiple subcontractors, which seems to result in a superior finished product.

Lastly, as project engineer for multiple projects with E.T. MacKenzie Company, I can state that, based on prior experience, the company instills a comfort level relative to conducting their construction activities in a conscientious and professional manner.

As per the above comments, I would have no concern or hesitation about using E.T. MacKenzie Company for any municipal construction project.

Sincerely,

Alec Malvetis, Asst. City Engineer



March 7, 2022

Mr. John Niemiec
E.T. MacKenzie Company – Ann Arbor Division
8197 Jackson Road
Ann Arbor, MI 48103
Office: (734) 761-5050
jniemiec@mackenzieco.com

Re: Reference Letter – E.T. MacKenzie Company

Dear John & To, Whom It May Concern:

This letter serves as a reference letter from O'Neal Construction, Inc. (OCI) to E.T. MacKenzie Company (ETM) confirming their outstanding track record for completed projects in the last five (5) years.

Over that last five (5) years subcontracts between OCI and ETM, totally over \$5 Million dollars for sitework & underground utilities have been successfully completed. Our relationship of outstanding projects dates back ten (10) years and counting.

OCI has come to rely heavily on ETM for their knowledge and expertise regarding all things sitework related. We've partnered on projects needing pre-construction design input to projects needing on-site soil troubleshooting. Their Ann Arbor Division provides great management leadership as well as field expertise that is trustworthy and reliable.

Should you have any questions or need any further information do not hesitate to contact me directly at (734) 216-5588.

Sincerely,

A handwritten signature in blue ink that reads 'Matthew J. Ratzow'.

Matthew Ratzow, Senior Project Manager

o'neal construction

www.onealconstruction.com

525 W. William, Ann Arbor, Michigan 48103
P. (734) 769-0770 F. (734) 769-1736 M. (734) 216-5588

Jack R. Carnahan, P.E., PLLC

Consulting Civil Engineer

March 2, 2022

To Whom It May Concern:

As a consultant and contractor for land development services to HC Investment Holdings LLC, and Soave Biltmore LLC, I have had numerous interactions with E.T. MacKenzie Company. They have constructed 4 phases of a large single family residential subdivision, built a widening lane in Jackson Road, built a pedestrian bridge to cross a major stream (Honey Creek in Washtenaw County), worked with local, county and state agencies and completed all aspects of any project on time and on budget.

They have been extremely helpful in dealing with homeowners who want to provide their own instructions to developers and builders.

I have extremely high regard for their employees and their work. They have been a great company to work with and have always performed beyond expectations.

I highly recommend them for any projects.

Sincerely,



Jack R. Carnahan, P.E.



March 2, 2022

Re: E.T. MacKenzie Company

To Whom It May Concern:

E.T. MacKenzie Company has been working for Norfolk Development Corporation as a subcontractor for over 25 years. They have been responsible for Soil Erosion, Demolition, Clearing, Mass Grading, Underground Utilities, including Sanitary, Storm and Water, Concrete, Asphalt Paving, Landscaping, and Maintenance.

We currently have six active contracts with them for various projects. Their management of these projects has been professional, and on point. In fulfilling their contractual obligations, they must work with municipalities, as well as our engineers, surveyors, testing companies, and specialty contractors. Being responsible for both internal and field operations, I have witnessed nothing but professional communication between E.T. MacKenzie Company and other professionals on our projects.

It is our desire to continue our relationship with E.T. MacKenzie Company for many years to come. Their attention to detail, timing, professionalism, and quality of work, allows us to follow up behind them, and do what we do best, build houses; confident that they have provided us a strong foundation for the balance of the project.

If you should have any questions, or would like to discuss our recommendation in greater detail, please feel free to contact me at ddarkowski@norfolk-homes.com, or 734.368.8663.

Sincerely,

A handwritten signature in blue ink, appearing to read "David Darkowski".

David Darkowski
Land Development Manager
Norfolk Development Corporation

Reference List

TRADE REFERENCES:

Michigan CAT

Joe Edwards
(517) 204.5568

Northern Concrete Pipe

John Washabaugh
(517) 645.2777

Ferguson Waterworks

Jason Maynard
(517) 322-0300
(517) 322-4037 fax

Anderson-Fischer & Associates

John Fischer
(517) 676-5522
(517) 676-0466 fax

PRIVATE FIRM REFERENCES:

O'Neal Construction

525 West William
Ann Arbor, MI 48103
(734) 769-0770
(734) 769-1736 fax

Rockford Construction Company

5540 Glenwood Hills Parkway SE
Grand Rapids, MI 49512
(616) 285-6933
(616) 285-8001 fax

Schostak Brothers & Company

17800 Laurel Park Drive North, Ste. 200C
Livonia, MI 48152
(248) 262-1000
(248) 262-1814 fax

BANK REFERENCE:

Old National Bank

Tim Helber
2723 South State Street
Ste. 210
Ann Arbor, MI 48104
(734) 887-2635

SURETY:

Liberty Mutual

c/o The David Chapman Agency
5700 West Mt. Hope Hwy.
Lansing, MI 48917
(517) 321-4600
(517) 321-9443 fax

PROFESSIONAL ASSOCIATIONS:

**MITA – Michigan Infrastructure &
Transportation Association**

**NUCA – National Underground
Contractors Association**

NAHB – National Assoc of Home Builders

NDC – National Demolition Association

MAA – Michigan Aggregates Association

ABC – Assoc. Builders & Contractors

**CFMA – Construction Financial
Management Association**



DAVID
CHAPMAN
AGENCY

Making Insurance and Bonds Easy

December 3, 2020

E T MacKenzie Company
4248 W Saginaw Hwy
Grand Ledge, MI 48837

RE: Surety Bond Reference

To Whom It May Concern:

It has been the privilege of the David Chapman Agency, Inc and The Liberty Mutual Insurance Company to provide surety bonds on behalf of E T MacKenzie Company for many years. We have had excellent experience. All projects have been completed, and all obligations have been met. In addition to considering their experience, we regularly review and analyze their CPA prepared financial statements. In our opinion E T MacKenzie Company is properly financed, equipped, and managed for superior performance on the projects they undertake

We evaluate each project opportunity based upon its own merits, and the opinion of MacKenzie management. However, we are prepared to provide bonds up to thirty million dollars single project with aggregate of eighty million dollars or more. As always, The Liberty Mutual Insurance Company reserves the right to perform normal underwriting at the time of any bond request, including, without limitation, prior review and approval of relevant contract documents, bond forms and project financing. We assume no liability if for any reason we do not execute such bonds.

The Liberty Mutual Insurance Company is listed on the U.S. Treasury Department's Listing of Approved Sureties and is rated A (XV) by A.M. Best's Company.

Sincerely
David Chapman Agency, Inc

Robert G Chapman



GRETCHEN WHITMER
Governor

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
Lansing

PAUL C. AJEGBA
Director

May 21, 2021

E.T. MacKenzie Company
4248 W Saginaw Hwy
Grand Ledge MI 48837-2225

01886
(517) 627-8408

Dear Vendor:

In accordance with our Administrative Rules we have established your numerical rating which is based on a financial rating of \$138,428,000.00 covering the classifications in the amounts stated below. This prequalification rating is effective until April 30, 2023.

1000	B	Concrete Pavement
300	Ba	Concrete Pavement Patching And Widening
138428	Ea	Grading, Drainage Structures & Agg. Cons
138428	Fa	Bridges And Special Structures
500	Fb	Structural Steel(Erection)
3000	Fd	Pumphouses
138428	G	Building Moving And Demolition
200	H	Landscaping
30000	I	Sodding And Seeding/Turf Establishment
10000	J	Concrete C, C&G, Driveways, Sidewalks
138428	K	Sewers and Watermains
138428	N2	Clearing & Grubbing

It will be assumed that the rating is satisfactory unless the Prequalification Committee is notified in writing to the contrary within 15 days after the bidder has been advised of the rating granted. The Department, may declare a prequalified bidder ineligible to bid at any time because of developments subsequent to prequalification which, in their opinion, would affect the responsibility of the bidder or their ability to perform the contract work.

Lawrence F. Strzalka
Manager
Construction Contracts Section
Contract Services Division

E.T. MacKenzie Company

Current Projects Profile

Project Name	Owner	Engineer	Estimated Completion Date	Contract Amount	Reference
Village Place PH 5 **Contract in Progress				TBD	
Emergent BioSolutions Demo 3500 N MLK Blvd Lansing MI	Emergent BioSolutions David Rademacher 3500 N MLK Blvd Lansing, MI 517-327-1625		March 2022	\$57,435.25	Emergent BioSolutions David Rademacher 3500 N MLK Blvd Lansing, MI 517-327-1625
Pepsi Lansing Drainage 4900 W Grand River Lansing, MI	Pepsi Co. Jacob Peterson 4900 W Grand River Lansing, MI 517-667-9821	Boss Engineering	February 2022 -Paving in Spring-	\$163,389.85	Pepsi Co. Jacob Peterson 4900 W Grand River Lansing, MI 517-667-9821
Snow Road Clearing Ypsilanti Township, MI	Ypsilanti Community Utilities Authority Scott Westover 2777 State Road Ypsilanti, MI 48198 734-484-4600	OHM Advisors Matthew Parks 34000 Plymouth Rd Livonia, MI 48150 734-522-6711	March 2022	\$173,900.00	Ypsilanti Community Utilities Authority Scott Westover 2777 State Road Ypsilanti, MI 48198 734-484-4600
LaFontaine Ford Lansing **Contract in Progress				\$225,819.52	
Ann Arbor Compost Pad Ann Arbor, MI	City of Ann Arbor Alison Heatley 301 E Huron St Ann Arbor, MI 734-794-6410	City of Ann Arbor Theresa Bridges 301 E Huron St Ann Arbor, MI 734-794-6410	June 2022	\$249,900.00	City of Ann Arbor Alison Heatley 301 E Huron St Ann Arbor, MI 734-794-6410
East West Pathway Repair Delta Twp, MI	Delta Township Earnest West, P.E. 7710 W Saginaw Hwy Lansing, MI 48917 517-323-8540	Delta Township Earnest West, P.E. 7710 W Saginaw Hwy Lansing, MI 48917 517-323-8540	October 2022	\$273,354.25	Delta Township Earnest West, P.E. 7710 W Saginaw Hwy Lansing, MI 48917 517-323-8540

Project Name	Owner	Engineer	Estimated Completion Date	Contract Amount	Reference
Oakhill Retaining Wall Oakhill Avenue, East Lansing	City of East Lansing Aden Duong 1800 E State St East Lansing, MI 517-337-9459	City of East Lansing Nichole McPherson 1800 E State St East Lansing, MI 517-337-9459	May 2022	\$276,629.40	City of East Lansing Aden Duong 1800 E State St East Lansing, MI 517-337-9459
Taco Bell MLK 3211 S Martin Luther King Jr Blvd Lansing, MI	Sundance, Inc. Tim Krause 7915 Kensington Ct Brighton, MI 48116 248-446-0100	Excel 100 Camelot Dr Fond Du Lac, WI 920-926-9800		\$329,418.03	Sundance, Inc. Tim Krause 7915 Kensington Ct Brighton, MI 48116 248-446-0100
Redwood Texas Twp, Ph 2 **Contract in Progress				\$403,997.00	
College Road Sanitary Sewer Holt & College Road	George F Eyde Family, LLC Howard Olsen 300 S Washington Sq, Ste 400 Lansing, MI 48933 517-351-2480	KEBS, INC 2116 Haslett Rd Haslett, MI 48840 517-339-1014		\$451,004.45	George F Eyde Family, LLC Howard Olsen 300 S Washington Sq, Ste 400 Lansing, MI 48933 517-351-2480
Michigan Pure Med Lansing, MI	Joe Jarvis MPM-R Lansing LLC 1001 Woodward Ave., Ste. 500 Unit 6A121 Detroit, MI 48226 248-804-8400	Tim Storey Storey Engineering 48264 Manchester Macomb, MI 48044 586-216-1043	October 2021	\$477,046.85	David Schatzberb Venator Contracting 44930 Vic Wertz Drive Clinton Twp., MI 48036 586-229-2428
Calmic PH 2 Leoni Township, MI	Calmic PH 2, LLC Louis Johnson 2793 Plymouth Rd Ann Arbor, MI 734-476-4445	AE Design Solutions, LLC Chris Crisenbery 250 Robinson Rd Jackson, MI	December 2021	\$648,357.47	Calmic PH 2, LLC Louis Johnson 2793 Plymouth Rd Ann Arbor, MI 734-476-4445
GLHS Fine Arts Addition Grand Ledge High School, MI	Grand Ledge Public Schools Dr Brian Metcalf 220 Lamson St Grand Ledge, MI	GIMNB Architects 85 East Eighth St, Ste 200 Holland, MI 49428	August 2022	\$881,224.00	Clark Construction Co. Jim Kaiser 3535 Moores River Drive Lansing, MI

Project Name	Owner	Engineer	Estimated Completion Date	Contract Amount	Reference
Ingham ISD 611 Hagadorn Rd Mason, MI	2630 W Howell Rd Mason, MI			\$1,025,619.00	
Hunters Glen Wayland, MI	Sun Hunters Glen, LLC Len Shember 27777 Franklin Rd, Ste 200 Southfield, MI 248-996-3635	Atwell, LLC Brian Styck 1250 E Dehl Rd, Ste 30 Naperville, IL 630-577-0800	September 2022	\$1,087,189.60	Atwell, LLC Ed Zebrowski 2 Town Square, Ste 700 Southfield, MI 866-850-4200
Sanitary Manhole Raising Ann Arbor, MI **Contract in Progress				\$1,273,675.00	
3rd & Mosely Water Main Ann Arbor, MI	City of Ann Arbor Theresa Bridges 301 E Huron St Ann Arbor, MI 734-994-1744	City of Ann Arbor Theresa Bridges 301 E Huron St Ann Arbor, MI 734-994-1744	July 2022	\$1,299,999.25	City of Ann Arbor Theresa Bridges 301 E Huron St Ann Arbor, MI 734-994-1744
Redwood Delta Willow Hwy Delta Twp, MI	Redwood Construction Kris Conwill 7007 E Pleasant Valley Rd Independence, OH 216-360-9441	Bergmann 7050 W Saginaw Hwy, Ste 200 Lansing, MI 517-827-8681	March 2022	\$1,481,528.50	Redwood Construction Chuck Grasser 7007 E Pleasant Valley Rd Independence, OH 440-417-2175
Bristol Ridge Ann Arbor, MI	Norfolk Homes of Bristol Ridge LLC 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-408-0777	Washtenaw Engineering Co. 3526 West Liberty Road #400 Ann Arbor, MI 48103 734-761-8800	July 2021	\$1,622,826.85	David Darkowski Norfolk Homes of Bristol Ridge LLC 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-408-0777
Grand Ledge Beagle Elementary Grand Ledge, MI	Brian Metcalf Grand Ledge Public Schools 220 Lamson Street Grand Ledge, MI 48837 517-925-5400	GMB Architects-Engineers 85 East Eighth Street, Ste. 200 Holland, MI 49428-3528 616-796-0200	August 2021	\$1,750,299.00	Jim Kaiser Clark Construction Company 3535 Moores River Drive Lansing, MI 48911 517-372-0940
	Eastbrook Homes				Eastbrook Homes

Project Name	Owner	Engineer	Estimated Completion Date	Contract Amount	Reference
Thomas Farms Clark Road Dewitt, MI	Michael McGraw 1188 E Paris Ave SE, Ste 100 Grand Rapids, MI 616-745-5208	Exxel Engineering 5252 Clyde Park SW Grand Rapids, MI 616-291-2276		\$1,844,189.91	Michael McGraw 1188 E Paris Ave SE, Ste 100 Grand Rapids, MI 616-745-5208
Sunset Ridge, Ph 5					
**Contract in Progress					
Whiskey Beach Bait Beaverton, MI	DTMB PO Box 30026 Lansing, MI	Sagasser & Associates Inc Jeffrey Arch, P.E. 699 S Wisconsin Ave Gaylord, MI 989-732-5800	December 2021	\$2,285,538.00	Sagasser & Associates Inc Jeffrey Arch, P.E. 699 S Wisconsin Ave Gaylord, MI 989-732-5800
Lakewood Ph II Forcemain Replacement Odessa Twp., MI	Doug Sunken Lakewood Wastewater Authority 13751 Harwood Road Lake Odessa, MI 48849 616-374-3265	Fishbeck 1515 Arboretum Drive SE Grand Rapids, MI 616-464-3929	May 2021	\$2,293,060.00	Greg Whittle Fishbeck 1515 Arboretum Drive SE Grand Rapids, MI 616-464-3929
Fosdick Glen York Township, MI	Norfolk Development 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-545-8546	Heath Hartt Midwestern Consulting 3815 Plaza Drive Ann Arbor, MI 48109 734-995-0200	November 2021	\$2,392,333.25	Sean Lefere Norfolk Development 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-545-8546
Redwood Hartland					
**Contract in Progress					
Redwood Portage Portage, MI	Redwood Portage Lovers Lane P1 LLC Chuck Grasser 7007 East Pleasant Valley Rd Independence OH 440-417-2175		June 2022	\$2,848,037.10	Redwood Portage Lovers Lane P1 LLC Chuck Grasser 7007 East Pleasant Valley Rd Independence OH 440-417-2175
Silver Leaf PH 1					
**Contract in Progress					

Project Name	Owner	Engineer	Estimated Completion Date	Contract Amount	Reference
Chelsea Milling (Jiffy) Chelsea, MI	Chelsea Milling Randy Kepple 201 W North St Chelsea, MI 734-475-1361, ext 294	Midwestern Consulting LLC Sue Dickinson 3815 Plaza Dr Ann Arbor, MI 734-995-0200, ext 221	October 2022	\$3,533,727.00	O'Neal Construction, Inc Matt Ratzow 525 W Williams St Ann Arbor, MI 734-769-0770
Cottages at Barton Green Ann Arbor, MI	Joel Spellar MI-LUM Holdings LLC 201 Main Street, Ste. 1000 Lafayette, IN 47901 765-807-2705	Scott Beizoldt Midwestern Consulting 3815 Plaza Drive Ann Arbor, MI 48109 734-995-0200	August 2021	\$4,187,410.70	Joel Spellar Trinitas Construction (MI) LLC 201 Main Street, Ste. 1000 Lafayette, IN 47901 765-807-2705
East Glenclair Neighborhood Utility & Roadway Improvements East Lansing, MI	City of East Lansing 1800 East State Road East Lansing, MI 48823 517-319-6928	Hubbell Roth & Clark, Inc. 2102 Aurelius Road, Ste. 2 Holt, MI 48842 517-694-7760	November 2021	\$5,295,394.35	Nicole McPherson City of East Lansing 1800 East State Road East Lansing, MI 48823 517-319-6928

E.T. MacKenzie Company
Completed Projects Profile

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Costco Wholesale East Lansing East Lansing, MI	Costco Wholesale, Inc. 999 Lake Drive Issaquah, WA 98027	Mulvanny G2 Architecture 1101 Second Ave., Ste. 100 Seattle, WA 98101	November 2017	Original \$5,948,885.00 Ending \$7,299,361.00	Jerry Pollock Jackson Dean Construction 3414 South 116th Street Seattle, WA 98168 425-531-1077
Hoover, Greene & Hill Improvements Ann Arbor, MI	City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410		August 2020	Original \$4,692,900.00 Ending \$5,585,055.50	Christopher Wall City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410
Cider Mill Crossings, Phase 4 Tyrone Twp., MI	Sun Cider Mill Crossings, LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034 248-208-2500	Matt Diffin Diffin-Umlor & Associates 49287 West Road Wixom, MI 48393 248-437-7803	November 2019	Original \$3,988,939.35 Ending \$4,446,073.33	Ron Hill Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000
Honey Creek, Phase 1 Earthwork, underground utilities Scio Twp., MI	Jack Camahan HC Investment Holdings, LLC 89 Lake Shore Road Grosse Pointe Farms, MI 48236 248-563-5800		October 2017	Original \$3,722,785.70 Ending \$4,059,244.94	Scott Betzoldt Midwestern Consulting, LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200
Mt Hope Park Phases I/II Delta Township, MI	Delta Charter Township 7710 West Saginaw Hwy Lansing, MI 48917 517-323-8500	Woody Isaacs Viridis Design Group 313 North Burdick Street Kalamazoo, MI 49007 269-585-2051	August 2019	Original \$3,579,300.00 Ending \$3,833,983.04	Ernie West Delta Charter Township 7710 West Saginaw Hwy Lansing, MI 48917 517-323-8500
Oaks of Rockford Phase 2 Cortland Twp., MI	Oaks of Rockford MHC, LLC 11640 Townsquare Blvd. Rockford, MI 49341 248-379-2941	Zack Voogt Moore & Bruggink, Inc. 2020 Monroe NW Grand Rapids, MI 49505 616-363-9801	August 2020	Original \$3,347,506.95 Ending \$3,313,120.36	Brian Fannon Oaks of Rockford MHC, LLC 11640 Townsquare Blvd. Rockford, MI 49341 248-379-2941
CRIA Taxiway Turning Improvement Lansing, MI	Capital Region Airport Authority 4100 Capital City Blvd. Lansing, MI 48906	RS&H G-3101 West Bristol Road, Ste. 300 Flint, MI 48507 810-496-6746	June 2017	Original \$3,256,594.25 Ending \$3,879,532.74	Erich Thiel RS&H G-3101 West Bristol Road, Ste. 300 Flint, MI 48507 810-496-6746

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Washtenaw County Bridges MDOT Contract ID 81000-208103 Washtenaw County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909		December 2021	Original \$3,032,221.12 Ending \$3,381,721.20	Nate Murphy Washtenaw County Road Commission 555 Zeeb Road Ann Arbor, MI 48103 734-761-1500
100 Grand River East Lansing, MI	100 Grand River LLC 540 West Madison Ave., Ste. 2500 Chicago, IL 60661	Solomon, Cordwell, Buenz, Inc. 625 N. Michigan Ave., Ste. 800 Chicago, IL 60611	July 2021	Original \$3,156,472.30 Ending \$3,496,986.80	Chris Oakley 100 Grand River LLC 540 West Madison Ave., Ste. 2500 Chicago, IL 60661
Cider Mill Crossings Manufactured Housing Comm. Earthwork and underground utilities Tyrone Twp., MI	Sun Cider Mill Crossings, LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034	Matt Diffin Diffin-Umlor & Associates 53115 Grand River Ave. New Hudson, MI 48165 248-437-7803	December 2016	Original \$2,995,903.30 Ending \$3,234,305.57	Erik Fix Schostak Brothers & Company, Inc. 17800 Laurel Park Drive N., Ste. 200C Livonia, MI 48152 248-262-1000
Grand Ledge 2020 Streets Improvements Grand Ledge, MI	Adam Smith City of Grand Ledge 310 Greenwood Street Grand Ledge, MI 48837 517-627-2149	Wolverine Engineers & Surveyors 312 North Street Mason, MI 48854 517-676-9200	November 2020	Original \$2,767,080.75 Ending \$2,620,716.05	Don Heck, PE Wolverine Engineers & Surveyors 312 North Street Mason, MI 48854 517-676-9200
Pauline Blvd MDOT Contract ID 81000-201737 Washtenaw County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48104 734-794-6410	July 2019	Original \$2,430,900.00 Ending \$2,276,487.99	Igor Kotlyar City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48104 734-794-6410
McLaren Offsite Infrastructure Improvements Lansing, MI	McLaren Greater Lansing 401 West Greenlawn Lansing, MI 48910	C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-9131	October 2020	Original \$2,387,461.90 Ending \$2,390,442.69	Adam Falkowski C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-9131
Waverly Shores Village MHC Holland, MI	Waverly Shores Village II LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034	Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000	September 2017	Original \$2,325,288.80 Ending \$2,462,592.80	Ron Hill Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000
		Ian Graham			Steve Schlabach

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Redwood Battle Creek Battle Creek, MI	Redwood Living USA, Inc. 7007 East Pleasant Valley Road Independence, OH 44131 216-360-9441	Bergmann 7050 West Saginaw Hwy., Ste. 200 Lansing, MI 48917 517-272-9836	October 2021	Original \$2,311,472.52 Ending \$2,157,081.64	Redwood Construction Co. 7007 East Pleasant Valley Road Independence, OH 44131 216-360-9441
Redwood Living @ DeWitt Twp. Clearing and Earthwork DeWitt Twp., MI	Redwood Living USA, Inc. 7007 East Pleasant Valley Road Independence, OH 44131 216-360-9441	Ian Graham Bergmann 7050 West Saginaw Hwy., Ste. 200 Lansing, MI 48917 517-272-9836	April 2021	Original \$2,206,718.46 Ending \$2,195,671.03	Steve Schliabach XL Builders LLC PO Box 267 Mount Eaton, OH 44659 330-465-4781
Sunset Ridge Phase 3 Portland, MI	Len Shember Sun Communities Funding II LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034 248-208-2500	Matt Diffin Diffin-Umlor & Associates 49287 West Road Wixom, MI 48393 248-437-7803	October 2018	Original \$2,060,002.15 Ending \$2,844,187.96	Ron Hill Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000
Plymouth & Green Water Main Ann Arbor, MI	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48104 734-794-6410	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48104 734-794-6410	December 2017	Original \$2,059,990.00 Ending \$2,690,955.92	Igor Kotlyar City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48104 734-794-6410
Trailwoods 2V Scio Township, MI	Jack Carnahan HC Investment Holdings LLC 1943 Henrietta Street Birmingham, MI 48009 248-563-5800	Midwestern Consulting LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200	July 2019	Original \$1,928,042.89 Ending \$2,342,809.99	Scott Betzoldt Midwestern Consulting LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200
Austin/Sharon Valley/McCollum Bridges MDOT Contract ID 81000-129377 Washtenaw County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Washtenaw County Road Commission 555 Zeeb Road Ann Arbor, MI 48103 734-761-1500	January 2020	Original \$1,920,965.10 Ending \$2,276,219.80	Kelly Jones Washtenaw County Road Commission 555 Zeeb Road Ann Arbor, MI 48103 734-761-1500
Oaks of Rockford Phase 2 Cortland Twp., MI	Brian Fannon Oaks of Rockford MHC, LLC 11640 Townsquare Blvd. Rockford, MI 49341 248-379-2941	Moore & Bruggink, Inc. 2020 Monroe NW Grand Rapids, MI 49505 616-363-9801	November 2018	Original \$1,915,427.25 Ending \$2,189,643.24	Zack Voogt Moore & Bruggink, Inc. 2020 Monroe NW Grand Rapids, MI 49505 616-363-9801
Dansville Schools Earthwork, Underground Utilities	Amy Hodgson Dansville Schools 1264 Adams Street	Mark Reile Kingscott & Associates 259 East Michigan Ave., Ste 308	June 2019	Original \$1,900,800.00	Chad Stahl Miller-Davis Construction 1029 Portage Street

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Dansville, MI	Dansville, MI 48819	Kalamazoo, MI 49007 269-388-4880		Ending \$2,125,672.55	Kalamazoo, MI 49001 269-345-3561
Dexter High School Athletic Fields Dexter, MI	Dexter Community Schools 7714 Ann Arbor Street Dexter, MI 48130	Carey Baker Beckett & Raeder 535 West William Street, Ste. 101 Ann Arbor, MI 48103 734-663-2622	December 2019	Original \$1,888,076.00 Ending \$2,053,550.68	Mike Nowosad Granger Construction Company 6267 Aurelius Road Lansing, MI 48911 517-393-1670
Former Detroit House of Corrections Plymouth Township, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Rob Smith ATC Group Service, Inc. 46555 Humboldt Dr., Ste 100 Novi, MI 48377 248-669-5140	June 2017	Original \$1,874,357.00 Ending \$1,785,387.63	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Copper Creek Condominium Haslett, MI	Haslett Holdings, LLC 1650 Kendale Blvd. East Lansing, MI 48823 517-371-5000	AJ Patrick Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	June 2021	Original \$1,857,117.07 Ending \$1,889,651.62	David Straub Haslett Holdings, LLC 1650 Kendale Blvd. East Lansing, MI 48823 517-371-5000
Northpointe at College Fields Meridian Twp., MI	Gary Jones Jones Property Development, LLC c/o Altman Greenfield & Selvaggi, LLP 10960 Wilshire Blvd., Ste. 1900 Los Angeles, CA 90024-3805	Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	November 2017	Original \$1,818,845.55 Ending \$1,818,845.55	Jim Rundquist Jones Property Development, LLC 3800 Hagadorn Road Okemos, MI 48864 517-333-8900
Volaris Lansing, MI	Waypoint Residential Services, LLC 13355 Noel Road Dallas, TX 75240 214-261-3414	Greg Petru Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	November 2020	Original \$1,814,549.00 Ending \$2,746,635.19	Keith Ivkovich Wieland 4162 English Oak Drive Lansing, MI 48911 517-372-8650
Athens Road Bridge over St. Joseph River Branch County, MI	Branch County Road Commission 23 East Garfield Ave. Coldwater, MI 49036 517-278-2022	Nicholas Patterson RS&H	January 2016	Original \$1,756,911.62 Ending \$1,729,126.26	Trent Arver Branch County Road Commission 23 East Garfield Ave. Coldwater, MI 49036 517-278-2022
CRIA Cargo Apron Expansion	Capitol Region International Airport	Nicholas Patterson RS&H		Original	Tony Cardillo Florence Cement Company

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Earthwork Lansing, MI	4100 Capitol City Blvd. Lansing, MI 48906	827 Willow Run Airport, 2nd Floor Ypsilanti, MI 48198 810-496-6756	December 2019	\$1,755,158.00 Ending \$2,215,865.16	51515 Corridor Shelby Twp., MI 48315 586-997-2666
Lakewood 2017 Pump Station Improvements Lake Odessa, MI	Lakewood Wastewater Authority 839 Fourth Ave. Lake Odessa, MI 48849	Fishbeck, Thompson, Carr & Huber 1515 Arboretum Drive, SE Grand Rapids, MI 49546 616-464-3815	July 2020	Original \$1,712,833.20 Ending \$2,119,011.51	Wayne Langeland Fishbeck, Thompson, Carr & Huber 1515 Arboretum Drive, SE Grand Rapids, MI 49546 616-464-3815
Redwood Living @ Texas Twp. Clearing and Earthwork Texas Twp., MI	Redwood Living USA, Inc. 7007 East Pleasant Valley Road Independence, OH 44131 216-360-9441	Ceso, Inc. 175 Montrose West Ave., Ste. 400 Akron, OH 44321 330-396-5676	October 2020	Original \$1,700,739.57 Ending \$1,679,754.17	Steve Schlabach XL Builders LLC PO Box 267 Mount Eaton, OH 44659 330-465-4781
Hewett, Russell, Russett and Redeemer Water Main Replacement Ann Arbor, MI	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-794-6410	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-794-6410	August 2016	Original \$1,609,990.00 Ending \$1,587,608.89	David Dykman City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-794-6410
Ballenger Hwy Bridge MDOT Contract ID 25007-118516 Genesee County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920	May 2016	Original \$1,609,504.58 Ending \$1,605,669.74	John Plamondon Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920
Courtyard By Marriott Site work, underground utilities, site concrete, road construction Mt. Pleasant, MI	Darrell Herbruck Mt. Pleasant Hospitality 5225 East Pickard Street Mt. Pleasant, MI 48858 989-773-2400	Tim BeBee CMS&D 310 West Pickard Street, Ste. C Mt. Pleasant, MI 48858 989-775-0756	March 2016	Original \$1,580,950.00 Ending \$1,924,734.64	Jim Fifarek Pioneer Construction 550 Kirtland Street, SW Grand Rapids, MI 49507 616-247-6966
John Earl Drain Eaton County, MI	Eric Deible Eaton County Drain Commission 1045 Independence Blvd. Charlotte, MI 48813 517-543-3809	Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355	August 2020	Original \$1,552,735.60 Ending \$1,486,722.50	Chris Mattson Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Austin Road Bridge MDOT Contract ID 81013-115681 Washtenaw County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Washtenaw County Road Commission 555 North Zeeb Road Ann Arbor, MI 48103 734-761-1500	January 2016	Original \$1,472,194.53 Ending \$1,443,086.81	Kelly Jones Washtenaw County Road Commission 555 North Zeeb Road Ann Arbor, MI 48103 734-761-1500
Eberspacher NA Addition Earthwork, sanitary sewer, storm sewer, water Brighton, MI	Eberspacher North America 2035 Orndorf Drive Brighton, MI 48116	Wayne Perry Desine, Inc. 2183 Pless Drive Brighton, MI 48114 810-227-9533	May 2016	Original \$1,402,996.65 Ending \$1,408,506.76	Mark Jeffries Corrigan Construction 775 North Second Street Brighton, MI 48116 810-229-6323
Elkhart County Jail Demo Goshin, IN	Elkhart County Board of Commissioners 117 North Second Street Goshen, IN 46526 574-534-9394		December 2020	Original \$1,391,392.80 Ending \$1,181,392.14	Tom Rushlow, P.E. Elkhart County Board of Commissioners 117 North Second Street Goshen, IN 46526 574-534-9394
Silverstone Estates Okemos, MI	Mayberry Homes 1650 Kendale Blvd. East Lansing, MI 48823 517-371-5000		January 2021	Original \$1,377,222.10 Ending \$1,441,998.14	Joe Schroeder Mayberry Homes 1650 Kendale Blvd. East Lansing, MI 48823 517-371-5000
Lift Station 102 and 501 Clinton County, MI	Brad Gurski SCCMUA 3671 West Herbison Road DeWitt, MI 48820 517-669-8311	C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-1200	December 2017	Original \$1,372,155.00 Ending \$1,410,914.35	Brian Van Zee C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-1200
Bayberry Chase Apartments Cascade Twp., MI	Norm VanDonseelaar Bayberry Chase One LLC 2651 Grove Circle Commerce Twp., MI 48382 216-360-9441	Mark Belmont CESO, Inc. 395 Springside Drive, Ste. 202 Akron, OH 44333 330-665-0660	July 2018	Original \$1,312,152.75 Ending \$1,316,979.53	Steve Schlabach X.L. Builders PO Box 267 Mt. Eaton, OH 44659 330-465-5255
Shield Road Bridge	Michigan Dept. of Transportation State Transportation Building	Washtenaw County Road Commission		Original	Kelly Jones Washtenaw County Road Commission

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
over Mill Creek MDOT Contract ID 81161-126689 Dexter, MI	425 West Ottawa Street PO Box 30050 Lansing, MI 48909	555 North Zeeb Road Ann Arbor, MI 48103 734-751-1500	February 2018	\$1,309,909.93 Ending \$1,281,146.28	555 North Zeeb Road Ann Arbor, MI 48103 734-751-1500
Gander Mountain - Lansing Earthwork, underground utilities Delta Twp., MI	Gander Mountain Company 180 East Fifth Street, Ste. 1300 St. Paul, MN 55101	Opus Design Build LLC 3610 River Crossing Parkway, Ste. 230 Indianapolis, IN 46240 317-816-5728	August 2016	Original \$1,269,925.00 Ending \$1,206,041.00	Eric Boehner Opus Design Build LLC 3610 River Crossing Parkway, Ste. 230 Indianapolis, IN 46240 317-816-5728
Arlington Woods Webster Twp., MI	Norfolk Development 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777	Scott Betzoldt Midwestern Consulting, LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200	December 2018	Original \$1,260,108.75 Ending \$1,337,451.31	Sean Lefere Norfolk Development 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777
Songbird Way Delta Twp., MI	Unified Group, LLC 6250 West Michigan Ave. Lansing, MI 48917 517-316-4415	Paul Furtaw Bergmann Associates 7050 West Saginaw Hwy Lansing, MI 48917 517-272-9835	July 2017	Original \$1,240,442.00 Ending \$1,289,308.30	John Peckham Unified Group, LLC 6250 West Michigan Ave. Lansing, MI 48917 517-316-4415
Paw Paw Laundry Paw Paw, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Sarat Bobba DLZ Michigan, Inc. 535 South Burdick Street, Ste. 248 Kalamazoo, MI 49007 269-553-0640	September 2017	Original \$1,230,245.00 Ending \$782,911.89	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Ashley Capital Water Main Delta Twp., MI	Marty Gorski Ashley Delta, LLC 2575 South Haggerty Rd, Ste. 500 Canton, MI 48188 773-490-4815	Webb Engineering, Inc. 3315 North Campbell Road, Ste. 200 Royal Oak, MI 48073 248-783-1105	October 2018	Original \$1,229,397.40 Ending \$1,424,072.93	Joe Webb Webb Engineering, Inc. 3315 North Campbell Road, Ste. 200 Royal Oak, MI 48073 248-783-1105
Bristol Rd & Atlas Rd Bridges Genesee County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920	November 2016	Original \$1,226,547.54 Ending \$1,274,890.00	Alex Patsy Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Moon Lake Road Bridge MDOT Contract ID 38000-133156 Jackson County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Casey Collings Great Lakes Engineering Group, LLC 521 Seymour Ave. Lansing, MI 48933 517-363-4400	August 2020	Original \$1,217,926.42 Ending \$1,221,982.69	Bret Taylor Jackson Co. Dept. of Transportation 2400 North Elm Ave. Jackson, MI 49201 517-788-4230
Manufactured Gas Plant Sites St. Johns, MI	Consumers Energy 1945 West Parnall Road Jackson, MI 49201 517-788-2160		September 2019	Original \$1,154,782.00 Ending \$1,113,823.12	Brian Trent Consumers Energy 1945 West Parnall Road Jackson, MI 49201 517-788-2160
Selkirk Lake Drain Wayland Twp., MI	Denise Medemar Allegan County Drain Commission 113 Chestnut Street Allegan, MI 49010 269-673-0440	ENG. Engineering & Surveying 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100	May 2019	Original \$1,141,880.35 Ending \$1,195,938.12	Brian Cenci, PE ENG. Engineering & Surveying 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100
Ferguson Plumbing Site Earthwork, underground utilities Lansing Twp., MI	Allen Atkinson Ferguson Enterprises, Inc. 12500 Jefferson Ave. Newport News, VA 23602-43114 757-874-7795	Brent LaVanwa Boss Engineering 3121 East Grand River Ave. Howell, MI 48843 800-246-6735	March 2018	Original \$1,111,483.00 Ending \$1,129,901.85	Matt Ratzow O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
Kaiser Optical Scio Twp., MI	Kaiser Optical Systems 371 Parkland Plaza Ann Arbor, MI 48103 734-665-8083	Context Design 12 South Main Street, Ste. 200 Fortville, IN 46040 317-485-6900	May 2017	Original \$1,106,537.00 Ending \$1,385,126.14	Bill Poland Genesis Property Development 514 North Harrison Street Shelbyville, IN 46176 317-363-1292
Sunset Drive Road Extension Potterville, MI	Wanda Darrow City of Potterville 319 North Nelson Street Potterville, MI 48876	Williams & Works 549 Ottawa Ave NW Grand Rapids, MI 49503 616-224-1500	May 2018	Original \$1,092,653.85 Ending \$1,712,108.42	Brandon Mieras Williams & Works 549 Ottawa Ave NW Grand Rapids, MI 49503 616-224-1500

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
West Herbison Road MDOT Contract ID 19000-130450 DeWitt, MI	State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Clinton County Road Commission 3536 South US Hwy. 27 St. Johns, MI 48879 989-224-3274	November 2017	Original \$1,084,541.31 Ending \$1,112,435.18	Clinton County Road Commission 3536 South US Hwy. 27 St. Johns, MI 48879 989-224-3274
MacAllister Rentals Delta Twp., MI	Tarbert Properties, Inc. 6300 Southeastern Ave. Indianapolis, IN 46203	Nederveld 217 Grandville Ave., Ste. 302 Grand Rapids, MI 49503	November 2020	Original \$1,067,719.85 Ending \$1,727,642.68	Jay Hostetter Shiel Sexton Company, Inc. 902 North Capitol Ave. Indianapolis, IN 46201 317-423-6064
Whitehills Lakes South Meridian Twp., MI	Signature Land Development 1188 East Paris Ave. SE, Ste. 100 Grand Rapids, MI 616-988-1324	Greg Petru KEBS, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	July 2018	Original \$1,065,395.05 Ending \$1,084,037.50	Mike McGraw Eastbrook Homes 1188 East Paris Ave. SE, Ste. 100 Grand Rapids, MI 49546 616-988-1324
Pepper Ridge Delta Twp., MI	Norm Van Donselaar Redwood Living 7007 East Pleasant Valley Road Independence, OH 44131 216-254-8425	Paul Furtaw Bergmann Associates 7050 West Saginaw Hwy. Lansing, MI 48917 517-272-9835	July 2017	Original \$1,031,208.85 Ending \$1,148,168.15	Wayne Schlabach X.L. Builders PO Box 267 Mt. Eaton, OH 44659 330-465-5255
Lyons Dam Contract 1 and 2 Lyons, MI	Ionia Conservation District 431 Swartz Ct. #300 Ionia, MI 48846 616-527-2620	Sandy Verry Ellen River Partners 21689 Birch Street Grand Rapids, MN 55744 218-301-9504	October 2016	Original \$953,605.00 Ending \$1,182,204.40	Melissa Eldridge Ionia Conservation District 431 Swartz Ct. #300 Ionia, MI 48846 616-527-2620
Creekside Athletic Fields Dexter, MI	Dexter Community Schools 7714 Ann Arbor Street Dexter, MI 48130	Carey Baker Beckett & Raeder 535 West William Street, Ste. 101 Ann Arbor, MI 48103 734-663-2622	December 2019	Original \$949,124.00 Ending \$1,039,367.65	Mike Nowosad Granger Construction Company 6267 Aurelius Road Lansing, MI 48911 517-393-1670
Woodland Corrections Housing Units Demo Whitmore Lake, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026	Christopher Kostner Materials Testing Consultants 693 Plymouth Ave. NE Grand Rapids, MI 49505	May 2018	Original \$936,116.00 Ending	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
	Lansing, MI 48909	616-456-5469		\$1,070,697.00	517-627-8408
Westchester Farm, Phase 1 Sylvan Twp., MI	NDC of Sylvan, LTD 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777	Bob Wanty Washtenaw Engineering 3250 West Liberty Road Ann Arbor, MI 48106 734-761-8800	June 2018	Original \$930,338.25 Ending \$941,220.58	Sean Lefere Norfolk Development Corp. 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777
Broadway Street Bridge over St. Joe River MDOT Contract ID 12016-122983 Union City, Branch County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Jason Early FTCH 39500 Mackenzie Drive Novi, MI 48377 248-342-2120	October 2017	Original \$922,458.38 Ending \$913,687.36	Chris Mathis City of Union City 208 North Broadway Street Union City, MI 49094 517-741-8591
Central Middle School Demolition Midland, MI	Michael Moeggenberg Midland Public Schools 600 East Carpenter Street Midland, MI 48640 989-615-0579	Barton Malow 26500 American Drive Southfield, MI 48034 248-436-5000	May 2016	Original \$899,486.00 Ending \$903,770.74	Daryl Dombrow Barton Malow 26500 American Drive Southfield, MI 48034 248-436-5000
Eyde Clark Road Mass Grading DeWitt Twp., MI	Louis J. Eyde Family LLC 2947 Eyde Parkway, Ste. 200 East Lansing, MI 48823 517-351-2480		December 2020	Original \$873,640.00 Ending \$876,860.00	Sam Eyde Louis J. Eyde Family LLC 2947 Eyde Parkway, Ste. 200 East Lansing, MI 48823 517-351-2480
Pepper Ridge Phase 2 Delta Twp., MI	Norm Van Donselaar Redwood Living 7007 East Pleasant Valley Road Independence, OH 44131 216-254-8425	Paul Fertaw Bergmann Associates 7050 West Saginaw St., Ste. 200 Lansing, MI 48917 517-272-9835	September 2018	Original \$865,726.65 Ending \$841,652.58	Steve Schlabach X.L. Builders PO Box 267 Mt. Eaton, OH 44659 330-465-5255
2020 Utility Improvements Ann Arbor, MI	City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410	City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410	October 2020	Original \$861,457.60 Ending \$825,301.52	Brian Slizewski City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Sunset Ridge Manufactured Housing Comm. Earthwork and underground utilities Portland Twp., MI	Sun Communities Funding II, LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034	Matt Diffin Diffin-Umlor & Associates 53115 Grand River Ave. New Hudson, MI 48165 248-437-7803	October 2016	Original \$842,141.70 Ending \$885,647.73	Erik Fix Schostak Brothers & Company, Inc. 17800 Laurel Park Drive N., Ste. 200C Livonia, MI 48152 248-262-1000
Big Ditch Drain St. Johns, MI	City of St. Johns 100 East State Street, Ste. 1100 St. Johns, MI 48879	Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355	July 2019	Original \$815,695.25 Ending \$772,045.23	Robert Briggs Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355
Old River Trail MDOT Contract ID 23000-201173 Eaton County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909		January 2020	Original \$808,428.43 Ending \$809,902.97	Ryan Atrend Moore & Bruggink 2020 Monroe Ave. NW Grand Rapids, MI 49505 616-363-9801
Windham Hills MHC, Phase 5 Earthwork and underground utilities Jackson, MI	Sun Secured Financing, LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034	Jack Ripstra Ripstra & Schepelmann, Inc. 2535 Spring Arbor Road Jackson, MI 49203 517-789-9898	December 2016	Original \$791,204.25 Ending \$783,779.38	Erik Fix Schostak Brothers & Company, Inc. 17800 Laurel Park Drive N., Ste. 200C Livonia, MI 48152 248-262-1000
Delhi Collection System Improvements Delhi Twp., MI	Delhi Charter Township 2074 Aurelius Road Holt, MI 48842 517-694-2135	Hubbell, Roth & Clark 555 Hulet Drive, PO Box 824 Bloomfield Hills, MI 48303-0824 248-454-6300	August 2019	Original \$783,503.25 Ending \$894,165.27	Prasad Gullapalli Hubbell, Roth & Clark 555 Hulet Drive, PO Box 824 Bloomfield Hills, MI 48303-0824 248-454-6300
Belsay Road Bridge MDOT Contract ID 25000-206079 Fowlerville, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Keith Brown MDOT - Davison TSC 9495 East Potter Road Davison, MI 48423 810-653-7470	October 2021	Original \$780,796.91 Ending \$799,853.23	Gerrad Godley Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920
groSolar Delta Solar Power 2 Nixon	:DF Renewables Distributed Solutions, Inc 5 Commerce Ave.	Paul Lyman Bergmann Associates 7050 West Saginaw St., Ste. 200 5 Commerce Ave.	August 2018	Original \$780,166.00	Tom Lyman EDF Renewables Distributed Solutions, Inc. 5 Commerce Ave.

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Delta Twp., MI	West Lebanon, NH 03784 802-359-6539	Lansing, MI 48917 517-272-9835		Ending \$1,227,137.11	West Lebanon, NH 03784 802-359-6539
Eastern Field Lansing, MI	Todd Coe Lansing School District 519 West Kalamazoo Lansing, MI 48933 517-755-3030	Rusti Owens C2AE 106 West Allegan Lansing, MI 48933	November 2019	Original \$778,090.00 Ending \$830,194.00	Rob Crowe The Christman Company 208 North Capitol Lansing, MI 48933 517-482-1488
Lake Pleasant Road Bridge Hillsdale County, MI	Hillsdale County Road Commission 1915 Hudson Road Hillsdale, MI 49242 517-437-4450		June 2020	Original \$772,055.58 Ending \$748,998.27	John Sanders Hillsdale County Road Commission 1915 Hudson Road Hillsdale, MI 49242 517-437-4450
Vista at College Fields Earthwork and underground utilities Meridian Twp., MI	Gary Jones Jones Property Development, LLC c/o Altman Greenfield & Selvaggi, LLP 10960 Wilshire Blvd., Ste. 1900 Los Angeles, CA 90024-3805	Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	June 2016	Original \$760,000.00 Ending \$791,770.00	Jim Rundquist Jones Property Development, LLC 3800 Hagadorn Road Okemos, MI 48864 517-333-8900
West John Street Development Corunna, MI	Joseph Sawyer City of Corunna 402 North Shiawassee Street Corunna, MI 48817 989-743-3650	C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-1200	November 2018	Original \$744,960.70 Ending \$742,762.34	Cory Davis, PE C2AE 106 West Allegan Street, Ste. 500 Lansing, MI 48933 517-371-1200
Former Ramada Hotel Building demolition Mt. Morris, MI	Cheryl McHallam Genesee Co Land Bank Authority 452 Saginaw Street, 2nd Floor Flint, MI 48502 810-257-3088	Ryan Londrigan AKT Peerless 214 Janes Ave. Saginaw, MI 48607 989-754-9896	March 2016	Original \$744,333.56 Ending \$752,755.00	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Bent Oak Hwy Bridge Lenawee County, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Lenawee County Road Commission 2461 Treat Hwy. Adrian, MI 49221 517-265-6971	December 2016	Original \$739,691.38 Ending \$768,974.13	Scott Merillat Lenawee County Road Commission 2461 Treat Hwy. Adrian, MI 49221 517-265-6971

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Grandhaven Manor II Lansing, MI	Grandhaven Manor II, LLC 950 Taylor Ave. Grand Haven, MI 49417 616-842-2425	Greg Petru Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	April 2018	Original \$727,700.00 Ending \$928,618.05	Dennis Reenders Reenders, Inc. 950 Taylor Ave. Grand Haven, MI 49417 616-842-2425
Leisure Village MHC Expansion Belmont, MI	Len Shember Leisure Village Mobile Home Park 27777 Franklin Road, Ste. 200 Southfield, MI 48034 248-208-2500	Eric Lord Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000	June 2018	Original \$686,723.00 Ending \$725,497.15	Ron Hill Atwell Group LLC Two Towne Square, Ste. 700 Southfield, MI 48076 248-477-2000
Gannon Bldg Parking Garage Demolition Lansing, MI	Lansing Community College 409 North Washington Square Lansing, MI 48933 517-483-1957	Rich & Associates 26877 Northwestern Hwy., Ste. 208 Southfield, MI 48033	May 2021	Original \$684,560.00 Ending \$707,622.00	Dan Hocker The Christman Company 208 North Capitol Ave. Lansing, MI 48933 517-482-1488
West Grand River Demos East Lansing, MI	100 Grand River LLC 540 West Madison Ave., Ste. 2500 Chicago, IL 60661 312-542-3123		December 2017	Original \$652,557.00 Ending \$729,474.00	Chris Oakley 100 Grand River LLC 540 West Madison Ave., Ste. 2500 Chicago, IL 60661 312-542-3123
West Gallup Park Path Resurfacing Ann Arbor, MI	City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410		December 2021	Original \$646,595.50 Ending \$674,892.04	Adam Fercho City of Ann Arbor 301 East Huron Ann Arbor, MI 48104 734-794-6410
Fowlerville CS Athletics and Parking Renovations Fowlerville, MI	Wayne Roedel Fowlerville Community Schools 7677 West Sharpe Road, Ste. A Fowlerville, MI 48836	Dave Mielock Mielock Associates, Inc. 114 Rayson Street, Ste. 2C Northville, MI 48167 248-349-2708	April 2020	Original \$644,385.00 Ending \$677,152.00	Richard Gorski George W. Auch Company 65 University Drive Pontiac, MI 48342 248-322-5516
Wind Trace	Nixon Road Holdings, LLC	KEBS, Inc.		Original	Ron Clark Nixon Road Holdings, LLC

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Delta Twp., MI	4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408	2116 Haslett Road Haslett, MI 48840 517-339-1014	December 2017	\$640,000.00 Ending \$666,734.00	4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408
Peckham Riverside Call Center Earthwork, underground utilities Lansing, MI	Nate Vanderlaan Peckham Industries 2571 North MLK Jr. Blvd. Lansing, MI 48906	Paul Furtaw Bergman Associates 7050 West Saginaw Hwy Lansing, MI 48917 517-272-9835	November 2016	Original \$630,670.00 Ending \$824,163.00	Justin Bialik Pioneer Construction 550 Kirtland Street SW Grand Rapids, MI 616-247-6966
Red Cedar Flats, Phase 1 Earthwork Meridian Twp., MI	Red Cedar Flats, LLC 2380 Science Parkway #101 Okemos, MI 48864 517-347-1980	Jeff Kyles Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	May 2017	Original \$607,400.00 Ending \$805,144.00	Bernie Aulgur Oakwood Construction 2380 Science Parkway #101 Okemos, MI 48864 517-347-1980
Yankee Air Museum New Hangar Facility Van Buren Twp., MI	Kevin Walsh Yankee Air Museum 47884 D Street Belleville, MI 48111 734-483-4030	Jim Rozema GMB Architecture & Engineering 85 East Eighth Street, Ste. 200 Holland, MI 49423 616-796-0200	June 2021	\$1,062,114.73	Keith Norush Quadrants Development, LLC 49410 Wixom Tech Drive Wixom, MI 48393 248-960-3900
1400 Alpine Ave. Site Grand Rapids, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Eric Walters Fleis & VandenBrink 2960 Lucerne Drive SE, Ste. 100 Grand Rapids, MI 49546 616-977-1000	July 2018	Original \$592,323.00 Ending \$367,900.90	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
MSUFCU Holt Branch Holt, MI	Eric Bowdell MSU Federal Credit Union 3777 West Road East Lansing, MI 48823	Neuwmann Smith 400 Galleria offcentre, Ste. 555 Southfield, MI 48034 248-352-8310	September 2020	Original \$573,600.00 Ending \$722,459.74	Andrea Andres Granger Construction Company 8267 Aurelius Road Lansing, MI 48911 517-393-1670
Walnut Park Apartments	Tony Knoble Walnut Park LLC 333 North Pennsylvania St., Ste. 100 Indianapolis, IN 46204 317-264-1833	Andrew Walters Metro Consulting Associates LLC 45345 Five Mile Road Plymouth, MI 48170 734-483-1427	August 2018	Original \$566,625.00 Ending \$665,277.94	Randy Swinford TWG Development 333 North Pennsylvania St., Ste. 100 Indianapolis, IN 46204 317-264-1833

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Lansing Botanical Company and Process Facility Lansing, MI	Go Greener, LLC 4520 Nroth Grand River Ave. Lansing, MI 48906 517-749-3511	Eric Iverson LSG 3135 Pine Tree Road, Ste. D Lansing, MI 48911 517-393-2902	September 2020	Original \$554,288.91 Ending \$839,085.76	Rich Lienhart Go Greener, LLC 4520 Nroth Grand River Ave. Lansing, MI 48906 517-749-3511
Former Salzbug Cleaners Bay City, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Joe Noykos Soil & Materials Engineers, Inc. 1501 West Thomas Street Bay City, MI 48706 989-684-6050	November 2019	Original \$534,565.00 Ending \$388,449.14	Kim Smith E. T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Zoller Building Ann Arbor, MI	Zoller Properties, LLC 3753 Plaza Drive Ann Arbor, MI 48108	Mannik Smith Group 2365 Haggerty Road South Canton, MI 48188	June 2018	Original \$532,746.00 Ending \$802,522.63	Matt Ratzow O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
groSolar Delta Solar Power 1 Delta Twp., MI	DF Renewables Distributed Solutions, Inc 5 Commerce Ave. West Lebanon, NH 03784 802-359-6539	Paul Fertaw Bergmann Associates 7050 West Saginaw St., Ste. 200 Lansing, MI 48917 517-272-9835	May 2018	Original \$528,914.00 Ending \$575,686.86	Tom Lyman EDF Renewables Distributed Solutions, Inc. 5 Commerce Ave. West Lebanon, NH 03784 802-359-6539
Ashford Manor #3 and Point West #3 Earthwork and underground utilities Delta Twp., MI	Eastbrook Homes 1188 East Paris Ave. SE, Ste. 100 Grand Rapids, MI 49546 616-988-1324	Jeff Kyes Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	May 2016	Original \$522,855.30 Ending \$877,710.32	Mike McGraw Eastbrook Homes 1188 East Paris Ave. SE, Ste. 100 Grand Rapids, MI 49546 616-988-1324
Holiday Inn Okemos Meridian Twp., MI	KEBS, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-8047	Jeff Kyyes KEBS, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-8047	October 2017	Original \$519,430.00 Ending \$551,967.88	David Tremonti Oliver/Hatcher Construction 27333 Meadowbrook Road, Ste. 100 Novi, MI 48377 248-374-1100

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Air Lift Addition Site work Delta Township, MI	Air Lift Company 2727 Snow Road Lansing, MI 48917 517-999-2146	WLP Associates 3001 Fuller NE, Ste. 1 Grand Rapids, MI 49505 616-454-1746	June 2019	Original \$518,593.00 Ending \$533,918.25	Constructors, Inc. 1965 Waldorf NW Grand Rapids, MI 49544 616-791-7000
Livingston No. 29 Drain Iosco Twp., MI	Ken Recker Livingston Co. Drain Commissioner 2300 East Grand River, Ste. 105 Howell, MI 48843	ENG. Engineering & Surveying 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100	July 2019	Original \$514,158.25 Ending \$544,868.81	Brian Cenci, PE ENG. Engineering & Surveying 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100
Powell Road Improvements Meridian Twp., MI	Powell Road Holdings LLC 1650 Kendale Blvd., Ste. 200 East Lansing, MI 48823 517-371-5000	John Barber TetraTech 1005 River Street, Ste. 1 Port Huron, MI 48060 810-956-9324	May 2021	Original \$499,787.37 Ending \$499,787.37	David Straub Powell Road Holdings LLC 1650 Kendale Blvd., Ste. 200 East Lansing, MI 48823 517-371-5000
Village Place Phase IV Grand Ledge, MI	Nixon Road Holdings, LLC 4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408	Jeff Kyes KEBS, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	April 2017	Original \$492,733.82 Ending \$336,412.87	Ron Clark Nixon Road Holdings, LLC 4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408
Glenmoor Village MHC Phase II Expansion Leroy Twp., MI	Glenmoor Village MHC LLC 3971 Capital Ave SW Battle Creek, MI 49015 248-379-2941	Zach Voogt Moore & Bruggink, Inc. 2020 Monroe Ave. Grand Rapids, MI 49505 616-363-9801	June 2021	\$630,315.98	Brian Fannon Glenmoor Village MHC LLC 3971 Capital Ave SW Battle Creek, MI 49015 248-379-2941
Delta Mills Canoe Launch Delta Twp., MI	Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500	Woody Isaacs Viridis Design Group 313 North Burdick Street Kalamazoo, MI 49007 269-585-2051	October 2019	Original \$485,000.00 Ending \$535,652.68	Ernie West Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500
Howell Medical Howell, MI	SDS Properties 2265 East Grand River Ave. Howell, MI 48843	Greg Petru Kebs, Inc. 2116 Haslett Road Haslett, MI 48840	November 2017	Original \$477,921.85 Ending	Joe Biersbach Biersbach Construction LLC 1905 Danbury East Okemos, MI

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
City of Flint - Admin Building Flint, MI	517-372-3440 State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	517-339-1014 Paul Meyer Environmental Consulting & Tech, Inc. 3125 Sovereign Drive, #9c Lansing, MI 48911 517-272-9200	October 2019	\$481,276.85 Original \$474,185.00 Ending \$274,590.31	517-281-1168 Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Guardian Tree Experts Scio Twp., MI	Jack Richardson Guardian Treet Experts 522 Second Street Ann Arbor, MI 48103 734-786-1688	Travis Munn Hurley & Stewart, LLC 2800 South 11th Street Kalamazoo, MI 48009 269-552-4960	December 2021	\$473,533.00 Original Ending \$563,740.00	Matt Ratzow O'Neal Construction 525 West Williams Street Ann Arbor, MI 48103 734-769-0770
Goshen Inn Demo Goshen, IN	City of Goshen 204 East Jefferson Street, Ste. 2 Goshen, IN 46528 574-537-3816		January 2017	\$457,480.00 Original Ending \$457,480.00	Keitha Windsor City of Goshen 204 East Jefferson Street, Ste. 2 Goshen, IN 46528 574-537-3816
Grand Ledge Library Parking Lot Grand Ledge, MI	City of Grand Ledge 310 Greenwood Street Grand Ledge, MI 48837	Rusti Owens C2AE 106 West Allegan, Ste. 500 Lansing, MI 48933	March 2018	\$448,415.00 Original Ending \$716,075.54	Adam Smith City of Grand Ledge 310 Greenwood Street Grand Ledge, MI 48837 517-627-2149
Oliver Towers Earthwork and Site Concrete Lansing, MI	Mark Clouse George F. Eyde Family LLC 300 South Washington Square, Ste. 400 Lansing, MI 48933 517-351-2480	Jeff Kyes Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	December 2019	\$443,980.53 Original Ending \$608,936.69	Dan Wittum Wieland 4162 English Oak Drive Lansing, MI 48911 517-372-8650
Caro Center Building demolition Caro, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Chris Kestner Materials Testing Consultants 693 Plymouth Ave. NE Grand Rapids, MI 49505 616-456-5469	January 2019	\$432,557.00 Original Ending \$366,945.76	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Sears Facility #1140 Site Kentwood, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Jean Talanda ATC Group Services LLC 4519 Broadmoor SE Grand Rapids, MI 49512 616-698-3131	March 2018	Original \$428,990.00 Ending \$351,035.84	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
MBS Terminal Bldg Demo Freeland, MI	MBS Airport Commission 8500 Garfield Road Freeland, MI	RS&H 827 Willow Run Airport, Second Floor Ypsilanti, MI 48198 810-496-6742	May 2018	Original \$416,412.00 Ending \$450,286.00	Pat Frame RS&H 827 Willow Run Airport, Second Floor Ypsilanti, MI 48198 810-496-6742
Environmental Cleanup at Former Gun Range Northville, MI	Charter Township of Northville 44405 Six Mile Road Northville, MI 48168 248-662-0498	Charter Township of Northville 44405 Six Mile Road Northville, MI 48168 248-662-0498	April 2021	Original \$415,910.00 Ending \$324,502.49	Bob Belair, PE Charter Township of Northville 44405 Six Mile Road Northville, MI 48168 248-662-0498
West Willow Canoe Launch Delta Twp., MI	Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500	Woody Isaacs Viridis Design Group 313 North Burdick Street Kalamazoo, MI 49007 269-585-2051	June 2019	Original \$415,700.00 Ending \$432,766.07	Ernie West Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500
LESA Building Additions Earthwork, underground utilities Howell, MI	Livingston Educational Service Agency 1425 West Grand River Ave. Howell, MI 48843 517-546-5550	Thom Dumond Boss Engineering 3121 East Grand River Ave. Howell, MI 48842 800-246-6735	December 2016	Original \$411,431.00 Ending \$404,534.71	Matt McSweeney O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
Reid Road Bridge over Swartz Creek Mundy Twp., MI	Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920	Todd Bigler Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920	June 2021	Original \$410,743.40 Ending \$455,761.57	Todd Bigler Genesee County Road Commission 211 West Oakley Street Flint, MI 48503 810-767-4920
Grandeur Oaks Lane	John Petz DF Land Development 24 Frank Lloyd Wright Dr., Ste. K3000	Midwestern Consulting, LLC 3815 Plaza Drive	August 2016	Original \$405,312.40	Tom Covert Midwestern Consulting, LLC 3815 Plaza Drive

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Ann Arbor, MI	Ann Arbor, MI 48106 734-930-4533	Ann Arbor, MI 48108 734-995-0200		Ending \$461,693.30	Ann Arbor, MI 48108 734-995-0200
groSolar Delta Solar Power 2 Mt Hope Delta Twp., MI	:DF Renewables Distributed Solutions, Inc 5 Commerce Ave. West Lebanon, NH 03784 802-359-6539	Paul Fertaw Bergmann Associates 7050 West Saginaw St., Ste. 200 Lansing, MI 48917 517-272-9835	August 2018	Original \$392,642.00 Ending \$546,145.12	Tom Lyman EDF Renewables Distributed Solutions, Inc. 5 Commerce Ave. West Lebanon, NH 03784 802-359-6539
Hamlin Manufactured Housing Comm. Earthwork and underground utilities Webberville, MI	Sun Pool 12, LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034	Brent LaVanway Boss Engineering 3121 East Grand River Ave. Howell, MI 48843 8080-246-6735	October 2016	Original \$390,745.65 Ending \$408,919.15	Erik Fix Schostak Brothers & Company, Inc. 17800 Laurel Park Drive N., Ste. 200C Livonia, MI 48152 248-262-1000
Michigan Pure Med Lansing, MI	Great Lakes Farms Properties LP PO Box 794 Birmingham, MI 48012	Designteam Plus, LLC 975 East Maple Road, Ste. 210 Birmingham, MI 48009	October 2020	Original \$385,022.43 Ending \$268,841.14	David Schatzberg Venator Contracting Group, LLC 44930 Vic Wertz Drive Clinton Twp., MI 48036
Cornwell Farms Ann Arbor Twp., MI	Alex deParry Ann Arbor Builders, Inc. 202 East Madison Street Ann Arbor, MI 48014 734-761-8990	Midwestern Consulting 3815 Paza Drive Ann Arbor, MI 48108 734-995-0200	June 2018	Original \$382,615.00 Ending \$694,061.23	Heath Hartt Midwestern Consulting 3815 Paza Drive Ann Arbor, MI 48108 734-995-0200
Howell - MC Legacy Howell, MI	Trilogy Health Services 303 N Hurstbourne Pkwy, Ste. 200 Louisville, KY 40222	Mannik Smith Group 23225 Mercantile Road Beachwood, OH 44122 216-378-1490	May 2020	Original \$378,691.00 Ending \$692,945.99	Dan Spenthoff DMK Development Group, LLC 9300 Shelbyville Road, Ste. 800 Louisville, KY 40222 502-822-0336
Friedland Industries Warehouse Expansion Lansing, MI	Friedland Industries 405 East Maple Street Lansing, MI 48906 517-482-3000	DC Engineering 1210 North Cedar Street, Ste.B Lansing, MI 48906 517-853-7866	November 2020	Original \$370,950.60 Ending \$382,830.76	Brian Stiebe Laux Construction 1018 Hogsbeck Road Mason, MI 48854 517-694-0117

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Former Days Inn Demo Delta Twp., MI	Saginaw Road Investments, LLC 30500 Northwestern Hwy., Ste 525 Farmington Hills, MI 48334		June 2016	Original \$365,500.00 Ending \$389,037.40	Eric Heizer Advance Redevelopment Solutions PO Box 204 Eagle, MI 48822 517-648-2434
Stoneco Overburden Removal Freedom Twp., MI	Michigan Materials & Aggregates Co. PO Box 600 Thornville, OH 43076 734-364-3235		March 2019	Original \$364,220.50 Ending \$464,720.50	Kristine Rorke Michigan Materials & Aggregates Co. PO Box 600 Thornville, OH 43076 734-364-3235
City Gate Eagle Twp., MI	Consumers Energy Company One Energy Plaza Jackson, MI 49201-2357 517-788-1934		December 2019	Original \$358,734.66 Ending \$366,564.46	Thomas Guess Consumers Energy Company One Energy Plaza Jackson, MI 49201-2357 517-788-1934
Belaire Hills Lift Station Delta Twp., MI	Charter Township of Delta 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8540		April 2016	Original \$342,177.25 Ending \$342,177.25	Gary Arnold Charter Township of Delta 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8540
Village of Okemos Block 1 & 2 Demolition Okemos, MI	Village of Okemos, LLC 2410 Woodlake Drive Okemos, MI 48864 517-648-2434		May 2021	Original \$321,588.00 Ending \$279,601.25	Eric Heizer Village of Okemos, LLC 2410 Woodlake Drive Okemos, MI 48864 517-648-2434
2900 Huron Parkway Ann Arbor, MI	Darren McKinnon First Martin Corp 115 Depot Street Ann Arbor, MI 48107 734-994-5050	Emily McKinnon Smith Group JJR 201 Depot Street, Second Floor Ann Arbor, MI 48104 734-662-4457	July 2019	Original \$315,994.60 Ending \$419,805.67	Tim Stout O'Neal Construction Co. 525 West William Ann Arbor, MI 48103 734-769-0770

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Station Vernon, MI	Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	1425 Keystone Ave. Lansing, MI 48911 517-908-4923	April 2021	\$314,884.00 Ending \$254,850.12	4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Blossom Road Culvert over Spencer Creek Branch County, MI	Branch County Road Commission 23 East Garfield Ave. Coldwater, MI 49036 517-278-2022	Trent Arver Branch County Road Commission 23 East Garfield Ave. Coldwater, MI 49036 517-278-2022	April 2017	Original \$313,708.00 Ending \$284,260.80	
M-43 Culvert over Porter Drain Eaton County, MI	Eric Deible Eaton County Drain Commission 1045 Independence Blvd. Charlotte, MI 48813 517-543-3809	LSG Engineers & Surveyors, Inc. 3135 Pinetree Road Lansing, MI 48911 517-393-2902	August 2019	Original \$313,550.50 Ending \$354,259.30	Greg Lamkin LSG Engineers & Surveyors, Inc. 3135 Pinetree Road Lansing, MI 48911 517-393-2902
Rose Harbor Marina Monroe, MI	Ray Govus State of Michigan - EGLE 301 East Louis Glick Hwy. Jackson, MI 49201 517-780-7690	Craig Savage ECT, Inc. 2200 Commonwealth Blvd., Ste. 300 Ann Arbor, MI 48105 734-769-3004	July 2020	Original \$312,631.00 Ending \$176,679.01	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Ridge Creek Lane Ann Arbor Twp., MI	John Petz DF Land Development 24 Frank Lloyd Wright Dr., Ste. K3000 Ann Arbor, MI 48106 734-930-4533	Midwestern Consulting, LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200	August 2016	Original \$304,097.95 Ending \$430,500.73	Tom Covert Midwestern Consulting, LLC 3815 Plaza Drive Ann Arbor, MI 48108 734-995-0200
Dexter Manufacturing Phase 2 Addition Earthwork Dexter, MI	Dexter Fastener Technologies, Inc. 2110 Bishop Circle East Dexter, MI 48130 734-426-5200	Christopher Gzrenkowitz Desine, Inc. 2183 Pless Drive Brighton, MI 48114 810-227-9533	December 2016	Original \$303,072.00 Ending \$320,132.93	Matt Ratzow O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
M&K Investment Group Saginaw, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Jon Hirschenberger AKT Peerless 214 James Ave Saginaw, MI 48607 989-754-9896	April 2017	Original \$298,776.00 Ending \$235,313.36	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Lake Lansing Rd/Interstate Earthwork East Lansing, MI	Joe Biersbach Biersbach Development 1905 Danbury East Okemos, MI 517-349-2558	Bergmann Associates 7050 West Saginaw Hwy Lansing, MI 48917 517-272-9835	June 2016	Original \$294,700.00 Ending \$406,041.85	Paul Furtaw Bergmann Associates 7050 West Saginaw Hwy Lansing, MI 48917 517-272-9835
Felton Road Building Site Earthwork, underground utilities Watertown Twp., MI	Emerger Development 4520 North Grand River Ave. Lansing, MI 48906	Jeff Kyes Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	June 2016	Original \$292,550.00 Ending \$317,270.00	James Ware James Ware Construction 903 North Clay Street, Ste. A Sturgis, MI 49091 269-651-4747
Trowbridge Crossings East Lansing, MI	Boji Group 124 West Allegan Street, Ste. 2100 Lansing, MI 48933 517-377-3000		September 2017	Original \$292,180.00 Ending \$298,994.00	Keith Kelley Boji Group 124 West Allegan Street, Ste. 2100 Lansing, MI 48933 517-377-3000
Jiffy Site Street Garage Parking Lot Chelsea, MI	Douglas Weitting Chelsea Milling Company 201 West North Street Chelsea, MI 48118 734-475-1361		February 2020	Original \$291,593.90 Ending \$447,995.51	Matt Ratzow O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
Monroe Commercial Development Frenchtown Twp., MI	Joe Guilmette Pacifica Monroe LLC 1775 Hancock Street, Ste. 200 San Diego, CA 92110 616299-3286	Bergmann Associates 7050 West Saginaw St., Ste. 200 Lansing, MI 48917 517-272-9835	May 2019	Original \$286,561.17 Ending \$328,166.26	Richard Blasey Bergmann Associates 7050 West Saginaw St., Ste. 200 Lansing, MI 48917 517-272-9835
Jackson Prison Bldg Demos Jackson, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Steven Kimm Fleis & Vandenbrink Engineering 4798 Campus Drive Kalamazoo, MI 49008 269-385-0011	June 2018	Original \$278,516.00 Ending \$302,543.62	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Cooley Stadium North Parking Lot Lansing, MI	City of Lansing 124 West Michigan Ave. Lansing, MI 48933 517-483-4455	Jones Petrie Rafinski 412 South Lafayette Blvd. South Bend, IN 46601 574-293-7762	May 2016	Original \$272,250.00 Ending \$291,094.97	The Christman Company 208 North Capital Ave. Lansing, MI 48933-1357 517-482-1488
Bailey Park Improvements East Lansing, MI	City of East Lansing 410 Abbot Road East Lansing, MI 48823 517-319-6940	Nick Wallace Landscape Architects & Planners 809 Center Street, Ste. 1 Lansing, MI 48906 517-485-5500	October 2020	Original \$266,663.70 Ending \$296,146.46	Wendy Wilmers Longpre City of East Lansing 410 Abbot Road East Lansing, MI 48823 517-319-6940
2015 Sidewalk Repair Project concrete sidewalks Lansing, MI	City of Lansing 124 West Michigan Ave, 8th Floor Lansing, MI 48933 517-483-4124	City of Lansing 124 West Michigan Ave, 8th Floor Lansing, MI 48933 517-483-4124	August 2016	Original \$262,415.75 Ending \$518,311.98	Zubair Ahmad City of Lansing 124 West Michigan Ave, 8th Floor Lansing, MI 48933 517-483-4124
Winewood Sanitary Sewer Extension Ann Arbor, MI	Norfolk Development 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777	Kem-Tex 22556 Gratiot Ave. Eastpointe, MI 48021	June 2018	Original \$260,113.00 Ending \$247,407.00	Sean Lefere Norfolk Development 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777
Bridge Street Sunoco Site remediation Grand Rapids, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Corey Buckner Superior Environmental 1128 Franklin Court Marne, MI 49435	July 2019	Original \$259,624.00 Ending \$117,126.45	Kim Smith E. T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Ham Creek Trail Bridge Missaukee County, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Northwest Design Group 2940 Parkview Drive Petoskey, MI 49770 231-348-1185	March 2017	Original \$255,915.00 Ending \$210,547.10	Kim Smith E. T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Lake Lansing Retail Site Lansing, MI	Doraid Markus Markus Associates LLC 251 East Merrill, Ste. 205 Birmingham, MI 48009	James Butler PEA, Inc. 2430 Rochester Court, Ste. 100 Troy, MI 48068	October 2019	Original \$255,083.30 Ending	Jen Haight NCS Construction Services, LLC 43636 Woodward Ave., Ste. 400 Bloomfield Hills, MI 48302

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
	248-892-2222	248-689-9090		\$305,259.25	248-338-9732
North Creek Elementary Parking Lot Improvements Chelsea, MI	Denis Taylor Chelsea School District 500 East Washington Street Chelsea, MI 48118 734-433-2200	Kingscott Associates, Inc. 229 East Michigan Ave., Ste. 335 Kalamazoo, MI 49007 269-381-4880	September 2016	Original \$250,507.20 Ending \$288,269.16	Robert Atkins Kingscott Associates, Inc. 229 East Michigan Ave., Ste. 335 Kalamazoo, MI 49007 269-381-4880
Frances Park Pump Station Forcement Repair Lansing, MI	City of Lansing 124 West Michigan Ave. Lansing, MI 48933 517-483-4455		October 2019	Original \$250,000.00 Ending \$250,000.00	Alec Malvetis City of Lansing 124 West Michigan Ave. Lansing, MI 48933 517-483-4455
Taco Bell - Dunckel Road Lansing, MI	Old West Properties 7915 Kennsington Ct. Brighton, MI 48116	Desine, Inc. 2183 Pless Drive Brighton, MI 48116 810-227-9533	December 2016	Original \$240,720.00 Ending \$283,897.96	Mark Keating Keating Contracting LLC 22775 Heslip Drive Novi, MI 48375 248-730-9339
Creyts Road Pump Station Rehabilitation Dimondale, MI	Village of Dimondale 136 Bridge Street Dimondale, MI 48821	Wolverine Engineers & Surveyors 312 North Street Mason, MI 48854 517-676-9200	April 2019	Original \$230,894.00 Ending \$237,667.30	Don Heck Wolverine Engineers & Surveyors 312 North Street Mason, MI 48854 517-676-9200
Camp White Lake Demolition White Lake, MI	Bruce Hassen State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Jennifer Fashbaugh FTC&H 39500 Mackenzie Drive, Ste. 100 Novi, MI 48377 248-324-2090	May 2016	Original \$229,146.00 Ending \$213,853.52	Kim Smith E.T. Mackenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Winans Elementary School Parking Lot Delta Twp., MI	Waverly Community Schools 515 Snow Road Lansing, MI 48917 517-321-7265	Barton Malow 26500 American Drive Southfield, MI 48034 586-524-1396	August 2016	Original \$227,720.00 Ending \$228,638.00	Eric Sifferman Barton Malow 26500 American Drive Southfield, MI 48034 586-524-1396

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Grace Bible Church Ann Arbor, MI	Grace Bible Church 1300 South Maple Road Ann Arbor, MI	Midwestern Consulting 3815 Paza Drive Ann Arbor, MI 48108 734-995-0200	October 2018	Original \$226,855.95 Ending \$255,090.25	Matt Ratzow O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
Taco Bell Charlotte Charlotte, MI	Joseph Baker Sundance, Inc. 7915 Kensington Court Brighton, MI 48116 248-446-0100	Jim Barnwell Desine, Inc. 2183 Pless Drive Brighton, MI 48114 810-227-9533	August 2019	Original \$226,520.00 Ending \$237,220.05	Mark Keating Keating Contracting LLC 22775 Heslip Drive Novi, MI 48375 248-730-9339
C&C Landfill Clearing Marshall, MI	Republic Services 6231 MacBeth Road Fort Wayne, IN 46809 260-442-3239	Stephanie Goodman Republic Services 6231 MacBeth Road Fort Wayne, IN 46809 260-442-3239	April 2021	Original \$222,900.00 Ending \$222,900.00	
Evergreen Apts. Demo East Lansing, MI	341 Evergreen LLC 540 West Madison Street, Ste. 2500 Chicago, IL 60661 312-542-3123	Christopher Oakly Convexity Properties, LLC 540 West Madison Street, 27th Floor Chicago, IL 60661-2555 312-542-3123	August 2016	Original \$217,645.00 Ending \$217,645.00	
Village of Shadow Glen Phase 4 Delta Twp., MI	Nixon Road Holdings, LLC 4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408	AJ Patrick KEBS, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	November 2016	Original \$213,061.00 Ending \$158,600.00	Ron Clark Nixon Road Holdings, LLC 4248 West Saginaw Hwy. Grand Ledge, MI 48837 517-627-8408
Parlen Management Burton, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Mark Schult Mannik-Smith Group 2365 Haggerty Road South Canton, MI 48188 734-397-3100	July 2017	Original \$205,750.00 Ending \$122,387.49	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Delta Mills UM Church Parking Lot Addition	Delta Mills United Methodist Church 6809 Delta River Drive	James Foster, PE Ziemnick Foster Engineering 426 South Clinton Street	November 2020	Original \$203,668.23	Dave Stanaway Delta Mills United Methodist Church 6809 Delta River Drive

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Lansing, MI	Lansing, MI 48906 517-285-2486	Grand Ledge, MI 48837 517-627-8068		Ending \$214,124.48	Lansing, MI 48906 517-285-2486
Maple Village Water Main Improvements Ann Arbor, MI	Brixmor Property Group 22054 Farmington Road Farmington, MI 48336		December 2016	Original \$202,961.50 Ending \$222,646.07	Russell McCombie Ken Cook's Plumbing & Heating, Inc. 3704 Trade Center Drive Ann Arbor, MI 48108 734-971-0304
Pine Elementary School Demo Grand Rapids, MI	Wolverine Building Group 4045 Barden SE Grand Rapids, MI 49512 616-949-3360		April 2019	Original \$200,600.00 Ending \$205,253.00	Brian Steinberg Wolverine Building Group 4045 Barden SE Grand Rapids, MI 49512 616-949-3360
Michigan Flyer Compensating Cut Leroy Twp., MI	Chad Cushman Howard Street, LLC 109 East Comstock Street Owosso, MI 48867	Eric Iversen, P.E. LSG Engineers & Surveyors 3135 Pine Tree Road, Ste. D Lansing, MI 48911 517-393-2902	May 2020	Original \$187,496.30 Ending \$193,701.55	John Peckham Peckham Property Services PO Box 716 East Lansing, MI 48826 517-290-4650
Fairview Elementary Lansing, MI	Lansing School District 519 West Kalamazoo Street Lansing, MI 48933 517-755-1000	C2AE 106 West Allegan St. #500 Lansing, MI 48933 517-371-1200	December 2016	Original \$186,650.00 Ending \$235,706.33	John Bedard The Christman Company 634 Front Ave., NW, Ste. 500 Grand Rapids, MI 49504-5335 616-454-4454
Lyders Hangar Howell, MI	Hawk Hollow Farm LLC 7915 Kensington Court Brighton, MI 48116 248-736-8403	Desine, Inc. 2183 Pless Drive Brighton, MI 48114 810-227-9533	October 2017	Original \$178,600.00 Ending \$199,237.56	John Pettersson Hawk Hollow Farm LLC 7915 Kensington Court Brighton, MI 48116 248-736-8403
Jackson College Tree Clearing Jackson, MI	Jackson College 2111 Emmons Road Jackson, MI 49201 517-796-8439		November 2016	Original \$177,800.00 Ending \$148,505.00	Darrell Norris Jackson College 2111 Emmons Road Jackson, MI 49201 517-796-8439

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Signature Oak Stables Gregory, MI	Robert & Elizabeth Haar 3607 Kipling Circle Howell, MI 48843	Washtenaw Engineering 3526 West Liberty Road, Ste. 400 Ann Arbor, MI 48106	November 2016	Original \$175,038.35 Ending \$188,894.07	Mike Shepard Mike Shepard Excavating, Inc. 7150 Chamberlin Road Dexter, MI 48130
A&H Racing Site Gladwin, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Jon Hirschenberger AKT Peerless 214 Janes Ave. Saginaw, MI 48607 989-754-9896	January 2016	Original \$174,049.00 Ending \$157,960.20	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Costco Wetland Mitigation East Lansing, MI	Costco Wholesale, Inc. 999 Lake Drive Issaquah, WA 98027	King & MacGregor Environmental, Inc. 2520 Woodmeadow SE Grand Rapids, MI 49546 616-957-1231	December 2017	Original \$169,539.20 Ending \$180,810.20	John Vigna King & MacGregor Environmental, Inc. 2520 Woodmeadow SE Grand Rapids, MI 49546 616-957-1231
Compost Pad Construction Ann Arbor, MI	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-764-6350	City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-764-6350	April 2016	Original \$169,104.00 Ending \$131,990.43	Chris Elenbaas City of Ann Arbor 301 East Huron Street Ann Arbor, MI 48107 734-764-6350
Delta Fire Station #3 Driveway Repair Delta Twp., MI	Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500	Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500	August 2019	Original \$165,974.00 Ending \$161,144.93	Ernie West Delta Charter Township 7710 West Saginaw Hwy. Lansing, MI 48917 517-323-8500
Grove Road Ypsilanti Twp., MI	Washtenaw County Road Commission 555 North Zeeb Road Ann Arbor, MI 48103 734-761-1500	Washtenaw County Road Commission 555 North Zeeb Road Ann Arbor, MI 48103 734-761-1500	November 2019	Original \$154,319.50 Ending \$176,148.40	Aaron Berkholz Washtenaw County Road Commission 555 North Zeeb Road Ann Arbor, MI 48103 734-761-1500
Ann Arbor Transfer Station	City of Ann Arbor	City of Ann Arbor Field Operations		Original	Ron Hoefl City of Ann Arbor Field Operations

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Ann Arbor, MI	301 East Huron Ann Arbor, MI 48104 734-794-6410	4251 Stone School Road Ann Arbor, MI 48108 734-794-6350	June 2020	\$153,492.00 Ending \$153,492.00	4251 Stone School Road Ann Arbor, MI 48108 734-794-6350
Old US-12 Bridge	City of Coldwater One Grand Street Coldwater, MI 49036 517-279-6911	Fishbeck, Thompson, Carr & Huber 39500 Mackenzie Drive, Ste. 100 Novi, MI 48377 248-324-2090	June 2018	Original \$147,585.00 Ending \$169,601.03	Fishbeck, Thompson, Carr & Huber, Inc. 39500 Mackenzie Drive, Ste. 100 Novi, MI 48377 248-324-2090
Munger Sunoco Site	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Mark Schult Mannik-Smith Group 2365 Haggerty Road South Canton, MI 48188 734-397-3100	November 2016	Original \$147,195.00 Ending \$56,007.30	Kim Smith E. T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Fire Station #8	City of Lansing 124 West Michigan Ave. Lansing, MI 48933 517-483-4455		September 2017	Original \$146,544.00 Ending \$177,265.32	Stephanie Robinson City of Lansing 124 West Michigan Ave. Lansing, MI 48933 517-483-4455
New Water Booster Pump Station	Len Shember Waverly Shores Village II LLC 27777 Franklin Road, Ste. 200 Southfield, MI 48034		June 2020	Original \$144,241.15 Ending \$137,296.15	Douglas Pakkala, P.E. Atwell, LLC Two Town Square Southfield, MI 48076 248-447-2000
Risdale Westside Bleachers Ph 3	City of Lansing 1110 South Pennsylvania Ave. Lansing, MI 48912 517-702-6197		July 2019	Original \$134,288.50 Ending \$135,149.74	Stephanie Robinson City of Lansing 1110 South Pennsylvania Ave. Lansing, MI 48912 517-702-6197
2018 Site Improvements	Jeff Adcock Emergent BioSolutions 3500 N Martin Luther King Jr Blvd Lansing, MI 48906 517-327-6819	Eng. Engineering & Surveying 4063 Grand Oak Drive, A109 Lansing, MI 48911 517-887-1100	November 2018	Original \$132,460.00 Ending \$146,996.00	Michael Gazella Eng. Engineering & Surveying 4063 Grand Oak Drive, A109 Lansing, MI 48911 517-887-1100

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
M-50 Retaining Wall MDOT Contract ID 58032-M61701 Dundee, MI	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	Jim Daavettilla Michigan Dept. of Transportation Brighton TSC 10321 Grand River Ave, Ste 500 Brighton, MI 48116 810-227-4681	January 2018	Original \$132,340.37 Ending \$142,426.09	Jim Daavettilla Michigan Dept. of Transportation Brighton TSC 10321 Grand River Ave, Ste 500 Brighton, MI 48116 810-227-4681
North Oak Office Center Bldg 4 Parking Lot Ann Arbor, MI	Commercial Property Investors of Scio LLC 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777	Midwestern Consulting 3815 Plaza Drive Ann Arbor, MI 48108	December 2019	Original \$129,144.10 Ending \$120,959.84	David Darkowski Commercial Property Investors of Scio LLC 8178 Jackson Road Ann Arbor, MI 48103 734-408-0777
Plant 3 Clarifier Removal Lansing, MI	David Favero RACER Trust Property 500 Woodward Ave., Ste. 1510 Detroit, MI 48226 217-741-6235	Eng. Engineering 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100	June 2016	Original \$127,884.00 Ending \$214,314.01	Greg Minshall Eng. Engineering 4063 Grand Oak Drive, Ste. A109 Lansing, MI 48911 517-887-1100
Sawyers Pontiac Demolition East Lansing, MI	CKJ Properties, LLC 2375 Woodlake Drive, Ste. 380 Okemos, MI 48864 517-908-0900	Kebs, Inc. 2116 Haslett Road Haslett, MI 48840 517-339-1014	September 2020	Original \$127,456.67 Ending \$139,706.03	Richard Lowe CKJ Properties, LLC 2375 Woodlake Drive, Ste. 380 Okemos, MI 48864 517-908-0900
Jaycee Park Improvements Grand Ledge, MI	Adam Smith City of Grand Ledge 310 Greenwood Street Grand Ledge, MI 48837 517-627-2149	Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355	August 2019	Original \$126,544.00 Ending \$139,157.76	Joe Wright Spicer Group 1400 Zeeb Drive St. Johns, MI 48879 989-224-2355
M. Midcalf Site Hemlock, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Kevin Saggaser Saggaser & Associates 699 South Wisconsin Ave. Gaylord, MI 49735 989-732-5800	August 2016	Original \$125,390.00 Ending \$87,070.43	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Sparrow Ramp Demo Lansing, MI	Sparrow Health System 1322 East Michigan Ave., Ste. 300 Lansing, MI 48912 517-364-2783		January 2019	Original \$120,112.00 Ending \$119,112.00	Sparrow Health System 1322 East Michigan Ave., Ste. 300 Lansing, MI 48912 517-364-2783
Fox Nissan Site Meridian Twp., MI	Green Castle Properties, LLC 200 Ottawa Ave. NW, Ste. 800 Grand Rapids, MI 49503		January 2019	Original \$117,488.52 Ending \$96,821.22	Green Castle Properties, LLC 200 Ottawa Ave. NW, Ste. 800 Grand Rapids, MI 49503
M-66 Storm Sewer and Curb Repairs Ionia County, MI	Ionia County Road Commission 170 East Riverside Drive Ionia, MI 48846 616-527-1700	Ionia County Road Commission 170 East Riverside Drive Ionia, MI 48846 616-527-1700	August 2016	Original \$117,100.80 Ending \$130,374.35	Paul Spitzley Ionia County Road Commission 170 East Riverside Drive Ionia, MI 48846 616-527-1700
Garfield Road over I-69	Michigan Dept. of Transportation State Transportation Building 425 West Ottawa Street PO Box 30050 Lansing, MI 48909	MDOT - Marshall TSC 15300 West Michigan Ave Marshall, MI 269-789-0592	December 2017	Original \$116,994.00 Ending \$127,432.88	Andy Strupulis MDOT - Marshall TSC 15300 West Michigan Ave Marshall, MI 269-789-0592
Lennon Road Demo Lennon, MI	Michigan Land Bank Fast Track Authority 300 North Washington Square, 4th Floor Lansing, MI 48913 517-241-6741		June 2019	Original \$116,900.00 Ending \$116,900.00	Linda Horak Michigan Land Bank Fast Track Authority 300 North Washington Square, 4th Floor Lansing, MI 48913 517-241-6741
Allmendinger Parking Lot Ann Arbor, MI	Darren McKinnon South First Associates 115 Depot Street Ann Arbor, MI 48104	Smith Group	September 2016	Original \$113,199.00 Ending \$113,199.00	Matt McSweeney O'Neal Construction 525 West William Ann Arbor, MI 48103 734-769-0770
Fieldstone Village II Chelsea, MI	Norfolk Development Corp. 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-408-0777	Atwell-Hicks, Inc. 500 Avis Drive, Ste. 100 Ann Arbor, MI 48108	July 2017	Original \$111,509.00 Ending \$155,252.20	David Darkowski Norfolk Development Corp. 8178 Jackson Road, Ste. D Ann Arbor, MI 48103 734-408-0777

Project Name	Owner	Engineer	Date Completed	Contract Amount	Reference
Blanchard Grocery Crystal, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Paul Meyer ECT, Inc. 3125 Sovereign Drive, Ste. 9C Lansing, MI 48911 517-272-9200	August 2016	Original \$106,829.00 Ending \$93,580.40	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408
Ypsilanti District Library Superior Branch Ypsilanti, MI	Ypsilanti District Library 8795 McArthur Blvd. Ypsilanti, MI 48198 734-482-4110	Daniels and Zermack Associates, Inc. 2080 South State Street Ann Arbor, MI 48104 734-761-2090	November 2020	Original \$105,670.00 Ending \$105,670.00	Matt Ratzow O'Neal Construction, Inc. 525 West William Ann Arbor, MI 48103 734-769-0770
South Campus Soil Remediation Delta Twp., MI	Auto-Owners Insurance Company 6101 Anacapri Blvd. Lansing, MI 48917 517-323-8760	Brian Hiesrodt Auto-Owners Insurance Company 6101 Anacapri Blvd. Lansing, MI 48917 517-323-8760	March 2019	Original \$104,667.08 Ending \$358,434.75	
JC Beal Construction Demolition Ann Arbor, MI	JC Beal Construction 221 Felch Street Ann Arbor, MI 48103 734-662-6133	Jeff Laswell JC Beal Construction 221 Felch Street Ann Arbor, MI 48103 734-662-6133	July 2017	Original \$103,710.00 Ending \$114,848.00	
Former R. Ayotte Property Byron, MI	State of Michigan Dept of Tech, Management & Budget PO Box 30026 Lansing, MI 48909	Scott Park DLZ Michigan, Inc. 1425 Keystone Ave. Lansing, MI 48911 517-393-6800	June 2016	Original \$101,237.00 Ending \$75,652.79	Kim Smith E.T. MacKenzie Company, LLC 4248 West Saginaw Hwy Grand Ledge, MI 48837 517-627-8408

EXHIBIT A.3 Quality Control Program Participation



E.T. MacKenzie Company

Concrete Quality Control Plan

**West Herbison Road from Old US-27 to west of
Turner Street**

Clinton County, Michigan

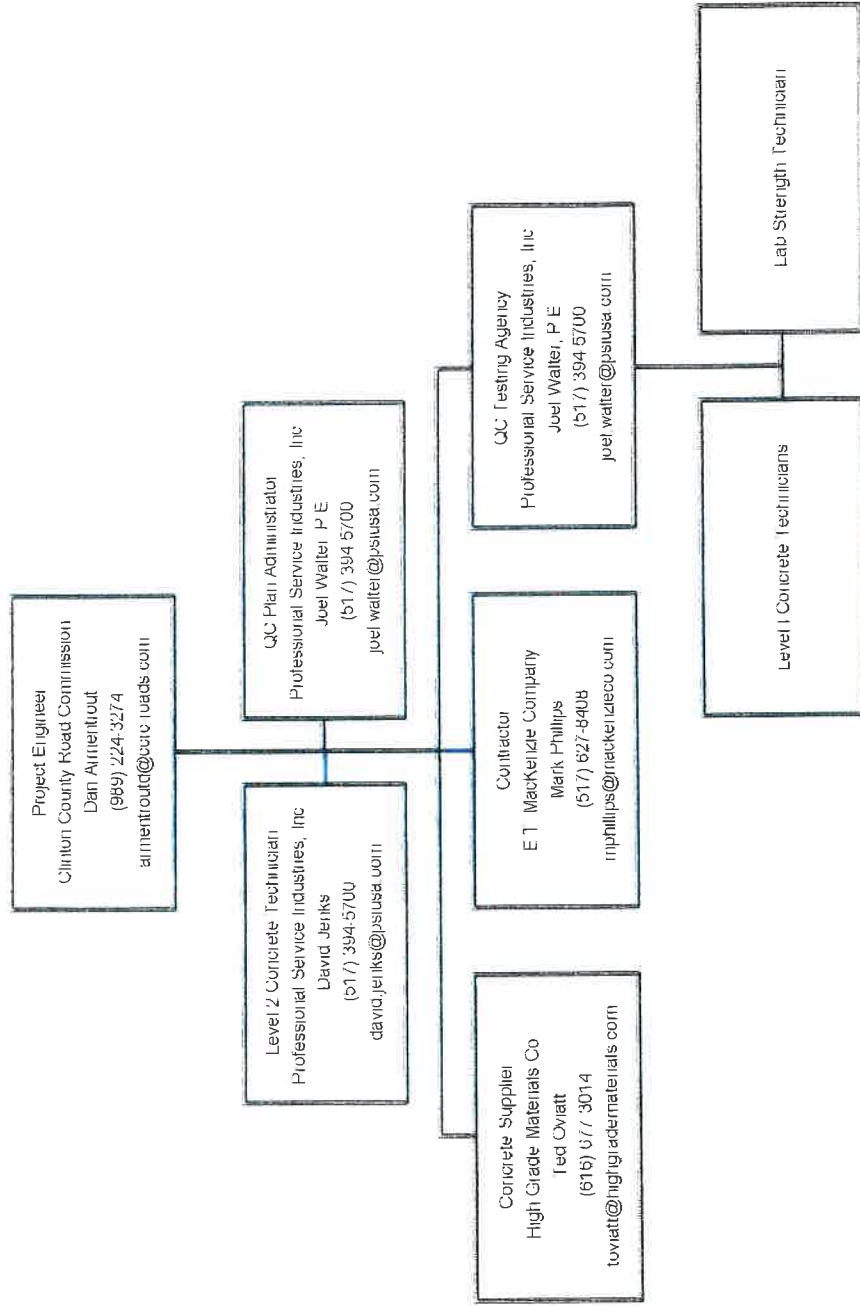
MDOT Project No. 19000-130450A

Date Submitted: August 7, 2017

A. Organizational Chart

ORGANIZATIONAL CHART

West Herbison Road from Old US-27 to west of Turner Street
 Clinton County, Michigan
 MDOT Project No. 19000-130450A



B. QC Plan Administrator

The QC plan administrator will be Mr. Joel Walter, P.E. of Professional Service Industries, Inc

Contact Information:

Mr. Joel Walter, P.E.
Professional Service Industries, Inc.
3120 Sovereign Drive, Suite C
Lansing, Michigan 48911
Office: (517) 394-5700
Cell Phone: (517) 937-9006
Email: joel.walter@psiusa.com

C. QC Staff

This Quality Control Plan will be administered in accordance with Special Provision for Quality Control and Acceptance of Portland Cement Concrete 12SP-604B-06, dated July 13, 2016.

The individual administering the Quality Control Plan for Professional Service Industries, Inc. (PSI) is Joel Walter, P.E., Branch Manager. David Jenks will be our MCA Level 2 technician and will always be available by cellular telephone. Field concrete MCA Level 1 QC testing staff includes David Jenks, Scott Maran, Jeff Southcott and Justin Speaks. Field concrete MCA Level 2 QC testing staff includes David Jenks. PSI's laboratory ACI concrete strength testing technician is David Jenks. Scheduling of technicians will be the responsibility of Joel Walter, P.E. who can be reached at the general office number for the PSI Lansing facility (517) 394-5700 between the hours of 8:00 AM and 5:00 PM.

The concrete supplier QC staff with High Grade Materials Co will be Ted Oviatt.

Certifications for the above PSI staff can be found appended to this document.

D. QC Personnel Interaction

When concrete loads have test results out of the specified range, PSI will immediately contact (either verbally or via cell phone) the contractor, supplier and the on-site Clinton County Road Commission representative. PSI will make the decision whether to accept and place the concrete or reject the load based on the criteria in this document. When concrete is rejected, placement shall stop until material is brought back within specifications. When concrete loads have test results out of specified ranges and are rejected by PSI, the results will be written on the concrete delivery ticket. Rejected load tickets will become part of the project documents.

In the event of continued production of nonconforming work, concrete production will stop and the PSI quality control plan administrator will work directly with the contractor and supplier to determine the actions required to bring the mix into compliance with project specifications. PSI will work with the supplier to make adjustment, if possible, to immediately correct the deviation. *If approved by the Clinton County Road Commission*, adjustments to air entraining admixture quantities and water addition rates will be periodically made to keep the concrete mixtures within the specifications.

E. Coordination of Activities

Coordination of all site activities will be at the direction of the E.T. MacKenzie Company. A 24-hour notice will be given to the Clinton County Road Commission and PSI before concrete is to be placed. The Clinton County Road Commission will be provided the opportunity to witness all sampling and testing.

F. Documentation, Procedures and Submittals

PSI will be handling the QC concrete testing for the E.T. MacKenzie Company. QC test results will be provided within 24 hours of testing to the E.T. MacKenzie Company and the Clinton County Road Commission. Sample report formats for field testing of plastic concrete and concrete compression reports are appended to this document.

G. Project and Plant Specifics

Concrete will be supplied by High Grade Materials Co. from their plant located in Lansing, Michigan. The Lansing plant is approximately 6 miles from the project.

H. Concrete Production Facilities Inspections and Certification

Please reference the plant certification documents prepared by High Grade Materials Co. for the E.T. MacKenzie Company appended to this QC plan.

I. Current Testing Equipment Calibrations

PSI will supply the required testing equipment including: slump kits, thermometers, air meters and locking cure boxes for QA and QC samples as required. In addition to the equipment listed, the testing equipment on site will include a roll-a-meter, unit weight bucket and scale. A roll-a-meter (volumetric) meter will be needed on-site if the pressure meter needs to be verified. If required equipment is not on site, concrete will not be placed until it is present. PSI maintains internal quality control procedures on its field and laboratory equipment. The dimensions of the slump cones are verified every twelve (12) months in accordance with ASTM C143. The calibration records for slump cones are documented on Form CCM-1 of PSI's Corporate Quality Assurance Manual (QA-M-5). The pressure-type air meters are calibrated every three (3) months in accordance with ASTM C231. The calibration records for air meters are documented on Form CCM-3 of QA-M-5. Calibration records for thermometers are documented on Form GL-6 of QA-M-5. Calibration records for compression testing and beam breaker machines are provided by Calibration Services Inc.

Records of PSI's latest equipment calibrations for compression machine and beam breaker are appended to this document. Each piece of field equipment assigned to a PSI technician is labeled with a unique identification number, date of last calibration and date of next calibration. PSI will provide specific calibration records for equipment if requested.

J. Testing and Initial Curing Facilities for QC and QA Specimens

PSI field technicians will look for a level area near the site of the concrete placement to perform daily testing activities and to place the initial cure facilities for both QA and QC cylinders or beams. PSI will provide plastic coolers for the cylinders that will have a chain or hasp device to be padlocked. PSI will be responsible for the moving of the initial cure facilities between concrete placement locations. Field cure beams will be left on-site and cured in a manner consistent with the concrete they represent.

K. Stockpile Management Plan

Please reference the aggregate quality control plan prepared by High Grade Materials Co.

L. Corrective Action Plan

When concrete loads have test results out of the specified range, PSI will immediately notify the contractor, supplier and the on-site Clinton County Road Commission representative. PSI will make the decision whether to accept and place the concrete or reject the load based on the criteria in this document. When concrete is rejected, placement will stop until material is brought back within specifications. When concrete loads have test results out of specified ranges and are rejected by PSI, the results will be written on the concrete delivery ticket. Rejected load tickets will become part of the project documents.

In the event of continued production of nonconforming work, concrete production shall stop, the PSI quality control plan administrator will work directly with the contractor and supplier to determine the actions required to bring the mix into compliance with project specifications. PSI will work with the supplier to make adjustment, if possible, to immediately correct the deviation. These adjustments to air entraining admixture quantities and water addition rates will be periodically adjusted to keep the concrete mixtures within the specifications per MDOT Special Provision 12SP-604B-06.

Nonconforming material will not be allowed to be placed. Adjustments will be made before placement.

PSI will maintain records of all quality control tests and observations. These records will indicate what action was taken to correct deficient concrete when quality control tests indicate the concrete was not in compliance with the specifications.

M. Mixing Time and Transportation

Transportation of the concrete from the plant to the site will be performed by High Grade Materials Co. The anticipated transportation time to the project site from the Lansing plant is 12 minutes. The time between charging the mixer and placing concrete will be per Table 601-1 of the MDOT 2012 Standard Specification for Construction.

Table 601-1 Time Between Charging Mixer and Placing Concrete (a)			
Type of Unit	Concrete Temperature (ASTM C1064)		
	<60°F	60°F-85°F	>85°F
Open Top Trucks (b)	60	45	30
Open Top Agitating Units (b)	60	60	30
Closed Top Agitating Units and Truck Mixers	90	60	45
Truck Mixers and Closed Top Agitating Units with Concrete Containing Water Reducing Retarding Admixtures (c)	120	90	70
a. Times shown in the table are in minutes b. Not allowed for structural concrete c. Superstructure concrete must meet the time limits for closed top agitating units and truck mixers			

N. Placement and Consolidation Methods

The mixes for the paving, sidewalk and curb and gutter are anticipated to be discharged directly from the truck. The concrete will be placed per MDOT 2012 Standard Specifications for Construction Section 703.03 Item H, "Placing Concrete".

O. Monitoring Stability of Air Content

PSI will be performing air content checks by the pressure method on an hourly basis. PSI will also do a comparison air content check with the QA representative at the start of the project to confirm that the air meters coincide with each other.

P. Hot and Cold Weather Protection

Hot weather protection for concrete will consist of waiting for favorable weather conditions for placement.

During cold weather, the concrete will be protected to prevent damage. Frozen concrete or concrete damaged by cold weather will be removed and placed. If the air temperature is forecasted to be between 40°F and 50°F, the concrete will be protected per the ordinary protection requirements of Section 706.03.J of the MDOT 2012 Standard Specifications for Construction. If the air temperature is forecasted to be below 40°F during the curing period, the concrete will be protected per the low temperature requirements of Section 706.03.J of the MDOT 2012 Standard Specifications for Construction.

Q. Control Charts with Action and Suspension Limits

S2-P1 mixes

<u>Quality Characteristics</u>	<u>Action Limits</u>	<u>Suspension Limits</u>
Air Content	<6.0% or >7.5%	<5.5% or >8.0%
Air Content Loss	>1.0%	>1.5%
Concrete Temperature	<60° or >85°F	<45°F or >90°F
Slump	>2.5"	>3.0"
Slump with Mid-Range	>5.5"	>6.0"

R. Verification for non-deleterious alkali-silica reactivity

Please reference the aggregate information prepared by High Grade Materials Co. appended to this QC plan.

S. Mix Design and JMF

Please reference the JMF's prepared by High Grade Materials Co. for the E.T. MacKenzie Company.

T. Proposed Lot Size and Location of Each Mix to Be Placed

A production lot will be defined as a single day's production or 50 cubic yards, whichever is less.

U. The frequency of Sampling and Testing

Sampling of the concrete will take place on site at the point of placement because ready mix concrete is proposed for this project. PSI will verify the correct, approved mix is delivered and placed at the project site.

PSI will sample and test for temperature, slump and air content the first load, and for each class of concrete delivered to the work site each day. Concrete placement will not begin until the quality control tests verify that the concrete meets required specifications. During the concrete placement, PSI will test for temperature, slump and air content of the concrete in a random manner at least once per a single day's production or 50 cubic yards, whichever is less. Unit weight tests shall be performed on each grade of concrete at the beginning of production. Concrete yield will be determined after the start of the first concrete operation for each mix design and immediately after the specified slump, temperature and air entrainment have been attained. PSI will keep track of batch times and discharge times for time limit restrictions. PSI will perform correlation testing with the Clinton County Road Commission inspector each time new equipment is utilized on the project site by either party. The following chart indicates the test method and frequency of proposed testing for this project:

<u>Test Method</u>	<u>Standard</u>	<u>Frequency</u>
Sampling freshly mixed concrete	ASTM C-172	Minimum of 1 per lot
Air content of freshly mixed concrete by the pressure method	ASTM C-231	First load of each mix then a minimum of once per hour
Air content of freshly mixed concrete by the volumetric method	ASTM C-173	As directed by engineer

Slump of hydraulic cement concrete	ASTM C-143	First load of each mix then a minimum of one per hour
Making and curing concrete test specimens in the field	ASTM C-31	Minimum 1 set per day
Compressive strength of cylindrical concrete specimens	ASTM C-39	As required, typically 7 and 28 days
Density (unit weight) and yield of plastic concrete	ASTM C-138	At first concrete operation, then as needed
Making and curing concrete test specimens in the lab	ASTM C-192	Curing of QC cylinders
Temperature of plastic Portland cement concrete	ASTM C-1064	Performed with slump and air tests or a minimum of once per hour

When concrete loads have test results that are out of the specified range, PSI will immediately notify the contractor, supplier and the on-site Clinton County Road Commission representative. If adjustments are made to the mix to correct deviations, the air content and slump will be tested on the next truck.

V. Handling and Protection of Test Specimens

PSI will store the concrete test specimens in the initial cure storage facility as indicated in Section J of this document. The following day PSI will return to the project site and retrieve the cylinders from the initial cure storage facility. The cylinders will be transported in an upright position and kept moist during transportation to the PSI laboratory located at 3120 Sovereign Drive, Suite C in Lansing, Michigan. Once at the laboratory the specimens will be stripped and labeled and then placed into our laboratory curing room until the required time for compression testing. The cure room is monitored via a temperature and humidity recorder. The QC cylinders will be retrieved from the cure room and testing for compressive strength at the required dates. PSI will break all of the QC cylinders. Test results of compressive strength testing will be provided to the Clinton County Road Commission and the E.T. MacKenzie Company via electronic distribution within 24 hours of testing.

W. Methods to Monitor Construction Equipment Loading and Open to Traffic Strengths

N/A

X. Finishing and Curing Procedure

Finishing and curing will be in accordance with Sections 706.03 and 701.03 C of the MDOT 2012 Standard Specifications for Construction.

Y. Ride Quality Control

Not applicable

Z. QC Records

A copy of PSI's Concrete Field Report will be provided for each day of production. The Concrete Field Report will describe the item of work represented and its location. PSI's Concrete Test Report will be provided after the testing of the specimens for compressive strength. Any actions to correct deficiencies will be included in the notes section of the report or a separate daily field report summarizing the actions will be provided.

**Michigan Concrete Association
Certification Board of Examiners**

hereby certifies that on 3/17/2016

David Jenks

did, by written and performance examinations, complete the requirements for

MCA Level II Advanced Concrete Technician

This certification expires on 4/15/2019

MCA Certification Board of Examiners

Michigan Department of Transportation
ACI Greater Michigan Chapter
ACI West Michigan Chapter
Alpena Community College



MCA Director of Technical Services/Training



Examiner



Executive Director

Michigan Concrete Association Certification Board of Examiners

Hereby certifies that on 3/8/2016

David Jenks

did, by written and performance examinations, complete the requirements for

Concrete Field Testing Technician Level I

This certification expires on 4/15/2019

MCA Certification Board of Examiners

Michigan Department of Transportation

ACI Greater Michigan Chapter

ACI West Michigan Chapter

Alpena Community College



MCA Director of Technical Services/Training



Executive Director



Examiner

AMERICAN CONCRETE INSTITUTE

This is to certify that

DAVID A JENKS JR

*has demonstrated knowledge and ability by
successfully completing the ACI Certification
requirements and is hereby recognized as an*

ACI Concrete Strength Testing Technician

Certified Date: 04/08/2016 Expires: 04/08/2021

Examiner of Record: Mr Steven M Waalkes



ACI Managing Director of Certification

The Authenticity of this certification can be verified at www.ACICertification.org/verify

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 1/19/2017

Scott Maran

did, by written and performance examinations, complete the requirements for

Concrete Field Testing Technician Level I

This certification expires on 4/15/2020

MCA Certification Board of Examiners

Michigan Department of Transportation
ACI - Greater Michigan Chapter
ACI - West Michigan Chapter
Alpena Community College

Lawrence J. Adams

MCA Director of Technical Services/Training

Roger A. Conner, P.E.

Examiner

[Signature]

Executive Director

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 3/9/2017

Jeff Southcott

did, by written and performance examinations, complete the requirements for

Concrete Field Testing Technician Level I

This certification expires on 4/15/2020

MCA Certification Board of Examiners

Michigan Department of Transportation
ACI - Greater Michigan Chapter
ACI - West Michigan Chapter
Alpena Community College

David J. Humphreys

MCA Director of Technical Services/Training

Steve Waalkes

Examiner-Steven Waalkes

Daniel DeGraaf

Executive Director-Daniel DeGraaf

Michigan Concrete Association Certification Board of Examiners

Hereby certifies that on 5/11/2017

Justin Speaks

did, by written and performance examinations, complete the requirements for

Concrete Field Testing Technician Level I

This certification expires on 4/15/2020

MCA Certification Board of Examiners

Michigan Department of Transportation

ACI - Greater Michigan Chapter

ACI - West Michigan Chapter

Alpena Community College



MCA Director of Technical Services/Training



Examiner-Steven Waalkes



Executive Director-Daniel DeGraaf

Certificate of Calibration

Client: Professional Service Industries, Inc
 Address: 3120 Sovereign Dr. Suite C
 City/State/Zip: Lansing, MI 48911

Report Date: 4/7/2017
 Calibration Date: 4/4/2017
 Technician: Dan Pfeil
 Temperature: 17 Degrees C
 Humidity: 50.3%
 Barometric Pressure: 29.49 in Hg
 Device Type: Digital Compression Machine
 Manufacturer: Pomey
 Model Number: QC-200-002
 Serial Number: 76054-032 11119-72
 Range: 4,000 lbs to 400,000 lbs

Calibration Location: 3120 Sovereign Dr. Suite C
 City/State/Zip: Lansing, MI 48911
 PO Number: 0408
 Cert Number: 171044
 Procedure No: CAL 1.02A
 Condition of Device: Good

CALIBRATION SYSTEM USED

All calibration standards used in this calibration are traceable to the International System of Units (SI) through NIST or equivalent National Measurement Institute signatories to the CIPM MRA.

Code	Instrument	Capacity	Serial Number	Class A
	BAROMETER - Control Company Barometer S/N 122716347 Reference Number: 4247-3251052 Control Company Date of Test: February 28, 2017 Date Due: February 28, 2018			
C	Reverse Load Cell	100K	763137	3,000.00C
	Report No. 76313712215 Morehouse Instrument Calibrated: September 22, 2015 Recalibration due: September 22, 2017			
D	Lebow Load Cell	400K	139	29,760.49C
	Report No. 13912215 Morehouse Instrument Calibrated: September 22, 2015 Recalibration due: September 22, 2017			

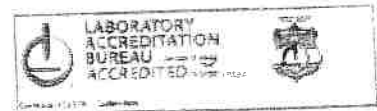
Statement of Compliance

This is to certify that the above described testing device has been calibrated in accordance with CSI's QMS Program based on ISO 9001:2015 in accordance with ANSI/NCSL Z540-3, the procedure listed above, and ASTM E-4-16 (excluding sections 6.2, 13 all, 16 all, A.1 all). The device has been verified within $\pm 1\%$ of applied load. Uncertainties were calculated using square root sum of squares (RSS) with a confidence factor of 95% and a coverage of k = 2. The expanded uncertainty is $\pm 0.25\%$ of applied load.

Signed: 
 Calibration Technician

Signed: 
 Quality Director

This Certificate is based on a statement of the fact that on the date the above instrument(s) had an accuracy as indicated in this section. This certificate should not be construed or regarded as a guarantee or assurance of accuracy of the client's equipment. At the time of calibration the instrument(s) will continue to retain the same percentage (%), of accuracy or efficiency as determined on the date when the calibration maintenance if required was performed and reported by Calibration Services, Inc. since the calibration has established no control as to the future operation. Damage, maintenance, repairs, and normal condition of the instrument(s) and hence accuracy, depends on use of the instrument(s) which should be deemed to be and which shall remain the sole responsibility of the machine operator, calibration user, and/or manufacturer. This document shall not be reproduced except in full without the written approval of Calibration Services, Inc.



Calibration Services, Incorporated

300 Buttertown Road

Embleton, PA 16373

Website: www.calibrationinc.com

Phone: (724) 867-6664

Fax: (724) 867-1346

email: info@calibrationinc.com

Certificate of Calibration

Client: Professional Service Industries, Inc
Address: 3120 Sovereign Dr. Suite C
City/State/Zip: Lansing, MI 48911

Report Date: 4/7/2017
Calibration Date: 4/4/2017
Technician: Dan Pfeil
Temperature: 17 Degrees C
Humidity: 50.0%
Barometric Pressure: 28.49 in Hg
Device Type: Digital Compression Machine
Manufacturer: Ramsey
Model Number: QC-200-GB1
Serial Number: 76054-GB2-131119-472
Range: 4,000 lbs to 400,000 lbs

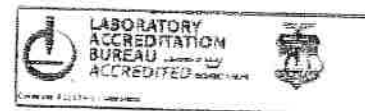
Calibration Location: 3120 Sovereign Dr. Suite C
City/State/Zip: Lansing, MI 48911
PO Number: 0408
Cert Number: 171044
Procedure No: CAL 102A
Condition of Device: Good

Range Number 1 Range: 4,000 lbs to 400,000 lbs **Graduation:** 10 lbs

Mode: Compression

As Found: In Tolerance As Left: In Tolerance

Grade	Code	Applied Load	As Found	#1 As Left	#2 As Left	Final #1 Error	Final #2 Error	Final #1 Percent	Final #2 Percent	Algebraic Difference Percent	ENCL (+/- Bias)
lbs		lbs	lbs	lbs	lbs	lbs	lbs				lbs
10	C	4000	3960	4010	4000	10.000	0.000	0.250	0.000	-0.250	9.96
10	C	8000	7950	8010	8000	10.000	0.000	0.125	0.000	-0.125	19.92
10	C	15000	15840	15990	15010	-10.000	10.000	-0.363	0.063	-0.125	19.34
10	C	24000	23850	23990	24010	-10.000	10.000	-0.342	0.042	-0.083	59.76
10	C	40000	39790	40020	40040	20.000	30.000	0.063	0.094	-0.031	79.58
10	C	80000	79680	80010	80030	10.000	30.000	0.013	0.038	-0.025	199.20
10	D	150000	159440	180040	150060	40.000	60.000	0.025	0.038	-0.013	398.40
10	D	240000	239580	240040	240050	40.000	60.000	0.017	0.021	-0.004	597.60
10	D	320000	319790	320060	320050	50.000	50.000	0.019	0.016	0.003	795.80
		400000	399810	400070	400060	70.000	60.000	0.018	0.015	-0.003	995.20
		Zero Return	-10	10	-10						





Professional Service Industries, Inc.
3120 Sovereign Drive, Suite C
Lansing, MI 48911

Phone: (517) 394-3700
Fax: (517) 394-5796

Report No. [REDACTED]
Issue No. 2

Concrete Field Report

Client: [REDACTED] CC: [REDACTED]

Project: [REDACTED]
EAST LANSING, MI

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced, except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report, to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.

[Signature]

Approved Signatory: Joel Water, District Manager
Date of Issue: 4/8/2013

General Field Data

Technician: David Jenks
Test Date: 3/22/2013
Weather: Partly Cloudy

Test Results

Set No	Specimens Made	Ticket	Time Batched	Time Unloaded	Cubic Yards Placed	Slump (in)	Air Content (%)	Air Temp (°F)	Concrete Temp (°F)
0408642-1-C1	4	14-1797860	14:32	15:25	10.0	6.00	6.40	42	65
0408642-1-C2	0	14-1797875	15:20		13.0		6.20	42	65

Location & Remarks

General Location	[REDACTED]	Remarks
Set No	Location	
0408642-1-C1	Strain pole foundation, west median	
General Location	[REDACTED]	Remarks
Set No	Location	
0408642-1-C2	Signal display poles, south side of intersection	

Mix Data

Set No	Supplier	Mix	Design Strength (psi)
0408642-1-C1	[REDACTED]	DDP165E9	3500
0408642-1-C2	[REDACTED]	DDP165E9	3500

Notes

Sampled from Revolving Drum Truck Mixer (ASTM C 172, 5.2.3)

Remarks

Applicable ASTM standards unless otherwise indicated. Making Samples: C31 (except sec 10.1.2), Slump: C143, Air Content: C231 (except sec 5); Temperature: C1064, Sampling: C172, Grout: C1019, Slump-Flow: C1611, Mortar: C109, Flow: C1437



Professional Service Industries, Inc.
3120 Sovereign Drive, Suite C
Lansing, MI 48911

Phone (517) 394-5700
Fax (517) 394-5795

Concrete Test Report

Report No: [REDACTED] Issue No: 2

Client [REDACTED] CC [REDACTED]
Project [REDACTED]
EAST LANSING, MI

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced, except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.

Approved Signatory: Joel Walter, District Manager
Date of Issue: 4/30/2013

Mix Data

Mix Data Submitted By [REDACTED]
Supplier [REDACTED]
Plant [REDACTED]
Mix Identification: DDP165E9
Specified Design Strength (psi): 3500 at age 28 days
Design Unit Weight (pcf): [REDACTED]
Cement Factor (Sacks/yd³): 6.00
Water-Cement Ratio (lb/lb): 0.45

Material	Source	Amount	Moisture (%)
Cement 1 (lb)	Lafarge	423	N/A
Cement 2 (lb)	Lafarge-GGBFS	141	N/A
Fly Ash (lb)			N/A
Coarse Agg (lb)	Stoneco-Pit #58-003	1766	
Fine Agg (lb)	Carl Schlegel-Pit #19-055	1270	
Admix Agg 1 (lb)	BASF Micro Air	0.8	N/A
Admix Agg 2 (lb)	BASF Polyheed 997	8.0	N/A
Water (gal)		30.7	N/A

Details of Sample

Date Sampled: 3/22/2013 Date Received: 3/23/2013
General Location: [REDACTED]
Sample Location: Strain pole foundation, west median
Curing Method: One day Field/Laboratory Cure
Field Sample No: [REDACTED]
Field Cure Temp (°F): High/Low
Contractor: [REDACTED]
Truck No: 33 Ticket No: 14-1797360
Sampled By: David Jenks
Submitted By: David Jenks
Weather: Partly Cloudy
Est Wind (mph): 5-10 Yd³ Placed: 10.0
Est Rh (%): 65

	Measured	Specified
Slump (in) ASTM C 143	6.00	-6
Slump w/ plasticizer (in)	N/A	
Air Temp (°F)	42	
Concrete Temp (°F) ASTM C 1064	65	
Air Content (%) ASTM C 231	6.40	5.5 - 8
Unit Weight (pcf) ASTM C 138		
Batch Size (yd ³)	10	
Water Added (gal)	Before/After	
Time Batched	14:32	
Time Sampled	15:20	
Time Placed	15:25	
Time in Truck (mins)	53	

Compressive Strength of Concrete Cylinders

Specimen ID	Date Tested	Age (Days)	Dimensions (in) Diameter Height	Area (in ²)	Type of Cap	Ultimate Load (lbF)	Fracture Type/Remark	Compressive Strength (psi)	ASTM C 39 Required Strength (psi)
[REDACTED]	03/29/13	7	6.03 12.00	28.56	U	90000	4	3150	
[REDACTED]	04/19/13	28	6.03 12.00	28.56	U	160000	4	5600	3500
[REDACTED]	04/19/13	28	6.03 12.00	28.56	U	158000	5	5530	3500
[REDACTED]		Hold			U				3500
Average 28 Day Compressive Strength (psi)								5570	

Notes

Sampling to ASTM C 172
Specimens Prepared to ASTM C 31
Capping B=Bonded ASTM C 517 U=Unbonded ASTM C 1231 C=Combined

Remarks

Fracture Type / Remarks: 4 = C39 Diagonal fracture C1314 Tension Break 5 = C39 Side fracture opposite ends C1314 Semi-Conical Break.
Applicable ASTM standards unless otherwise indicated. Slump: C143

National Ready Mixed Concrete Association



Certificate of Conformance For Concrete Production Facilities

THIS IS TO CERTIFY THAT

Lansing Plant No. 06, Lansing, MI
High Grade Materials Co., Inc.

has been inspected by the undersigned licensed professional engineer for conformance with the requirements of the *Check List for Ready Mixed Concrete Production Facilities*. As of the inspection date, the facilities met the requirements for production by

*Truck Mixing with Automatic Batching and Recordings of
Cementitious Materials, Aggregate, Water, and Chemical Admixtures*



A handwritten signature in cursive script, appearing to read "Keith Reenders", written over a horizontal line.

Signature of Licensed Professional Engineer

February 12, 2016

Inspection Date

February 12, 2018

Certification Expiration Date

This company will maintain these facilities in compliance with the *Check List* requirements and will correct promptly any deficiencies which develop.

A handwritten signature in cursive script, appearing to read "James P. Starnes", written over a horizontal line.

Signature of Company Official

President

Title of Company Official

NOTICE: The Check List indicates only that plant facilities are satisfactory for the production of concrete when properly operated. Conformance of the concrete itself with specification requirements must be verified by usual inspection methods in accordance with sales agreements.

This certificate is issued by the National Ready Mixed Concrete Association on verification that the production facility conforms to the requirements of the NRMCA Certification of Ready Mixed Concrete Production Facilities, QC3. Unauthorized reproduction or misuse of this certificate may result in legal action.

Plant ID #: 810464

Certification ID #: 19575

© 1965, 1992, 2001, 2002, 2006, 2007, 2012

National Ready Mixed Concrete Association 900 Spring Street • Silver Spring • Maryland 20910

National Ready Mixed Concrete Association



Certificate of Conformance For Concrete Production Facilities

THIS IS TO CERTIFY THAT

Lansing Plant No. 62, Lansing, MI
High Grade Materials Co., Inc.

has been inspected by the undersigned licensed professional engineer for conformance with the requirements of the *Check List for Ready Mixed Concrete Production Facilities*. As of the inspection date, the facilities met the requirements for production by

*Truck Mixing with Automatic Batching and Recordings of
Cementitious Materials, Aggregate, Water, and Chemical Admixtures*



Keith Reenders

Signature of Licensed Professional Engineer

February 12, 2016

Inspection Date

February 12, 2018

Certification Expiration Date

This company will maintain these facilities in compliance with the *Check List* requirements and will correct promptly any deficiencies which develop.

James P. Stevens

Signature of Company Official

President

Title of Company Official

NOTICE: The Check List indicates only that plant facilities are satisfactory for the production of concrete when properly operated. Conformance of the concrete itself with specification requirements must be verified by usual inspection methods in accordance with sales agreements.

This certificate is issued by the National Ready Mixed Concrete Association on verification that the production facility conforms to the requirements of the NRMCA Certification of Ready Mixed Concrete Production Facilities, QC3. Unauthorized reproduction or misuse of this certificate may result in legal action.

Plant ID #: 843722

Certification ID #: 19576

© 1965, 1992, 2001, 2002, 2006, 2007, 2012

National Ready Mixed Concrete Association 900 Spring Street • Silver Spring • Maryland 20910



WEST MICHIGAN SCALES
943 Industrial Parkway
Plainwell, MI 49080

SCALE CALIBRATION / INSPECTION REPORT
Michigan Weights and Measures Service Registration Number 10000

ISO/IEC 17025 • AC-1135

Technician M1A

Customer High Grade

Service Order MA2177A

Date 11/17 Page 2 of 3

City Kalamazoo

THIS REPORT IS VALID ONLY IF APPROVED BY THE CALIBRATION EXPERT IN FIELD WITHOUT WRITTEN APPROVAL OF WEST MICHIGAN SCALES

Serial Number	Center	Weight Applied	Ironing Load	Reaction Load	Increase Load	Decrease Load	Condition of Equipment	Comments / Service Rendered
533274A Plant 1 Central Scale Capacity 10000 x 10 lb Calibrated 01N Next Due 2/15	1	1900 lb	0	0	0	0	Good	
533274A Plant 1 A B F Scale Capacity 49,000 x 20 lb Calibrated 01N Next Due 2/18	2	2000 lb	0	0	0	0	Good	
533274A Plant 1 A B F Scale Capacity 49,000 x 20 lb Calibrated 01N Next Due 2/18	3	6000 lb	0	0	0	0	Good	
533274A Plant 1 A B F Scale Capacity 49,000 x 20 lb Calibrated 01N Next Due 2/18	4	8340 lb	0	0	0	0	Good	

WEIGHT SIGNATURE: 01-1202
CUSTOMER SIGNATURE: _____
Temperature: 73.5°F Humidity: 52.1 lb



WEST MICHIGAN SCALES
943 Industrial Parkway
Plainwell, MI 49080

SCALE CALIBRATION / INSPECTION REPORT

Michigan Weights and Measures Service Registration Number 100023
ISO/IEC 17025 ♦ AC-1135

Customer: High Grade

Service Order# 1122711A

Date: 11/12 Page 3 of 3

Technician: PJA

City: Lansing

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF WEST MICHIGAN SCALES

Serial Number	Location	Center	Before	After	Weight Applied	Increase/Decrease (Units of Weight)				Comments / Service Rendered
						Increase Load	Decreasing Load	Increase Load	Decreasing Load	
J 33274 B	Plant 2 Cement	1	1	1	1900 lb	0	0	0	0	Good / Pass
19000 x 10 lb	Scale Capacity	2	N/A	N/A	2000	0	0	0	0	
Next Due: 2/18	Calibrated: 8/18	4								Temperature: 73.5 F Humidity: 38.9%
J 33274 B	Plant 2 Aggs	1	N/A	N/A	2000 lb	0	0	0	0	Good / Pass
140,000 x 20 lb	Scale Capacity	2			4020	0	0	0	0	Temperature: 73.5 F Humidity: 38.9%
Next Due: 2/18	Calibrated: 8/18	4			8060	0	0	0	0	Temperature: 73.5 F Humidity: 38.9%
Serial Number: 05	Location: Above	1			10082	0	0	0	0	Condition of Equipment: Good / Pass
Scale Capacity: 1	Scale Capacity: 1	2			14060	0	0	0	0	Comments / Service Rendered:
Calibrated: 8/18	Next Due: 1	4			18040	0	0	0	0	Temperature: 73.5 F Humidity: 38.9%

CUSTOMER SIGNATURE: _____

WEIGHT S/N: 1901, 1028
FCR-001 REV G

**NRMCA CERTIFIED CONCRETE PLANT
INTERIM CHECK ON ADMIX & WATER DISPENSERS**
(to be performed at 90 day intervals)

NAME: High Grade Materials

ADDRESS: HG06 Lansing

1300 Turner St

Lansing, MI

Date of original certification: _____

Admix Manufacture: GRT

Admix #1
Name: AE
Dose Rate: 1 /cwt

Target	Metered	Measured
50	49	49

Admix #2
Name: 400NC
Dose Rate: 3 /cwt

Target	Metered	Measured
100	100	99

Admix #3
Name: R
Dose Rate: 3 /cwt

Target	Metered	Measured
100	101	101

Admix #4
Name: KB1200
Dose Rate: 5 /cwt

Target	Metered	Measured
150	152	152

WATER

Target	Metered	Measured

Performed By: _____ **Date:** 5-2-17

Witnessed by M.D.O.T.: YES / NO **Name:** Ted Oviatt

HIGH  *GRADE*



High Grade Materials Co.

0-10561 Linden Drive • Grand Rapids, MI 49544

Office 616-677-1271 • Fax 616-677-3014

www.highgradematerials.com

MDOT Quality Control Plan Stockpile Management

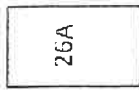
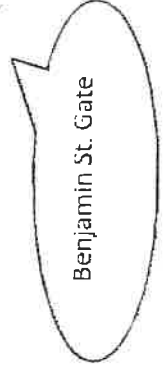
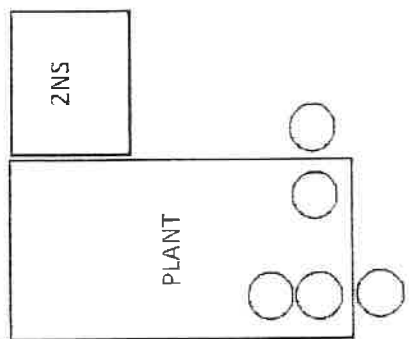
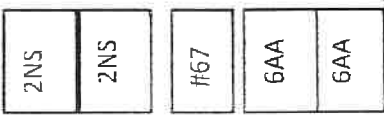
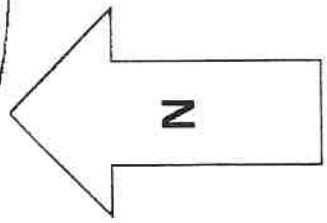
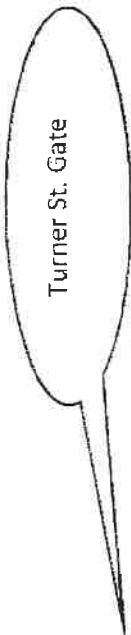
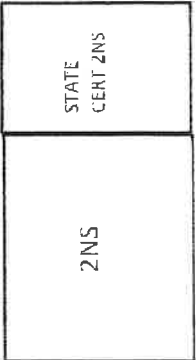
The following methods will be employed to at each of High Grade Materials' permanent batch facilities to prevent contamination of aggregates:

- Aggregate piles are divided by poured concrete walls or stacked 2' x 2' x 6' concrete blocks.
- Each aggregate pile will have a permanent designation label painted on either the dividing wall or an affixed sign.
- Aggregate piles will be monitored by the plant manager for quantity to protect against overflow of aggregate bins.
- Aggregate piles will be placed on concrete and/or operators loading material from aggregate piles into batch plant bins will leave the lower 6-8" of the aggregate pile undisturbed to prevent excess moisture and contamination from the subgrade.
- See attached map indicating location of stockpiles

ALLENDALE • DUTTON • SAND LAKE • GREENVILLE • KALAMAZOO • BENTON HARBOR
SIX LAKES • CARSON CITY • LANSING • MUSKEGON

HIGH GRADE MATERIALS LANSING STOCK PILE MAP 2017

6AAA	#467	LTWGHT	#67	#57	6AA
------	------	--------	-----	-----	-----





SOILS & STRUCTURES

Potential Alkali Reactivity of Aggregates ASTM C1293

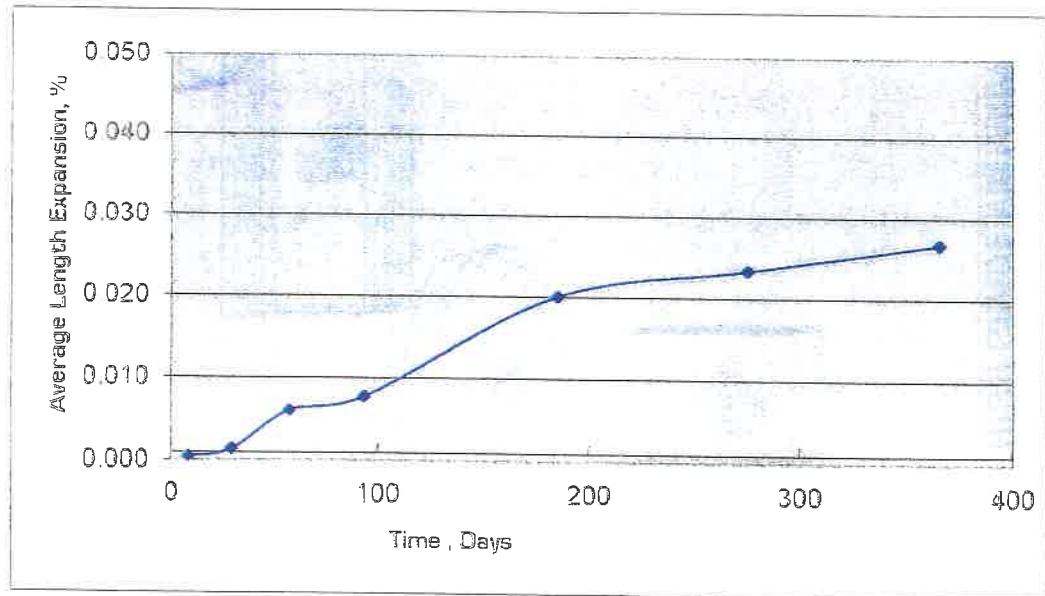
Project: Greenville Sand - 59-44
 Client: High Grade Materials
 Job No.: 2015.0244

Date Moided: 3/31/2015
 Date Stripped: 4/1/2015
 Date Reported: 4/1/2016

Fine Aggregate: 2NS Pit # 59-44
 Coarse Aggregate: Port Inland Limestone
 Portland Cement: Type I St. Marys Cement

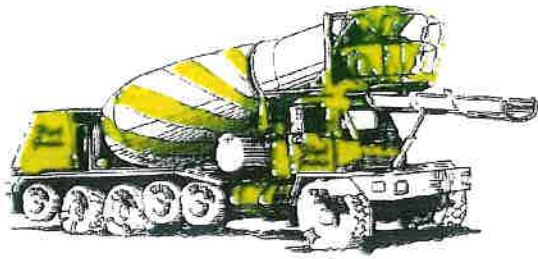
Reagent: NaOh
 Fly Ash: None
 Other: None

Date	Days Immersed	Specimen			Average Expansion, %
		A	B	C	
4/1/2015	Initial	0.0170	0.0712	0.0773	
4/7/2015	7	0.0170	0.0713	0.0773	0.0003
4/28/2015	28	0.0170	0.0715	0.0774	0.0013
5/26/2015	56	0.0170	0.0722	0.0781	0.0060
6/31/2015	92	0.0174	0.0722	0.0782	0.0077
9/31/2015	184	0.0186	0.0733	0.0796	0.0200
12/31/2015	273	0.0194	0.0734	0.0797	0.0233
3/31/2016	365	0.0198	0.0737	0.0800	0.0267
TOTAL EXPANSION:					0.027



Comments: MDOT Special Provision for Quality Control And Acceptance of Portland Cement Concrete - ASTM 1293 - Concrete Prism Test. If the expansion of the concrete prisms is not greater than 0.040 percent after 1 year, the fine aggregate is considered non-deleterious to ASR reactivity and may be used in the concrete without the need for ASR mitigation. This material meets the MDOT specification.

Reviewed By: [Signature]



High Grade Materials Co.

0-10561 Linden Drive • Grand Rapids, MI 49544
Office 616-677-1271 • Fax 616-677-3014
www.highgradematerials.com

August 3, 2017

MDOT Concrete Submittal

MDOT Job# 19000-130450
Project Location: W Herbison Rd (Old US-27 to Turner St)
Prime/Subcontractor(s) E.T. Mackenzie Co
Project Engineer: Dan Armentrout – Clinton CRC
Plant Location(s): HG06 Lansing MI

JMFs Included:

Mix Design #	Mix Description	Intended Use	Type of Mix
M.S2W	MDOT S2-P1	Paving, Sidewalk, C&G, Misc	Both
M.S2M	MDOT S2-P1 w/MRWR	Paving, Sidewalk, C&G, Misc	Both
M.S2D	MDOT S2-P1 w/Retarder	Paving, Sidewalk, C&G, Misc	Both
M.S2MD	MDOT S2-P1 w/MRWR & Retarder	Paving, Sidewalk, C&G, Misc	Both
M.S2WSF	MDOT S2-P1 Slipform	Paving, Sidewalk, C&G, Misc	Both
M.S2DSF	MDOT S2-P1 Slipform w/Retarder	Paving, Sidewalk, C&G, Misc	Both

Ted Oviatt
High Grade Materials, Quality Control
MCA Level II (ACI# D1176888)

ALLENDALE • DUTTON • SAND LAKE • GREENVILLE • KALAMAZOO • BENTON HARBOR
SIX LAKES • CARSON CITY • LANSING • MUSKEGON

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

This form applies only to the project listed below and is not transferable to other projects
DISTRIBUTION: ORIGINAL - Project Engineer COPIES - Contractor, Lansing CFS, Region, Inspector

CONTROL SECTION 19000	JOB NUMBER 130450	PROJECT LOCATION W Herbison Rd (Old US-27 to Turner St)	PROJECT ENGINEER Dan Armentrout - Clinton CRC
CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2W	INTENDED USE (S) CONTRACTOR QC PLAN Y <input type="checkbox"/> SUBMITTED? (MDOT use only) N <input type="checkbox"/>
PRIME / SUBCONTRACTOR(S) E.T Mackenzie Co			
STANDARD SPEC DATE 2012		QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016
			AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE		INTERMEDIATE AGGREGATE		FINE AGGREGATE	
Aggregate Type	LIME	Aggregate Type		Aggregate Type	
Source Name	WYANDOT	Source Name		Source Name	WHEELER #2
MDOT Source No	93-31	MDOT Source No		MDOT Source No	59-44
MDOT Series Class	5AA	MDOT Services Class		MDOT Series Class	2NS
Specific Gravity (Bulk Dry)	2.61	Specific Gravity (Bulk Dry)		Specific Gravity (Bulk Dry)	2.62
Specific Gravity (Bulk SSD) optional	2.69	Specific Gravity (Bulk SSD) optional		Specific Gravity (Bulk SSD) optional	2.67
Absorption	1.70	Absorption		Absorption	1.40
Unit Weight (Dry Rodded) DR or	95	Unit Weight (Dry Rodded) DR or		Fineness Modulus (FM)	2.30
Unit Weight (Dry Loose) DL	NA	Unit Weight (Dry Loose) DL			
Percent Crushed	100	Percent Crushed			
MDOT Freeze-Thaw (F-T) Dilation	0.011	MDOT Freeze-Thaw (F-T) Dilation			
Specific Gravity (Bulk Dry) of F-T Sample*	2.69	Specific Gravity (Bulk Dry) of F-T sample*			
Date of MDOT Freeze-Thaw Report	2014	Date of MDOT Freeze-Thaw Report			

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects.

CEMENTITIOUS		ADMIXTURES	
Cement Source / Plant	ILLINOIS CEMENT	Air Entrainment	GRT POLYCHEM SA-50
Cement Type		Water Reducer	GRT POLYCHEM 400NC (A)
Cement Specific Gravity	3.15	Water Reducer	
Fly Ash Source (distributor & plant)	NA	Water Reducer	
Fly Ash Class	NA	Accelerator	
Fly Ash Specific Gravity	NA	Other	
Slag Cement Source	NA	Indicate Source & Product name with ticket code)	
Slag Cement Grade	NA	TYPE OF MIX WINTER/SUMMER	
Slag Cement Specific Gravity	NA		30TH
Other			

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	59	Design Slump	3" MAX
Coarse Aggregate Weight (Dry)	1773	Design Air %	6.75 +/- 1.25
Intermediate Aggregate Weight (Dry)	0	Specified Air %	6.75 +/- 1.25
Fine Aggregate Weight (Dry)	1335	PSI minimum required	3500
Portland Cement Weight	528	Total Cementitious	528
Fly Ash Weight	0	Yield cuft	27.2
Fly Ash Percent of Cementitious	0		
Slag Cement Weight	0		
Slag Cement Percent of Cementitious	0		
Total Water Weight	237		
Net Water Weight	237		
W/C (as designed)	45		
Air Entrainment (dosage)	1.0 OZ/CWT		
Water Reducer (dosage)	3.0 OZ/CWT (A)		
Other (dosage)	0		

Verify that all applicable standards (ASTM) methods have been followed regarding the mix design and A/E

Signature: **Ted Oviatt**
Digitally signed by Ted Oviatt
DN: cn = Ted Oviatt email =
oviatt@highgradematerials.com o =
US O = High Grade Materials OU =
High Grade Materials
Date: 2017.09.09 17:01:16 -0500

M.I.A. when Expansion Date 04/15/2019

Date 07/27/2017

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

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DISTRIBUTION: ORIGINAL – Project Engineer **COPIES** – Contractor, Lansing CFS, Region, Inspector

CONTROL SECTION 19000	JOB NUMBER 130450	PROJECT LOCATION W Herbison Rd (Old US-27 to Turner St)	PROJECT ENGINEER Dan Armentrout - Clinton CRC
CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2M	INTENDED USE (S)
PRIME / SUBCONTRACTOR(S) E T Mackenzie Co			CONTRACTOR QC PLAN Y <input type="checkbox"/> SUBMITTED? (MDOT use only) N <input type="checkbox"/>
STANDARD SPEC DATE 2012	QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016	AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE		INTERMEDIATE AGGREGATE		FINE AGGREGATE	
Aggregate Type	LIME	Aggregate Type		Source Name	WHEELER #2
Source Name	WYANDOT	Source Name		MDOT Source No	59-44
MDOT Source No	93-31	MDOT Source No		MDOT Series Class	2NS
MDOT Series Class	8AA	MDOT Series Class		Specific Gravity (Bulk Dry)	2.52
Specific Gravity (Bulk Dry)	2.51	Specific Gravity (Bulk Dry)		Specific Gravity (Bulk SSD) optional	2.57
Specific Gravity (Bulk SSD) optional	2.59	Specific Gravity (Bulk SSD) optional		Absorption	1.40
Absorption	1.70	Absorption		Fineness Modulus (FM)	2.30
Unit Weight (Dry Rodded) DR or	95	Unit Weight (Dry Rodded) DR or			
Unit Weight (Dry Loose) DL	NA	Unit Weight (Dry Loose) DL			
Percent Crushed	100	Percent Crushed			
MDOT Freeze-Thaw (F-T) Dilation	0.011	MDOT Freeze-Thaw (F-T) Dilation			
Specific Gravity (Bulk Dry) of F-T Sample	2.69	Specific Gravity (Bulk Dry) of F-T Sample			
Date of MDOT Freeze-Thaw Report	2014	Date of MDOT Freeze-Thaw Report			

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects

CEMENTITIOUS		ADMIXTURES	
Cement Source / Plant	ILLINOIS CEMENT	Air Entrainment	GRT POLYCHEM BA-50
Cement Type	I	Water Reducer	GRT POLYCHEM KB1200 (MR)
Cement Specific Gravity	3.15	Water Reducer	
Fly Ash Source (distributor & plant)	NA	Water Reducer	
Fly Ash Class	NA	Accelerator	
Fly Ash Specific Gravity	NA	Other	
Slag Cement Source	NA	Indicate Source & Product name with ticket code:	
Slag Cement Grade	NA	TYPE OF MIX WINTER/SUMMER	
Slag Cement Specific Gravity	NA	BOTH	
Other			

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	59	Design Slump	8" MAX
Coarse Aggregate Weight (Dry)	1775	Design Air %	6.75 +/- 1.25
Intermediate Aggregate Weight (Dry)	0	Specified Air %	6.75 +/- 1.25
Fine Aggregate Weight (Dry)	1385	PSI minimum required	3500
Portland Cement Weight	525	Total Cementitious	525
Fly Ash Weight	0	Yield cuft	27.2
Fly Ash Percent of Cementitious	0		
Slag Cement Weight	0		
Slag Cement Percent of Cementitious	0		
Total Water Weight	237		
Net Water Weight	237		
W/C (as designed)	45		
Air Entrainment (dosage)	1.0 OZ/CWT		
Water Reducer (dosage)	5.0 OZ/CWT (MR)		
Other (dosage)	0		

certify that all applicable standard test methods have been followed verifying the mix design and JMF

Digitally signed by Ted Oviatt
DN: cn = Ted Oviatt, email =
oviat@highgrade-materials.com, o =
US O = High Grade Materials OU =
High Grade Materials
Date: 2017.09.08 17:04:31 -0500

Ted Oviatt

MCA Level: Approved Date: 04/15/2013

Date: 07/27/2017

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

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CONTROL SECTION 19000	JOB NUMBER 130450	PROJECT LOCATION W Herbison Rd (Old US-27 to Turner St)	PROJECT ENGINEER Dan Armentrout - Clinton CRC
CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2D	INTENDED USE (S)
PRIME / SUBCONTRACTOR(S) E T Mackenzie Co			CONTRACTOR QC PLAN Y <input type="checkbox"/> SUBMITTED? (MDOT use only) N <input type="checkbox"/>
STANDARD SPEC DATE 2012	QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016	AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE	INTERMEDIATE AGGREGATE	FINE AGGREGATE
Aggregate Type <u>LIME</u>	Aggregate Type _____	Aggregate Type _____
Source Name <u>WYANDOT</u>	Source Name _____	Source Name <u>WHEELER #2</u>
MDOT Source No <u>93-31</u>	MDOT Source No _____	MDOT Source No <u>59-44</u>
MDOT Series Class <u>9AA</u>	MDOT Series Class _____	MDOT Series Class <u>2NS</u>
Specific Gravity (Bulk Dry) <u>2.61</u>	Specific Gravity (Bulk Dry) _____	Specific Gravity (Bulk Dry) <u>2.62</u>
Specific Gravity (Bulk SSD) optional <u>2.69</u>	Specific Gravity (Bulk SSD) optional _____	Specific Gravity (Bulk SSD) optional <u>2.67</u>
Absorption <u>1.73</u>	Absorption _____	Absorption <u>1.40</u>
Unit Weight (Dry Rodded) DR or Unit Weight (Dry Loose) DL _____	Unit Weight (Dry Rodded) DR or Unit Weight (Dry Loose) DL _____	Fineness Modulus (FM) <u>2.30</u>
Percent Crushed <u>100</u>	Percent Crushed _____	_____
MDOT Freeze-Thaw (F-T) Dilation <u>0.011</u>	MDOT Freeze-Thaw (F-T) Dilation _____	_____
Specific Gravity (Bulk Dry) of F-T Sample <u>2.69</u>	Specific Gravity (Bulk Dry) of F-T Sample _____	_____
Date of MDOT Freeze-Thaw Report <u>2014</u>	Date of MDOT Freeze-Thaw Report _____	_____

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects.

CEMENTITIOUS	ADMIXTURES
Cement Source / Plant <u>ILLINOIS CEMENT</u>	Air Entrainment <u>GRT POLYCHEM SA-50</u>
Cement Type <u>1</u>	Water Reducer <u>GRT POLYCHEM R (D)</u>
Cement Specific Gravity <u>3.15</u>	Water Reducer _____
Fly Ash Source (distributor & plant) <u>NA</u>	Water Reducer _____
Fly Ash Class <u>NA</u>	Accelerator _____
Fly Ash Specific Gravity <u>NA</u>	Other _____
Slag Cement Source <u>NA</u>	Indicate Source & Product name with ticket code(s) _____
Slag Cement Grade <u>NA</u>	TYPE OF MIX WINTER/SUMMER
Slag Cement Specific Gravity <u>NA</u>	<u>BOTH</u>
Other _____	_____

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	<u>69</u>	Design Slump	<u>3" MAX</u>
Coarse Aggregate Weight (Dry)	<u>1775</u>	Design Air %	<u>6.75 +/- 1.25</u>
Intermediate Aggregate Weight (Dry)	<u>0</u>	Specified Air %	<u>6.75 +/- 1.25</u>
Fine Aggregate Weight (Dry)	<u>1385</u>	PSI minimum required	<u>3500</u>
Portland Cement Weight	<u>525</u>	Total Cementitious	<u>525</u>
Fly Ash Weight	<u>0</u>	Yield cu/ft	<u>27.2</u>
Fly Ash Percent of Cementitious	<u>0</u>	_____	_____
Slag Cement Weight	<u>0</u>	_____	_____
Slag Cement Percent of Cementitious	<u>0</u>	_____	_____
Total Water Weight	<u>237</u>	_____	_____
Net Water Weight	<u>237</u>	_____	_____
WC (as designed)	<u>45</u>	_____	_____
Air Entrainment (dosage)	<u>1.0 OZ/OWT</u>	_____	_____
Water Reducer (dosage)	<u>3.0 OZ/OWT (D)</u>	_____	_____
Other (dosage)	<u>0</u>	_____	_____

Verify that all applicable standards test methods have been followed in finding the mix design and yield.

Digitally signed by Ted Oviatt
DN: cn = Ted Oviatt, email =
oviatt@highgradematerials.com, o = US
High Grade Materials OU = High
Grade Materials
Date: 2017.08.28 17:01:45 -0500

MOA (last) Expiration Date: 04/15/2019

Date: 07/27/2017

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

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CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2MD	INTENDED USE (S)
PRIME / SUBCONTRACTOR(S) E.T. Mackenzie Co			CONTRACTOR QC PLAN Y <input type="checkbox"/> SUBMITTED? (MDOT use only) N <input type="checkbox"/>
STANDARD SPEC DATE 2012	QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016	AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE		INTERMEDIATE AGGREGATE		FINE AGGREGATE	
Aggregate Type	LIME	Aggregate Type		Source Name	WHEELER #2
Source Name	WYANDOT	Source Name		MDOT Source No	59-44
MDOT Source No	93-31	MDOT Source No		MDOT Series Class	2NS
MDOT Series Class	6AA	MDOT Services Class		Specific Gravity (Bulk Dry)	2.52
Specific Gravity (Bulk Dry)	2.61	Specific Gravity (Bulk Dry)		Specific Gravity (Bulk SSD) (optional)	2.57
Specific Gravity (Bulk SSD) (optional)	2.69	Specific Gravity (Bulk SSD) (optional)		Absorption	1.40
Absorption	1.70	Absorption		Fineness Modulus (FM)	2.30
Unit Weight (Dry Rodded) DR or	35	Unit Weight (Dry Rodded) DR or			
Unit Weight (Dry Loose) DL	NA	Unit Weight (Dry Loose) DL			
Percent Crushed	100	Percent Crushed			
MDOT Freeze-Thaw (F-T) Dilation	0.011	MDOT Freeze-Thaw (F-T) Dilation			
Specific Gravity (Bulk Dry) of F-T Sample*	2.69	Specific Gravity (Bulk Dry) of F-T Sample*			
Date of MDOT Freeze-Thaw Report	2014	Date of MDOT Freeze-Thaw Report			

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects

CEMENTITIOUS

ADMIXTURES

Cement Source / Plant	ILLINOIS CEMENT	Air Entrainment	GRT POLYCHEM SA-50
Cement Type	I	Water Reducer	GRT POLYCHEM KB1200 (MR)
Cement Specific Gravity	3.15	Water Reducer	GRT POLYCHEM R (D)
Fly Ash Source (distributor & plant)	NA	Water Reducer	
Fly Ash Class	NA	Accelerator	
Fly Ash Specific Gravity	NA	Other	
Slag Cement Source	NA	Indicate Source & Product name with ticket code)	
Slag Cement Grade	NA	TYPE OF MIX WINTER/SUMMER	
Slag Cement Specific Gravity	NA		BOTH
Other			

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	59	Design Slump	5" MAX
Coarse Aggregate Weight (Dry)	1775	Design Air %	6.75 +/- 1.25
Intermediate Aggregate Weight (Dry)	0	Specified Air %	6.75 +/- 1.25
Fine Aggregate Weight (Dry)	1385	PSI minimum required	3500
Portland Cement Weight	525		
Fly Ash Weight	0	Total Cementitious	525
Fly Ash Percent of Cementitious	0	Yield cu/ft	27.2
Slag Cement Weight	0		
Slag Cement Percent of Cementitious	0		
Total Water Weight	237		
Net Water Weight	237		
WC (as designed)	45		
Air Entrainment (dosage)	1.0 OZ/CWT		
Water Reducer (dosage)	5.0 OZ/CWT (MR)		
Other (dosage)	3.0 OZ/CWT (D)		

Verify that all applicable standard test methods have been followed verifying the mix design and JMF

Digitally signed by Ted Oviatt
DN: cn = Ted Oviatt, email =
oviatt@highgradematerials.com, o =
US C - High Grade Materials LLC =
High Grade Materials
Date: 2017.08.03 17:03:00 -0500

Ted Oviatt

MSA Label / Expiration Date: 04/15/2019

Date: 07/27/2017

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

This form applies only to the project listed below and is not transferable to other projects
DISTRIBUTION: ORIGINAL - Project Engineer COPIES - Contractor, Lansing CFS, Region, Inspector

CONTROL SECTION 19000	JOB NUMBER 130450	PROJECT LOCATION W Herbison Rd (Old US-27 to Turner St)	PROJECT ENGINEER Dan Armentrout - Clinton CRC
CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2WSF	INTENDED USE (S)
PRIME / SUBCONTRACTOR(S) E. T. Mackenzie Co			
STANDARD SPEC DATE 2012		QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016
			AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE		INTERMEDIATE AGGREGATE		FINE AGGREGATE	
Aggregate Type	LIME	Aggregate Type		Source Name	WHEELER #2
Source Name	WYANDOT	Source Name		MDOT Source No	59-44
MDOT Source No	33-31	MDOT Source No		MDOT Series Class	2NS
MDOT Series Class	5AA	MDOT Services Class		Specific Gravity (Bulk Dry)	2.62
Specific Gravity (Bulk Dry)	2.61	Specific Gravity (Bulk Dry)		Specific Gravity (Bulk SSD) optional	2.67
Specific Gravity (Bulk SSD) optional	2.69	Specific Gravity (Bulk SSD) optional		Absorption	1.43
Absorption	1.73	Absorption		Fineness Modulus (FM)	2.30
Unit Weight (Dry Rodded) DR or	95	Unit Weight (Dry Rodded) DR or			
Unit Weight (Dry Loose) DL	NA	Unit Weight (Dry Loose) DL			
Percent Crushed	100	Percent Crushed			
MDOT Freeze-Thaw (F-T) Dilaton	0.011	MDOT Freeze-Thaw (F-T) Dilaton			
Specific Gravity (Bulk Dry) of F-T Sample*	2.69	Specific Gravity (Bulk Dry) of F-T Sample*			
Date of MDOT Freeze-Thaw Report	2014	Date of MDOT Freeze-Thaw Report			

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects.

CEMENTITIOUS		ADMIXTURES	
Cement Source / Plant	ILLINOIS CEMENT	Air Entrainment	GRT POLYCHEM SA-50
Cement Type	I	Water Reducer	GRT POLYCHEM 400NC (A)
Cement Specific Gravity	3.15	Water Reducer	
Fly Ash Source (distributor & plant)	NA	Water Reducer	
Fly Ash Class	NA	Accelerator	
Fly Ash Specific Gravity	NA	Other	
Slag Cement Source	NA	Indicate Source & Product name with ticket code!	
Slag Cement Grade	NA	TYPE OF MIX WINTER/SUMMER	
Slag Cement Specific Gravity	NA	BOTH	
Other			

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	69	Design Slump	3" MAX
Coarse Aggregate Weight (Dry)	1775	Design Air %	5.75 +/- 1.25
Intermediate Aggregate Weight (Dry)	0	Specified Air %	5.75 +/- 1.25
Fine Aggregate Weight (Dry)	1335	PSI minimum required	3500
Portland Cement Weight	525		
Fly Ash Weight	0	Total Cementitious	525
Fly Ash Percent of Cementitious	0	Yield cuft	27.2
Slag Cement Weight	0		
Slag Cement Percent of Cementitious	0		
Total Water Weight	237		
Net Water Weight	237		
W/C (as designed)	45		
Air Entrainment (dosage)	1.0 OZ/CWT		
Water Reducer (dosage)	3.0 OZ/CWT (A)		
Other (dosage)	0		

Verify that all applicable standard test methods have been followed verifying the mix design and JMF.

Digitally signed by Ted Oviatt
DN: CN = Ted Oviatt, email =
toviatt@highgradematerials.com, O =
US O = High Grade Materials, OU =
High Grade Materials
Date: 2017.09.03 11:02:14 -0500

MCA License Expiration Date: 04/15/2019

07/27/2017

JOB MIX FORMULA (JMF) CONCRETE FIELD COMMUNICATION

This form applies only to the project listed below and is not transferable to other projects
DISTRIBUTION: ORIGINAL - Project Engineer COPIES - Contractor, Lansing CFS, Region, Inspector

CONTROL SECTION 19000	JOB NUMBER 130450	PROJECT LOCATION W Herbison Rd (Old US-27 to Turner St)	PROJECT ENGINEER Dan Armentrout - Clinton CRC
CONCRETE SUPPLIER HIGH GRADE MATERIALS		PLANT LOCATION Lansing, MI	PLANT NUMBER HG06
GRADE OF CONCRETE S2-P1	PSI REQUIREMENT 3500	MIX DESIGN NUMBER M.S2DSF	INTENDED USE (S)
PRIME / SUBCONTRACTOR(S) E.T. Mackenzie Co			CONTRACTOR QC PLAN Y <input type="checkbox"/> SUBMITTED? (MDOT use only) N <input type="checkbox"/>
STANDARD SPEC DATE 2012	QC/QA SPECIAL PROVISION DATE 07/08/2016	DATE EFFECTIVE 07/13/2016	AGG CORRECTION 0.2%

MATERIAL DESIGN SOURCES AND PROPERTIES

COARSE AGGREGATE		INTERMEDIATE AGGREGATE		FINE AGGREGATE	
Aggregate Type	LIME	Aggregate Type		Source Name	WHEELER #2
Source Name	WYANDOT	Source Name		MDOT Source No	59-44
MDOT Source No	93-31	MDOT Source No		MDOT Series Class	2NS
MDOT Series Class	5AA	MDOT Series Class		Specific Gravity (Bulk Dry)	2.52
Specific Gravity (Bulk Dry)	2.81	Specific Gravity (Bulk Dry)		Specific Gravity (Bulk SSD) optional	2.37
Specific Gravity (Bulk SSD) optional	2.69	Specific Gravity (Bulk SSD) optional		Absorption	1.40
Absorption	1.70	Absorption		Fineness Modulus (FM)	2.30
Unit Weight (Dry Rodded) DR or	95	Unit Weight (Dry Rodded) DR or			
Unit Weight (Dry Loose) DL	NA	Unit Weight (Dry Loose) DL			
Percent Crushed	100	Percent Crushed			
MDOT Freeze-Thaw (F-T) Dilution	0.01	MDOT Freeze-Thaw (F-T) Dilution			
Specific Gravity (Bulk Dry) of F-T Sample*	2.69	Specific Gravity (Bulk Dry) of F-T Sample*			
Date of MDOT Freeze-Thaw Report	2014	Date of MDOT Freeze-Thaw Report			

*If the bulk dry specific gravity is more than 0.04 less than the bulk dry specific gravity of the most recently tested freeze-thaw sample, the aggregate will be considered to have changed characteristics and be required to have a new freeze-thaw test conducted prior to the use on Department projects.

CEMENTITIOUS

Cement Source / Plant	ILLINOIS CEMENT
Cement Type	I
Cement Specific Gravity	3.15
Fly Ash Source (distributor & plant)	NA
Fly Ash Class	NA
Fly Ash Specific Gravity	NA
Slag Cement Source	NA
Slag Cement Grade	NA
Slag Cement Specific Gravity	NA
Other	

ADMIXTURES

Air Entrainment	GRT POLYCHEM SA-50
Water Reducer	GRT POLYCHEM R (D)
Water Reducer	
Water Reducer	
Accelerator	
Other	
(Indicate Source & Product name with ticket code)	
TYPE OF MIX WINTER/SUMMER	
BOTH	

MIX PROPORTIONS

Volume of Coarse Aggregate (DR)	59	Design Slump	3" MAX
Coarse Aggregate Weight (Dry)	1775	Design Air %	6.75 +/- 1.25
Intermediate Aggregate Weight (Dry)	0	Specified Air %	6.75 +/- 1.25
Fine Aggregate Weight (Dry)	1385	PSI minimum required	3500
Portland Cement Weight	525	Total Cementitious	525
Fly Ash Weight	0	Yield cuft	27.2
Fly Ash Percent of Cementitious	0		
Slag Cement Weight	0		
Slag Cement Percent of Cementitious	0		
Total Water Weight	237		
Net Water Weight	237		
WC (as designed)	45		
Air Entrainment dosage	1.0 OZ/CWT		
Water Reducer dosage	3.0 OZ/CWT (D)		
Other dosage	0		

Verify that all applicable standard test methods have been followed, verifying the mix design and JMF.

Signature: **Ted Oviatt**
Digitally signed by Ted Oviatt
DN: cn = Ted Oviatt email =
oviatt@highgrade-materials.com o = US
High Grade Materials OU = High
Grade Materials
Date: 2017.08.31 17:22:05-0500

Expiration Date: 04/15/2019

Date: 07/27/2017

EXHIBIT A.4 Major Subcontractor Utilization

MAJOR SUBCONTRACTOR



Cadillac Asphalt

51777 West 12 Mile Rd

Wixom, MI. 48393

Contact: Wanda Dwyer

Phone: (734) 216-7006

Fax:

Quote To: Prime Contractors

Job Name: Stadium & Washtenaw

Phone:

Date of Plans:

Fax:

Revision Date:

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
202	Gen Conditions				
241	HMA Level/Top, LVSP	1.00	LS		
242	HMA Appr	1,600.00	TON		
243	HMA Hand Patching	97.00	TON		
		20.00	TON		

GRAND TOTAL

NOTES:

CLARIFICATION: CrafCo joint sealant is included for all paving except for hand patch, HMA Approach and trench paving.
 WE DO NOT INCLUDE ALLOWANCES FOR THE FOLLOWING ITEMS UNLESS NOTED ABOVE:
 Excavation, removals, sawcutting, engineering, layout, traffic control devices, permits, bonds and/or dues of any kind.
 This proposal may be withdrawn if not accepted within (10) days.
 Please do not hesitate to call with any questions or concerns, (734) 216-7006.

Wanda Dwyer
 Digitally signed by Wanda Dwyer
 Date: 2022.03.12 12:56:16 -05'00'

Anticipated Value
 \$ 279,330.00

EXHIBIT B.1 OSHA Approved Safety Program



Safety Program

E.T. MacKenzie Company

MICHIGAN SAFETY AND HEALTH PROTECTION ON THE JOB

THE MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT, 1974 P.A. 154, AS AMENDED, REQUIRES POSTING OF THIS DOCUMENT IN A CENTRAL AND CONSPICUOUS LOCATION. FAILURE TO DO SO MAY RESULT IN A PENALTY.

The Michigan Occupational Safety and Health Act (MIOSH Act), Act No. 154 of the Public Acts of 1974, as amended, provides job safety and health protection for Michigan employees through the maintenance of safe and healthful working conditions. Under the MIOSH Act and a state plan approved in September 1973 by the U.S. Department of Labor, the Michigan Department of Licensing and Regulatory Affairs is responsible for administering the Act. Department representatives conduct job site inspections and investigations to ensure compliance with the Act and with safety and health standards.

The contents of this poster describe many important provisions of the Act. These provisions apply equally to employers and employees in either private industry or the public sector.

EMPLOYER REQUIREMENTS

MIOSHA requires that each employer:

1. Furnish to each employee employment and a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to the employee.
2. Comply with promulgated rules and standards and with orders issued pursuant to the Act.
3. Post this and other notices and use other appropriate measures to keep his or her employees informed of their protection and obligations under the Act, including the provisions of applicable rules and standards.
4. Notify the Michigan Department of Licensing and Regulatory Affairs within 8 hours of any work-related fatality. Notification may be accomplished by calling 1-800-858-0397.
5. Notify the Michigan Department of Licensing and Regulatory Affairs within 24 hours of all work-related inpatient hospitalizations, amputations and losses of an eye. Notification may be accomplished by calling 1-844-464-6742 (4MIOSHA).
6. Make available to employees, for inspection and copying, all medical records and health data in the employer's possession pertaining to that employee.
7. Afford an employee an opportunity with or without compensation to attend all meetings between the Department of Licensing and Regulatory Affairs and the employer relative to any appeal of a citation by the employer.
8. Give the representative of employees the opportunity to accompany the department during the inspection or investigation of a place of employment and to prohibit the suffering of any loss of wages or fringe benefits or discriminate against the representative of employees for time spent participating in the inspection, investigation, or opening and closing conferences.
9. Provide personal protective equipment, at the employer's expense, when it is specifically required by a MIOSHA standard.
10. Not permit an employee, other than an employee whose presence is necessary to avoid, correct or remove an imminent danger, to operate equipment or engage in a process which has been tagged by the Department and which is the subject of an order issued by the Department identifying that an imminent danger exists.
11. To promptly notify an employee who was or is being exposed to toxic materials or harmful physical agents in concentrations or at levels which exceed those prescribed by a MIOSHA standard.

EMPLOYEE REQUIREMENTS

MIOSHA requires that each employee:

1. Comply with promulgated rules and standards and with orders issued pursuant to the Act.
2. Not remove, displace, destroy, or carry off a safeguard furnished or provided for use in a place of employment, or interfere in any way with the use thereof by any other person.

INSPECTIONS/INVESTIGATIONS: Inspections and investigations are conducted by trained personnel. The Act requires that an employer representative and a representative of employees be given an opportunity to accompany the department representative for the purpose of aiding in the inspection or investigation.

If a representative of employees does not participate, the department representative will consult with a number of employees concerning matters of safety or health in the place of employment.

COMPLAINTS: Employees and employee representatives who believe that an unsafe or unhealthful condition exists in their workplace have the right to request an inspection by giving written notice to the Department of Licensing and Regulatory Affairs. If a condition exists which may present an immediate and danger, the Department should be notified in the most expedient manner without regard to a written notice. The names of complainants will be kept confidential and not revealed upon the request of the employee. Employees also have the right to bring unsafe or unhealthful conditions to the attention of the department representative during the conduct of an inspection or investigation.

The Act provides that employees may not be discharged or in any manner discriminated against for filing a complaint or exercising any of their rights under the Act. An employee who believes he or she has been discriminated against may file a complaint with the Michigan Department of Licensing and Regulatory Affairs within 30 days of the alleged discrimination.

The U.S. Department of Labor is monitoring the operation of the Michigan Occupational Safety and Health Administration (MIOSHA) to assure the effective administration of the state act. Any person may make a written complaint regarding the state administration of the state act directly to the Regional Office of OSHA, 230 South Dearborn, Chicago, Illinois 60604.

CITATIONS: If upon inspection or investigation of the Department of Licensing and Regulatory Affairs believes that a requirement of the Act has been violated, a citation alleging such violation and setting a time period for correction will be issued to the employer. The citation must be prominently posted at or near the place of the alleged violation for three days or until the violation is corrected, whichever is later.

The Act provides for first instance penalties of up to \$7,000 for a violation. Penalties of up to \$7,000 per day may be assessed for failure to correct a violation within a proposed abatement period. Any employer who willfully or repeatedly violates the Act may be assessed penalties of up to \$70,000 for each such violation. Employers may appeal the alleged citation, the proposed penalties or the abatement periods to the Department and to the Board of Health and Safety the abatement and Appeals. Employees may appeal the abatement period in a similar manner. Employees also may appeal to the Board of Health and Safety Compliance and Appeals any decision issued by the Department in response to an employer appeal.

Criminal penalties also are provided for in the Act. A person who knowingly makes a false statement or report pursuant to the Act upon conviction is punishable by a fine of up to \$10,000 or may be imprisoned for not more than 6 months or both. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of up to \$10,000 or by imprisonment for not more than one year or both. A second conviction doubles the maximum monetary penalty and is punishable by imprisonment for up to three years.

VOLUNTARY ACTIVITY & COMPLIANCE ASSISTANCE: The act encourages employers and employees to reduce workplace hazards voluntarily.

The Michigan Department of Licensing and Regulatory Affairs offers limited on-site consultation assistance to employers to assist them in achieving compliance with occupational safety and health standards. Training specialists are available and can give advice on the correction of hazardous conditions and on the development of safety and health systems. Department staff are available to conduct seminars and training relative to occupational safety and health for both employer and employee groups. Requests for service should be addressed to the department at the address shown below.

The U.S. Department of Labor will continue to enforce federal standards governing maritime operations of long shoring, shipbuilding, ship breaking and ship repairing. These issues are not covered by the Michigan Plan for Occupational Safety and Health.

MORE INFORMATION:

Department of Licensing and Regulatory Affairs
Michigan Occupational Safety & Health Administration
530 W. Allegan Street, Box 30643
Lansing, Michigan 48909-8143
www.michigan.gov/miosha

THIS IS AN IMPORTANT DOCUMENT - DO NOT COVER!

MIOSHA Complaint Hotline 1-800-866-4674
Fatality Hotline 1-800-858-0397
MIOSHA Injuries/Illnesses Reporting 1-844-464-6742
Consultation and Training Assistance 1-517-284-7720



The Department of Licensing and Regulatory Affairs will not discriminate against any individual or group because of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. If you need assistance with reading, writing, hearing, etc., under the Americans with Disabilities Act, you may make your need known to this agency.
10,000 copies printed at \$705.54 or \$0.07 per copy.

MIOSHA/CET 2010 (9/15)

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Introduction

It is the policy of this company to provide a safe workplace for its employees. To this end, the company, in concert with employees, will comply with all applicable standards promulgated pursuant to the Michigan Occupational Safety and Health Act (MIOSHA and the Mine Safety and Health Act (MSHA). MIOSHA and MSHA standards are available upon request (see your Safety Officer), or online at www.michigan.gov/lara and www.msha.gov, respectively.

Since the most important component of any safety policy or program is implementation, it is our intent to communicate the contents of this program to our employees. In turn, all employees are expected to comply with this document and may be disciplined if found to be in noncompliance.

Accident Prevention Program/ General Safety Rules

1. It is the policy of this company to furnish each employee employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to such employee.
2. This company designates _____ as corporate Safety Officer. This person is responsible for the implementation of the company's safety program. If any employee needs to know who the company Safety Officer is, they can find out by asking any foreman.
3. Employees of MacKenzie Companies participate in formal and informal training programs as necessary to their daily work routines.
4. A qualified employee will be designated on each crew or project who will have the following responsibilities:
 - a. Instruct each employee regarding operating procedures, hazard and safeguards of tools and equipment when necessary to perform the job.
 - b. Inspect the construction site, tools and equipment to assure unsafe conditions that may create a hazard are eliminated.
 - c. Instruct each employee in the recognition and avoidance of hazards.
 - d. Instruct each employee, where known harmful plants, reptiles, animals or insects are present, as to the potential hazards, how to avoid injury, and applicable first aid procedures to be used in the event of injury.
 - e. Instruct each employee required to handle or use known poisons, toxic materials, caustics and other harmful substances regarding the potential hazards, safe handling, use personal hygiene, protective measures required and applicable first aid procedures to be used in the event of injury.

- f. Instruct each employee required to enter a confined space regarding the hazards involved, the necessary precautions to be taken, the use of personal protective equipment, and the procedures to be followed if an emergency occurs.
 - g. Instruct all employees in the steps to be taken in case of an injury or accident.
5. The job foreman will inspect all machines, tools and equipment on a regular basis to make certain that no defect is present that will affect the safety of employees.
 6. All employee complaints or concerns regarding safety shall be immediately brought to the attention of the Supervisor and/or Safety Officer.
 7. Periodic meetings will be held to inform all employees of the Company safety program.
 8. This safety program shall be made available to all employees.
 9. A copy of the MITA Trench Safety Handbook shall be made available to all employees who are involved in working in open excavations.
 10. Safety bulletins are located at the main office and in each job trailer and include all required safety postings.
 11. All employees are expected to comply with all applicable standards promulgated pursuant to MIOSHA and MSHA as described in the introduction section of this safety handbook.
 12. Employees will adhere to the safety rules and programs within this safety handbook.

Safety Rules and Programs

MISCELLANEOUS RULES

1. Do not use tools or equipment that you have not been trained or authorized to use. This rule also applies to power-actuated tools.
2. Gasoline must be stored and transported in approved cans only. Engines must be shut off when refueling and no smoking anywhere near flammable liquids.
3. Immediately report all injuries, whether to yourself or a co-worker, to your foreman.
4. Do not distract the attention of fellow workers.

TRENCHING RULES

1. Spoil pile must be at least 2 feet back from the lip of the trench.
2. All employees working in excavations or trenches must always stay within the protective system (trench shield, shoring, sloping).
3. Never climb on shoring, trench shields, or sloped walls or ride on any lift, hook, chain, cable, sling, or other equipment parts.
4. Ladders in a trench must extend at least 3 feet above the top of the trench. All employees working in a trench must be within 25 feet of a ladder or ramp.
5. For further excavation information, refer to the *MITA Trench Safety Handbook*, or Part 9 of MIOSHA Standards.
6. All trenches over 5' deep must be cut to the angle of repose, sheeted or shored.

CONFINED SPACE PROGRAM

GENERAL

Confined Space Definition

1. A confined space is a space having all of the following criteria: (1) is large enough and so configured that an employee can bodily enter, (2) has a limited or restricted means for entry and exit, and (3) is not designed for continuous employee occupancy.

Examples of locations where confined spaces may occur include, but are not limited to, storage tanks, manholes, sewers, water mains, storm drains, underground utility vaults, concrete pier columns, precast concrete manhole units, drilled shafts, pipelines, gatewells, ducts, catch basins and open top spaces such as pits, tubs, vaults, and vessels.

Confined Space Classifications

1. Non-Permit Space is a confined space that does not contain existing or potential physical or atmospheric hazards. A space having only physical hazard(s) that have been isolated or eliminated can be reclassified as a non-permit space. Reclassifying is not allowed when a space contains an existing or potential atmospheric hazard(s) (i.e. existing sewers, manholes, and other similar locations).
2. Alternate Entry Space is a permit space that contains no physical hazards (or the physical hazards have been eliminated or isolated.; the existing or potential atmospheric hazards can be controlled by continuous mechanical forced air ventilation; and, in the event the ventilation system stops working, entrants can exit the space safely. Alternate entry procedures are less stringent than full permit space procedures.
3. Full Permit Space is a permit space that contains existing or potential physical and/or atmospheric hazards. Full permit space entry procedures are required when workers enter the space.

MIOSHA Standard References

1. The requirements for confined spaces in construction are covered

in Construction Safety Standard (CS) Part 35 – Confined Space in Construction. Additional requirements for welding activities are covered in CS Part 7 – Welding and Cutting and General Industry Standard Part 12 – Welding and Cutting.

Part 35 – Confined Space in Construction does not apply to certain construction work activities such as diving, excavations, and underground construction (i.e. tunnels, shafts, cofferdams, and caissons). The requirements for these activities are covered in CS Part 9 – Excavation Trenching & Shoring and Part 14 – Tunnels, Shafts, Cofferdams, and Caissons; and Occupational Health Standards Part 504 - Diving Operations and Part 665 - Underground Construction, Caissons, Cofferdams, and Compressed Air.

Employee Responsibilities

1. Employees must not enter a confined space until properly trained and authorized by the supervisor/foreman. If unsure whether an area or space is considered a confined space, contact your supervisor or foreman.

Employee Training

1. Every employee shall receive training and instruction as to the existence, location, and dangers posed by permit spaces and that they must not enter such spaces without authorization by the supervisor/foreman.
2. Employees who are involved in alternate entry and full permit space entry work operations shall receive specific training to ensure they have the knowledge, understanding and skills to perform their duties safely; understand the hazards in the permit spaces and the methods used to isolate, control or protect workers; and the dangers of attempting entry rescue unless authorized.
3. Employee names, trainer names, specific duties training, and dates of training shall be recorded and maintained at the office. The training records shall be made available to employees upon request.

FIRST STEP: INITIAL WORK SITE EVALUATION

1. Before work begins, the competent person (typically the foreman) must evaluate the worksite to determine if there are any spaces that workers may enter into that meet the definition of a confined space.
2. Employees are not authorized to enter a confined space until the foreman has determined which of the following classifications and entry procedures will be used to enter the space:
 - a. Non-Permit Space Entry
 - b. Alternate Entry Space
 - c. Full Permit Space Entry

Use the **Classifying Confined Spaces** flowchart (See Appendix A. for assistance in determining classification and entry procedures.

3. Each confined space must be evaluated for existing and/or potential physical and atmospheric hazards. Whenever possible, the initial evaluation shall be completed without entering the space. If entry into the space is necessary to complete an initial evaluation, full permit space entry procedures are required.
4. The atmosphere in the space must be tested prior to changing the space's natural ventilation. Direct-reading instruments must be calibrated per manufacturers' specification and used to test for oxygen content, flammable gases and vapors, and potential toxic air contaminants, in this order. The testing will determine whether the following hazards are present or could be introduced by the work operation:
 - a. Oxygen deficiency (concentration less than 19.5 %) or excess (concentration above 23.5 %).
 - b. Concentration of any flammable gas, vapor, or mist in excess of 10 percent of its lower explosive limit (LEL).
 - c. Airborne combustible dust at a concentration equal to or greater than its lower explosive limit.
 - d. Atmospheric concentration of any substance that can cause death,

incapacitation, impairment of ability to self-rescue, injury or acute illness.

5. **Section 1** of the **Pre Entry Checklist** (See Appendix B. must be completed for each confined space that employees may enter into and kept available at the job site. The Pre-Entry Certification (PEC. is necessary to document the results of the initial evaluation and atmospheric testing; and is the rationale used to classify the space and the entry procedures.

NON-PERMIT SPACE ENTRY

1. If a space does not have an existing or potential physical or atmospheric hazard, it is classified as a non-permit space, and employees may enter. **Danger signs are not required for non-permit spaces.**
2. If a space contains an existing or potential physical hazard(s) only, the space can be reclassified as a non-permit space if the physical hazards have been eliminated or isolated. The rationale must be documented in Section 1 on the Pre Entry Certification (PEC.. Reclassifying is not allowed when a space contains an existing or potential atmospheric hazard (i.e. existing sewers, manholes, and other similar locations). In this situation, go to the Alternate Entry Space section.
3. Periodic atmospheric testing and evaluations may be necessary to ensure employee safety in a non-permit space, especially when a work operation (i.e. welding, cutting, using toxic materials) could introduce a new hazard into the space. Anytime a periodic or subsequent atmospheric test is conducted, the results must be documented and kept at the work site. (See Appendix C.: **Confined Space Atmospheric Testing Data Sheet**. Atmospheric test results are not required to be documented if *continuously monitoring* the atmosphere within the space.
4. Employees must exit the space immediately if a hazard is introduced or detected. The space is then reclassified as a full permit space until additional testing and evaluation demonstrate that the space is

safe for re-entry. The event, hazards, and steps taken to eliminate or isolate the hazard in order to prevent another occurrence must be documented in Section 3 on the PEC. The foreman must include his/her signature authorizing re-entry into the space. In addition, the GC must be informed of any hazards that occurred or were created in the space during entry.

ALTERNATE ENTRY SPACE

1. Alternate entry space procedures are less stringent requirements that may be used in lieu of the full permit space procedures, provided **all** of the following criteria can be obtained:
 - a. All physical hazards in the space are eliminated or isolated;
 - b. The only hazard is an actual or potential hazardous atmosphere that can be made safe for entry using continuous forced air ventilation; and
 - c. In the event the ventilation system stops working, entrants can exit the space safely.
2. Prior to entry, the foreman must inform the controlling contractor of the existence, location, and hazards likely to be confronted or created during entry, and that alternate entry procedures will be used to enter the space. When another employer's employee(s) is working in the space at the same time, or when work activities that could result in a hazard are performed in the space at the same time, the alternate entry procedures must be coordinated with the controlling contractor and the other affected employer.
3. **DANGER – PERMIT-REQUIRED CONFINED SPACE – DO NOT ENTER** signs must be posted at each alternative entry space location to prevent unauthorized entry.
4. *Sections 1 and 2* on the PEC must be completed prior to entering the space when using alternate entry procedures. This will document the hazards, precautions, entry procedures and the supporting data for using alternate entry procedures and to verify the space is safe for entry. The PEC must be made available to each employee entering

the space or to their authorized representative, as applicable, and kept at the job site.

5. Any conditions making it unsafe to remove an entrance cover (i.e. manhole cover) must be eliminated before the cover is removed. If an entrance cover is removed, the opening must be immediately guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and will protect employees from falling objects when working in the space.
6. Continuous mechanical forced air ventilation must be set up and used to ventilate the space. Exhaust ventilation and natural ventilation are not acceptable substitutes for forced air ventilation. The forced air ventilation must be directed to ventilate the immediate areas where each employee will be working within the space and must continue until all employees have left the space. The air supply for the forced air ventilation must be from a clean source and must not increase the hazards in the space.
7. After the space has been ventilated, the atmosphere must be re-tested prior to entry to ensure that the forced air ventilation is preventing the accumulation of a hazardous atmosphere. After re-testing, the atmosphere must be continuously monitored unless periodic monitoring is sufficient to ensure that the atmosphere remains nonhazardous. Anytime a periodic, subsequent or re-test of the atmosphere is conducted, the results must be documented and kept at the work site. (See Appendix C.: **Confined Space Atmospheric Testing Data Sheet**. Atmospheric test results are not required to be documented if *continuously monitoring* the atmosphere within the space.
8. Monitoring instruments must be equipped with an early warning audible alarm that is capable of alerting employees of any atmospheric hazard that may have entered into the space and provides sufficient time to exit the space.
9. If the ventilation system is equipped with an audible alarm, employee(s) must immediately leave the space on their own if the

ventilation stops for any reason when the alarm sounds.

If the ventilation system is not equipped with an audible alarm, an employee stationed at the top of the space opening (top man) must be readily available to monitor the ventilation system and be able to effectively communicate with the employees within to immediately exit the space on their own should the ventilation stop for any reason.

10. A safe method of entering and exiting the space must be provided. Any hoisting system that is used must either be designed or manufactured for personnel hoisting or be approved for personnel hoisting by a registered professional engineer prior to use.
11. Confirm local emergency units are readily available in the case of an emergency. **Attendants, rescue equipment and rescue teams are not required during alternate entry procedures unless the space is reclassified as a full permit space.**
12. If a hazard is detected while employees are working within the space, the foreman must ensure each worker leaves the space immediately. The space is then reclassified as a full permit space until additional testing and evaluation demonstrate that the space is safe for re-entry. The foreman must document the event, hazards, and steps taken to eliminate or isolate that hazard to prevent another occurrence in **Section 3** on the PEC. The foreman must include his/her signature authorizing re-entry into the space.
13. The GC must be notified when work has been completed and informed of any hazards that occurred or were created in the space during entry. Document this in **Section 4** on the PEC.

FULL PERMIT SPACE ENTRY

1. Complete Section 1 of the PEC to verify the conditions of the permit space during the initial work site evaluation and prior to entry. When hazards or potential hazards within a space cannot be eliminated, isolated, controlled with ventilation, or entrants are unable to exit the space in the event the ventilation system stops working, full permit space entry procedures must be established and implemented.

2. DANGER – PERMIT-REQUIRED CONFINED SPACE – DO NOT ENTER signs must be posted at each full permit space location to prevent unauthorized entry.
3. Prior to entry, the foreman must inform the controlling contractor of the existence, and location, of hazards (including any hazards likely to be confronted or created., and that full permit entry procedures will be used to enter the space. The entry procedures must be coordinated with the controlling contractor when another employer’s employee(s) is working in the permit space at the same time and when a work activity that could result in a hazard is performed in the space at the same time.
4. Full permit entry procedures must be developed and implemented to ensure safe entry into the space. The entry procedures must include, at a minimum, all of the following:
 - a. Specify the acceptable entry conditions;
 - b. Provide entrants or their authorized representative an opportunity to observe any monitoring or testing of space;
 - c. Isolate the space and physical hazards within the space;
 - d. Purging, inerting, flushing, or ventilating the space as necessary to eliminate or control atmospheric hazards;
 - e. Determine that, in the event the ventilation system stops working, the monitoring procedures and equipment will detect an increase in atmospheric hazard levels in sufficient time for entrants to safely exit the space;
 - f. Provide pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards;
 - g. Verify that conditions within the space are acceptable throughout entry.
5. Provide the following equipment, maintain the equipment, and ensure employees use the equipment properly:
 - a. Testing and monitoring equipment;
 - b. Ventilating equipment;

- c. Communication equipment;
 - d. Personal protective equipment when engineering and work-practice controls do not adequately protect employees;
 - e. Approved lighting equipment;
 - f. Barriers and shields;
 - g. Equipment, such as ladders, for safe access and egress;
 - h. Rescue and emergency equipment, unless equipment is provided by rescue services; and
 - i. Any other equipment necessary for safe entry into, safe exit from, and rescue.
6. Full permit space conditions must be evaluated as follows during entry:
- a. Test the atmosphere in the space before entry to determine if acceptable entry conditions exist before changes to the space's natural ventilation are made. If isolation of the space is infeasible, due to being large or is part of a continuous system (such as a sewer), all of the following must be conducted:
 - i. Perform pre-entry atmospheric testing to the extent feasible before entry;
 - ii. Continuous monitoring of conditions in the areas where entrants are working;
 - iii. Provide an early-warning system that continuously monitors for non-isolated engulfment hazards and alerts entrants and attendants in sufficient time to safely exit the space.
 - b. Continuously monitor atmospheric hazards unless periodic monitoring is sufficient to ensure that the atmosphere remains nonhazardous.
 - c. When testing the atmosphere, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.
 - d. Allow entrants or their authorized representative to observe any testing.
 - e. Reevaluate the space as requested by the entrant or their authorized representative and provide them with the results of any

testing.

7. The authorized entrant(s), attendant(s), and foremen each have specific duties whenever work is performed in a permit space. Their specific duties are listed below:

Authorized entrants must:

- a. Know space hazards, including information on the means of exposure such as inhalation or skin contact, and symptoms of the exposure;
- b. Use appropriate personal protective equipment properly;
- c. Stay in communication with attendant as necessary to enable the attendant to monitor the entrant's status and alert to evacuate when necessary;
- d. Exit from the permit space as soon as possible when:
 - i. Ordered by the attendant or foreman;
 - ii. When he/she recognizes the warning signs or symptoms of exposure;
 - iii. A prohibited condition exists; or
 - iv. An automatic alarm is activated.
- e. Alert the attendant when a prohibited condition exists or when warning signs or symptoms of exposure exist.

Attendants must:

- a. Remain outside the permit space during entry operations unless relieved by another authorized attendant;
- b. Perform non-entry rescues when specified by the rescue procedure;
- c. Know existing and potential hazards, including information on the types of exposure, signs or symptoms, consequences, and other effects;
- d. Maintain communication with and keep an accurate account of the workers within the space;
- e. Assess conditions inside and outside the space and order evacuation of the permit space when:

- i. A prohibited condition exists;
 - ii. A worker shows behavioral effects of hazard exposure;
 - iii. A situation exists outside the confined space that could endanger the employees within the space; and
 - iv. The attendant cannot effectively and safely perform required duties.
- f. Summon rescue and other services during an emergency and when a worker becomes injured or ill;
 - g. Ensure that unauthorized people stay away from permit spaces or exit immediately if they have entered into the space;
 - h. Inform entry employees and foreman if any unauthorized person enters the permit space; and
 - i. Perform no other duties that interfere with the attendant's primary duties.

Foremen must:

- a. Know space hazards including information on the mode of exposure, signs or symptoms and consequences;
 - b. Verify that specified entry conditions are satisfied, including permits, tests, procedures and equipment before allowing entry;
 - c. Terminate entry and cancel or suspend permits when entry operations are completed or if a condition that is not allowed under the permit arises;
 - d. Verify that rescue services are available and that the means for summoning them are operable;
 - e. Take appropriate measures to remove unauthorized entrants; and
 - f. Ensure that entry operations remain consistent with the entry permit and that acceptable entry conditions are maintained.
8. At least one attendant must be stationed outside the permit space when workers are working within, and maintain communication with all entrants and keep track of their conditions. If one or more entrants suffers an injury or illness and is unable to exit the space without help, the attendant must initiate a rescue. When an attendant is required to monitor multiple permit spaces, additional procedures

must be implemented in the event of an emergency within one or more of those spaces.

9. **Rescue and emergency** procedures must be established for summoning rescue and emergency services and preventing unauthorized personnel from attempting rescue.

- a. **Non-entry rescue:** It is preferable if the entrant(s) can be rescued without others entering the space to avoid having additional personnel exposure to the hazard that caused the illness or injury. Therefore, non-entry rescue procedures using retrieval equipment must be implemented, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant, such as when obstructions can snag the retrieval line or the line can become entangled with air lines or electric cords. The attendant must be prepared to perform non-entry rescues if needed.

When non-entry procedure is selected, each entrant must wear a chest or full body harness, with a retrieval line attached at the D-ring in the center of the back or another point which positions the entrant so that he or she is small enough to be pulled out of the space. The other end of the retrieval line must be attached to a mechanical device or a fixed point outside the permit space. A mechanical device must be available to retrieve someone from vertical type permit spaces more than 5 feet deep. Wristlets or anklets may be used instead of a chest or full body harness only if the employer can demonstrate that use of a chest or full body harness is infeasible or creates a greater hazard.

When a non-entry rescue procedure is selected, the foreman must also confirm, before entry begins, that emergency assistance (typically the local fire department) is available if the non-entry rescue fails.

- b. **Entry rescue:** When non-entry rescue is not feasible, the only way to rescue an entrant is for others to enter the permit space. For entry rescue, an on-site rescue team consists of our employees or another contractor's employees. An off-site rescue service is a

local fire department or other rescue service. The off-site rescue service must be able to respond in time to get the entrant out of the space to receive medical treatment, which requires the foreman to contact the rescue service prior to entering the space and informing them of the nature and hazards involved in the space. In some cases, this may require a standby rescue team, such as when the entrant is working in an atmosphere that is immediately dangerous to life or health (IDLH) and is wearing an airline respirator or a self-contained breathing apparatus.

When entry rescue takes place, an attendant must be stationed outside the permit space so that additional help can be summoned if needed. If the original attendant is to enter the space as part of the rescue team, a new attendant must be in position before the first attendant enters the space.

- c. ***Training requirements for rescue teams and off-site rescue services:*** All members of a rescue team must receive the training that is required for authorized entrants and have been trained to perform their assigned rescue duties. Rescue team members must be provided with personal protective and rescue equipment, including respirators, and must be instructed on how to use it. All rescuers must be trained in first aid and CPR. At a minimum, one rescue team member must be certified in first aid and CPR. Rescuers must be informed of the hazards within the permit space before entering. Rescue team practices or exercises must take place at least yearly. Off-site rescue services must be provided access to all permit spaces, if requested, in order to practice rescue operations.

Off-site rescue services must notify the foreman in the event that their service is unavailable. The permit space work can be postponed or another off-site rescue service can be used.

If using an off-site rescue service, the foreman must determine that the service has the ability and equipment to carry out a rescue in the particular permit space or type of permit space that entrants are working in. The foreman must contact the rescue service to make

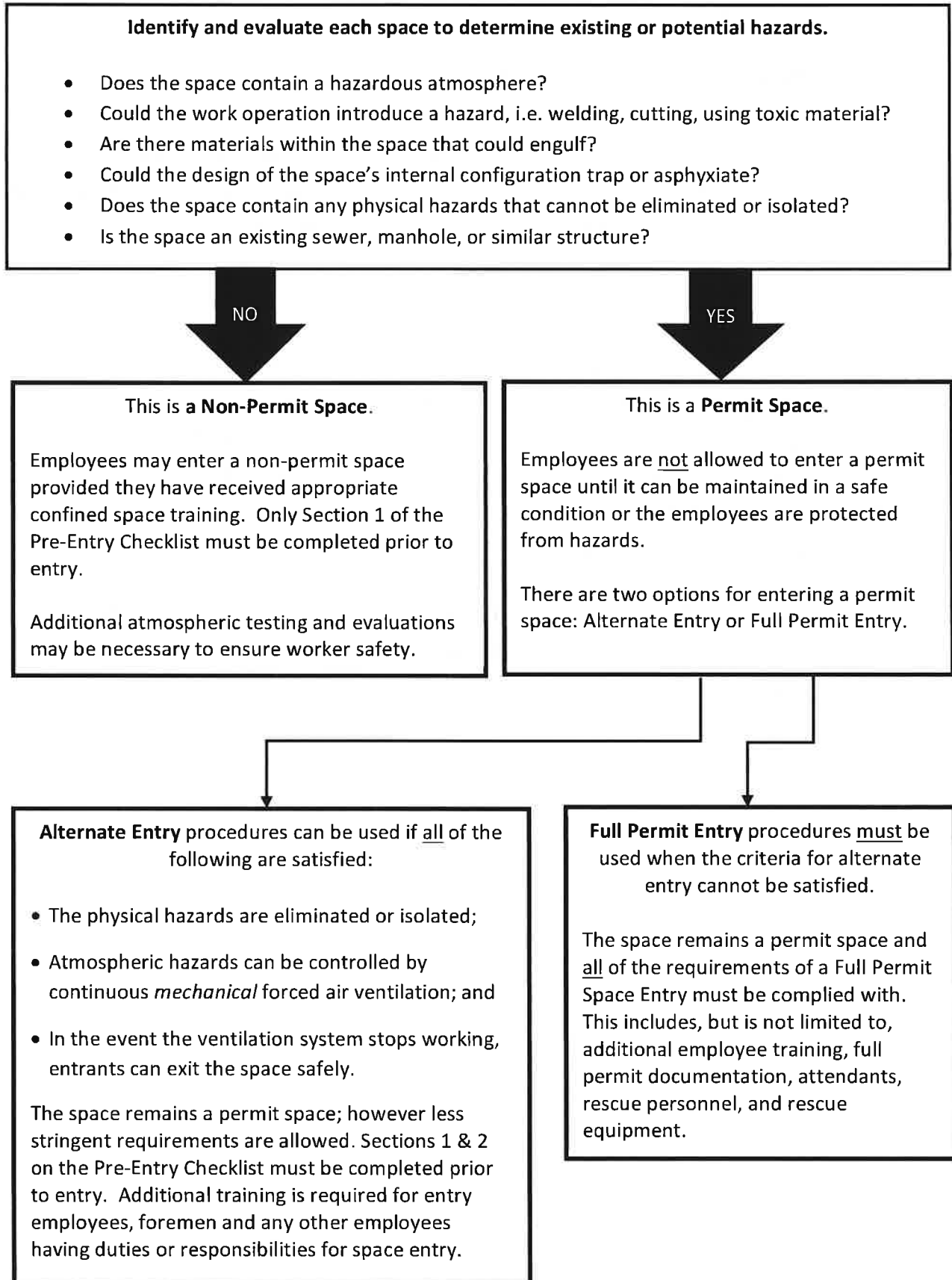
sure that it will be able to respond in a timely manner whenever an entrant is in the permit space.

10. Full permit space entry procedures must be reviewed and deficiencies must be corrected whenever it is discovered that the procedures established may not be protecting employees adequately. Circumstances requiring a review include an injury or near misses, unauthorized entry, detection of a new hazard or condition prohibited by the Entry Permit, or an employee complaint about the program's effectiveness. In addition, the Full Permit Space Procedures will be reviewed annually for effectiveness using the cancelled entry permits
11. Prior to entry, a **Full Permit Space Entry Permit** (See Appendix D. must be completed for each full permit space that employees may enter into. The entry permit includes all of the following information:
 - a. Name of the permit space to be entered, authorized entrants(s), current attendants, and current entry foremen;
 - b. Purpose of entry;
 - c. Date and authorized duration of entry;
 - d. Means of detecting an increase in atmospheric hazard levels;
 - e. Name and signature of foreman who authorizes entry;
 - f. Known hazards in the space;
 - g. Measures to be taken to isolate permit spaces and to eliminate or control space hazards;
 - h. Acceptable entry conditions;
 - i. Test results, date and time of tests(s), and the tester's initials or signature;
 - j. Name and telephone numbers of rescue and emergency services and means to be used to contact them;
 - k. Communication procedures and equipment to maintain during entry;
 - l. Special equipment and procedures, including personal protective equipment and alarm systems;

- m. Any other information needed to ensure employee safety; and
 - n. Additional permits, such as for hot work, that have been issued authorizing work in the permit space.
12. The foreman must cancel entry permits when work has been completed within the space or when new hazards or conditions occur. Once a permit is cancelled, entry under it is no longer permitted. New hazards or conditions must be noted on the cancelled permit and used in revising the permit space program. Once the work has been completed and the entry permit cancelled, it must be kept for a least one year.
 13. The foreman may suspend an entry permit instead of cancelling it if a temporary condition has occurred in or near the space that, once corrected, is not expected to reoccur. The permit may be reinstated and entry may occur under the permit if the entry supervisor has determined that the conditions in the space match the allowable conditions listed on the permit.
 14. The GC shall be informed when work has been completed within the space and of any hazards that occurred or were created in the space during entry.

APPENDIX A

CLASSIFYING CONFINED SPACES



APPENDIX B PRE-ENTRY CHECKLIST

SECTION 1: INITIAL WORK SITE EVALUATION

Date of Initial Evaluation:	Identify space being entered:	Person completing the evaluation:
-----------------------------	-------------------------------	-----------------------------------

Can the initial evaluation be completed without entering? Yes <input type="checkbox"/> Continue to next box. No <input type="checkbox"/> STOP! –Use full permit space procedures.	If a cover or guard has to be removed to perform the initial evaluation or testing, have all hazardous conditions been eliminated, isolated, or controlled? Yes <input type="checkbox"/> N/A <input type="checkbox"/>
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Atmospheric Hazard Assessment

Record initial atmospheric testing: <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">Oxygen</td> <td style="width: 30%;">%</td> </tr> <tr> <td>Flammable/Explosive Gas</td> <td>% LEL</td> </tr> <tr> <td>Hydrogen Sulfide (H2S)</td> <td>PPM</td> </tr> <tr> <td>Carbon Monoxide (CO)</td> <td>PPM</td> </tr> <tr> <td>Other (Specify)</td> <td></td> </tr> </table> Record subsequent atmospheric testing on the Confined Space Atmospheric Testing Data Sheet (Appendix C).	Oxygen	%	Flammable/Explosive Gas	% LEL	Hydrogen Sulfide (H2S)	PPM	Carbon Monoxide (CO)	PPM	Other (Specify)		Does the space contain a hazardous atmosphere? No <input type="checkbox"/> Yes <input type="checkbox"/> (Only Alternate Entry or Full Permit Entry procedures are allowed.) Could a hazardous atmosphere possibly enter the space after the initial testing, (i.e. sewers and manholes) or could a hazard be introduced from a work operation (i.e. welding, cutting, applying toxic material)? No <input type="checkbox"/> Yes <input type="checkbox"/> (Only Alternate Entry or Full Permit Entry procedures are allowed.)
Oxygen	%										
Flammable/Explosive Gas	% LEL										
Hydrogen Sulfide (H2S)	PPM										
Carbon Monoxide (CO)	PPM										
Other (Specify)											

Physical Hazard Assessment

Are there existing or potential physical hazards in the space (i.e. electrical, mechanical, engulfment)? No <input type="checkbox"/> Yes <input type="checkbox"/> (Check applicable boxes below) <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Electrical</td> <td><input type="checkbox"/> Entrapment</td> </tr> <tr> <td><input type="checkbox"/> Mechanical</td> <td><input type="checkbox"/> Converging Walls</td> </tr> <tr> <td><input type="checkbox"/> Engulfment/Water</td> <td><input type="checkbox"/> Fall Hazard</td> </tr> <tr> <td><input type="checkbox"/> Hydraulic/Pneumatic</td> <td><input type="checkbox"/> Temp. Extreme</td> </tr> <tr> <td><input type="checkbox"/> Other (Specify): _____</td> <td></td> </tr> </table>	<input type="checkbox"/> Electrical	<input type="checkbox"/> Entrapment	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Converging Walls	<input type="checkbox"/> Engulfment/Water	<input type="checkbox"/> Fall Hazard	<input type="checkbox"/> Hydraulic/Pneumatic	<input type="checkbox"/> Temp. Extreme	<input type="checkbox"/> Other (Specify): _____		If physical hazards were detected in the space, were they eliminated or isolated? No <input type="checkbox"/> Yes <input type="checkbox"/> (Check applicable boxes below) <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Lock out/Tag out</td> <td><input type="checkbox"/> Personal Fall Arrest/Rest.</td> </tr> <tr> <td><input type="checkbox"/> Isolate/Guard</td> <td><input type="checkbox"/> Install Work Platform</td> </tr> <tr> <td><input type="checkbox"/> Purge/Drain/Clean</td> <td><input type="checkbox"/> Guard Rails/Hole Covers</td> </tr> <tr> <td><input type="checkbox"/> Blank/Block/Bleed</td> <td><input type="checkbox"/> Ventilation/Ice Vest</td> </tr> <tr> <td><input type="checkbox"/> Other (Specify): _____</td> <td></td> </tr> </table>	<input type="checkbox"/> Lock out/Tag out	<input type="checkbox"/> Personal Fall Arrest/Rest.	<input type="checkbox"/> Isolate/Guard	<input type="checkbox"/> Install Work Platform	<input type="checkbox"/> Purge/Drain/Clean	<input type="checkbox"/> Guard Rails/Hole Covers	<input type="checkbox"/> Blank/Block/Bleed	<input type="checkbox"/> Ventilation/Ice Vest	<input type="checkbox"/> Other (Specify): _____	
<input type="checkbox"/> Electrical	<input type="checkbox"/> Entrapment																				
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<input type="checkbox"/> Engulfment/Water	<input type="checkbox"/> Fall Hazard																				
<input type="checkbox"/> Hydraulic/Pneumatic	<input type="checkbox"/> Temp. Extreme																				
<input type="checkbox"/> Other (Specify): _____																					
<input type="checkbox"/> Lock out/Tag out	<input type="checkbox"/> Personal Fall Arrest/Rest.																				
<input type="checkbox"/> Isolate/Guard	<input type="checkbox"/> Install Work Platform																				
<input type="checkbox"/> Purge/Drain/Clean	<input type="checkbox"/> Guard Rails/Hole Covers																				
<input type="checkbox"/> Blank/Block/Bleed	<input type="checkbox"/> Ventilation/Ice Vest																				
<input type="checkbox"/> Other (Specify): _____																					

SPECIFY THE APPROPRIATE CLASSIFICATION AND ENTRY PROCEDURES

- Non-Permit Space.** There are no existing or potential physical hazards or atmospheric hazards. Periodic atmospheric testing may be necessary. Employees may enter the space.
- Alternate Entry Space.** There are no physical hazards. There are existing or potential atmospheric hazards that can be controlled by ventilation; and if the ventilation system stops working, entrants can exit the space safely on their own. Continue to Section 2: Alternate Entry Space.
- Full Permit Space.** There are physical hazards that cannot be eliminated or isolated and/or there are existing or potential atmospheric hazards that cannot be controlled by ventilation. Full permit space entry procedures are required.

SECTION 2: ALTERNATE ENTRY SPACE

Confined space danger sign posted at the space? Yes <input type="checkbox"/>	Are local emergency services readily available? Yes <input type="checkbox"/>
GC notified of the work and entry procedure? Yes <input type="checkbox"/> N/A <input type="checkbox"/>	Alternate entry training provided to employees? Yes <input type="checkbox"/>

Check applicable boxes describing the existing or potential atmospheric hazards detected in the space:

- | | | |
|--|--|--|
| <input type="checkbox"/> Oxygen Deficiency | <input type="checkbox"/> Carbon Monoxide (CO) | <input type="checkbox"/> Flammable/Explosive Gases/Vapors (Specify): |
| <input type="checkbox"/> Welding/Cutting | <input type="checkbox"/> Hydrogen Sulfide (H ₂ S) | <input type="checkbox"/> Other (Specify): |

Check applicable boxes that describe how the atmospheric hazards will be isolated or controlled in order to protect entrants:

- | | |
|--|--|
| <input type="checkbox"/> Mechanical ventilation system set at 100% outside air | <input type="checkbox"/> Open additional manholes to increase air circulation |
| <input type="checkbox"/> Use portable blowers to augment natural ventilation | <input type="checkbox"/> Repeat atmospheric testing after ventilating the space |
| <input type="checkbox"/> Continuous air monitoring during and after entry | <input type="checkbox"/> No burning, cutting, or welding operations in the space |
| <input type="checkbox"/> Use intrinsically safe lighting in the space | <input type="checkbox"/> Other (Specify): |

In the event the ventilation system stops working, check applicable boxes that describe how the atmospheric hazards will remain at safe levels long enough for entrants to recognize the problem and safely exit the space:

- Fully ventilated space while unoccupied to get non-detect readings for atmospheric hazards; then shut down ventilation and monitored air quality. If atmospheric hazards are detected that reach maximum limits, full permit space procedures will be implemented.
- The atmospheric testing equipment is equipped with an audible alarm to alert entrants to exit the space.
- Entrants are wearing personal air monitors that are equipped with an audible alarm to alert them to exit the space.
- The ventilation system is equipped with an audible alarm to alert entrants to exit the space.
- A top man is readily available to monitor the ventilation system and alert the entrants to exit the space.
- Other (Specify):

Check applicable boxes that describe how employees are able to safely exit the space on their own:

- A fixed ladder is located in the space and safe for entrants to use to exit the space.
- A portable ladder will remain in the manhole during the time entrants are working in the space.
- A work platform has been installed in the space for egress.
- Other (Specify):

Check appropriate boxes that describe any additional steps or monitoring to be taken to ensure conditions are safe from physical hazards: Periodic inspections Early warning system Other (Specify):

SECTION 3: COMPLETE ONLY WHEN A HAZARD IS DETECTED IN THE SPACE AFTER THE INITIAL EVALUATION

Were employees evacuated from the space when the hazard was detected? Yes

Describe the event, hazard, and steps taken to eliminate or isolate the hazard to prevent another occurrence:

Is the space safe for re-entry?

Yes *Employees may re-enter the space.* Foreman Signature: _____

No *Employees must not enter the space. This is now re-classified as a full permit space. Full permit space procedures are required until space has been made safe for re-entry.*

SECTION 4: AFTER WORK HAS BEEN COMPLETED IN THE SPACE

GC informed that work has been completed? Yes GC informed of any hazards detected during entry? Yes N/A

APPENDIX D FULL PERMIT SPACE ENTRY PERMIT

1. Permit space to be entered (i.e. sewer, tank, manhole, crawlspace, attic):				Host, GC and Subs notified of the work? Yes <input type="checkbox"/> NA <input type="checkbox"/>											
2. Purpose of entry:				Location:											
3. Date of entry:		Auth. duration of entry permit:		Entry supervisor print name/contact information:											
4. Rescue type selected: Non-entry <input type="checkbox"/> or Entry <input type="checkbox"/> Equipment: Tri-pod/Davit arm <input type="checkbox"/> or Emergency service <input type="checkbox"/> Emer. Service Available (Permit Space only): Onsite <input type="checkbox"/> or <input type="checkbox"/> Off-site (name & phone): Rescuer(s) trained in 1 st Aid/CPR (Permit Space only): <input type="checkbox"/> (Note: Part 1 1 st Aid requirements)				Communication Equipment: Radio <input type="checkbox"/> Voice <input type="checkbox"/> Cell Phone <input type="checkbox"/> Air Horn <input type="checkbox"/> <input type="checkbox"/> Other (Specify):											
5. Authorized entrants (Print Names)		Entry time		Entry time		Entry time		Entry time							
Use back or attach page for more entrants		In Out		In Out		In Out		In Out							
6. Attendant (Print Name)		Date and Time		7. Current training for confined space workers verified?											
				Yes <input type="checkbox"/> No <input type="checkbox"/>											
8A. Identify, evaluate and record hazards of space to be entered.		Yes		No		8B. Specify equipment and measures required to eliminate/control hazards before and during entry									
A. Lack of Oxygen or Inert Gas Present (i.e. Argon, Nitrogen)		<input type="checkbox"/>		<input type="checkbox"/>		Continuous forced air ventilation <input type="checkbox"/>									
B. Flammable Gas/Vapor (%LEL)		<input type="checkbox"/>		<input type="checkbox"/>		Blank, Block and Bleed <input type="checkbox"/>									
C. Toxic Gas/Vapor (i.e. CO and H ₂ S)		<input type="checkbox"/>		<input type="checkbox"/>		Purge, Clean, Drain <input type="checkbox"/>									
D. Chemical (impairs self-rescue)		<input type="checkbox"/>		<input type="checkbox"/>		Intrinsically Safe Lighting <input type="checkbox"/>									
E. Electrical		<input type="checkbox"/>		<input type="checkbox"/>		Respiratory Protection: Supplied Air with Escape Bottle <input type="checkbox"/> SCBA <input type="checkbox"/>									
F. Mechanical		<input type="checkbox"/>		<input type="checkbox"/>		Other (list) <input type="checkbox"/>									
G. Hydraulic/Pneumatic		<input type="checkbox"/>		<input type="checkbox"/>		Lockout/Tagout <input type="checkbox"/>									
H. Temp. Extreme		<input type="checkbox"/>		<input type="checkbox"/>		Isolate/Guard <input type="checkbox"/>									
I. Engulfment		<input type="checkbox"/>		<input type="checkbox"/>		Blank, Block and Bleed <input type="checkbox"/>									
J. Entrapment/Converging Walls		<input type="checkbox"/>		<input type="checkbox"/>		Other (list) <input type="checkbox"/>									
K. Fall Hazard		<input type="checkbox"/>		<input type="checkbox"/>		Continuous forced air ventilation <input type="checkbox"/> Ice Vest <input type="checkbox"/> Other (list) <input type="checkbox"/>									
L. Introduced Hazards (i.e. Chemical, Hot Work)		<input type="checkbox"/>		<input type="checkbox"/>		Drain <input type="checkbox"/> Pump <input type="checkbox"/> Other (list) <input type="checkbox"/>									
M. Other		<input type="checkbox"/>		<input type="checkbox"/>		Install Work Platform <input type="checkbox"/> Hole Covers <input type="checkbox"/> Guard Rails <input type="checkbox"/>									
						Personal Fall Arrest /Restraint <input type="checkbox"/>									
						Other (list) <input type="checkbox"/>									
						Fire extinguisher <input type="checkbox"/> Hot Work Permit <input type="checkbox"/>									
						Other (list) <input type="checkbox"/>									
						Warning signs posted at access <input type="checkbox"/> Additional PPE <input type="checkbox"/>									
9. Gas tester(s)/monitor model(s)/type(s):				Serial/unit no(s):											
				Bump test to confirm function? Yes <input type="checkbox"/> Verified: On-site test <input type="checkbox"/> Documentation <input type="checkbox"/>											
Test Required		Permissible levels		Initial test levels		Subsequent test type: Sample <input type="checkbox"/> Continuous <input type="checkbox"/>									
				(before vent)		(take readings before EACH entry into space)									
						Test 2		Test 3		Test 4		Test 5		Test 6	
A. Oxygen (O ₂)		19.5 to 23.5%													
B. Combustible gas/vapor (LEL)		10% LEL													
C. Hydrogen sulfide (H ₂ S)		5 PPM													
D. Carbon monoxide (CO)		< 25 PPM													
E. Other															
		Tester initials													
		Test Times													
10. Are entry conditions acceptable? (Remove debris and other obstructions from entry point) Yes <input type="checkbox"/> No <input type="checkbox"/>															

Entry Suspended (time): _____ AM PM

Time of reentry: _____ AM PM

Reason for suspending permit: _____

Permit Canceled date/time _____ / _____ AM PM

Unanticipated Hazards? No Yes If yes, describe below: _____

Debriefing occurred after entry? Yes No

Entry Supervisor Signature: _____

PERSONAL PROTECTIVE EQUIPMENT RULES

1. All employees outside of a cabbed vehicle or covered piece of equipment must wear a hard hat. Never use metal hard hats.
2. Wear proper eye and face protection (goggles, safety glasses, etc.) when necessary.
3. Hearing protection shall be used where loud noise is present.
4. Always wear safety vest, hard hats, and boots when directing traffic.
5. All employees must wear required hand protection, gloves, etc., when an employee is exposed to hazards such as radiation, alkalies, acids, adhesives and temperatures extreme other than those caused by weather conditions.
6. Proper clothing will be worn, including hard toe work boots when required, shirts and pants (no cutoffs).

WELDING, CUTTING AND HOT WORK

1. Hot work in any work area creates a fire hazard, especially in confined or enclosed spaces. Good ventilation must be provided to reduce the level of toxic fumes that are released during welding and cutting.
2. Only trained and authorized personnel shall perform welding and cutting operations.
3. Respirators of the proper type must be used in location where ventilation is inadequate and when welding or cutting galvanized metals.
4. Cylinders: Gas cylinders must be capped when transported and when not in use. Cylinders shall be moved on an approved cart or by tilting and rolling them on their bottom edges. Regulators shall be removed and valve caps put in place before cylinders are moved. Cylinders must be secured in an upright position to keep them from being knocked over. Gas cylinders must be in an upright position when in use. A chain, bracket, or other restraining device shall be used at all times to prevent cylinders from falling. Cylinders shall never be used

as rollers or supports. Before connecting a regulator to a cylinder, crack the valve momentarily (away from you, other workers and sources of ignition) to clear the valve of dust and dirt.

5. Welding hoses, regulators and cables must be inspected before use, and damaged equipment must not be used.
6. Hoses and cables must be arranged so that they do not create a tripping hazard and are not damaged by equipment.
7. The frame of arc welding equipment must be grounded.
8. When electrode holders are left unattended, the electrodes shall be removed and the holders protected from contact with employees. Hot electrodes shall not be dipped in water.
9. Whenever welding or cutting, a fire extinguisher of the proper type must be immediately available in the work area.
10. Make sure that each fuel gas cylinder lead is equipped with a flash arrestor to prevent flashback.
11. Perform welding in a well-ventilated area. Use mechanical ventilation in confined or enclosed spaces. Provide both general ventilation to bring in clean air and local exhaust ventilation close to the work to remove hazardous fumes.
12. Wear the proper personal protective equipment: Wear welder's leather coverings or long-sleeve, fire-retardant coveralls without cuffs. Wear high-top leather shoes or boots and keep the cuffs of pants over the top of footwear to prevent sparks from falling into shoes. Wear safety glasses and a welder's helmet with properly shaded lenses to protect eyes from harmful ultraviolet rays.

FIRE PREVENTION

1. Flammable liquids, such as gasoline, must be kept in approved, clearly labeled containers and stored in a separate area away from sources of ignition. Store in the shade whenever possible.
2. The use of gasoline is prohibited for cleaning equipment and tools

and for starting fires. Do not use gasoline to clean your hands.

3. Shut off engines when refueling and do not refuel hot engines if gas could spill on hot engine components such as mufflers.
4. Do not smoke in any area where flammables or explosives are handled or stored.
5. Oxygen (oxidizers), when stored, must be separated from flammables by 20 feet or by a 5 foot noncombustible wall with at least one-half hour rating. This includes separating oxygen and fuel gases at night when not in use.
6. Know how to use the fire extinguishers. In the event of a small fire, use the correct class of fire extinguisher for the burning material:
 - CLASS A – wood, paper, cloth
 - CLASS B – gas, oil, paints
 - CLASS C – electrical
 - CLASS D – metals

If the fire is large, evacuate the work area and call the fire department.

7. Tampering with fire extinguishers or fire hoses is prohibited.
8. Make sure that each fuel gas cylinder regulator or hose is equipped with an anti-flashback device. Regulators must be removed when transporting cylinders and when equipment is not in use.

HAND AND POWER TOOLS

1. Inspect tools daily before use to insure they are in proper working order. Damaged or defective tools must be taken out of service immediately and tagged “Do Not Use.”
2. Hand tools should be used for their intended purposes only. The design capacity of hand tools should not be exceeded by the use of unauthorized attachments.
3. Machine guards must not be removed, blocked or otherwise made

inoperative. Proper adjustment and maintenance of guards is essential.

4. Electrically powered tools and equipment shall be double insulated or of the 3-wire grounded type. Employees using electrical power tools and extension cords must be protected by an approved ground fault circuit interrupter or the tools and the cords must be inspected and electrical grounds tested in accordance with the requirements of the Assured Equipment Grounding Conductor Program.
5. Hand-held pneumatic tools must have an approved safety check valve installed at the manifold outlet of each supply line. Before removing any pneumatic tools or disconnecting hoses from the compressor, determine that the air pressure has been turned off and bled from the system.
6. All pneumatic hose connections must be fastened securely by retaining clips or approved quick disconnect couplings.
7. Always disconnect power tools from the energy source before making adjustments or changing attachments.
8. Electrical shut down switches for all power equipment must be located within the immediate reach of the operator.
9. Power tools should be hoisted or lowered by hand lines, never by their electrical cords or air hoses.
10. Power cords and hoses must be placed so they do not create tripping hazards or become subject to damage from equipment and materials.
11. Do not use electric tools while standing in water.
12. Abrasive wheels should be ping tested and checked for cracks, chips or other defects before mounting. Check the speed rating for the wheel to be sure its rated speed RPMs is not exceeded.
13. Power-actuated tools must be operated only by trained and licensed personnel wearing protective equipment, including but not limited to eye and ear protection.

14. When placing sand, gravel or concrete with pneumatic hoses, employees must wear protective head and face equipment.
15. When a mechanical or hydraulic jack is used, determine that the jack is capable of lifting the required weight and is firmly positioned to prevent the load from slipping off the jack's cap.
16. When it is necessary to work on electrically driven machinery, the disconnect switch for controlling the machine shall be in the opened or off position and locked in place by the worker or workers performing the job.

HEAVY EQUIPMENT RULES

1. Every employee, not just the equipment operator, must be fully aware of all safety aspects of heavy construction equipment.
2. Be constantly alert when working around heavy equipment. The operator cannot always see other personnel around his equipment. Stay out from under suspended loads, away from moving equipment, and counterweights.
3. Only designated individuals shall be permitted to operate or service heavy equipment.
4. Equipment and vehicles essential in accomplishing job duties are expensive and may be difficult to replace. When using, employees are expected to exercise care, perform required maintenance and follow all operating instructions, safety standards and guidelines.
5. Perform frequent and periodic inspections as required, and complete a weekly equipment repair request form so hours and other important information may be recorded for the maintenance of the machine.
6. Immediately notify your Supervisor if any equipment, machines, tools or vehicles appear to be damaged, defective or in need of repair. If a Supervisor is not available, contact the Shop immediately and discontinue operation if necessary to avoid further damage.
7. The equipment operator must wear the seat belt when required.

8. No employee is permitted to ride on any part of the equipment.
9. Do not leave trucks and equipment idling — turn them off.
10. It is the responsibility of all employees to make certain that back-up alarms on obstructed rear view heavy equipment be in operable condition. Use a flagger to move equipment when back up alarms are inoperable.
11. Maintain at least a 10' minimum clearance from energized lines; use a spotter in difficult areas.

SAFE CRANE OPERATION

1. Follow heavy equipment rules listed above.
2. Before operations begin, be sure to level crane and make sure outriggers give reliable stability and are used on proper support.
3. Inspect rigging, hooks and slings daily.
4. Avoid overturning, collapse of the boom and cable failure by recognizing manufacturer's postings of safe loads for boom angles found in the cab. Never exceed these postings.
5. Do not place water dispenser on a crane as a central location for workers.
6. Before leaving the crane for any reason, the operator should set the brakes, block the wheels, lock the boom and place the levers and controls in a neutral position.
7. Crane engines should not be refueled while running and a suitable fire extinguisher must be available.
8. Barricade the swing radius of the rotating superstructure of the crane.
9. Knowledge of hand signals assures safe communication with operator.

FORKLIFT AND INDUSTRIAL TRUCKS

1. Employees who are authorized to operate powered industrial trucks must receive training prior to engaging in their duties.
2. Follow heavy equipment rules listed above.
3. Persons are not allowed to stand or pass under elevated forks of a truck.
4. If powered industrial trucks are used to elevate persons, an appropriate man lift platform (cage with standard rails and toe-boards) that is attached to the mast must be used.
5. A safe distance must be maintained from the edge of ramps or platforms while on any elevated dock, platform, or freight car. Maintain sufficient headroom under overhead installations such as: lights, pipes, sprinkler systems, etc.
6. An overhead guard must be used as protection against falling objects and operators must wear hard hats in areas where overhead hazards exist.
7. Lift capacity must be marked on all powered industrial trucks. Operators must assure the load does not exceed rated weight limits.
8. All powered industrial trucks (with the exception of pallet jacks) must be equipped with a multi-purpose dry chemical fire extinguisher.
9. Loads should be safely arranged, stable, and centered — always use caution when handling loads.
10. Fuel tanks may not be filled while the engine is running. Avoid spillage.
11. Any powered-operated industrial truck not in safe operating condition must be removed from service. Authorized personnel must make all repairs.

FALL PROTECTION & GUARDING

1. All manholes which present a fall hazard should be covered and identified as a hole.
2. Guardrails around open shafts and bore pits deeper than 6' should be 42" plus or minus 3" high.
3. The intermediate rail should be positioned halfway between the floor and top rail.
4. The threshold for fall protection use is 6'. Fall protection may be accomplished by guarding, personal fall arrest systems or safety nets. Ask your qualified person.
5. Perimeter cables constructed of 3/8" cable with danger signs midway between the cable supports may be used as a fall protection device.
6. Perimeter cables should be 42" above floor with a maximum of 6".

TRAFFIC, SIGNALS, SIGNS AND BARRICADES

1. All traffic control devices are to be placed under the direction of the trained employee.
2. While flagging or directing vehicular traffic, a reflectorized, fluorescent orange warning vest and hard hat shall be worn at all times. Flag people are to be courteous at all times.
3. A six foot staff two-sided paddle sign with "STOP" on one side and "SLOW" on the other shall be used to control traffic.
4. Traffic control devices shall be installed and maintained as prescribed by Part 6 of the *Michigan Manual of Uniform Traffic Control Devices*.
5. When working in or adjacent to vehicular traffic, always face the flow of traffic or use a spotter.
6. Replace traffic control devices that have been damaged or downed signs as soon as possible.

7. Cover construction traffic control when work is not in progress if possible.
8. Consult the qualified person with traffic regulation questions.

SCAFFOLD SAFETY

1. Employees must receive training prior to using a scaffold.
2. A trained, competent, employee must inspect a scaffold before each day and after anything happens that could affect the structure.
3. If a scaffold is more than 2 feet above or below a level, there must be a way to get on or off — such as a ladder, ramp, or personnel hoist.
4. Put a standing scaffold on a firm foundation (with base plates attached to feet) — for instance, with one piece of wood under each pair of legs (across the shortest distance), extending at least 1 foot past each leg.
5. Uprights must be vertical and braced to prevent swaying; platforms must be level.
6. A scaffold that is more than 4 times higher than its base is wide must be tied to supports.
7. Most scaffold platforms and walkways must be 18" wide or more. If a work area is less than 18" wide, guardrails and/or personal fall-arrest must be used.
8. Ten-foot planks must extend at least 6" past the end supports, but not more than 12"; no more than 1" between planks or between planks and uprights.
9. Wood planks must be unpainted, so any cracks will show.
10. For supported scaffolds, check at least these points: completely planked platforms, proper access, complete guardrails and proper ties to building (where required..
11. Keep scaffolds 10' or more from power lines.

12. Fall protection is necessary if a scaffold is more than 10 feet above a level.
13. On most scaffolds, guard rails must be on all open sides and ends. On supported scaffolds and some other scaffolds, guardrails or personal fall protection is enough. On most suspension scaffolds, both are needed. Use a harness, not a body belt, for personal fall protection.
14. Scaffold walkways must have no more than a 9.5" gap between planks and a guardrail.
15. Don't let junk collect on the scaffold; you can trip and fall.
16. There must be a 3 1/2" high toe board to prevent things falling off a scaffold. If things on the scaffold are taller than 3 1/2" — above the toeboard — other systems, like debris nets, can be used to catch falling tools or materials. If things can fall off a scaffold, people must be prevented from walking under or near the scaffold.

RIGGING MATERIAL HANDLING

1. Inspect rigging equipment for material handling before use each day and as necessary during its use to ensure that it is safe. Remove defective rigging equipment from service.
2. Do not load rigging equipment in excess of its recommended safe working load.
3. Mark special custom-design grabs, hooks, clamps, or other lifting accessories for such units as modular panels, prefabricated structures, and similar materials to indicate safe working loads, and proof-test them before use to 125 percent of their rated load.
4. Each day before use, the sling and all fastenings and attachments must be inspected for damage or defects by a competent person designated by the employer. Perform additional inspections during sling use where service conditions warrant. Immediately remove damaged or defective slings from service.

5. Make sure that welded alloy steel chain slings have permanently affixed durable identification stating size, grade, rated capacity, and sling manufacturer.
6. Check that hooks, rings, oblong links, pear-shaped links, welded or mechanical coupling links, or other attachments, when used with alloy steel chains, have a rated capacity at least equal to that of the chain.
7. Do not use job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, etc., or other such attachments.
8. Never stand, walk, or work under suspended loads.
9. Have overhead power lines de-energized and grounded or maintain at least a 10' clearance.
10. Pipe and other materials shall be properly stacked and remain banded or otherwise secured until needed. When removing banding or chains, never pull them directly toward you. Always check the blocking before cutting the bands or loosening the chains.
11. All materials and equipment must be stored at least 2' from the edge of the trench.

PORTABLE LADDERS

1. Only use type 1A or type 1 ladders for construction purposes.
2. Always extend ladders 3' above the landing surface to which the ladder is used to gain access.
3. Never use a step ladder as a straight ladder by leaning it against a wall or support.
4. All ladders used in conjunction with platforms must be secured at top and bottom.

PERSONAL FALL ARREST SYSTEMS

1. Personal fall arrest systems must be worn when workers are exposed to falls 6' or greater.

2. The attachment point of harness shall be located in the center of the wearer's back, near the shoulder level.
3. Never use body harnesses as material handling devices.
4. Do not re-use fall protection devices that have been subjected to impact loading until they have been inspected and considered suitable for use by a qualified employee. Tag this equipment out of service until such an inspection can be performed.
5. Visually inspect all harnesses before use.
6. Do not attach fall protection devices to guardrail system.

LOCKOUT/TAGOUT

1. Lockout devices, locks and tags should be installed to isolate valves, switches, circuit breakers and other devices as necessary to ensure that those devices cannot be adjusted, removed, energized, moved or otherwise activated during the time that workers are exposed to potential hazards associated with the equipment being serviced or situations where workers could be exposed to an energy source.
2. If there is no provision for locking out a piece of equipment, a tag must be used without a lock; however, other safety measures should be taken to ensure the safety of the worker(s), such as removing the valve handle or installing a mechanical block.
3. After deactivating, locking out or blocking the energy source, attempt to operate the equipment in the normal way to ensure that it is in fact deactivated.
4. If more than one employee is involved in repairing or maintaining the circuit, piping system, machinery or equipment, each worker shall place a lock and tag on the lockout device.
5. All worker tags attached to lockout devices must be properly signed and dated.
6. When the work is completed, each worker is responsible for removing his/her individual lock and tag. Do not leave your lock and tag on

equipment when the work is completed and you are clear of the potential hazard. Never remove another person's lock and tag.

7. Only when the repair or maintenance operations are complete and all locks and tags removed should the equipment be restored to full operating condition.

EQUIPMENT GROUNDING CONDUCTOR PROGRAM

This program is designed to inform employees of the inspection and testing of all electrical cords, plugs and tools to prevent injuries from occurring. The foreman, in conjunction with the shop, is responsible for implementing this program.

1. All extension cords, plugs, electrical tools and equipment shall be visually inspected before each day's use for external defects or damage and for possible internal damage. Damaged or defective cords, plugs, electrical tools or equipment shall not be used and sent to the shop for repair.
2. For the generators equipped with ground fault interrupters, please adhere to the following:
 - a. Check all ground fault interrupters every time the generator is started.
 - b. If the reset button pops out, the ground fault interrupter is good.
 - c. If the reset button does not pop out, the ground fault interrupter is bad.
 - d. A bad ground fault interrupter will cause shocking to occur.
 - e. Call the shop to repair or replace a bad ground fault interrupter.
 - f. Do not wire the throttle. It will cause the ground fault interrupter to go bad.
 - g. The frame of all welders must be grounded.
3. The following tests shall be performed:
 - a. All equipment ground conductors shall be tested for electrical continuity.
 - b. Each receptacle or plug shall be tested for correct attachment of the

equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.

4. All required tests shall be performed:
 - a. before first use;
 - b. before equipment is returned to service following any repairs;
 - c. before equipment is used after any incident which can be reasonably suspected to have caused damage;
 - d. and at intervals not exceeding three months, except extension cords and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding six months.

CONCRETE CONSTRUCTION

1. Always wear proper personal protective equipment (ppe) when performing concrete construction, including eye protection and rubber boots
2. Fall protection should be utilized when placing concrete in areas more than 6' above adjacent areas. This can be accomplished with ppe, proper barricades or railings.
3. Never work above vertically protruding reinforcing steel unless the steel has been capped to eliminate the hazard.
4. Be aware of energized lines and maintain a clear 10' of clearance with equipment and tools.
5. Do not remove forms until concrete has cured to a point that it can support its own weight and currently intended load.
6. Stripped forms should be stored in an area away from general foot traffic. Be sure to pull or cut all protruding nails, wires or other accessories that may cause injury.
7. Be sure all heavy equipment including concrete paving machines have functioning back-up alarms. If supplier's equipment has nonfunctioning back-up alarms on site, designate a spotter until equipment has left the area.

8. If concrete construction is performed in areas that impact motor traffic, be sure proper signage is used. Refer to the MUTCD or the MITA Traffic Control Handbook. MDOT jobs may already have a required traffic set-up. If so, consult with your supervisor for required signage.
9. When using portable mixer, keep hands out of all moving areas when the unit is running. Keep the engine shroud closed when the motor is engaged.
10. When using a bull float, be aware of traffic and other dangerous contacts that may be present.

RESPIRATORY PROTECTION

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazard substance does not exceed the limits set by MIOSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

1. Follow all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certification should appear on the respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect you against. For example, a respirator designed to filter dust particles will not protect you

against gasses, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

HAZWOPER

(Hazardous Waste Operations and Emergency Response) Plan

All employees will be properly trained prior to performing hazardous waste or emergency response operations. Our training program consists of formal classroom instruction and hands on activities, and exceeds the minimal requirements specified under the HAZWOPER detailed under OSHA 29 CFR 1910.120. Upon completion of training, certificates documenting training are provided to all participants.

LEAD AWARENESS

Lead is a common hazard in construction. Any worker who has the potential for exposure to lead shall be protected from the harmful effects that may occur. Paint on metal bridges and buildings may contain lead. Workers become exposed during renovation, demolition and repainting.

1. Effects from Exposure:

- a. Lead is hazardous when inhaled and/or ingested. Lead can cause headache, poor appetite, dizziness, irritability, anxiety, constipation, metallic taste in mouth, tiredness, weakness, nausea, muscle & joint pain, pallor (pale skin), reproductive problems, hyper activity, and more.

2. Personal Hygiene:

- a. Wash hands/face before eating, drinking or smoking.
- b. Never eat, drink or smoke in contaminated areas.
- c. Remove contaminated clothes before eating.
- d. Change into work clothes at worksite. Store street clothes separate from work clothes.
- e) Wash or shower prior to changing back into street clothes to prevent exposing friends or family members.

f) Personal vehicles should be parked away from contaminated area.

3. Health:

a. Blood test for lead levels will be required on an annual basis for all employees at risk of being exposed to lead. Blood lead levels of 1-49 are within acceptable range, levels of 40 or above require a medical exam and consultation, and levels of 50 or above call for removal from the job and any potential lead exposure.

4. Personal Protective Equipment:

a. Half mask respirators and supplied air respirators should use NEPA filters or equivalent.

b. Proper ventilation or controls should be in place to limit exposure outside work area.

c. Air monitor for presence of airborne lead and other hazardous agents.

ASBESTOS AWARENESS, INSPECTOR & SUPERVISORY TRAINING

Asbestos is a combination of minerals (chrysotile, amosite, and crocidolite, and the asbestos forms of tremolite, actinolite and anthophyllite obtained from mines). Its ability to separate into thin, strong particles makes it highly suitable for use as a noncombustible, nonconducting, and chemically resistant material. In its natural state, asbestos is a fluffy, fibrous material.

Asbestos was first used in the 1880s as insulation for steam pipes. During the 20th century, the construction industry used asbestos for cement products, roofing, plastics, insulation and floor tiling. Asbestos is also used for fireproof clothing, fire-resistant curtains, automotive undercoating, brake and clutch linings and nose cones of space vehicles.

Asbestos cannot be recognized by ordinary observation; a sample must be tested in a laboratory utilizing polarized light microscopy (PLM) or an electron microscope.

Any employee whose work activities includes contact with asbestos containing material or presumed asbestos containing material will receive asbestos awareness, inspector and/or supervisory training, depending on

their work activities. This training is in accordance with the requirements of Michigan Public Act 440 of 1988, as amended.

BENZENE AWARENESS TRAINING

Benzene, also known as benzol, is a clear, colorless liquid with a distinctive sweet odor. Benzene evaporates into air very quickly and dissolves slightly in water. Benzene is highly flammable. Most people can begin to smell benzene in air at 1.5-4.7 parts of benzene per million parts of air (ppm) and smell benzene in water at 2 ppm. Most people can begin to taste benzene in water at 0.5-4.5 ppm. One part per million is approximately equal to one drop in 40 gallons. Benzene is found in air, water, and soil, and comes from both industrial and natural sources.

Industrial Sources and Uses: Benzene was first discovered and isolated from coal tar in the 1800s. Today, benzene is made mostly from petroleum. Because of its wide use, benzene ranks in the top 20 in production volume for chemicals produced in the United States. Various industries use benzene to make other chemicals, such as styrene (for styrofoam and other plastics), cumene (for various resins), and cyclohexane (for nylon and synthetic fibers). Benzene is also used in the manufacturing of some types of rubbers, lubricants, dyes, detergents, drugs and pesticides.

Natural Sources: Natural sources of benzene, which include gas emissions from volcanoes and forest fires, also contribute to the presence of benzene in the environment. Benzene is also present in crude oil and gasoline and cigarette smoke.

Everyone is exposed to a small amount of benzene every day. You are exposed to benzene in the outdoor environmental, in the workplace, and in the home.

MIOSHA regulates levels of benzene in the workplace. The maximum allowable amount of benzene in workroom air during an 8-hour workday, 40-hour workweek is 1 ppm. Because benzene can cause cancer and many other health problems, MIOSHA recommends that all workers wear special breathing equipment and protective clothing and equipment (eye and face protection) when they are likely to be exposed to benzene at levels exceeding the recommended exposure limit.

Refer to MIOSHA Standards for more information on benzene regulations. Visit www.michigan.gov/MIOSHA standards or see your Safety Officer for information.

EMERGENCY RESPONSE PROGRAM

1. As part of its safety program, it is the policy of this company to make certain that all employees have been instructed as to proper procedures in case of an injury or accident.
2. This company designates the 911 system as its first response in the event of a medical emergency and/or rescue operation.
3. A list of emergency phone numbers will be posted at the job site when practical. If no suitable or convenient location exists, the list will be kept by the project foreman.
4. All injuries and/or accidents shall be reported to the job foreman immediately.
5. This company will provide a person at each job site who is trained in CPR and first aid procedures as required by any applicable Safety & Health Standards.

HAZARD COMMUNICATION AND “RIGHT TO KNOW PROGRAM”

The following hazard communication program has been established for this company. This program will be available for review by all employees.

1. Hazard Determination
 - a. The Safety Officer will rely on safety data sheets from suppliers to meet determination requirements.
2. Labeling
 - a. Each foreman will be responsible for seeing that all containers coming in are properly labeled. All labels shall be checked for:
 - Identity
 - Hazard
 - Name and address of responsible party

- b. Each foreman shall be responsible for seeing that all portable containers used in their work are labeled with identity and hazard warnings.
3. Safety Data Sheets (SDSs)
 - a. The Safety Officer will be responsible for compiling the master SDS file. It will be kept _____.
 - b. Copies of SDS for all hazardous chemicals to which employees may be exposed will be made available to all employees upon request.
 - c. Each foreman will be provided with the required MIOSHA Right-To-Know posters and postings notifying employees of new or revised SDSs.
4. Employee Information and Training
 - a. The Safety Officer shall coordinate and maintain records of training conducted for this company.
 - b. The employee will be informed that the employer is prohibited from discharging, or discriminating against, an employee who exercises the rights regarding information about hazardous chemicals in the workplace.
 - c. Attendance will be taken at training sessions. The records will be kept by the Safety Officer.
 - d. Before any new hazardous chemical is introduced into the workplace, each employee will be given information in the same manner as during the safety briefing.
5. Hazardous Non-Routine Tasks
 - a. On occasion, employees may be asked to do work in potentially hazardous areas (e. g. confined spaces). Prior to starting work in such areas, each employee will be given information about the hazards involved in these areas. This information will include:
 - specific chemical hazards;
 - protection/safety measures the employee can take to lessen risks;
 - and measures the company has taken to lessen the hazards

including ventilation, respirators, the presence of another employee and emergency procedures.

- b. It is the policy of this company that no employee will begin work in a confined space, or any non-routine task, without first receiving a safety briefing.

6. Informing Contractors

- a. It is the responsibility of the Safety Officer to provide any subcontractors with employees on the job site exposed to our chemicals with the following information:
 - Hazardous chemicals with which they may come in contact.
 - Measures the employees may take to lessen the risks.
 - Where to get SDSs for all hazardous chemicals.
- b. It is the responsibility of the Safety Officer to obtain chemical information from contractors when they will expose our employees to hazardous chemicals which they may bring into our workplace.

7. List of Hazardous Chemicals

- a. The list of the chemicals used by this company can be obtained by reviewing SDSs.

RESPONSIBILITIES OF FOREMAN/QUALIFIED EMPLOYEE

1. Assure that the safety program is implemented.
2. Inspect the job site to assure that no unsafe conditions exist
3. Make sure that necessary protective equipment is on hand and used when required.
4. Instruct all employees in safe procedures and job safety requirements. Follow up and insist on compliance.
5. Discuss safety with employees on every operation. Have periodic safety meetings.
6. See that all injuries are cared for properly and reported promptly.

7. Investigate all accidents. File a complete accident report with the Safety Officer and correct the causes immediately.
8. Be familiar with the rules pertaining to safety.
9. Report any hazardous conditions to the Safety Officer even if the condition has been corrected.

Employee Sign-off Sheet

_____, an employee of this company will immediately read this Safety Handbook in its entirety. I understand that if I have any questions concerning the handbook or safety in general, I may contact the company Safety Officer for clarification. Further, I understand that safety is everyone's responsibility, including my own.

MacKenzie Companies

Written Silica Exposure Control Program

1.0 Applicability and Scope

1.1 Applicability

This Written Exposure Control Plan (Plan) applies to personnel who are potentially exposed to airborne concentrations of respirable crystalline silica (silica) because of their work activities or proximity to the work locations where airborne silica is being emitted. This Plan also applies to superintendents, foremen, or safety personnel who may be responsible for overseeing a subcontractor's operations that have the potential to expose personnel to airborne concentrations of silica at or above regulatory and industry action levels and exposure limits.

1.2 Scope

This Plan describes the hazards associated with projects involving potential exposure to airborne concentrations of silica and the issues to be addressed during these projects. These projects include, but are not limited to:

- Handheld power saws used to cut concrete, asphalt, concrete masonry block, sheet rock, gypsum fiber roof board, or any other product containing quartz.
- Walk-behind saws used to cut concrete or asphalt.
- Rig-mounted or free standing core saws or drills (including impact and rotary hammer drills) used to penetrate concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Jackhammers and handheld powered chipping tools used to demolish or modify concrete, concrete masonry block, or any other structural component or product containing quartz.
- Vehicle mounted hammers or chipping tools used to demolish concrete, concrete masonry block, or any other structural component or product containing quartz. (i.e. hydraulic breakers)
- Handheld grinders or cut-off wheels used for mortar removal or cutting/grinding of concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Walk-behind milling machines or bead blasters used for surfacing activities on concrete, concrete masonry block, asphalt, or any other product containing quartz.
- Hand or power tool sanding of painted surfaces. Current latex paint products contain quartz and the painted substrate (sheet rock, concrete masonry block, concrete) contains quartz.
- Drivable asphalt milling machines used to mill asphalt roadways or walkways.
- Pug mills or crushing equipment used to size or mix products containing quartz (i.e. CTB plant).
- All housekeeping operations associated with the activities described above.

Employees who work in proximity to silica-related operations must be aware of safe work practices and take all necessary precautions associated with avoiding and minimizing airborne silica exposure.

2.0 Regulatory Review

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1153: Respirable Crystalline Silica (Construction Industry) and 29 CFR 1910.1053: Respirable Crystalline Silica (General Industry), contain regulatory requirements specific to respirable crystalline silica. This Written Exposure Control Plan is developed in accordance with the requirements in 29 CFR 1926.1153(g).

3.0 Project Planning

3.1 Training Requirements

Employees who anticipate working on projects where they could be exposed to airborne silica will be provided training in silica hazards in accordance with the program established to comply with the hazard communication standard (29 CFR 1910.1200). Each employee will have access to labels on containers of crystalline silica and safety data sheets, and be provided information on the health hazards of silica including cancer, lung effects, immune system effects, and kidney effects. In addition, employees will be provided training and information regarding specific activities identified in this Plan that could result in airborne silica exposure, and the specific engineering controls, work practices and respiratory protection requirements to mitigate the potential airborne silica exposures. This training will provide a discussion of silica hazards, initial exposure determination either by complying with 29 CFR 1926.1153 Table 1 requirements or air monitoring, specific engineering and work practice control measures, personal protective equipment (PPE), and medical surveillance requirements. The training will also identify the competent person for silica exposure identification and determination of control requirements. All employees will be provided with access to a copy of 29 CFR 1910.1153 and be trained on the contents of 29 CFR 1926.1153.

3.2 Medical Surveillance Requirements

Medical surveillance is required for employees wearing a respirator 30 or more days per year. Initial medical surveillance consists of medical and work history with emphasis on: past, present, and anticipated exposure to silica, dust and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history; a physical examination with emphasis on the respiratory system; chest X-ray (a single posterior-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film (no less than 14 x 17 inches and no more than 16 x 17 inches) or digital radiography systems), interpreted and classified according to the International Labor Office (ILO) International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader; a pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course; testing for latent tuberculosis infection; and any other tests deemed appropriate by the Occupational Medicine Provider. Subcontractors are responsible for implementing a medical surveillance program for their employees.

3.3 Competent Person Requirements

MacKenzie shall identify a competent person to inspect and oversee all activities with potential airborne silica exposure. Subcontractors working on projects within the scope of this program shall appoint a competent person capable of executing the duties described herein. The competent person must have training in the inspection of work areas and equipment and in the determination of safe working conditions. This person shall have a working knowledge of the 1926.1153 standards, shall be capable of identifying airborne silica hazards, shall determine the need for initial and additional exposure monitoring, shall recommend and implement engineering and work practice controls, shall establish levels of PPE, and shall have the authority to take action to eliminate hazards and correct incidences of noncompliance.

3.4 Planning Activities

Projects where anticipated activities involve concrete cutting, grinding, sandblasting, drilling, coring, or other abrasive operations are treated as potential sources for airborne silica exposure. Additionally, existing structures and materials such as sheetrock, any painted surfaces with low volatile organic compounds, tile, brick, or some insulation products may contain silica. Likewise, new material installation may involve silica-containing mortar, paints, or insulation. Where process knowledge indicates the presence of silica, MacKenzie will either implement all controls required by 1926.1153 Table 1- Exposure Control Methods for Selected Construction Operations or conduct an initial determination in accordance with 29 CFR 1926.1153(d)(2).

4.0 Project Execution

4.1 Safe Work Practices

The requirements of this section are to be followed by employees who may be exposed to airborne concentrations of silica at or above the regulatory limits.

4.1.1 Exposure Assessment

- An exposure assessment is required when employees may be exposed to airborne silica at or above the action level in order to determine the extent to which employees are exposed and the appropriate exposure controls required.
- An initial determination of exposure shall be made at the beginning of operations. The determination shall consist of the collection of personal air samples representative of a full shift including at least one sample for each job classification in each work area, either for each shift, or for the shift with the highest exposure level.
- During the initial determination, until such time that actual airborne concentrations are determined, personnel shall be protected by respiratory protection based on task- specific anticipated airborne concentrations of silica as illustrated in Table 2 below:
- During the initial determination, and in addition to the levels of respiratory protection required, personnel shall be provided with protective clothing and equipment, hygiene facilities, and training.
- Whenever a change in equipment, process, controls, or personnel occurs, or a new task has been initiated, an additional exposure assessment is required.
- When an assessment determines that exposure has occurred above the action level but below the PEL, additional monitoring shall be required at least every 6 months. Additional monitoring shall continue until such time that the monitoring results fall below the action level on two separate occasions at least 7 days apart.
- When monitoring yields results above the PEL, then quarterly monitoring is required. In addition, the quarterly monitoring may be suspended when additional monitoring results fall below the action level on two separate occasions at least 7 days apart.
- When the competent person can clearly demonstrate, in the absence of air monitoring data, that a work activity will not create airborne silica concentrations in excess of the action level, then air monitoring may be unwarranted. When a negative initial determination is reached without air monitoring, the competent person must develop a written explanation as to why exposures are not expected to exceed the action level.

4.1.2 Communication of Hazards

- Each employee shall be provided training and demonstrate knowledge and understanding of the following:
 - Health hazards associated with exposure to respirable crystalline silica.
 - Specific tasks that could result in exposure to respirable crystalline silica.
 - Specific measures that are required to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and required use of respiratory protection.
 - The contents of the 29 CFR 1926.1153.
 - Purpose and description of the medical surveillance program.
- A written compliance program shall be made available to all affected employees.
- In addition, notification to owners, contractors, and other personnel working in the area shall be made.

4.1.3 Control Methods

- Engineering and work practice controls, including administrative controls, shall be implemented to reduce and maintain employee exposure to silica at or below the PEL, to the extent that such controls are feasible.
- Where all feasible engineering and work practice controls that can be instituted are not sufficient to reduce employee exposure to or below the PEL, such controls shall be used, nonetheless, to reduce employee exposure to the lowest feasible level (and in conjunction with respiratory protection).
- Respiratory protection shall be selected based on guidance in 1926.1153 Table 1 or based on a Certified Industrial Hygienist's or competent person's assessment of the potential airborne exposure that may be created by the means and methods of work (high energy operations with high airborne dust generation or low energy operations with low dust generation).
- When using mechanical ventilation to control exposure, regularly evaluate the system's ability to effectively control exposure.
- If administrative controls are used to limit exposure, establish and implement a job rotation schedule that includes employee identification as well as the duration and exposure levels at each job or work station where each affected employee is located.
- A written compliance program shall be established and implemented prior to the start of operations within the scope of this Written Compliance Plan. The written program shall outline the plans for maintaining employee exposure below the PEL.
- Maintain all surfaces as free as possible from accumulations of silica. Select methods for cleaning surfaces and floors that minimize the likelihood of silica becoming airborne (such as using a HEPA vacuum).
- If vacuuming is the method selected, specialized vacuums with HEPA filtration are required. Methods to use and empty vacuums in a manner that minimizes the reentry of silica into the workplace shall be described and used. Use of household vacuums with HEPA filters are not allowed at any time for the collection of dust or debris that contains silica.
- Never use compressed air to remove silica from any surface unless it is used in conjunction with a ventilation system designed to capture the airborne dust created while using the compressed air.
- Employees shall not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in any areas

where exposure to silica is above the PEL (in other words, regulated areas).

- Do not allow employees to leave the workplace wearing any protective clothing or equipment that is required to be worn during their work shift without HEPA vacuum removal of dust.
- Where feasible, install shower facilities and require employees who work in regulated areas to shower at the end of their work shift. Also provide an adequate supply of cleaning agents and clean towels.
- Provide hand washing facilities for use by employees working in regulated areas. Furthermore, require employees to wash their hands and face at the end of the work shift and prior to eating or entering eating facilities, drinking, smoking, or applying cosmetics.
- Eating facilities or areas shall be provided for employees working in regulated areas. These facilities shall be maintained free of silica contamination and shall be readily accessible to those employees.

4.1.4 Personal Protective Equipment (PPE)

Respiratory protection must be used for the following conditions:

- During periods when employee exposure to airborne silica exceeds the PEL.
- For work operations where engineering and work-practice controls are not sufficient to reduce employee exposure to or below the PEL.
- During periods when an employee requests a respirator.
- During periods when respirators are required to provide interim protection while conducting initial exposure assessments.
- Powered air-purifying respirators (PAPR) shall be provided to employees who request such a respirator to use where it will provide adequate protection.

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- Do not allow employees to leave the workplace wearing any protective clothing or equipment that is required to be worn during their work shift without HEPA vacuum removal of dust.
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- During periods when respirators are required to provide interim protection while conducting initial exposure assessments.
- Powered air-purifying respirators (PAPR) shall be provided to employees who request such a respirator to use where it will provide adequate protection.

WORKPLACE SAFETY

To assist in providing a safe and healthful work environment for employees, customers, and visitors, MacKenzie Companies have established a workplace safety program. This program is a top priority for MacKenzie Companies. The Safety Director has responsibility for implementing, administering, monitoring, and evaluating the safety program. Its success depends on the alertness and personal commitment of all. Please refer to the *Safety Program Handbook* for further safety instructions and information.

MacKenzie Companies provide information to employees about workplace safety and health issues through training sessions and regular internal communication channels such as supervisor-employee meetings, bulletin board postings, newsletters, memos or other written communications.

Some of the best safety improvement ideas come from employees. Those with ideas, concerns, or suggestions for improved safety in the workplace are encouraged to raise them with their Supervisor, or with another Supervisor or Manager, or bring them to the attention of the Safety Director. All reports can be made without fear of reprisal.

Each employee is expected to obey safety rules and to exercise caution in all work activities. Employees must immediately report any unsafe condition to the appropriate Supervisor. Employees who violate safety standards, who cause hazardous or dangerous situations, or who fail to report or, where appropriate, remedy such situations, may be subject to disciplinary action, up to and including termination of employment.

In the case of accidents that result in injury, regardless of how insignificant the injury may appear, employees should immediately notify their Supervisor.

Workplace Monitoring

Workplace monitoring may be conducted by MacKenzie Companies to ensure quality control, employee safety, security and customer satisfaction. MacKenzie Companies may conduct video surveillance of workplace areas. Video monitoring is used to identify safety concerns, maintain quality control, detect theft and misconduct, and discourage or prevent acts of harassment and workplace violence.

Drivers' License Records

All employees must maintain a driving record acceptable to MacKenzie Companies. An employee who does not maintain an acceptable driving record will be subject to disciplinary action up to and including termination.

Employee Medical Examinations

To help ensure that employees are able to perform their duties safely, medical examinations may be required.

After an offer has been made to an applicant entering a designated job category, a medical examination will be performed at MacKenzie Companies' expense by a

the professional of MacKenzie Companies' choice. The offer of employment and assignment to duties is contingent upon satisfactory completion of the exam.

Current employees may be required to take medical examinations to determine fitness for duty. Such examinations will be scheduled at reasonable times and intervals and performed at MacKenzie Companies' expense.

Information on an employee's medical condition or history will be kept separate from other employee information and maintained confidentially. Access to this information will be limited to those who have a legitimate need to know.

Drug and Alcohol Use

MacKenzie Companies is committed to providing a safe, efficient and productive work environment for all employees. To promote this goal, employees are required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner.

Using or being under the influence of drugs or alcohol on the job may pose serious safety and health risks. While on MacKenzie Companies' premises (including job sites), during lunch and rest breaks (including off-site locations), and when conducting business-related activities off MacKenzie Companies' premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. The legal use of prescribed drugs is permitted on the job only if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other individuals in the workplace.

Violations of this policy may lead to disciplinary action, up to and including immediate termination of employment, or required participation in a substance abuse rehabilitation or treatment program. Such violations may also have legal consequences.

Testing for Alcohol and Drugs

Employees are subject to testing of urine and/or blood to detect prohibited drugs or alcohol in the following circumstances:

1. **Pre-Employment Testing.**
All prospective job candidates must pass a drug test as a condition of employment.
2. **Reasonable Cause Testing.**
Employees may be subject to a fitness for duty evaluation, to include appropriate urine and/or blood testing, when there is reason to believe that drug or alcohol use is adversely affecting job performance. Examples of reasonable cause include but are not limited to the following: (a) physical signs and symptoms consistent with prohibited drug and alcohol use, (b) evidence of the distribution, dispensing, possession or use of prohibited drugs or alcohol, (c) occurrence of an accident that may have been caused by human error.

3. **Post-Accident Testing.**

Drug and alcohol testing is mandatory for any employee who either contributed to an accident or appears to have contributed to an accident involving death. Drug and alcohol testing may be required in the event of any injury or damage to property, at MacKenzie Companies' discretion.

4. **Return to Duty Testing.**

Any employee who has enrolled in a rehabilitation program or is off work for failing a drug and/or alcohol test must pass a return to duty drug or alcohol test before returning to work. Any employee who has completed rehabilitation under the EAP program and who has tested negative on the return to duty test will be subject to unannounced drug and/or alcohol tests after being returned to work.

5. **CDL Required Testing.**

All CDL drivers are subject to the U.S. Department of Transportation's Federal Motor Carrier Safety Administration's drug and alcohol regulations and testing. For more information, refer to our Drug and Alcohol Plan for CDL Drivers.

Employees with drug or alcohol problems that have not resulted in, and are not the immediate subject of, disciplinary action may request approval to take unpaid time off to participate in a rehabilitation or treatment program. Leave may be granted if the employee agrees to abstain from use of the problem substance; abides by all MacKenzie Companies' policies, rules, and prohibitions relating to conduct in the workplace; and if granting the leave will not cause MacKenzie Companies any undue hardship.

Our Employee Assistance Program (EAP) provides confidential counseling and referral services to employees for assistance with such problems as drug and/or alcohol abuse or addiction. It is the employee's responsibility to seek assistance from the EAP prior to reaching a point where his or her judgment, performance, or behavior has led to imminent disciplinary action. Participation in the EAP after the disciplinary process has begun may not preclude disciplinary action, up to and including termination of employment.

Employees with questions on this policy or issues related to drug or alcohol use in the workplace should raise their concerns with their Supervisor or Human Resources without fear of reprisal.

EXHIBIT B.2 EMR Documentation





DAVID
CHAPMAN
AGENCY

Making Insurance and Bonds Easy

August 15, 2021

MacKenzie Companies
4848 W Saginaw
Grand Ledge, MI 48837

Experience Modification Rating (EMR)

To Whom It May Concern:

As insurance agents for the E T MacKenzie Company we are pleased to report their current workers compensation experience modification (EMR) for 8/15/2021 to 8/15/2022 is **.60**. Their EMR for the previous year 8/15/2020-21 was .66, and for 8/15/2019-20 it was .68.

These are excellent EMRs for the heavy construction industry. The history of low experience modification factors is the direct result of MacKenzie Companies' culture and attention to safety. If you have further questions about MacKenzie Companies, their EMR, or their safety record, please contact us.

Sincerely
David Chapman Agency, Inc

Robert G Chapman

5700 W. Mount Hope Hwy. Lansing, MI 48917
517.321.4600
www.DavidChapmanAgency.com

EXHIBIT B.3 Craft Employee Safety Training Documentation



HR Training & Education By Training Code

All Training Codes

All Resources

All Training Dates

Resource	Seq	Date	Status
500 OSHA #500 Trainer Course			
1370 McElhaney, Ronald G	16	02/22/19	Completed
510 OSHA 510			
1370 McElhaney, Ronald G	9	12/06/16	Completed
Aer.Manlif Articulating Aerial Manlift			
601 Fergus, Jeremy D	10	05/06/14	Completed
819 Hughes, Donavon D	23	12/01/15	Completed
1316 Melvin, Steve M	8	05/06/14	Completed
1356 Maurer, Chadwick E	3	05/12/09	Completed
1610 Pilar Renteria, Luis E	3	12/01/15	Completed
2010 Townsend, Jeremy W	10	08/18/14	Completed
Aerial Aerial Work Platform Permit			
100 Abfalter, David M	1	05/16/09	Completed
502 Emmons III, Phillips C	13	04/23/13	Completed
1803 Rickman, Charles R	11	04/23/13	Completed
Asb40 40-Hour Asbestos Abatement			
603 Fiasky, Matthew W	17	01/30/15	Completed
1001 Jasman, Horace E	9	01/30/15	Completed
1358 McTaggart, Isaac D	2	01/30/15	Completed
2010 Townsend, Jeremy W	11	01/30/15	Completed
AsbSup Asbestos Contractor Supervisor			
124 Allen, Javier L	1	02/07/22	Completed
358 Curry, Kaleb S	1	02/07/22	Completed
363 Cook, Daniel R	1	02/07/22	Completed
364 Covert, Alec J	1	02/07/22	Completed
429 Dalla-Vecchia, Luciano G	1	02/07/22	Completed
501 Emmons Jr, Phillips C	11	09/11/09	Completed
501 Emmons Jr, Phillips C	31	01/12/16	Completed
501 Emmons Jr, Phillips C	34	01/26/17	Completed
501 Emmons Jr, Phillips C	40	03/30/18	Completed
501 Emmons Jr, Phillips C	42	02/18/19	Completed
501 Emmons Jr, Phillips C	48	03/14/20	Completed
501 Emmons Jr, Phillips C	52	02/26/21	Completed
501 Emmons Jr, Phillips C	56	02/17/22	Completed
502 Emmons III, Phillips C	30	01/12/16	Completed
502 Emmons III, Phillips C	35	01/26/17	Completed
502 Emmons III, Phillips C	42	03/30/18	Completed
502 Emmons III, Phillips C	44	02/18/19	Completed
502 Emmons III, Phillips C	48	03/14/20	Completed
502 Emmons III, Phillips C	52	02/26/21	Completed
502 Emmons III, Phillips C	53	02/17/22	Completed
602 Ferguson, Kevin E	3	02/12/19	Completed
602 Ferguson, Kevin E	7	03/14/20	Completed
602 Ferguson, Kevin E	10	02/26/21	Completed
602 Ferguson, Kevin E	13	02/17/22	Completed
603 Fiasky, Matthew W	22	01/12/16	Completed
715 Glass, Willie	14	03/10/17	Completed
715 Glass, Willie	19	03/30/18	Completed
715 Glass, Willie	20	02/18/19	Completed
715 Glass, Willie	24	03/14/20	Completed
715 Glass, Willie	27	02/26/21	Completed
715 Glass, Willie	28	02/17/22	Completed

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Resource	Seq	Date	Status
AsbSup Asbestos Contractor Supervisor			- Continued
828 Hein, Kenneth D	6	03/10/17	Completed
828 Hein, Kenneth D	13	03/30/18	Completed
828 Hein, Kenneth D	14	02/18/19	Completed
828 Hein, Kenneth D	17	03/14/20	Completed
828 Hein, Kenneth D	18	02/26/21	Completed
828 Hein, Kenneth D	19	02/17/22	Completed
1001 Jasman, Horace E	17	01/12/16	Completed
1001 Jasman, Horace E	22	01/26/17	Completed
1001 Jasman, Horace E	30	03/30/18	Completed
1001 Jasman, Horace E	32	02/18/19	Completed
1001 Jasman, Horace E	37	03/14/20	Completed
1001 Jasman, Horace E	40	02/26/21	Completed
1001 Jasman, Horace E	42	02/17/22	Completed
1113 Keip, Brian J	18	03/10/17	Completed
1220 Lulham, Blake W	1	02/07/22	Completed
1223 Leach, Micheal K	1	02/07/22	Completed
1313 Medina, Gerardo	8	03/10/17	Completed
1313 Medina, Gerardo	10	06/07/18	Completed
1313 Medina, Gerardo	11	02/18/19	Completed
1313 Medina, Gerardo	13	03/14/20	Completed
1313 Medina, Gerardo	14	02/26/21	Completed
1313 Medina, Gerardo	16	02/17/22	Completed
1352 MacKenzie, Thomas A	8	03/10/17	Completed
1352 MacKenzie, Thomas A	11	03/30/18	Completed
1352 MacKenzie, Thomas A	14	02/18/19	Completed
1352 MacKenzie, Thomas A	17	03/14/20	Completed
1352 MacKenzie, Thomas A	20	02/26/21	Completed
1352 MacKenzie, Thomas A	23	02/17/22	Completed
1358 McTaggart, Isaac D	10	01/12/16	Completed
1370 McElhaney, Ronald G	25	03/14/20	Completed
1370 McElhaney, Ronald G	29	02/26/21	Completed
1370 McElhaney, Ronald G	33	02/17/22	Completed
1380 Mikula, Jason B	3	02/07/22	Completed
1381 Morel, James R	1	02/07/22	Completed
1382 Maddox, Collin J	2	02/07/22	Completed
1610 Pilar Renteria, Luis E	5	03/10/17	Completed
1610 Pilar Renteria, Luis E	11	03/30/18	Completed
1610 Pilar Renteria, Luis E	13	02/18/19	Completed
1620 Platte, Roger M	3	03/10/17	Completed
1620 Platte, Roger M	6	03/30/18	Completed
1620 Platte, Roger M	7	03/14/20	Completed
1620 Platte, Roger M	8	03/04/21	Completed
1620 Platte, Roger M	9	02/17/22	Completed
1626 Pierson, Brian L	11	03/08/19	Completed
1626 Pierson, Brian L	15	03/14/20	Completed
1626 Pierson, Brian L	18	02/26/21	Completed
1626 Pierson, Brian L	22	02/17/22	Completed
1648 Phillips, Cameron D	1	02/07/22	Completed
1827 Ridner, Taran R	5	02/07/22	Completed
1951 Somers, Matthew M	1		Completed
1951 Somers, Matthew M	4	03/30/18	Completed
1951 Somers, Matthew M	6	02/18/19	Completed
1966 Smith, Michael J	3	02/07/22	Completed

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Resource	Seq	Date	Status
AsbSup Asbestos Contractor Supervisor - Continued			
1972 Strong, Austin B	1	02/07/22	Completed
2010 Townsend, Jeremy W	19	01/12/16	Completed
2010 Townsend, Jeremy W	23	01/26/17	Completed
2010 Townsend, Jeremy W	28	03/30/18	Completed
2010 Townsend, Jeremy W	31	02/18/19	Completed
2010 Townsend, Jeremy W	36	03/14/20	Completed
2010 Townsend, Jeremy W	39	02/26/21	Completed
2010 Townsend, Jeremy W	42	02/17/22	Completed
2121 Tunnell, Matt R	9	02/07/22	Completed
2303 Warren, Matthew J	10	03/10/17	Completed
2303 Warren, Matthew J	17	03/30/18	Completed
2303 Warren, Matthew J	19	02/18/19	Completed
2303 Warren, Matthew J	22	03/14/20	Completed
2303 Warren, Matthew J	23	02/26/21	Completed
2303 Warren, Matthew J	24	02/17/22	Completed
2326 Warren, Forest G	7	02/07/22	Completed
2604 Zea, Leonardo S	2	02/07/22	Completed
BLifeS Basic Life Support			
1370 McElhaney, Ronald G	32	11/26/21	Completed
BrakeInsp Brake Inspector Certification			
210 Bigford Jr., Guy L	4	04/27/11	Completed
312 Clark, Dale E	10	04/27/11	Completed
CO Crane Operator Permit			
819 Hughes, Donavon D	17	08/21/14	Completed
1503 Otto, Cameron W	1	06/02/09	Completed
1503 Otto, Cameron W	3	08/31/06	Completed
1503 Otto, Cameron W	7	04/14/11	Completed
1628 Purvis, Carl E	3	04/14/11	Completed
1628 Purvis, Carl E	7	08/21/14	Completed
1975 Stretchbery, Foster B	1	04/30/19	Completed
CompGas Compressed Gas Cylinders			
210 Bigford Jr., Guy L	11	09/22/16	Completed
312 Clark, Dale E	25	09/22/16	Completed
411 Deemer, Bryon C	10	09/22/16	Completed
1206 Lindow, Michael W	8	09/22/16	Completed
Conc Concrete Basics			
1301 MacKenzie, Stephanie L	6	02/16/04	Completed
ConcFT Concrete Field Testing Tech			
700 Garcia, Felipe	3	02/16/17	Completed
1604 Phillips, Mark V	9	02/16/17	Completed
1610 Pilar Renteria, Luis E	7	02/16/17	Completed
CoSaf Company-wide Safety Meeting			
100 Abfalter, David M	26	03/27/15	Completed
100 Abfalter, David M	39	04/28/17	Completed
100 Abfalter, David M	44	03/23/18	Completed
100 Abfalter, David M	48	03/22/19	Completed
106 Andries, Roman A	20	04/28/17	Completed
106 Andries, Roman A	24	03/23/18	Completed
106 Andries, Roman A	26	03/22/19	Completed
120 Askew, Reggie E	3	04/28/17	Completed

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Resource	Seq	Date	Status
CoSaf Company-wide Safety Meeting			- Continued
120 Askew, Reggie E	4	03/23/18	Completed
120 Askew, Reggie E	6	03/22/19	Completed
210 Bigford Jr., Guy L	8	03/27/15	Completed
210 Bigford Jr., Guy L	12	04/28/17	Completed
210 Bigford Jr., Guy L	13	03/23/18	Completed
210 Bigford Jr., Guy L	16	03/22/19	Completed
221 Bailey, Micah	11	04/28/17	Completed
221 Bailey, Micah	14	03/23/18	Completed
226 Bivins, Zachary T	2	03/27/15	Completed
226 Bivins, Zachary T	3	04/28/17	Completed
226 Bivins, Zachary T	4	03/23/18	Completed
226 Bivins, Zachary T	6	03/22/19	Completed
234 Battle, Dewitt N	1	03/27/15	Completed
234 Battle, Dewitt N	3	04/28/17	Completed
234 Battle, Dewitt N	4	03/23/18	Completed
234 Battle, Dewitt N	5	03/22/19	Completed
238 Benson, Glen J	1	03/27/15	Completed
238 Benson, Glen J	2	04/28/17	Completed
238 Benson, Glen J	3	03/23/18	Completed
238 Benson, Glen J	4	03/22/19	Completed
312 Clark, Dale E	20	03/27/15	Completed
312 Clark, Dale E	26	04/28/17	Completed
312 Clark, Dale E	31	03/22/19	Completed
318 Comwell, Jack L	9	04/28/17	Completed
318 Comwell, Jack L	12	03/22/19	Completed
322 Curby, Russell J	18	03/27/15	Completed
322 Curby, Russell J	24	04/28/17	Completed
322 Curby, Russell J	27	03/23/18	Completed
322 Curby, Russell J	31	03/22/19	Completed
331 Clark Jr., Kenneth B	2	03/27/15	Completed
331 Clark Jr., Kenneth B	3	04/28/17	Completed
331 Clark Jr., Kenneth B	5	03/23/18	Completed
331 Clark Jr., Kenneth B	6	03/22/19	Completed
411 Deemer, Bryon C	4	03/27/15	Completed
411 Deemer, Bryon C	11	04/28/17	Completed
411 Deemer, Bryon C	15	03/23/18	Completed
411 Deemer, Bryon C	18	03/22/19	Completed
417 Dean, Dennis R	2	03/22/19	Completed
501 Emmons Jr, Phillips C	27	03/27/15	Completed
501 Emmons Jr, Phillips C	39	03/23/18	Completed
501 Emmons Jr, Phillips C	46	03/22/19	Completed
502 Emmons III, Phillips C	25	03/27/15	Completed
502 Emmons III, Phillips C	41	03/23/18	Completed
502 Emmons III, Phillips C	46	03/22/19	Completed
503 Everett, Gregory D	5	04/28/17	Completed
503 Everett, Gregory D	7	03/23/18	Completed
512 Elliot, Shawn E	2	03/22/19	Completed
601 Fergus, Jeremy D	12	03/27/15	Completed
601 Fergus, Jeremy D	21	04/28/17	Completed
601 Fergus, Jeremy D	24	03/23/18	Completed
601 Fergus, Jeremy D	30	03/22/19	Completed
603 Fiasky, Matthew W	21	03/27/15	Completed
603 Fiasky, Matthew W	26	04/28/17	Completed

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Resource	Seq	Date	Status
CoSaf Company-wide Safety Meeting			- Continued
603 Fiasky, Matthew W	30	03/23/18	Completed
603 Fiasky, Matthew W	34	03/22/19	Completed
627 Foy, Nicholas J	2	03/23/18	Completed
627 Foy, Nicholas J	5	03/22/19	Completed
700 Garcia, Felipe	2	04/28/17	Completed
700 Garcia, Felipe	5	03/23/18	Completed
700 Garcia, Felipe	7	03/22/19	Completed
711 Grummet, Ted J	10	03/27/15	Completed
711 Grummet, Ted J	14	04/28/17	Completed
711 Grummet, Ted J	18	03/23/18	Completed
711 Grummet, Ted J	21	03/22/19	Completed
715 Glass, Willie	8	03/27/15	Completed
715 Glass, Willie	15	04/28/17	Completed
715 Glass, Willie	18	03/23/18	Completed
715 Glass, Willie	22	03/22/19	Completed
724 Guevara, Juan M	2	03/23/18	Completed
724 Guevara, Juan M	4	03/22/19	Completed
802 Hampton, Matthew S	1	04/28/17	Completed
802 Hampton, Matthew S	4	03/22/19	Completed
812 Hilborn, James S	12	03/27/15	Completed
812 Hilborn, James S	16	04/28/17	Completed
812 Hilborn, James S	18	03/23/18	Completed
812 Hilborn, James S	20	03/22/19	Completed
813 Hildenbrand, Thomas F	4	03/27/15	Completed
813 Hildenbrand, Thomas F	7	04/28/17	Completed
813 Hildenbrand, Thomas F	8	03/23/18	Completed
813 Hildenbrand, Thomas F	10	03/22/19	Completed
814 Horstman, Eric L	23	03/27/15	Completed
814 Horstman, Eric L	32	04/28/17	Completed
814 Horstman, Eric L	38	03/23/18	Completed
814 Horstman, Eric L	42	03/22/19	Completed
818 Hufnagel, Heather M	4	03/27/15	Completed
818 Hufnagel, Heather M	5	04/28/17	Completed
818 Hufnagel, Heather M	6	03/22/19	Completed
819 Hughes, Donavon D	20	03/27/15	Completed
819 Hughes, Donavon D	31	04/28/17	Completed
819 Hughes, Donavon D	35	03/23/18	Completed
819 Hughes, Donavon D	41	03/22/19	Completed
820 Hughes, Patrick L	13	03/27/15	Completed
820 Hughes, Patrick L	20	04/28/17	Completed
820 Hughes, Patrick L	25	03/23/18	Completed
820 Hughes, Patrick L	31	03/22/19	Completed
827 Hallenbeck, Mitch L	8	03/27/15	Completed
827 Hallenbeck, Mitch L	11	04/28/17	Completed
828 Hein, Kenneth D	4	03/27/15	Completed
828 Hein, Kenneth D	7	04/28/17	Completed
828 Hein, Kenneth D	12	03/23/18	Completed
828 Hein, Kenneth D	16	03/22/19	Completed
840 Hayden, Clinton R	1	04/28/17	Completed
840 Hayden, Clinton R	2	03/23/18	Completed
1001 Jasman, Horace E	13	03/27/15	Completed
1001 Jasman, Horace E	25	04/28/17	Completed
1001 Jasman, Horace E	35	03/22/19	Completed

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CoSaf Company-wide Safety Meeting			- Continued
1007 Julson, Tyler A	4	03/27/15	Completed
1007 Julson, Tyler A	6	04/28/17	Completed
1007 Julson, Tyler A	8	03/23/18	Completed
1007 Julson, Tyler A	10	03/22/19	Completed
1011 Jaquette, David M	3	03/22/19	Completed
1101 Kempfer, Daryl B	6	03/27/15	Completed
1101 Kempfer, Daryl B	10	04/28/17	Completed
1101 Kempfer, Daryl B	11	03/23/18	Completed
1101 Kempfer, Daryl B	14	03/22/19	Completed
1104 Kindinger, David B	3	03/27/15	Completed
1106 Kreps, David C	25	03/27/15	Completed
1106 Kreps, David C	33	04/28/17	Completed
1106 Kreps, David C	39	03/22/19	Completed
1113 Keip, Brian J	11	03/27/15	Completed
1113 Keip, Brian J	19	04/28/17	Completed
1113 Keip, Brian J	23	03/23/18	Completed
1113 Keip, Brian J	26	03/22/19	Completed
1200 Lampman, Aaron D	2	03/27/15	Completed
1200 Lampman, Aaron D	5	04/28/17	Completed
1200 Lampman, Aaron D	6	03/23/18	Completed
1200 Lampman, Aaron D	7	03/22/19	Completed
1206 Lindow, Michael W	5	03/27/15	Completed
1206 Lindow, Michael W	9	04/28/17	Completed
1206 Lindow, Michael W	11	03/23/18	Completed
1206 Lindow, Michael W	13	03/22/19	Completed
1215 Lopez, Billy A	1	04/28/17	Completed
1215 Lopez, Billy A	3	03/23/18	Completed
1215 Lopez, Billy A	4	03/22/19	Completed
1216 Lehman, Jonah T	3	03/22/19	Completed
1301 MacKenzie, Stephanie L	17	03/27/15	Completed
1301 MacKenzie, Stephanie L	20	04/28/17	Completed
1301 MacKenzie, Stephanie L	24	03/22/19	Completed
1302 MacKenzie, Thomas E	28	03/27/15	Completed
1302 MacKenzie, Thomas E	37	04/28/17	Completed
1302 MacKenzie, Thomas E	44	03/22/19	Completed
1303 Maddox, Travis J	2	03/27/15	Completed
1303 Maddox, Travis J	5	04/28/17	Completed
1303 Maddox, Travis J	6	03/23/18	Completed
1304 Marks, Michael Scott	10	03/27/15	Completed
1304 Marks, Michael Scott	13	04/28/17	Completed
1304 Marks, Michael Scott	15	03/22/19	Completed
1309 McLean, Jacob M	11	04/28/17	Completed
1309 McLean, Jacob M	14	03/23/18	Completed
1312 McNamara, Dennis J	11	04/28/17	Completed
1312 McNamara, Dennis J	12	03/23/18	Completed
1312 McNamara, Dennis J	16	03/22/19	Completed
1313 Medina, Gerardo	4	03/27/15	Completed
1313 Medina, Gerardo	9	04/28/17	Completed
1313 Medina, Gerardo	12	03/22/19	Completed
1315 Melvin, Cornie	16	03/27/15	Completed
1315 Melvin, Cornie	21	04/28/17	Completed
1315 Melvin, Cornie	24	03/23/18	Completed
1315 Melvin, Cornie	28	03/22/19	Completed

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CoSaf Company-wide Safety Meeting			- Continued
1316 Melvin, Steve M	9	03/27/15	Completed
1316 Melvin, Steve M	12	04/28/17	Completed
1316 Melvin, Steve M	15	03/22/19	Completed
1318 Meyers, Jerrold M	5	03/27/15	Completed
1318 Meyers, Jerrold M	9	04/28/17	Completed
1318 Meyers, Jerrold M	10	03/23/18	Completed
1318 Meyers, Jerrold M	11	03/22/19	Completed
1328 Meingasner, Roger E	3	04/28/17	Completed
1328 Meingasner, Roger E	4	03/23/18	Completed
1328 Meingasner, Roger E	7	03/22/19	Completed
1352 MacKenzie, Thomas A	9	04/28/17	Completed
1352 MacKenzie, Thomas A	10	03/23/18	Completed
1352 MacKenzie, Thomas A	15	03/22/19	Completed
1355 McPhee, Sean M	2	03/27/15	Completed
1355 McPhee, Sean M	12	04/28/17	Completed
1355 McPhee, Sean M	15	03/23/18	Completed
1355 McPhee, Sean M	18	03/22/19	Completed
1356 Maurer, Chadwick E	5	03/27/15	Completed
1356 Maurer, Chadwick E	10	04/28/17	Completed
1356 Maurer, Chadwick E	12	03/23/18	Completed
1356 Maurer, Chadwick E	14	03/22/19	Completed
1358 McTaggart, Isaac D	6	03/27/15	Completed
1367 Merryfield, Chase A	1	03/22/19	Completed
1370 McElhaney, Ronald G	21	03/22/19	Completed
1401 Niemiec, John W	6	03/22/19	Completed
1503 Otto, Cameron W	24	04/28/17	Completed
1503 Otto, Cameron W	27	03/23/18	Completed
1503 Otto, Cameron W	32	03/22/19	Completed
1508 Olney, James A	4	03/27/15	Completed
1508 Olney, James A	6	04/28/17	Completed
1508 Olney, James A	7	03/22/19	Completed
1604 Phillips, Mark V	6	03/27/15	Completed
1608 Pilar, Gonzalo	3	03/27/15	Completed
1608 Pilar, Gonzalo	6	04/28/17	Completed
1608 Pilar, Gonzalo	8	03/23/18	Completed
1608 Pilar, Gonzalo	9	03/22/19	Completed
1610 Pilar Renteria, Luis E	2	03/27/15	Completed
1610 Pilar Renteria, Luis E	6	04/28/17	Completed
1610 Pilar Renteria, Luis E	10	03/23/18	Completed
1610 Pilar Renteria, Luis E	17	03/22/19	Completed
1613 Platte, James M	8	04/28/17	Completed
1613 Platte, James M	9	03/23/18	Completed
1615 Puskala, Benjamin J	13	03/27/15	In Progress
1615 Puskala, Benjamin J	18	04/28/17	Completed
1615 Puskala, Benjamin J	21	03/23/18	Completed
1615 Puskala, Benjamin J	23	03/22/19	Completed
1620 Platte, Roger M	4	04/28/17	Completed
1620 Platte, Roger M	5	03/23/18	Completed
1622 Petipren, Karl R	2	03/23/18	Completed
1626 Pierson, Brian L	3	03/27/15	Completed
1628 Purvis, Carl E	8	03/27/15	Completed
1628 Purvis, Carl E	12	04/28/17	Completed
1628 Purvis, Carl E	16	03/22/19	Completed

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Resource	Seq	Date	Status
CoSaf Company-wide Safety Meeting			- Continued
1631 Patrick, Lonny J	2	03/27/15	Completed
1631 Patrick, Lonny J	3	04/28/17	Completed
1631 Patrick, Lonny J	4	03/23/18	Completed
1631 Patrick, Lonny J	5	03/22/19	Completed
1634 Plunkett, Jeffery A	3	04/28/17	Completed
1634 Plunkett, Jeffery A	4	03/23/18	Completed
1634 Plunkett, Jeffery A	5	03/22/19	Completed
1801 Raimer, Gary D	8	03/27/15	Completed
1801 Raimer, Gary D	11	03/23/18	Completed
1803 Rickman, Charles R	17	03/27/15	Completed
1803 Rickman, Charles R	26	04/28/17	Completed
1803 Rickman, Charles R	29	03/23/18	Completed
1803 Rickman, Charles R	34	03/22/19	Completed
1818 Roiter, Douglas E	2	03/27/15	Completed
1818 Roiter, Douglas E	3	04/28/17	Completed
1818 Roiter, Douglas E	4	03/22/19	Completed
1903 Sherrell, Ronald E	16	03/27/15	Completed
1903 Sherrell, Ronald E	23	04/28/17	Completed
1903 Sherrell, Ronald E	26	03/23/18	Completed
1903 Sherrell, Ronald E	29	03/22/19	Completed
1915 Stebleton Jr., Kenneth D	3	03/27/15	Completed
1915 Stebleton Jr., Kenneth D	5	03/22/19	Completed
1920 Swaynie, Don A	18	03/27/15	Completed
1920 Swaynie, Don A	25	04/28/17	Completed
1920 Swaynie, Don A	28	03/23/18	Completed
1920 Swaynie, Don A	31	03/22/19	Completed
1931 Stanaway, David R	3	04/28/17	Completed
1931 Stanaway, David R	4	03/23/18	Completed
1931 Stanaway, David R	5	03/22/19	Completed
1939 Schaible, Tyler G	2	03/27/15	Completed
1939 Schaible, Tyler G	5	04/28/17	Completed
1939 Schaible, Tyler G	8	03/23/18	Completed
1939 Schaible, Tyler G	10	03/22/19	Completed
1940 Smith, Brian J	2	03/27/15	Completed
1940 Smith, Brian J	7	04/28/17	Completed
1940 Smith, Brian J	9	03/23/18	Completed
1940 Smith, Brian J	11	03/22/19	Completed
1941 Stover, Ralph E	2	03/27/15	Completed
1941 Stover, Ralph E	5	04/28/17	Completed
1941 Stover, Ralph E	6	03/23/18	Completed
1951 Somers, Matthew M	3	03/23/18	Completed
1951 Somers, Matthew M	7	03/22/19	Completed
2005 Toews, Kirk D	14	03/27/15	Completed
2005 Toews, Kirk D	22	04/28/17	Completed
2005 Toews, Kirk D	25	03/23/18	Completed
2005 Toews, Kirk D	28	03/22/19	Completed
2010 Townsend, Jeremy W	15	03/27/15	Completed
2010 Townsend, Jeremy W	24	04/28/17	Completed
2010 Townsend, Jeremy W	27	03/23/18	Completed
2010 Townsend, Jeremy W	34	03/22/19	Completed
2116 Torres, Alvaro	2	04/28/17	Completed
2116 Torres, Alvaro	3	03/23/18	Completed
2116 Torres, Alvaro	4	03/22/19	Completed

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Resource	Seq	Date	Status
CoSaf Company-wide Safety Meeting			- Continued
2206 VanDyke, Eric C	3	04/28/17	Completed
2206 VanDyke, Eric C	5	03/23/18	Completed
2206 VanDyke, Eric C	7	03/22/19	Completed
2303 Warren, Matthew J	5	03/27/15	Completed
2303 Warren, Matthew J	12	04/28/17	Completed
2303 Warren, Matthew J	16	03/23/18	Completed
2303 Warren, Matthew J	21	03/22/19	Completed
2305 West, Patrick S	5	03/27/15	Completed
2305 West, Patrick S	9	04/28/17	Completed
2305 West, Patrick S	10	03/23/18	Completed
2305 West, Patrick S	12	03/22/19	Completed
2307 Whipple, Nelson J	4	03/27/15	Completed
2307 Whipple, Nelson J	6	04/28/17	Completed
2307 Whipple, Nelson J	7	03/23/18	Completed
2307 Whipple, Nelson J	8	03/22/19	Completed
2326 Warren, Forest G	1	03/27/15	Completed
2326 Warren, Forest G	5	04/28/17	Completed
2500 Yahnka, David K	3	04/28/17	Completed
2500 Yahnka, David K	4	03/23/18	Completed
2500 Yahnka, David K	5	03/22/19	Completed
2601 Zemla, William D	2	03/23/18	Completed
2601 Zemla, William D	5	03/22/19	Completed
CPR CPR & First Aid			
100 Abfalter, David M	4	11/01/07	Completed
100 Abfalter, David M	5	11/01/05	Completed
100 Abfalter, David M	6	10/16/09	Completed
100 Abfalter, David M	15	01/13/12	Completed
100 Abfalter, David M	22	01/10/14	Completed
100 Abfalter, David M	35	04/01/16	Completed
100 Abfalter, David M	45	03/27/18	Completed
100 Abfalter, David M	53	03/12/21	Completed
107 Argersinger, Charles F	1	11/01/07	Completed
107 Argersinger, Charles F	2	11/01/05	Completed
120 Askew, Reggie E	5	03/27/18	Completed
120 Askew, Reggie E	7	03/12/21	Completed
210 Bigford Jr., Guy L	14	03/27/18	Completed
210 Bigford Jr., Guy L	17	03/12/21	Completed
226 Bivins, Zachary T	7	02/05/21	Completed
312 Clark, Dale E	3	11/01/07	Completed
312 Clark, Dale E	5	11/01/05	Completed
312 Clark, Dale E	6	10/16/09	Completed
312 Clark, Dale E	12	01/13/12	Completed
312 Clark, Dale E	19	01/10/14	Completed
312 Clark, Dale E	32	03/12/21	Completed
322 Curby, Russell J	1	11/01/07	Completed
322 Curby, Russell J	2	11/01/05	Completed
322 Curby, Russell J	4	10/16/09	Completed
322 Curby, Russell J	13	01/10/14	Completed
322 Curby, Russell J	21	04/01/16	Completed
322 Curby, Russell J	28	03/27/18	Completed
322 Curby, Russell J	35	02/05/21	Completed
360 Culver, Justin W	1	02/05/21	Completed
417 Dean, Dennis R	1	03/27/18	Completed

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Resource	Seq	Date	Status
CPR CPR & First Aid			- Continued
417 Dean, Dennis R	3	03/12/21	Completed
420 Dionise, Nicholas B	2	03/26/21	Completed
430 David, Dalton S	1	01/10/20	Completed
501 Emmons Jr, Phillips C	2	11/01/07	Completed
501 Emmons Jr, Phillips C	3	11/01/05	Completed
501 Emmons Jr, Phillips C	5	10/16/09	Completed
501 Emmons Jr, Phillips C	17	01/13/12	Completed
501 Emmons Jr, Phillips C	32	04/01/16	Completed
501 Emmons Jr, Phillips C	41	03/27/18	Completed
501 Emmons Jr, Phillips C	53	03/19/21	Completed
502 Emmons III, Phillips C	32	04/01/16	Completed
502 Emmons III, Phillips C	43	03/27/18	Completed
502 Emmons III, Phillips C	51	02/05/21	Completed
512 Elliot, Shawn E	1	03/01/17	Completed
601 Fergus, Jeremy D	34	02/05/21	Completed
603 Fiasky, Matthew W	2	11/01/07	Completed
603 Fiasky, Matthew W	3	11/01/05	Completed
603 Fiasky, Matthew W	12	02/01/12	Completed
603 Fiasky, Matthew W	16	01/10/14	Completed
603 Fiasky, Matthew W	31	03/27/18	Completed
627 Foy, Nicholas J	3	03/27/18	Completed
627 Foy, Nicholas J	7	03/12/21	Completed
631 Fatura, Carl J	1	02/05/21	Completed
700 Garcia, Felipe	6	03/27/18	Completed
700 Garcia, Felipe	8	03/12/21	Completed
702 Goddard, Scott L	1	11/01/05	Completed
711 Grummet, Ted J	3	11/01/07	Completed
711 Grummet, Ted J	7	01/13/12	Completed
711 Grummet, Ted J	9	01/10/14	Completed
711 Grummet, Ted J	19	03/27/18	Completed
711 Grummet, Ted J	22	03/12/21	Completed
812 Hilborn, James S	1	11/01/07	Completed
812 Hilborn, James S	2	11/01/05	Completed
812 Hilborn, James S	8	02/01/12	Completed
812 Hilborn, James S	10	01/10/14	Completed
812 Hilborn, James S	13	04/01/16	Completed
812 Hilborn, James S	19	03/27/18	Completed
814 Horstman, Eric L	2	11/01/07	Completed
814 Horstman, Eric L	3	11/01/05	Completed
814 Horstman, Eric L	11	01/13/12	Completed
814 Horstman, Eric L	18	01/10/14	Completed
814 Horstman, Eric L	39	03/27/18	Completed
814 Horstman, Eric L	46	03/19/21	Completed
818 Hufnagel, Heather M	1	11/01/07	Completed
818 Hufnagel, Heather M	2	11/01/05	Completed
819 Hughes, Donavon D	2	11/01/07	Completed
819 Hughes, Donavon D	5	10/16/09	Completed
819 Hughes, Donavon D	9	01/13/12	Completed
819 Hughes, Donavon D	15	01/10/14	Completed
819 Hughes, Donavon D	27	04/01/16	Completed
819 Hughes, Donavon D	36	03/27/18	Completed
820 Hughes, Patrick L	26	03/27/18	Completed
820 Hughes, Patrick L	35	03/19/21	Completed

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CPR CPR & First Aid			- Continued
840 Hayden, Clinton R	3	03/27/18	Completed
1001 Jasman, Horace E	19	04/01/16	Completed
1001 Jasman, Horace E	31	03/27/18	Completed
1007 Julson, Tyler A	2	03/23/13	Completed
1007 Julson, Tyler A	5	04/01/16	Completed
1007 Julson, Tyler A	9	03/27/18	Completed
1101 Kempfer, Daryl B	1	12/08/07	Completed
1101 Kempfer, Daryl B	2	10/16/09	Completed
1101 Kempfer, Daryl B	4	01/13/12	Completed
1101 Kempfer, Daryl B	8	04/01/16	Completed
1101 Kempfer, Daryl B	12	03/27/18	Completed
1101 Kempfer, Daryl B	15	02/05/21	Completed
1104 Kindinger, David B	1	11/01/05	Completed
1106 Kreps, David C	2	11/01/07	Completed
1106 Kreps, David C	3	10/16/09	Completed
1106 Kreps, David C	14	01/13/12	Completed
1106 Kreps, David C	19	01/10/14	Completed
1106 Kreps, David C	28	04/01/16	Completed
1106 Kreps, David C	37	03/27/18	Completed
1106 Kreps, David C	43	03/26/21	Completed
1113 Keip, Brian J	1	10/16/09	Completed
1113 Keip, Brian J	3	01/13/12	Completed
1113 Keip, Brian J	7	01/10/14	Completed
1113 Keip, Brian J	14	04/01/16	Completed
1113 Keip, Brian J	24	03/27/18	Completed
1113 Keip, Brian J	30	03/26/21	Completed
1125 Keifer, Kyle J	1	03/19/21	Completed
1215 Lopez, Billy A	5	03/12/21	Completed
1301 MacKenzie, Stephanie L	1	11/01/07	Completed
1301 MacKenzie, Stephanie L	2	11/01/05	Completed
1302 MacKenzie, Thomas E	2	11/01/07	Completed
1302 MacKenzie, Thomas E	3	11/01/05	Completed
1302 MacKenzie, Thomas E	6	10/16/09	Completed
1302 MacKenzie, Thomas E	17	01/13/12	Completed
1302 MacKenzie, Thomas E	25	01/10/14	Completed
1302 MacKenzie, Thomas E	34	04/01/16	Completed
1302 MacKenzie, Thomas E	41	03/27/18	Completed
1302 MacKenzie, Thomas E	49	03/26/21	Completed
1304 Marks, Michael Scott	1	11/01/07	Completed
1304 Marks, Michael Scott	2	11/01/05	Completed
1304 Marks, Michael Scott	3	10/16/09	Completed
1304 Marks, Michael Scott	6	01/13/12	Completed
1304 Marks, Michael Scott	9	01/10/14	Completed
1309 McLean, Jacob M	1	11/01/07	Completed
1309 McLean, Jacob M	2	11/01/05	Completed
1309 McLean, Jacob M	7	10/16/09	Completed
1309 McLean, Jacob M	8	01/13/12	Completed
1309 McLean, Jacob M	9	01/27/12	Completed
1309 McLean, Jacob M	15	03/27/18	Completed
1312 McNamara, Dennis J	1	11/01/05	Completed
1312 McNamara, Dennis J	4	01/23/10	Completed
1312 McNamara, Dennis J	7	03/09/13	Completed
1312 McNamara, Dennis J	8	04/01/16	Completed

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Resource	Seq	Date	Status
CPR CPR & First Aid			- Continued
1312 McNamara, Dennis J	13	03/27/18	Completed
1313 Medina, Gerardo	1	11/01/05	Completed
1313 Medina, Gerardo	5	04/01/16	Completed
1313 Medina, Gerardo	15	03/19/21	Completed
1315 Melvin, Cornie	8	01/13/12	Completed
1315 Melvin, Cornie	15	01/10/14	Completed
1315 Melvin, Cornie	25	03/27/18	Completed
1315 Melvin, Cornie	29	02/05/21	Completed
1328 Meingasner, Roger E	1	10/16/09	Completed
1328 Meingasner, Roger E	5	03/27/18	Completed
1328 Meingasner, Roger E	8	02/05/21	Completed
1352 MacKenzie, Thomas A	5	04/01/16	Completed
1352 MacKenzie, Thomas A	12	03/27/18	Completed
1352 MacKenzie, Thomas A	21	03/19/21	Completed
1355 McPhee, Sean M	9	04/01/16	Completed
1355 McPhee, Sean M	16	03/27/18	Completed
1355 McPhee, Sean M	20	03/26/21	Completed
1356 Maurer, Chadwick E	1	03/05/11	Completed
1356 Maurer, Chadwick E	7	04/01/16	Completed
1356 Maurer, Chadwick E	13	03/27/18	Completed
1356 Maurer, Chadwick E	15	02/05/21	Completed
1370 McElhaney, Ronald G	4	01/01/18	Completed
1370 McElhaney, Ronald G	22	02/18/21	Completed
1380 Mikula, Jason B	1	03/26/21	Completed
1408 Nighbert, Donald L	2	03/26/21	Completed
1604 Phillips, Mark V	1	11/01/07	Completed
1604 Phillips, Mark V	2	11/01/05	Completed
1604 Phillips, Mark V	3	10/16/09	Completed
1604 Phillips, Mark V	11	03/19/21	Completed
1610 Pilar Renteria, Luis E	12	03/27/18	Completed
1610 Pilar Renteria, Luis E	18	03/12/21	Completed
1613 Platte, James M	1	11/01/07	Completed
1613 Platte, James M	2	11/01/05	Completed
1613 Platte, James M	4	04/01/16	Completed
1613 Platte, James M	10	03/27/18	Completed
1613 Platte, James M	12	02/05/21	Completed
1626 Pierson, Brian L	10	04/01/16	Completed
1626 Pierson, Brian L	19	03/19/21	Completed
1801 Raimer, Gary D	1	11/01/07	Completed
1801 Raimer, Gary D	2	11/01/05	Completed
1801 Raimer, Gary D	4	10/16/09	Completed
1801 Raimer, Gary D	5	01/13/12	Completed
1801 Raimer, Gary D	7	01/10/14	Completed
1801 Raimer, Gary D	9	04/01/16	Completed
1801 Raimer, Gary D	12	03/27/18	Completed
1801 Raimer, Gary D	13	03/19/21	Completed
1803 Rickman, Charles R	2	11/01/07	Completed
1803 Rickman, Charles R	8	02/01/12	Completed
1803 Rickman, Charles R	13	01/10/14	Completed
1803 Rickman, Charles R	22	04/01/16	Completed
1803 Rickman, Charles R	30	03/27/18	Completed
1803 Rickman, Charles R	38	02/05/21	Completed
1903 Sherrell, Ronald E	2	11/01/05	Completed

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CPR CPR & First Aid - Continued			
1903 Sherrell, Ronald E	19	04/01/16	Completed
1903 Sherrell, Ronald E	27	03/27/18	Completed
1903 Sherrell, Ronald E	33	02/05/21	Completed
1920 Swaynie, Don A	2	10/16/09	Completed
1920 Swaynie, Don A	9	01/13/12	Completed
1920 Swaynie, Don A	21	04/01/16	Completed
1920 Swaynie, Don A	29	03/27/18	Completed
1940 Smith, Brian J	3		Completed
1940 Smith, Brian J	4	01/01/16	Completed
1940 Smith, Brian J	8	01/21/18	Completed
1951 Somers, Matthew M	5	03/27/18	Completed
2005 Toews, Kirk D	1	01/01/04	Completed
2005 Toews, Kirk D	19	04/01/16	Completed
2005 Toews, Kirk D	26	03/27/18	Completed
2005 Toews, Kirk D	32	03/26/21	Completed
2010 Townsend, Jeremy W	3	01/13/12	Completed
2010 Townsend, Jeremy W	7	01/10/14	Completed
2010 Townsend, Jeremy W	20	04/01/16	Completed
2010 Townsend, Jeremy W	29	03/27/18	Completed
2010 Townsend, Jeremy W	40	03/26/21	Completed
2206 VanDyke, Eric C	1	04/01/16	Completed
2206 VanDyke, Eric C	6	03/27/18	Completed
2301 Ward, Matthew H	2	11/01/05	Completed
2301 Ward, Matthew H	4	10/16/09	Completed
2301 Ward, Matthew H	7	02/05/21	Completed
2303 Warren, Matthew J	7	04/01/16	Completed
2303 Warren, Matthew J	18	03/27/18	Completed
2305 West, Patrick S	1	11/01/05	Completed
2305 West, Patrick S	6	04/01/16	Completed
2305 West, Patrick S	11	03/27/18	Completed
2601 Zemla, William D	3	03/27/18	Completed
2601 Zemla, William D	6	03/26/21	Completed
CraneCert Crane Operator Certification			
107 Argersinger, Charles F	5	01/23/12	Completed
819 Hughes, Donavon D	10	01/23/12	Completed
819 Hughes, Donavon D	22	01/31/12	Completed
819 Hughes, Donavon D	39	11/13/18	Completed
1503 Otto, Cameron W	9	01/23/12	Completed
1503 Otto, Cameron W	16	01/31/12	Completed
1503 Otto, Cameron W	30	11/13/18	Completed
1628 Purvis, Carl E	4	01/23/12	Completed
1628 Purvis, Carl E	10	01/31/12	Completed
1628 Purvis, Carl E	14	11/13/18	Completed
CSE Confined Space Entry			
221 Bailey, Micah	5	07/28/14	Completed
226 Bivins, Zachary T	1	07/28/14	Completed
322 Curby, Russell J	7	05/18/02	Completed
322 Curby, Russell J	15	07/28/14	Completed
420 Dionise, Nicholas B	1	05/30/19	Completed
502 Emmons III, Phillips C	26	07/01/15	Completed
601 Ferguson, Jeremy D	2	03/18/05	Completed
602 Ferguson, Kevin E	1	03/28/13	Completed
602 Ferguson, Kevin E	6	05/31/19	Completed

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CSE Confined Space Entry			
- Continued			
603 Fiasky, Matthew W	5	03/18/05	Completed
711 Grummet, Ted J	2	05/17/08	Completed
812 Hilborn, James S	5	04/23/10	Completed
813 Hildenbrand, Thomas F	2	03/18/05	Completed
819 Hughes, Donavon D	8	12/09/11	Completed
828 Hein, Kenneth D	3	07/30/14	Completed
1106 Kreps, David C	13	05/18/02	Completed
1106 Kreps, David C	22	07/30/14	Completed
1301 MacKenzie, Stephanie L	5	03/01/95	Completed
1302 MacKenzie, Thomas E	5	03/18/05	Completed
1309 McLean, Jacob M	5	03/18/05	Completed
1312 McNamara, Dennis J	5	01/29/10	Completed
1316 Melvin, Steve M	4	12/09/11	Completed
1352 MacKenzie, Thomas A	3	07/30/14	Completed
1352 MacKenzie, Thomas A	4	07/01/15	Completed
1356 Maurer, Chadwick E	2		Completed
1370 McElhaney, Ronald G	3	06/06/17	Completed
1508 Olney, James A	3	07/30/14	Completed
1608 Pilar, Gonzalo	2	07/21/03	Completed
1622 Petipren, Karl R	1	06/15/11	Completed
1626 Pierson, Brian L	14	05/31/19	Completed
1803 Rickman, Charles R	6	12/09/11	Completed
1826 Rodriguez, Zachary J	1	05/31/19	Completed
1827 Ridner, Taran R	2	05/31/19	Completed
2005 Toews, Kirk D	2	06/03/03	Completed
2005 Toews, Kirk D	11	07/30/14	Completed
2010 Townsend, Jeremy W	1	04/23/10	Completed
2301 Ward, Matthew H	1	06/07/08	Completed
2303 Warren, Matthew J	2	03/18/05	Completed
2305 West, Patrick S	3	04/30/10	Completed
2326 Warren, Forest G	3	07/01/15	Completed
2604 Zea, Leonardo S	1	05/30/19	Completed
DecConc Decorative Concrete Technician			
1604 Phillips, Mark V	8	03/23/17	Completed
DriveDef Defensive Driving			
106 Andries, Roman A	21	11/13/17	Completed
312 Clark, Dale E	28	11/13/17	Completed
331 Clark Jr., Kenneth B	4	11/13/17	Completed
411 Deemer, Bryon C	13	11/13/17	Completed
502 Emmons III, Phillips C	38	11/13/17	Completed
603 Fiasky, Matthew W	27	11/13/17	Completed
724 Guevara, Juan M	1	11/13/17	Completed
812 Hilborn, James S	17	11/13/17	Completed
814 Horstman, Eric L	34	11/13/17	Completed
819 Hughes, Donavon D	32	11/13/17	Completed
828 Hein, Kenneth D	9	11/13/17	Completed
1001 Jasman, Horace E	27	11/13/17	Completed
1007 Juison, Tyler A	7	11/13/17	Completed
1106 Kreps, David C	34	11/13/17	Completed
1113 Keip, Brian J	20	11/13/17	Completed
1206 Lindow, Michael W	10	11/13/17	Completed
1215 Lopez, Billy A	2	11/13/17	Completed
1302 MacKenzie, Thomas E	39	11/13/17	Completed

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DriveDef Defensive Driving - Continued			
1356 Maurer, Chadwick E	11	11/13/17	Completed
1608 Pilar, Gonzalo	7	11/13/17	Completed
1610 Pilar Renteria, Luis E	9	11/13/17	Completed
1801 Raimer, Gary D	10	11/13/17	Completed
1915 Stebleton Jr., Kenneth D	4	11/13/17	Completed
1939 Schaible, Tyler G	6	11/13/17	Completed
1951 Somers, Matthew M	2	11/13/17	Completed
2206 VanDyke, Eric C	4	11/13/17	Completed
2601 Zemla, William D	1	11/13/17	Completed
EFusionLDC Electrofusion LDC Certificatio			
2303 Warren, Matthew J	11	02/22/17	Completed
EnvSpec Cert. Environmental Specialist			
2121 Tunnell, Matt R	8	10/13/21	Completed
EO Equipment Operator Permit			
1370 McElhaney, Ronald G	7	01/27/17	Completed
FallProt Competent Person Fall Protect			
1370 McElhaney, Ronald G	8	02/13/17	Completed
FL Forklift Training			
210 Bigford Jr., Guy L	1	07/30/07	Completed
210 Bigford Jr., Guy L	2	07/01/10	Completed
210 Bigford Jr., Guy L	5	06/06/12	Completed
210 Bigford Jr., Guy L	6	06/25/12	Completed
210 Bigford Jr., Guy L	9	07/09/15	Completed
210 Bigford Jr., Guy L	15	07/09/18	Completed
210 Bigford Jr., Guy L	18	07/09/21	Completed
312 Clark, Dale E	4	07/30/07	Completed
312 Clark, Dale E	8	07/01/10	Completed
312 Clark, Dale E	14	06/06/12	Completed
312 Clark, Dale E	15	06/25/12	Completed
312 Clark, Dale E	22	07/09/15	Completed
312 Clark, Dale E	29	07/09/18	Completed
312 Clark, Dale E	33	07/09/21	Completed
318 Cornwell, Jack L	1	09/24/08	Completed
318 Cornwell, Jack L	5	06/06/12	Completed
411 Deemer, Bryon C	1	07/02/14	Completed
411 Deemer, Bryon C	2	07/01/14	Completed
411 Deemer, Bryon C	6	07/09/15	Completed
411 Deemer, Bryon C	16	07/09/18	Completed
411 Deemer, Bryon C	19	07/09/21	Completed
430 David, Dalton S	2	01/31/20	Completed
601 Fergus, Jeremy D	5	06/06/12	Completed
819 Hughes, Donavon D	1	09/24/08	Completed
819 Hughes, Donavon D	12	06/06/12	Completed
820 Hughes, Patrick L	1	09/24/08	Completed
820 Hughes, Patrick L	7	06/06/12	Completed
1206 Lindow, Michael W	1	07/30/07	Completed
1206 Lindow, Michael W	2	06/06/12	Completed
1206 Lindow, Michael W	3	06/25/12	Completed
1206 Lindow, Michael W	6	07/09/15	Completed
1206 Lindow, Michael W	12	07/09/18	Completed
1206 Lindow, Michael W	14	07/09/21	Completed

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Resource	Seq	Date	Status
FL Forklift Training - Continued			
1315 Melvin, Cornie	3	07/30/07	Completed
1315 Melvin, Cornie	5	07/01/10	Completed
1315 Melvin, Cornie	10	06/06/12	Completed
1315 Melvin, Cornie	11	06/25/12	Completed
1315 Melvin, Cornie	18	07/09/15	Completed
1315 Melvin, Cornie	26	07/09/18	Completed
1316 Melvin, Steve M	1	09/24/08	Completed
1316 Melvin, Steve M	6	06/06/12	Completed
1318 Meyers, Jerrold M	1	09/24/08	Completed
1318 Meyers, Jerrold M	4	06/06/12	Completed
1352 MacKenzie, Thomas A	1	06/06/12	Completed
1352 MacKenzie, Thomas A	2	06/25/12	Completed
1503 Otto, Cameron W	2	09/24/08	Completed
1503 Otto, Cameron W	10	06/06/12	Completed
1503 Otto, Cameron W	18	12/03/15	Completed
1610 Pilar Renteria, Luis E	4	07/06/15	Completed
1610 Pilar Renteria, Luis E	15	03/22/19	Completed
1628 Purvis, Carl E	2	08/02/11	Completed
1628 Purvis, Carl E	5	06/06/12	Completed
1803 Rickman, Charles R	1	09/24/08	Completed
1803 Rickman, Charles R	9	06/06/12	Completed
2116 Torres, Alvaro	1	07/06/15	Completed
2123 Tinkey, Russell D	1	07/09/21	Completed
2601 Zemla, William D	4	07/09/18	Completed
2601 Zemla, William D	7	07/09/21	Completed
Flag Flagger Certification			
221 Bailey, Micah	15	08/15/18	Completed
226 Bivins, Zachary T	5	08/23/18	Completed
322 Curby, Russell J	29	06/15/18	Completed
601 Fergus, Jeremy D	26	08/15/18	Completed
724 Guevara, Juan M	3	08/15/18	Completed
813 Hildenbrand, Thomas F	9	08/15/18	Completed
1101 Kempfer, Daryl B	13	08/15/18	Completed
1112 Kipke, Duston C	3	08/15/18	Completed
1328 Meingasner, Roger E	6	08/15/18	Completed
1352 MacKenzie, Thomas A	13	08/15/18	Completed
1370 McElhaney, Ronald G	5	05/21/18	Completed
1382 Maddox, Collin J	1	09/17/20	Completed
1613 Platte, James M	11	08/15/18	Completed
1940 Smith, Brian J	10	08/15/18	Completed
FlatFin Flatwork Finisher Cert			
700 Garcia, Felipe	4	03/02/17	Completed
1604 Phillips, Mark V	10	03/02/17	Completed
1610 Pilar Renteria, Luis E	8	03/02/17	Completed
HAZW OSHA Hazwoper 40-Hour			
100 Abfalter, David M	17		Completed
106 Andries, Roman A	10		Completed
221 Bailey, Micah	1	07/15/12	Completed
247 Babcock, Mitchel A	1	09/24/21	Completed
250 Bradley, Michael G	1	01/26/17	Completed
318 Cornwell, Jack L	13	09/24/21	Completed
322 Curby, Russell J	9	05/26/11	Completed

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Resource	Seq	Date	Status
HAZW OSHA Hazwoper 40-Hour			
- Continued			
430 David, Dalton S	3		Completed
501 Emmons Jr, Phillips C	19		Completed
502 Emmons III, Phillips C	11	07/16/04	Completed
601 Fergus, Jeremy D	3	05/26/11	Completed
602 Ferguson, Kevin E	5		Completed
603 Fiasky, Matthew W	10	05/26/11	Completed
715 Glass, Willie	1	05/26/11	Completed
814 Horstman, Eric L	13	04/05/12	Completed
819 Hughes, Donavon D	7	11/08/11	Completed
820 Hughes, Patrick L	5	11/08/11	Completed
827 Hallenbeck, Mitch L	1	05/26/11	Completed
1001 Jasman, Horace E	2	05/26/11	Completed
1011 Jaquette, David M	1	03/12/19	Completed
1106 Krepis, David C	16		Completed
1113 Keip, Brian J	2	05/26/11	Completed
1221 Lowe, Eric D	1	09/24/21	Completed
1301 MacKenzie, Stephanie L	11		Completed
1302 MacKenzie, Thomas E	20		Completed
1316 Melvin, Steve M	17	09/24/21	Completed
1352 MacKenzie, Thomas A	16	03/28/19	Completed
1355 McPhee, Sean M	22	09/24/21	Completed
1358 McTaggart, Isaac D	1	09/01/14	Completed
1370 McElhaney, Ronald G	1	08/17/15	Completed
1503 Otto, Cameron W	8	11/08/11	Completed
1615 Puskala, Benjamin J	1	05/14/08	Completed
1626 Pierson, Brian L	13		Completed
1803 Rickman, Charles R	5	11/08/11	Completed
1827 Ridner, Taran R	4	09/24/21	Completed
1903 Sherrell, Ronald E	10		Completed
1920 Swaynie, Don A	11	01/01/91	Completed
1966 Smith, Michael J	1		Completed
2005 Toews, Kirk D	7	03/07/92	Completed
2010 Townsend, Jeremy W	2	05/26/11	Completed
2121 Tunnell, Matt R	1	05/08/19	Completed
HazWaste HazardousWaste OnSite Training			
2121 Tunnell, Matt R	2	01/06/20	Completed
HAZWRef OSHA Hazwoper Refresher			
100 Abfalter, David M	2	03/14/08	Completed
100 Abfalter, David M	9	03/20/09	Completed
100 Abfalter, David M	10	03/19/10	Completed
100 Abfalter, David M	13	02/04/11	Completed
100 Abfalter, David M	16	03/16/12	Completed
100 Abfalter, David M	19	02/01/13	Completed
100 Abfalter, David M	23	02/07/14	Completed
100 Abfalter, David M	24	02/06/15	Completed
100 Abfalter, David M	32	02/05/16	Completed
100 Abfalter, David M	37	02/03/17	Completed
100 Abfalter, David M	41	03/16/18	Completed
100 Abfalter, David M	46	03/15/19	Completed
100 Abfalter, David M	50	03/13/20	Completed
106 Andries, Roman A	1	03/14/08	Completed
106 Andries, Roman A	4	03/20/09	Completed
106 Andries, Roman A	5	03/19/10	Completed

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Resource	Seq	Date	Status
HAZWRef OSHA Hazwoper Refresher			- Continued
106 Andries, Roman A	7	02/04/11	Completed
106 Andries, Roman A	9	03/16/12	Completed
106 Andries, Roman A	11	02/01/13	Completed
106 Andries, Roman A	13	02/07/14	Completed
106 Andries, Roman A	14	02/06/15	Completed
106 Andries, Roman A	16	02/05/16	Completed
106 Andries, Roman A	18	02/03/17	Completed
106 Andries, Roman A	22	03/16/18	Completed
106 Andries, Roman A	25	03/15/19	Completed
221 Bailey, Micah	2	02/01/13	Completed
221 Bailey, Micah	4	02/07/14	Completed
221 Bailey, Micah	6	02/06/15	Completed
221 Bailey, Micah	9	02/03/17	Completed
221 Bailey, Micah	12	03/16/18	Completed
221 Bailey, Micah	16	03/15/19	Completed
322 Curby, Russell J	10	03/16/12	Completed
322 Curby, Russell J	11	02/01/13	Completed
322 Curby, Russell J	14	02/07/14	Completed
322 Curby, Russell J	16	02/06/15	Completed
322 Curby, Russell J	19	02/05/16	Completed
322 Curby, Russell J	25	03/16/18	Completed
322 Curby, Russell J	30	03/15/19	Completed
322 Curby, Russell J	33	03/13/20	Completed
430 David, Dalton S	4	01/27/20	Completed
430 David, Dalton S	5	02/19/21	Completed
501 Emmons Jr, Phillips C	1	03/14/08	Completed
501 Emmons Jr, Phillips C	9	03/20/09	Completed
501 Emmons Jr, Phillips C	10	03/19/10	Completed
501 Emmons Jr, Phillips C	13	02/04/11	Completed
501 Emmons Jr, Phillips C	18	03/16/12	Completed
501 Emmons Jr, Phillips C	20	02/01/13	Completed
501 Emmons Jr, Phillips C	22	02/07/14	Completed
501 Emmons Jr, Phillips C	24	02/06/15	Completed
501 Emmons Jr, Phillips C	29	02/05/16	Completed
501 Emmons Jr, Phillips C	45	03/15/19	Completed
501 Emmons Jr, Phillips C	49	03/13/20	Completed
502 Emmons III, Phillips C	1	03/14/08	Completed
502 Emmons III, Phillips C	5	03/20/09	Completed
502 Emmons III, Phillips C	6	03/19/10	Completed
502 Emmons III, Phillips C	7	02/04/11	Completed
502 Emmons III, Phillips C	10	03/16/12	Completed
502 Emmons III, Phillips C	12	02/01/13	Completed
502 Emmons III, Phillips C	15	02/07/14	Completed
502 Emmons III, Phillips C	17	02/06/15	Completed
502 Emmons III, Phillips C	28	02/05/16	Completed
502 Emmons III, Phillips C	36	02/03/17	Completed
502 Emmons III, Phillips C	39	03/16/18	Completed
502 Emmons III, Phillips C	45	03/15/19	Completed
502 Emmons III, Phillips C	49	03/13/20	Completed
601 Fergus, Jeremy D	4	03/16/12	Completed
601 Fergus, Jeremy D	6	02/01/13	Completed
601 Fergus, Jeremy D	8	02/07/14	Completed
601 Fergus, Jeremy D	11	02/06/15	Completed

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Resource	Seq	Date	Status
HAZWRef OSHA Hazwoper Refresher			- Continued
601 Fergus, Jeremy D	16	02/05/16	Completed
601 Fergus, Jeremy D	19	02/03/17	Completed
601 Fergus, Jeremy D	22	03/16/18	Completed
601 Fergus, Jeremy D	28	03/15/19	Completed
601 Fergus, Jeremy D	32	03/13/20	Completed
602 Ferguson, Kevin E	4	05/23/19	Completed
602 Ferguson, Kevin E	8	03/13/20	Completed
602 Ferguson, Kevin E	11	09/25/21	Completed
603 Fiasky, Matthew W	13	03/16/12	Completed
603 Fiasky, Matthew W	14	02/01/13	Completed
603 Fiasky, Matthew W	19	02/06/15	Completed
603 Fiasky, Matthew W	28	03/16/18	Completed
603 Fiasky, Matthew W	32	03/15/19	Completed
603 Fiasky, Matthew W	36	03/13/20	Completed
715 Glass, Willie	2	03/16/12	Completed
715 Glass, Willie	3	02/01/13	Completed
715 Glass, Willie	5	02/07/14	Completed
715 Glass, Willie	6	02/06/15	Completed
715 Glass, Willie	9	02/05/16	Completed
715 Glass, Willie	12	02/03/17	Completed
715 Glass, Willie	16	03/16/18	Completed
715 Glass, Willie	21	03/15/19	Completed
715 Glass, Willie	25	03/13/20	Completed
814 Horstman, Eric L	15	02/01/13	Completed
814 Horstman, Eric L	19	02/07/14	Completed
814 Horstman, Eric L	21	02/06/15	Completed
814 Horstman, Eric L	25	02/05/16	Completed
814 Horstman, Eric L	30	02/03/17	Completed
814 Horstman, Eric L	35	03/16/18	Completed
814 Horstman, Eric L	40	03/15/19	Completed
814 Horstman, Eric L	44	03/13/20	Completed
819 Hughes, Donavon D	13	02/01/13	Completed
819 Hughes, Donavon D	16	02/07/14	Completed
819 Hughes, Donavon D	18	02/06/15	Completed
819 Hughes, Donavon D	25	02/05/16	Completed
819 Hughes, Donavon D	29	02/03/17	Completed
819 Hughes, Donavon D	33	03/16/18	Completed
819 Hughes, Donavon D	40	03/15/19	Completed
819 Hughes, Donavon D	43	03/13/20	Completed
819 Hughes, Donavon D	46	09/25/21	Completed
820 Hughes, Patrick L	8	02/01/13	Completed
820 Hughes, Patrick L	10	02/07/14	Completed
820 Hughes, Patrick L	11	02/06/15	Completed
820 Hughes, Patrick L	16	02/05/16	Completed
820 Hughes, Patrick L	18	02/03/17	Completed
820 Hughes, Patrick L	22	03/16/18	Completed
820 Hughes, Patrick L	29	03/15/19	Completed
820 Hughes, Patrick L	33	03/13/20	Completed
820 Hughes, Patrick L	37	09/25/21	Completed
827 Hallenbeck, Mitch L	2	03/16/12	Completed
827 Hallenbeck, Mitch L	3	02/01/13	Completed
827 Hallenbeck, Mitch L	5	02/07/14	Completed
827 Hallenbeck, Mitch L	7	02/06/15	Completed

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Resource	Seq	Date	Status
HAZWRef OSHA Hazwoper Refresher			- Continued
827 Hallenbeck, Mitch L	12	03/16/18	Completed
827 Hallenbeck, Mitch L	14	03/15/19	Completed
1001 Jasman, Horace E	4	03/16/12	Completed
1001 Jasman, Horace E	5	02/01/13	Completed
1001 Jasman, Horace E	7	02/07/14	Completed
1001 Jasman, Horace E	11	02/06/15	Completed
1001 Jasman, Horace E	15	02/05/16	Completed
1001 Jasman, Horace E	23	02/03/17	Completed
1001 Jasman, Horace E	28	03/16/18	Completed
1001 Jasman, Horace E	33	03/15/19	Completed
1001 Jasman, Horace E	38	03/13/20	Completed
1011 Jaquette, David M	2	03/15/19	Completed
1011 Jaquette, David M	5	03/13/20	Completed
1106 Kreps, David C	1	03/14/08	Completed
1106 Kreps, David C	7	03/20/09	Completed
1106 Kreps, David C	8	03/19/10	Completed
1106 Kreps, David C	10	02/04/11	Completed
1106 Kreps, David C	15	03/16/12	Completed
1106 Kreps, David C	17	02/01/13	Completed
1106 Kreps, David C	20	02/07/14	Completed
1106 Kreps, David C	23	02/06/15	Completed
1106 Kreps, David C	26	02/05/16	Completed
1106 Kreps, David C	31	02/03/17	Completed
1106 Kreps, David C	35	03/16/18	Completed
1106 Kreps, David C	38	03/15/19	Completed
1106 Kreps, David C	41	03/13/20	Completed
1113 Keip, Brian J	4	03/16/12	Completed
1113 Keip, Brian J	5	02/01/13	Completed
1113 Keip, Brian J	8	02/07/14	Completed
1113 Keip, Brian J	9	02/06/15	Completed
1113 Keip, Brian J	12	02/05/16	Completed
1113 Keip, Brian J	16	02/03/17	Completed
1113 Keip, Brian J	21	03/16/18	Completed
1113 Keip, Brian J	25	03/15/19	Completed
1113 Keip, Brian J	28	03/13/20	Completed
1301 MacKenzie, Stephanie L	3	04/18/08	Completed
1301 MacKenzie, Stephanie L	8	03/20/09	Completed
1301 MacKenzie, Stephanie L	9	03/19/10	Completed
1301 MacKenzie, Stephanie L	10	03/16/12	Completed
1301 MacKenzie, Stephanie L	12	02/01/13	Completed
1301 MacKenzie, Stephanie L	14	02/07/14	Completed
1301 MacKenzie, Stephanie L	15	02/06/15	Completed
1301 MacKenzie, Stephanie L	18	02/03/17	Completed
1301 MacKenzie, Stephanie L	21	03/16/18	Completed
1301 MacKenzie, Stephanie L	23	03/15/19	Completed
1301 MacKenzie, Stephanie L	26	03/13/20	Completed
1302 MacKenzie, Thomas E	10	03/20/09	Completed
1302 MacKenzie, Thomas E	11	03/19/10	Completed
1302 MacKenzie, Thomas E	15	05/26/11	Completed
1302 MacKenzie, Thomas E	19	03/16/12	Completed
1302 MacKenzie, Thomas E	22	02/01/13	Completed
1302 MacKenzie, Thomas E	26	02/07/14	Completed
1302 MacKenzie, Thomas E	27	02/06/15	Completed

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Resource	Seq	Date	Status
HAZWRef OSHA Hazwoper Refresher			- Continued
1302 MacKenzie, Thomas E	42	03/15/19	Completed
1302 MacKenzie, Thomas E	46	03/13/20	Completed
1352 MacKenzie, Thomas A	18	03/13/20	Completed
1358 McTaggart, Isaac D	4	02/06/15	Completed
1358 McTaggart, Isaac D	8	02/05/16	Completed
1370 McElhaney, Ronald G	18	03/15/19	Completed
1370 McElhaney, Ronald G	26	03/13/20	Completed
1503 Otto, Cameron W	11	02/01/13	Completed
1503 Otto, Cameron W	13	02/07/14	Completed
1503 Otto, Cameron W	20	02/05/16	Completed
1503 Otto, Cameron W	22	02/03/17	Completed
1503 Otto, Cameron W	25	03/16/18	Completed
1503 Otto, Cameron W	31	03/15/19	Completed
1503 Otto, Cameron W	34	03/13/20	Completed
1503 Otto, Cameron W	37	09/25/21	Completed
1615 Puskala, Benjamin J	3	07/30/09	Completed
1615 Puskala, Benjamin J	4	03/19/10	Completed
1615 Puskala, Benjamin J	6	05/25/11	Completed
1615 Puskala, Benjamin J	7	03/16/12	Completed
1615 Puskala, Benjamin J	8	02/01/13	Completed
1615 Puskala, Benjamin J	10	02/07/14	Completed
1615 Puskala, Benjamin J	11	02/06/15	Completed
1615 Puskala, Benjamin J	14	02/05/16	Completed
1615 Puskala, Benjamin J	16	02/03/17	Completed
1615 Puskala, Benjamin J	19	03/16/18	Completed
1615 Puskala, Benjamin J	22	03/15/19	Completed
1615 Puskala, Benjamin J	25	03/13/20	Completed
1615 Puskala, Benjamin J	27	09/25/21	Completed
1626 Pierson, Brian L	12	05/23/19	Completed
1626 Pierson, Brian L	16	03/13/20	Completed
1626 Pierson, Brian L	20	09/25/21	Completed
1803 Rickman, Charles R	10	02/01/13	Completed
1803 Rickman, Charles R	14	02/07/14	Completed
1803 Rickman, Charles R	15	02/06/15	Completed
1803 Rickman, Charles R	20	02/05/16	Completed
1803 Rickman, Charles R	24	02/03/17	Completed
1803 Rickman, Charles R	27	03/16/18	Completed
1803 Rickman, Charles R	33	03/15/19	Completed
1803 Rickman, Charles R	36	03/13/20	Completed
1803 Rickman, Charles R	39	09/25/21	Completed
1903 Sherrell, Ronald E	1	03/14/08	Completed
1903 Sherrell, Ronald E	5	03/20/09	Completed
1903 Sherrell, Ronald E	6	03/19/10	Completed
1903 Sherrell, Ronald E	7	02/04/11	Completed
1903 Sherrell, Ronald E	9	03/16/12	Completed
1903 Sherrell, Ronald E	11	02/01/13	Completed
1903 Sherrell, Ronald E	13	02/07/14	Completed
1903 Sherrell, Ronald E	14	02/06/15	Completed
1903 Sherrell, Ronald E	17	02/05/16	Completed
1903 Sherrell, Ronald E	21	02/03/17	Completed
1903 Sherrell, Ronald E	24	03/16/18	Completed
1903 Sherrell, Ronald E	28	03/15/19	Completed
1903 Sherrell, Ronald E	31	03/13/20	Completed

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Resource	Seq	Date	Status
HAZWRef OSHA Hazwoper Refresher			
- Continued			
1920 Swaynie, Don A	1	03/14/08	Completed
1920 Swaynie, Don A	5	03/20/09	Completed
1920 Swaynie, Don A	6	03/19/10	Completed
1920 Swaynie, Don A	7	02/04/11	Completed
1920 Swaynie, Don A	10	03/16/12	Completed
1920 Swaynie, Don A	12	02/01/13	Completed
1920 Swaynie, Don A	14	02/07/14	Completed
1920 Swaynie, Don A	16	02/06/15	Completed
1920 Swaynie, Don A	19	02/05/16	Completed
1920 Swaynie, Don A	23	02/03/17	Completed
1920 Swaynie, Don A	26	03/16/18	Completed
1920 Swaynie, Don A	30	03/15/19	Completed
1920 Swaynie, Don A	33	03/13/20	Completed
2005 Toews, Kirk D	4	02/04/11	Completed
2005 Toews, Kirk D	6	03/16/12	Completed
2005 Toews, Kirk D	8	02/01/13	Completed
2005 Toews, Kirk D	10	02/07/14	Completed
2005 Toews, Kirk D	12	02/06/15	Completed
2005 Toews, Kirk D	16	02/05/16	Completed
2005 Toews, Kirk D	23	03/16/18	Completed
2005 Toews, Kirk D	27	03/15/19	Completed
2005 Toews, Kirk D	30	03/13/20	Completed
2005 Toews, Kirk D	33	09/25/21	Completed
2010 Townsend, Jeremy W	4	03/16/12	Completed
2010 Townsend, Jeremy W	5	02/01/13	Completed
2010 Townsend, Jeremy W	8	02/07/14	Completed
2010 Townsend, Jeremy W	13	02/06/15	Completed
2010 Townsend, Jeremy W	17	02/05/16	Completed
2010 Townsend, Jeremy W	25	03/16/18	Completed
2010 Townsend, Jeremy W	32	03/15/19	Completed
2010 Townsend, Jeremy W	37	03/13/20	Completed
2010 Townsend, Jeremy W	41	09/25/21	Completed
2121 Tunnell, Matt R	3	03/13/20	Completed
2121 Tunnell, Matt R	6	09/25/21	Completed
HAZWSup Hazwoper Site Supervisor Refr			
501 Emmons Jr, Phillips C	25	02/06/15	Completed
501 Emmons Jr, Phillips C	35	02/03/17	Completed
501 Emmons Jr, Phillips C	37	03/16/18	Completed
501 Emmons Jr, Phillips C	44	03/15/19	Completed
501 Emmons Jr, Phillips C	50	03/13/20	Completed
501 Emmons Jr, Phillips C	54	09/25/21	Completed
1370 McElhaney, Ronald G	2	10/22/15	Completed
1370 McElhaney, Ronald G	19	03/15/19	Completed
1370 McElhaney, Ronald G	27	03/13/20	Completed
1370 McElhaney, Ronald G	30	09/25/21	Completed
HumanFac Human Factors Engineering			
1370 McElhaney, Ronald G	11	10/27/14	Completed
LAAT Lead & Asbestos Awareness			
501 Emmons Jr, Phillips C	23	04/17/14	Completed
502 Emmons III, Phillips C	16	04/17/14	Completed
601 Fergus, Jeremy D	9	04/17/14	Completed
812 Hilborn, James S	11	04/17/14	Completed

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Resource	Seq	Date	Status
LAAT Lead & Asbestos Awareness			
- Continued			
814 Horstman, Eric L	20	04/17/14	Completed
827 Hallenbeck, Mitch L	6	04/17/14	Completed
1001 Jasman, Horace E	8	04/17/14	Completed
1106 Kreps, David C	21	04/17/14	Completed
1313 Medina, Gerardo	3	04/17/14	Completed
1503 Otto, Cameron W	14	04/17/14	Completed
1508 Olney, James A	2	04/17/14	Completed
1920 Swaynie, Don A	15	04/17/14	Completed
2010 Townsend, Jeremy W	9	04/17/14	Completed
2303 Warren, Matthew J	4	04/17/14	Completed
LCC Lead, Cadmium, Chromium			
100 Abfalter, David M	25	02/06/15	Completed
100 Abfalter, David M	33	02/05/16	Completed
100 Abfalter, David M	38	02/03/17	Completed
100 Abfalter, David M	42	03/16/18	Completed
100 Abfalter, David M	49	03/15/19	Completed
100 Abfalter, David M	51	03/13/20	Completed
106 Andries, Roman A	15	02/06/15	Completed
106 Andries, Roman A	17	02/05/16	Completed
106 Andries, Roman A	19	02/03/17	Completed
106 Andries, Roman A	23	03/16/18	Completed
106 Andries, Roman A	27	03/15/19	Completed
221 Bailey, Micah	7	02/06/15	Completed
221 Bailey, Micah	10	02/03/17	Completed
221 Bailey, Micah	13	03/16/18	Completed
221 Bailey, Micah	17	03/15/19	Completed
322 Curby, Russell J	17	02/06/15	Completed
322 Curby, Russell J	20	02/05/16	Completed
322 Curby, Russell J	23	02/03/17	Completed
322 Curby, Russell J	26	03/16/18	Completed
322 Curby, Russell J	32	03/15/19	Completed
322 Curby, Russell J	34	03/13/20	Completed
501 Emmons Jr, Phillips C	26	02/06/15	Completed
501 Emmons Jr, Phillips C	30	02/05/16	Completed
501 Emmons Jr, Phillips C	36	02/03/17	Completed
501 Emmons Jr, Phillips C	38	03/16/18	Completed
501 Emmons Jr, Phillips C	47	03/15/19	Completed
501 Emmons Jr, Phillips C	51	03/13/20	Completed
501 Emmons Jr, Phillips C	55	09/25/21	Completed
502 Emmons III, Phillips C	18	02/06/15	Completed
502 Emmons III, Phillips C	29	02/05/16	Completed
502 Emmons III, Phillips C	37	02/03/17	Completed
502 Emmons III, Phillips C	40	03/16/18	Completed
502 Emmons III, Phillips C	47	03/15/19	Completed
502 Emmons III, Phillips C	50	03/13/20	Completed
601 Fergus, Jeremy D	17	02/05/16	Completed
601 Fergus, Jeremy D	20	02/03/17	Completed
601 Fergus, Jeremy D	23	03/16/18	Completed
601 Fergus, Jeremy D	31	03/15/19	Completed
601 Fergus, Jeremy D	33	03/13/20	Completed
602 Ferguson, Kevin E	9	03/13/20	Completed
602 Ferguson, Kevin E	12	09/25/21	Completed
603 Fiasky, Matthew W	18	01/30/15	Completed

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Resource	Seq	Date	Status
LCC Lead, Cadmium, Chromium			- Continued
603 Fiasky, Matthew W	20	02/06/15	Completed
603 Fiasky, Matthew W	29	03/16/18	Completed
603 Fiasky, Matthew W	35	03/15/19	Completed
603 Fiasky, Matthew W	37	03/13/20	Completed
715 Glass, Willie	7	02/06/15	Completed
715 Glass, Willie	10	02/05/16	Completed
715 Glass, Willie	13	02/03/17	Completed
715 Glass, Willie	17	03/16/18	Completed
715 Glass, Willie	23	03/15/19	Completed
715 Glass, Willie	26	03/13/20	Completed
814 Horstman, Eric L	22	02/06/15	Completed
814 Horstman, Eric L	26	02/05/16	Completed
814 Horstman, Eric L	31	02/03/17	Completed
814 Horstman, Eric L	36	03/16/18	Completed
814 Horstman, Eric L	43	03/15/19	Completed
814 Horstman, Eric L	45	03/13/20	Completed
819 Hughes, Donavon D	19	02/06/15	Completed
819 Hughes, Donavon D	26	02/05/16	Completed
819 Hughes, Donavon D	30	02/03/17	Completed
819 Hughes, Donavon D	34	03/16/18	Completed
819 Hughes, Donavon D	42	03/15/19	Completed
819 Hughes, Donavon D	44	03/13/20	Completed
819 Hughes, Donavon D	47	09/25/21	Completed
820 Hughes, Patrick L	12	02/06/15	Completed
820 Hughes, Patrick L	17	02/05/16	Completed
820 Hughes, Patrick L	19	02/03/17	Completed
820 Hughes, Patrick L	23	03/16/18	Completed
820 Hughes, Patrick L	32	03/15/19	Completed
820 Hughes, Patrick L	34	03/13/20	Completed
820 Hughes, Patrick L	38	09/25/21	Completed
827 Hallenbeck, Mitch L	13	03/16/18	Completed
827 Hallenbeck, Mitch L	15	03/15/19	Completed
1001 Jasman, Horace E	10	01/30/15	Completed
1001 Jasman, Horace E	12	02/06/15	Completed
1001 Jasman, Horace E	16	02/05/16	Completed
1001 Jasman, Horace E	24	02/03/17	Completed
1001 Jasman, Horace E	29	03/16/18	Completed
1001 Jasman, Horace E	36	03/15/19	Completed
1001 Jasman, Horace E	39	03/13/20	Completed
1011 Jaquette, David M	4	03/15/19	Completed
1011 Jaquette, David M	6	03/13/20	Completed
1106 Kreps, David C	24	02/06/15	Completed
1106 Kreps, David C	27	02/05/16	Completed
1106 Kreps, David C	32	02/03/17	Completed
1106 Kreps, David C	36	03/16/18	Completed
1106 Kreps, David C	40	03/15/19	Completed
1106 Kreps, David C	42	03/13/20	Completed
1113 Keip, Brian J	10	02/06/15	Completed
1113 Keip, Brian J	13	02/05/16	Completed
1113 Keip, Brian J	17	02/03/17	Completed
1113 Keip, Brian J	22	03/16/18	Completed
1113 Keip, Brian J	27	03/15/19	Completed
1113 Keip, Brian J	29	03/13/20	Completed

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Resource	Seq	Date	Status
LCC Lead, Cadmium, Chromium			- Continued
1301 MacKenzie, Stephanie L	16	02/06/15	Completed
1301 MacKenzie, Stephanie L	19	02/03/17	Completed
1301 MacKenzie, Stephanie L	22	03/16/18	Completed
1301 MacKenzie, Stephanie L	25	03/15/19	Completed
1301 MacKenzie, Stephanie L	27	03/13/20	Completed
1302 MacKenzie, Thomas E	45	03/15/19	Completed
1302 MacKenzie, Thomas E	47	03/13/20	Completed
1352 MacKenzie, Thomas A	19	03/13/20	Completed
1358 McTaggart, Isaac D	3	01/30/15	Completed
1358 McTaggart, Isaac D	5	02/06/15	Completed
1358 McTaggart, Isaac D	9	02/05/16	Completed
1370 McElhaney, Ronald G	23	03/15/19	Completed
1370 McElhaney, Ronald G	28	03/13/20	Completed
1370 McElhaney, Ronald G	31	09/25/21	Completed
1503 Otto, Cameron W	21	02/05/16	Completed
1503 Otto, Cameron W	23	02/03/17	Completed
1503 Otto, Cameron W	26	03/16/18	Completed
1503 Otto, Cameron W	33	03/15/19	Completed
1503 Otto, Cameron W	35	03/13/20	Completed
1503 Otto, Cameron W	38	09/25/21	Completed
1615 Puskala, Benjamin J	12	02/06/15	Completed
1615 Puskala, Benjamin J	15	02/05/16	Completed
1615 Puskala, Benjamin J	17	02/03/17	Completed
1615 Puskala, Benjamin J	20	03/16/18	Completed
1615 Puskala, Benjamin J	24	03/15/19	Completed
1615 Puskala, Benjamin J	26	03/13/20	Completed
1615 Puskala, Benjamin J	28	09/25/21	Completed
1626 Pierson, Brian L	17	03/13/20	Completed
1626 Pierson, Brian L	21	09/25/21	Completed
1803 Rickman, Charles R	16	02/06/15	Completed
1803 Rickman, Charles R	21	02/05/16	Completed
1803 Rickman, Charles R	25	02/03/17	Completed
1803 Rickman, Charles R	28	03/16/18	Completed
1803 Rickman, Charles R	35	03/15/19	Completed
1803 Rickman, Charles R	37	03/13/20	Completed
1803 Rickman, Charles R	40	09/25/21	Completed
1903 Sherrell, Ronald E	15	02/06/15	Completed
1903 Sherrell, Ronald E	18	02/05/16	Completed
1903 Sherrell, Ronald E	22	02/03/17	Completed
1903 Sherrell, Ronald E	25	03/16/18	Completed
1903 Sherrell, Ronald E	30	03/15/19	Completed
1903 Sherrell, Ronald E	32	03/13/20	Completed
1920 Swaynie, Don A	17	02/06/15	Completed
1920 Swaynie, Don A	20	02/05/16	Completed
1920 Swaynie, Don A	24	02/03/17	Completed
1920 Swaynie, Don A	27	03/16/18	Completed
1920 Swaynie, Don A	32	03/15/19	Completed
1920 Swaynie, Don A	34	03/13/20	Completed
2005 Toews, Kirk D	13	02/06/15	Completed
2005 Toews, Kirk D	17	02/05/16	Completed
2005 Toews, Kirk D	24	03/16/18	Completed
2005 Toews, Kirk D	29	03/15/19	Completed
2005 Toews, Kirk D	31	03/13/20	Completed

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All Training Codes

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All Training Dates

Resource	Seq	Date	Status
LCC Lead, Cadmium, Chromium - Continued			
2005 Toews, Kirk D	34	09/25/21	Completed
2010 Townsend, Jeremy W	12	01/30/15	Completed
2010 Townsend, Jeremy W	14	02/06/15	Completed
2010 Townsend, Jeremy W	18	02/05/16	Completed
2010 Townsend, Jeremy W	26	03/16/18	Completed
2010 Townsend, Jeremy W	35	03/15/19	Completed
2010 Townsend, Jeremy W	38	03/13/20	Completed
2121 Tunnell, Matt R	4	03/13/20	Completed
2121 Tunnell, Matt R	7	09/25/21	Completed
LCHA Lead and Cadmium Hazard Awaren			
501 Emmons Jr, Phillips C	15	06/17/11	Completed
MACS Mobile AirCond Soc Certificate			
411 Deemer, Bryon C	9	09/12/16	Completed
MasonryWal Masonry Wall Bracing			
2005 Toews, Kirk D	15	06/15/15	Completed
2303 Warren, Matthew J	6	06/15/15	Completed
2326 Warren, Forest G	2	06/15/15	Completed
MDig Miss Dig 811			
1370 McElhaneey, Ronald G	24	06/21/19	Completed
MDOpQual OQ207 Medium Diameter Op Qual			
2303 Warren, Matthew J	14	03/22/17	Completed
Mine Mine Safety Training			
100 Abfalter, David M	3	04/19/08	Completed
100 Abfalter, David M	7	04/30/10	Completed
100 Abfalter, David M	18	01/30/13	Completed
100 Abfalter, David M	21	01/10/14	Completed
100 Abfalter, David M	27	03/27/15	Completed
100 Abfalter, David M	34	03/25/16	Completed
100 Abfalter, David M	40	04/28/17	Completed
100 Abfalter, David M	43	03/23/18	Completed
100 Abfalter, David M	47	03/22/19	Completed
100 Abfalter, David M	52	04/24/20	Completed
100 Abfalter, David M	54	03/26/21	Completed
312 Clark, Dale E	1	05/16/09	Completed
312 Clark, Dale E	2	04/19/08	Completed
312 Clark, Dale E	7	04/30/10	Completed
312 Clark, Dale E	11	05/07/11	Completed
312 Clark, Dale E	13	01/13/12	Completed
312 Clark, Dale E	16	01/30/13	Completed
312 Clark, Dale E	18	01/10/14	Completed
312 Clark, Dale E	21	03/27/15	Completed
312 Clark, Dale E	23	03/25/16	Completed
312 Clark, Dale E	27	04/28/17	Completed
312 Clark, Dale E	30	03/22/19	Completed
411 Deemer, Bryon C	3	07/24/14	Completed
411 Deemer, Bryon C	5	03/27/15	Completed
411 Deemer, Bryon C	7	03/25/16	Completed
411 Deemer, Bryon C	12	04/28/17	Completed
411 Deemer, Bryon C	14	03/23/18	Completed
411 Deemer, Bryon C	17	03/22/19	Completed
420 Dionise, Nicholas B	3	03/26/21	Completed

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Resource	Seq	Date	Status
Mine Mine Safety Training			- Continued
503 Everett, Gregory D	1	02/27/15	Completed
503 Everett, Gregory D	2	03/25/16	Completed
503 Everett, Gregory D	6	03/23/18	Completed
601 Fergus, Jeremy D	27	08/10/18	Completed
601 Fergus, Jeremy D	29	03/22/19	Completed
603 Fiasky, Matthew W	1	04/19/08	Completed
603 Fiasky, Matthew W	23	03/23/18	Completed
603 Fiasky, Matthew W	33	03/22/19	Completed
627 Foy, Nicholas J	1	03/23/18	Completed
627 Foy, Nicholas J	4	03/22/19	Completed
627 Foy, Nicholas J	6	04/24/20	Completed
711 Grummet, Ted J	1	05/16/09	Completed
711 Grummet, Ted J	4	04/30/10	Completed
711 Grummet, Ted J	6	05/07/11	Completed
711 Grummet, Ted J	11	03/25/16	Completed
711 Grummet, Ted J	15	04/28/17	Completed
711 Grummet, Ted J	17	03/23/18	Completed
711 Grummet, Ted J	20	03/22/19	Completed
802 Hampton, Matthew S	2	01/07/19	Completed
802 Hampton, Matthew S	3	03/22/19	Completed
814 Horstman, Eric L	1	05/16/09	Completed
814 Horstman, Eric L	6	04/30/10	Completed
814 Horstman, Eric L	10	05/07/11	Completed
814 Horstman, Eric L	12	01/13/12	Completed
814 Horstman, Eric L	14	01/30/13	Completed
814 Horstman, Eric L	17	01/10/14	Completed
814 Horstman, Eric L	24	03/27/15	Completed
814 Horstman, Eric L	27	03/25/16	Completed
814 Horstman, Eric L	33	04/28/17	Completed
814 Horstman, Eric L	37	03/23/18	Completed
814 Horstman, Eric L	41	03/22/19	Completed
820 Hughes, Patrick L	24	03/23/18	Completed
820 Hughes, Patrick L	30	03/22/19	Completed
828 Hein, Kenneth D	8	04/28/17	Completed
828 Hein, Kenneth D	11	03/23/18	Completed
828 Hein, Kenneth D	15	03/22/19	Completed
1001 Jasman, Horace E	18	03/25/16	Completed
1001 Jasman, Horace E	26	04/28/17	Completed
1001 Jasman, Horace E	34	03/22/19	Completed
1001 Jasman, Horace E	41	03/26/21	Completed
1216 Lehman, Jonah T	1	08/18/18	Completed
1216 Lehman, Jonah T	2	03/22/19	Completed
1302 MacKenzie, Thomas E	1	05/16/09	Completed
1302 MacKenzie, Thomas E	8	04/30/10	Completed
1302 MacKenzie, Thomas E	14	05/07/11	Completed
1302 MacKenzie, Thomas E	18	01/13/12	Completed
1302 MacKenzie, Thomas E	21	01/30/13	Completed
1302 MacKenzie, Thomas E	24	01/10/14	Completed
1302 MacKenzie, Thomas E	29	03/27/15	Completed
1302 MacKenzie, Thomas E	33	03/25/16	Completed
1302 MacKenzie, Thomas E	38	04/28/17	Completed
1302 MacKenzie, Thomas E	40	03/23/18	Completed
1302 MacKenzie, Thomas E	43	03/22/19	Completed

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Resource	Seq	Date	Status
Mine Mine Safety Training			- Continued
1302 MacKenzie, Thomas E	48	04/24/20	Completed
1302 MacKenzie, Thomas E	50	03/26/21	Completed
1304 Marks, Michael Scott	8	01/10/14	Completed
1304 Marks, Michael Scott	11	03/27/15	Completed
1304 Marks, Michael Scott	14	04/28/17	Completed
1312 McNamara, Dennis J	14	01/07/19	Completed
1312 McNamara, Dennis J	15	03/22/19	Completed
1315 Melvin, Cornie	1	05/16/09	Completed
1315 Melvin, Cornie	2	04/19/08	Completed
1315 Melvin, Cornie	4	04/30/10	Completed
1315 Melvin, Cornie	7	05/07/11	Completed
1315 Melvin, Cornie	9	01/13/12	Completed
1315 Melvin, Cornie	12	01/30/13	Completed
1315 Melvin, Cornie	14	01/10/14	Completed
1315 Melvin, Cornie	17	03/27/15	Completed
1315 Melvin, Cornie	19	03/25/16	Completed
1315 Melvin, Cornie	22	04/28/17	Completed
1315 Melvin, Cornie	23	03/23/18	Completed
1315 Melvin, Cornie	27	03/22/19	Completed
1352 MacKenzie, Thomas A	22	03/26/21	Completed
1355 McPhee, Sean M	1	05/12/14	Completed
1355 McPhee, Sean M	3	03/27/15	Completed
1355 McPhee, Sean M	8	03/25/16	Completed
1355 McPhee, Sean M	13	04/28/17	Completed
1355 McPhee, Sean M	14	03/23/18	Completed
1355 McPhee, Sean M	17	03/22/19	Completed
1355 McPhee, Sean M	19	04/24/20	Completed
1370 McElhaney, Ronald G	17	01/10/19	Completed
1370 McElhaney, Ronald G	20	03/22/19	Completed
1380 Mikula, Jason B	2	03/26/21	Completed
1401 Niemiec, John W	4	01/10/19	Completed
1401 Niemiec, John W	5	03/22/19	Completed
1408 Nighbert, Donald L	1	04/24/20	Completed
1408 Nighbert, Donald L	3	03/26/21	Completed
1610 Pilar Renteria, Luis E	14	01/07/19	Completed
1610 Pilar Renteria, Luis E	16	03/22/19	Completed
1626 Pierson, Brian L	4	03/27/15	Completed
1626 Pierson, Brian L	9	03/25/16	Completed
1628 Purvis, Carl E	15	03/22/19	Completed
1628 Purvis, Carl E	17	04/24/20	Completed
1628 Purvis, Carl E	18	03/26/21	Completed
1931 Stanaway, David R	6	03/26/21	Completed
1939 Schaible, Tyler G	4	03/25/16	Completed
1939 Schaible, Tyler G	7	03/23/18	Completed
1939 Schaible, Tyler G	9	03/22/19	Completed
1939 Schaible, Tyler G	11	04/24/20	Completed
1939 Schaible, Tyler G	12	03/26/21	Completed
2010 Townsend, Jeremy W	30	06/07/18	Completed
2010 Townsend, Jeremy W	33	03/22/19	Completed
2303 Warren, Matthew J	13	04/28/17	Completed
2303 Warren, Matthew J	15	03/23/18	Completed
2303 Warren, Matthew J	20	03/22/19	Completed
2326 Warren, Forest G	6	04/28/17	Completed

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All Training Codes

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All Training Dates

Resource	Seq	Date	Status
MIOSHA MIOSHA Training			
107 Argersinger, Charles F	3	09/01/05	Completed
318 Cornwell, Jack L	3	09/01/05	Completed
322 Curby, Russell J	3	09/01/05	Completed
501 Emmons Jr, Phillips C	4	09/01/05	Completed
502 Emmons III, Phillips C	2	09/01/05	Completed
601 Fergus, Jeremy D	1	09/01/05	Completed
603 Fiasky, Matthew W	4	09/01/05	Completed
812 Hilborn, James S	3	09/01/05	Completed
813 Hildenbrand, Thomas F	1	09/01/05	Completed
814 Horstman, Eric L	4	09/01/05	Completed
819 Hughes, Donavon D	4	09/01/05	Completed
820 Hughes, Patrick L	4	09/01/05	Completed
1106 Kreps, David C	12	02/24/98	Completed
1302 MacKenzie, Thomas E	4	09/01/05	Completed
1309 McLean, Jacob M	3	09/01/05	Completed
1312 McNamara, Dennis J	2	09/01/05	Completed
1316 Melvin, Steve M	3	09/01/05	Completed
1318 Meyers, Jerrold M	2	09/01/05	Completed
1356 Maurer, Chadwick E	4	12/18/08	Completed
1503 Otto, Cameron W	4	09/01/05	Completed
1608 Pilar, Gonzalo	1	09/01/05	Completed
1801 Raimer, Gary D	3	09/01/05	Completed
1803 Rickman, Charles R	3	09/01/05	Completed
2301 Ward, Matthew H	3	09/01/05	Completed
2303 Warren, Matthew J	1	09/01/05	Completed
2305 West, Patrick S	2	09/01/05	Completed
MSHA Cert Certificate of Training - MSHA			
100 Abfalter, David M	28	04/23/15	Completed
100 Abfalter, David M	29	04/28/15	Completed
100 Abfalter, David M	30	04/24/15	Completed
100 Abfalter, David M	31	04/27/15	Completed
1302 MacKenzie, Thomas E	30	04/23/15	Completed
1302 MacKenzie, Thomas E	31	04/28/15	Completed
1302 MacKenzie, Thomas E	32	04/24/15	Completed
1355 McPhee, Sean M	4	04/23/15	Completed
1355 McPhee, Sean M	5	04/24/15	Completed
1355 McPhee, Sean M	6	04/27/15	Completed
1355 McPhee, Sean M	7	04/28/15	Completed
1626 Pierson, Brian L	5	04/23/15	Completed
1626 Pierson, Brian L	6	04/24/15	Completed
1626 Pierson, Brian L	7	04/27/15	Completed
1626 Pierson, Brian L	8	04/28/15	Completed
NCCCO NCCCO Certified Crane Operator			
107 Argersinger, Charles F	7	01/31/12	Completed
1007 Julson, Tyler A	3	03/31/12	Completed
O10 OSHA 10-Hour			
107 Argersinger, Charles F	4	03/21/03	Completed
322 Curby, Russell J	6	03/21/03	Completed
367 Carpenter, Travis J	1	09/28/20	Completed
501 Emmons Jr, Phillips C	12	03/21/03	Completed
603 Fiasky, Matthew W	7	03/21/03	Completed
812 Hilborn, James S	6	03/21/03	Completed

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Resource	Seq	Date	Status
O10 OSHA 10-Hour			- Continued
814 Horstman, Eric L	7	03/21/03	Completed
819 Hughes, Donavon D	6	03/21/03	Completed
828 Hein, Kenneth D	1	07/08/11	Completed
1101 Kempfer, Daryl B	3	03/21/03	Completed
1301 MacKenzie, Stephanie L	4	03/21/03	Completed
1302 MacKenzie, Thomas E	12	03/21/03	Completed
1304 Marks, Michael Scott	5	03/21/03	Completed
1309 McLean, Jacob M	4	05/13/05	Completed
1312 McNamara, Dennis J	3	03/21/03	Completed
1312 McNamara, Dennis J	6	03/12/10	Completed
1313 Medina, Gerardo	2	03/21/03	Completed
1512 O'Neil, Sean P	1	04/30/20	Completed
1604 Phillips, Mark V	4	03/21/03	Completed
1613 Platte, James M	3	03/21/03	Completed
1827 Ridner, Taran R	1	12/01/17	Completed
1966 Smith, Michael J	2		Completed
2005 Toews, Kirk D	3	03/21/03	Completed
2301 Ward, Matthew H	5	03/21/03	Completed
2307 Whipple, Nelson J	1	03/21/03	Completed
O30 OSHA 30-Hr Training			
123 Arendt II, Arthur D	2		Completed
1370 McElhaney, Ronald G	6	05/14/15	Completed
1370 McElhaney, Ronald G	10	05/14/15	Completed
OPM&T Equipment Operation Training			
100 Abfalter, David M	36	05/18/16	Completed
210 Bigford Jr., Guy L	10	05/18/16	Completed
312 Clark, Dale E	24	05/18/16	Completed
411 Deemer, Bryon C	8	05/18/16	Completed
502 Emmons III, Phillips C	33	05/18/16	Completed
503 Everett, Gregory D	3	05/18/16	Completed
601 Fergus, Jeremy D	18	05/18/16	Completed
603 Fiasky, Matthew W	24	05/18/16	In Progress
711 Grummet, Ted J	12	05/18/16	Completed
715 Glass, Willie	11	05/18/16	Completed
812 Hilborn, James S	14	05/18/16	Completed
813 Hildenbrand, Thomas F	5	05/18/16	Completed
814 Horstman, Eric L	28	05/18/16	Completed
819 Hughes, Donavon D	28	05/18/16	Completed
827 Hallenbeck, Mitch L	9	05/18/16	Completed
1001 Jasman, Horace E	20	05/18/16	Completed
1101 Kempfer, Daryl B	9	05/18/16	Completed
1106 Kreps, David C	29	05/18/16	Completed
1113 Keip, Brian J	15	05/18/16	Completed
1200 Lampman, Aaron D	3	05/18/16	Completed
1206 Lindow, Michael W	7	05/18/16	Completed
1302 MacKenzie, Thomas E	35	05/18/16	Completed
1303 Maddox, Travis J	3	05/18/16	Completed
1312 McNamara, Dennis J	9	05/18/16	Completed
1313 Medina, Gerardo	6	05/18/16	Completed
1315 Melvin, Cornie	20	05/18/16	Completed
1352 MacKenzie, Thomas A	6	05/18/16	Completed
1355 McPhee, Sean M	10	05/18/16	Completed
1356 Maurer, Chadwick E	8	05/18/16	Completed

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Resource	Seq	Date	Status
OPM&T Equipment Operation Training			- Continued
1358 McTaggart, Isaac D	11	05/18/16	In Progress
1608 Pilar, Gonzalo	4	05/18/16	Completed
1613 Platte, James M	5	05/18/16	Completed
1620 Platte, Roger M	1	05/18/16	Completed
1634 Plunkett, Jeffery A	1	05/18/16	Completed
1803 Rickman, Charles R	23	05/18/16	Completed
1903 Sherrell, Ronald E	20	05/18/16	Completed
1920 Swaynie, Don A	22	05/18/16	Completed
1931 Stanaway, David R	1	05/18/16	Completed
1939 Schaible, Tyler G	3	05/18/16	Completed
1940 Smith, Brian J	5	05/18/16	Completed
1941 Stover, Ralph E	3	05/18/16	Completed
2005 Toews, Kirk D	20	05/18/16	Completed
2010 Townsend, Jeremy W	21	05/18/16	Completed
2206 VanDyke, Eric C	2	05/18/16	Completed
2303 Warren, Matthew J	8	05/18/16	Completed
2305 West, Patrick S	7	05/18/16	Completed
2307 Whipple, Nelson J	5	05/18/16	Completed
2500 Yahnka, David K	1	05/18/16	Completed
OSHAConfSp OSHA's New Conf.Space Stds2016			
120 Askew, Reggie E	1	06/01/16	Completed
221 Bailey, Micah	8	06/01/16	Completed
228 Bultema, Stephen C	3	06/01/16	Completed
234 Battle, Dewitt N	2	06/01/16	Completed
322 Curby, Russell J	22	06/01/16	Completed
342 Cooley, Mary K	2	06/01/16	Completed
501 Emmons Jr, Phillips C	33	06/01/16	Completed
502 Emmons III, Phillips C	34	06/01/16	Completed
603 Fiasky, Matthew W	25	06/01/16	Completed
711 Grummet, Ted J	13	06/01/16	Completed
812 Hilborn, James S	15	06/01/16	Completed
813 Hildenbrand, Thomas F	6	06/01/16	Completed
814 Horstman, Eric L	29	06/01/16	Completed
827 Hallenbeck, Mitch L	10	06/01/16	Completed
828 Hein, Kenneth D	5	06/01/16	Completed
1001 Jasman, Horace E	21	06/01/16	Completed
1106 Kreps, David C	30	06/01/16	Completed
1112 Kipke, Duston C	2	06/01/16	Completed
1200 Lampman, Aaron D	4	06/01/16	Completed
1302 MacKenzie, Thomas E	36	06/01/16	Completed
1303 Maddox, Travis J	4	06/01/16	Completed
1304 Marks, Michael Scott	12	06/01/16	Completed
1312 McNamara, Dennis J	10	06/01/16	Completed
1313 Medina, Gerardo	7	06/01/16	Completed
1328 Meingasner, Roger E	2	06/01/16	Completed
1352 MacKenzie, Thomas A	7	06/01/16	Completed
1355 McPhee, Sean M	11	06/01/16	Completed
1356 Maurer, Chadwick E	9	06/01/16	Completed
1358 McTaggart, Isaac D	12	06/01/16	Completed
1401 Nierniec, John W	3	06/01/16	Completed
1508 Olney, James A	5	06/01/16	Completed
1608 Pilar, Gonzalo	5	06/01/16	Completed
1613 Platte, James M	6	06/01/16	Completed

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All Training Dates

Resource	Seq	Date	Status
OSHAConfSp OSHA's New Conf.Space Stds2016 - Continued			
1620 Platte, Roger M	2	06/01/16	Completed
1634 Plunkett, Jeffery A	2	06/01/16	Completed
1931 Stanaway, David R	2	06/01/16	Completed
1940 Smith, Brian J	6	06/01/16	Completed
1941 Stover, Ralph E	4	06/01/16	Completed
1945 Schneemann, Dustin T	2	06/01/16	Completed
2005 Toews, Kirk D	21	06/01/16	Completed
2010 Townsend, Jeremy W	22	06/01/16	Completed
2207 Vanierberg, Jeremy R	2	06/01/16	Completed
2303 Warren, Matthew J	9	06/01/16	Completed
2305 West, Patrick S	8	06/01/16	Completed
2326 Warren, Forest G	4	06/01/16	Completed
2500 Yahnka, David K	2	06/01/16	Completed
PE Professional Engineer			
319 Coscarelli, Pasquale A	4		Completed
PipePatch Factory Trained Installer			
322 Curby, Russell J	8	09/16/09	Completed
603 Fiasky, Matthew W	8	09/16/09	Completed
1615 Puskala, Benjamin J	5	09/16/09	Completed
2301 Ward, Matthew H	6	09/16/09	Completed
Railroad Railroad Safety Training			
318 Cornwell, Jack L	2	04/17/06	Completed
819 Hughes, Donavon D	3	04/17/06	Completed
820 Hughes, Patrick L	2	04/17/06	Completed
1316 Melvin, Steve M	2	04/17/06	Completed
Reclnjury MIOSHA Rec & Cost of Injuries			
1370 McElhaney, Ronald G	13	10/22/14	Completed
Rig/Signal Qualified Rigging/Signalperson			
318 Cornwell, Jack L	4	01/27/12	Completed
318 Cornwell, Jack L	8	11/20/15	Completed
318 Cornwell, Jack L	11	10/20/18	Completed
601 Fergus, Jeremy D	15	11/20/15	Completed
819 Hughes, Donavon D	11	01/27/12	Completed
819 Hughes, Donavon D	24	11/20/15	Completed
819 Hughes, Donavon D	38	10/20/18	Completed
820 Hughes, Patrick L	6	01/27/12	Completed
820 Hughes, Patrick L	15	11/20/15	Completed
820 Hughes, Patrick L	28	10/20/18	Completed
1007 Julson, Tyler A	1	03/31/12	Completed
1316 Melvin, Steve M	5	01/27/12	Completed
1316 Melvin, Steve M	11	11/20/15	Completed
1316 Melvin, Steve M	14	10/20/18	Completed
1318 Meyers, Jerrold M	3	01/27/12	Completed
1318 Meyers, Jerrold M	8	11/20/15	Completed
1503 Otto, Cameron W	19	11/20/15	Completed
1503 Otto, Cameron W	29	10/20/18	Completed
1628 Purvis, Carl E	11	11/20/15	Completed
1803 Rickman, Charles R	7	01/27/12	Completed
1803 Rickman, Charles R	19	11/20/15	Completed
1803 Rickman, Charles R	32	10/20/18	Completed
1975 Stretchbery, Foster B	2	03/31/17	Completed

HR Training & Education By Training Code

All Training Codes

All Resources

All Training Dates

Resource	Seq	Date	Status
RwW Roadway Wkr Trng. (Railroad)			
402 Driver, Linn B	2	09/21/15	Completed
501 Emmons Jr, Phillips C	16	12/15/11	Completed
501 Emmons Jr, Phillips C	28	09/21/15	Completed
502 Emmons III, Phillips C	9	12/15/11	Completed
502 Emmons III, Phillips C	27	09/21/15	Completed
601 Fergus, Jeremy D	14	09/21/15	Completed
603 Fiasky, Matthew W	11	12/15/11	Completed
1001 Jasman, Horace E	3	12/15/11	Completed
1001 Jasman, Horace E	14	09/21/15	Completed
1302 MacKenzie, Thomas E	16	12/15/11	Completed
1318 Meyers, Jerrold M	7	09/21/15	Completed
1358 McTaggart, Isaac D	7	09/21/15	Completed
1503 Otto, Cameron W	17	09/21/15	Completed
2010 Townsend, Jeremy W	16	09/21/15	Completed
S/HMgmt S/H Management System			
1370 McElhaney, Ronald G	14	10/15/14	Completed
Scaffold Scaffold User			
100 Abfalter, David M	8	02/20/09	Completed
100 Abfalter, David M	11	03/19/10	Completed
100 Abfalter, David M	14	02/04/11	Completed
106 Andries, Roman A	2	02/20/09	Completed
106 Andries, Roman A	3	03/19/10	Completed
106 Andries, Roman A	8	02/04/11	Completed
501 Emmons Jr, Phillips C	7	02/20/09	Completed
501 Emmons Jr, Phillips C	8	03/19/10	Completed
501 Emmons Jr, Phillips C	14	02/04/11	Completed
502 Emmons III, Phillips C	3	02/20/09	Completed
502 Emmons III, Phillips C	4	03/19/10	Completed
502 Emmons III, Phillips C	8	02/04/11	Completed
1106 Kreps, David C	5	02/20/09	Completed
1106 Kreps, David C	6	03/19/10	Completed
1106 Kreps, David C	11	02/04/11	Completed
1301 MacKenzie, Stephanie L	7	02/20/09	Completed
1302 MacKenzie, Thomas E	9	02/20/09	Completed
1615 Puskala, Benjamin J	2	03/19/10	Completed
1903 Sherrell, Ronald E	3	02/20/09	Completed
1903 Sherrell, Ronald E	4	03/19/10	Completed
1903 Sherrell, Ronald E	8	02/04/11	Completed
1920 Swaynie, Don A	3	02/20/09	Completed
1920 Swaynie, Don A	4	03/19/10	Completed
1920 Swaynie, Don A	8	02/04/11	Completed
2005 Toews, Kirk D	5	02/04/11	Completed
SDS SDS Communication/Labeling			
100 Abfalter, David M	20	10/03/13	Completed
106 Andries, Roman A	12	10/03/13	Completed
107 Argersinger, Charles F	6	10/03/13	Completed
210 Bigford Jr., Guy L	7	10/03/13	Completed
221 Bailey, Micah	3	10/03/13	Completed
228 Bultema, Stephen C	1	10/03/13	Completed
312 Clark, Dale E	17	10/03/13	Completed
318 Comwell, Jack L	6	10/03/13	Completed
319 Coscarelli, Pasquale A	2	10/03/13	Completed

HR Training & Education By Training Code

All Training Codes

All Resources

All Training Dates

Resource	Seq	Date	Status
SDS SDS Communication/Labeling			- Continued
322 Curby, Russell J	12	10/03/13	Completed
331 Clark Jr., Kenneth B	1	10/03/13	Completed
402 Driver, Linn B	1	10/03/13	Completed
500 Edgar, Keith A	1	10/03/13	Completed
501 Emmons Jr, Phillips C	21	10/03/13	Completed
502 Emmons III, Phillips C	14	10/03/13	Completed
601 Fergus, Jeremy D	7	10/03/13	Completed
602 Ferguson, Kevin E	2	10/03/13	Completed
603 Fiasky, Matthew W	15	10/03/13	Completed
700 Garcia, Felipe	1	10/03/13	Completed
702 Goddard, Scott L	2	10/03/13	Completed
711 Grummet, Ted J	8	10/03/13	Completed
715 Glass, Willie	4	10/03/13	Completed
812 Hilborn, James S	9	10/03/13	Completed
813 Hildenbrand, Thomas F	3	10/03/13	Completed
814 Horstman, Eric L	16	10/03/13	Completed
818 Hufnagel, Heather M	3	10/03/13	Completed
819 Hughes, Donavon D	14	10/03/13	Completed
820 Hughes, Patrick L	9	10/03/13	Completed
827 Hallenbeck, Mitch L	4	10/03/13	Completed
828 Hein, Kenneth D	2	10/03/13	Completed
1001 Jasman, Horace E	6	10/03/13	Completed
1101 Kempfer, Daryl B	5	10/03/13	Completed
1104 Kindinger, David B	2	10/03/13	Completed
1106 Kreps, David C	18	10/03/13	Completed
1109 Kilmer, Kenneth D	1	10/03/13	Completed
1113 Keip, Brian J	6	10/03/13	Completed
1116 Kain, Robert W	1	10/03/13	Completed
1200 Lampman, Aaron D	1	10/03/13	Completed
1206 Lindow, Michael W	4	10/03/13	Completed
1301 MacKenzie, Stephanie L	13	10/03/13	Completed
1302 MacKenzie, Thomas E	23	10/03/13	Completed
1303 Maddox, Travis J	1	10/03/13	Completed
1304 Marks, Michael Scott	7	10/03/13	Completed
1309 McLean, Jacob M	10	10/03/13	Completed
1315 Melvin, Cornie	13	10/03/13	Completed
1316 Melvin, Steve M	7	10/03/13	Completed
1401 Niemiec, John W	2	10/03/13	Completed
1503 Otto, Cameron W	12	10/03/13	Completed
1508 Olney, James A	1	10/03/13	Completed
1604 Phillips, Mark V	5	10/03/13	Completed
1610 Pilar Renteria, Luis E	1	10/03/13	Completed
1615 Puskala, Benjamin J	9	10/03/13	Completed
1626 Pierson, Brian L	2	10/03/13	Completed
1628 Purvis, Carl E	6	10/03/13	Completed
1631 Patrick, Lonny J	1	10/03/13	Completed
1801 Raimer, Gary D	6	10/03/13	Completed
1803 Rickman, Charles R	12	10/03/13	Completed
1818 Roiter, Douglas E	1	10/03/13	Completed
1903 Sherrell, Ronald E	12	10/03/13	Completed
1915 Stebleton Jr., Kenneth D	2	10/03/13	Completed
1920 Swaynie, Don A	13	10/03/13	Completed
1935 Stiffler, Kimberly A	1	10/03/13	Completed

HR Training & Education By Training Code

All Training Codes All Resources
All Training Dates

Resource	Seq	Date	Status
SDS SDS Communication/Labeling - Continued			
1939 Schaible, Tyler G	1	10/03/13	Completed
1940 Smith, Brian J	1	10/03/13	Completed
1941 Stover, Ralph E	1	10/03/13	Completed
2005 Toews, Kirk D	9	10/03/13	Completed
2010 Townsend, Jeremy W	6	10/03/13	Completed
2303 Warren, Matthew J	3	10/03/13	Completed
2305 West, Patrick S	4	10/03/13	Completed
2307 Whipple, Nelson J	3	10/03/13	Completed
Silica Silica Training			
1370 McElhaney, Ronald G	15	02/06/17	Completed
SM Safety Meeting			
120 Askew, Reggie E	2	10/07/16	Completed
SupRol Supervisor's Rold in S/H			
1370 McElhaney, Ronald G	12	10/23/14	Completed
SWO Construction Storm Water Op			
123 Arendt II, Arthur D	1	08/23/18	Completed
228 Bultema, Stephen C	2	10/14/15	Completed
319 Coscarelli, Pasquale A	1	07/01/17	Completed
322 Curby, Russell J	5	07/01/13	Completed
342 Cooley, Mary K	1	07/01/15	Completed
416 Dunn, Adam C	1	06/26/18	Completed
427 Davis, Katherine A	1	06/08/21	Completed
501 Emmons Jr, Phillips C	6	07/01/20	Completed
502 Emmons III, Phillips C	31	03/10/16	Completed
603 Fiasky, Matthew W	6	07/01/16	Completed
711 Grummet, Ted J	16	02/07/18	Completed
812 Hilborn, James S	4	07/01/20	Completed
814 Horstman, Eric L	5	02/13/17	Completed
828 Hein, Kenneth D	10	02/07/18	Completed
1101 Kempfer, Daryl B	7	03/10/16	Completed
1106 Kreps, David C	4	07/01/13	Completed
1112 Kipke, Duston C	1	10/14/15	Completed
1217 LaHaie, Andrew J	1	07/21/20	Completed
1302 MacKenzie, Thomas E	7	07/01/16	Completed
1304 Marks, Michael Scott	4	07/01/05	Completed
1309 McLean, Jacob M	13	02/07/18	Completed
1356 Maurer, Chadwick E	6	03/10/16	Completed
1401 Niemiec, John W	1	07/01/20	Completed
1604 Phillips, Mark V	7	10/14/15	Completed
1613 Platte, James M	7	07/01/17	Completed
1651 Parker, Philip RL	1	09/17/21	Completed
1945 Schneemann, Dustin T	1	10/14/15	Completed
2005 Toews, Kirk D	18	03/10/16	Completed
2121 Tunnell, Matt R	5	07/21/20	Completed
2207 Vanlerberg, Jeremy R	1	10/14/15	Completed
SWOI Industrial Storm Water Op			
319 Coscarelli, Pasquale A	3	07/01/12	Completed
1309 McLean, Jacob M	12	07/01/16	Completed
TeleLift Telescopic Lift Truck			
318 Comwell, Jack L	7	06/01/15	Completed
318 Comwell, Jack L	10	06/28/18	Completed

HR Training & Education By Training Code

All Training Codes

All Resources

All Training Dates

Resource		Seq	Date	Status
TeleLift Telescopic Lift Truck				- Continued
601	Fergus, Jeremy D	13	06/01/15	Completed
601	Fergus, Jeremy D	25	06/28/18	Completed
819	Hughes, Donavon D	21	06/01/15	Completed
819	Hughes, Donavon D	37	06/28/18	Completed
819	Hughes, Donavon D	45	06/08/21	Completed
820	Hughes, Patrick L	14	06/01/15	Completed
820	Hughes, Patrick L	27	06/28/18	Completed
820	Hughes, Patrick L	36	06/08/21	Completed
1316	Melvin, Steve M	10	06/01/15	Completed
1316	Melvin, Steve M	13	06/28/18	Completed
1316	Melvin, Steve M	16	06/08/21	Completed
1318	Meyers, Jerrold M	6	06/01/15	Completed
1355	McPhee, Sean M	21	06/08/21	Completed
1503	Otto, Cameron W	15	06/01/15	Completed
1503	Otto, Cameron W	28	06/28/18	Completed
1503	Otto, Cameron W	36	06/08/21	Completed
1628	Purvis, Carl E	9	06/01/15	Completed
1628	Purvis, Carl E	13	06/28/18	Completed
1803	Rickman, Charles R	18	06/01/15	Completed
1803	Rickman, Charles R	31	06/28/18	Completed
1827	Ridner, Taran R	3	06/08/21	Completed
TrSaf Truck Driving Safety Class				
100	Abfalter, David M	12	10/27/10	Completed
106	Andries, Roman A	6	10/27/10	Completed
210	Bigford Jr., Guy L	3	10/27/10	Completed
312	Clark, Dale E	9	10/27/10	Completed
603	Fiasky, Matthew W	9	10/27/10	Completed
812	Hilborn, James S	7	10/27/10	Completed
814	Horstman, Eric L	8	10/27/10	Completed
1106	Kreps, David C	9	10/27/10	Completed
1302	MacKenzie, Thomas E	13	10/27/10	Completed
1309	McLean, Jacob M	6	10/27/10	Completed
1315	Melvin, Cornie	6	10/27/10	Completed
1626	Pierson, Brian L	1	10/27/10	Completed
1803	Rickman, Charles R	4	10/27/10	Completed
1915	Stebleton Jr., Kenneth D	1	10/27/10	Completed
2307	Whipple, Nelson J	2	10/27/10	Completed
Weld Welding Certificate				
247	Babcock, Mitchel A	2	09/22/21	Completed
503	Everett, Gregory D	4	03/03/17	Completed
711	Grummet, Ted J	5	03/24/15	Completed
814	Horstman, Eric L	9	02/06/19	Completed
820	Hughes, Patrick L	3	02/07/20	Completed
820	Hughes, Patrick L	21	11/08/17	Completed
820	Hughes, Patrick L	39	01/18/22	Completed
1001	Jasman, Horace E	1	03/13/17	Completed
1503	Otto, Cameron W	6	01/13/12	Completed
1628	Purvis, Carl E	1	04/02/21	Completed
1939	Schaible, Tyler G	13	09/22/21	Completed

EXHIBIT B.4 ETMCO Safety Record Documentation





Occupational Safety and Health Administration

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Establishment Search Results

Establishment	Date Range	Office	Zipcode	State
E.T. MacKenzie	03/11/2017 to 03/11/2022	all	all	all

Please note that inspections which are known to be incomplete will have the identifying Activity Nr shown in italic. Information for these open cases is especially dynamic, e.g., violations may be added or deleted.

Sort By: [Date](#) | [Name](#) | [Office](#) | [State](#)

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#	Activity	Opened	RID	St	Type	Sc	SIC	NAICS	Vio	Establishment Name
<input type="checkbox"/>	1	1435511.015	10/03/2019	0552651	MI	Planned	Complete	238910		E.T. Mackenzie Company
<input type="checkbox"/>	2	1418893.015	07/27/2019	0552651	MI	Planned	Partial	238910		E.T. Mackenzie Company
<input type="checkbox"/>	3	1406285.015	06/06/2019	0552651	MI	Planned	Complete	238110		E. T. Mackenzie Co., L.L.C.
<input type="checkbox"/>	4	1403568.015	05/20/2019	0552651	MI	Planned	Complete	237110	1	E. T. Mackenzie Co., L.L.C.
<input type="checkbox"/>	5	1351564.015	10/05/2018	0552651	MI	Planned	Complete	238910		E.T. Mackenzie Company
<input type="checkbox"/>	6	1345324.015	09/05/2018	0552651	MI	Planned	Complete	238910		E.T. Mackenzie Company
<input type="checkbox"/>	7	1323922.015	05/10/2018	0552651	MI	Prog Related	Complete	237110	4	E T Mackenzie
<input type="checkbox"/>	8	1312974.015	04/26/2018	0552651	MI	Planned	Complete	238910		E.T. Mackenzie Company
<input type="checkbox"/>	9	1287402.015	01/11/2018	0552651	MI	Planned	Complete	238910	1	E.T. Mackenzie Company
<input type="checkbox"/>	10	1249398.015	07/24/2017	0552651	MI	Planned	Complete	237110	2	E T Mackenzie Company
<input type="checkbox"/>	11	1227648.015	04/26/2017	0552651	MI	Planned	Complete	237110		E T Mackenzie Co



Inspection Detail

Inspection: 1249398.015 - E T Mackenzie Company

Inspection Information - Office: Michigan Safety Cnst

Nr: 1249398.015 Report ID: 0552651 Open Date: 07/24/2017

E T Mackenzie Company

2800 State St

Ann Arbor, MI 48103

Union Status: NonUnion

SIC:

NAICS: 237110/Water and Sewer Line and Related Structures Construction

Mailing: 6400 Jackson Ave, Ann Arbor, MI 48103

Inspection Type: Planned

Scope: Complete

Advanced Notice: N

Ownership: Private

Safety/Health: Safety

Close Conference: 07/24/2017

Emphasis: P:Construction, S:Construction

Close Case: 12/18/2017

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations				2		2
Current Violations				2		2
Initial Penalty	\$0	\$0	\$0	\$0	\$0	\$0
Current Penalty	\$0	\$0	\$0	\$0	\$0	\$0
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr\$	Init\$	Fta\$	Contest	LastEvent
1.	01001	Other	408.40114(1)	08/15/2017	08/23/2017	\$0	\$0	\$0		Z - Issued
2.	01002	Other	408.41851(7)	08/15/2017	08/23/2017	\$0	\$0	\$0		Z - Issued

FEDERAL GOVERNMENT

OCCUPATIONAL SAFETY AND HEALTH

ABOUT THE SITE

Inspection Detail

Inspection: 1287402.015 - E.T. Mackenzie Company

Inspection Information - Office: Michigan Safety Cnst

Nr: 1287402.015 Report ID: 0552651 Open Date: 01/11/2018
 E.T. Mackenzie Company
 346 State St Union Status: NonUnion
 Charlotte, MI 48813
 SIC:
 NAICS: 238910/Site Preparation Contractors
 Mailing: 4248 W Saginaw Hwy, Grand Ledge, MI 48837
 Inspection Type: Planned
 Scope: Complete Advanced Notice: N
 Ownership: Private
 Safety/Health: Safety Close Conference: 01/11/2018
 Emphasis: P:Construction, S:Construction Close Case: 03/26/2018

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	1					1
Current Violations	1					1
Initial Penalty	\$7,000	\$0	\$0	\$0	\$0	\$7,000
Current Penalty	\$2,400	\$0	\$0	\$0	\$0	\$2,400
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr\$	Init\$	Fta\$	Contest	LastEvent
1.	01001	Serious	408.40944(2)	01/22/2018	01/30/2018	\$2,400	\$7,000	\$0		I - Informal Settlement

FEDERAL GOVERNMENT

OCCUPATIONAL SAFETY AND HEALTH

ABOUT THE SITE

Inspection Detail

Inspection: 1323922,015 - E T Mackenzie

Inspection Information - Office: Michigan Safety Cnst

Nr: 1323922.015 Report ID: 0552651 Open Date: 05/10/2018

E T Mackenzie

15 W Washington St
Ypsilanti, MI 48197

Union Status: NonUnion

SIC:

NAICS: 237110/Water and Sewer Line and Related Structures Construction

Mailing: 6400 Jackson Rd, Ann Arbor, MI 48103

Inspection Type: Prog Related

Scope: Complete Advanced Notice: N

Ownership: Private

Safety/Health: Safety Close Conference: 05/10/2018

Emphasis: P:Fall, S:Construction, S:Fall Close Case: 09/11/2018

Related Activity:	Type	ID	Safety	Health
Inspection		1315857	Yes	
Inspection		1324871	Yes	
Inspection		1323916	Yes	
Inspection		1323932	Yes	
Inspection		1327208	Yes	
Inspection		1327213	Yes	
Inspection		1324673	Yes	

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations				4		4
Current Violations				4		4
Initial Penalty	\$0	\$0	\$0	\$0	\$0	\$0
Current Penalty	\$0	\$0	\$0	\$0	\$0	\$0
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr\$	Init\$	Fta\$	Contest	LastEvent
1.	01001	Other	408.40114(1)	07/26/2018	08/03/2018	\$0	\$0	\$0		Z - Issued
2.	01002	Other	408.40132(3)	07/26/2018	08/03/2018	\$0	\$0	\$0		Z - Issued
3.	01003	Other	408.41852(1)	07/26/2018	08/03/2018	\$0	\$0	\$0		Z - Issued
4.	01004	Other	408.41523(1)	07/26/2018	08/03/2018	\$0	\$0	\$0		Z - Issued

FEDERAL GOVERNMENT

OCCUPATIONAL SAFETY AND HEALTH

ABOUT THE SITE



Inspection Detail

Inspection: 1403568.015 - E. T. Mackenzie Co., L.L.C.

Inspection Information - Office: Michigan Safety Cnst

Nr: 1403568.015 **Report ID:** 0552651 **Open Date:** 05/20/2019
 E. T. Mackenzie Co., L.L.C.
 Delhi Commerce Drive @ Willoughby Road Holt, MI 48842 **Union Status:** NonUnion
SIC:
 NAICS: 237110/Water and Sewer Line and Related Structures Construction
 Mailing: 4248 W. Saginaw Hwy, Grand Ledge, MI 48837
Inspection Type: Planned
Scope: Complete **Advanced Notice:** N
Ownership: Private
Safety/Health: Safety **Close Conference:** 05/20/2019
Emphasis: P:Work In Roadways, S:Construction, S:Work In Roadways **Close Case:** 08/01/2019

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations				1		1
Current Violations				1		1
Initial Penalty	\$0	\$0	\$0	\$0	\$0	\$0
Current Penalty	\$0	\$0	\$0	\$0	\$0	\$0
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr\$	Init\$	Fta\$	Contest	LastEvent
1.	01001	Other	408.40114(1)	07/19/2019	07/29/2019	\$0	\$0	\$0		Z - Issued

EXHIBIT B.5 Anticipated Major Subcontractor Safety Documentation





Establishment Search Results

Establishment	Date Range	Office	Zipcode	State
Cadillac Asphalt	03/11/2017 to 03/11/2022	all	all	all

Please note that inspections which are known to be incomplete will have the identifying Activity Nr shown in italic. Information for these open cases is especially dynamic, e.g., violations may be added or deleted.

Sort By: [Date](#) | [Name](#) | [Office](#) | [State](#)

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Results 1 - 4 of 4

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#	Activity	Opened	RID	St	Type	Sc	SIC	NAICS	Vio	Establishment Name
<input type="checkbox"/>	1 1488741.015	08/19/2020	0552651	MI	Planned	Complete	237310			Cadillac Asphalt Llc
<input type="checkbox"/>	2 1396808.015	04/29/2019	0552652	MI	Referral	Partial	237310			Cadillac Asphalt Llc
<input type="checkbox"/>	3 1252163.015	08/02/2017	0552651	MI	Planned	Complete	237310			Cadillac Asphalt, Llc
<input type="checkbox"/>	1252159.015	08/01/2017	0552651		Planned	Complete	237310			Cadillac Asphalt, L.L.C.

UNITED STATES DEPARTMENT OF LABOR

Occupational Safety and Health
Administration
200 Constitution Ave NW
Washington, DC 20210
800-321-6742 (OSHA)
TTY
www.OSHA.gov

FEDERAL GOVERNMENT
White House
Severe Storm and Flood Recovery
Assistance
Disaster Recovery Assistance
DisasterAssistance.gov
USA.gov
No Fear Act Data
U.S. Office of Special Counsel

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Plug-Ins Used by DOL
Accessibility Statement

Inspection Detail

Inspection: 1252159.015 - Cadillac Asphalt, L.L.C.

Inspection Information - Office: Michigan Safety Cnst

Nr: 1252159.015 Report ID: 0552651 Open Date: 08/01/2017

Cadillac Asphalt, L.L.C.
South Blvd @ Crooks Rd
Troy, MI 48098 Union Status: Union
SIC:
NAICS: 237310/ Highway, Street, and Bridge Construction
Mailing: 2575 S Haggerty Rd Ste 100, Canton, MI 48188

Inspection Type: Planned
Scope: Complete Advanced Notice: N
Ownership: Private
Safety/Health: Safety Close Conference: 08/04/2017
Emphasis: P:Construction, S:Construction Close Case: 10/24/2017

Related Activity: Type ID Safety Health
Inspection 1252170 Yes

Violation Summary

	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	1					1
Current Violations	1					1
Initial Penalty	\$1,500	\$0	\$0	\$0	\$0	\$1,500
Current Penalty	\$750	\$0	\$0	\$0	\$0	\$750
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

Violation Items

#	ID	Type	Standard	Issuance	Abate	Curr\$	Init\$	Fta\$	Contest	LastEvent
1.	01001	Serious	408.42223(1)	08/29/2017		\$750	\$1,500	\$0		I - Informal Settlement

August 11, 2021

Cadillac Asphalt, LLC
2575 S Haggerty Rd. Suite 100
Canton, MI 48188

RE: Workers Compensation Intrastate Experience Modification (MI)

This letter is to confirm the MI Intrastate Experience Modification Rating for the following terms:

Term	Rate
09/01/2019 – 09/01/2020	.62
09/01/2020 – 09/01/2021	.68
09/01/2021 - 09/01/2022	.66

If you need any further information regarding the EMR, Please contact the undersigned.

Sincerely,

Holly Tabbert

Holly Tabbert
Account Manager

EXHIBIT C.2 Davis Bacon Wage Decision



"General Decision Number: MI20220001 02/25/2022

Superseded General Decision Number: MI20210001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the

Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	01/21/2022
2	02/11/2022
3	02/25/2022

CARP0004-004 06/01/2019

REMAINDER OF STATE

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 27.62	20.59

 CARP0004-005 06/01/2018

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR AND WAYNE COUNTIES

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 30.50	27.28

 ELEC0017-005 06/01/2021

STATEWIDE

	Rates	Fringes
Line Construction		
Groundman/Driver.....	\$ 29.11	7.20+32%
Journeyman Signal Tech, Communications Tech, Tower Tech & Fiber Optic Splicers.	\$ 42.55	7.20+32%
Journeyman Specialist.....	\$ 48.93	7.20+32%
Operator A.....	\$ 35.96	7.20+32%
Operator B.....	\$ 33.57	7.20+32%

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.

Operator A: Shall be proficient in operating all power equipment including: Backhoe, Excavator, Directional Bore and Boom/Digger truck.

Operator B: Shall be proficient in operating any 2 of the above mentioned pieces of equipment listed under Operator A.

 ENGI0324-003 06/01/2021

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWEE, LIVINGSTON, MACOMB, MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC, SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment		
(Steel Erection)		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 49.02	24.85
GROUP 3.....	\$ 46.52	24.85
GROUP 4.....	\$ 47.52	24.85
GROUP 5.....	\$ 45.02	24.85
GROUP 6.....	\$ 46.02	24.85
GROUP 7.....	\$ 44.75	24.85
GROUP 8.....	\$ 45.75	24.85
GROUP 9.....	\$ 44.30	24.85
GROUP 10.....	\$ 45.30	24.85
GROUP 11.....	\$ 43.57	24.85
GROUP 12.....	\$ 44.57	24.85
GROUP 13.....	\$ 43.21	24.85
GROUP 14.....	\$ 44.21	24.85
GROUP 15.....	\$ 42.57	24.85
GROUP 16.....	\$ 39.37	24.85
GROUP 17.....	\$ 24.89	12.00
GROUP 18.....	\$ 28.38	12.00

FOOTNOTE:

Paid Holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib 400' or longer

GROUP 2: Engineer when operating combination of boom and jib 400' or longer on a crane that requires an oiler

GROUP 3: Engineer when operating combination of boom and jib 300' or longer

GROUP 4: Engineer when operating combination of boom and jib 300' or longer on a crane that requires an oiler

GROUP 5: Engineer when operating combination of boom and jib 220' or longer

GROUP 6: Engineer when operating combination of boom and jib 220' or longer on a crane that requires an oiler

GROUP 7: Engineer when operating combination of boom and jib 140' or longer

GROUP 8: Engineer when operating combination of boom and jib 140' or longer on a crane that requires an oiler

GROUP 9: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level)

GROUP 10: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level) on a crane that requires an oiler

GROUP 11: Engineer when operating combination of boom and jib 120' or longer

GROUP 12: Engineer when operating combination of boom and jib 120' or longer on a crane that requires an oiler

GROUP 13: Crane operator; job mechanic and 3 drum hoist and excavator

GROUP 14: Crane operator on a crane that requires an oiler

GROUP 15: Hoisting operator; 2 drum hoist and rubber tired backhoe

GROUP 16: Forklift and 1 drum hoist

GROUP 17: Compressor or welder operator

GROUP 18: Oiler

 ENGI0324-004 06/01/2021

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON, HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE, KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
AREA 1		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00
AREA 2		
GROUP 1.....	\$ 48.02	24.85
GROUP 2.....	\$ 44.75	24.85
GROUP 3.....	\$ 43.21	24.85
GROUP 4.....	\$ 39.37	24.85
GROUP 5.....	\$ 24.89	12.00
GROUP 6.....	\$ 28.38	12.00

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 additional to the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 additional to the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1: Crane Operator with main boom & jib 400', 300', or 220' or longer.

GROUP 2: Crane Operator with main boom & jib 140' or longer, Tower Crane; Gantry Crane; Whirley Derrick.

GROUP 3: Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Mechanic, Grader and Hydro Excavator.

GROUP 4: Air Tugger (single drum), Material Hoist Pump 6" or over, Elevators, Brokk Concrete Breaker.

GROUP 5: Air Compressor, Welder, Generators, Conveyors

GROUP 6: Oiler and fire tender

ENGI0324-005 09/01/2021

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALLEGAN, ALGER, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment (Underground construction (including sewer))		
AREA 1:		
GROUP 1.....	\$ 37.63	24.85
GROUP 2.....	\$ 32.90	24.85
GROUP 3.....	\$ 32.17	24.85
GROUP 4.....	\$ 31.60	24.85
GROUP 5.....	\$ 23.15	12.05
AREA 2:		
GROUP 1.....	\$ 35.92	24.85
GROUP 2.....	\$ 31.03	24.85
GROUP 3.....	\$ 30.53	24.85
GROUP 4.....	\$ 30.25	24.85
GROUP 5.....	\$ 23.15	12.05

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck and End dump operator;

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non- powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Hydraulic pipe pushing machine; Mulching equipment; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); Sweeper (Wayne type); Water wagon and Extend-a boom forklift

Group 5: Fire Person, Oiler

* ENGI0324-006 06/01/2021

GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW, WAYNE, ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN,

CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
Power equipment operators: (AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION)		
GROUP 1.....	\$ 36.86	24.85
GROUP 2.....	\$ 30.13	24.85
GROUP 3.....	\$ 29.52	24.85
GROUP 4.....	\$ 29.40	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self-propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan; Vacuum truck operator; Batch Plant (concrete dry batch); Concrete Saw Operator (40h.p. or over); Tractor Operator (farm type); Finishing Machine Operator (concrete); Grader Operator

(self-propelled fine grade or form (concrete)).

GROUP 2: Screening plant operator; Washing plant operator; Crusher operator; Backhoe (with 3/8 yd. bucket or less); Side boom tractor (smaller than D-4 type or equivalent); Sweeper (Wayne type and similar equipment); Greese Truck; Air Compressor Operator (600 cu.ft. per min or more); Air Compressor Operator (two or more, less than 600 cfm);

GROUP 3: Boiler fire tender; Tractor operator (farm type with attachment); Concrete Breaker; Wagon Drill Operator;

GROUP 4: Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Boom or winch hoist truck operator; Endloader operator *under 1 yd. capacity); Roller Operator (other than asphalt); Curing equipment operator (self-propelled); Power bin operator; Plant drier (6 ft. wide or over); Guard post driver operator (power driven); All mulching equipment; Stump remover; Concrete pump (under 3-in.); Mesh installer (self-propelled); End dump; Skid Steer.

ENGI0324-007 05/01/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment		
(Steel Erection)		
Compressor, welder and forklift.....	\$ 35.90	24.60
Crane operator, main boom & jib 120' or longer.....	\$ 42.37	24.60
Crane operator, main boom & jib 140' or longer.....	\$ 42.67	24.60
Crane operator, main boom & jib 220' or longer.....	\$ 43.26	24.60
Mechanic with truck and tools.....	\$ 41.50	24.60
Oiler and fireman.....	\$ 34.36	24.60
Regular operator.....	\$ 39.72	24.60

ENGI0324-008 10/01/2020

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY,

BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment (Sewer Relining)		
GROUP 1.....	\$ 35.37	14.31
GROUP 2.....	\$ 33.33	14.31

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used in connection with the CCTV system

GROUP 2: Operation of hot water heaters and circulation systems, water jetters and vacuum and mechanical debris removal systems

 ENGI0325-012 05/01/2021

	Rates	Fringes
Power equipment operators - gas distribution and duct installation work:		
GROUP 1.....	\$ 33.48	24.85
GROUP 2.....	\$ 31.45	24.85
GROUP 3.....	\$ 29.60	24.45

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as ""distribution work,"" starting from the first metering station, connection,

similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service). Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

IRON008-007 06/01/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector.....	\$ 23.70	6.95
IRONWORKER		
General contracts		
\$10,000,000 or greater.....	\$ 36.45	27.65
General contracts less than \$10,000,000.....	\$ 36.45	27.65

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON025-002 06/01/2021

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LIVINGSTON, MACOMB, MIDLAND, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector		
Alcona, Alpena, Arenac, Cheboygan, Clare, Clinton, Crawford, Gladwin, Gratiot, Huron, Ingham, Iosco, Isabella, Jackson, Lapeer, Livingston (west of Burkhardt Road), Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Shiawassee, Tuscola & Washtenaw (west of U.S. 23).	\$ 24.26	22.11
Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne...	\$ 25.48	23.11
IRONWORKER		
Ornamental and Structural...	\$ 36.77	29.03
Reinforcing.....	\$ 32.99	30.76

 IRON0055-005 07/01/2021

LENAWEE AND MONROE COUNTIES:

	Rates	Fringes
IRONWORKER		
Pre-engineered metal buildings.....	\$ 23.59	19.35
All other work.....	\$ 31.25	26.90

 IRON0292-003 06/01/2020

BERRIEN AND CASS COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 31.75	22.84

 IRON0340-001 06/19/2017

ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX,
 EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO,
 KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA,
 MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA,
 OTTAWA, ST. JOSEPH, VAN BUREN AND WEXFORD COUNTIES:

	Rates	Fringes
IRONWORKER (Including pre-engineered metal building erector).....	\$ 24.43	24.67

LAB00005-006 10/01/2020

	Rates	Fringes
Laborers - hazardous waste abatement: (ALCONA, ALPENA, ANTRIM, BENZIE, CHARLEVOIX, CHEBOYGAN, CRAWFORD, EMMET, GRAND TRAVERSE, IOSCO, KALKASKA, LEELANAU, MISSAUKEE, MONTMORENCY, OSCODA, OTSEGO, PRESQUE ISLE AND WEXFORD COUNTIES - Zone 10)		
Levels A, B or C.....	\$ 17.45	12.75
class b.....	\$ 18.64	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....	\$ 16.45	12.75
class a.....	\$ 17.64	12.90
Zone 10		
Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11)		
Levels A, B or C.....	\$ 23.58	12.90
Work performed in conjunction with site preparation not requiring		

the use of personal protective equipment; Also, Level D.....\$ 22.58	12.90
Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, IONIA COUNTY (except the city of Portland); KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9)	
Levels A, B or C.....\$ 21.80	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 20.80	12.90
Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW AND TUSCOLA COUNTIES - Zone 8)	
Levels A, B or C.....\$ 21.39	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 20.80	12.90
Laborers - hazardous waste abatement: (CLINTON, EATON AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); LIVINGSTON COUNTY (west of Oak Grove Rd., including the City of Howell) - Zone 6)	
Levels A, B or C.....\$ 25.64	12.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D.....\$ 24.64	12.90
Laborers - hazardous waste abatement: (GENESEE, LAPEER	

AND SHIAWASSEE COUNTIES -

Zone 7)

Levels A, B or C.....\$ 24.20 13.80

Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 23.20 13.80

Laborers - hazardous waste
abatement: (HILLSDALE,
JACKSON AND LENAWEЕ COUNTIES

- Zone 4)

Levels A, B or C.....\$ 25.17 12.90

Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 24.17 12.90

Laborers - hazardous waste
abatement: (LIVINGSTON COUNTY
(east of Oak Grove Rd. and
south of M-59, excluding the
city of Howell); AND

WASHTENAW COUNTY - Zone 3)

Levels A, B or C.....\$ 29.93 14.20

Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 28.93 14.20

Laborers - hazardous waste
abatement: (MACOMB AND WAYNE
COUNTIES - Zone 1)

Levels A, B or C.....\$ 29.93 16.90

Work performed in
conjunction with site
preparation not requiring
the use of personal
protective equipment;

Also, Level D.....\$ 28.93 16.90

Laborers - hazardous waste
abatement: (MONROE COUNTY -
Zone 4)

Levels A, B or C.....\$ 31.75 14.90

Work performed in
conjunction with site
preparation not requiring

the use of personal protective equipment;		
Also, Level D.....	\$ 31.75	14.90
Laborers - hazardous waste abatement: (OAKLAND COUNTY and the Northeast portion of LIVINGSTON COUNTY bordered by Oak Grove Road on the West and M-59 on the South - Zone 2)		
Level A, B, C.....	\$ 29.93	16.90
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 28.93	16.90
Laborers - hazardous waste abatement: (SANILAC AND ST. CLAIR COUNTIES - Zone 5)		
Levels A, B or C.....	\$ 25.75	16.35
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....	\$ 24.75	16.35

LAB00259-001 09/01/2021

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES
 AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW AND WEXFORD COUNTIES

Rates Fringes

Laborers - tunnel, shaft and caisson:

AREA 1		
GROUP 1.....	\$ 23.62	16.95
GROUP 2.....	\$ 23.73	19.95
GROUP 3.....	\$ 23.79	16.95
GROUP 4.....	\$ 23.97	16.95
GROUP 5.....	\$ 24.22	16.95
GROUP 6.....	\$ 24.55	16.95
GROUP 7.....	\$ 17.83	16.95
AREA 2		
GROUP 1.....	\$ 25.15	12.95
GROUP 2.....	\$ 25.24	12.95
GROUP 3.....	\$ 25.34	12.95
GROUP 4.....	\$ 25.50	12.95
GROUP 5.....	\$ 25.76	12.95
GROUP 6.....	\$ 26.07	12.95
GROUP 7.....	\$ 18.34	12.95

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquifers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tugger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0334-001 09/01/2021

	Rates	Fringes
Laborers - open cut:		
ZONE 1 - MACOMB, OAKLAND AND WAYNE COUNTIES:		
GROUP 1.....	\$ 23.47	16.95
GROUP 2.....	\$ 23.58	16.95
GROUP 3.....	\$ 23.63	16.95
GROUP 4.....	\$ 23.71	16.95
GROUP 5.....	\$ 23.77	16.95
GROUP 6.....	\$ 21.22	16.95
GROUP 7.....	\$ 17.84	16.95
ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND WASHTENAW COUNTIES:		
GROUP 1.....	\$ 24.80	12.95
GROUP 2.....	\$ 24.91	12.95
GROUP 3.....	\$ 25.03	12.95
GROUP 4.....	\$ 25.10	12.95
GROUP 5.....	\$ 25.25	12.95
GROUP 6.....	\$ 22.55	12.95
GROUP 7.....	\$ 19.19	12.95
ZONE 3 - CLINTON, EATON, GENESEE, HILLSDALE AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); JACKSON, LAPEER AND LENAWEЕ COUNTIES; LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND SHIAWASSEE COUNTIES:		
GROUP 1.....	\$ 22.99	12.95
GROUP 2.....	\$ 23.13	12.95
GROUP 3.....	\$ 23.25	12.95
GROUP 4.....	\$ 23.30	12.95
GROUP 5.....	\$ 23.44	12.95
GROUP 6.....	\$ 20.74	12.95

GROUP 7.....	\$ 17.89	12.95
ZONE 4 - ALCONA, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT AND HURON COUNTIES; IONIA COUNTY (EXCEPT THE CITY OF PORTLAND); IOSCO, ISABELLA, KALAMAZOO, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES:		
GROUP 1.....	\$ 22.02	12.95
GROUP 2.....	\$ 22.15	12.95
GROUP 3.....	\$ 22.26	12.95
GROUP 4.....	\$ 22.33	12.95
GROUP 5.....	\$ 22.45	12.95
GROUP 6.....	\$ 19.67	12.95
GROUP 7.....	\$ 18.01	12.95
ZONE 5 - ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:		
GROUP 1.....	\$ 22.24	12.95
GROUP 2.....	\$ 22.38	12.95
GROUP 3.....	\$ 22.51	12.95
GROUP 4.....	\$ 22.56	12.95
GROUP 5.....	\$ 22.61	12.95
GROUP 6.....	\$ 19.99	12.95
GROUP 7.....	\$ 18.10	12.95

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental work. Open cut construction work shall not include any structural modifications, alterations, additions and repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

 LAB00465-001 06/01/2021

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON, KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES

	Rates	Fringes
LABORER (AREA 1)		
GROUP 1.....	\$ 30.52	13.45
GROUP 2.....	\$ 30.65	13.45
GROUP 3.....	\$ 30.83	13.45
GROUP 4.....	\$ 30.91	13.45
GROUP 5.....	\$ 31.12	13.45
GROUP 6.....	\$ 31.42	13.45
LABORER (AREA 2)		
GROUP 1.....	\$ 26.92	12.90
GROUP 2.....	\$ 27.12	12.90
GROUP 3.....	\$ 27.36	12.90
GROUP 4.....	\$ 27.71	12.90
GROUP 5.....	\$ 27.58	12.90
GROUP 6.....	\$ 27.92	12.90
LABORER (AREA 3)		
GROUP 1.....	\$ 26.22	12.90

GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90
LABORER (AREA 4)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90

LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.; burlap person; yard person; dumper (wagon, truck, etc.); joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing, (other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender (including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

LAB01076-005 04/01/2021

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1.....	\$ 23.92	12.95
Zone 2.....	\$ 22.22	12.95
Zone 3.....	\$ 20.35	12.95
Zone 4.....	\$ 19.77	12.95
Zone 5.....	\$ 19.75	12.95

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

Zone 1 - Macomb, Oakland and Wayne

Zone 2 - Monroe and Washtenaw

Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair

Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft

Zone 5 - Remaining Counties in Michigan

PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the

city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 25.06	14.75

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour additional.

 PAIN0312-001 06/01/2018

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrien, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

	Rates	Fringes
PAINTER		
Brush and roller.....	\$ 23.74	13.35
Spray, Sandblast, Sign		
Painting.....	\$ 24.94	13.35

PAIN0845-003 05/10/2018

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

PAIN0845-015 05/10/2018

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

PAIN0845-018 05/10/2018

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.

PAIN1011-003 06/02/2021

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON,
 IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON
 AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 26.71	14.38

FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to
 80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30
 per hour additional.

PAIN1474-002 06/01/2010

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR,
 SANILAC AND TUSCOLA COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 23.79	12.02

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.
 Work with any hazardous material: \$1.00 per hour
 additional. Sandblasting, steam cleaning and acid cleaning:
 \$1.00 per hour additional. Ladder work at or above 40 ft.,
 scaffold work at or above 40 ft., swing stage, boatswain
 chair, window jacks and all work performed over a falling
 height of 40 ft.: \$1.00 per hour additional. Spray gun
 work, pick pullers and those handling needles, blowing off
 by air pressure, and any person rigging (setting up and
 moving off the ground): \$1.00 per hour additional.
 Steeplejack, tanks, gas holders, stacks, flag poles, radio
 towers and beacons, power line towers, bridges, etc.: \$1.00
 per hour additional, paid from the ground up.

PAIN1803-003 06/01/2019

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX,
 CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE,
 GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE,
 MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES;
 OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE
 ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

	Rates	Fringes
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PAINTER

Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with industrial plants, except maintenance of industrial plants.....	\$ 25.39	14.68
All other work, including maintenance of industrial plant.....	\$ 25.39	14.68

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks, vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

 PLAS0514-001 06/01/2018

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER

ZONE 1.....	\$ 31.47	13.81
ZONE 2.....	\$ 29.97	13.81

PLUM0190-003 05/01/2015

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY,
 BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,
 IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT,
 KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE,
 MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA,
 MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE,
 MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA,
 OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST.
 CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA,
 VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
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Plumber/Pipefitter - gas
 distribution pipeline:

Welding in conjunction with gas distribution pipeline work.....	\$ 33.03	20.19
All other work:.....	\$ 24.19	12.28

TEAM0007-004 06/01/2020

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,
 BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,
 DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE,
 GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO,
 IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW,
 LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE,
 MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE,
 MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW,
 ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE,
 ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST.
 CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW
 AND WAYNE COUNTIES

	Rates	Fringes
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TRUCK DRIVER

AREA 1

Euclids, double bottoms and lowboys.....	\$ 28.05	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.80	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 27.90	.50 + a+b

AREA 2

Euclids, double bottomms and lowboys.....	\$ 24.895	.50 + a+b
Euclids, double bottoms and lowboys.....	\$ 28.15	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.90	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 28.00	.50 + a+b

Footnote:

- a. \$47.70 per week
- b. \$68.70 daily

TEAM0247-004 04/01/2013

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, SAGINAW, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
Sign Installer		
AREA 1		
GROUP 1.....	\$ 21.78	11.83
GROUP 2.....	\$ 25.27	11.8375
AREA 2		
GROUP 1.....	\$ 22.03	11.83
GROUP 2.....	\$ 25.02	11.8375

FOOTNOTE:

a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or otherwise, required for the installation of highway and street signs

TEAM0247-010 04/01/2018

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
TRUCK DRIVER (Underground construction)		
AREA 1		
GROUP 1.....	\$ 23.82	19.04
GROUP 2.....	\$ 23.91	19.04
GROUP 3.....	\$ 24.12	19.04
AREA 2		
GROUP 1.....	\$ 24.12	19.04
GROUP 2.....	\$ 24.26	19.04
GROUP 3.....	\$ 24.45	19.04

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

 * SUMI2002-001 05/01/2002

	Rates	Fringes
Flag Person.....	\$ 10.10 **	0.00
LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)....	\$ 20.30	12.90
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).....	\$ 18.02	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 27.07	12.90
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 24.36	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 24.02	12.90
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE,		

OAKLAND, WASHTENAW AND WAYNE)

Group 2.....\$ 21.62 12.90

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted striper, grinder, blaster, groover, or thermoplastic melter for the placement or removal of temporary or permanent pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for the placement or removal of temporary or permanent pavement markings or markers not covered by the classification of Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or removal of temporary or permanent pavement markings or markers in a moving convoy operation not performed by the classification of Pavement Marker Group 1. A moving convoy operation is comprised of only Pavement Markers Group 1 and Line Protectors.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO

is available at
<https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====
END OF GENERAL DECISIO"

"General Decision Number: MI20220074 02/25/2022

Superseded General Decision Number: MI20210074

State: Michigan

Construction Type: Heavy

County: Washtenaw County in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar Pipeline Construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/25/2022

CARP0687-006 06/01/2021

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 35.16	29.22

ELEC0252-009 06/01/2021

	Rates	Fringes
ELECTRICIAN.....	\$ 48.48	27%+12.25

ENGI0325-019 09/01/2021

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 37.63	24.85
GROUP 2.....	\$ 32.90	24.85
GROUP 3.....	\$ 32.17	24.85
GROUP 4.....	\$ 31.60	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer, Crane, Grader/ Blade, Loader, Roller, Scraper, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor, Bobcat/ Skid
Steer /Skid Loader

ENGI0326-008 06/01/2021

EXCLUDES UNDERGROUND CONSTRUCTION

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1.....	\$ 44.69	24.95
GROUP 2.....	\$ 43.19	24.95
GROUP 3.....	\$ 41.69	24.95
GROUP 4.....	\$ 41.39	24.95
GROUP 5.....	\$ 40.57	24.95
GROUP 6.....	\$ 39.71	24.95
GROUP 7.....	\$ 38.74	24.95
GROUP 8.....	\$ 37.03	24.95
GROUP 9.....	\$ 28.69	24.95

FOOTNOTES: Tower cranes: to be paid the crane operator rate
determined by the combined length of the mast and the boom.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane with boom & jib or leads 400' or longer

GROUP 2: Crane with boom & jib or leads 300' or longer

GROUP 3: Crane with boom & jib or leads 220' or longer

GROUP 4: Crane with boom & jib or leads 140' or longer

GROUP 5: Crane with boom & jib or leads 120' or longer

GROUP 6: Regular crane operator

GROUP 7: Backhoe/Excavator, Bobcat/Skid Loader, Boring
Machine, Broom/Sweeper, Bulldozer, Grader/Blade, Loader,
Roller, Scraper, Tractor, Trencher

GROUP 8: Forklift

GROUP 9: Oiler

IRON0025-006 06/01/2019

	Rates	Fringes
IRONWORKER		
Reinforcing.....	\$ 30.98	27.99
Structural.....	\$ 36.77	29.03

LAB00334-009 06/01/2021

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
Landscape Laborer		
GROUP 1.....	\$ 21.35	7.40
GROUP 2.....	\$ 19.35	7.40

LANDSCAPE LABORER CLASSIFICATIONS

GROUP 1: Landscape specialist, including air, gas and diesel equipment operator, lawn sprinkler installer and skidsteer (or equivalent)

GROUP 2: Landscape laborer: small power tool operator, material mover, truck driver and lawn sprinkler installer tender

LAB00334-018 09/01/2018

SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Rates	Fringes
LABORER		
(1) Common or General.....	\$ 23.75	12.85
(2) Mason Tender- Cement/Concrete.....	\$ 23.86	12.85
(4) Grade Checker.....	\$ 24.05	12.85
(5) Pipelayer.....	\$ 22.90	12.75
(524.20) Pipelayer.....	\$ 22.90	12.85
(7) Landscape.....	\$ 18.14	12.85

LAB00499-020 08/01/2021

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 30.21	14.45
GROUP 2.....	\$ 30.42	14.45
GROUP 3.....	\$ 30.56	14.45

LABORER CLASSIFICATIONS

GROUP 1: Common or General; Grade Checker

GROUP 2: Mason Tender - Cement/Concrete

GROUP 3: Pipelayer

PAIN0022-005 07/01/2008

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 25.06	14.75
Spray.....	\$ 25.86	14.75

PLAS0514-002 06/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 31.47	13.81

PLUM0190-010 06/01/2021

	Rates	Fringes
PLUMBER.....	\$ 44.31	23.70

TEAM0007-006 06/01/2020

	Rates	Fringes
TRUCK DRIVER		
Dump Truck under 8 cu. yds.; Tractor Haul Truck....	\$ 27.90	.50 + a+b
Dump Truck, 8 cu. yds. and over.....	\$ 28.00	.50 + a+b
Lowboy/Semi-Trailer Truck...	\$ 28.15	.50 + a+b

FOOTNOTE:

- a. \$470.70 per week.
- b. \$68.70 daily.

 SUMI2010-072 11/09/2010

	Rates	Fringes
TRUCK DRIVER: Off the Road		
Truck.....	\$ 20.82	3.69

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

 The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local),

a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISIO"

EXHIBIT D.2 Equal Opportunity Program and Employee Handbook





MacKenzie Companies

Contracting and Consulting

Equal Employment Opportunity Policy Statement

- A. MacKenzie Companies shall hire and do business in a nondiscriminatory manner, and provide an aggressive and coherent management program to provide for equal employment opportunity.
- B. This policy of equal employment opportunity shall apply to, but is not limited to, hiring, recruitment, selection, placement, training, promotion, demotion, transfer, lay-off, recall, termination, rate of pay, fringe benefits and other forms of compensation. This policy applies to full time, part time, seasonal and temporary employees.
- C. The supervisory staff has been made aware of this policy and is expected to comply with both the letter and the spirit of this policy.
- D. A copy of this Equal Employment Opportunity Statement has been distributed to all employees, and they have been made aware of where to report actions which they feel to be discriminatory.
- E. Only criteria based on an individual's merit will be used in making determinations relating to the actions in paragraph number B and all other personnel matters. These decisions shall not be made on a basis of race, color, national origin, religion, sex (including pregnancy), disability, marital status, height, weight, age, genetic information or arrest record.
- F. The company will maintain a list of agencies to contact when there are job openings. Aside from the local unemployment office, this list will include organizations in the area who maintain lists of qualified minority and women applicants. These agencies will be contacted on an annual basis
- G. The Equal Employment Officer is Heather Hufnagel, and may be contacted at the address and phone number below.


Michael S. Marks, President

3/20/20
Dated

EMPLOYEE HANDBOOK

MacKenzie Companies

Welcome new employee!

On behalf of your colleagues, we welcome you to MacKenzie Companies and wish you every success here.

We believe that each employee contributes directly to MacKenzie Companies' growth and success, and we hope that you take pride in being a member of the team.

The safety, health and welfare of every employee at MacKenzie Companies is at the utmost of our concern. If there is ever a safety concern, or if you ever find an unsafe working condition, we request that you bring it to our attention immediately. This open door policy is strongly encouraged and you are asked to contact us at the phone numbers listed below. In the event of our absence a message will reach us promptly.

This handbook was developed to describe some of the expectations of employees and to outline the policies, programs and benefits available to eligible employees. Employees should familiarize themselves with the contents of the employee handbook as soon as possible, as it will answer many questions about employment with MacKenzie Companies.

We hope that your experience at MacKenzie Companies continues to be challenging, enjoyable and rewarding. Again, welcome!

Sincerely,

Michael Marks - President

Thomas E. MacKenzie - Vice-President

Stephanie MacKenzie – Corp. Secretary/Treasurer

(517) 627-8408

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COMPANY INFORMATION

Organization Description

The MacKenzie Companies perform underground excavating & construction, contracting and environmental work in the commercial, industrial, municipal and private sectors. With offices located in Michigan and Florida, services provided include:

- Site Development
- Underground Utility Construction
- Highway and Road Construction
- Demolition
- Environmental Construction and Consulting
- Concrete and Paving
- Landscaping
- Site Services
- Bridge Construction

Mission Statement

At MacKenzie Companies, we believe the single most important concern in the underground excavating & construction, contracting and environmental business is the customer. Our objective is to achieve complete customer satisfaction by offering customers the best possible value. As workers at MacKenzie Companies, we will reach our objective through hard work, determination, and our constant pursuit of excellence.

Introductory Statement

This handbook is designed to acquaint you with MacKenzie Companies and provide you with information about working conditions, employee benefits and some of the policies affecting your employment. You should read, understand and comply with all provisions of the handbook. It describes many of your responsibilities as an employee and outlines the programs developed by MacKenzie Companies to benefit employees. One of our objectives is to provide a work environment that is conducive to both personal and professional growth.

No employee handbook can anticipate every circumstance or question about policy. The need may arise, and MacKenzie Companies reserve the right to revise, supplement, or rescind any policies or portion of the handbook from time to time as it deems appropriate, in its sole and absolute discretion. The only exception to any change is our employment-at-will policy permitting you or MacKenzie Companies to end our relationship for any reason at any time. Employees will, of course, be notified of such changes to the handbook as they occur.

ACKNOWLEDGEMENT OF RECEIPT OF HANDBOOK

I received a copy of the MacKenzie Companies' Employee Handbook.

I understand the Handbook does not constitute an employment agreement or contract and that the Handbook can be changed or amended by the company at any time and without notice and that any amendments or changes must be in writing from the President of the company.

I further understand that I am an "at will" employee, meaning that I or the company may terminate my employment at any time, with or without cause and with or without notice.

Important

Although the Handbook is not a contract or employment agreement, as an employee of the company you are contractually bound by the signing of this receipt form that if you have any claim against the company or officer of the company, during or after termination of employment which relates to your employment, that any claim shall be submitted, within six months of the date said claim arises, to be heard and determined by an arbitrator in Lansing, MI, or Bradenton, FL, as appointed by the American Arbitration Association. Any decision rendered through arbitration will be enforced by the Circuit Court in Ingham County, MI, or Manatee County, FL, respectively.

Employee: _____

Date: _____

This copy is to be retained in the Employee Handbook.

ACKNOWLEDGEMENT OF RECEIPT OF HANDBOOK

I received a copy of the MacKenzie Companies' Employee Handbook.

I understand the Handbook does not constitute an employment agreement or contract and that the Handbook can be changed or amended by the company at any time and without notice and that any amendments or changes must be in writing from the President of the company.

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Employee: _____

Date: _____

This copy is to be retained by MacKenzie Companies.

EMPLOYMENT

Nature of Employment

This handbook is intended to provide employees with a general understanding of our personnel policies. Employees are encouraged to familiarize themselves with the contents of this handbook, for it will answer many common questions concerning employment with MacKenzie Companies.

However, this handbook cannot anticipate every situation or answer every question about employment. It is not an employment contract and is not intended to create contractual obligations of any kind. Neither the employee nor MacKenzie Companies is bound to continue the employment relationship if either chooses, at its will, to end the relationship at any time.

In order to retain necessary flexibility in the administration of policies and procedures, MacKenzie Companies reserve the right to change, revise, or eliminate any of the policies and/or benefits described in this handbook, except for its policy of employment-at-will. The only recognized deviations from the stated policies are those authorized by the President of MacKenzie Companies.

Employee Relations

MacKenzie Companies believe that the work conditions, wages, and benefits offered to employees are competitive with those offered by other employers in this area and in this industry. If employees have concerns about work conditions or compensation, they are strongly encouraged to voice these concerns openly and directly to their Division Manager or President of MacKenzie Companies.

Our experience has shown that when employees communicate openly and directly, the work environment can be excellent, communications can be clear, and attitudes can be positive. We believe that MacKenzie Companies amply demonstrates its commitment to employees by responding effectively to employee concerns.

Federal and State Employment Laws

In compliance with federal, state and local employment laws, required information is posted in areas readily accessible to all employees. "Your Right to Know" folders are located in every job office and job trailer for quick access. Please refer to the folder for information and/or contact Human Resources with any questions.

Equal Employment Opportunity

In order to provide equal employment and advancement opportunities to all individuals, employment decisions at MacKenzie Companies will be based on merit, qualifications and abilities. MacKenzie Companies do not discriminate in employment opportunities or practices on the basis of race, color, national origin, religion, sex (including pregnancy), disability, marital status, height, weight, age, genetic information, arrest record or any other characteristic protected by law. This policy governs all aspects of employment, including selection, job assignment, compensation, discipline, termination and access to benefits and training.

In addition to a commitment to provide equal employment opportunities to all qualified individuals, MacKenzie Companies has established an affirmative action program.

Any employees with questions or concerns about any type of discrimination in the workplace are encouraged to bring these issues to the attention of their Division Manager, Human Resources, or the President of MacKenzie Companies. Employees can raise concerns and make reports without fear of reprisal. Anyone found to be engaging in any type of unlawful discrimination will be subject to disciplinary action, up to and including termination of employment.

Equal Employment Opportunity Statement

1. MacKenzie Companies shall hire and do business in a nondiscriminatory manner, and provide for an aggressive and coherent management program to provide for equal employment opportunity.
2. This policy of equal employment opportunity shall apply to, but is not limited to hiring, recruitment, selection, placement, training, promotion, demotion, transfer, lay-off, recall, termination, rate of pay, fringe benefits and other forms of compensation. This policy applies to full time, part time, seasonal and temporary employees.
3. Supervisory staff have been made aware of this policy and are expected to comply with both the letter and the spirit of this policy.
4. A copy of this Equal Employment Opportunity Statement has been distributed to all employees, and they have been made aware of where to report actions which they feel are discriminatory.
5. Only criteria based upon an individual's merit will be used in making determinations relating to the actions in paragraph number 2 and all other personnel matters. These decisions shall not be made on a basis of race, color, national origin, religion, sex (including pregnancy), disability, marital status, height, weight, age, genetic information, or arrest record.
6. The company will maintain a list of agencies to contact when there are job openings. Aside from the local unemployment office, this list will include organizations in the area who maintain lists of qualified minority and women applicants. These agencies will be contacted on an annual basis.
7. An Equal Employment Officer may be contacted in both Michigan and Florida main offices.

American with Disabilities Act (ADA) and Amendments Act (ADAAA)

The American with Disabilities Act (ADA) and the Americans with Disabilities Amendments Act (ADAAA), are federal laws that prohibit employers with 15 or more employees from discriminating against applicants and individuals with disabilities and that when needed provide reasonable accommodations to applicants and employees who are qualified for a job, with or without reasonable accommodations, so that they may perform the essential job duties of the position.

It is the policy of MacKenzie Companies to comply with all federal and state laws concerning the employment of persons with disabilities and to act in accordance

with regulations and guidance issued by the Equal Employment Opportunity Commission (EEOC). Furthermore, it is our company policy not to discriminate against qualified individuals with disabilities in regard to application procedures, hiring, advancement, discharge, compensation, training or other terms, conditions and privileges of employment.

The company will reasonably accommodate qualified individuals with a disability so that they can perform the essential functions of a job unless doing so causes a direct threat to these individuals or others in the workplace and the threat cannot be eliminated by reasonable accommodation and/or if the accommodation creates an undue hardship to MacKenzie Companies. Contact Human Resources with any questions or requests for accommodation.

Social Security Privacy Protection Policy

This Social Security Privacy Protection Policy applies to Social Security Numbers (SSNs) that MacKenzie Companies obtains from employees. Access and/or disclosure of such information is restricted to those who have a legitimate business need for access and is stored in a safe and secure manner.

Background and Reference Checks

To ensure that individuals who join MacKenzie Companies are well qualified and to ensure that MacKenzie Companies maintains a safe and productive work environment, it is our policy to conduct pre-employment background checks on all applicants who accept an offer of employment. Background checks may include verification of any information on the applicant's application form or resume. MacKenzie Companies also reserves the right to conduct a background check for current employees to determine eligibility for promotion or reassignment in the same manner as described above.

Sexual and Other Unlawful Harassment

MacKenzie Companies is committed to providing a work environment that is free of discrimination and unlawful harassment. Actions, words, jokes, or comments based on an individual's sex, race, ethnicity, age, religion, or any other legally protected characteristic will not be tolerated. As an example, sexual harassment (both overt and subtle) is a form of employee misconduct that is demeaning to another person, undermines the integrity of the employment relationship, and is strictly prohibited.

If employees believe they have been subject to sexual harassment or any unwanted sexual attention, they should make their unease and/or disapproval directly and immediately known to the harasser and tell the harasser to stop. If the harasser does not stop, employees should promptly report the matter to his or her Supervisor. If the Supervisor is unavailable or the employee believes it would be inappropriate to contact that person, the employee should immediately contact Human Resources or the President of MacKenzie Companies. Employees can raise concerns and make reports without fear of reprisal.

Any Supervisor or Manager who becomes aware of possible sexual or other unlawful harassment should promptly advise Human Resources or the President

of MacKenzie Companies who will handle the matter in a timely and confidential manner.

Anyone engaging in sexual or other unlawful harassment will be subject to disciplinary action, up to and including termination of employment.

Employment Termination

Termination of employment is an inevitable part of personnel activity within any organization, and many of the reasons for termination are routine. Below are examples of some of the most common circumstances under which employment is terminated:

RESIGNATION - voluntary employment termination initiated by an employee.

DISCHARGE - involuntary employment termination initiated by the organization.

LAYOFF - involuntary employment termination initiated by the organization for nondisciplinary reasons.

Since employment with MacKenzie Companies is based on mutual consent, both the employee and MacKenzie Companies have the right to terminate employment at will, with or without cause, at any time.

Return of Company Property

The separating employee must return all company property at the time of separation, including but not limited to uniforms, cell phones, keys, credit cards, fuel cards and wash cards. Failure to return some items may result in deductions from the final paycheck. MacKenzie Companies may also take all action deemed appropriate to recover or protect its property.

Amendments

No individual, other than the President of MacKenzie Companies, is authorized to amend these policies. The Employee Handbook is intended to give you a general overview of MacKenzie Companies and information regarding policies and procedures. Because we operate in a dynamic industry, some policies and benefits currently in effect may be revised, suspended, or eliminated by MacKenzie Companies in response to business needs or changing legal requirements.

WORKPLACE SAFETY

To assist in providing a safe and healthful work environment for employees, customers, and visitors, MacKenzie Companies have established a workplace safety program. This program is a top priority for MacKenzie Companies. The Safety Director has responsibility for implementing, administering, monitoring, and evaluating the safety program. Its success depends on the alertness and personal commitment of all. Please refer to the *Safety Program Handbook* for further safety instructions and information.

MacKenzie Companies provide information to employees about workplace safety and health issues through training sessions and regular internal communication channels such as supervisor-employee meetings, bulletin board postings, newsletters, memos or other written communications.

Some of the best safety improvement ideas come from employees. Those with ideas, concerns, or suggestions for improved safety in the workplace are encouraged to raise them with their Supervisor, or with another Supervisor or Manager, or bring them to the attention of the Safety Director. All reports can be made without fear of reprisal.

Each employee is expected to obey safety rules and to exercise caution in all work activities. Employees must immediately report any unsafe condition to the appropriate Supervisor. Employees who violate safety standards, who cause hazardous or dangerous situations, or who fail to report or, where appropriate, remedy such situations, may be subject to disciplinary action, up to and including termination of employment.

In the case of accidents that result in injury, regardless of how insignificant the injury may appear, employees should immediately notify their Supervisor.

Workplace Monitoring

Workplace monitoring may be conducted by MacKenzie Companies to ensure quality control, employee safety, security and customer satisfaction. MacKenzie Companies may conduct video surveillance of workplace areas. Video monitoring is used to identify safety concerns, maintain quality control, detect theft and misconduct, and discourage or prevent acts of harassment and workplace violence.

Drivers' License Records

All employees must maintain a driving record acceptable to MacKenzie Companies. An employee who does not maintain an acceptable driving record will be subject to disciplinary action up to and including termination.

Employee Medical Examinations

To help ensure that employees are able to perform their duties safely, medical examinations may be required.

After an offer has been made to an applicant entering a designated job category, a medical examination will be performed at MacKenzie Companies' expense by a

health professional of MacKenzie Companies' choice. The offer of employment and assignment to duties is contingent upon satisfactory completion of the exam.

Current employees may be required to take medical examinations to determine fitness for duty. Such examinations will be scheduled at reasonable times and intervals and performed at MacKenzie Companies' expense.

Information on an employee's medical condition or history will be kept separate from other employee information and maintained confidentially. Access to this information will be limited to those who have a legitimate need to know.

Drug and Alcohol Use

MacKenzie Companies is committed to providing a safe, efficient and productive work environment for all employees. To promote this goal, employees are required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner.

Using or being under the influence of drugs or alcohol on the job may pose serious safety and health risks. While on MacKenzie Companies' premises (including job sites), during lunch and rest breaks (including off-site locations), and when conducting business-related activities off MacKenzie Companies' premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. The legal use of prescribed drugs is permitted on the job only if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other individuals in the workplace.

Violations of this policy may lead to disciplinary action, up to and including immediate termination of employment, or required participation in a substance abuse rehabilitation or treatment program. Such violations may also have legal consequences.

Testing for Alcohol and Drugs

Employees are subject to testing of urine and/or blood to detect prohibited drugs or alcohol in the following circumstances:

1. **Pre-Employment Testing.**
All prospective job candidates must pass a drug test as a condition of employment.
2. **Reasonable Cause Testing.**
Employees may be subject to a fitness for duty evaluation, to include appropriate urine and/or blood testing, when there is reason to believe that drug or alcohol use is adversely affecting job performance. Examples of reasonable cause include but are not limited to the following: (a) physical signs and symptoms consistent with prohibited drug and alcohol use, (b) evidence of the distribution, dispensing, possession or use of prohibited drugs or alcohol, (c) occurrence of an accident that may have been caused by human error.

3. Post-Accident Testing.

Drug and alcohol testing is mandatory for any employee who either contributed to an accident or appears to have contributed to an accident involving death. Drug and alcohol testing may be required in the event of any injury or damage to property, at MacKenzie Companies' discretion.

4. Return to Duty Testing.

Any employee who has enrolled in a rehabilitation program or is off work for failing a drug and/or alcohol test must pass a return to duty drug or alcohol test before returning to work. Any employee who has completed rehabilitation under the EAP program and who has tested negative on the return to duty test will be subject to unannounced drug and/or alcohol tests after being returned to work.

5. CDL Required Testing.

All CDL drivers are subject to the U.S. Department of Transportation's Federal Motor Carrier Safety Administration's drug and alcohol regulations and testing. For more information, refer to our Drug and Alcohol Plan for CDL Drivers.

Employees with drug or alcohol problems that have not resulted in, and are not the immediate subject of, disciplinary action may request approval to take unpaid time off to participate in a rehabilitation or treatment program. Leave may be granted if the employee agrees to abstain from use of the problem substance; abides by all MacKenzie Companies' policies, rules, and prohibitions relating to conduct in the workplace; and if granting the leave will not cause MacKenzie Companies any undue hardship.

Our Employee Assistance Program (EAP) provides confidential counseling and referral services to employees for assistance with such problems as drug and/or alcohol abuse or addiction. It is the employee's responsibility to seek assistance from the EAP prior to reaching a point where his or her judgment, performance, or behavior has led to imminent disciplinary action. Participation in the EAP after the disciplinary process has begun may not preclude disciplinary action, up to and including termination of employment.

Employees with questions on this policy or issues related to drug or alcohol use in the workplace should raise their concerns with their Supervisor or Human Resources without fear of reprisal.

WORKPLACE EXPECTATIONS

New Employee Orientation

The first thirty (30) days of employment are considered to be an orientation period. During this time, you will have a chance to determine your satisfaction with MacKenzie Companies and your job. At the same time, your Supervisor will evaluate your work and attitude to determine if you are in the right job and able to meet the job requirements.

Work Schedules

Work schedules for employees vary throughout our organization. All employees are expected to report to work as needed. Staffing needs and operational demands may necessitate variations in starting and ending times, as well as variations in the total hours that may be scheduled each day and week. If employees do not avail themselves to work the necessary hours, within reason, they may become ineligible to receive certain benefits. Supervisors will advise employees of their individual work schedules. All employees must be conveniently reachable via phone in order to receive work schedules.

Attendance and Punctuality

To maintain a safe and productive work environment, MacKenzie Companies expect employees to be reliable and to be punctual in reporting for scheduled work. Absenteeism and tardiness place a burden on other employees and on MacKenzie Companies. In the rare instances when employees cannot avoid being late to work or are unable to work as scheduled, they should notify their Supervisor as soon as possible in advance of the anticipated tardiness or absence. Poor attendance and excessive tardiness are disruptive. Either may lead to disciplinary action, up to and including termination of employment.

Job Sites/Teamwork

All crew members are expected to work as a team and remain on site until the following items are complete at the end of every work day:

- All equipment tracks are cleaned
- All equipment is fueled and greased
- The job site is cleaned up.

Please work together to make sure our equipment and job sites are properly maintained.

Employee Conduct and Work Rules

To ensure orderly operations and provide the best possible work environment, MacKenzie Companies expect employees to follow rules of conduct that will protect the interests and safety of all employees and the organization. Employees are expected to act in a professional manner in order to maintain a working environment that encourages mutual respect among coworkers, customers, vendors and subcontractors, and is free from all forms of harassment and violence.

It is not possible to list all the forms of behavior that are considered unacceptable in the workplace. The following are examples of infractions of rules of conduct that

may result in disciplinary action, up to and including termination of employment:

- Theft or inappropriate removal or illegal possession of company property.
- Falsification of timekeeping records.
- Working under the influence of alcohol or illegal drugs.
- Possession, distribution, sale, transfer, or use of alcohol or illegal drugs in the workplace, while on duty, or while operating employer-owned vehicles or equipment.
- Violation of safety or health rules.
- Absenteeism or any absence without notice.
- Behaving in a manner that is hostile or disrespectful.

Employment with MacKenzie Companies is at the mutual consent of MacKenzie Companies and the employee, and either party may terminate that relationship at any time, with or without cause, and with or without advance notice.

Confidentiality

Employees are expected to maintain the confidentiality of MacKenzie Companies' trade secrets and private or confidential information. Trade secrets may include information regarding the development of systems, processes, know-how and technology. Do not post internal reports, job site photos, policies, procedures or other internal business-related confidential communications without prior approval.

Our clients and other parties with whom we do business entrust the company with important information relating to their businesses. It is our policy that all information considered confidential will not be disclosed to external parties or to employees without a "need to know." If an employee questions whether certain information is considered confidential, he/she should first check with his/her immediate supervisor. This policy is intended to alert employees to the need for discretion at all times and is not intended to inhibit normal business communications.

All media inquiries should be directed to the President of MacKenzie Companies. Employees should not speak to the media on MacKenzie Companies' behalf without prior approval from the President of MacKenzie Companies.

Social Media Policy

MacKenzie Companies understand that social media can be a fun and rewarding way to share your life and opinions with family, friends and co-workers around the world. We also appreciate the dedication and enthusiasm of our workforce and the pride our employees have for our projects. However, use of social media also presents certain risks and carries with it certain responsibilities. To assist you in making responsible decisions about your use of social media, we have established these guidelines for appropriate use of social media.

Guidelines

In the rapidly expanding world of electronic communication, social media can mean many things. Social media includes all means of communicating or posting information or content of any sort on the Internet, including to your own or someone else's web log or blog, journal or diary, personal web site, social networking or affinity web site, web bulletin board or a chat room, whether or not

associated or affiliated with MacKenzie Companies, as well as any other form of electronic communication.

Know and follow the rules

Ultimately, you are solely responsible for what you post online. Before creating online content, consider some of the risks and rewards that are involved. Keep in mind that any of your conduct or postings regarding your job performance, the performance of fellow associates, customers, suppliers, people who work on behalf of MacKenzie Companies or MacKenzie Companies legitimate business interests, could have adverse effects.

Inappropriate postings that may include discriminatory remarks, harassment, and threats of violence or similar inappropriate or unlawful conduct will not be tolerated and may subject you to disciplinary action up to and including termination. Always be fair and courteous to fellow associates, customers, members, suppliers or people who work on behalf of MacKenzie Companies. Also, keep in mind that you are more likely to resolve work-related complaints by speaking directly with your co-workers or by utilizing our Open Door Policy than by posting complaints to a social media outlet. Nevertheless, if you decide to post complaints or criticism, avoid using statements, photographs, video or audio that reasonably could be viewed as malicious, obscene, threatening or intimidating, that disparage customers, members, associates or suppliers, or that might constitute harassment or bullying. Examples of such conduct might include offensive posts meant to intentionally harm someone's reputation or posts that could contribute to a hostile work environment on the basis of race, sex, disability, religion or any other status protected by law or company policy.

Be honest and accurate

Make sure you are always honest and accurate when posting information or news, and if you make a mistake, correct it quickly. Be open about any previous posts you have altered. Remember that the Internet archives almost everything; therefore, even deleted postings can be searched. Never post any information or rumors that you know to be false about MacKenzie Companies, fellow associates, members, customers, suppliers, and others working on behalf of MacKenzie Companies or competitors.

Post only appropriate and respectful content

- Maintain the confidentiality of MacKenzie Companies trade secrets and private or confidential information. Trades secrets may include information regarding the development of systems, processes, products, know-how and technology. Do not post internal reports, policies, procedures or other internal business-related confidential communications.
- Do not create a link from your blog, website or other social networking site to a MacKenzie Companies website without identifying yourself as a MacKenzie Companies associate.
- Express only your personal opinions. Never represent yourself as a spokesperson for MacKenzie Companies. If MacKenzie Companies is a subject of the content you are creating, be clear and open about the fact that

you are an associate and make it clear that your views do not represent those of MacKenzie Companies, fellow associates, members, customers, suppliers or people working on behalf of MacKenzie Companies. If you do publish a blog or post online related to the work you do or subjects associated with MacKenzie Companies, make it clear that you are not speaking on behalf of MacKenzie Companies. It is best to include a disclaimer such as "The postings on this site are my own and do not necessarily reflect the views of MacKenzie Companies."

Using social media at work

Refrain from using social media while on work time or on equipment we provide, unless it is work-related as authorized by your manager or consistent with the Company Equipment Policy. Do not use MacKenzie Companies email addresses to register on social networks, blogs or other online tools utilized for personal use.

Retaliation is prohibited

MacKenzie Companies prohibits taking negative action against any associate for reporting a possible deviation from this policy or for cooperating in an investigation. Any associate who retaliates against another associate for reporting a possible deviation from this policy or for cooperating in an investigation will be subject to disciplinary action, up to and including termination.

Please refer to our Employee Handbook for other policies and procedures that relate to confidentiality and/or social media, and do not allow the posting of internal reports, job site photos, policies, procedures or other internal business-related confidential communications without prior approval.

Solicitations, Distributions and Posting of Materials

Non-employees may not solicit employees or distribute literature of any kind on Company premises at any time. Employees may only admit non-employees to work areas with management approval or as part of a Company-sponsored program. These visits should not disrupt workflow. Former employees are not permitted onto Company property except for official Company business. The sole exceptions to this policy are charitable and community activities supported by MacKenzie Companies' management and company-sponsored programs related to MacKenzie Companies' services.

Use of Phone and Mail Systems

Employees should practice discretion in using company phones when making personal calls and may be required to reimburse MacKenzie Companies for any charges resulting from their personal use. The use of MacKenzie Companies-paid postage for personal correspondence is not permitted.

Use of Cell Phones

In the interest of everyone's safety and production, employees' personal cell phones must be left in vehicles. Equipment operators, laborers and pipe layers shall not take their cell phones onto our job sites. In the event of an emergency, family members may contact the office in order to contact employees between break periods. Cell phones must be a hands-free application in order to use while driving company motor vehicles.

Use of Equipment and Vehicles

Equipment and vehicles essential in accomplishing job duties are expensive and may be difficult to replace. They are for business use only and are only to be operated by the assigned driver or another approved driver of the company. When using property, employees are expected to exercise care, perform required maintenance, and follow all operating instructions, safety standards and guidelines.

All company drivers are expected to remain safe and courteous at all times. Aggressive driving or behaviors, even when reacting to a situation where the other driver is at fault, is never appropriate. Always remain in control of your vehicle, stay safe, maintain a calm demeanor, and do not make or reciprocate any gestures, actions or words.

Please notify the Supervisor if any equipment, machines, tools, or vehicles appear to be damaged, defective, or in need of repair. Prompt reporting of damages, defects, and the need for repairs could prevent deterioration of equipment and possible injury to employees or others. The Supervisor can answer any questions about an employee's responsibility for maintenance and care of equipment or vehicles used on the job.

Equipment Operators are required to complete an *equipment repair request* every week regardless of whether or not the equipment requires repair. The unit number and equipment hours or miles must be written on the repair request in order to track necessary equipment maintenance.

Drivers are required to complete a *daily vehicle inspection report* every day.

The improper, careless, negligent, destructive, or unsafe use or operation of equipment or vehicles, as well as excessive or avoidable traffic and parking violations, can result in disciplinary action, up to and including termination of employment.

Employee Purchases

Receipts must be turned in to the office for all purchases, with a clear description on the receipt for the intended use. An employee who does not deliver the required receipt to the office will be held accountable for the charges.

Any purchase made by any employee of MacKenzie Companies that is not required for use related to a specific project is to be authorized prior to the purchase. Examples of non-project related purchases include but are not limited to cell phones, food and beverages, computers and accessories, and electronics.

In no instance shall an employee purchase an item either with company credit account or company credit card that is intended for non-business use.

Documentation and Record Keeping

Employees are required to maintain, complete and report all necessary records on a timely and accurate basis. Documentation such as receipts, shippers, purchase orders and invoices must be turned in to the appropriate office with purchaser's (employee) name, written legibly (not signed), equipment and/or job number and phase code written legibly on the document. Accidents, damages to equipment and/or property and theft of company property must be reported promptly as well.

Personnel Data Changes

It is the responsibility of each employee to promptly notify MacKenzie Companies of any change in personal information. Personal mailing addresses, telephone numbers, number and names of dependents, individuals to be contacted in the event of an emergency, and other such status reports should be accurate and current at all times. If any personnel data has changed, please notify Human Resources.

COMPENSATION

Timekeeping

Accurately recording time worked is the responsibility of every hourly (nonexempt) employee. Federal and state laws require MacKenzie Companies to keep an accurate record of time worked in order to calculate employee pay and benefits. Time worked is the time actually spent on the job performing assigned duties. Hourly employees should accurately record the time they begin and end their work, as well as the beginning and ending time of each meal period. They should also record the beginning and ending time of any split shift or departure from work for personal reasons. It is the employees' responsibility to sign their time records to certify the accuracy of all time recorded. The Supervisor must review and initial the time record before it is submitted for payroll processing.

Altering, falsifying, tampering with time records, or recording time on another employee's time record may result in disciplinary action, up to and including termination of employment.

All time must be turned in to the appropriate office by the following Monday.

Job site work hours are turned in daily, on job daily reports. Job site Supervisors complete these reports which include all on-site crew members. Therefore, employees working on job sites do not need to complete tickets and have them verified. However, a *Payroll Time Sheet Summary* form is available for employees to complete so that our payroll department may verify hours worked have been turned in on the job daily. You must write your name on this form. The completion of the *Payroll Time Sheet Summary* is not mandatory; it is offered to help ensure the accuracy of your paycheck. You will not be paid from this form.

Payment of Wages

All employees are paid weekly. Each paycheck will include earnings for all work performed through the end of the previous payroll period, and the check will be made available on Friday. In the event that a regularly scheduled payday falls on a day off such as a holiday, employees will receive pay on the last day of work before the regularly scheduled payday.

Employees may have pay directly deposited into their bank accounts if they provide MacKenzie Companies with their account information. The forms necessary to initiate direct deposit may be received from Human Resources. Employees will receive an itemized statement of wages every week.

Administrative Pay Corrections

MacKenzie Companies take all reasonable steps to ensure that employees receive the correct amount of pay in each paycheck and that employees are paid promptly on the scheduled payday. In the event that there is an error in the amount of pay, the employee should promptly bring the discrepancy to the attention of the Payroll Administrator or Human Resources so that corrections can be made as quickly as possible.

BENEFITS

Eligible employees at MacKenzie Companies are provided a wide range of benefits. A number of the programs (such as social security, workers' compensation and state unemployment insurance) cover all employees in the manner prescribed by law.

In addition, Group Health Insurance, Voluntary Benefits, a Profit Sharing/401(k) Plan, and an Employee Assistance Program are offered to eligible employees:

Health Insurance

Upon completion of a thirty (30) day new employee orientation period, eligible employees of MacKenzie Companies will be offered company provided health insurance within ninety (90) days. Temporary, seasonal employees, whose employment is expected to last for only a limited period of time, are not eligible for company provided health insurance. Employees must maintain an average of thirty (30) hours per week in order to be eligible for company provided health insurance coverage.

All employees must promptly report personal and dependent status changes to Human Resources.

As defined by the federal Consolidated Omnibus Budget Reconciliation Act (COBRA), employees and their qualified beneficiaries may have the opportunity to continue coverage under MacKenzie Companies' health plan, if enrolled, when a "qualifying event", as defined by COBRA, would normally result in the loss of eligibility. Under COBRA, the employee pays the full cost of coverage at MacKenzie Companies' group rates plus an administration fee of 2% (see below).

Benefits Continuation (COBRA)

The federal Consolidated Omnibus Budget Reconciliation Act (COBRA) gives employees and their qualified beneficiaries the opportunity to continue health insurance coverage under MacKenzie Companies' health plan when a "qualifying event" would normally result in the loss of eligibility. Some common qualifying events are resignation, termination of employment, or death of an employee; a reduction in an employee's hours or a leave of absence; an employee's divorce or legal separation; and a dependent child no longer meeting eligibility requirements.

Under COBRA, the employee or beneficiary pays the full cost of coverage at MacKenzie Companies' group rates plus an administration fee. Each eligible employee shall be provided with a written notice describing rights granted under COBRA when the employee becomes eligible for coverage under MacKenzie Companies' health insurance plan. The notice contains important information about employee rights and obligations.

Voluntary Benefits

Once eligible for company-provided health insurance, employees of MacKenzie Companies may opt for voluntary benefits including dental, vision and Aflac. All policies are voluntary and at the employee's discretion and expense as pre-tax payroll deductions.

Profit Sharing/401(k) Plan

Provided you are not an Excluded Employee (as defined in the summary plan description), you will be eligible to participate in the Plan once you satisfy the Plan's age and service requirements. You will have met the age requirement when you attain age 18 and the service requirement when you complete one Year of Service. You will have completed a Year of Service if, at the end of your first twelve consecutive months of employment with us, you have been credited with at least 1,000 Hour(s) of service. If you have not been credited with 1,000 Hour(s) of Service by the end of your first twelve consecutive months of employment, your entry date into the Plan will be the first day of the Plan Year quarter coinciding with or next following the date you satisfy the eligibility requirements.

Notwithstanding the preceding, your entry date with respect to salary deferrals is the first day of the quarter coinciding with or immediately following the date you satisfy the Plan's salary deferral eligibility requirements. In addition, and notwithstanding the preceding, your entry date with respect to matching contributions is the first day of the quarter coinciding with or immediately following the date you satisfy the Plan's matching contribution eligibility requirements.

Once eligible to participate in the profit sharing/401(k) plan, all employees will automatically participate in the profit sharing portion of the plan. The profit sharing account is funded by yearly voluntary contributions made by MacKenzie Companies. The 401(k) portion of the plan, however, is voluntary and at the employee's discretion. Each employee is able to contribute up to 100% of his/her gross income (up to yearly IRS limit), and the company may, at its discretion, match a portion of this contribution. Employee contributions are only subject to social security taxes, as they are exempt from federal, state and local taxation. Please refer to the summary plan description for a complete description of participants' rights, obligations and benefits under the plan.

Employee Assistance Program

MacKenzie Companies offer an employee assistance program (EAP) to all employees. All help received through the EAP is completely free and confidential. If you or members of your household seek help, this information is kept private. Only you can decide who will know about your participation. If you or members of your household have a personal problem, your EAP is ready to help. In Michigan, contact Sparrow's GuidanceResources EAPPlus at 877.595.5284. In Florida, contact Centerstone Employee Assistance Program at 941.782.4379.

Employees of MacKenzie Companies may also be referred to the EAP because of poor job performance. While an employee cannot be forced to participate or seek assistance through the program, the EAP can be helpful where job performance is a problem. By making available a system for employees to resolve personal problems,

MacKenzie Companies gain a more productive work force and a better functioning business.

TIME OFF/LEAVES OF ABSENCE

Time Off Requests

It is policy of MacKenzie Companies that all employees use time off requests to ensure better worksite communication.

Planned Time Off

All employees must fill out a time off request when planning to take time off from work. If you are going to be away from the office or job site you must fill out a time off request.

Unplanned Time Off

When unable to come to work for various reasons, such as an illness, you must contact your Supervisor. If your Supervisor is unreachable, you will need to contact the Dispatcher. The Dispatcher will notify your Supervisor of your absence. Your Supervisor or the Dispatcher will complete a time off request for you.

Jury Duty

Upon receipt of notification from the state or federal courts of an obligation to serve on a jury, employees must notify their supervisor and provide him/her with a copy of the jury summons.

Military Leave

MacKenzie Companies is committed to protecting the job rights of employees absent on military leave. In accordance with federal and state law, it is the company's policy that no employee or prospective employee will be subjected to any form of discrimination on the basis of that person's membership in or obligation to perform service for any of the Uniformed Services of the United States.

Lactation/Breastfeeding

Pursuant to the Patient Protection and Affordable Care Act of 2010, and up to one year after a child's birth, MacKenzie Companies shall provide breastfeeding employees with reasonable break times as needed to express breast milk in a private location.

Family and Medical Leave (FMLA)

Under this policy, MacKenzie Companies will grant up to 12 weeks (or up to 26 weeks of military caregiver leave to care for a covered service member with a serious injury or illness) of unpaid leave during a 12-month period to eligible employees. Please refer to the FMLA notice provided in the "Your Right to Know" folder for information on eligibility, types of leave covered, amount of leave, and other details.

EXHIBIT D.3 Affirmative Action Program





MacKenzie Companies

Contracting and Consulting

MacKenzie Companies Affirmative Action Program

- I. Equal Employment Opportunity Policy Statement:
 - A. MacKenzie Companies shall hire and do business in a nondiscriminatory manner, and provide an aggressive and coherent management program to provide for equal employment opportunity.
 - B. This policy of equal employment opportunity shall apply to, but is not limited to, hiring, recruitment, selection, placement, training, promotion, demotion, transfer, lay-off, recall, termination, rate of pay, fringe benefits and other forms of compensation. This policy applies to full time, part time, seasonal and temporary employees.
 - C. The supervisory staff has been made aware of this policy and is expected to comply with both the letter and the spirit of this policy.
 - D. A copy of this Equal Employment Opportunity Statement has been distributed to all employees, and they have been made aware of where to report actions which they feel to be discriminatory.
 - E. Only criteria based on an individual's merit will be used in making determinations relating to the actions in paragraph number B and all other personnel matters. These decisions shall not be made on a basis of race, color, national origin, religion, sex (including pregnancy), disability, marital status, height, weight, age, genetic information and arrest record.
 - F. The company will maintain a list of agencies to contact when there are job openings. Aside from the local unemployment office, this list will include organizations in the area who maintain lists of qualified minority and women applicants. These agencies will be contacted on an annual basis
 - G. The Equal Employment Officer is Heather Hufnagel, and may be contacted at the address and phone number below.

II. Dissemination of the E.E.O. Policy:

- A. The E.E.O. policy is distributed to employees on an annual basis as the construction season begins. This is accomplished either by placing a copy of the policy in payroll envelopes or including in the company's quarterly newsletter. The E.E.O. policy is discussed at regular employees meetings, included in the Employee Handbook, and displayed at offices and jobsites
- B. The fact that the MacKenzie Companies is an Equal Opportunity Employer is stated on our letterhead and in our company newsletter. When advertising for employees or subcontractors the Equal Opportunity Employer notification is included in the ad, and noted on the employment application forms.

III. Management' responsibilities through the designated E.E.O. Officer:

- A. MacKenzie Companies will conduct business in a nondiscriminatory manner. This practice will apply to, but is not limited to, hiring, training, promotion, transfer, termination, layoff, benefits, harassment, non-segregated facilities, and solicitation of minority and female owned contractors. Decisions in all areas will be based on merit and not on the basis of race, color, national origin, religion, sex (including pregnancy), disability, marital status, height, weight, age, genetic information, arrest record or familial status.

- 1. All supervisory personnel are directed to implement the above policy. Those specifically assigned with the task of monitoring and reviewing policies and decisions are Michael Marks, President and Heather Hufnagel, E.E.O. Officer.

B. Statement of Procedures:

- 1. The E.E.O. Officer is assigned the task of monitoring all activities pertaining to personnel and identifying any problem areas where discrimination occurs. It is her responsibility to notify recruiting sources of possible job openings in order to meet the company's affirmative action goals.
 - 2. As problem areas or complaints are identified, the E.E.O. Officer has the authority to investigate the situation and suggest corrective action, subject to final approval of the president of the company.
 - 3. The E.E.O. Officer will periodically review the progress made in the Affirmative Action Program and update, where necessary, the policies of the company.



4. Reviews of hiring, terminating, training opportunities, promotion and layoff procedures are performed by the E.E.O. Officer, as well as periodic site visits to determine if unreported incidences of discrimination occur.
5. A list of referral sources for minority and female job applicants includes the organizations below. These organizations are notified at least once a year:

NAWIC Lansing Chapter
Cristo Rey Community Center
Michigan Indian Employment & Training Services
Women's Center of Greater Lansing
Greater Lansing Urban League
NAACP Lansing Branch
Great Lakes Christian College
UnidosNow
Manatee County Black Chamber of Commerce
NAWIC Tampa
NAACP Manatee County

IV. Goals and Timetables for Minorities and Females:

- A. MacKenzie Companies will strive for workplace diversity within all job classifications.
- B. Approximately every six weeks, the workforce is reviewed by the E.E.O. Officer for compliance. Based on these reviews recommendations are made to the President and supervisory personnel to help reach the goals which have been set by the company.
- C. Approximately every six months, the workforce is evaluated in the areas of rate of pay, fringe benefits, and other forms of compensation, by the E.E.O. Officer and the President.

V. Indicate the Due Process for Handling:

- A. In the event that a complaint is received, it will be reviewed and investigated by the E.E.O. Officer. Appropriate corrective action is to be recommended to and reviewed by the President, including a review of whether discrimination may extend beyond these actions reviewed. Corrective action will include all affected persons.



- B. If an employee wishes to appeal a decision made by the President in a case of grievance or harassment, they may do this through the E.E.O. Officer who will reopen the investigation.
- C. Persons responsible to handle complaints and appeals are Michael Marks, President and Heather Hufnagel, E.E.O. Officer.
- D. Complaints pertaining to civil rights that are not resolved may also be appealed to any of the following departments:

Michigan Department of Civil Rights - Complaint Investigation

Battle Creek Office (616) 964-7193
Benton Harbor Office (616) 925-7044
Detroit Office (313) 256-2658
Flint Office (313) 235-4653
Grand Rapids Office (616) 456-7543
Lansing Office (517) 335-4026
Muskegon Office (616) 739-7168
Saginaw Office (517) 758-1701

Office of Federal Contract Compliance Programs (OFCCP)

Grand Rapids Office (616) 456-2166
Washington, D.C. Office (202) 523-9368

U.S. Equal Employment Opportunity Commission

Detroit Office (313) 226-7636
Washington, D.C. Office (800) 669-4000

