Tribal Technical Assistance Program
Michigan Technological University
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Course Topics Covered

• Operate a bulldozer, backhoe, front end loader, dump truck, and tractor with equipment trailer
• Identify limitations of equipment and selection the right equipment for a job
• Practice safety procedures including use of personal safety equipment and safety inspection of equipment
• Care and routine maintenance of each type of heavy equipment
• Use a laser transit
• Place field stakes for grade set up
• Read basic blueprints for various types of work
• Identify basic types of residential and property development
• Effective procedures for working with civil engineers and public health department staff
• Make field determination of soil texture Different Types of Rip Rap Stone
• Digging, Leveling, Grading, Shaping
• Loading and securing equipment for transporting
• Digging a Basement, grading floor for forming, digging footings as per code
• Installing septic systems and drain fields as per BIA Spec. and Code
• Roughing out driveways to grade
• Installing Water Lines, What type of fill material
• Backfilling Techniques Type of fill material
• Trenching Techniques as per (OSHA)
• Compaction of different types of Soils
• Using the laser on different types of Contour
• How to read Grade stakes on cut and fill
• How to tail gate spread with dump trucks
• Know where and how to stock pile Material on site
• Clearing and Grubbing, and Stumping
• Decreasing water table (de-watering) during construction
• Techniques for loading and Hauling Sand and Gravel

Workshop Information and Cost

The cost of the workshop will be $300 per student. In order for all attendees to get the most out of the training, class sizes are limited to 10 participants. Please note that there may be a minimum class size for this training. This workshop is spread out over three days, and access to a conference room, to a shop area, and to on-site/field areas for actual equipment operation is required. All attendees should have proper safety attire and personal protective equipment.

Workshop Instructor

John Lovato has worked in construction for nearly 40 years, and he’s been providing heavy equipment and safety training for the Michigan Tech TTAP since 1996.
Day Three Agenda continued

10:00 am BREAK
10:15 am Hands-On Equipment Operation (Field)
12:00 pm LUNCH
1:00 pm Hands-On Equipment Operation (Field)
2:30 pm BREAK
2:45 pm Quiz
3:15 pm Quiz Review & Answers
3:45 pm Course Wrap-Up, Q&A, Discussion
4:00 pm Adjourn