City of Kaukauna Board of Public Works jn/engr dept

March 4, 2024

#### Agenda Item #2b TDS Request for Reinstatement

#### **Background**

Due to repeated unsafe and unacceptable construction practices, all TDS Right-of-Way permits for mainline construction were suspended indefinitely as of Friday October 13, 2023. Spriggs Construction LLC and Moreno and Sons Excavation were no longer permitted to work within the right-of-way of the city of Kaukauna. TDS was informed that to apply or re-apply for Right-of-Way permits, a formal request for reinstatement and a proposed safety management plan would be required by the city of Kaukauna.

TDS has submitted several safety program documents and a formal letter to request reinstatement. See attached documents. The City, KU, and TDS have also conducted a reinstatement meeting to better understand what the requirements and expectations will be for the TDS Internal Construction Crews (ICC).

TDS plans to have a representative present to speak/appeal to the Board.

#### **Staff Recommendation**

Direct staff to work with TDS to establish a new Right-of-Way registration and to grant permits with the following conditions:

- All registration and permit requirements of Municipal Code section 8.06 are met.
- A plan for relocating TDS facilities currently in conflict with City and KU facilities is approved by the Director of Public Works.
- A plan for completing all hard surface and soft surface restoration from previous work is approved by the Director of Public Works.
- All safety plans and communications policies presented by TDS are followed.



February 28, 2024

City of Kaukauna 144 W 2<sup>nd</sup> Street Kaukauna, WI 54130

Attention: Public Works Director John Neumeier

Dear Director Neumeier & Board of Public Works:

Thank you for your time and willingness to consider TDS' appeal. TDS remains committed to our fiber expansion project in Kaukauna and we are excited to bring world class fiber technology to your City.

I am writing to formally appeal the revocation of TDS' construction permits. We share the City's concern for safety, and we have worked diligently to devise a plan that will adhere to all safety and construction standards. Moving forward, TDS will be leveraging our internal construction crews (ICC) to enhance control over construction quality, bolster communication, and ensure adherence to safety standards, particularly when operating near Kaukauna utilities. Our foremost objective is to minimize disturbance for residents and ensure a smooth and responsible construction process.

We understand the importance of maintaining open communication and collaboration with the Public Works Department, and we are committed to promptly addressing any concerns you may have regarding our construction activities.

Thank you for thoughtfully considering this request. We look forward to continued collaboration as TDS works to become a trusted local service provider in Kaukauna.

Sincerely,

Bruce Shead Manager, Business Development

# Policy 1201: Horizontal Directional Drilling (HDD)



Shinee, Mike Mgr-Envrmtl Health, Safety & Security

## PRE-CONSTRUCTION

Prior to the start of construction, the HDD Operator and/or support worker shall complete the following:

1. Work Area Familiarization. The HDD Operator and/or support worker shall familiarize Itself with the work area and the technical requirements of the plans.

2. Utility Locates. The HDD Operator and/or support worker shall request utility locates and complete all other utility coordination requirements.

1. Call diggers hotline 811 and get a locate # for your job site.

3. Complete an On-Site Hazard Assessment. Include the following:

- Discuss specific hazards and procedures
- Discuss location of emergency facilities
- Discuss evacuation plan and emergency procedures
- Brief all personnel, subcontractors, and visitors as they arrive.
- Record discussions and attendees. It is imperative that site-specific hazards are identified, and appropriate safety procedures are discussed, as every site has unique safety issues that need to be addressed. Crews should be aware of specific safety and emergency procedures.

## Specific Hazards Underground

• Electrical power cables, which can cause serious injury or electrocution if connected

• Fiber optic cables carry laser light signals, which can cause eye damage

• Fluid and gas pipes, which may transport asphyxiating, toxic, flammable, and/or explosive gases or liquids

• Low-pressure sewage and storm water lines. These pose a unique hazard potential if an HDD gas or electric line installation has been installed that has intersected the sewage line without detection. Subsequent maintenance or repair activity could cause a gas leak, explosion, or electrocution

The volatility and hazards of liquids are increased by heating. Therefore, additional requirements may be necessary where flammable and combustible liquids are exposed to storage, use, or process operations where they are naturally or artificially heated to or above their flash points. These requirements include items such as ventilation, exposure to ignition sources, and electrical area classifications.

#### Surface hazards to include

• Manholes within the drill area should be opened and inspected, without entry, to determine the underground utility it services. The direction of flow in a sewer should be checked to determine the approximate grade. This information can be used to project depth of the utility where the bore is being made.

- Wires attached to poles should be assumed to be live.
- Out buildings (i.e., storage sheds) should be checked to determine if they have electrical wires or other utility services that may not be marked on any plans.

• Gas barbeque grills, outdoor lighting, etc. should be identified and services confirmed.

• Ditch line depressions in the landscape or obvious changes in vegetation may reveal previous excavation and should be investigated.

• Road repairs may indicate the presence of recently installed or repaired utilities.

• Marker signs or casing vents at or near property lines indicate underground hazards.

• Private utilities and utilities that do not subscribe to the one-call system are not marked by One Call operators.

• TDS associates should check local regulations and proper due diligence should be taken to verify the existence of such (e.g., Rural Water Lines).

#### **Overhead hazards include**

Overhead lines must be avoided. Overhead lines are of particular concern during mobilization/demobilization, while handling drill pipe, or loading and unloading heavy equipment. Always maintain a safe separation between equipment and power lines. If necessary, place highly visible markers on either side of the overhead hazard or designate an individual to notify equipment operators as they approach.

### Verify Utility Locates

The location of all identified utilities must be verified using non-destructive methods of excavation. The bore profile must be designed to maintain acceptable clearances between underground utilities and structures, and the final reamed hole. Possible migration of the back reamer from the pilot bore toward the utility, due to excessive steering or a tight radius, must be carefully considered when establishing clearances. As easements become increasingly congested, it may be necessary to increase the easement widths to accommodate demand for new utilities.

• To protect utilities from the drilling activity, a window must be excavated 24 inches either side of the utility to visually monitor the potentially hazardous

situation. A vacuum unit is required to remove the drilling fluid during this process, and high pressure drilling fluid hazards must be addressed. If the bore passes closely by a utility, it may be necessary to continuously monitor the separation after the drill head or reamer passes the window as the drill string or product pipe may subsequently contact the utility during the completion of the installation.

- Communication is a critical ingredient of any successful horizontal directional drilling project. It is imperative that the drill locator and the drill rig operator have an understanding of the job prior to commencement of the work. They should walk the planned bore path with the tracking equipment to evaluate any potential fields of electromagnetic (active) interference and look for signs of reinforced concrete or other possible passive interference that may hinder the operation and discuss the identified hazards.
- During the actual boring process, if abnormal readings are found with the tracking equipment, the operator should stop, back up, and verify previous readings prior to commencing the bore. This is critical; as deviation from the planned bore profile could result in an underground utility strike. Care must also be taken during the pullback to ensure that utilities are not damaged due to the upsizing by the enlarged back reamer and possible straightening of the bore during back reaming and product installation.

### Traffic Control (Pedestrian and Vehicle)

Necessary traffic control must be maintained throughout the project. Typically, mobilization, demobilization, material handling, and intermittent movement of mobile equipment require traffic control if the activity conflicts with vehicle or pedestrian traffic. Traffic control includes permits, planning, notification, flag persons, warning signs and barricades. The work area, particularly around the drill rig and entrance/exit pits, must also be secured to prevent unauthorized entry. Emergency vehicles and school buses must have access during construction.

# **Drilling Unit**

If the drilling unit is equipped with an Electrical Strike Sensing System, its use should follow manufacturer's recommendations. The system may include audible and visual warning alarms, grounding mats, and personal protective equipment. Electrical sensing stakes must be driven into the ground and the strike alert system tested prior to operation.

## DURING CONSTRUCTION

While the work is being performed, the HDD Operator and/or support worker shall complete the following:

- Calibration and Tracking: The HDD Operator and/or support worker shall calibrate the tracking and locating equipment at the beginning of each workday and maintain a calibration log.
- Monitoring and Recording: The HDD Operator and/or support worker shall monitor and record the alignment and depth readings provided by the tracking system every 25-30 feet for normal conditions, and every 5-10 feet when precise alignment control is necessary.
- Maintain Drilling Fluid Circulation: The HDD Operator and/or support worker shall maintain drilling fluid circulation throughout the HDD process including the initial pilot hole installation, and the reaming and back pull process. The pullback shall not exceed the fluid circulation rate capabilities.
- Back-reaming: The HDD Operator and/or support worker shall back-ream as required to accommodate the product size. Compaction reamers are not permissible. The HDD Operator and/or support worker shall plan the back pulling operations carefully to ensure that all back pulling operations can be completed without stopping and within the permitted work hours.
- Clearances: The HDD Operator and/or support worker shall maintain all required clearances and offsets from existing utilities.
- Documentation: The HDD Operator and/or support worker shall at all times and for the entire length of the HDD alignment be able to demonstrate and provide the horizontal and vertical position of the alignment, the fluid volume used, return rates, and pressures.

• Inspection: The HDD Operator and/or support worker shall inspect the work and surrounding area to ensure damage has not occurred to existing utilities due to HDD construction operations.

### SAFE PRACTICES

#### **Drilling Precautions**

The following precautions should be observed during the drilling operation:

- If a hazardous situation is suspected, work should be stopped until an evaluation is made, and appropriate corrective action taken.
- Potential "pinch points" on the drill rig and support equipment must be identified and avoided.
- Safe clearances (as specified by regulatory authorities) must be maintained between the bore and all utilities. The minimum clearance must take into consideration the final reamed diameter and the bend radius of the pilot bore.
- Workers must stay clear of the rotating drill string
- The drill must not be operated when personnel are working on or near the drill string.
- The drill must not be operated without positive communication with the drill locator or exit side personnel.
- The manufacturer's specified maximum torque and thrust/pullback capacity of the drill pipe must not be exceeded.
- Remote breakout wrenches must be used safely.
- Drilling machine torque or backhoes with wrenches should never be used to make or break tool joints.

#### **Reaming and Installation Precautions**

The following precautions should be observed during reaming and product installation:

- Two-way radio communication must be maintained at all times between the entry and exit sides.
- The drill pipe must not be rotated until all personnel have been notified and acknowledgement has been made by all personnel.
- Workers must never step over rotating drill pipe and must maintain a safe distance when working near rotating drill pipes.

When crossing existing underground utilities, the utility must be exposed at the crossing location and monitored during the crossing.

#### Other Activities

Common hazards such as slips, trips, and falls, excavation cave-ins, pinched fingers and toes, vehicle accidents, and back injuries and hazards specific to HDD equipment and operations must be identified and isolated or removed to avoid incidents and accidents.

#### **RESPONSE TO EVENTS**

If an existing utility is struck during the boring operation, emergency procedures must be initiated to reduce the likelihood of human injury. Procedures to follow in the event of utility strikes are summarized below by type of utility.

#### **Electrical Strike**

If an electrical strike occurs, workers should not move. The voltage difference between the equipment and the ground, or between a person's feet may be sufficient to cause injury or death. Do not touch the machine, drill pipe, water system, mud-mixing system, or anything connected to the drill as these items may be highly charged. The drill operator should remain calm and reverse the direction of advance in an attempt to break contact with the electrical line. The electrical utility company must be contacted immediately. The drill operator should follow the manufacture's procedure to determine if the drill is electrically charged before attempting to dismount the drill.

### Gas Strike

If a gas line strike occurs, evacuate the area immediately. The drill operator should shut down all engines and under no circumstance should the operator attempt to reverse the bore to break contact as further movement may cause a spark. Emergency services (911) and the gas utility company should be contacted immediately.

### **Fiber Optic Strike**

If a fiber-optic strike occurs, workers must not look into the cut ends of the cable, which can cause severe eye damage. Drilling must stop immediately, and the utility owner must be contacted.

### **Communications Line Strike**

If a communications line strike occurs, drilling must stop immediately, and the utility company should be contacted.

### Sanitary/Storm Sewer and Water Strike

If a water or sewer line strike occurs, drilling should be stopped immediately, and all bystanders should be warned that a strike has occurred and that they should stay away. Medical attention should be obtained for personnel who have come into contact with sewage. As with any strike, the utility owner should be contacted immediately.

# Policy 1203: Construction Site Safety Policy



Shinee, Mike Mgr-Envrmtl Health, Safety & Security

### Site Safety Pertaining to Locate Markings

The purpose of this policy is to outline the importance of locates and the maintenance of, as they pertain directly to job site safety during the construction process. All guidelines below must be followed 100% of the time to ensure the safety of public, other utilities and associates on the job site.

- 1. All TDS excavation sites must have a valid, not expired, one call ticket on site at all times during the construction process.
  - a. Once a locate ticket is called in or entered into the one call website, a copy of this ticket must be printed and placed in the project folder with the corresponding project Name and TC number, along with any and all other documentation needed for the project (permits, staking sheets etc).
  - b. This folder must be always kept in a vehicle physically on the project site
- 2. All one call tickets for projects must be reviewed for expiration date.
  - a. Keep track of the expiration date of the locate ticket by highlighting the expiration date on the ticket in the project folder. Review the project folder each week ensuring we are operating under a valid non- expired locate ticket.
  - b. Before the locate ticket expires, call in a minimum of four (4) business days prior to expiration date and renew the locate ticket to keep it valid through the duration of the project.
- 3. Before beginning work on a construction site, validate all locates are present prior to excavation by walking the site.
  - a. If locates are not present or you believe something was missed, do not excavate in the area, stop work, and call the company responsible for

locating the facilities to have them mark/remark the area.

- b. During potholing a located facility, you find that the locates are off or you cannot find the utility as marked, stop work, and call the company responsible for locating the facility to have them remark the area.
- c. If excavating and you find an unmarked facility in an area that has all required locate marks present, stop excavation, and call the company responsible for locating the facility and have them mark the unmarked facility.
- 4. All locate markings must be maintained and remain visible through the course of the project.
  - a. If locates are no longer visible in a section or portion of the project, you must stop work and either call in for a renew of the locates to ensure they are consistently in view or call the company responsible for locating the facilities and have them refresh the locate marks through the section in question.
  - b. Always ensure locates are visible, rain can and will wash away locate marks, and the use of flags to mark utilities can also be used to prevent this and keep marks visible during all phases of construction. Refresh locates after rain and after 20 days.

### Site safety for associates

- 1. All personal must have personal protective equipment on while working in construction area.
  - a. Hard hats,
  - b. Safety vest or shirt.
  - c. Safety FST boots.
  - d. Safety glasses as needed
  - e. Hearing protection as needed
- All work will stop during thunder and lightning storms. Work can commence
  30 minutes after last known thunder and/or lightning strike.
- 3. If another utility is struck, stop all work, and call that provider for repair. In the event of a gas strike, area should be cleared, call 911, and all ignition sources should not be utilized. In the event of a power strike, the horizontal directional drill rig operator should remain on the rig. All pedestrian traffic, including civilians, should be advised not to approach area. All media correspondence, including social media, should be directed to contact TDS

Dir-External Affairs & Communications and not answered by any field associate.

- 4. All associates are encouraged that if they <u>"see something, say something"</u> and can halt operations until the safety issue is addressed without fear of repercussions.
- 5. A<u>job safety analysis ("JSA"</u>), in which they identify potential safety hazards or safety considerations and discuss them with their crews before starting work each day.

### Site Safety equipment operations

- 1. When stopping work for the night all equipment needs to be shut down and parked in a safe area.
- 2. Also cover or tape off any open holes or excavation areas
- 3. All keys need to be removed from the equipment and secured in a company truck or taken back to the office.
- 4. Do Not leave keys hidden on the equipment.
- 5. If leave equipment or trailers on roadway they must be cones placed and hitch lock in place if leaving the trailer overnight.

## Safety Practices for Workers in work area.

- 1. Always follow all TDS safety and health policies and practices.
- 2. Stay clear of pinch points created by operating equipment.
- 3. Never get under a load or between the load and the machine.
- 4. Wear appropriate PPE as required by the task being performed and as required per TDS policy
- 5. Be aware of suspended loads, counterweights, and pinch points. Maintain eye contact with the operator always.
- 6. Be aware of and listen for the backup alarm operation.
- 7. You may be asked to act as a spotter if there are overhead power lines, underground utilities, or tight working conditions.
- 8. Work under the bucket shall be limited. No personnel shall be under the bucket while it is being raised or lowered.
- 9. All unnecessary personnel shall be prohibited from the work area.

- 10. Hand signals shall be given by one person and must be understood by all personnel on site.
- 11. No riders shall be permitted on equipment.
- 12. Know the location of the nearest fire extinguisher.

# Regulations

# OSP Construction Crew (OSP Construction) Utility Strike Process

Shinee, Mike Mgr-Envrmtl Health, Safety & Security

The purpose of this process is to clearly outline the expectations of the OSP Construction Teams in the event a utility strike should occur.

If a utility strike should happen, the following must be followed to properly document, investigate and set into motion corrective action procedures to prevent further hits from occurring.

- 1. If a utility strike occurs, first and foremost stop work immediately. Shut down any running equipment and stop all construction activity to minimize the risk of sparks and fire. If this is a gas line hit, electric line damaged and sparking, or a water main damage then call 911 emergency services. Secure the area immediately to prevent injury to you or anyone in and around the area.
  - a. Call in an 811-damage ticket.
  - b. Contact your Supervisor
  - c. Fill out Utility Strike Form
- 2. Operator, in the event of a power strike, stay on the rig.
- Always advise homeowners and or pedestrians in the area of the danger and to stay clear. Properly document the utility hit utilizing the <u>Utility Strike</u> <u>form</u>.
  - a. Any utility strike, as stated above contact your local TDS OSPC representative.
  - b. Supervisor of the team is responsible from an FS perspective for documenting the utility strike utilizing the Utility Damage Checklist and must be filled out in its entirety including pictures of the damages.

- c. Ensure to utilize the TDS provided Hit Kit in the event that the locates were off or not present to ensure everything is properly measured and documented as part of the analysis.
- d. Supervisor must collect witness statements from crew and operator.
- e. Never, under any circumstances, share on Social Media Platforms or send photos or videos of the incident to family, friends, neighbors, or others outside of TDS.
- f. Never under any circumstances speak with the Media in the event of a utility strike, always contact your Manager and have them work with the TDS Communications team for media communications.
- 1. Once on-site investigation is completed by the direct supervisor, supervisor must contact the following:
  - a. Local ICC associate manager/ ICC Field Service Manager
  - b. TDS Safety department (Safety@tdstelecm.com)
  - c. Construction SR. Manager-Field Service (<u>Dwayne.Dunaway@tdstelecom.com</u>)
  - d. DO NOT begin excavation again until you are given the OK to do so by the utility company performing the repairs.
  - e. Hold Safety Stand Down with involved crew and those working nearby to discuss incident.
  - f. Supervisor must hold an incident review with those specified in step 3a within five (5) days of the incident resolution.
  - g. Any corrective action detailed from the incident review must be implemented immediately to prevent future utility strike incidents.

## **Disciplinary Actions:**

#### Any team found to be in violation of the following will be subject to disciplinary

#### action up to and including termination.

Violations subject to termination:

- Digging without legal locates
- No potholing/hand exposing of utilities to ensure true depth before excavating/boring
- Blind boring

Violations subject to other disciplinary actions including verbal warning, written warning and or suspension:

- No locate ticket in folder on job site ensuring legal dates of excavation
- Permits not in folder on job site
- Improperly securing work zone with signs, cones, covering of open trenches at the end of the workday etc
- Improper stowing of equipment booms and or failure to properly secure machines while not in use or transporting equipment to and from jobsites
- Wearing of appropriate PPE while on job site
  - Hardhat
  - Vests
  - Steel toe boots
- Failure to properly notify persons in this policy with relation to utility hit damage checklist, investigation of damages immediately after securing the site of a damage

#### 2/15/2024 Kaukauna Requirements:

#### Safety Training –

- Written proof (sign off sheet) of all staff has taken a safety training course on safe boring and digging practices.
- Review and agree toBest Practices for Drill Operators
  - Any time a new drill operator is brought into market they have to fill out the Best Practices for Drill Operators and show proof of safety training.
- Frost Bars, Rock Bars, etc. TDS Supervisor will take it from you and remove it from the build.
- NO BLIND BORING!
- Must have clear locates! if locates are an issue contact TDS Supervisor to check in with USIC/Laser Locates/Kaukauna Storm Department to see what the delay is.

#### Spotting/Pot Holing Utilities -

- All utilities must be spotted, watch the drill cross the utility and on pullback also.
  - Take photos.
- If within 10' of a manhole crossing a utility or utilities, don't need to core city facility if depth taken from manhole allows for enough clearance to cross.
  - When in doubt about storm and sanitary call Jeff.
- Can advance drill cores in concrete on Saturday if needed be mindful of holidays, yard sales, etc.
  - Resto can also be done on Saturday.
- Cores must be temporarily covered with a cone and then securely covered/plated or filled completely same day
- Clean-up of saw slurry same day

Water - reach out to Laser Locates if size isn't noted on the locates.

- Laser Locates Scott 920-606-3152 (Sara has his personal cell phone number if he's on vacation and you can't get ahold of anyone else.)
- Water Key keep track of water usage to provide to City to Pay for on a Monthly Basis.
- Key must be returned to TDS Supervisor Daily.
- Eugene: 920-419-3565 am, pm 920-766-5721
- Water spotting/Pot holing –)(Should be 4.5' and 18" below running depth) if it's not a water main over 8".
- Water mains larger than 8" <u>must</u> provide <u>24 hr notice</u> before crossing, someone from Kaukauna Water HAS to be on site to watch you cross the water main.
  - Want to see 18" all the way around the utility.
  - Backfill with something at the bottom that won't move (slurry or flowable) then backfill with gravel.
- Core all water including services to homes in driveways, aprons, street, etc.
  - Backfill and return the core to the hole some homeowners want their core epoxied back in instead of a new apron section poured. (Must be in writing)
- 3' separation from city water, can be closer but need prior approval first (24" closest we are allowed to be, but we have to ask first).
- 5' from hydrants for HH's if we can, otherwise past 3' is the minimum.
  - Anything deemed too close to the hydrant from the city will be redone.
- As much distance as possible from water valves, 3' is the minimum I believe.
- When in doubt call and ask (Mike with Kaukauna Water or Jeff with the City of Kaukauna)!

Gas –

- WE Energies Emergency Number 1- 800-242-9137 (after you call the emergency number for a hit, call the nonemergency number. The emergency number goes all the way to Milwaukee to dispatch first before it notifies the local guys).
- WE Energies Non-Emergency Number 920-450-2776
- High Pressure Watchdog Keith 920-857-8654
- If we dig to 4' and can't find the gas, a TDS Supervisor can call the Non-Emergency WE Energies number to have someone come out to confirm where their service is.
- If you are near high pressure gas, the high-pressure gas spotter must be notified and on site. He books up fast and needs two three days' notice before you dig near high-pressure gas.
- The high-pressure gas main has to be exposed in case the coating is damaged when soil was removed so a patch/repair can be made.

#### Restoration –

- Clean-up of saw slurry same day
- Minimum 3" clean topsoil
- No loose straw! Must be some sort of straw matting to hold everything in place (straw or the green kind are fine).

#### Concrete -

- Whoever does the concrete restoration needs to fill out city paperwork, have a stamp, and has to have preapproval before they do road repairs.
- When in doubt if we can adjust a running line to save a core, avoiding mains, do it.
  - If adjusting the running line will be a <u>large change</u> in distance (over 5') it will be a redesign and must be approved by TDS, the City of Kaukauna, the County, etc., depending on the situation.

#### **Restricted working hour in School Zones:**

- School zones and major school driving/walking routes will have restricted work hours.
- No work shall occur outside of the hours of 8am-2pm on weekdays that will affect traffic or sidewalks on any routes abutting schools, or on routes including but not limited to:
  - Loderbauer Road
  - Hillcrest Drive (CTH Q)
  - Dodge Street
  - Island Street
  - o Catherine Street
  - o Elm Street
  - Maple Street
  - o Taylor Street (STH 96)
  - Lawe Street (STH 55)
  - o Sarah Street
  - o Doty Street
  - o Wisconsin Avenue
  - Delanglade Street (STH 55)
  - Ann Street
  - Crooks Avenue (STH 55)
  - o Third Street
  - o Second Street
  - Kenneth Avenue
  - Main Avenue (Crooks to 5<sup>th</sup> Street)

#### HH's

• 3' off back of curb minimum and as far away from driveways and alleys as possible (8' if you can do it because people pile snow on the sides of their driveways and crush the HH's).

#### Homeowner notification of work:

- **Door tags** 2 3 days before work starts.
- **Concrete restoration** let the homeowner know what and when it will happen, then coordinate/work with them.