

Section	Description	Unit	Rate
1	EARTHWORK LABOR		
	Excavations Observations & Evaluations	HOUR	\$ 137.00
	Compaction Testing	HOUR	\$ 93.00
	RELATED TESTS		
	Moisture Content (ASTM D 2216)	TEST	\$ 13.00
	Atterberg Limits: LL & PL (ASTM D 4318)	TEST	\$ 125.00
	Sieve Analysis Through No. 200 Sieve (ASTM C 136, D 1140 or C 117 or MnDOT 1221)	TEST	\$ 110.00
	Mechanical Sieve - Hydrometer Analysis (ASTM D 422)	TEST	\$ 215.00
	Organic Content (ASTM D 2974)	TEST	\$ 78.00
	Permeability Granular Soil, Less Than 10 Percent Fines (ASTM D 2434)	TEST	\$ 285.00
	Permeability of All Other Soils (ASTM D 5084, EPA 9100 or COE Undisturbed Sample, Includes Extrusions)	TEST	\$ 390.00
	Permeability All Other Soils (ASTM D 5084, EPA 9100 or COE Remolded Sample Does not Include Proctor)	TEST	\$ 390.00
	Unconfined Compression (ASTM D 2166)	TEST	\$ 110.00
	PH Determination (AASHTO T 289) (-10 mesh)	TEST	\$ 78.00
	Electrical Resistivity of Soils (AASHTO T 288)	TEST	\$ 107.00
	Oxidation - Reduction	TEST	\$ 77.00
	Sulfate (Concrete)	TEST	Quote
	Sulfide (Metals)	TEST	Quote
	Topsoil Testing, MnDOT 3877A (without nutrients)	TEST	\$ 300.00
	Topsoil Testing, MnDOT 3877A (with nutrients)	TEST	\$ 300.00
	Nuclear Moisture Density Meter	TRIP	\$ 50.00
	Standard Proctor Test (ASTM D 693)	TEST	\$ 150.00
	Modified Proctor Test (ASTM D 1557)	TEST	\$ 160.00
Sample Pick-up (Tech II Rate, Excludes Mileage)	HOUR	\$ 93.00	
2	FLEXIBLE OR RIGID PAVEMENTS LABOR		
	Excavations Observations and Sub-Grade Evaluations	HOUR	\$ 137.00

Section	Description	Unit	Rate
	Compaction Testing (technician conducting compaction tests using sand cone or nuclear density meter)	HOUR	\$ 93.00
	MnDOT Penetration Index Method by DCP Test to Evaluate Sub-Grade Strength or Density	HOUR	\$ 93.00
	Sub-Grade and/or Aggregate Base Test-Roll Observation	HOUR	\$ 137.00
	Bituminous Placement Observations	HOUR	\$ 93.00
	Concrete Paving Testing (Technician casting concrete test cylinders, reviewing delivery tickets, measuring temperature, air content and slump, etc.)	HOUR	\$ 93.00
	Bituminous or Concrete Coring (includes portable core drill with diamond bits at 2- to 12-inch diameter, and crew, excludes mileage, (3 hour minimum) per hour)	HOUR	\$ 234.00
	RELATED TESTS		
	Standard Proctor Test (ASTM D 698)	TEST	\$ 150.00
	Modified Proctor Test (ASTM D 1557)	TEST	\$ 160.00
	Aggregate Base Gradation (ASTM C 136 or MnDOT 5-692.215)	TEST	\$ 110.00
	Mechanical Analysis of Fine or Coarse Bituminous Aggregate (MnDOT 1202/1203)	TEST	\$ 110.00
	Spall Material Analysis (MnDOT 1209)	TEST	\$ 185.00
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209) - Coarse Aggregate	TEST	\$ 150.00
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209) - Fine Aggregate	TEST	\$ 120.00
	Specific Gravity and Absorption for Fine Aggregates (MnDOT 1205 / 1204)	TEST	\$ 110.00
	Specific Gravity and Absorption for Course Aggregates (MnDOT 1205 / 1204)	TEST	\$ 100.00
	Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	TEST	\$ 110.00
	Bituminous Asphalt Content Determination (MnDOT 1854 / 1853)	TEST	\$ 230.00
	Bituminous Asphalt Content Determination (MnDOT 1854 / 1853) with Aggregate Gradation (MnDOT 1203)	TEST	\$ 270.00
	Preparation of Asphalt Specimens using Marshall Apparatus	TEST	\$ 325.00
	Marshall Stability and Flow (Set of 3) (MnDOT 1805)	TEST	\$ 180.00

Section	Description	Unit	Rate
	Marshall Density Testing, Triple Specimen (MnDOT 1805 / 1806)	TEST	\$ 138.00
	Rice Specific Gravity (MnDOT 1807)	TEST	\$ 120.00
	Thickness and Density of Payment Cores (MnDOT 1810)	TEST	\$ 46.00
	Gyratory Mix Properties (Suite of Tests) including: Gyratory Density (AASHTO T 312) MnDOT Modified, Rice Specific Gravity (ASTM D2041), Asphalt extraction and aggregate gradation (ASTM D2172 Method E-11) MnDOT Modified C137 and C117, Fine Aggregate Angularity (AASHTO T 304, Method A, MnDOT 1206.5), Percent Crushed Particles (MnDOT 1214.8)	TEST	\$ 515.00
	Plus #4 Crushing Determination (MnDOT 1214)	TEST	\$ 110.00
	Bit Wear and Patch Material, Per Core	TEST	\$ 1.00
	Sample Pick-up (Tech II Rate, Excludes Mileage)	HOURL	\$ 93.00
	Nuclear Moisture Density Meter	HOURL	\$ 50.00
3	PILES AND OR DRILL SHAFTS EVALUATION OF TEST PILES		
	Project Engineer/Piling Specialist Conducting Dynamic Pile Testing	HOURL	\$ 157.00
	Pile Driving Analyzer TM Equipment Rental	DAY	\$ 750.00
	Wave Equation Analysis	EACH	\$ 750.00
	CAPWAP Analysis	EACH	\$ 360.00
	PILE/PIER PRODUCTION - INSTALLATION MONITORING		
	Special Inspection / Monitoring of Piles or Piers During Installation	HOURL	\$ 114.00
	Vibration Monitoring Technician On-Site Documenting Vibration Producing Activity and Measuring Vibration Levels	HOURL	\$ 157.00
	Seismographic Equipment - Daily Rate	DAY	\$ 130.00
	Seismographic Equipment - Weekly Rate	WEEK	\$ 600.00
	Seismographic Equipment - Monthly Rate	MONTH	\$ 1,500.00
4	CONCRETE REINFORCEMENT LABOR		
	Special Inspection of Concrete Reinforcement	HOURL	\$ 93.00
5	CONCRETE		

Section	Description	Unit	Rate
	LABOR		
	Engineering Analysis, Per Mix Design (ACI 211 Normal Weight Mix Design)	EACH	\$ 215.00
	Special Inspection of Concrete Placements	HOUR	\$ 114.00
	Concrete Testing (technician casting cylinders, reviewing, delivery ticket, measuring temperature, air content and slump)	HOUR	\$ 93.00
	RELATED TESTS		
	Mechanical Analysis of Fine or Course Bituminous Aggregate (MnDOT 1202 / 1203)	TEST	\$ 110.00
	Deleterious Particles (MnDOT 1209)	TEST	\$ 185.00
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209) - Coarse Aggregate	TEST	\$ 150.00
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209) - Fine Aggregate	TEST	\$ 120.00
	Specific Gravity and Absorption for Fine Aggregates (MnDOT 1205 / 1204)	TEST	\$ 110.00
	Specific Gravity and Absorption for Course Aggregates (MnDOT 1205 / 1204)	TEST	\$ 100.00
	Soundness of Aggregate (MnDOT 1219) 5 cycles on 5 pans	TEST	\$ 305.00
	Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	TEST	\$ 110.00
	Compression Testing (ASTM C39) includes laboratory processing, handling and cylinder molds, cast by TA (4x8 inch)	TEST	\$ 30.00
	Compression Testing (ASTM C 39) includes laboratory processing, handling and cylinder molds, cast by others (4x8 inch)	TEST	\$ 30.00
	Compression Testing (ASTM C39) includes laboratory processing, handling and cylinder molds, cast by TA (6x12 inch)	TEST	\$ 40.00
	Compression Testing (ASTM C 39) includes laboratory processing, handling and cylinder molds, cast by others (6x12 inch)	TEST	\$ 40.00
	Standard Curing and Testing of Flexural Beams (ASTM C78 and ASTM C293) Per Unit	TEST	\$ 65.00
	Compressive Strength of 2x2 Cubes	TEST	\$ 30.00
	Speciality Mold Rental Clean-up (beams) Per Use	EACH	\$ 45.00
	Speciality Mold Rental Clean-up (cubes) Per Use	EACH	\$ 50.00
	Concrete Strength Curve Development for Maturity Testing (ASTM C1074 Multiple Samples Per Mix)	EACH	\$ 500.00

Section	Description	Unit	Rate
	Maturity Meter Rental, Per day	DAY	\$ 55.00
	Maturity Pucks (wired)	EACH	\$ 75.00
	Thermocouple Probes (wireless)	EACH	\$ 105.00
	Lightweight Concrete Unit Weight (ASTM C 567), Set of 3	TEST	\$ 350.00
	Cylinder end prep (ASTM C39)	EACH	\$ 25.00
	Concrete Cylinder "Hot Box" During Winter Construction	MONTH	
	Compressive Strength of CIPPOCS (ASTM C 873)	TEST	\$ 65.00
	CIPPOC Mold (ASTM C 873)	TEST	\$ 55.00
	Concrete Cylinder Pick-up (includes mileage)	TRIP	\$ 80.00
	Concrete Coring-Portable Core Drill with Diamond Bits at 2- to 12-inch Diameter and Crew. Excludes Mileage (3 Hour Minimum) Per Hour	HOUR	\$ 234.00
	Compressive Strength of Concrete Cores, Including Physical Measurements Trimming, ASTM C 42	TEST	\$ 105.00
	Bit Wear and Patch Material, Per Core	EACH	\$ 1.00
	Locate Reinforcing Steel, Pachometer	HOUR	Quote
	Rental of Windsor Probe, Schmidt Hammer or Profometer	DAY	Quote
	Technician Measuring Floor Flatness (FF and FL) Measurements (Field)	HOUR	\$ 137.00
	Floor Flatness Engineering Analysis	HOUR	\$ 137.00
	Dipstick Rental	DAY	\$ 160.00
6	MASONRY REINFORCEMENT LABOR		
	Special Inspection of Masonry Reinforcement	HOUR	\$ 114.00
	BRICK OR UNIT MASONRY LABOR		
	Technician Performing Masonry Quality Control Testing	HOUR	\$ 93.00
	RELATED TESTS		
	Absorption of RWU (ASTM C 140) (set of 3)	EACH	\$ 115.00
	Compressive Strength (ASTM C 140) Block (set of 3)	EACH	\$ 160.00
	Physical Measurements and Absorption (ASTM C 140)	EACH	Included above
	Net Area Determination (ASTM C 140)	TEST	Included above
	ASTM C1314 Compressive Strength of Masonry Prisms (fieldfabrication and test)	EACH	\$ 125.00

Section	Description	Unit	Rate
	ASTM C1314 Compressive Strength of Masonry Prisms (lab fabrication and test)	SET	\$ 500.00
	ASTM C1314 Compressive Strength of Masonry Prisms (if cells are filled)	EACH	\$ 100.00
	Compressive Strength - Grout (ASTM C 1019)	TEST	\$ 70.00
	Freeze / Thaw of Brick and Concrete Pavers (ASTM C 67) Per Set of 5	TEST	\$ 510.00
	Efflorescence of Brick or Masonry Units (ASTM C67 / C216) Per Set of 10 Samples	TEST	\$ 155.00
	Initial Rate of Absorption (ASTM C 67 / C 216) Per Set of 5	TEST	\$ 180.00
	Compressive Strength (ASTM C 67 / C 216) per set of 5	TEST	\$ 225.00
	Absorption and Saturation Coefficient (ASTM C 67 / C) Per Set of 5	TEST	\$ 180.00
	ASTM C67 Section 13 & 14 Measurement of Size and Warpage of Brick and Structural Clay Tile, set of 10	TEST	\$ 250.00
	Standard Brick Testing (ASTM C 67 / C 216) per set (does not include freeze/thaw and dimensional analysis testing) set of 5	TEST	\$ 725.00
	Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Field Cast	TEST	\$ 30.00
	Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Laboratory Cast	TEST	\$ 30.00
	Compression Test of Cylindrical Mortar Specimens (ASTM C 780) 2x4 cylinders	TEST	\$ 30.00
	Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Laboratory Cast) set of 5	TEST	\$ 500.00
	Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Field Cast) set of 5	TEST	\$ 500.00
	Flexural Bond Strength of Mortar to Masonry Units (ASTM C 1072) Prism Testing per Prism	TEST	\$ 1,200.00
	Masonry Sample Pick Up (includes mileage)	TRIP	\$ 80.00
8	STRUCTURAL STEEL LABOR		
	Special Inspections of Structural Steel Level II NDE Technician, AWS Certified Weld Inspector	HOUR	\$ 120.00
	Radiography, Two-Man Crew	HOUR	\$ 203.00
	Structural Steel Summary Report	EACH	Quote
9	FIREPROOFING LABOR		
	Special Inspections: Fireproofing Inspections and Thickness Measurements	HOUR	\$ 114.00

Section	Description	Unit	Rate
	RELATED TESTS		
	Bond Testing	TEST	Quote
	Laboratory Density Determination	TEST	\$ 85.00
	Cohesion/Adhesion Determination	TEST	Quote
10	GEOSYNTHETIC AND POND LITER		
	RELATED TESTS		
	Shear / Peel Tests on Field Seams (PVC), (ASTM D 903), Per Sample	TEST	N/A
	Shear / Peel Tests on Field Seams (HDPE, VLDPE) (ASTM D 903), Per Sample	TEST	N/A
	Resistance of Plastics to Chemical Reagents (ASTM 0 543)	TEST	N/A
	Tensile Properties of Plastics (ASTM D 638)	TEST	N/A
	Flexural Properties of Unreinforced and Reinforced Plastics	TEST	N/A
	Material Property Testing (Strength, Elongation, Creep, Cyclic Stress-Strain, Etc.)	TEST	N/A
	Pond Liner Shear/Peel Strength Testing ASTM D6392 (does not include shipping)	TEST	Quote
	Sample Pick-up (includes Mileage)	TRIP	\$ 80.00
11	CONSULTING SERVICES - OTHER		
	MISCELLANEOUS EXPENSE		
	Vehicle Mileage, per mile (as related to inspection and testing services for all site visits, state approved rates) <i>In the future state current year.</i>	MILE	Current year IRS Mileage Rate
12	CONSULTING SERVICES - PROJECT ENGINEERING		
	Engineer I, Graduate Engineer or Engineer In Training	HOUR	\$ 137.00
	Engineer II/Registered Professional Engineer, PE (Project Manager)	HOUR	\$ 157.00
	Senior Engineer	HOUR	\$ 180.00
	Principle Engineer	HOUR	\$ 220.00
13	UNIT RATE FOR INSPECTION AND TESTING LABOR		
	Technician II: Associates Degree and 6 months related experience, ACI (American Concrete Institute) Certified, MnDOT Concrete Certified or Provisionally Certified or Equivalent Combination of Education and Experience	HOUR	\$ 93.00
	Technician II: (Overtime after 8 hours)	HOUR	\$ 116.25

Section	Description	Unit	Rate
	Technician III: Associate Degree and 3 years related experience, ACI Certified, MnDOT Grading and Base, Bituminous or Concrete Certified or Provisionally Certified as Required or Equivalent Combination of Education and Experience	HOUR	\$ 114.00
	Technician III: (Overtime after 8 hours)	HOUR	\$ 142.50
	Technician IV or ICBO Special Inspector: Associate Degree and 6 years related experience, posses ICBO Certification (Concrete Reinforcement, Structural Masonry, Precast Concrete, Fireproofing or structural steel and welding) ACI Certified, Level II NDE technician, AWS Certified Weld Inspector as Required or Equivalent combination of Education and Experience	HOUR	\$ 132.00
	Technician IV or ICBO special Inspector: Overtime after 8 hours)	HOUR	\$ 165.00
14	PLANT INSPECTIONS		
	MnDOT Bituminous Batch Plant Inspections & Concrete Batch Plant Inspections Technician with MnDOT Bituminous Plant Level I or II Certifications and Concrete Plant Level I or II Certifications	HOUR	\$ 93.00
	MnDOT Concrete Paving Batch Plant Inspections Technician with MnDOT Concrete Plant Level I or II Certifications on an as needed basis	HOUR	\$ 93.00

Section	Description	Unit	Rate
1	EARTHWORK LABOR		
	Excavations Observations & Evaluations	HOUR	\$98.00
	Compaction Testing	HOUR	\$78.00
	RELATED TESTS		
	Moisture Content (ASTM D 2216)	TEST	\$15.00
	Atterberg Limits: LL & PL (ASTM D 4318)	TEST	\$107.00
	Sieve Analysis Through No. 200 Sieve (ASTM C 136, D 1140 or C 117 or MnDOT 1221)	TEST	\$131.00
	Mechanical Sieve - Hydrometer Analysis (ASTM D 422)	TEST	\$110.00
	Organic Content (ASTM D 2974)	TEST	\$74.00
	Permeability Granular Soil, Less Than 10 Percent Fines (ASTM D 2434)	TEST	\$398.00
	Permeability of All Other Soils (ASTM D 5084, EPA 9100 or COE Undisturbed Sample, Includes Extrusions)	TEST	\$500.00
	Permeability All Other Soils (ASTM D 5084, EPA 9100 or COE Remolded Sample Does not Include Proctor)	TEST	\$600.00
	Unconfined Compression (ASTM D 2166)	TEST	\$90.00
	PH Determination (ASTM G 51)	TEST	\$24.00
	Electrical Resistivity of Soils (ASTM G 57)	TEST	\$73.00
	Oxidation - Reduction	TEST	\$61.00
	Sulfate (Concrete)	TEST	\$41.00
	Sulfide (Metals)	TEST	\$68.00
	Topsoil Testing, MnDOT 3877A (without nutrients)	TEST	\$267.00
	Topsoil Testing, MnDOT 3877A (with nutrients)	TEST	\$331.00
	Nuclear Moisture Density Meter	HOUR	\$22.00
	Standard Proctor Test (ASTM D 1557)	TEST	\$182.00
	Modified Proctor Test (ASTM D 1557)	TEST	\$182.00
Sample Pick-up (Tech 1 Rate, Excludes Mileage)	HOUR	\$78.00	
2	FLEXIBLE OR RIGID PAVEMENTS LABOR		
	Excavations Observations and Sub-Grade Evaluations	HOUR	\$98.00

Section	Description	Unit	Rate
	Compaction Testing (technician conducting compaction tests using sand cone or nuclear density meter)	HOUR	\$78.00
	MnDOT Penetration Index Method by DCP Test to Evaluate Sub-Grade Strength or Density	HOUR	\$78.00
	Sub-Grade and/or Aggregate Base Test-Roll Observation	HOUR	\$94.00
	Bituminous Placement Observations	HOUR	\$102.00
	Concrete Paving Testing (Technician casting concrete test cylinders, reviewing delivery tickets, measuring temperature, air content and slump, etc.)	HOUR	\$78.00
	Bituminous or Concrete Coring (includes portable core drill with diamond bits at 2- to 12-inch diameter, and crew, excludes mileage, (3 hour minimum) per hour)	HOUR	\$180.00
	RELATED TESTS		
	Standard Proctor Test (ASTM D 698)	TEST	\$182.00
	Modified Proctor Test (ASTM D 1557)	TEST	\$182.00
	Aggregate Base Gradation (ASTM C 136 or MnDOT 5-692.215)	TEST	\$131.00
	Mechanical Analysis of Fine or Coarse Bituminous Aggregate (MnDOT 1202/1203)	TEST	\$131.00
	Spall Material Analysis (MnDOT 1209)	TEST	\$127.00
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209)	TEST	\$79/ 159
	Specific Gravity and Absorption for Fine or Course Aggregates (MnDOT 1205 / 1204)	TEST	\$81/123
	Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	TEST	\$131.00
	Bituminous Asphalt Content Determination (MnDOT 1854 / 1853)	TEST	\$150.00
	Aggregate Gradation (MnDOT 1203)	TEST	\$131.00
	Marshall Stability and Flow (Set of 3) (MnDOT 1805)	TEST	\$63.00
	Marshall Density Testing, Triple Specimen (MnDOT 1805 / 1806)	TEST	\$123.00
	Rice Specific Gravity (MnDOT 1807)	TEST	\$80.00
	Thickness and Density of Payment Cores (MnDOT 1810)	TEST	\$52.00
	Gyratory Density (MnDot 1820)	TEST	\$182.00

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CONSTRUCTION MATERIAL TESTING

Section	Description	Unit	Rate
	Plus #4 Crushing Determination (MnDOT 1214)	TEST	\$80.00
	Bit Wear and Patch Material, Per Core	TEST	\$19.00
	Sample Pick-up (Tech 1 Rate, Excludes Mileage)	HOUR	\$78.00
	Nuclear Moisture Density Meter	HOUR	\$22.00
	Fine Aggregate Angularity (MnDOT 1206)	TEST	\$78.00
3	PILES AND OR DRILL SHAFTS EVALUATION OF TEST PILES		
	Project Engineer/Piling Specialist Conducting Dynamic Pile Testing	HOUR	\$164.00
	Pile Driving Analyzer TM Equipment Rental	DAY	\$1,150.00
	Wave Equation Analysis	EACH	\$300.00
	CAPWAP Analysis	EACH	\$545.00
	PILE/PIER PRODUCTION - INSTALLATION MONITORING		
	Special Inspection / Monitoring of Piles or Piers During Installation	HOUR	\$98.00
	Vibration Monitoring Technician On-Site Documenting Vibration Producing Activity and Measuring Vibration Levels	HOUR	\$98.00
	Seismographic Equipment - Hourly Rate	HOUR	NA
	Seismographic Equipment - Daily Rate	DAY	\$185.00
	Seismographic Equipment - Weekly Rate	WEEK	\$430.00
4	CONCRETE REINFORCEMENT LABOR		
	Special Inspection of Concrete Reinforcement	HOUR	\$98.00
5	CONCRETE LABOR		
	Engineering Analysis, Per Mix Design	EACH	\$286.00
	Special Inspection of Concrete Placements	HOUR	\$98.00
	Concrete Testing (technician casting cylinders, reviewing, delivery ticket, measuring temperature, air content and slump)	HOUR	\$78.00
	RELATED TESTS		
	Mechanical Analysis of Fine or Course Bituminous Aggregate (MnDOT 1202 / 1203)	TEST	\$131.00
	Deleterious Particles (MnDOT 1209)	TEST	\$127.00

Section	Description	Unit	Rate
	Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209)	TEST	\$79/ 159
	Specific Gravity and Absorption for Fine or Course Aggregates (MnDOT 1205 / 1204)	TEST	\$81/123
	Soundness of Aggregate (MnDOT 1219)	TEST	\$320.00
	Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	TEST	\$131.00
	Compression Testing (ASTM C39) includes laboratory processing, handling and cylinder molds, cast by TA	TEST	\$30.00
	Compression Testing (ASTM C 39) includes laboratory processing, handling and cylinder molds, cast by others	TEST	\$30.00
	Standard Curing and Testing of Flexural Beams (ASTM C78 and ASTM C293) Per Unit	TEST	\$116.00
	Specialty Mold Rental Clean-up (cubes and beams) Per Use	EACH	\$45.00
	Concrete Strength Curve Development for Maturity Testing	EACH	\$2,120.00
	Maturity Meter Rental, Per hour	HOUR	\$70.00
	Dry Unit Weight (ASTM C 567), Per Unit	TEST	\$111.00
	Sawing of Concrete Unit (ASTM C31), Per Cut	EACH	\$13.00
	Concrete Cylinder "Hot Box" During Winter Construction	MONTH	NA
	Compressive Strength of CIPPOCS (ASTM C 873)	TEST	\$37.00
	Concrete Cylinder Pick-up (Tech rate, excludes mileage)	HOUR	\$78.00
	Concrete Coring-Portable Core Drill with Diamond Bits at 2- to 12-inch Diameter and Crew. Excludes Mileage (3 Hour Minimum) Per Hour	HOUR	\$180.00
	Compressive Strength of Concrete Cores, Including Physical Measurements Trimming, ASTM C 42	TEST	\$97.00
	Bit Wear and Patch Material, Per Core	EACH	\$19.00
	Locate Reinforcing Steel, Pachometer	HOUR	\$25.00
	Rental of Windsor Probe, Schmidt Hammer or Profometer	DAY	\$65.00
	Technician Measuring Floor Flatness (FF and FL) Measurements (Field)	HOUR	\$78.00
	Floor Flatness Engineering Analysis	HOUR	\$164.00
	Dipstick Rental	DAY	\$191.00

Section	Description	Unit	Rate
6	MASONARY REINFORCEMENT LABOR		
	Special Inspection of Masonry Reinforcement	HOUR	\$98.00
	BRICK OR UNIT MASONRY LABOR		
	Technician Performing Masonry Quality Control Testing	HOUR	\$78.00
	RELATED TESTS		
	Absorption of RWU (ASTM C 140)	EACH	\$63.00
	Compressive Strength (ASTM C 140) Block	EACH	\$45.00
	Physical Measurements and Absorption (ASTM C 140)	EACH	\$66.00
	Net Area Determination (ASTM C 140)	TEST	\$45.00
	Brick Prism Assembly (ASTM C 1314, E 447)	TEST	\$106.00
	Compressive Strength Hollow Block Prisms (ASTM C 1314)	TEST	\$178.00
	Compressive Strength - Grout Block Prisms (ASTM C 1314)	TEST	\$220.00
	Compressive Strength - Grout (ASTM C 1019)	TEST	\$55.00
	Freeze / Thaw of Brick and Concrete Pavers (ASTM C 67) Per Set	TEST	\$916.00
	Efflorescence of Brick or Masonry Units (ASTM C67 / C216) Per Set of 10 Samples	TEST	\$186.00
	Initial Rate of Absorption (ASTM C 67 / C 216) Per Set	TEST	\$186.00
	Compressive Strength (ASTM C 67 / C 216) per set	TEST	\$168.00
	Absorption and Saturation Coefficient (ASTM C 67 / C) Per Set	TEST	\$238.00
	Dimensional Analysis (ASTM C 67 / C 216) per set	TEST	\$232.00
	Standard Brick Testing (ASTM C 67 / C 216) per set (does not include freeze/thaw and dimensional analysis testing)	TEST	\$700.00
	Warpage (ASTM C 67 / C 216), per set	TEST	\$265.00
	Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Field Cast	TEST	\$30.00
	Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Laboratory Cast	TEST	\$30.00
	Compression Test of Cylindrical Mortar Specimens (ASTM C 780)	TEST	\$30.00
	Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Laboratory Cast)	TEST	\$75.00

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CONSTRUCTION MATERIAL TESTING

Section	Description	Unit	Rate
	Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Field Cast)	TEST	\$45.00
	Flexural Bond Strength of Mortar to Masonry Units (ASTM C 1072) Prism Testing per Prism	TEST	\$225.00
	Masonry Sample Pick Up (Tech I rate, excludes mileage)	HOUR	\$78.00
8	STRUCTURAL STEEL LABOR		
	Special Inspections of Structural Steel Level II NDE Technician, AWS Certified Weld Inspector	HOUR	\$106.00
	Radiography, Two-Man Crew	HOUR	\$168.00
	Structural Steel Summary Report	EACH	\$440.00
9	FIREPROOFING LABOR		
	Special Inspections: Fireproofing Inspections and Thickness Measurements	HOUR	\$106.00
	RELATED TESTS		
	Bond Testing	TEST	\$40.00
	Laboratory Density Determination	TEST	\$50.00
	Cohesion/Adhesion Determination	TEST	\$43.00
10	GEOSYNTHETIC AND POND LITER RELATED TESTS		
	Shear / Peel Tests on Field Seams (PVC), (ASTM D 903), Per Sample	TEST	\$146.00
	Shear / Peel Tests on Field Seams (HDPE, VLDPE) (ASTM D 903), Per Sample	TEST	\$492.00
	Resistance of Plastics to Chemical Reagents (ASTM 0 543)	TEST	\$180.00
	Tensile Properties of Plastics (ASTM D 638)	TEST	\$60.00
	Flexural Properties of Unreinforced and Reinforced Plastics	TEST	\$110.00
	Material Property Testing (Strength, Elongation, Creep, Cyclic Stress-Strain, Etc.)	TEST	\$750.00
	Sample Pick-up (Tech 1 Rate, Excludes Mileage)	HOUR	\$78.00
11	CONSULTING SERVICES - OTHER MISCELLANEOUS EXPENSE		
	Vehicle Mileage, per mile (as related to inspection and testing services for all site visits, state approved rates) In the future state current year.	MILE	Current year IRS Mileage Rate

Section	Description	Unit	Rate
12	CONSULTING SERVICES - PROJECT ENGINEERING		
	Project Assistant	HOUR	\$82.00
	Staff Engineer, Graduate Engineer or Engineer In Training	HOUR	\$130.00
	Registered Professional Engineer, PE (Project Manager)	HOUR	\$160.00
	Senior Engineer	HOUR	\$185.00
	Principle Engineer	HOUR	\$215.00
13	UNIT RATE FOR INSPECTION AND TESTING LABOR		
	Technician I: Associate's Degree or Equivalent Combination of Education and Experience	HOUR	\$78.00
	Technician I: (Overtime after 8 Hours)	HOUR	\$97.50
	Technician II: Associates Degree and 6 months related experience, ACI (American Concrete Institute) Certified, MnDOT Concrete Certified or Provisionally Certified or Equivalent Combination of Education and Experience	HOUR	\$92.00
	Technician II: (Overtime after 8 hours)	HOUR	\$115.00
	Technician III: Associate Degree and 3 years related experience, ACI Certified, MnDOT Grading and Base, Bituminous or Concrete Certified or Provisionally Certified as Required or Equivalent Combination of Education and Experience	HOUR	\$110.00
	Technician III: (Overtime after 8 hours)	HOUR	\$137.50
	Technician IV or ICBO Special Inspector: Associate Degree and 6 years related experience, posses ICBO Certification (Concrete Reinforcement, Structural Masonry, Precast Concrete, Fireproofing or structural steel and welding) ACI Certified, Level II NDE technician, AWS Certified Weld Inspector as Required or Equivalent combination of Education and Experience	HOUR	\$112.00
	Technician IV or ICBO special Inspector: Overtime after 8 hours)	HOUR	\$137.50

Section	Description	Unit	Rate
14	PLANT INSPECTIONS		
	MnDOT Bituminous Batch Plant Inspections & Concrete Batch Plant Inspections Technician with MnDOT Bituminous Plant Level I or II Certifications and Concrete Plant Level I or II Certifications	HOUR	\$98.00
	MnDOT Concrete Paving Batch Plant Inspections Technician with MnDOT Concrete Plant Level I or II Certifications on an as needed basis	HOUR	\$105.00

Appendix A: Cost



SECTION DESCRIPTION	UNIT	FINE
1 EARTHWORK		
LABOR		
Excavations Observations & Evaluations	Hour	75
Compaction Testing	Hour	65
RELATED TESTS		
Moisture Content (ASTM D 2216)	Test	10
Atterberg Limits: LL & PL (ASTM D 4318)	Test	100
Sieve Analysis Through No. 200 Sieve (ASTM C 136, D 1140 or C 117 or MnDOT 1221)	Test	100
Mechanical Sieve - Hydrometer Analysis (ASTM D 422)	Test	200
Organic Content (ASTM D 2974)	Test	50
Permeability Granular Soil, Less Than 10 Percent Fines (ASTM D 2434)	Test	280
Permeability of All Other Soils (ASTM D 5084, EPA 9100 or COE Undisturbed Sample, Includes Extrusions)	Test	390
Permeability All Other Soils (ASTM D 5084, EPA 9100 or COE Remolded Sample Does not Include Proctor)	Test	75
Unconfined Compression (ASTM D 2166)	Test	80
PH Determination (ASTM G 51)	Test	20
Electrical Resistivity of Soils (ASTM G 57)	Test	60
Oxidation - Reduction	Test	20
Sulfate (Concrete)	Test	30
Sulfide (Metals)	Test	30
Topsoil Testing, MnDOT 3877A (without nutrients)	Test	250
Topsoil Testing, MnDOT 3877A (with nutrients)	Test	300
Nuclear Moisture Density Meter	Hour	10
Standard Proctor Test (ASTM D 1557)	Test	100
Modified Proctor Test (ASTM D 1557)	Test	100
Sample Pick-up (Tech 1 Rate, Excludes Mileage)	Hour	55
2 FLEXIBLE OR RIGID PAVEMENTS		
LABOR		
Excavations Observations and Sub-Grade Evaluations	Hour	75
Compaction Testing (technician conducting compaction tests using sand cone or nuclear density meter)	Hour	65
MnDOT Penetration Index Method by DCP Test to Evaluate Sub-Grade Strength or Density	Hour	10
Sub-Grade and/or Aggregate Base Test-Roll Observation	Hour	75
Bituminous Placement Observations	Hour	75
Concrete Paving Testing (Technician casting concrete test cylinders, reviewing delivery tickets, measuring temperature, air content and slump, etc.)	Hour	65
Bituminous or Concrete Coring (includes portable core drill with diamond bits at 2- to 12-inch diameter, and crew, excludes mileage, (3 hour minimum) per hour)	Hour	200
RELATED TESTS		
Standard Proctor Test (ASTM D 698)	Test	100
Modified Proctor Test (ASTM D 1557)	Test	100
Aggregate Base Gradation (ASTM C 136 or MnDOT 5-692.215)	Test	100
Mechanical Analysis of Fine or Coarse Bituminous Aggregate (MnDOT 1202/1203)	Test	100
Spall Material Analysis (MnDOT 1209)	Test	150
Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209)	Test	120
Specific Gravity and Absorption for Fine or Course Aggregates (MnDOT 1205 / 1204)	Test	120

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Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	Test	120
Bituminous Asphalt Content Determination (MnDOT 1854 / 1853)	Test	100
Aggregate Gradation (MnDOT 1203)	Test	100
Marshall Stability and Flow (Set of 3) (MnDOT 1805)	Test	60
Marshall Density Testing, Triple Specimen (MnDOT 1805 / 1806)	Test	120
Rice Specific Gravity (MnDOT 1807)	Test	75
Thickness and Density of Payment Cores (MnDOT 1810)	Test	30
Gyratory Density (MnDOT 1820)	Test	180
Plus #4 Crushing Determination (MnDOT 1214)	Test	60
Bit Wear and Patch Material, Per Core	Test	0
Sample Pick-up (Tech 1 Rate, Excludes Mileage)	Hour	55
Nuclear Moisture Density Meter	Hour	10
Fine Aggregate Angularity (MnDOT 1206)	Test	60
3 PILES AND OR DRILL SHAFTS		
EVALUATION OF TEST PILES		
Project Engineer/Piling Specialist Conducting Dynamic Pile Testing	Hour	135
Pile Driving Analyzer TM Equipment Rental	Day	700
Wave Equation Analysis	Each	250
CAPWAP Analysis	Each	300
PILE/PIER PRODUCTION - INSTALLATION MONITORING		
Special Inspection / Monitoring of Piles or Piers During Installation	Hour	120
Vibration Monitoring Technician On-Site Documenting Vibration Producing Activity and Measuring Vibration Levels	Hour	90
Seismographic Equipment - Hourly Rate	Hour	50
Seismographic Equipment - Daily Rate	Day	100
Seismographic Equipment - Weekly Rate	Week	500
4 CONCRETE REINFORCEMENT		
LABOR		
Special Inspection of Concrete Reinforcement	Hour	75
5 CONCRETE		
LABOR		
Engineering Analysis, Per Mix Design	Each	300
Special Inspection of Concrete Placements	Hour	75
Concrete Testing (technician casting cylinders, reviewing, delivery ticket, measuring temperature, air content and slump)	Hour	65
RELATED TESTS		
Mechanical Analysis of Fine or Course Bituminous Aggregate (MnDOT 1202 / 1203)	Test	100
Deleterious Particles (MnDOT 1209)	Test	25
Shale Content by Heavy Liquid Examination (MnDOT 1207 / 1209)	Test	120
Specific Gravity and Absorption for Fine or Course Aggregates (MnDOT 1205 / 1204)	Test	120
Soundness of Aggregate (MnDOT 1219)	Test	250
Los Angeles Rattler (LAR) Abrasion Loss of Course Aggregate (MnDOT 1210)	Test	120
Compression Testing (ASTM C39) includes laboratory processing, handling and cylinder molds, cast by TA	Test	20
Compression Testing (ASTM C 39) includes laboratory processing, handling and cylinder molds, cast by others	Test	20
Standard Curing and Testing of Flexural Beams (ASTM C78 and ASTM C293) Per Unit	Test	75
Speciality Mold Rental Clean-up (cubes and beams) Per Use	Each	0
Concrete Strength Curve Development for Maturity Testing	Each	2000
Maturity Meter Rental, Per hour	Hour	10

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Dry Unit Weight (ASTM C 567), Per Unit	Test	100
Sawing of Concrete Unit (ASTM C31), Per Cut	Each	0
Concrete Cylinder "Hot Box" During Winter Construction	Month	250
Compressive Strength of CIPPOCS (ASTM C 873)	Test	20
Concrete Cylinder Pick-up (Tech rate, excludes mileage)	Hour	55
Concrete Coring-Portable Core Drill with Diamond Bits at 2- to 12-inch Diameter and Crew. Excludes Mileage (3 Hour Minimum) Per Hour	Hour	200
Compressive Strength of Concrete Cores, Including Physical Measurements Trimming, ASTM C 42	Test	50
Bit Wear and Patch Material, Per Core	Each	0
Locate Reinforcing Steel, Pachometer	Hour	20
Rental of Windsor Probe, Schmidt Hammer or Profometer	Day	40
Technician Measuring Floor Flatness (FF and FL) Measurements (Field)	Hour	90
Floor Flatness Engineering Analysis	Hour	90
Dipstick Rental	Day	150
6 MASONRY REINFORCEMENT		
LABOR		
Special Inspection of Masonry Reinforcement	Hour	75
BRICK OR UNIT MASONRY		
LABOR		
Technician Performing Masonry Quality Control Testing	Hour	65
RELATED TESTS		
Absorption of RWU (ASTM C 140)	Each	75
Compressive Strength (ASTM C 140) Block	Each	50
Physical Measurements and Absorption (ASTM C 140)	Each	75
Net Area Determination (ASTM C 140)	Test	50
Brick Prism Assembly (ASTM C 1314, E 447)	Test	100
Compressive Strength Hollow Block Prisms (ASTM C 1314)	Test	150
Compressive Strength - Grout Block Prisms (ASTM C 1314)	Test	200
Compressive Strength - Grout (ASTM C 1019)	Test	30
Freeze / Thaw of Brick and Concrete Pavers (ASTM C 67) Per Set	Test	1000
Efflorescence of Brick or Masonry Units (ASTM C67 / C216) Per Set of 10 Samples	Test	200
Initial Rate of Absorption (ASTM C 67 / C 216) Per Set	Test	150
Compressive Strength (ASTM C 67 / C 216) per set	Test	150
Absorption and Saturation Coefficient (ASTM C 67 / C) Per Set	Test	220
Dimesional Analysis (ASTM C 67 / C 216) per set	Test	220
Standard Brick Testing (ASTM C 67 / C 216) per set (does not include freeze/thaw and dimesional analysis testing)	Test	250
Warpage (ASTM C 67 / C 216), per set	Test	250
Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Field Cast	Test	20
Compressive Strength of 2" x 2" Mortar Cube (ASTM C 102) Laboratory Cast	Test	20
Compression Test of Cylindrical Mortar Specimens (ASTM C 780)	Test	20
Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Laboratory Cast)	Test	250
Bond Strength of Mortar to Masonry Units (ASTM C 952) Brick (Field Cast)	Test	250
Flexural Bond Strength of Mortar to Masonry Units (ASTM C 1072) Prism Testing per Prism	Test	350
Masonry Sample Pick Up (Tech I rate, excludes mileage)	Hour	55
8 STRUCTURAL STEEL		
LABOR		
Special Inspections of Structural Steel Level II NDE Technician, AWS Certified Weld Inspector	Hour	90
Radiography, Two-Man Crew	Hour	170

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	Structural Steel Summary Report	Each	1200
9	FIREPROOFING		
	LABOR		
	Special Inspections: Fireproofing Inspections and Thickness Measurements	Hour	90
	RELATED TESTS		
	Bond Testing	Test	30
	Laboratory Density Determination	Test	40
	Cohesion/Adhesion Determination	Test	30
10	GEOSYNTHETIC AND POND LITER		
	RELATED TESTS		
	Shear / Peel Tests on Field Seams (PVC), (ASTM D 903), Per Sample	Test	175
	Shear / Peel Tests on Field Seams (HDPE, VLDPE) (ASTM D 903), Per Sample	Test	175
	Resistance of Plastics to Chemical Reagents (ASTM O 543)	Test	300
	Tensile Properties of Plastics (ASTM D 638)	Test	300
	Flexural Properties of Unreinforced and Reinforced Plastics	Test	300
	Material Property Testing (Strength, Elongation, Creep, Cyclic Stress-Strain, Etc.)	Test	300
	Sample Pick-up (Tech 1 Rate, Excludes Mileage)	Hour	55
11	CONSULTING SERVICES - OTHER		
	MISCELLANEOUS EXPENSE		
	Vehicle Mileage, per mile (as related to inspection and testing services for all site visits, state approved rates) In the future state current year.	Mile	Current year IRS Mileage Rate
12	CONSULTING SERVICES - PROJECT ENGINEERING		
	Project Assistant	Hour	65
	Staff Engineer, Graduate Engineer or Engineer In Training	Hour	75
	Registered Professional Engineer, PE (Project Manager)	Hour	115
	Senior Engineer	Hour	120
	Principle Engineer	Hour	130
13	UNIT RATE FOR INSPECTION AND TESTING LABOR		
	Technician I: Associate's Degree or Equivalent Combination of Education and Experience	Hour	55
	Technician I: (Overtime after 8 Hours)	Hour	55
	Technician II: Associates Degree and 6 months related experience, ACI (American Concrete Institute) Certified, MnDOT Concrete Certified or Provisionally Certified or Equivalent Combination of Education and Experience	Hour	65
	Technician II: (Overtime after 8 hours)	Hour	65
	Technician III: Associate Degree and 3 years related experience, ACI Certified, MnDOT Grading and Base, Bituminous or Concrete Certified or Provisionally Certified as Required or Equivalent Combination of Education and Experience	Hour	75
	Technician III: (Overtime after 8 hours)	Hour	75
	Technician IV or ICBO Special Inspector: Associate Degree and 6 years related experience, posses ICBO Certification (Concrete Reinforcement, Structural Masonry, Precast Concrete, Fireproofing or structural steel and welding) ACI Certified, Level II NDE technician, AWS Certified Weld Inspector as Required or Equivalent combination of Education and Experience	Hour	90
	Technician IV or ICBO special Inspector: Overtime after 8 hours)	Hour	90
14	PLANT INSPECTIONS		
	MnDOT Bituminous Batch Plant Inspections & Concrete Batch Plant Inspections Technician with MnDOT Bituminous Plant Level I or II Certifications and Concrete Plant Level I or II Certifications	Hour	90
	MnDOT Concrete Paving Batch Plant Inspections Technician with MnDOT Concrete Plant Level I or II Certifications on an as needed basis	Hour	90