COLEMAN ENGINEERING COMPANY
CIVIL ENGINEERING • ENVIRONMENTAL ENGINEERING • GEOTECHNICAL ENGINEERING • SURVEYING
635 CIRCLE DRIVE • IRON MOUNTAIN, MI 49801 • PHONE: 906-774-3440

February 6, 2024

Mr. Mikael Kilpela
Engineering Department
City of Marquette
Municipal Service Center
1100 Wright Street
Marquette, Michigan 49855

Re: Construction Materials Testing
2024 Construction Projects
Marquette, Michigan

Dear Mr. Kilpela:

In response to your recent Request for Proposal, Coleman Engineering Company (CEC) is pleased to submit this cost proposal for Construction Materials Testing services for the 2024 construction season for the City of Marquette.

We have prepared the attached scope of testing services based on our understanding of the types of projects contemplated by the City. All services will be provided through our Iron Mountain, Michigan laboratory.

If you have any further questions or comments regarding this matter, please contact me at this office 906-774-3440 or by email at dedlebeck@coleman-engineering.com.

Sincerely,

COLEMAN ENGINEERING COMPANY

Dave Edlebeck

Dave Edlebeck
Laboratory Manager

DE/lp

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE • IRON MOUNTAIN, MI 49801
PHONE: 906-774-3440 • FAX: 906-774-7776

Cost Proposal
Construction Materials Testing
2024 Construction Projects
Marquette, Michigan

General Company Information

Coleman Engineering Company (CEC) is a corporation licensed to conduct business in the State of Michigan. The construction materials laboratory is pre-qualified through the Michigan Department of Transportation (MDOT) and maintains national accreditation as an AASHTO Material Reference Laboratory. CEC plans on utilizing the personnel identified below:

Dave Edlebeck – Laboratory Manager
635 Circle Drive
Iron Mountain, Michigan 49801
(906) 774-3440 office
(906) 774-7776 fax
(906) 282-1915 cell
dedlebeck@coleman-engineering.com

Teidra Fuson – Laboratory Supervisor
635 Circle Drive
Iron Mountain, Michigan 49801
(906) 774-3440 office
(906) 774-7776 fax
(906) 396-2643 cell
tfuson@coleman-engineering.com

Jeremy MacDonald – Testing Technician
635 Circle Drive
Iron Mountain, Michigan
(906) 774-3440 office
(906) 448-8162 cell
jmacdonald@coleman-engineering.com

Taylor Follrath – Testing Technician
635 Circle Drive
Iron Mountain, Michigan
(906) 774-3440 office
(231) 233-8748 cell
tfollrath@coleman-engineering.com

Dylan Bousley – Testing Technician
635 Circle Drive
Iron Mountain, Michigan
(906) 774-3440 office
(906) 221-4126 cell
dbousley@coleman-engineering.com

Requested field and laboratory services shall be performed through our Iron Mountain laboratory.

Statement of Understanding

CEC understands that the City will contract with a firm to provide construction materials testing services for multiple projects listed below. This testing will be on an as-needed basis at the direction of the City's on-site representative per MDOT frequency requirements. Testing will be conducted per MDOT or City specifications and will be presented on MDOT standard forms. Results will be noted "pass" or "fail" as applicable. CEC will provide our services on a time and materials / "on-call" basis. We request 24 hours' notice but realize that is not always feasible. Additionally, CEC will make every effort to confirm that work is ready prior to leaving to the sight if inclement weather is impending.

Proposed Projects

- Lakeshore Boulevard Phase II;
- Front / Crescent Street Sewer Extension;
- SIMP and Sanitary Sewer Lateral Replacements;
- Sugarloaf Multiuse Path Extension;
- Dead River Mouth Dredging;
- Other projects if they become available

Scope of Testing Services

Based on our previous experience with similar projects, the scope of testing will include density control of compacted soils, aggregate mixtures, Hot Mix Asphalt (HMA) and testing of fresh concrete for road and utility projects. Laboratory testing includes mechanical analysis of soils and aggregates, compressive strength of cylindrical concrete specimens and quantitative extraction / mechanical analysis of HMA mixtures. The specific test methods that will be utilized for the project are listed below.

➢ Concrete Testing

- MTM 205 Michigan Test Method for Consolidation Method of Concrete Cylinder Test Specimens
- MTM 206 Michigan Test Method for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
- MTM 207 Michigan Test Method for Testing Concrete

- Aggregates
  - MTM 107 Michigan Test Method for Sampling Aggregates
  - MTM 108 Michigan Test Method for Materials Finer than No. 75µm (No. 200) Sieve in Mineral Aggregates by Washing
  - MTM 109 Michigan Test Method for Sieve Analysis of Fine, Dense Graded, Open Graded and Coarse Aggregates in the Field
  - MTM 110 Michigan Test Method for Determining Deleterious and Objectionable Particles in Aggregates
- Hot Mix Asphalt
  - MTM 311 Michigan Test Method for Determining Aggregate Gradation for HMA Mixture
  - MTM 313 Michigan Test Method for Sampling HMA Paving Mixtures
  - MTM 314 Michigan Test Method for Theoretical Maximum Specific Gravity and Density of HMA Paving Mixtures
  - MTM 315 Michigan Test Method for Bulk Specific Gravity and Density of Compacted HMA Mixtures Using Saturated Surface-Dry Specimens
  - MTM 319 Michigan Test Method for Determination of Asphalt Content From Asphalt Paving Mixtures By the Ignition Method
  - MTM 320 Michigan Test Method for Determining Specific Gravity and Absorption of Coarse Aggregates
  - MTM 321 Michigan Test Method for Determining Specific Gravity and Absorption of Fine Aggregates
  - MTM 324 Michigan Test Method for Sampling HMA Paving Mixtures Behind the Paver
  - MTM 325 Michigan Test Method for Quantitative Extraction of Bitumen from HMA Paving Mixtures
- Compaction
  - ASTM D6938 In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods
  - ASTM D2950 Density of Hot Mix Asphalt Concrete in Place by Nuclear Methods
  - MDOT Density Control Handbook One Point Cone / T-99 Modified T-180

Out of Scope Services

Out of Scope Services include testing services not identified in the above scope of work and include but are not limited to:

- Testing of engineered fill to replace deleterious soils identified during foundation excavation.
- Time spent on-site waiting for work to be completed for initial testing.
- Time spent on-site for retesting.
- Scheduled trips resulting in no work completed due to changed schedules or work cancelled without prior notification.
- All work described in the Scope of Testing Services will be completed within a normal 5 day/40-hour work week.
- Your construction representative and our field technician prior to completing any out of scope work will sign a Field Change Order. The Field Change Order will be utilized to prepare a work order to the contract.

2024 City of Marquette Testing Services Request for Proposals

Company: Coleman Engineering Company (CEC)

Service	Rate	Comments*
1) Technician rate	$87.00 / hr	Portal to Portal, includes all field testing equipment
2) Mileage	$0.75 / mile	
3) Compaction	$87.00 / hr	Portal to Portal
Michigan Cone Test	$87.00 / hr	Testing will be completed in the field under the hourly service rate and reported on MDOT Form 0582B
Density Nuclear Gauge	$60.00 / day	
4) Concrete		
Field Testing	$87.00 / hr	Testing will be completed in the field under the hourly service rate and reported on MDOT Form 1174R/1174S
Compressive Strength	$25.00 / cyl	Reported on CEC Cylinder forms
Hold	$10.00 / cyl	
5) Aggregate		
Sieve Analysis - Sand	$115.00 / ea	Reported on MDOT Forms 1900 / 1901
Sieve Analysis - Gravel	$145.00 / ea	Reported on MDOT Forms 1900 / 1901
6) HMA		
Extraction with Gradation	$87.00 / hr	Testing will be completed at the contractor's on-site QC laboratory, per MDOT special provision. Reported on MDOT Forms 1903B / 1912
Density Nuclear Gauge	$60.00 / day	
7) Reporting		Describe Reporting:
Admin Staff	$87.00 / hr	Preliminary test results will be provided verbally at the completion of testing.
Project Manager	$110.00 / hr	Typed testing reports will be submitted on appropriate forms via email,
		after Project Manager's review.
8) Expenses		List Expenses:
		None anticipated, but will advise and request approval prior to occurance
9) Overtime		Overtime will be authorized prior to occurrence
Over 8 hours	$130.50 / hr	
Saturdays	$130.50 / hr	
Sundays/Holidays	$130.50 / hr	
10) Other*		

** Use this space and other blank lines to include any other information needed to clarify services, rates, etc.*

DAVID EDLEBECK, Laboratory Manager

Education: Northeast Wisconsin Technical Institute, A.S. - Civil Engineering Technology, 1987

Experience:

2011-Present	Coleman Engineering Company
2000-2011	Dickinson County Road Commission
1997-2000	Niagara Mill
1990-1997	Coleman Engineering Company
1987-1990	Twin City Testing & Engineering Labs, Inc.

Certifications:

MDOT Aggregate Sampling
MCA Certified Concrete Field Testing Technician Level 1
ACI Concrete Field Testing Technician Grade 1
ACI Concrete Strength Testing Technician
WisDOT Aggregate Technician I
WisDOT Nuclear Density Technician I
WisDOT Grading Technician I
Radiation Safety Officer
Coleman Engineering Company Nuclear Gauge Training

Mr. Edlebeck is a senior level engineering technician managing the geotechnical and construction materials testing operation at CEC's Iron Mountain Laboratory. Dave has extensive practical experience in the field of geotechnical and construction materials. Dave has performed technical support for major projects throughout the Upper Peninsula and Northern Wisconsin. Through his career with Coleman Engineering as well as other consultants and governmental agencies, he has developed a wealth of experience in civil engineering and construction fields. He is familiar with a variety of civil works related construction projects. He is an expert on the testing and measurement of physical properties of various construction materials and provides testing on a variety of construction materials which include soils, aggregates, concrete, HMA paving mixtures as well as other specialty testing and inspections.

Dave's management responsibilities include developing realistic testing programs, preparing cost proposals, assigning appropriate technical staff for projects, performing field and laboratory testing, monitoring the testing as the project progresses, reviewing test reports, preparing test reports, quality assurance of testing procedures, training personnel on testing procedures and maintaining the quality management system for the laboratory.

He is the resident expert for field and laboratory testing of soils for geotechnical purposes. He reviews all geotechnical information included for geotechnical investigations, provides confirmation of soil classifications, prepares final boring logs for preparation of geotechnical recommendations, completes necessary laboratory strength and index tests and prepares summary reports.

Through his extensive efforts he has built a significant reputation regarding the quality of testing offered through the laboratory operation. Currently the Iron Mountain laboratory maintains a national accreditation through AASHTO:resource, is a validated laboratory through the US Army Corps of Engineers and has qualified status with WisDOT and MDOT.

Related Project Experience:

LP Sagola Siding Conversion, Sagola, Michigan. Project Manager for project consisting of a conversion to Louisiana Pacific's existing facility which includes multiple building additions and equipment modifications, site work and rail construction. Performed DCP Testing, Soil Density Testing, Concrete and High Strength Grout Testing.

Quality Assurance Quality Control A. Lindberg and Son, Ishpeming, Michigan**.** Completed numerous laboratory testing projects associated with process control in the production of construction aggregates. Testing included particle size analysis, abrasion resistance and soundness testing as well as determination of deleterious and objectionable particles.

County Road 424, Iron County, Michigan. Project Manager for Quality Assurance Testing of Hot Mix Asphalt crushing, reshaping and resurfacing, and aggregate shoulder project.

Menominee County Road Commission, Marquette, Michigan. Project Manager for the construction materials testing throughout the county. Conducted field and laboratory strength testing of concrete and completed numerous laboratory testing projects associated with process control in the production of construction aggregates.

Iron County Road Commission, Iron County, Michigan. Project Manager for construction materials testing throughout the county, Provided density assurance testing of soils, subbase, aggregate base, and testing of hot mix asphalt placed on various county highways throughout the construction season.

US-2 over Big Cedar River, Menominee County, Michigan. Project Manager for construction materials testing for a Bridge replacement with 27-inch prestressed concrete box beam including cofferdams, steel piling, underdrains, hot mix asphalt road resurfacing, concrete curb and gutter, guardrail and pavement work on US-2 over Big Cedar River, Menominee County.

V.A. Hospital, Iron Mountain, Michigan. Project Manager for hospital expansion consisting of constructing an addition to the existing Community living Center. The new structure will be a one-story building with a small second story and a partial basement enclosing over 11,000 square feet of floor space. Construction will include frost depth foundations, foundation walls, concrete masonry walls, slabs-on-grade, elevated concrete floors, spray applied fireproofing, concrete patios, concrete anti-ram barriers, concrete sidewalks, curb and gutter, earthwork, and hot mix asphalt paving.

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 12/2/2022

Dave Edlebeck

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

Concrete Field Testing Technician Level I

This certification expires on 4/15/2026

MCA Certification Board of Examiners

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

MCA Assistant Director of Training & Certification

Examiner-William Foster

Executive Director-Daniel DeGraaf

AMERICAN CONCRETE INSTITUTE

This is to certify that

DAVID R EDLEBECK

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

ACI Concrete Field Testing Technician – Grade I

Certified Date: 12/02/2022 **Expires: 12/01/2027**

Examiner of Record: William L Foster

ACI Managing Director of Certification

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

AMERICAN CONCRETE INSTITUTE

This is to certify that

DAVID R EDLEBECK

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: 11/29/2022 **Expires: 11/28/2027**

Examiner of Record: William L Foster

ACI Managing Director of Certification

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

TEIDRA FUSON, Laboratory Supervisor

Education: Bay College 2017-2018
Northern Michigan University 2019

Experience: 2015 - Present Coleman Engineering Company

Certifications:
MDOT Certified Hot Mix Asphalt QC/QA Technician
MDOT Level I / II Aggregate Technician
MDOT Density Technology
MCA Concrete Field Testing Technician Level I
ACI Concrete Field Testing Technician Level I
ACI Concrete Strength Testing Technician
WisDOT Nuclear Density Technician Level I
WisDOT Portland Concrete Cement Technician Level I
WisDOT Aggregate Technician Level I
WisDOT Concrete Strength Technician
Hazmat Certification
Nuclear Density Gauge Safety Certification

Ms. Fuson is the Laboratory Supervisor at the Iron Mountain, Michigan laboratory. Her supervisory responsibilities include the laboratory activities associated with testing of soils and various construction materials. Her job description includes assigning work, outlining procedures to be used by technicians, performing training for new employees, and conducting periodic evaluations of technicians. Her responsibilities also include testing of hot mix asphalt (HMA) paving mixtures and applying formulas for the interpretation and calculation of test results and makes determinations regarding compliance. Construction materials routinely tested under her supervision include soils, construction aggregates, concrete (fresh and hardened) and hot mixed asphalt (HMA) mixtures. The testing procedures include field sampling and testing as well as laboratory-controlled testing activities.

Ms. Fuson has had an abundance of experience with testing HMA paving mixtures on airport projects, the Michigan Department of Transportation Bit Lab as well as local agencies. She has proven herself as being qualified on a variety of projects, requiring little supervision.

Related Project Experience:

Michigan Department of Transportation, As-Needed Inspection and Testing, Various Cities, Michigan. Performed as-needed laboratory testing of soils on a variety of MDOT projects throughout the Upper Peninsula. Work also included as-need field and laboratory testing of concrete to determine slump, temperature, and air content as well as strength determination.

Testing of Aggregates Little Bay Concrete Products, Gladstone, Michigan. Performed annual quality control testing of concrete aggregates utilized for precast concrete products. Laboratory testing included particle size analyses of fine and coarse concrete aggregates.

Iron County Road Commission, Iron County, Michigan. Provided density assurance testing of soils, subbase, aggregate base, and testing of hot mix asphalt placed on various county highways throughout the construction season.

City of Escanaba Stephenson Avenue Improvement Project, Escanaba, Michigan. Provided Quality Assurance Testing of in-place subgrade and basecourse material. Laboratory testing of aggregate included particle size analysis tests of dense graded aggregate to confirm compliance with project specifications. Testing also included field testing of HMA and HMA Mixture testing.

Sawyer International Airport, Gwinn, Michigan. Work consisted of acceptance testing on subgrade, sand subbase, recycled aggregate base course, and P-401/P-403 HMA pavement.

Dickinson County Airport Runway Rehabilitation, Iron Mountain, Michigan. Completed laboratory testing of subgrade and aggregate base materials as part of a pavement evaluation study for runway rehabilitation. Tests performed include FAA prerequisites Laboratory Compaction Characteristics of Soil, and particle size analyses.

Marquette County Road Commission, Marquette, Michigan. Work included determining asphalt content, particle size, and theoretical maximum density of hot mix asphalt from various locations throughout the county.

Eagle Mine ZLD Building, Champion, Michigan. Performed field density testing of compacted fill for site grading, building foundations, concrete slabs using nuclear testing methods. Conducted field and laboratory testing of cast-in-place concrete for footings, foundation walls and slabs

LP Sagola Siding Conversion, Sagola, Michigan. Conducted field and laboratory testing of cast-in-place concrete for footings, foundation walls and slabs for the conversion to Louisiana Pacific's existing facility which includes multiple building additions and equipment modifications, site work and rail construction.

US-2 over Big Cedar River, Menominee County, Michigan. Provided field and laboratory testing of concrete for a Bridge replacement with 27-inch prestressed concrete box beam including cofferdams, steel piling, underdrains, hot mix asphalt road resurfacing, concrete curb and gutter, guardrail and pavement work on US-2 over Big Cedar River, Menominee County.

As-Needed HMA Inspection and Testing, Gladstone, Michigan. Provided full-time HMA materials testing, reporting and record keeping, sampling verification for testing and obtaining HMA samples.

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 4/8/2022

Teidra L Fuson

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

Concrete Field Testing Technician Level I

This certification expires on 4/15/2025

MCA Certification Board of Examiners

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

MCA Assistant Director of Training & Certification

Examiner-William Foster

Executive Director-Daniel DeGraaf

AMERICAN CONCRETE INSTITUTE

This is to certify that

TEIDRA L FUSON

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

ACI Concrete Field Testing Technician – Grade I

Certified Date: 04/06/2022 **Expires: 04/05/2027**

Examiner of Record: David R Cook

ACI Managing Director of Certification

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

AMERICAN CONCRETE INSTITUTE

This is to certify that

TEIDRA L FUSON

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: 11/10/2021 **Expires: 11/09/2026**

Examiner of Record: William L Foster

ACI Managing Director of Certification

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

MDOT Michigan Department of Transportation

FERRIS STATE UNIVERSITY

Institute for Construction Education and Training

MDOT Michigan Department of Transportation

HEREBY CERTIFIES THAT

Teidra Fuson

Has demonstrated through written and performance examinations
the ability and understanding necessary for classification as a

MICHIGAN CERTIFIED AGGREGATE TECHNICIAN LEVEL ONE

And is therefore qualified to perform the following tests:

- Sampling
- Sample Reduction, Loss by Wash and Sieving
- Crush Particle Pick

EXPIRES: March 31, 2027 **ENDORSEMENTS: ABC** **IDENTIFICATION NUMBER: 104260-0327**

Doug Needham, President
Michigan Aggregate
Association

Kevin Kennedy
Pavement Operations Engineer
Michigan Department of Transportation

David Faber , Program Coordinator
Institute for Construction Education and Training
Ferris State University

FERRIS STATE UNIVERSITY
Institute for Construction Education and Training

HEREBY CERTIFIES THAT

Teidra Fuson

Has demonstrated through written and performance examinations
the ability and understanding necessary for classification as a

MICHIGAN CERTIFIED AGGREGATE TECHNICIAN LEVEL TWO

And is therefore qualified to perform the following tests:

- Sampling
- Sample Reduction, Loss by Wash and Sieving
- Crush Particle Pick
- Deleterious Particle Pick
- Flat and Elongated Particles in Coarse Aggregate
- Fine Aggregate Angularity
- Fine and Coarse Aggregate Specific Gravity and Absorption

Expires: December 31, 2028

Endorsements: ABCDEFG

Identification Number: 104260-1228

Doug Needham, President
Michigan Aggregate Association

Kevin Kennedy
Pavement Operations Engineer
Michigan Deprtment of Transportation

David Faber , Program Coordinator
Institute for Construction Education and Training
Ferris State University

MDOT Michigan Department of Transportation

FERRIS STATE UNIVERSITY

Institute for Construction Education and Training

MDOT Michigan Department of Transportation

HEREBY CERTIFIES THAT

Teidra Fuson

has demonstrated, through a written and practical examination,
the knowledge and ability to perform tests as a

MICHIGAN CERTIFIED HOT MIX ASPHALT QC/QA TECHNICIAN

and is hereby awarded this certificate of certification.

David Faber, Program Coordinator
Institute for Construction Education and Training
Ferris State University

Brett Stanton
Executive Director
Michigan Asphalt Paving Association

Kevin Kennedy
Pavement Operations Engineer
Michigan Department of Transportation

Qualification number: 0719-0325 **Expires: March 31, 2025**

MDOT Michigan Department of Transportation

FERRIS STATE UNIVERSITY

Institute for Construction Education and Training

MDOT Michigan Department of Transportation

HEREBY CERTIFIES THAT

Teidra Fuson

Has demonstrated the ability and understanding of Density Technology, and is therefore qualified to perform the following tests:

- Density In-Place (Nuclear)
- One-Point Michigan Cone
- One Point T-99
- Michigan Modified T-180
- Speedy Moisture Gauge (Clay and Granular)

EXPIRES: **May 31, 2027**

IDENTIFICATION NUMBER: **12858-0527**

Justin Foster, Compaction Control Specialist
Construction Field Services
Michigan Department of Transportation

David Faber, Program Coordinator
Institute for Construction Education and Training
Ferris State University

JEREMY J. MACDONALD, Construction Materials Testing Technician

Experience:	2014 - Present	Coleman Engineering Company
	1996 - 2017	Michigan Army National Guard
	2010 – 2013	Michigan Army National Guard Recruiter

Certifications:

MCA Concrete Field Testing Technician Level I
ACI Concrete Field Testing Technician Level I
MDOT Density Technology
MDOT HMA Paving Operations
MDOT Aggregate Tech Sampling
Troxler Nuclear Gauge Safety Certification
Hazmat Certification

Mr. MacDonald is a field and laboratory technician with Coleman Engineering Company based in our Iron Mountain, Michigan laboratory. His primary responsibility is to provide field and laboratory testing of various construction materials. He has provided construction testing throughout the Upper Peninsula of Michigan and northern Wisconsin for earthwork projects, concrete testing of foundations, floors, curb and gutter, elevated slabs, and field density control of Hot Mixed Asphalt (HMA) paving mixtures.

Mr. MacDonald has gained solid experience in laboratory and field construction quality assurance testing for industrial and commercial construction projects since joining Coleman Engineering Company. He has demonstrated talents in testing and has taken on assignments with enthusiasm.

Related Project Experience:

Michigan Department of Transportation, As Needed Testing - Various Locations, Michigan. Performed field testing of concrete and density of soil and hot mix asphalt per MDOT specifications.

M-35 over Portage Creek, Delta County, Michigan. Provided field testing of concrete for concrete deck and brush block patching, per MDOT specifications.

US-2 over Whitefish River, Delta County, Michigan. Provided field testing of concrete for concrete deck and brush block patching, per MDOT specifications.

City of Escanaba Stephenson Avenue Improvement Project, Escanaba, Michigan. Provided Quality Assurance Testing of in-place subgrade and basecourse material. Testing also included field testing of basecourse and top course HMA placed.

Dickinson County Road Commission Various Projects, Marquette, Michigan. Provided nuclear density testing on pulverized hot mix asphalt base course being placed, following MDOT Density and Inspection standards. This project was administered by the MDOT Local Agency Program.

County Road 424, Iron County, Michigan. Provided nuclear density testing of pulverized Hot mix asphalt aggregate base being placed, following MDOT Density and Inspection standards. This project was administered by the MDOT Local Agency Program.

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 2/26/2021

Jeremy MacDonald

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

Concrete Field Testing Technician Level I

This certification expires on 4/15/2024

MCA Certification Board of Examiners

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

David L. Hollingsworth

MCA Director of Technical Services/Training

Examiner-William Foster

Executive Director-Daniel DeGraaf

AMERICAN CONCRETE INSTITUTE

This is to certify that

JEREMY J MACDONALD

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

ACI Concrete Field Testing Technician – Grade I

Certified Date: 02/24/2021 **Expires: 02/23/2026**

Examiner of Record: William L Foster

ACI Managing Director of Certification

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

MDOT Michigan Department of Transportation

FERRIS STATE UNIVERSITY

Institute for Construction Education and Training

MDOT Michigan Department of Transportation

HEREBY CERTIFIES THAT

Jeremy MacDonald

Has demonstrated the ability and understanding of Density Technology, and is therefore qualified to perform the following tests:

- Density In-Place (Nuclear)
- One-Point Michigan Cone
- One Point T-99
- Michigan Modified T-180
- Speedy Moisture Gauge (Clay and Granular)

EXPIRES: **January 31, 2025**

IDENTIFICATION NUMBER: **11536-0125**

Justin Foster, Compaction Control Specialist
Construction Field Services
Michigan Department of Transportation

David Faber, Program Coordinator
Institute for Construction Education and Training
Ferris State University


Michigan Certified Aggregate Technician
This certificate is issued by the
Aggregate Board of Examiners
to attest that
Jeremy MacDonald
has demonstrated through a written and practical examination the required knowledge to be designated as a
Michigan Certified Aggregate Technician Sampling
104587-1127
Certification Number
A
Endorsements
06/30/27
Expires

Aggregate Board of Examiners

American Public Works Association
Asphalt Paving Association Of Michigan
Consulting Engineers Council Of Michigan
Federal Highway Administration
Ferris State University
Michigan Aggregate Association
Michigan Concrete Association
Michigan Concrete Paving Association
Michigan Infrastructure & Transportation Association
Michigan Municipal League
Michigan Society or Professional Engineers
Michigan Technological University

Report Address Change to:

FERRIS STATE UNIVERSITY
Institute for Construction Education and Training
1018 Maple Street
Big Rapids, MI 49307-1649
Telephone: 231.591.5826

FERRIS STATE UNIVERSITY

TAYLOR FOLLRATH, Construction Materials Testing Technician

Education: Grand Valley State University, B.S. Criminal Justice, 2020

Experience: 2022-Present Coleman Engineering Company

Certifications:
ACI Concrete Field Testing Technician Grade I
MCA Concrete Field Testing Technician Level I
MDOT Aggregate Technician Level I
WisDOT Aggregate Technician I
Troxler Nuclear Gauge Safety Training
Hazmat Certification

Mr. Follrath is a geotechnical technician that provides support to the geotechnical and construction materials laboratory in Iron Mountain, Michigan. His responsibilities include a variety of technical support tasks associated with geotechnical investigations, geotechnical laboratory testing, and construction materials testing. Since joining Coleman Engineering, he has taken on numerous opportunities to get involved with varied projects and tasks.

His experience also includes providing construction materials testing throughout the Upper Peninsula and northern Wisconsin for earthwork projects, underground utility construction, concrete testing of foundations, floors, curb and gutter and elevated slabs.

Related Project Experience:

Wells Street / Structure 27 Riser FNDS, Marinette, Wisconsin. Provided field and laboratory testing of concrete according to ATC concrete construction specifications for the placement of thermal concrete.

Marquette Area WWTF Biosolids Improvement Project, Marquette, Michigan. Provided field and laboratory testing of concrete according to project specifications. Technician also performed compaction testing on foundation backfill.

Marquette Shooting Range, Marquette, Michigan. Provided field and laboratory testing of concrete according to project specifications.

LP Sagola Siding Conversion, Sagola, Michigan. Conducted field and laboratory testing of cast-in-place concrete for footings, foundation walls and slabs for the conversion of Louisiana Pacific's existing facility which included multiple building additions and equipment modifications, site work and rail construction.

US-2 over Big Cedar River, Menominee County, Michigan. Provided field and laboratory testing of concrete for a Bridge replacement with 27-inch prestressed concrete box beam including cofferdams, steel piling, underdrains, hot mix asphalt road resurfacing, concrete curb and gutter, guardrail and pavement work on US-2 over Big Cedar River, Menominee County.

VA Medical Center Expanded Primary Care, Iron Mountain, Michigan. Provided field and laboratory testing of concrete for the 10,000 square feet addition to the main hospital.

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 12/2/2022

Taylor Follrath

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

Concrete Field Testing Technician Level I

This certification expires on 4/15/2026

MCA Certification Board of Examiners

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

MCA Assistant Director of Training & Certification

Examiner-William Foster

Executive Director-Daniel DeGraaf

AMERICAN CONCRETE INSTITUTE

This is to certify that

TAYLOR J FOLLRATH

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

ACI Concrete Field Testing Technician – Grade I

Certified Date: 12/02/2022 **Expires: 12/01/2027**

Examiner of Record: William L Foster

ACI Managing Director of Certification

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

MDOT Michigan Department of Transportation

FERRIS STATE UNIVERSITY

Institute for Construction Education and Training

MDOT Michigan Department of Transportation

HEREBY CERTIFIES THAT

Taylor Follrath

Has demonstrated through written and performance examinations
the ability and understanding necessary for classification as a

MICHIGAN CERTIFIED AGGREGATE TECHNICIAN LEVEL ONE

And is therefore qualified to perform the following tests:

- Sampling
- Sample Reduction, Loss by Wash and Sieving
- Crush Particle Pick

EXPIRES: **December 31, 2028** **ENDORSEMENTS**: **ABC** **IDENTIFICATION NUMBER: 104962-1228**

Doug Needham, President
Michigan Aggregate
Association

Kevin Kennedy
Pavement Operations Engineer
Michigan Department of Transportation

David Faber , Program Coordinator
Institute for Construction Education and Training
Ferris State University

Dylan Bousley, Construction Materials Testing Technician

Education: Northeast Wisconsin Technical College, 2023-present

Experience: 2022-Present Coleman Engineering Company

Certifications:
ACI Concrete Field Testing Technician Grade I
MCA Concrete Field Testing Technician Level I
MDOT Aggregate Technician Sampling
Troxler Nuclear Gauge Safety Training
Hazmat Certification

Mr. Bousley is a testing technician that provides support to construction materials laboratory in Iron Mountain, Michigan. His experience includes providing construction materials testing throughout the Upper Peninsula and northern Wisconsin for earthwork projects, and concrete testing of foundations, floors, curb and gutter and elevated slabs.

Dylan has an excellent work ethic and is eager to take on any tasks asked of him.

Related Project Experience:

Wells Street / Structure 27 Riser FNDS, Marinette, Wisconsin. Provided field and laboratory testing of concrete according to ATC concrete construction specifications for the placement of thermal concrete.

Marquette Area WWTF Biosolids Improvement Project, Marquette, Michigan. Provided field and laboratory testing of concrete according to project specifications. Technician also performed compaction testing on transfer pad subgrade material.

Eagle Mine, Big Bay, Michigan. Providing quality control testing of cemented rock fill (CFR) material used in the backfilling of mine excavations. Field testing of concrete includes slump, air content, temperature testing, unit weight, and casting compressive strength specimens.

Marquette Shooting Range, Marquette, Michigan. Provided field and laboratory testing of concrete according to project specifications.

LP Sagola Siding Conversion, Sagola, Michigan. Conducted field and laboratory testing of cast-in-place concrete for footings, foundation walls and slabs for the conversion of Louisiana Pacific's existing facility which included multiple building additions and equipment modifications, site work and rail construction.

VA Medical Center Expanded Primary Care, Iron Mountain, Michigan. Provided field and laboratory testing of concrete for the 10,000 square feet addition to the main hospital.

Escanaba Lead Service Line Replacement, Escanaba, Michigan. Provided field and laboratory testing of concrete according to project specifications for the replacement of multiple blocks of curb and sidewalks throughout the city.

Michigan Concrete Association
Certification Board of Examiners

Hereby certifies that on 12/2/2022

Dylan Bousley

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

Concrete Field Testing Technician Level I

This certification expires on 4/15/2026

MCA Certification Board of Examiners

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

MCA Assistant Director of Training & Certification

Examiner-William Foster

Executive Director-Daniel DeGraaf

AMERICAN CONCRETE INSTITUTE

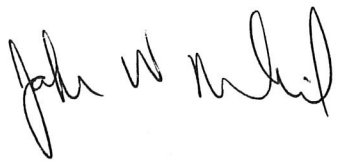
This is to certify that

DYLAN R BOUSLEY

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

ACI Concrete Field Testing Technician – Grade I

Certified Date: 12/02/2022 **Expires: 12/01/2027**



Examiner of Record: William L Foster

ACI Managing Director of Certification

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

Michigan Certified Aggregate Technician

This certificate is issued by the
Aggregate Board of Examiners
to attest that

Dylan R Bousley

has demonstrated through a written and practical examination the required knowledge to be designated as a

Michigan Certified Aggregate Technician Sampling

104856-0528	A	05/31/28
Certification Number	Endorsements	Expires

Aggregate Board of Examiners

American Public Works Association
Asphalt Paving Association Of Michigan
Consulting Engineers Council Of Michigan
Federal Highway Administration
Ferris State University
Michigan Aggregate Association
Michigan Concrete Association
Michigan Concrete Paving Association
Michigan Infrastructure & Transportation Association
Michigan Municipal League
Michigan Society or Professional Engineers
Michigan Technological University

Report Address Change to:

FERRIS STATE UNIVERSITY
Institute for Construction Education and Training
1018 Maple Street
Big Rapids, MI 49307-1649
Telephone: 231.591.5826

FERRIS STATE UNIVERSITY

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 23

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70 and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with application dated May 05, 2023,	4. Expiration Date: November 30, 2038
1. Coleman Engineering Company		
2. 635 Circle Dr. Iron Mountain, MI 49801	3. License No.: 21-16955-01 is renewed in its entirety to read as follows:	5. Docket No.: 030-11942 Reference No.:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
A. Cesium-137	A. Sealed Sources (AEA Technology/QSA, Inc., Model CDCW556; Isotope Product Laboratories, Model HEG-137)	A. 9 millicuries per source and 27 millicuries total	A. For use in Troxler Electronic Laboratories Model 3400 Series portable gauging devices for measuring physical properties of materials.
B. Americium-241/ Beryllium	B. Sealed Sources (AEA Technology/QSA, Inc., Model AMNV.997; Isotope Product Laboratories, Model Am1.NO2, 3021, 3027)	B. 44 millicuries per source and 132 millicuries total	B. For use in Troxler Electronic Laboratories Model 3400 Series portable gauging devices for measuring physical properties of materials.
C. Cesium-137	C. Sealed Sources (CPN, Model CPN-131)	C. 10 millicuries per source and 50 millicuries total	C. For use in CPN International Division of InstroTek, Inc. Model MC Series PORTAPROBE portable gauging devices for measuring physical properties of materials.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 21-16955-01 Amendment No. 23	Docket or Reference No.: 030-11942

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
D. Americium-241/ Beryllium	D. Sealed Sources (CPN, Model CPN-131)	D. 50 millicuries per source and 250 millicuries total	D. For use in CPN International Division of InstroTek, Inc. Model MC Series PORTAPROBE portable gauging devices for measuring physical properties of materials.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 21-16955-01	Docket or Reference No.: 030-11942
	Amendment No. 23	

CONDITIONS

10. Licensed material shall be used or stored at the licensee's facilities located at:

    A. 635 Circle Dr., Iron Mountain, Michigan, 49801

    B. 200 E Ayer St., Ironwood, Michigan, 49938

    Licensed material may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States. If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the Federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction should be obtained from the appropriate state regulatory agency.

11. Licensed material shall only be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated May 5, 2023. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.

12. The Radiation Safety Officer (RSO) for this license is David R. Edlebeck.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 21-16955-01 Amendment No. 23	Docket or Reference No.: 030-11942

13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State. In the absence of a registration certificate, sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six months, or at such other intervals as specified.

B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.

C. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

D. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 microcuries) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 microcuries) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

E. Analysis of leak test samples and/or contamination shall be performed by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is authorized to collect leak test samples but not perform the analysis.

F. Records of leak test results shall be kept in units of becquerels (microcuries) and shall be maintained for three years.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 21-16955-01	Docket or Reference No.: 030-11942
	Amendment No. 23	

14. Sealed sources or source rods containing licensed material shall not be opened or sources removed from source holders or detached from source rods by the licensee, except as specifically authorized.

15. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license. Records of inventories shall be maintained for three years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

16. Except for maintaining labeling as required by 10 CFR Part 20, or Part 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective certificate of registration issued either by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or by an Agreement State.

17. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport or storage, or when not under the direct surveillance of an authorized user.

18. Any cleaning, maintenance, or repair of the gauge(s) that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 21-16955-01	Docket or Reference No.: 030-11942
	Amendment No. 23	

19. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those statements, representations, and procedures that are required to be submitted in accordance with the regulations. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence impose on the licensee requirements that are more restrictive than or in addition to the regulations.

A. Application dated May 5, 2023 (ML23128A035)

B. Letter dated November 15, 2023 (ML23319A301)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: November 22, 2023

By: _____

Frank P. D. Tran
Region 3