



PUBLIC WORKS COMMITTEE AGENDA

July 26, 2022 at 5:30 PM

Municipal Service Building - Training Room, 2026 New Jersey Avenue

It is possible that a quorum (or a reverse quorum) of the Sheboygan Common Council or any other City committees/boards/commissions may be in attendance, thus requiring a notice pursuant to State ex rel. Badke v. Greendale Village Board, 173 Wis. 2d 553, 494 N.W.2d 408 (1993).

Persons with disabilities who need accommodations to attend this meeting should contact the Department of Public Works at 920-459-3440. Persons other than council members who wish to participate remotely shall provide notice to the Public Works Department at 920-459-3440 at least 24 hours before the meeting so that the person may be provided a remote link for that purpose.

OPENING OF MEETING

1. Call to Order
2. Roll Call - Alderpersons Dekker, Perrella, Ramey, Rust and Salazar may attend meeting remotely.
3. Pledge of Allegiance
4. Introduction of Committee Members and Staff

MINUTES

- [5.](#) Approval of Minutes: July 12, 2022

ITEMS FOR DISCUSSION & POSSIBLE ACTION

- [6.](#) Res. No. 39-22-23 / July 18, 2022: A resolution authorizing the appropriate City officials to enter into a contract with Elexco, Inc. for the installation of fiber optic cable at the Uptown Social facility and connecting the facility to the existing "Ring of Fiber" fiber optic cable network.
- [7.](#) Mid-Year Performance Report for the Department of Public Works. DISCUSSION ONLY

NEXT MEETING DATE

8. Next Regular Meeting Date: August 9, 2022

ADJOURNMENT

9. Motion to adjourn

In compliance with Wisconsin's Open Meetings Law, this agenda was posted in the following locations more than 24 hours prior to the time of the meeting:

*City Hall • Mead Public Library
Sheboygan County Administration Building • City's website*

CITY OF SHEBOYGAN

PUBLIC WORKS COMMITTEE MINUTES

Tuesday, July 12, 2022

COMMITTEE MEMBERS PRESENT: Alderperson Angela Ramey, Chair Dean Dekker, Vice Chair Grazia Perrella, and Alderperson Zach Rust.

COMMITTEE MEMBERS EXCUSED: Alderperson Amanda Salazar.

STAFF/OFFICIALS PRESENT: Director of Public Works David Biebel, City Engineer Ryan Sazama, Superintendent of Parks and Forestry Joe Kerlin, Superintendent of Wastewater Jordan Skiff, Superintendent of Facilities and Traffic Mike Willmas, and Assistant City Attorney Liz Majerus.

OPENING OF MEETING

1. Call to Order

Chair Dean Dekker called the meeting to order at 5:30 PM.

2. Roll Call - Alderpersons Dekker, Perrella, Ramey, Rust and Salazar may attend meeting remotely.

3. Pledge of Allegiance

The Pledge of Allegiance was recited.

4. Introduction of Committee Members and Staff

MINUTES

5. Approval of Minutes: June 14, 2022

MOTION TO APPROVE MINUTES FROM JUNE 14, 2022

Motion made by Vice Chair Perrella, Seconded by Alderperson Rust.

Voting Yea: Alderperson Ramey, Chair Dekker, Vice Chair Perrella, Alderperson Rust

ITEMS FOR DISCUSSION & POSSIBLE ACTION

6. Gen. Ord. No. 5-22-23 / June 20, 2022: An ordinance creating a 30 Minute Parking zone on the west side of N. 15th Street north of Wisconsin Avenue.

MOTION TO RECOMMEND THE COMMON COUNCIL ADOPT THE ORDINANCE

Motion made by Vice Chair Perrella, Seconded by Alderperson Rust.

Voting Yea: Alderperson Ramey, Chair Dekker, Vice Chair Perrella, Alderperson Rust

7. Gen. Ord. No. 7-22-23 / July 5, 2022: An ordinance creating parking limits so as to add a two-hour parking limit, between 8:00 a.m. and 5:00 p.m. Monday through Friday, to the west side of S. 12th Street between Georgia and Clara Avenue.

MOTION TO RECOMMEND THE COMMON COUNCIL ADOPT THE ORDINANCE

Motion made by Vice Chair Perrella, Seconded by Alderperson Rust.

Voting Yea: Alderperson Ramey, Chair Dekker, Vice Chair Perrella, Alderperson Rust

8. R. O. No. 33-22-23 / July 5, 2022: Submitting, as a matter of record, a copy of the United States Department of the Army Headquarters, 88th Readiness Division Storm Water Management Plan for the William F. Fale USARC facility located at 2913 Erie Avenue.

MOTION TO RECOMMEND THE COMMON COUNCIL FILE THE REPORT OF OFFICER

Motion made by Vice Chair Perrella, Seconded by Alderperson Ramey.

Voting Yea: Alderperson Ramey, Chair Dekker, Vice Chair Perrella, Alderperson Rust

NEXT MEETING DATE

9. Next Regular Meeting Date: July 26, 2022

ADJOURNMENT

10. Motion to adjourn

MOTION TO ADJOURN AT 5:40 PM

Motion made by Vice Chair Perrella, Seconded by Alderperson Ramey.

Voting Yea: Alderperson Ramey, Chair Dekker, Vice Chair Perrella, Alderperson Rust

CITY OF SHEBOYGAN

REQUEST FOR PUBLIC WORKS COMMITTEE CONSIDERATION

ITEM DESCRIPTION: A resolution authorizing the appropriate City Officials to enter into a contract with Elexco, Inc. for the installation of fiber optic cable at the Uptown Social facility and connecting the facility to the existing “Ring of Fiber” fiber optic cable network.

REPORT PREPARED BY: Bernard R. Rammer, Purchasing Agent

REPORT DATE: July 13, 2022

MEETING DATE: July 26, 2022

FISCAL SUMMARY:

Budget Line Item: 202000-531100
 Budget Summary: Federal Grants
 Contracted Services
 Budget Expenditure: \$50,000.00
 Budgeted Revenue: N/A

STATUTORY REFERENCE:

Wisconsin Statutes: N/A
 Municipal Code: N/A

BACKGROUND / ANALYSIS: Renovations of the building which will become the new home of Uptown Social are well underway. The Information Technology Department has a need to connect the facility to the City’s Ring of Fiber. The City engaged the Services of Multimedia Communications and Engineering to design the fiber link installation between the facility and the nearest fiber connection located at North 9th Street and Superior Avenue.

STAFF COMMENTS: The City of Sheboygan issued a Request for Bids for the directional Boring and fiber installation services. The low bid, in the amount of \$ 39,640.00 was submitted by Elexco, Inc of Seymour WI. A review of the submitted by the City’s Engineer, MC&E has determined that bid meets all of the requirements as specified. The funding for this project is utilizing grant funds supplied through the American Rescue Plan Act (ARPA)

Elexco, Inc. is an established Vendor with the City of Sheboygan.

ACTION REQUESTED: Motion to recommend the Common Council adopt Res. No. 39-22-23 authorizing the appropriate City Officials to enter into a contract with Elexco, Inc. for the installation of fiber optic cable at the Uptown Social facility and connecting the facility to the existing “Ring of Fiber” fiber optic cable network.

ATTACHMENTS:

- I. Res. No. 39-22-23
- II. Elexco, Inc. agreement

Res. No. 39 - 22 - 23. By Alderpersons Dekker and Perrella.
July 18, 2022.

A RESOLUTION authorizing the appropriate City Officials to enter into a contract with Elexco, Inc. for the installation of fiber optic cable at the Uptown Social facility and connecting the facility to the existing "Ring of Fiber" fiber optic cable network.

WHEREAS, the City desires to connect the new Uptown Social Community Center to internet via the existing "Ring of Fiber" fiber optic cable network at the nearest access point located at the intersection of North 9th Street and Superior Avenue ("project"); and

WHEREAS, the City retained Multimedia Communications & Engineering ("MCE") to generate technical specifications for this project; and

WHEREAS, the City subsequently issued and advertised a Request For Bids from qualified contractors for the the project; and

WHEREAS, Elexco, Inc. provided the low bid in the amount of \$39,640.00; and

WHEREAS, MCE has confirmed that Elexco, Inc.'s bid includes all work MCE designed for the project and Elexco, Inc. possesses the knowledge and equipment necessary to successfully complete the project; and

WHEREAS, Council previously authorized utilizing American Rescue Plan Act funding to invest in Uptown Social facility improvements via Res. No. 111-21-22 adopted December 20, 2021.

NOW, THEREFORE, BE IT RESOLVED: That the appropriate City officials are hereby authorized to enter into a contract with Elexco, Inc. for the project in substantially similar terms as the attached contract.

Public Works

BE IT FURTHER RESOLVED: That the appropriate City officials are hereby authorized to draw funds in the amount of \$39,640.00 from Account No. 202000-531100 (Federal Grants Contracted Services).

I HEREBY CERTIFY that the foregoing Resolution was duly passed by the Common Council of the City of Sheboygan, Wisconsin, on the _____ day of _____, 20____.

Dated _____ 20____. _____, City Clerk

Approved _____ 20____. _____, Mayor

**AGREEMENT
BETWEEN THE CITY OF SHEBOYGAN, WISCONSIN AND ELEXCO, INC.
FOR THE PROVISION AND INSTALLATION OF A NEW FIBER OPTIC
CONNECTION BETWEEN THE CITY OF SHEBOYGAN RING OF FIBER AND
THE NEW UPTOWN SOCIAL COMMUNITY CENTER**

This Agreement ("Agreement") is made and entered into effective this ____ day of _____, 2022 (the "Effective Date"), by and between the City of Sheboygan (the "City"), a municipal corporation, and Elexco, Inc. ("Contractor").

WITNESSETH:

WHEREAS, the City is the owner of the new Uptown Social Community Center located at 1817 North 8th Street, Sheboygan WI 53081; and

WHEREAS, the City desires to connect the facility to the existing Ring of Fiber to provide the facility with connectivity to the internet as well as other City Buildings and the nearest access point to the Ring of Fiber is located at the Intersection of North 9th Street and Superior Avenue; and

WHEREAS, the City wishes to connect to the Ring of Fiber at the nearest location and terminate the fiber in an interior computer closet within the Uptown Social facility currently under construction with the majority of the work being done through the use of underground directional boring to minimize excavation and disturbance of the surface facilities along the route in full compliance with the specifications, identified in Exhibit 1 to this Agreement, and

WHEREAS, the City issued Request for Bids # 2019-22 to obtain bids from qualified providers of the services and equipment ("Services"); and

WHEREAS, the City has opened the bids, and determined that the bid from Contractor ("Bid") is the lowest responsive and responsible bid for the Services; and

WHEREAS, Contractor desires to provide the City with the necessary Services under the terms set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

Article 1. Scope of Services

Contractor shall perform all work associated with the work as specified in Exhibits 1 & 2 related to the provision, installation and testing of the Fiber Optic Extension and Connection between the Ring of Fiber and the Uptown Social Facility (the "Services").

Contractor shall provide all labor, machinery, equipment, licenses, permits, bonds, and travel expenses to safely and skillfully complete the project and shall dispose of all materials generated during said installation in a lawful manner (the "Disposal"). Contractor shall be responsible for obtaining any and all applicable City permits and paying any and all applicable permit fees prior to beginning work. The City of Sheboygan does not waive permitting fees between City of Sheboygan Departmental projects.

Contractor shall be responsible for furnishing, erecting, and maintaining suitable barricades, warning signs, flashers, fencing, and other protective equipment to properly protect and safeguard its personnel and the public during all phases of the Services.

Contractor will need to plan the work in advance of mobilization and coordinate with the City's Representative. The public right of way impacted by the project shall remain open to traffic during the project and work on the interior of the facility currently underway shall continue while the Contractor installs the fiber connection.

Article 2. Standard of Care

Contractor shall be responsible for completion of the Services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances ("Standard of Care"). The City's Representative shall be the sole judge of the adequacy of Contractor's work in meeting the Standard of Care; however, the City's Representative shall not unreasonably withhold its approval as to the adequacy of Contractor's performance. Upon notice to Contractor, Contractor will, without additional compensation, correct or replace any and all Services not meeting the Standard of Care which appear within a period of one year from the date of final payment of the Contract.

Contractor shall be solely responsible for all construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under this Agreement.

Article 3. City's Representative

The City designates Eric Bushman, Information Technology Director and representatives from the City's Engineering Firm, Multimedia Consulting and Engineering, Inc. (MC&E) as the City's Representative for purposes of this Agreement. If the City's Representative deems it appropriate, the City's Representative may consult with other employees of the City, or may retain an appropriate outside expert to assist with the management of this Project.

If the City's Representative or Engineer observes any work performed by the Contractor to not be in conformity with the Agreement, the City's Representative(s) will report that to the Contractor. The City's Representative(s) will have authority to stop any portion of the work not in conformity with the Agreement until the City has investigated and decided upon an appropriate procedure.

Article 4. Compensation

The City shall pay Contractor for the Services an amount not to exceed \$39,640.00 ("Contract Amount"). Invoices shall be sent via first class mail postage prepaid or via email. Payment will be

remitted to Contractor within sixty (60) days of receipt of invoice. Contractor shall submit an invoice to the City on a monthly basis and shall be based on the percentage of each quadrant completed. The invoice shall be sent to:

Bernard Rammer
City of Sheboygan
828 Center Ave.
Sheboygan, Wisconsin 53081

Contractor shall be required to file waivers of lien from all suppliers and subcontractors with the Owner prior to receiving payment. The submission of any Request for Payment shall be deemed a waiver and release by Contractor of all liens and claims with respect to the work and period to which such payment request pertains except as specifically reserved and noted on such request.

Contractor shall deliver to the City a complete release of all liens arising out of this Agreement before the retained percentage or the Final Payment is paid. If any lien remains unsatisfied after the retained percentage or the Final Payment is paid, Contractor shall refund to the City such amounts as the City may have been compelled to pay in discharging such liens (including any costs and reasonable legal fees).

Additional services not set forth in Article 1, or changes in the Services must be authorized in writing by the City or its Representative prior to such work being performed, or expenses incurred. The City shall not make payment for any unauthorized work or expenses.

The City may withhold payment, in whole or in part, to the extent necessary to protect itself from a loss on account of any of the following:

- Payments that may be earned or due for just claims for labor or materials furnished in and about the work.
- Defective work.
- Failure of Contractor to make payments due to subcontractors, material suppliers, or employees.
- Damage to the City or a third party.
- The probable filing of claims by other parties against Contractor which may adversely affect the City.
- Reasonable doubt that the Agreement can be completed for the balance then unpaid.
- Liquidated damages due to the City.

The City will disburse, and shall have the right to act as agent for Contractor in disbursing the Withheld Amounts to the party or parties who are entitled to payment. The City will provide the Contractor with a proper accounting of all such funds disbursed on behalf of the Contractor.

The City also reserves the right to refuse payment of the final 10% due to Contractor until the City's Representative is satisfied that all subcontractors, material suppliers, and employees of the Contractor have been paid in full.

Partial payment made under this Agreement is not evidence of the proper performance by Contractor either in whole or in part, and no payment made by the City shall be construed to be an acceptance of defective or improper work. Acceptance of the work by the City shall occur only upon Final Payment by the City which will occur after Final Acceptance. The Parties recognize that more than 45 days may elapse between the submission of the last invoice and Final Acceptance or Final Payment. The City agrees to make reasonable efforts to schedule its Final Inspection in a timely manner and to process the Final Payment in a timely manner upon Final Acceptance. (For the avoidance of doubt, the warranties and guarantees in this Agreement shall continue to apply even after Final Payment by the City.)

Article 5. Appropriation of Funds

Notwithstanding any other provision of this Agreement, if funds for the continued fulfillment of this Agreement by the City are at any time not forthcoming or are insufficient, through failure of any entity, including the City itself, to appropriate funds or otherwise, then the City shall have the right to terminate this Agreement without penalty. The City agrees that it will make its best effort to obtain sufficient funds for the Agreement to meet its obligations hereunder in full.

Article 6. Performance and Payment Bond

Contractor shall, within ten (10) days of the execution of this Agreement by the Common Council of the City of Sheboygan, provide the City with a Performance Bond and a Payment Bond in the amount of one hundred percent (100%) of the contract amount.

Failure by Contractor to perform the work in a timely or satisfactory fashion may result in forfeiture of Contractor's Performance Bond. Failure by Contractor to make necessary payments to suppliers or subcontractors may result in forfeiture of Contractor's Payment Bond.

If the Surety on any bond furnished by Contractor becomes a party to supervision or liquidation, or its right to do business in the State of Wisconsin is terminated, Contractor shall, within thirty (30) calendar days thereafter, substitute another bond or surety, both of which must be acceptable to the City.

Article 7. Schedule

Contractor shall commence work after receiving a Notice to Proceed from the City. All work shall be coordinated with the City's Representative. No work may occur on weekends, holidays without prior approval from the City's Representative.

Contractor shall complete the services within 120 calendar days of commencement, or within such extra time as may have been allowed by a mutually agreed extension (the "Deadline") Due primarily to manufacturer lead time for materials, the City's Representative shall have the authority to consent to an extension of the Deadline on behalf of the City and waive any associated penalties with liquidated damages.

Article 8. Liquidated Damages

In the event that Contractor does not complete the Services by the Deadline or the alternative final agreed upon completion date, there shall be deducted from any monies due or that may become due to Contractor, for each and every calendar day that the work remains uncompleted, a sum of One Hundred and 00/100 Dollars (\$100.00) per calendar day.

This sum shall be considered and treated not as a penalty but as fixed, agreed, and liquidated damages due the City from Contractor by reason of inconvenience to the public, added cost of supervision, and other items which have caused an expenditure of public funds resulting from his failure to complete the work.

Article 9. Workmanship and Quality of Materials

Contractor shall ensure that the System has the following warranties, which begin after Final Acceptance and completion of all training required in the Project Manual:

- All equipment purchased as a result of this Agreement shall include the equipment manufacturer's standard warranty.
- Contractor shall provide a one-year warranty against defects for parts and labor.

All material used shall be new, newest model year, and free from defects. Items which are used, demonstrators, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval of the City's Representative.

Whenever, in any document, an article, material, or equipment is defined by describing a proprietary product, or by using the name of a manufacturer or vendor, the term "or equal" or the term "the equivalent" if not inserted, shall be implied, and it is done for the express purpose of establishing a basis of durability and efficiency and not for the purpose of limiting competition. Whenever material or equipment is submitted for approval as being equal to that specified, the submittal shall include sufficient information and data to demonstrate that the material or equipment conforms to all contractual requirements. The decision as to whether such material or equipment is equal to that specified shall be made by the City's Representative. The approval by the City's Representative of alternate material or equipment as being equivalent to that specified shall not in any way relieve Contractor of responsibility for failure of the material or equipment due to faulty design, material, or workmanship, to perform the function required by the contract documents. The City's Representative shall be the sole and final judge of equivalency.

Article 10. Safety Requirements

All materials, equipment, and supplies provided to the City must comply fully with all safety requirements set forth under state and federal law.

Contractor shall be responsible for the safety of its employees at all times and shall provide all equipment necessary to insure their safety. Contractor shall ensure the enforcement of all applicable safety rules, regulations, ordinances and laws, whether federal, state, or local.

Contractor shall provide the necessary safeguards including, but not limited to, warning signs and barricades, to avoid all necessary hazards and protect the public, the work, and the property at all times, including on days when no work is being done. The City shall not be responsible for any loss or damage to the project materials prior to their installation or to Contractor's tools and equipment from any cause whatsoever.

Article 11. Open Records

Both parties understand that the City is bound by the Wisconsin Public Records Law and, as such, this contract is subject to that law. Contractor acknowledges that it is obligated to assist the City in retaining and producing records that are subject to Wisconsin Public Records Law, and that the failure to do so shall constitute a material breach of the contract, and that Contractor must defend and hold the City harmless from liability under that law. Except as otherwise authorized, those records shall be maintained for a period of seven (7) years after receipt of Final Payment under the Agreement.

Article 12. Termination

The City may terminate or suspend performance of this Agreement at the City's prerogative at any time upon written notice to Contractor. The City's Representative shall have the authority to provide this written notice. Contractor shall terminate or suspend performance of the Services on a schedule acceptable to the City and the City shall pay Contractor for all the Services performed up to the date that written notice is received, plus reasonable termination or suspension expenses. Upon restart, an equitable adjustment shall be made to Contractor's compensation and the schedule of services.

If the City fails to make payment through no fault of the Contractor for a period of 30 days after such payment is due in accordance with the Contract Documents, the Contractor may, upon 7 days written notice to the City, terminate the Agreement and recover from the City payment for all work executed and for any proven loss sustained upon any materials, equipment, tools, and construction equipment and machinery, including reasonable profit and damages.

If Contractor defaults or fails to fulfill in a timely and proper manner its obligations pursuant to this Agreement, the City may, seven (7) days after written notice has been delivered to Contractor, and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due to Contractor. In the alternative the City may, at its option, terminate this Agreement and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor, and may finish the project by whatever method it may deem expedient. In case the expenses incurred by the City (including payments previously made to Contractor) shall be less than the sum which would have been payable under the Agreement if it had been completed by Contractor, Contractor shall be entitled to receive the difference. However, in case such expense shall exceed the sum which would have been payable under the Agreement, Contractor will be liable and shall pay to the City the amount of said excess. By taking over prosecution of the work, the City does not forfeit the right to recover damages from Contractor or its surety for failure to complete the work in the time specified.

For the avoidance of doubt, the specific remedies identified in this Article 11 are not exclusive. In other words, the City may pursue any remedy in law or equity in the event that Contractor defaults under this Agreement.

Article 13. Default

If Contractor breaches this Agreement or fails to perform the work in an acceptable manner, it shall be considered in default. Any one or more of the following will be considered a default:

- Failure to begin the work under this Agreement within the time specified.
- Failure to perform the work with sufficient supervision, workers, equipment and materials to ensure prompt completion of said work within the time limits allowed.
- Unsuitable performance of the work as determined by City.
- Neglecting or refusing to remove defective materials or failure to perform anew such work as shall have been rejected.
- Discontinuing the prosecution of the work or any part of it.
- Inability to finance the work adequately.
- If, for any other reason, Contractor breaches this Agreement or fails to carry on the work in an acceptable manner.

The City shall send Contractor a written notice of default. If Contractor, within a period of seven (7) days after such notice, fails to remedy the default, then the City shall have full power and authority, without violation of the Agreement, to take the prosecution of the work out of the hands of Contractor, as set forth in this Agreement.

Article 14. Identity of Contractor

Contractor acknowledges that one of the primary reasons for its selection by the City to perform the Services is the qualifications and experience of Contractor. Contractor thus agrees that the Services to be performed pursuant to this Agreement shall be performed by Contractor. Contractor shall not subcontract any part of the Services without the prior written permission of the City. The City's Representative shall have the ability to provide this written permission. The City reserves the right to reject any of the Contractor's personnel or proposed outside professional sub-consultants, and the City reserves the right to request that acceptable replacement personnel be assigned to the project.

Article 15. Independent Contractor Status

During the entire term of this Agreement, Contractor shall be an independent contractor, and in no event shall any of its personnel, agents or sub-contractors be construed to be, or represent themselves to be, employees of the City. Contractor shall be solely responsible for the payment and reporting of all employee and employer taxes, including social security, unemployment, and any other federal, state, or local taxes required to be withheld from employees or payable on behalf of its employees.

Article 16. Indemnification

Contractor is responsible to the City for the acts and omissions of its employees, subcontractors, and any other persons performing any of the work under a contract with Contractor.

As such, to the extent permitted by law, Contractor shall defend and hold the City, including its officials, agents, and employees, harmless from all liability, including, but not limited to, losses, damages, costs, attorney's fees, expenses, causes of action, claims, or judgments resulting from claimed injury, death, damage to property, or loss of use of property or any person or legal entity arising out of or in any way connected with the performance of work or work to be performed under this Agreement.

Contractor shall reimburse the City for any costs, expenses, judgments, and attorney's fees paid or incurred, by or on behalf of the City, its officials, agents, or employees, or paid for on behalf of the City, its officials, agents, or employees by insurance purchased or self-insurance provided by the City.

For the avoidance of doubt, Contractor shall further hold the City, its officials, agents, and employees harmless from liability or claims for any injuries to or death of Contractor's employees (or the employees of any authorized subcontractor) arising out of or in any way connected with the work or work to be performed under this Agreement, including protection against any claim of the contractor or subcontractor for any payments under any worker's compensation law or any expenses of or any payments made by any worker's compensation insurance carrier on behalf of said contractor or subcontractor, and the contractor shall hold the City harmless from any costs, expenses, judgments, and attorney's fees with respect to any above referenced workers' compensation claims incurred or paid by the City or paid on its behalf or on behalf of its Officials, Agents, or Employees by insurance purchased or self-insurance provided by the City.

Article 17. Insurance

Contractor shall not commence work under this Agreement until it has obtained all insurance required under this Article. Additionally, Contractor shall not allow any approved subcontractor to commence work on its subcontract until the subcontractor has obtained all insurance required under this Article.

During the performance of any and all Services under this Agreement, Contractor shall maintain the following insurance in full force and effect, and shall provide proof of insurance to the City's Representative listing the City of Sheboygan as an additional insured:

- a. Workers' Compensation Insurance – Contractor shall acquire and maintain, for the duration of the Agreement, Workers' Compensation Insurance that meets all statutory requirements. In the event this Agreement authorizes any work to be subcontracted, Contractor shall require any subcontractor to similarly provide Workers' Compensation Insurance in accordance with all statutory requirements.
- b. Commercial General Liability Insurance – Contractor shall acquire and maintain, for the duration of this Agreement, Commercial General Liability Insurance with a policy limit of at least \$2,000,000 per occurrence and \$2,000,000 in the aggregate.

The proof of insurance referenced above shall require the insurance company to notify the City at least thirty (30) days prior to the expiration, cancellation, non-renewal, or material change in the coverage. The Certificate Holder on the proof of insurance should be listed as:

City of Sheboygan, Wisconsin
 828 Center Ave., Suite 110
 Sheboygan, Wisconsin 53081

The proof of insurance must contain an original signature.

Approval of the insurance by the City shall not relieve or decrease the extent to which Contractor may be held responsible for payment of damages resulting from Contractor's provision of the Services or its operations under this Agreement. If Contractor fails or refuses to procure or maintain the insurance required by these provisions, or fails or refuses to furnish the City the required proof that the insurance has been procured and is in force and paid for, the City shall have the right at its election to terminate the Agreement.

Article 18. Conflict of Interest

Contractor declares that it has no present interest, nor shall it acquire any interest, direct or indirect, which would conflict with the performance of Services under this Agreement. Contractor agrees that no person having any such interest shall be employed in the performance of this Agreement.

Article 19. Waiver

No failure of either party to enforce a term of this Agreement against the other shall be construed as a waiver of that term, nor shall it in any way affect the party's right to enforce that term. No waiver by any party of any term of this Agreement shall be considered to be a waiver of any other term or breach thereof.

Article 20. Severability

The invalidity, illegality or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of the Agreement shall be construed and enforced as if it did not contain the particular provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

Article 21. Assignment

Neither the City nor Contractor shall assign any rights or duties under this Agreement without the prior written consent of the other party. Such written approval by the City shall not relieve the Contractor of the obligations incurred by the Contractor under the terms of this Agreement.

Article 22. Third Party Rights

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and Contractor.

Nothing in this Agreement shall create any contractual relationship between any subcontractor and the City. Contractor agrees to bind every approved subcontractor (and every subcontractor of a subcontractor) by the terms of this Agreement as far as applicable to that subcontractor's work, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the City. The City's Representative shall have the authority to consent to a subcontract as being adequate.

Article 23. Governing Law and Venue

This Agreement shall be governed by the laws of the State of Wisconsin. Venue of any disputes arising under this Agreement shall be in the Sheboygan County Circuit Court, Wisconsin.

Article 24. Non-Discrimination

In connection with the performance of work under this Agreement, Contractor agrees not to discriminate against any employee or applicant for employment because of age, race, religion, color, handicap, sex, physical condition, developmental disability (as defined in Wis. Stat. § 51.01(5)), sexual orientation (as defined in Wis. Stat. § 111.32(13m)), or national origin. This provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Contractor further agrees to take affirmative action to ensure equal employment opportunities.

Article 25. Compliance with Laws

In performing the Services under this Agreement, Contractor shall comply with any and all applicable federal, state and local statutes, ordinances, plans, and regulations. This includes all safety requirements as set forth by the Wisconsin Administrative Code and all applicable OSHA Standards.

The City reserves the right to cancel this Agreement if Contractor fails to follow the requirements of Wis. Stat. § 77.66 and related statutes regarding certification for collection of sales and use tax. The City also reserves the right to cancel this Agreement with any state or federally debarred contractor.

Contractor shall have any and all licenses and permits required to perform the work specified, and shall furnish proof of such licensing authorization and permits upon request.

Article 26. Notices

Any notice required by this Agreement shall be made in writing to the individuals/addresses specified below:

City:

Contractor:

City Clerk		
City of Sheboygan		
828 Center Ave.		
Sheboygan, Wisconsin 53083		

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of the City and Contractor.

Article 27. Intent to be Bound

The City and Contractor each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners to the other party to this Agreement, and to the successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement.

Article 28. Force Majeure

Neither party shall be in default by reason of any failure in performance of this Agreement in accordance with reasonable control and without fault or negligence on their part. Such causes may include, but are not restricted to, acts of nature or the public enemy, acts of the government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather. In every case, the failure to perform must be beyond the reasonable control and without the fault or negligence of the party.

Article 29. Integration and Modification

This Agreement may be modified only by a written amendment signed by both parties hereto.

This Agreement consists of the following parts, each of which is as fully a part of this Agreement as if fully set out herein:

1. This Agreement and its Attachments
2. Any Written Amendment to the Agreement which may be delivered or issued after the Effective Date of the Agreement (including Change Orders)
3. The Request for Bids (including all attachments)
4. The Plan Set for Request for Bids 2005-21
5. All Addenda to the Request for Bids
6. All Other Submittals by Contractor
7. The Performance and Payment Bonds
8. Federal Terms and Conditions Addendum (Exhibit 3)

(collectively "the Contract").

This Contract is the entire and integrated agreement between the City and Contractor regarding the subject matter of this Contract. It supersedes all prior and contemporaneous communications, representations and agreements that are not part of this Contract.

In resolving conflicts, errors, discrepancies and disputes concerning the Scope of Work to be performed by Contractor, the document expressing the greater quantity, quality, or other scope of work in question, or imposing the greater obligation upon Contractor and affording the greater right or remedy to the City shall govern. Otherwise, the documents shall be given precedence in the order set forth above.

Article 30. Non-Collusion

Contractor is certifying, under penalty of perjury, that to the best of its knowledge and belief:

1. The prices in its bid were arrived at independently, without collusion, consultation, communication, or agreement for the purpose of restricting competition as to any other matter relating to such prices with any other bidder, or with any other competitor.
2. The prices quoted in its bid were not knowingly disclosed—directly or indirectly—by the bidder prior to bid opening.
3. No attempt was made to induce any other person, partnership, or corporation to submit or not submit a bid for the purpose of restricting competition.

Article 31. Other Provisions

1. Material Safety Data Sheet. If any item(s) on an order(s) resulting from this Agreement is a hazardous chemical, as defined under 29 C.F.R. 1910.1200, Contractor shall provide one (1) copy of a Material Safety Data Sheet for each item with the shipped container(s) and one (1) copy with the invoice(s).
2. Advertising and News Releases. Reference to or use of the City, or any of its departments, officials, or employees, for commercial promotion is prohibited. News releases pertaining to this procurement shall not be made without prior approval of the City's Representative. Release of broadcast e-mails pertaining to this procurement shall not be made without prior written authorization of the City's Representative.
3. Foreign Corporation. A foreign corporation (any corporation other than a Wisconsin corporation) which becomes a party to this Agreement is required to conform to all the requirements of Wis. Stat. Ch. 180 relating to a foreign corporation, and must possess a certificate of authority from the Wisconsin Department of Financial Institutions, unless the corporation is transacting business in interstate commerce or is otherwise exempt from the requirement of obtaining a certificate of authority.
4. Guaranteed Delivery. Failure of the Contractor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the Contractor liable for all costs in excess of the Agreement price when alternate procurement is necessary. Excess costs shall include the administrative costs and other costs attributable to the delay.
5. Authority. Each person executing this Agreement on behalf of a party hereto represents and warrants to the other party: That the execution and delivery of this Agreement has been duly authorized, that the person or persons executing this Agreement have the full power, authority, and right to do so, and that such execution is sufficient and legally binding on such party to enable this Agreement to be enforceable in accordance with its terms.
6. Intent of Contract Documents.
 - a. The intent of this Agreement is to include in the contract price the cost of all labor and materials, water, fuel, tools, plants, equipment, light, transportation, and any other expenses that may be necessary for the proper execution and completion of the work included in the Agreement.

- b. In interpreting the Agreement, words describing materials that have a well-known technical or trade meaning shall be construed in accordance with such well known meanings unless otherwise specifically defined

Article 33. Incorporation of Required Clauses and Conditions

To the extent any applicable federal statute, regulation, or executive order requires any clause or condition to be included or incorporated into this contract between the City of Sheboygan and the contractor, and that term or condition has not been expressly included or incorporated, it is included or incorporated by reference.

To the extent Contractor is required, by this contract or by any applicable federal statute, regulation, or executive order, to include or incorporate any clause or condition into its subcontracts or Contractor agrees to ensure that any term.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first written above.

CITY OF SHEBOYGAN, WISCONSIN

CONTRACTOR:
ELEXCO, INC.

BY: _____
Ryan Sorenson, Mayor

BY: _____

ATTEST: _____
Meredith DeBruin, City Clerk

ATTEST: _____

DATE: _____

DATE: _____

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications



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SECTION T1 PROJECT GUIDELINES

T1.01 Definitions

Bidder – Any company or organization responding to this Bid

Bidding Documents – All Project instructions, attachments, worksheets, drawings, and addendums

Contract Documents – These Bidding Documents

Contractor – Bidder to whom the project is awarded

Owner – City of Sheboygan

Prime-Contractor – Same as “Contractor”

Project – Overall scope of work as outlined in the Bidding Documents

Project Manager – Multimedia Communications & Engineering, Inc. representative directing the flow and nature of work being performed

Respondent – Same as “Bidder”

Subcontractor – Any Contractor working under direct control of the Prime Contractor

Work – Tasks comprising the Project

T1.02 Industrial Guidelines

This project has been designed according to the following local, state, federal, and industrial guidelines:

1. Any Addendums to this Technical Specification and CAD drawings.
2. This Technical Specification and Associated CAD Drawings.
3. Any Local Municipal Code having jurisdiction
4. National Fire Protection Agency (NFPA) ANSI/NFPA- 70 2017 Edition.
5. National Electric Service Code (NESC)
6. National Fire Protection Agency (NFPA) ANSI/NFPA- 70. National Electric Code
7. American Nation Standard Institute (ANSI) Section C1, C2.
8. ANSI/EIA/TIA-568-B Commercial Building Telecommunications Cabling Standard.
9. ANSI/EIA/TIA-607 Commercial Building Grounding Requirements for Telecommunications

Should the above documents contain conflicting requirements, the Respondent is required to follow the more stringent requirement.

T1.03 Description of Project

This Project includes all necessary labor and materials to:

Place new single 2" duct and fiber optic cable 1,735' between an existing Fiber Optic Splice Point located at the intersection of 9th Street and Superior Avenue to the City's new Activity Center located at 1817 N. 8th Street in the City of Sheboygan.

Once the new OSP cable enters the Senior Center it will be terminated to a wall mount demarcation panel. From this panel the contractor will install 2 runs of interior innerduct and 12 strand fiber optic cable to 2 separate closet locations. One interior cable will terminate inside an existing data rack inside a data closet and the other interior cable will be run to a contractor provided and installed wall mount data cabinet inside an undeveloped portion of the building.

The project includes provisioning and placement of all labor and materials necessary to complete the project as depicted in these technical Specifications and associated Plans.

It is the Respondent's sole responsibility to verify all measurements and quantities required for a complete installation. The Contractor will be expected to complete the Project defined in these Request for Bid Documents and associated CAD Plans with the materials and labor included in their Bid.

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

T1.04 Project Management

All work will be performed under the guidance of the Owner's Hired Engineering and Project Management Firm, Multimedia Communications & Engineering, Inc. (MCE). The MCE Project Manager will interface with the Contractor's Foreman on a regular basis checking the progress and workmanship of the Prime Contractor and Subcontractors.

The MCE Project Manager will perform all Door-Hanging along the construction routes. The Contractor will be required to video tape all areas of excavation and underground duct placement prior to construction. Videos will be used to verify existing pre-construction conditions and verify any disputes arising from the construction.

T1.05 Construction Schedule

Construction start no later than **JULY 11TH, 2022**.

The substantial completion date, i.e. all duct handhole and cable placement is **JULY 29TH, 2022**.

Restoration does not count against any of the above completion dates.

The project deadline will be extended for documented weather or documented Permitting delays.

If the Contractor is delayed or hindered at any time in the progress of the work by any act or neglect of the City or by any Contractor employed by the City, or by changes ordered in the scope of the work, or by fire, adverse weather conditions not reasonably anticipated, or any other causes beyond the control of the Contractor, then the duration set forth in the construction progress schedule shall be extended as agreed to by the City and the Contractor. However, to the fullest extent permitted by law, the City, its agents and employees shall not be responsible for any loss or damage sustained by the Contractor, or by abnormal weather conditions, or by any other cause, and the Contractor agrees not to make, and hereby waives any claim for damages, and agrees that the sole right and remedy therefore shall be an extension of time.

The Owner will withhold 5% of each payment as security for payment after the completion of any restorations.

T1.06 Equipment and Material Storage

The Contractor will be required to store all equipment to include; vehicles, machines, tools, consumables and other work related materials off site during times when work is not being performed in the immediate vicinity. The Owner will not be required to provide onsite storage. The Owner shall not be held responsible for any loss, theft or damage to Contractors materials and equipment while stored on the jobsite or in the Contractors storage area.

T1.07 Hours of Work

Work hours will be regulated by the Contractor performing the work and by any work restrictions placed on the project by the City of Sheboygan. Current Hours of work for this project are 7am to 7pm. Special care must be taken to avoid violation of any applicable noise or public nuisance ordinances that may apply. Interior site access will not be granted outside normal business hours or on weekends without prior approval. Contractor should not assume access will be granted outside normal hours of operation.

T1.08 Project Foreman

The Prime Contractor must assign one Foreman to the Project who will take instruction for all Prime and Subcontracted crews. This Prime Contractor's Foreman must be on site and act as the single point of contact for the MCE Project Manager until the Project is completed.

T1.09 Warranty on Workmanship and Contractor Provided Materials

The Contractor is required to provide the Owner with a minimum of 1-year warranty on all workmanship and Contractor-provided materials related to the installation of this Project. Warranty must begin on the date of acceptance and continue for one full year thereafter.

Upon discovery of materials or workmanship that is inconsistent with the requirements of these Bidding Documents and subsequent agreements within the 1-year period, the Owner will notify the Contractor and expect to receive within

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

3 days, a response detailing the Contractor's proposed remedy. The Owner will work with the Contractor to define a convenient time for the work to be performed.

All costs associated with repairs or restoration of any failure or inconsistency identified within the 1-year period will be borne by the Contractor.

Additional warranties on restoration and workmanship may be required by the Municipal Permitting Agencies. Such warranties are in addition to any warranty provided to the Owner.

T1.10 Encroachment, Excavation and Obstruction Permits

City of Sheboygan Right of Way Excavation Permit:

Contractor must obtain all necessary permits from the City of Sheboygan prior to commencement of any project excavations. All requirements set forth in the City Permit and subsequent approval are incorporated into these bidding documents by reference.

The Contractor shall assure that proper erosion control measures are implemented prior to and at all times during work operations. The contractor shall also be responsible for providing and maintaining erosion control measures to protect all restored areas upon completion of the work until the replacement vegetation achieves sustained growth. Where applicable, applicant shall obtain a Construction Site Erosion Control Permit.

T1.11 Underground Utility Locating

The Contractor must abide by WI State Statute 182.0175, which outlines the responsibility of the Contractor when excavating on or near underground facilities. The Contractor must have all underground utilities, private or otherwise located during the course of construction. The Contractor must notify Digger's Hotline 3 days or more prior to commencement of any underground excavation. The Contractor may not perform work for the Owner under any Digger's Hotline locate ticket other than their own.

The Contractor must work directly with all private property owners to ensure all private utilities are properly located for areas where a new underground route extends on to private property. Private Owner facilities may not be registered with Diggers Hotline therefore prior to any work being performed on private property the Contractor will be required to notify the proper personnel to have any private facilities located. Private Property is defined as all areas outside of the public right of way.

All flags must be removed by the contractor following their completion of the underground work.

T1.12 Soil Condition/Depth of Installation Clause

The Contractor must inform the Project Manager immediately upon discovery of any underground conditions such as limestone or boulder fields that adversely affect their ability to drill or otherwise excavate through an area or at the specified depth to the extent where additional resources not included in their price are deemed necessary. The Project Manager and Contractor Foreman together will determine the need for additional resources and costs.

Unit rates for Rock Bore and Cobble Rock adders have been included in the unit rate section of the Bid Response. These Unit Rates will be used to negotiate Change Orders for rock areas.

Additional charges for placement of the duct at a depth deeper than 36" for the sake of avoiding utilities or other obstructions will typically not be granted.

T1.13 Worksite Safety

The Contractor is responsible for the safety of all persons and property inside the construction zone. This entails deploying proper barricades, traffic control plans, and or flagmen to protect vehicles and pedestrians passing by or through the work zone, along with ensuring that equipment operators utilize ground spotters when necessary.

Open ground must be properly barricaded at all times that the Contractor is not in the immediate vicinity of the open ground. Open ground areas that are to remain open overnight or over any extended period of time must be barricaded in a fashion that will make the open area easily detectable and avoidable by passersby.

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

Potholes/core holes in the immediate vicinity of the work zone during working hours can be covered with a cone; however Type II barricades must be placed over any pothole left open overnight. Steel plates over street or sidewalk cores, or the temporary replacement of cores are the only acceptable means by which to cover the core hole when the Contractor is not physically on site performing work.

All work areas, both interior and outdoor must remain clean and free of all rubbish and tools not in use at all times. At the end of each workday the Contractor must clean the worksite and secure all equipment and tools.

Worksite safety procedures must follow and comply with the guidelines and requirements of all applicable Municipal and OSHA standards.

T1.14 Traffic Control Plan

The Contractor must provide an approved Traffic Control Plan consistent with the guidelines set forth in the Wisconsin DOT Manual on Uniform Traffic Control for all construction being performed within various Municipal and DOT Right of Ways when requested.

T1.15 Excavations

Excavations shall not remain open in excess of three calendar days unless specific permission is obtained from the Owner prior to the third day.

In all streets, alleys, sidewalks or other public ways, whether improved or unimproved, all excavated material shall be removed and the excavation shall be completely backfilled with sand or gravel, unless permission is obtained from the Owner to use excavated material for backfill.

T1.16 Hard Surface Potholing

The Contractor may be allowed to mechanically core through hard surface streets to locate existing utilities provided that the restoration of the core be performed per all municipal excavations permit requirements. Core holes must be backfilled using suitable materials compacted in lifts. Cores must be replaced using a permanent epoxy such as Utilicor's Utilibond or equivalent permanent pavement bonding compound.

Potholing is not allowed in sidewalks and ADA compliant or non-compliant pedestrian ramps unless specifically approved by the municipality. Any hard surface excavations within any sidewalk panels or ramp panels may likely result in the replacement of the entire panel by a licensed sidewalk contractor, possibly along with adjacent panels for ADA ramps at the Contractor's expense.

At no time can the Contractor perform any excavation that undermines the adjacent in-tact surfaces, thereby making vertical mechanical compaction impossible and creating future potential for subsurface failure.

All grass/softscape restorations must be completed within 5 working days of the completion of excavations in the immediate area. This may be temporary restorations outside the growing season or permanent restoration during the growing season.

T1.17 Restoration Guidelines

Restorations must follow the specific guidelines set forth by the Municipal Code or Permit for each Municipality being worked in. The Owner will not be responsible for additional costs associated with the failure to identify all restoration guidelines in the Contractor's initial Bid Response.

The Contractor is advised to videotape each area of construction just prior to the work being performed to document all pre-existing conditions.

T1.18 Erosion Control Policy

The Contractor must employ Erosion Control Best Management Practices (BMP) following uniform statewide standards for construction site erosion control per WI State Statute 281.33 (3)(b)4.

Contractor must inspect all erosion control measures on a weekly basis and/or after ½" or more of rainfall to ensure the effectiveness of the erosion control measures.

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The contractor will be required to apply soil stabilization with the seed or biodegradable matting at the time of restoration. Loose or crimped straw will not be allowed in this installation.

Additional erosion Control measures are defined in the project CAD plans.

Section T2 UNDERGROUND CONSTRUCTION GUIDELINES

T2.01 Duct Placement Guidelines

The Contractor is responsible to provide all duct, handholes, locate posts, locate stations, locate wire, and pull rope as part of their installation responsibilities. The HDPE Duct part number referenced in Section T6 – Contractor Provided Materials, references a duct that includes a mule tape for cable installation. The Contractor will be required to provide all mule tape necessary for cable installations whether it be included with the duct at the time of purchase or provided and installed separately.

All ducts will be placed on the routes identified in the attached CAD Plans. All ducts must maintain a minimum horizontal clearance zone of 18" when paralleling other underground utilities with the exception of Municipal Water, Sewer, and Storm where a 5' horizontal clearance and 24" vertical clearance is required. The routes on the attached CAD plans have taken all applicable additional clearances into consideration.

All underground ducts must be placed a minimum of 36" below finished grade wherever possible. Instances where the duct must be placed at a shallower or drastically deeper depth must be brought to the attention of the Project Manager prior to installation.

The Owner's Project Manager will be on site to coordinate and mark the duct placement route and handhole locations once all locates have cleared. Routes will be marked with the use of paint and flags. The Contractor must not place duct along the route without first reviewing the individual areas with the Project Manager. This measure is designed to avoid instances where the new duct may encroach the restricted clearance zones of other utilities or extend outside the Right of Way.

All exposed duct ends must be covered with a temporary plug or adequately sealed with duct tape to prevent the ingress of dirt, water, and debris prior to the installation of the cable, locate wire, and mule tape.

All empty ducts (if any) must be sealed using properly sized duct plugs.

Where ducts are coupled together, the contractor must use an aluminum threaded coupler.

T2.02 Handhole Placement Guidelines

The Contractor may be required to place new Large 36"x60"x36" pre-cast handholes, Medium 30"x48"x36" pre-cast handholes, Small 24"x36"x36" pre-cast handholes, or Extra Small 17"x30"x24" pre-cast handholes along the route as shown on the project CAD Plans. Large Handholes must be Quazite PG3660BB36 base with PG3660HH21 Extra Heavy Duty (ANSI Tier 22) 2-piece lid marked "Fiber Optics". Medium Handholes must be Quazite PG3048BB36 base with PG3048HH21 Extra Heavy Duty (ANSI Tier 22) 2-piece lid marked "Fiber Optics". Small Handholes must be Quazite PG2436BB36 base with PG2436HH21 Extra Heavy Duty (ANSI Tier 22) 1-piece lid marked "Fiber Optics". Extra Small Handholes must be Quazite PG1730BA24 base with PG1730HH21 Heavy Duty (ANSI Tier 22) 1-piece lid marked "Fiber Optics". Manufacturer substitutions or equals will not be allowed for the handholes and lids.

The handholes must sit parallel with adjacent streets, buildings, or other structures and must be flush with all surrounding surfaces, and if installed on a slope or grade the handhole must follow the contour of the grade as much as possible.

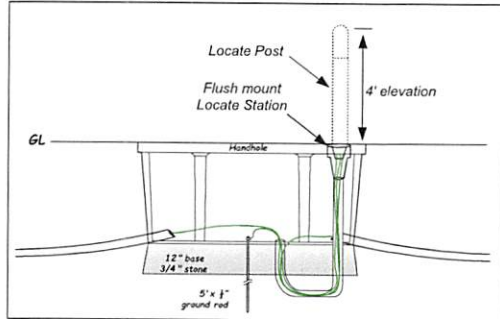
The installed handholes must sit atop a 12" bed of $\frac{3}{4}$ " washed, crushed stone for drainage – pea gravel or other stone smaller than $\frac{3}{4}$ " is not an acceptable base for drainage. All fill around the Handhole must be mechanically compacted in 12" layers to within 8" from the top to prevent settling.

Inside each new handhole the Contractor will be required to install a single 5' long by 1/2" diameter copper clad ground rod. The ground rod must not protrude more than 6" above the surface of the crushed stone bed. After ground rod

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

installation, the Contractor must equip the top with a conductor clamp that will allow the Contractor to tie a locate wire to the end.

Detail Drawing of Handhole and Locate Station Installation



T2.03 Locate Wire and Post/Station Placement Guidelines

All locate wires will be installed outside the duct. A suitable locate wire for this purpose is identified within the Contractor-provided materials list in Section 6.01.

The Contractor will be required to install flush mount locate stations or above grade locate posts adjacent to handholes identified on the CAD Drawings. The locate stations and posts will be used to access the locate wires for future locating purposes.

Between the handhole and locate station or post the contractor must install a short length of 1-1/4" underground plowduct. This will facilitate the installation of the locate wires into the post from the handhole.

At no time will a locate station or post be installed in a location where it impedes or can be damaged by the removal of the handhole lid.

At the below grade building entry point the locate wire must be run above grade using 1/2" galvanized steel conduit. Locate wire will be housed in a single gang outdoor rated outlet box approximately 4' above grade.

T2.04 Mule Tape Installation Guidelines

The Contractor will be required to install a single 1,800 lb mule tape within the plowduct during the installation of the fiber optic cable.

T2.05 Fiber Optic Cable Installation Guidelines

The Contractor can install the fiber optic cable by hand or with the use of pneumatic/hydraulic installation equipment. However the means of installation, the Contractor must take care to not exceed the cable's maximum pulling tension (typically 600lbs). The Contractor must utilize a breakaway/swivel device at all times while installing the fiber optic cables. Multiple swivels must be used; one for the cable, and another set 8" back from the first for the mule tape.

At each handhole the Contractor must store a cable slack loop (Slack Loop length noted on the CAD Plans) neatly coiled and labeled with a permanent label, identifying the Cable's owner and identifying the specific cable strand count. Suitable labels for this purpose are Panduit #PST-F0.

Following cable installation all occupied ducts must be plugged using a split plug appropriately sized to accommodate the cable diameter – do not use foam, putty, or tape to plug any duct. All spare ducts must be sealed using properly sized duct plugs.

Instances where multiple ducts are being placed, all cables and mule tape will be installed inside one duct, while the other duct will only contain mule tape for future installations.

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

T2.06 Underground Installation Documentation

The Contractor will be required to provide bore logs showing rod placement dates and depths as well as redline drawings showing cable placement and cable footage sequential markings within the underground duct and interior piping.

Section T3 INTERIOR CONSTRUCTION GUIDELINES

T3.01 Above Grade Building Penetration

Where the underground plowducts extend to the exterior of a building whose entry point is above grade, the Contractor is required to transition below grade from each plowduct to a Galvanized Rigid Steel pipe that extends up the side of the exterior wall to an elevation shown on the accompanying Interior Drawings. At the below-grade transition point where the rigid pipe meets the plowduct, the Contractor must utilize a watertight fitting that is rated for underground use (Duraline 20001845 or approved equivalent). The Project Manager must approve the final location of building risers.

At the top of the rigid pipe run, the Contractor must install a 12"x12"x6" NEMA 3R rated pull box over a 2" core hole and aligned so the building core is situated at the top of the pull box. The core into the building must then be sleeved with EMT. Interior EMT extending to a termination room can extend through the core to satisfy this sleeve requirement, however instances where Interior EMT is not being placed the Contractor must sleeve the core with EMT and securely fasten the sleeve to the exterior pull box and inside the building. All sleeves/EMT ends must be equipped with collared fittings to avoid cable damage.

Extending from 12" below grade the contractor must install a 1/2" Rigid Steel pipe up to an elevation of 4 feet from the ground or as noted on the CAD interior drawings. This pipe will house the locate wire that runs back to the nearest locate post or housing along the plowduct path. At the top of this 1/2" pipe the Contractor must install a steel single gang outdoor outlet box with waterproof cover. A 12" coil of Locate wire must be housed inside the single-gang outlet box. All exterior pipes and boxes must be securely fastened to the building wall with anchors and fastening hardware suitable for a permanent installation into the materials comprising the wall.

T3.02 Interior Workmanship

Contractor shall take precautions to ensure that dust and debris associated with the project is contained within the work area and not allowed to spread into other areas of the site. Equipment or materials, which cannot be moved, shall be covered by the Contractor to prevent contamination or damage.

All materials used by the Contractor shall be certified asbestos-free by the manufacturer. There will be no exceptions. A letter from the Contractor certifying that no asbestos-containing materials were used shall be provided upon request.

Contractor shall assure that any and all equipment used on this project will be handled and operated in conformance with OSHA safety requirements.

Contractor shall advise the owner whenever work is expected to be hazardous to building occupants.

Contractor shall maintain fire extinguisher within easy access whenever power tools; flammable materials or heat producing devices are being used.

Contractor shall advise the owner when volatile materials are to be used near air ventilation intakes or near occupied spaces so that action may be taken to prevent degradation of indoor air quality.

T3.03 Interior EMT/Innerduct Installation

The Contractor must take all necessary precautions to prevent activation of building alarms, such as fire or security. Conduits that enter rooms that are sealed for the sake of Halon release systems must be sealed to ensure that the room's integrity is maintained.

Where the interior conduit or Innerduct passes through any non-concrete/block wall the Contractor must create a hole through the wall only large enough for the conduit to pass through, then seal around the conduit with ASTM E814 (UL 1479) approved fire stop materials.

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

Prior to cutting or coring into or through any building structure the Contractor must review the core location with the Project Manager.

At each end, and along any interior EMT conduit or Innerduct path approximately every 10 feet, the Contractor must label the EMT with a warning label identifying the contents as a fiber optic cable. Suitable labels are Panduit's #PCV-FOB.

Along any interior EMT conduit or Innerduct path the Contractor may be required to install 12"x12"x6" Type 1 pull boxes fitted with a screw cover for pulling assistance and a 24"x24"x8" Type 1 pull box fitted with a screw cover for cable storage as shown on the CAD interior plans. At every pull box (and building entry box) the Contractor must use screw type fittings to attach the conduit to the box. Pull boxes are required every 100' or when the total bend radius is to exceed 180degrees.

Any interior 2" conduit must be bonded to a ground point at each building. The Project Manager will determine the ground points. Cable used to Bond the EMT to the Building Ground Electrode will be no smaller than a #6 AWG Stranded copper and must have a green jacket suitable for interior use.

T3.04 Interior Cable Installation

Contractor must install the cable along the path shown on the accompanying CAD Plans.

Instances where the interior path uses existing Innerduct, EMT, or other pipe that does not contain an existing pull rope, the contractor may be required to fish the existing pathway and install a pull rope to aid in the installation of the Fiber Optic Cable.

Following the installation of the fiber optic cable through the exterior and interior EMT conduit or innerduct, the Contractor must seal the conduit or innerduct ends (where the EMT enters the outside pull box and where the EMT enters the termination room) with ASTM E814 (UL 1479) approved fire stop materials.

Section T4 CABLE SPLICING TERMINATION AND TESTING GUIDELINES

T4.01 Cable Pre-Acceptance Testing

The Contractor crews must perform "pre-acceptance testing" with an Optical Time Domain Reflectometer (OTDR) on each fiber optic cable reel. The pre-acceptance testing will verify the performance of the cable prior to it being installed. Pre-acceptance testing must be performed on every cable strand at 1310nm and 1550nm only from the exposed end of the cable. Test results must be provided to and approved by the Project Manager prior to installation.

T4.02 Outdoor Fusion Splicing

The Contractor will be required to Fusion Splice the fiber optic cables at each of the splice points identified below.

Superior Avenue Splice – Splice all 12 strands from the new cable to the Ribbon 7 (red) of the existing 432strand fiber optic cable inside the existing FOSC 600 Series Splice case. Strands 1-6 of the 12 FOC will splice to 73-78 of the 432 FOC South direction – Strands 7-12 of the 12 FOC splice to 73-78 of the 432 FOC West direction.

T4.03 Indoor Fiber Termination

All cable terminations will be performed by splicing factory terminated fiber optic cable pigtails to the ends of the fiber optic cables. Contractor must supply all termination panels, pigtails, and consumables necessary to complete the terminations as described in the CAD Interior Plans.

T4.04 Fusion Splicing Equipment

All cable strand splicing will be performed using a fusion splice machine that is capable of splicing within a 0.2dB loss tolerance and equipped with either live monitoring or a Local Injection Detection (LID) testing system, thus ensuring the splice quality while the splice is set up in the machine.

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

All splices will be protected with appropriate fusion splice sleeves fitted with steel-reinforcing rod(s) (provided by the Contractor).

T4.05 Cable Testing

Following the splicing and termination procedures the Contractor will be required to test each strand using an OTDR and Power Meter Light Source (PMLS) at 1310nm and 1550nm. Each terminated strand will be tested between the sites with both devices at both wavelengths. This totals 8 tests per strand. All OTDR tests must be performed using a launch cable that is at least 500 meters in length thus allowing a full view of the initial pigtail connector/splice event loss. Testing will take place between the New Activity Center and Sheboygan City Hall located at 828 Center Avenue, Sheboygan, WI 53081.

T4.06 OTDR Viewing Software

Prior to the OTDR testing the Contractor must provide a copy of the OTDR viewing software that is capable of allowing a user to electronically review the test results. This does not need to be a licensed copy, just one that allows the user to view traces in their native (non-pdf) format.

T4.07 Test Documentation

Following the OTDR testing the Contractor must provide the Owner with one electronic copy of each test performed. Prior to testing, the Contractor will be provided with the strand identification and labeling plan, the electronic copies of the test results must match the labeling scheme provided to the Contractor.

Following the PMLS testing, the Contractor must provide the Owner with test results showing the total link loss between each site along with the average loss for each strand. The test results must be provided on any Windows® compatible electronic spreadsheet. Each cable strand tested must be labeled per the Owner-provided labelling scheme. This labelling must accompany each test results.

T4.08 Optical Loss Budget

The Contractor will be provided with optical link budgets for each installed cable strand. Budget losses are calculated by measuring the total link loss between sites, and then averaging the measurements from both directions using the parameters identified in Table 1 below. The test results provided to the Project Manager must confirm that 100% of all installed strands perform within the optical loss budget and within the specific tolerances for individual events identified in Event Loss Table below.

Note that even though a link loss test may show a loss that is within the optical budget, any event shown by the OTDR report that exceeds its thresholds listed in the Table will result in a failed test result and must be remedied prior to system acceptance by the Owner. Instances where individual tolerances cannot be met must be reviewed with the Project Manager prior to completion.

Event Loss Table

Event	Wavelength	Threshold (dB)
Coupler Loss	1310nm	0.4dB
	1550nm	0.4dB
Splice Loss	1310nm	0.2dB
	1550nm	0.2dB
Cable Attenuation	1310nm	.35dB/Km
	1550nm	.25dB/Km

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

Section T5 INDIVIDUAL PROJECT CONSTRUCTION QUANTITIES

T5.01 Use of Quantities Shown

The following lists only represent a high-level overview of the tasks associated with each individual project and should not be solely relied upon for bidding purposes. It is the Contractors responsibility to thoroughly review the project routes, CAD Plans to calculate their own quantities and footages to complete the project as outlined in this document. The Bid amount must be adequate to fulfill the intent of the entire project.

T5.02 Construction Quantities

This project consists of the following high-level tasks. It is the contractor's responsibility to verify their own quantities prior to submitting their bid.

SHEBOYGAN ACTIVITY CENTER FIBER OPTIC CONNECTION - LABOR UNITS		
<u>Item Description</u>	<u>Quantity</u>	<u>units</u>
Provide and install New 2" SDR-11 HDPE Duct via Directional Bore	1,735	feet
Provide and install new 24x36x36 Tier 22 Handhole and cover over existing duct	2	each
Provide and install new 12 strand outdoor rated OS2 Singlemode fiber optic cable through new 2" HDPE Duct and building entry duct – including slack loops.	2,235	feet
New Building Entry Galvanized 2" pipe installation	10	feet
New 12x12x6 NEMA 3R Building Entry Pull Box Installation	1	each
New Building Entry Galvanized 1/2" pipe installation	5	feet
New Weatherproof Single Gang Outlet Box Installation	1	each
Splice new 12 FOC into existing 432 strand backbone in Superior Avenue existing 600 Series Splice case	12	splices
Provide and install new 1.25" Riser Rated Corrugated innerduct	235	feet
Provide and install new 12 strand indoor riser rated OS2 Singlemode fiber optic cable through innerduct – including termination and storage lengths	395	feet
Provide and install 36 Port capacity Wall Mount Termination/Splice Panel inside Building Entry point	1	each
Provide and install 36Hx32Dx24W wall mount data cabinet	1	each
Terminate Fiber to Wall Mount Termination Panel (12 strands x 3 cables)	36	Terminations
Provide and install 24 port Rack Mount Termination Panel inside Data Room and inside Wall Mount Cabinet	2	each
Terminate Fiber to Rack Mount Termination Panel	24	each
Test Fiber Connection with OTDR and PMLS between Activity Center and City Hall	12	Tests

City of Sheboygan Activity Center Fiber Optic Connection Technical Specifications

Section T6 CONTRACTOR PROVIDED MATERIALS

T6.01 Contractor Provided Material List

1. Underground Plowduct – 2" inside diameter first-run SDR-11 HDPE Orange smooth exterior/smooth interior. Carlon A13C6N1JNNA or approved equivalent.
2. 1800 pound mule tape – Carlon TL38203 or equivalent.
3. Locate Wire – #12 AWG HDPE jacketed, steel core copper clad wire. Pro-Trace #HDD-CCS-PE45 or equivalent.
4. Split Duct Plug – 2" outside diameter split plugs with interior port diameter sufficient for cable size. Carlon or equivalent.
5. Small Handhole – Quazite #PG2436BB36 Base / #PG2436HH21 ANSI Tier 22 1-piece Cover – no equivalent.
6. Flush Mount Locate Station – Handley Industries #T2IC5F1LMQ or approved equivalent.
7. Ground Rod – 5'x1/2" copper clad ground rod. Non-manufacturer specific.
8. 2" Galvanized Steel Pipe – Non-manufacturer specific.
9. NEMA 3R Enclosure – Screw Cover, Galvanized, Paint Finish, 12" x 12" x 6" (Hoffman A12R126 or equivalent)
10. 1/2" Galvanized Steel Pipe – Non-manufacturer specific.
11. Outdoor Rated Outlet Box with Cover – single gang outdoor rated outlet box with steel 2-screw gasket and cover. Non-manufacturer specific.
12. 12 Strand OS2 rated Singlemode Loose Tube All-Dielectric outdoor rated fiber optic cable (Commscope D-012-LN-8W-F12NS or equivalent).
13. 1.25" Corrugated Riser Rated Innerduct (Carlon DG4X1C or equivalent).
14. 12"x12"x6" Type 1 pull box fitted with a screw cover, Non-Manufacturer Specific.
15. 12 Strand OS2 Indoor Riser rated Singlemode fiber optic cable (Corning 012E81-33131-24 or equivalent).
16. 1RU Fiber Termination Panel – Sliding Tray, 3 Adapter panel capacity, black, steel equipped with 12 strand LC-UPC OS2 Singlemode Pigtail and 12 port LC-UPC Bulkheads (TCS FLP-03B-02101-301-01001 or equivalent).
17. Wall Mount Data Cabinet – Black – Plexiglass Door – reversible Mount – Vented. (Great Lakes GL36WMCMP-B-SH-00-00 or equivalent).
18. Wall Mount Termination Panel – CORE Dual Door, 036 LC/UPC Capability, Loaded, with (3) 6 ct. Duplex LC/UPC Singlemode, Blanks, (1) 12 ct. Splice Trays, (3) 12 ct. Sub-Distribution Style Pigtail – (TCS part # From Manufacturer or equivalent).
19. Consumables and Installation hardware – Contractor required consumables for the installation of all the above items and Owner-provided items per these Request for Bid Documents.

T6.02 Contractor Completion Clause

The Contractor is required to complete the installation with the material included in their Bid response.

CITY OF SHEBOYGAN ACTIVITY CENTER FIBER OPTIC CONNECTION PROJECT

PROJECT OWNER:
CITY OF SHEBOYGAN
828 CENTER AVENUE
SHEBOYGAN, WI. 53081

PROJECT ENGINEER:
MULTIMEDIA COMMUNICATIONS & ENGINEERING, INC.
CONTACT: DAN BECKER
FIBER OPTIC NETWORK SPECIALIST
PO BOX 11064
GREEN BAY, WI 54307
PH: 920-301-7900 EXT. 1002
EMAIL: dbecker@mcewi.com

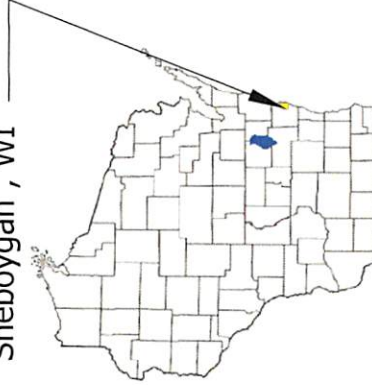
PROJECT DRAFTER:
MULTIMEDIA COMMUNICATIONS & ENGINEERING, INC.
CONTACT: DAN BECKER
FIBER OPTIC NETWORK SPECIALIST

PERMITS REQUIRED:
CITY OF SHEBOYGAN RIGHT OF WAY PERMIT

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INTERIOR DIAGRAM

Project Location Sheboygan , WI



CALL DIGGERS HOTLINE 3 DAYS BEFORE DIGGING.
AT 811 OR (800) 242-6811
EMERGENCY ONLY (24/7) (262) 432-7910

ALL UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. UTILITY INFORMATION WAS PROVIDED IN RESPONSE TO PLANNING LOCATE REQUESTS. CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF MUNICIPAL AND PRIVATE UTILITIES. COMPLETE REPAIR OF ANY AND ALL DAMAGES & RESTORATION INCURRED SHALL BE AT THE EXPENSE OF THE CONTRACTOR. FACILITY PLACEMENT SUBJECT TO CHANGE UPON FIELD LOCATE COMPLETION.
RIGHTS-OF-WAY ARE DEPICTED BASED ON FIELD OBSERVATIONS AND THE LATEST STATE AND COUNTY RECORDS AVAILABLE.

COORDINATE SYSTEM: HARN/WI.ShebyganWI-FOOT

Legend

— Telco	● Manhole	— Fiber Ped	— Street Light	— Culvert
— Cable TV	○ Utility Pole	— Electric Ped	— Pole Anchor	— Railroad Light
— Electric	⊗ Power Pole	— Telco Ped	— Aerial Fiber	— Traffic Light
— Gas	⊗ Power Transformer Pole	— Cable TV Ped	— Overhead Guy	— Pull Box
— Water	⊗ Street Light	— Traffic Control Box	— Aerial Expansion Loop	— Tree
— Sanitary Sewer	⊗ Electric Transformer	— Electric Transformer	— Aerial Splice	
— Storm Sewer	⊗ Gas Valve	— Gas Valve	— Standoff	
— Private Fiber Optic	⊗ Water Valve	— Water Valve		
— New Underground Fiber	⊗ Fire Hydrant	— Fire Hydrant		
— Existing Underground Fiber	⊗ Catch Basin	— Catch Basin		
— New Handhole	⊗ Round Catch Basin	— Round Catch Basin		
— Existing Handhole				
— Locate Station				

Typical Install Depth is 36"



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PO Box 11064 Green Bay, WI 54307
P: 920.301.7900 | 877.870.6968

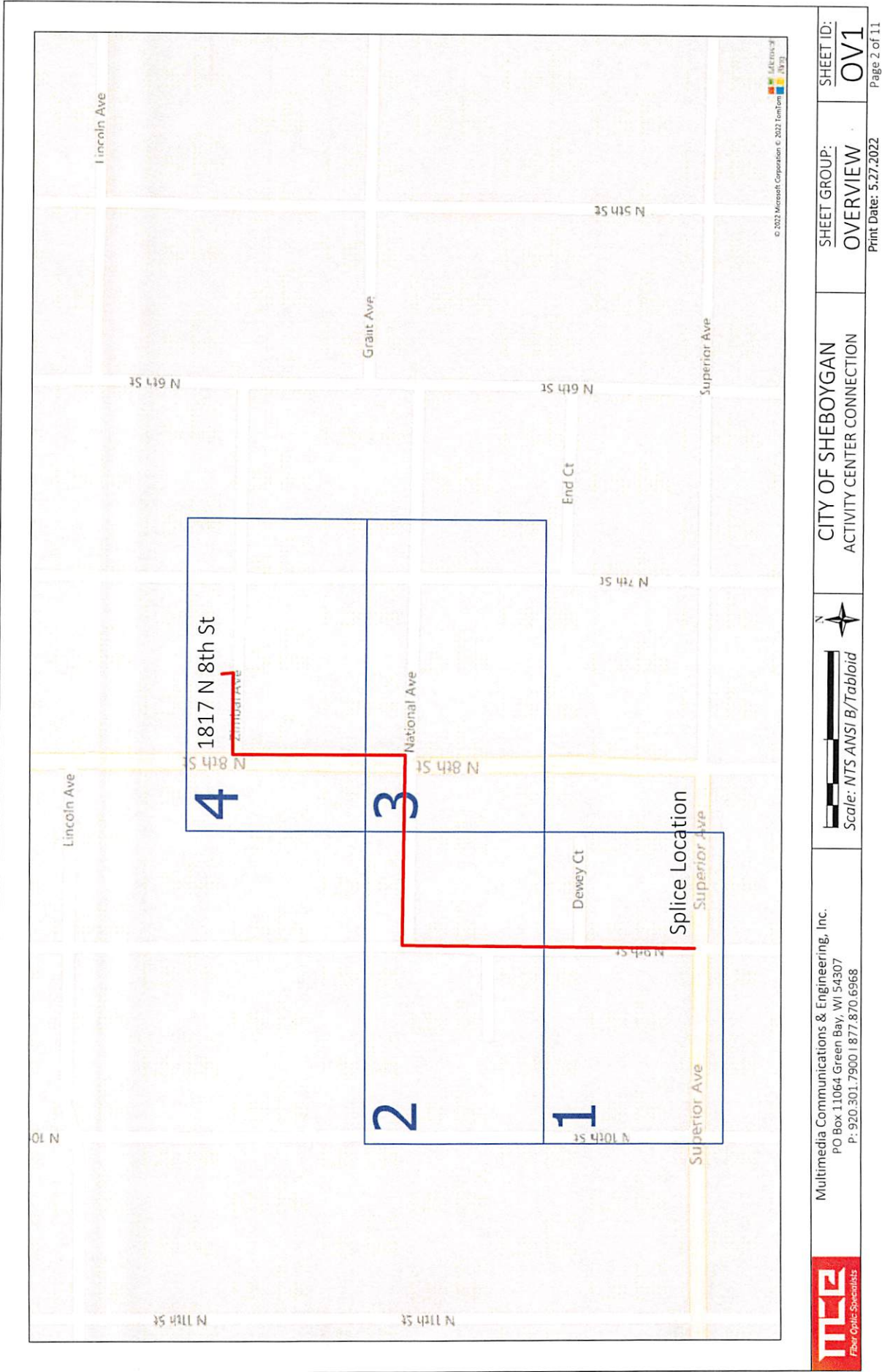


CITY OF SHEBOYGAN
ACTIVITY CENTER CONNECTION

SHEET GROUP:
COVER SHEET

SHEET ID:
CS1

Print Date: 5.27.2022
Page 1 of 11



EXCAVATIONS

Excavations shall not remain open in excess of 24 hours unless specific permission is obtained from the City Engineer. In all streets, alleys, sidewalks or other public ways, whether improved or unimproved, all excavated material shall be removed and the trench shall be backfilled with flow-able filled slurry mix.

At no time can spoils or other debris be stored or piled in the street gutter.

Excavation stock piling must remain within the public right of way and cannot be placed on or impede any roadways, driveways, sidewalks, or fire hydrants. Any areas that have minimal public right of way available must stock pile the excavated material on a truck bed or trailer. No stock piling of excavated material will be allowed on private property.

Excavations are to remain outside of wetland areas. All excavations must have proper erosion control practices to prevent stock piled materials from entering wetland areas.

Excavations are to remain 75' from the high-water mark of and waterway. Any excavations must have proper erosion control practices to prevent stock piled materials from entering waterways.

EROSION CONTROL PLAN

Any open excavations, construction areas or standing debris piles that pose the threat debris runoff will require erosion control practices such as placing silt socks, placing hay bales, or placing silt fencing down-drill of the area.

The Contractor must employ the following good housekeeping practices that will prevent the ingress of any excavated materials into the Municipal storm water system:

- 1) Cover Storm Sewer Inlet with DOT Filter Fabric (DOT Type FF, not felt or silt fence material) near areas where excavation and directional drilling operations occur. DOT Type C Inlet protection standards apply (2x4 across back of inlet with DOT Filter Fabric over inlet held in place by inlet cover).
- 2) Inlet Protection including waddles (fiber filled filter socks) around drains to prevent debris from entering the storm sewer system are required at any low area inlets.

- 3) Place Silt Fence Barrier around excavation per below typical specification diagram. Silt Fence to be inspected prior to excavation.

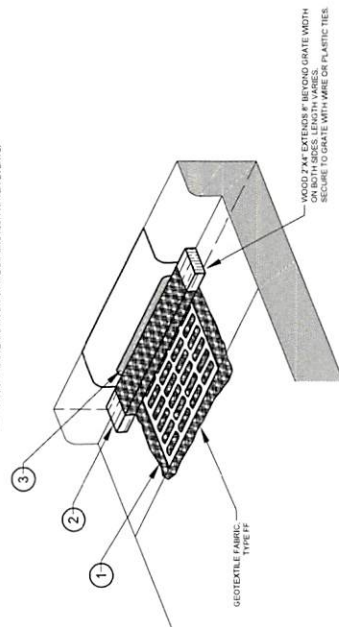
- 4) Protect graded restoration area using fibrous matting to prevent runoff ingress into Storm Water Management System.

- 5) Place temporary soil stabilization materials to prevent erosion into Storm Water Management System.

All erosion control measures shall be inspected on a weekly basis and/or after 1/2" or more of rainfall to ensure the effectiveness of the erosion control measures.

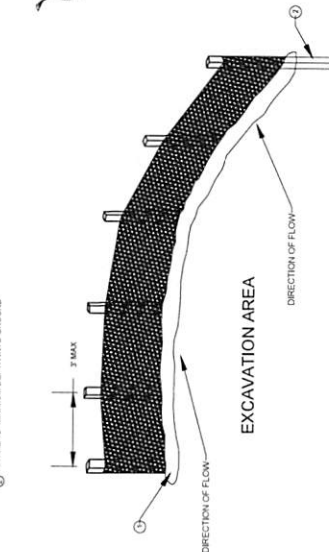
INLET PROTECTION

- 1) FINISHED SITE INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10' AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- 2) FOR INLET PROTECTION, TYPE C (WITH CURB BOULDER) AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WADDLE AND SECURED WITH STAPLES.
- 3) THE WADDLE SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING TO FACILITATE OVERFLOW DRAINAGE DURING HIGH WATER EVENTS.



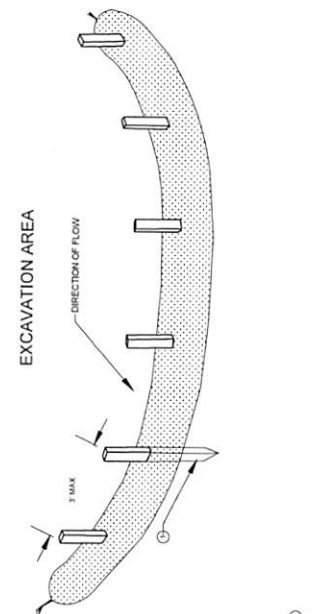
SILT FENCE

- 1) MINIMUM BLACK DIRT CURB BATTERY OF 3" X 6" SILT FENCE TO PREVENT SEDIMENT EGRESS FROM EXCAVATION AREA.
- 2) STAKE 12" MINIMUM DEPTH INTO GROUND.



SILT SOCK

- 1) STAKE 12" MINIMUM DEPTH INTO GROUND.



DEWATERING

Dewatering of pits, trenches, handholes, or manholes must be done with the use of a sediment bag, a straw bale dewatering basin, or approved equivalent. All dewatering procedures must meet or exceed state standards. All Vacuum Excavation spoils are to be transported and disposed of offsite at an approved dumping station. Dewatering is expected to be negligible given the depth of installation and the nature of the directional boring operations for this project.

FRAC-OUT CONTINGENCY PLAN

Boring activities and bore path are to be continually monitored to observe potential frac-outs. Erosion control materials are to be accessible and onsite should a frac-out occur. Acceptable materials include silt fence, straw bales, and sand bags. As soon as a frac-out is discovered, erosion control must immediately be implemented around the frac-out material (bentonite-water mixture). A vacuum excavation machine is to be accessible on short notice to clean any frac-out material should it occur.

RESTORATION

The Contractor may be allowed to mechanically core through hard surface streets to locate existing utilities provided that the restoration of the core be performed per the specific requirements of the Municipality or Agency having jurisdiction. Core holes must be backfilled with a slurry mixture as specified by the DOT per permitting requirements. The original Concrete or Asphalt core can then be replaced using Plug and Epoxy method.

Potholing is not allowed in ADA compliant or non-compliant pedestrian ramps. Any hard surface excavations within any panels at the Contractor's expense.

At no time can the Contractor perform any excavation that undermines the adjacent in-situ surfaces, thereby making vertical mechanical compaction impossible and creating future potential for subsurface failure. This scenario will result in the replacement of the effected hard surface to the permitting authority's specifications.

All disturbed lawns, vegetation, flowers, shrubbery, trees, landscaping, etc. must be replaced or restored to its previous condition or better. Lawn repair will require a minimum of 4" of black dirt and municipal approved grass blends are to be applied.

All areas of restoration using Black Dirt and Seed must be protected with biodegradable net-free fibrous matting. Placement of loose straw or other materials that can be easily blown away or otherwise eroded/removed from the restored area will not be permitted. Fibrous matting materials will must be included in the Contractor Cut Sheets and approved by the Owner for use prior to placement.



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CITY OF SHEBOYGAN
ACTIVITY CENTER CONNECTION

SHEET GROUP: EROSION CONTROL

SHEET ID: EC

Print Date: 5.27.2022 Page 3 of 11

SECTIONS 1 is only included in the Project Bidding Documents

Section T2 UNDERGROUND CONSTRUCTION GUIDELINES

T2.01 Duct Placement Guidelines

The Contractor is responsible to provide all duct, handholes, locate posts, locate stations, locate wire, and pull rope as part of their installation responsibilities. The HDPE Duct part number referenced in Section T6 - Contractor Provided Materials, references a duct that includes a mule tape for cable installation. The Contractor will be required to provide all mule tape necessary for cable installations whether it be included with the duct at the time of purchase or provided and installed separately.

All ducts will be placed on the routes identified in the attached CAD Plans. All ducts must maintain a minimum horizontal clearance zone of 18" when paralleling other underground utilities with the exception of Municipal Water, Sewer, and Storm where a 5' horizontal clearance and 24" vertical clearance is required. The routes on the attached CAD plans have taken all applicable additional clearances into consideration.

All underground ducts must be placed a minimum of 36" below finished grade wherever possible. Instances where the duct must be placed at a shallower or drastically deeper depth must be brought to the attention of the Project Manager prior to installation.

The Owner's Project Manager will be on site to coordinate and mark the duct placement route and handhole locations once all locates have cleared. Routes will be marked with the use of paint and flags. The Contractor must not place duct along the route without first reviewing the individual areas with the Project Manager. This measure is designed to avoid instances where the new duct may encroach the restricted clearance zones of other utilities or extend outside the Right of Way.

All exposed duct ends must be covered with a temporary plug or adequately sealed with duct tape to prevent the ingress of dirt, water, and debris prior to the installation of the cable, locate wire, and mule tape.

All empty ducts (if any) must be sealed using properly sized duct plugs.

Where ducts are coupled together, the contractor must use an aluminum threaded coupler.

T2.02 Handhole Placement Guidelines

The Contractor may be required to place new Large 36"x60"x36" pre-cast handholes, Medium 30"x48"x36" pre-cast handholes, Small 24"x36"x36" pre-cast handholes, or Extra Small 17"x30"x24" pre-cast handholes along the route as shown on the project CAD Plans. Large Handholes must be Quazite PG3604BH21 Extra Heavy Duty (ANSI Tier 22) 2-piece lid marked "Fiber Optics". Medium Handholes must be Quazite PG3048BH21 Extra Heavy Duty (ANSI Tier 22) 2-piece lid marked "Fiber Optics". Small Handholes must be Quazite PG2436BH21 Extra Heavy Duty (ANSI Tier 22) 1-piece lid marked "Fiber Optics". Extra Small Handholes must be Quazite PG1730BH21 Extra Heavy Duty (ANSI Tier 22) 1-piece lid marked "Fiber Optics".

Manufacturer substitutions or equals will not be allowed for the handholes and lids.

The handholes must sit parallel with adjacent streets, buildings, or other structures and must be flush with all surrounding surfaces, and if installed on a slope or grade the handhole must follow the contour of the grade as much as possible.

The installed handholes must sit atop a 12" bed of 3/4" washed, crushed stone for drainage - pea gravel or other stone smaller than 3/4" is not an acceptable base for drainage. All fill around the Handhole must be mechanically compacted in 12" layers to within 8" from the top to prevent settling.

Inside each new handhole the Contractor will be required to install a single 5' long by 1/2" diameter copper clad ground rod. The ground rod must not protrude more than 6" above the surface of the crushed stone bed. After ground rod installation, the Contractor must equip the top with a conductor clamp that will allow the Contractor to tie a locate wire to the end.

T2.03 Locate Wire and Post/Station Placement Guidelines

All locate wires will be installed outside the duct. A suitable locate wire for this purpose is identified within the Contractor-provided materials list in Section 6.01.

The Contractor will be required to install flush mount locate stations or above grade locate posts adjacent to handholes identified on the CAD Drawings. The locate stations and posts will be used to access the locate wires for future locating purposes.

Between the handhole and locate station or post the contractor must install a short length of 1-1/4" underground plowduct. This will facilitate the installation of the locate wires into the post from the handhole.

At no time will a locate station or post be installed in a location where it impedes or can be damaged by the removal of the handhole lid.

At the below grade building entry point the locate wire must be run above grade using 1/2" galvanized steel conduit. Locate wire will be housed in a single gang outdoor rated outlet box approximately 4' above grade.

T2.04 Mule Tape Installation Guidelines

The Contractor will be required to install a single 1,800 lb mule tape within the plowduct during the installation of the fiber optic cable.

T2.05 Fiber Optic Cable Installation Guidelines

The Contractor can install the fiber optic cable by hand or with the use of pneumatic/hydraulic installation equipment. However the means of installation, the Contractor must take care to not exceed the cable's maximum pulling tension (typically 600lbs). The Contractor must utilize a breakaway/swivel device at all times while installing the fiber optic cables. Multiple swivels must be used, one for the cable, and another set 8' back from the first for the mule tape.

At each handhole the Contractor must store a cable slack loop (Slack Loop length noted on the CAD Plans) neatly coiled and labeled with a permanent label, identifying the Cable's owner and identifying the specific cable strand count. Suitable labels for this purpose are Panduit #PST-FO.

Following cable installation all occupied ducts must be plugged using a split plug appropriately sized to accommodate the cable diameter - do not use foam, putty, or tape to plug any duct. All spare ducts must be sealed using properly sized duct plugs.

Instances where multiple ducts are being placed, all cables and mule tape will be installed inside one duct, while the other duct will only contain mule tape for future installations.

T2.06 Underground Installation Documentation

The Contractor will be required to provide bore logs showing rod placement dates and depths as well as redline drawings showing cable placement and cable footage sequential markings within the underground duct and interior piping.

Section T3 INTERIOR CONSTRUCTION GUIDELINES

T3.01 Above Grade Building Penetration

Where the underground plowducts extend to the exterior of a building whose entry point is above grade, the Contractor is required to transition below grade from each plowduct to a Galvanized Rigid Steel pipe that extends up the side of the exterior wall to an elevation shown on the accompanying Interior Drawings. At the below-grade transition point where the rigid pipe meets the plowduct, the Contractor must utilize a watertight fitting that is rated for underground use (Durulene 20001845 or approved equivalent). The Project Manager must approve the final location of building risers.

At the top of the rigid pipe run, the Contractor must install a 12"x12"x6" NEMA 3R rated pull box over a 2" core hole and aligned so the building core is situated at the top of the pull box. The core into the building must then be sleeved with EMT. Interior EMT extending to a termination room can extend through the core to satisfy this sleeve requirement, however instances where Interior EMT is not being placed the Contractor must sleeve the core with EMT and securely fasten the sleeve to the exterior pull box and inside the building. All sleeves/EMT ends must be equipped with collared fittings to avoid cable damage.

Extending from 12" below grade the contractor must install a 1/2" Rigid Steel pipe up to an elevation of 4 feet from the ground or as noted on the CAD interior drawings. This pipe will house the locate wire that runs back to the nearest locate post or housing along the plowduct path. At the top of this 1/2" pipe the Contractor must install a steel single gang outdoor outlet box with waterproof cover. A 12' coil of Locate wire must be housed inside the single-gang outlet box. All exterior pipes and boxes must be securely fastened to the building wall with anchors and fastening hardware suitable for a permanent installation into the materials comprising the wall.

T3.02 Interior Workmanship

Contractor shall take precautions to ensure that dust and debris associated with the project is contained within the work area and not allowed to spread into other areas of the site. Equipment or materials, which cannot be moved, shall be covered by the Contractor to prevent contamination or damage.

All materials used by the Contractor shall be certified asbestos-free by the manufacturer. There will be no exceptions. A letter from the Contractor certifying that no asbestos-containing materials were used shall be provided upon request.

Contractor shall assure that any and all equipment used on this project will be handled and operated in conformance with OSHA safety requirements.

Contractor shall advise the owner whenever work is expected to be hazardous to building occupants.

Contractor shall maintain fire extinguisher within easy access whenever power tools, flammable materials or heat producing devices are being used.

Contractor shall advise the owner when volatile materials are to be used near air ventilation intakes or near occupied spaces so that action may be taken to prevent degradation of indoor air quality.

T3.03 Interior EMT/Innerduct Installation

The Contractor must take all necessary precautions to prevent activation of building alarms, such as fire or security. Conduits that enter rooms that are sealed for the sake of Halon release systems must be sealed to ensure that the room's integrity is maintained.

Where the interior conduit or innerduct passes through any non-concrete/block wall the Contractor must create a hole through the wall only large enough for the conduit to pass through, then seal around the conduit with ASTM E814 (UL 1479) approved fire stop materials.

Prior to cutting or coring into or through any building structure the Contractor must review the core location with the Project Manager.

At each end, and along any interior EMT conduit or innerduct path approximately every 10 feet, the Contractor must label the EMT with a warning label identifying the contents as a fiber optic cable. Suitable labels are Panduit's #PCV-FOB.

Along any interior EMT conduit or innerduct path the Contractor may be required to install 12"x12"x6" Type 1 pull boxes fitted with a screw cover for pulling assistance and a 24"x24"x8" Type 1 pull box fitted with a screw cover for cable storage as shown on the CAD interior plans. At every pull box (and building entry box) the Contractor must use screw type fittings to attach the conduit to the box. Pull boxes are required every 100' or when the total bend radius is to exceed 180 degrees.

Any interior 2" conduit must be bonded to a ground point at each building. The Project Manager will determine the ground points. Cable used to Bond the EMT to the Building Ground Electrode will be no smaller than a #6 AWG Stranded copper and must have a green jacket suitable for interior use.

T3.04 Interior Cable Installation

Contractor must install the cable along the path shown on the accompanying CAD Plans

Instances where the interior path uses existing Innerduct, EMT, or other pipe that does not contain an existing pull rope, the contractor may be required to fish the existing pathway and install a pull rope to aid in the installation of the Fiber Optic Cable

Following the installation of the fiber optic cable through the exterior and interior EMT conduit or innerduct, the Contractor must seal the conduit or innerduct ends (where the EMT enters the outside pull box and where the EMT enters the termination room) with ASTM E814 (UL 1479) approved fire stop materials.

Section T4 CABLE SPLICING TERMINATION AND TESTING GUIDELINES

T4.01 Cable Pre-Acceptance Testing

The Contractor crews must perform "pre-acceptance testing" with an Optical Time Domain Reflectometer (OTDR) on each fiber optic cable reel. The pre-acceptance testing will verify the performance of the cable prior to it being installed. Pre-acceptance testing must be performed on every cable strand at 1310nm and 1550nm only from the exposed end of the cable. Test results must be provided to and approved by the Project Manager prior to installation.

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The Contractor will be required to Fusion Splice the fiber optic cables at each of the splice points identified below.

Superior Avenue Splice - Splice all 12 strands from the new cable to the Ribbon 7 (red) of the existing 432strand fiber optic cable inside the existing FOSC 600 Series Splice case. Strands 1-6 of the 12 FOC will splice to 73-78 of the 432 FOC South direction - Strands 7-12 of the 12 FOC splice to 73-78 of the 432 FOC West direction.

T4.03 Indoor Fiber Termination

All cable terminations will be performed by splicing factory terminated fiber optic cable pigtail(s) to the ends of the fiber optic cables. Contractor must supply all termination panels, pigtails, and consumables necessary to complete the terminations as described in the CAD Interior Plans

T4.04 Fusion Splicing Equipment

All cable strand splicing will be performed using a fusion splice machine that is capable of splicing within a 0.2dB loss tolerance and equipped with either live monitoring or a Local Injection Detection (LID) testing system, thus ensuring the splice quality while the splice is set up in the machine.

All splices will be protected with appropriate fusion splice sleeves fitted with steel/reinforcing rod(s) (provided by the Contractor)

T4.05 Cable Testing

Following the splicing and termination procedures the Contractor will be required to test each strand using an OTDR and Power Meter Light Source (PMLS) at 1310nm and 1550nm. Each terminated strand will be tested between the sites with both devices at both wavelengths. This totals 8 tests per strand. All OTDR tests must be performed using a launch cable that is at least 500 meters in length thus allowing a full view of the initial pigtail connector/splice event loss. Testing will take place between the New Activity Center and Sheboygan City Hall located at 828 Center Avenue, Sheboygan, WI 53081.

T4.06 OTDR Viewing Software

Prior to the OTDR testing the Contractor must provide a copy of the OTDR viewing software that is capable of allowing a user to electronically review the test results. This does not need to be a licensed copy, just one that allows the user to view traces in their native (non-pdf) format.

T4.07 Test Documentation

Following the OTDR testing the Contractor must provide the Owner with one electronic copy of each test performed. Prior to testing, the Contractor will be provided with the strand identification and labeling plan, the electronic copies of the test results must match the labeling scheme provided to the Contractor

Following the PMLS testing, the Contractor must provide the Owner with test results showing the total link loss between each site along with the average loss for each strand. The test results must be provided on any Windows® compatible electronic spreadsheet. Each cable strand tested must be labeled per the Owner-provided labeling scheme. This labelling must accompany each test results.

T4.08 Optical Loss Budget

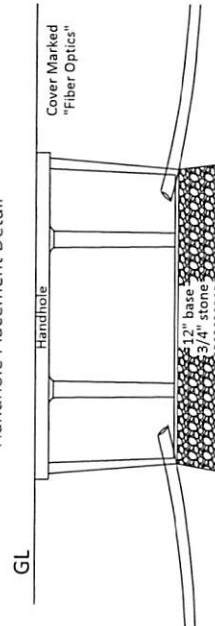
The Contractor will be provided with optical link budgets for each installed cable strand. Budget losses are calculated by measuring the total link loss between sites, and then averaging the measurements from both directions using the parameters identified in Table 1 below. The test results provided to the Project Manager must confirm that 100% of all installed strands perform within the optical loss budget and within the specific tolerances for individual events identified in Event Loss Table below.

Note that even though a link loss test may show a loss that is within the optical budget, any event shown by the OTDR report that exceeds its thresholds listed in the Table will result in a failed test result and must be remedied prior to system acceptance by the Owner. Instances where individual tolerances cannot be met must be reviewed with the Project Manager prior to completion.

Event Loss Table

Event	Wavelength	Threshold (dB)
Coupler Loss	1310nm	0.4dB
	1550nm	0.4dB
Splice Loss	1310nm	0.2dB
	1550nm	0.2dB
Cable Attenuation	1310nm	35dB/Km
	1550nm	25dB/Km

Handhole Placement Detail



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CITY OF SHEBOYGAN

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T5.01 Use of Quantities Shown

The following lists only represent a high-level overview of the tasks associated with each individual project and should not be solely relied upon for bidding purposes. It is the Contractor's responsibility to thoroughly review the project routes, CAD Plans to calculate their own quantities and footages to complete the project as outlined in this document. The Bid amount must be adequate to fulfill the intent of the entire project.

T5.02 Construction Quantities

This project consists of the following high-level tasks. It is the contractor's responsibility to verify their own quantities prior to submitting their bid.

SHEBOYGAN ACTIVITY CENTER FIBER OPTIC CONNECTION - LABOR UNITS		
Item Description	Quantity	units
Provide and install New 2" SDR-11 HDPE Duct via Directional Bore	1,735	feet
Provide and install new 24x36x36 Tier 22 Handhole and cover over existing duct	2	each
Provide and install new 12 strand outdoor rated OS2 Singlemode fiber optic cable through new 2" HDPE Duct and building entry duct - including slack loops.	2,235	feet
New Building Entry Galvanized 2" pipe installation	10	feet
New 12x12x6 NEMA 3R Building Entry Pull Box Installation	1	each
New Building Entry Galvanized 1/2" pipe installation	5	feet
New Weatherproof Single Gang Outlet Box Installation	1	each
Splice new 12 FOC into existing 432 strand backbone in Superior Avenue existing 600 Series Splice case	12	splices
Provide and install new 1.25" Riser Rated Corrugated innerduct	235	feet
Provide and install new 12 strand indoor riser rated OS2 Singlemode fiber optic cable through innerduct - including termination and storage lengths	395	feet
Provide and install 36 Port capacity Wall Mount Termination/Splice Panel inside Building Entry point	1	each
Provide and install 36Tx32Dx24W wall mount data cabinet	1	each
Terminate Fiber to Wall Mount Termination Panel (12 strands x 3 cables)	36	Terminations
Provide and install 24 port Rack Mount Termination Panel inside Data Room and inside Wall Mount Cabinet	2	each
Terminate Fiber to Rack Mount Termination Panel	24	each
Test Fiber Connection with OTDR and PMLS between Activity Center and City Hall	12	Tests

Section T6 CONTRACTOR PROVIDED MATERIALS

T6.01 Contractor Provided Material List

- Underground Plowduct - 2" inside diameter first-run SDR-11 HDPE Orange smooth exterior/smooth interior. Carlon A136GNT JNNA or approved equivalent
- 1800 pound runde tape - Carlon TL38203 or equivalent.
- Locate Wire - #12 AWG HDPE jacketed steel core copper clad wire. Pro-Trace #HDD-CCS-PF-45 or equivalent.
- Split Duct Plug - 2" outside diameter split plugs with interior port diameter sufficient for cable size. Carlon or equivalent.
- Small Handhole - Quatzite #PG2436BH21 ANSI Tier 22 1-piece Cover - no equivalent.
- Flush Mount Locate Station - Handley Industries #72C5F1LMQ or approved equivalent.
- Ground Rod - 5x1/2" copper clad ground rod. Non-manufacturer specific.
- 2" Galvanized Steel Pipe - Non-manufacturer specific.
- NEMA 3R Enclosure - Screw Cover, Galvanized, Paint Finish, 12" x 12" x 6" (Hoffman A12P126 or equivalent)
- 1/2" Galvanized Steel Pipe - Non-manufacturer specific.
- Outdoor Rated Outlet Box with Cover - single gang outdoor rated outlet box with steel 2-screw gasket and cover. Non-manufacturer specific.
- 12 Strand OS2 rated Singlemode Loose Tube All-dielectric outdoor rated fiber optic cable (Commscope D-012-LN8W-F12NS or equivalent)
- 1.25" Corrugated Riser Rated Innerduct (Carlon DG4X1C or equivalent).
- 12"x12"x6" Type 1 pull box fitted with a screw cover, Non-Manufacturer Specific.
- 12 Strand OS2 Indoor Riser rated Singlemode fiber optic cable (Corning 012E81-33131-24 or equivalent)
- 1RU Fiber Termination Panel - Sliding Tray, 3 Adapter panel capacity, black, steel equipped with 12 strand LC-UPC OS2 Singlemode Pigtail and 12 port LC-UPC Bulkheads (TCS FLP-GB402-101-30-0-001 or equivalent)
- Wall Mount Data Cabinet - Black - Plexiglass Door - reversible Mount - Vented (Great Lakes GL36WMCMP-B-SH-00-00 or equivalent)
- Wall Mount Termination Panel - CORE Dual Door, OS2 LC/UPC Capability, Loaded, with (3) 6 ct. Duplex LC/UPC Singlemode Blanks, (1) 12 ct. Splice Trays, (3) 12 ct. Sub-Distribution Style Pigtail - (TCS part # From Manufacturer or equivalent).
- Consumables and Installation hardware - Contractor required consumables for the installation of all the above items and Owner-provided items per these Request for Bid Documents.

T6.02 Contractor Completion Clause

The Contractor is required to complete the installation with the material included in their Bid response.



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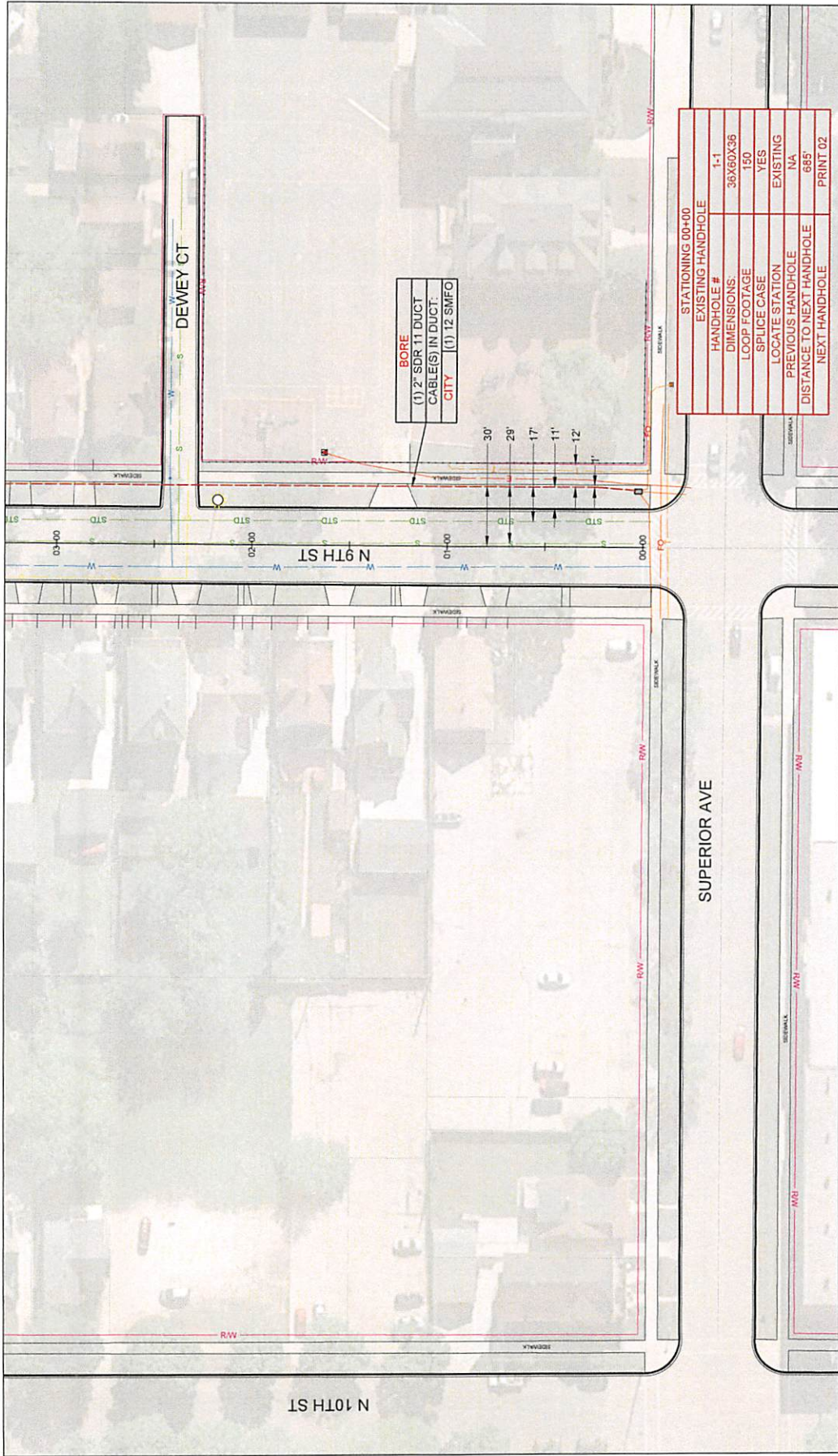
CITY OF SHEBOYGAN
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SEE SHEET 2



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ACTIVITY CENTER CONNECTION

SHEET GROUP:
1:50 Scaled Plans

SHEET ID:
01

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Page 7 of 11

PERMITS REQUIRED ON THIS SHEET: City of Sheboygan Right of Way Excavation Permit



SEE SHEET 1

STATIONING 07+80	
NEW HANDHOLE INSTALLATION	
HANDHOLE #	2-1
DIMENSIONS:	24X36X36
LOOP FOOTAGE	150
SPLICE CASE	NO
LOCATE STATION	FLUSH
PREVIOUS HANDHOLE	1-1
DISTANCE TO NEXT HANDHOLE	850'
NEXT HANDHOLE	PR1704

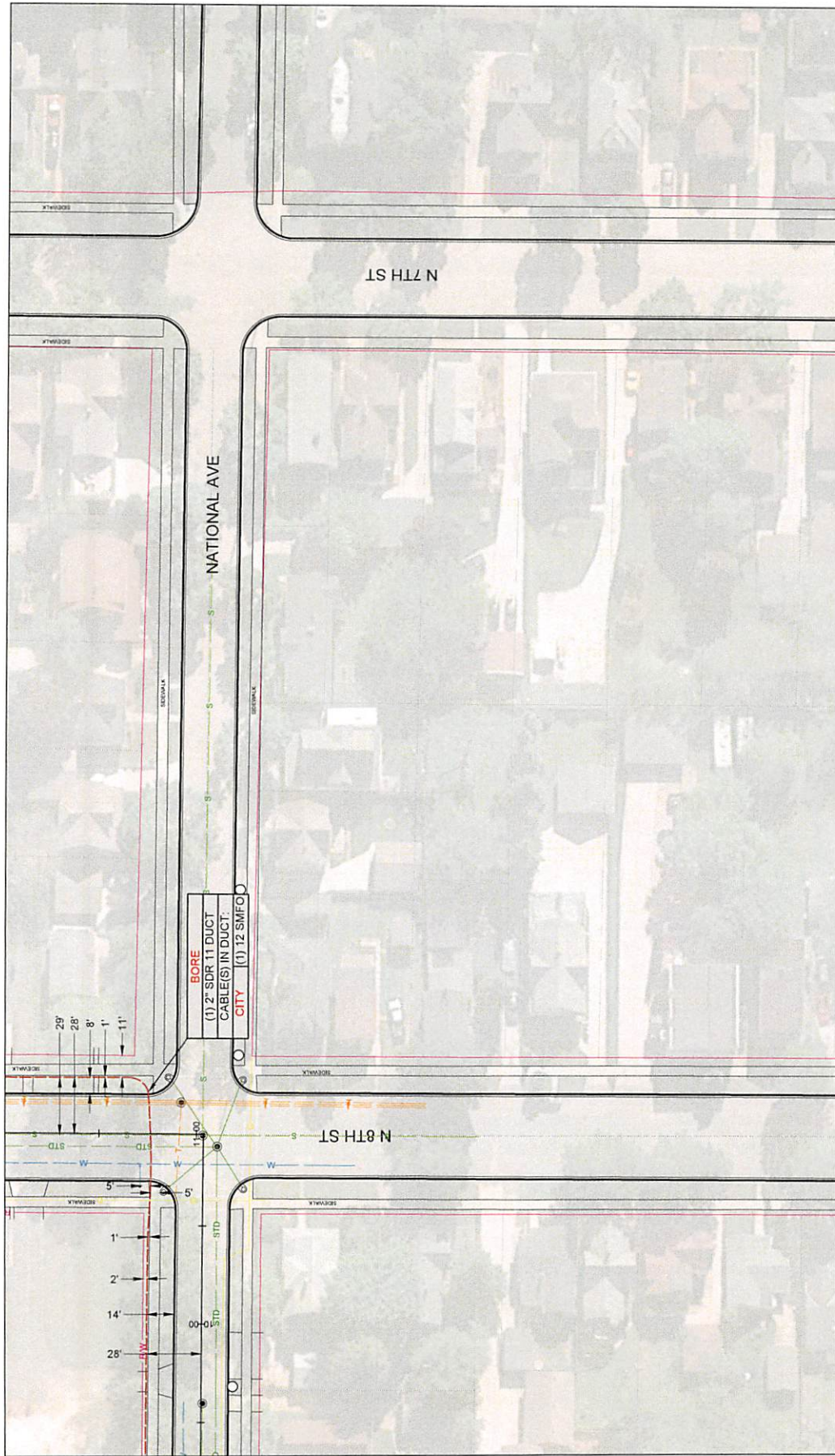
BORE	
(1) 2" SDR 11 DUCT	
CABLE(S) IN DUCT:	
CITY	(1) 12 SMFO

BORE	
(1) 2" SDR 11 DUCT	
CABLE(S) IN DUCT:	
CITY	(1) 12 SMFO

	Multimedia Communications & Engineering, Inc. PO Box 11064 Green Bay, WI 54307 P: 920.301.7900 / 1.877.870.6968	0 50' 100' N  Scale: 1" = 50' ANSI B/TABLOID	CITY OF SHEBOYGAN ACTIVITY CENTER CONNECTION	SHEET GROUP: 1:50 Scaled Plans	SHEET ID: 02
	PERMITS REQUIRED ON THIS SHEET: City of Shebovogan Right of Way Excavation Permit Print Date: 5.27.2022 Page 8 of 11				

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SEE SHEET 4



SEE SHEET 2



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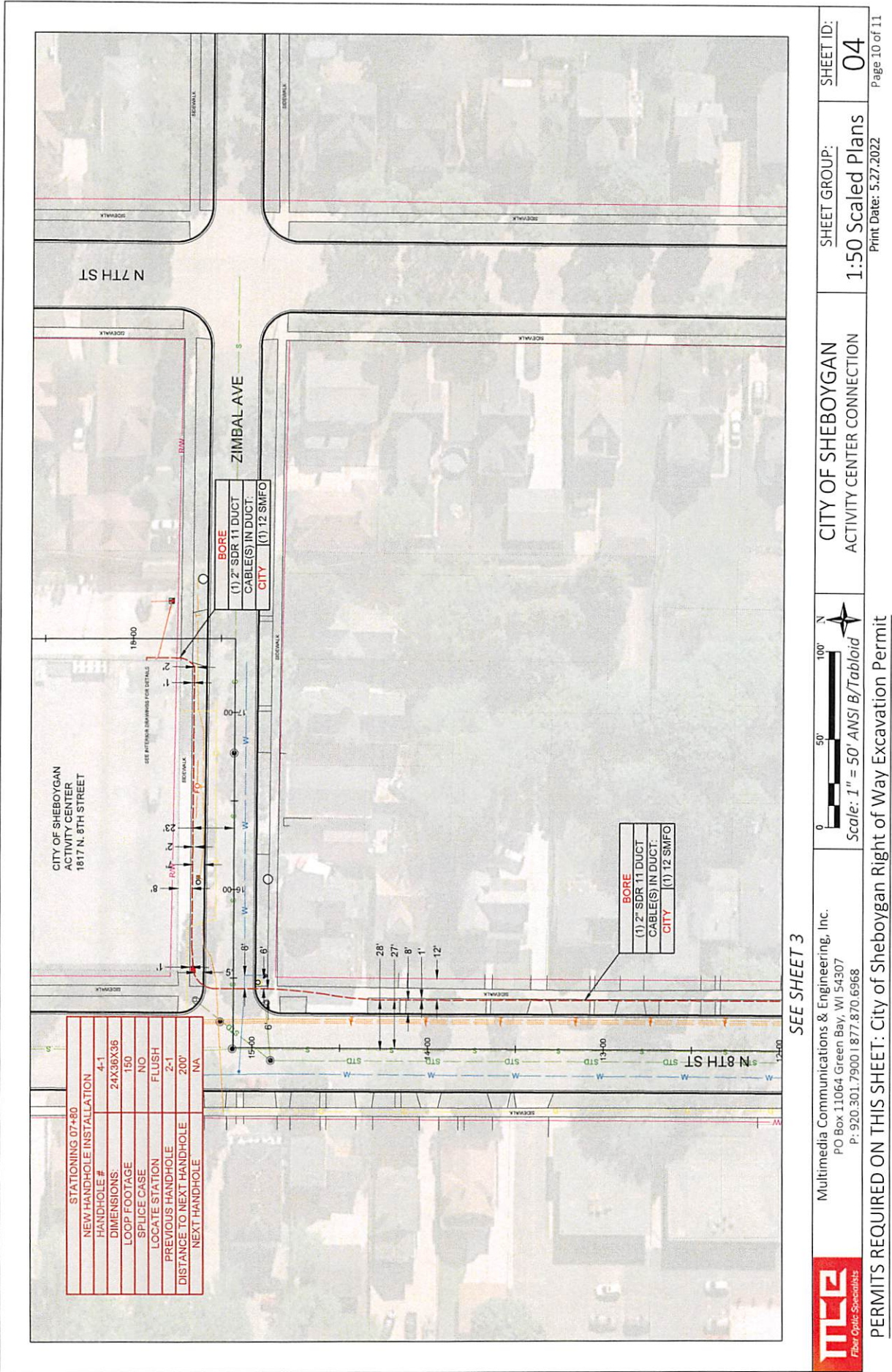
CITY OF SHEBOYGAN
ACTIVITY CENTER CONNECTION

SHEET GROUP:
1:50 Scaled Plans

SHEET ID:
03

Print Date: 5.27.2022
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PERMITS REQUIRED ON THIS SHEET: City of Sheboygan Right of Way Excavation Permit



SHEET ID: 04

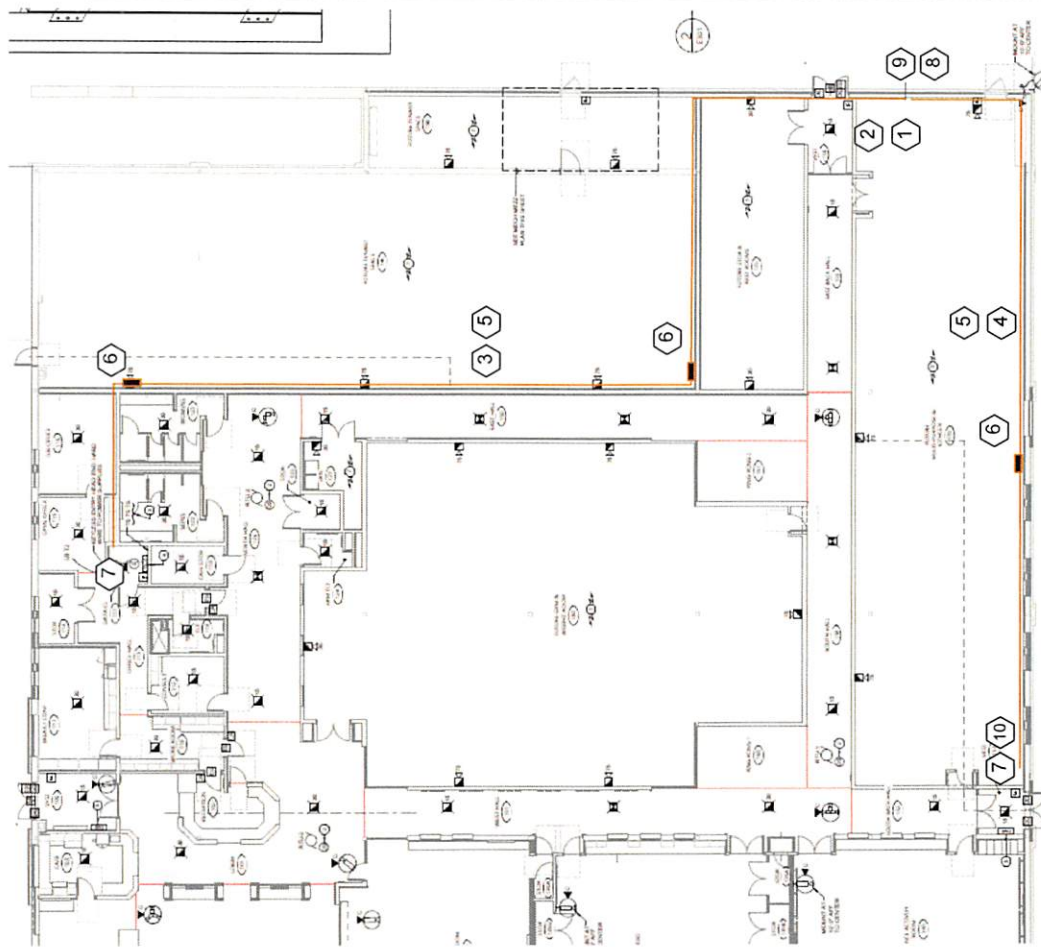
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CITY OF SHEBOYGAN
ACTIVITY CENTER CONNECTION

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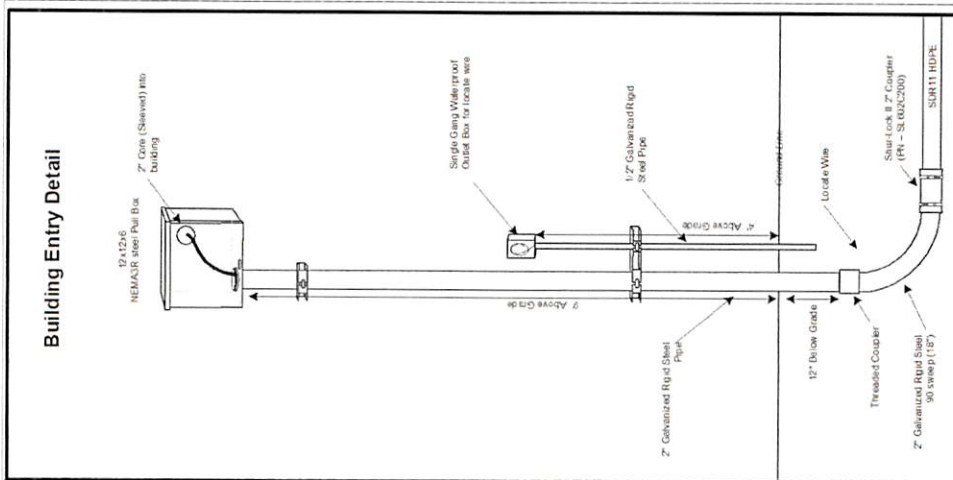
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PERMITS REQUIRED ON THIS SHEET: City of Sheboygan Right of Way Excavation Permit



INSTALLATION NOTES

1. Provide and install New 36 port Wall Mount. Termination center for 12 strand outdoor cable and 2 - 12 strand indoor cable terminations. Equip Wall mount Panel with 36 LC-UPC bulkheads and OS2 SM pigtails and 3 - 12 strand splice trays.
2. Fusion splice individual Pigtails to indoor and outdoor cable strands - 36 total.
3. Provide and install 1.25" Riser Rated corrugated InnerRadius between building entry point and Data Closet - 235' total.
4. Provide and install 1.25" Riser Rated corrugated InnerRadius between building entry point and Wall Mount Cabinet - 150' total.
5. Provide and install 12 strand OS2 Riser Rated fiber optic cable inside innerduct - 385' + 50' slack coil each side = 585' total.
6. Provide and install 12"x12"x6" TYPE I rated pull box.
7. Provide and install new 12 port rack mount termination panel for 12 strand indoor cable termination. Equip rack mount panel with 12 LC-UPC bulkheads, OS2 SM Pigtails, and 1 - 12 strand splice tray.
8. Install Building Entry Piping on exterior wall per Building Entry Detail diagram shown.
9. Core 2" hole into building - noma EMT Sleeve into place - Couple Sleeve to Menta Box.
10. Provide and install new 36x32x24 wall mount data cabinet



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CITY OF SHEBOYGAN
ACTIVITY CENTER CONNECTION

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Scale: 1" = 50' ANSI B/Tabloid

SHEET GROUP:
Interior Plans

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CITY OF SHEBOYGAN

TERMS AND CONDITIONS FOR ALL CONTRACTS FUNDED WITH
FEDERAL GRANTS SUBJECT TO THE UNIFORM GUIDANCE

In the event of a conflict between the below terms and conditions and the terms of the main body of the Contract or any exhibit or appendix, these federally required contract terms shall govern.

1. **Amendment Permitted.** This list of Federally Required Contract terms may be amended by City in the event that the applicable federal grant providing funding for this Contract contains additional required terms.
2. **Debarment and Suspension.** Contractor represents and warrants that, as of the execution of this Contract, neither Contractor nor any subcontractor or sub-consultant performing work under this Contract (at any tier) is included on the federally debarred bidder's list listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." If at any point during Contract's term Contractor or any subcontractor or sub-consultant performing work at any tier is included on the federally debarred bidder's list, Contractor shall notify City immediately. Contractor's completed Vendor Debarment Certification is attached hereto and incorporated herein.
3. **Record Retention.** Contractor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. Contractor further certifies that it will retain all records as required by 2 CFR § 200.333 for a period of five (5) years after it receives City notice that City has submitted final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed. Unless Contractor is functioning as a sub-recipient of grant funding, rather than as a contractor, this requirement is in addition to, and not in place of, City's public records retention requirements set forth elsewhere herein. In the event of conflict between local and federal retention periods, the longer retention requirement shall control.
4. **Procurement of Recovered Materials (Applies Only if the Work Involves the use of Materials).** Pursuant to 2 CFR §200.323, Contractor represents and warrants that in its performance under the Contract, Contractor shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
5. **Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as Amended.** If this is a contract or sub-grant in excess of \$150,000, Contractor must comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act

(42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations must be reported to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

6. **Energy Efficiency.** Contractor certifies that it will comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

7. **Byrd Anti-Lobbying Amendment** (31 U.S.C. 1352). Contractor certifies that:

7.1. No federal appropriated funds have been paid or will be paid, by or on behalf of Contractor, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal Loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of and Federal contract, grant, loan, or cooperative agreement.

7.2. If any funds other than federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, Contractor shall request from City and provide, completed, to City the "Disclosure Form to Report Lobbying," in accordance with its instructions as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96).

7.3. Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

7.4. Contractor's completed Byrd Anti-Lobbying Certification is attached hereto and incorporated herein.

8. **Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708) (Applies Only to Funding Over \$100,000, When Laborers or Mechanics are Used).** Contractor must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, Contractor must compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

9. **Right to Inventions Made Under a Contract or Agreement.** Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any applicable implementing regulations.
10. **Federal Government is Not a Party.** The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to City, Contractor, or any other party pertaining to any matter resulting from the Contract.
11. **Davis-Bacon Act, as amended (40 U.S.C. 3141-3148).** If this is a "prime construction contract," in its performance under the Contract, Contractor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, Contractor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, Contractor is required to pay wages not less than once a week. **Note: this paragraph is not applicable to contracts paid for solely with ARPA SLFRF moneys.**
12. **Copeland "Anti-Kickback" Act (40 U.S.C. 3145).** If this is a "prime construction contract" in excess of \$2,000, Contractor shall, in its performance of the contract, comply with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that Contractor is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.
13. **Equal Employment Opportunity.** Contractor shall comply with Executive Order 11246, "Equal Employment Opportunity," as amended by EO 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
14. **Termination for Convenience.** If this Contract is for an amount in excess of \$10,000 and it lacks a termination for convenience clause, the following applies: City may terminate this Contract at any time for any reason by giving at least thirty (30) days' notice in writing from City to Contractor. If Contractor is terminated for convenience by City, Contractor will be paid for services actually performed or commodity actually provided.
15. **Termination for Cause.** If this Contract is for an amount in excess of \$10,000 and it lacks a termination for cause clause, the following applies: If Contractor shall fail to fulfill in timely and proper manner any of its obligations or violate any of the provisions of this Contract; City shall have the right to terminate this Contract. City shall notify Contractor of its intent to terminate, by giving Contractor prior written notice at least five (5) business days before the effective date of the termination, identifying the alleged deficiencies in Contractor's performance, and shall give Contractor thirty (30)

days to cure such deficiencies prior to termination. In such event, all deliverables completed by Contractor as of the date of termination shall, at the option of City, become property of City. Notwithstanding the above, Contractor shall not be relieved of liability to City for damages sustained by City by virtue of any breach of the Contract, and City shall retain its remedies under law.

16. **Executive Order 13202- Preservation of Open Competition and Government Neutrality Towards Contractors' Labor Relations on Federal and Federally Funded Construction Contracts.** These requirements apply to recipients and sub-recipients of awards and cooperative agreements and to any manager of a construction project acting on their behalf. These individuals or employees of one of these organizations must ensure that the bid specifications, project agreements, and other controlling documents do not: (a) require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or (b) otherwise discriminate against bidders, offerors, contractors, or subcontractors for becoming or refusing to become or remain signatories, or otherwise to adhere to agreements with one or more labor organizations, on the same or other related construction project(s). Contractors or subcontractors are not prohibited from voluntarily entering into agreements with one or more labor organizations.

17. **Domestic Preferences for Procurements.** Pursuant to 2 CFR §200.322, as appropriate, and to the extent consistent with law, Contractor should, to the greatest extent practicable under this Contract, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subcontracts and purchase orders for work or products under this Contract.

18. **Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.** Contractor shall not use funds under this Contract to purchase, or enter into subcontracts to purchase, any equipment, services, or systems that use telecommunications equipment or services as a substantial or essential component of a system that is subject to 2 CFR § 200.216 (generally, video surveillance or telecommunications equipment produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, their subsidiaries or affiliates, or any entity that the Secretary of Defense reasonably believes to be an entity owned or controlled by the government of a foreign country). In the event Contractor identifies covered telecommunications equipment or services that constitute a substantial or essential component of any system, or as critical technology as part of any system that is subject to 2 CFR § 200.216, during Contract performance, Contractor shall alert City as soon as possible and shall provide information on any measures taken to prevent recurrence.

19. **Prohibitions on Discrimination.** Contractor agrees to comply with the following as applicable:

19.1. Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.) and Treasury's implementing regulations at 31C.F.R. Part 22, which prohibit discrimination on the basis of race, color, or national origin under programs or activities receiving federal financial assistance.

19.2. The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability.

19.3. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance.

19.4. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance.

19.5. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state or local governments or instrumentalities or agencies thereto.

20. **Financial and Program Management** As subrecipient of federal funds, Contractor is required to comply with 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, other than such provisions as Treasury may determine are inapplicable to this Contract and subject to such exceptions as may be otherwise provided by Treasury.

20.1. Financial Management: Contractor shall maintain records and financial documents sufficient to show compliance with section 603(c) of ARPA, Treasury's regulations implementing that section, and guidance issued by Treasury. Contractor shall grant the Treasury Office of Inspector General and the Government Accountability Office or their authorized representatives, the right of access to these records in order to conduct audits or other investigations. Financial records, supporting documents, statistical records and all other records pertinent to the services purchased pursuant to this Contract shall be retained for a period of five (5) years after all of the City's funds have been expended or returned to the Treasury Department, whichever is later.

20.2. Audit Requirements. Contractor agrees to provide all reports requested by the City including, but not limited to, financial statements and reports, reports and accounting of services rendered, and any other reports or documents requested. Financial and service reports shall be provided according to a schedule (when applicable) or upon request. Contractors who expend more than \$750,000 in federal awards during their fiscal year will be subject to an audit under the Single Audit Act and its implementing regulation at 2 CFR Part 200, Subpart F.

20.3 Recipient Integrity and Performance Matters. Contractor agrees to provide any information requested by the City in order to comply with 2 CFR Appendix XII to Part 200

20.4 SAM.gov Requirements. Contractor is required to comply with 2 CFR Part 25 (System for Award Management ("SAM")) and 2 CFR Part 170 (Reporting Subaward and Executive Compensation Information) unless exempted pursuant to 2 CFR § 25.110.

21. **Drug-Free Workplace.** Contractor acknowledges that as a subrecipient of federal funds, it is subject to 31 CFR Part 20 (Governmentwide Requirements for Drug-Free Workplace)

22. **Relocation Assistance.** Where an agreement or project requires the relocation of persons or such person's personal property, Contractor is advised that 42 USC 4601-4655 (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970) may apply.

23. **Incorporation of Required Clauses and Conditions.** To the extent any applicable federal statute, regulation, or executive order requires any clause or condition to be included or incorporated into this Contract between the City of Sheboygan and the Room Tax Commission, and that term or condition has not been expressly included or incorporated, it is included or incorporated by reference.

This form is required only for subrecipient funding of more than \$100,000

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of their knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Ch. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

 Signature of Contractor's authorized official

Date: _____

 (Print name of person signing above)

 (Print title of person signing above)

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

Federal Executive Order 12549 requires that all contractors receiving individual awards, using federal funds and all subrecipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency from doing business with the Federal Government. By signing below, Contractor certifies that its organization and its principals are not debarred. Failure to comply or attempts to edit this language may disqualify your bid. Information on debarment is available at the following websites: www.sam.gov and <https://acquisition.gov/far/index.html>.

Your signature certifies that neither you nor your principal is presently disbarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Date:

Signature of Contractor's authorized official

(Print name of person signing above)

(Print title of person signing above)

CITY OF SHEBOYGAN

REQUEST FOR PUBLIC WORKS COMMITTEE CONSIDERATION

ITEM DESCRIPTION: Semi-annual benchmarks

REPORT PREPARED BY: David H. Biebel, Director of Public Works

REPORT DATE: July 20, 2022

MEETING DATE: July 26, 2022
FISCAL SUMMARY:

Budget Line Item:	N/A
Budget Summary:	N/A
Budgeted Expenditure:	N/A
Budgeted Revenue:	N/A

STATUTORY REFERENCE:

Wisconsin	N/A
Statutes:	
Municipal Code:	N/A

BACKGROUND / ANALYSIS: As part of the annual budgeting process, the Department of Public Works has developed performance benchmarks to track progress of the department's activities.

STAFF COMMENTS: Due to the seasonal nature of many of the services provided by the Department of Public Works, many items that are benchmarked are currently not available for this report. The benchmark report encompasses information from Streets & Sanitation, Motor Vehicle, Parks & Forestry, Facilities & Traffic, Engineering, and Wastewater.

ACTION REQUESTED: For informational purposes only

ATTACHMENTS:

- I. Public Works Operations Semi-Annual Summary

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Administration				
Excavating Permits Issued	73	68	141	272
Occupy Permits Issued	31	88	119	252
Stormwater Permits Issued	6	8	14	25
Park Reservation Permits	198	238	436	864
Park Reservation Revenues	\$ 42,801.61	\$ 37,956.26	\$ 80,757.87	\$ 144,945.24
Calls	3,738	3,180	6,918	12,184
Capital Project Fund				
Miles of street improvement	0.00	0.00	0.00	6.01
Boat Slips				
Riverfront Marina Repair Requests	0	1	1	1
Riverfront Marina slip rentals	19	23	42	28
DPW Social Media				
Facebook Page Likes	2,521.00	2,658.00	2,658	2,400
Facebook Reach	31,032.00	31,591.00	31,591	71,300
Instagram Followers	245.00	251.00	251	234
Instagram Reach	115.00	100.00	100	451
Twitter Followers	124.00	139.00	139	108
Wildwood Cemetery				
Full Burials	11	10	21	45
Cremains	3	13	16	35
Baby	0	0	0	0
Graves Sold	29	21	50	93

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Street Repair & Maintenance				
Crack and joint filling footages (LF)	6,575	28,249	34,824	35,074
Yards of concrete installed	0	253	253	1,099
Potholes - cold mix tons	-	0	0	0.0
Potholes - hot mix tons	28	38	66	198.0
Response to pothole repair requests within 2 days	94%	85%	90%	86%
Asphalt Overlay (Tons)	0.0	1,105.2	1,105.2	11,871.4
Linear feet of street improved	0	1,180	1,180	18,673
Linear fees of road re-paved (Cemetery Only)	0	600	600	3,217

Street Cleaning				
Debris removed (tons)	43.4	356.2	399.6	715.0
Curb miles streets swept	175	1,584	1,759	7,330
Percent of streets swept every 6 weeks	100%	100%	100%	100%

Sanitary Sewer				
Number of manholes repaired / replaced	0	18	18	62
Sanitary sewer jetting footages (LF)	44,027	63,335	107,362	422,885
Sanitary sewer televising footages (LF)	6,556	3,759	10,315	22,157
Total Backwater Calls	11	9	20	29
Sewer backup calls - lateral plugged	10	6	16	27
Sewer backup calls - main plugged	1	3	4	2

Storm Sewer				
Catch basins debris removed (tons)	10	135	145	65
Number of catch basins cleaned	68	1,026	1,094	892
Number of catch basins replaced	0	10	10	19
Storm sewer jetting footages (LF)	10,929	7,072	18,001	18,924
Storm sewer televising footages (LF)	9,656	3,551	13,207	18,035
Number of storm manholes replaced	0	1	1	17
Storm Sewer Pipe Replaced (LF)	0	0	0	118

Bridges				
Number of bidges inspected	0	0	0	0
Number of bridges sealed	0	0	0	7

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Sanitation & Recycling Curbside Collection				
Garbage collected (tons)	2,938.72	3,317.71	6,256.43	13,118.03
Recycling collected (tons)	786.18	862.15	1,648.33	3,425.41
Material diversion rate %	21%	21%	21%	21%
Nuisance notices issues (weeds notice)	0	86	86	194
Number of lots cut by city contractor	0	17	17	22
Nusiance notices issued (snow removal)	0	0	0	65
Numer of lots cleared by city contractor	0	0	0	14

Recycling Center				
Yard waste hauled (tons)	41.7	1,050.0	1,091.7	2,676.5
Tire disposal	12	34	46	115
Scrap metals collected (tons)	35.9	32.8	68.8	265.1
Oil collected (gallons)	1,225	3,125	4,350	11,170
Branch grinding (dollars)	\$ -	\$ 20,386.50	\$ 20,386.50	\$ 16,136.75
Leaf Collection Tons	0.0	0.0	0.0	1,253.0

Snow				
Events	15	0	15	16
Duration (hours)	206	0	206	288
Precipitation (inches)	20	0	20	39
Hours	2,246	0	2,246	3,339
Salt Usage (tons)	2,217.0	0.0	2,217.0	2,276.0
Average snowfall per event (inches)	1.3	0.0	1.3	2.4
Average hours per event	13.0	0.0	13.7	18.0
Percent of operations in which snow is removed within 24 hours after the event	100%	0%	100%	100%
Brine (Gallons)	25,547	0	25,547	0

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Motor Vehicle				
Age of fleet	9.4	9.4	9.4	11.5
Completed work orders	322	343	665	1,356
Preventative maintenance completion %	84%	92%	88%	85.8%
Vehicle maintenance budget used %	30%	16%	46%	98.0%
Contracted services budget used %	10%	27%	37%	114.0%

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Parks				
Number of Parks	36	36	36	36
Acres of mowed public land	119	119	119	119
Miles of paved off-road trails	8.8	8.8	9	9.0
New trees planted in parks	0	0	0	100
Percent of graffiti removed within 3 days	-	50%	50%	90%

City Forestry				
Trees Planted (Street)	0	302	302	367
Trees Elevated (Street)	795	240	1,035	1,450
Trees Removed (Street)	190	189	379	704
Trees Removed (Cemetery)	0	0	0	0
Trees Planted (Cemetery)	0	0	0	0
Stump Removals	9	102	111	1,360
Treated Ash Trees	0	203	203	749
Citizen Tree Concern	86	212	298	1,001

Park, Forestry and Open Space				
Number of parks with splash pads	3	3	3	3
Number of non-Ash gap street trees planted	0	302	302	367
Number of non-Ash street trees removed	105	147	252	317
Number of Ash trees removed	85	42	127	387
Number of Ash trees treated	0	203	203	749

Park Maintenance Repairs/Painting				
Grills	0	0	0	0
Combo Picnic Tables	95	0	95	275
Straight Tables	60	0	60	41
Garbage Receptacles	12	0	12	96
Park Signs	7	0	7	5
New Combo Picnic Tables	130	0	130	0
Garbage Collected (Tons)	27	55.08	81.91	205.54
Beach Refuse (Tons)	0	13.04	13.04	15.11
Straight Benches	0	0	0	17
4' Benches	0	0	0	0

Park Rentals				
Events	2	29	31	71
Combo Picnic Tables	9	158	167	457
Straight Tables 10'	26	57	83	164
Straight Benches 10'	24	46	70	70
Bench 4'	6	6	12	101
Trash Receptacles	25	143	168	435
Stage	1	5	6	11
Grills	0	3	3	14
Chair Trailer, 320	0	2	2	5
Dance Floor	1	1	2	3
Bleachers	0	0	0	3

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Wastewater Treatment Plant				
Total Precipitation (in)	6.20	13.26	19.46	28.81
Total Wastewater Treated (MG)	796	1,162	1,958	3,607
Total Influent CBOD5 Loading (lbs)	1,279,232	1,276,792	2,556,024	5,370,704
Total Influent TSS Loading (lbs)	1,750,940	1,671,648	3,422,588	6,607,045
Total Influent Ammonia Loading (lbs)	142,982	145,675	288,657	692,435
Total Influent Phosphorus Loading (lbs)	32,035	37,444	69,479	147,281
Average CBOD5 Removal Efficiency (%)	98.2%	98.0%	98.1%	98.3%
Average TSS Removal Efficiency (%)	97.5%	97.7%	97.6%	98.2%
Average Ammonia Removal Efficiency (%)	87.2%	93.9%	90.6%	84.9%
Average Phosphorus Removal Efficiency (%)	93.8%	94.7%	94.3%	93.3%
Average CBOD5 Discharged (mg/L)	3.5	2.6	3.1	3.1
Average TSS Discharged (mg/L)	5.6	3.7	4.6	3.8
Average Phosphorus Discharged (mg/L)	0.31	0.20	0.3	0.32
Average Ammonia Discharged (mg/L)	2.36	1.38	1.9	3.65
Average Effluent Mercury Concentration (ng/L)	1.02	0.88	1.0	0.96
Biogas Produced (cu ft)	13,540,007	15,406,889	28,946,896	60,331,876
Biogas Utilized (%)	99.54%	99.43%	99.49%	92.13%
Total Plant Electrical Power Generated (kWh)	0	0	0	0
Electricity Purchased (kWh)	1,864,645	1,986,102	3,850,747	7,297,773
Natural Gas Consumed (therms)	45,122	50,661	95,783	115,322
Total Dried Biosolids Produced (lbs)	333,800	1,113,890	1,447,690	3,237,280

Pretreatment & Laboratory				
Significant Industrial Users Semi-Annual Monitoring Complete (%)	67%	33%	100%	200%
Significant Industrial Users issued Notice of Non-Compliance (NON)	0	1	1	2
Significant Industrial Users Annual Site Inspection Completed (%)	0%	27%	27%	99%
Number of SIU Permits Issued or Renewed	0	0	0	2
Community Annual Monitoring Inspections (%)	0.0%	0.0%	0.0%	160.0%
Sewer Surcharge Facilities Quarterly Monitoring Completed (%)	100.0%	100.0%	100.0%	100.0%
Number of Samples Analyzed by Sheboygan WWTP Laboratory	22	25	47	81
Number of violations of WPDES permit limits	0	0	0	0
CMAR Score	A	A	A	A

Waste Water Treatment Plant Maintenance				
Number of Closed Work Orders	299	407	706	1706

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Street Lights				
Street Lights Damaged	8	3	11	12
Material Used	\$ 29,427.45	\$ 10,230.07	\$ 39,657.52	\$ 43,033.59
Labor	\$ 10,105.00	\$ 1,940.00	\$ 12,045.00	\$ 12,545.00
Equipment Rental	\$ 9,510.00	\$ 2,210.00	\$ 11,720.00	\$ 15,460.00
Traffic Signal Knockdowns				
Traffic Signals Damaged	5	1	6	10
Material Used	\$ 5,676.98	\$ 963.62	\$ 6,640.60	\$ 16,208.23
Labor	\$ 4,270.00	\$ 600.00	\$ 4,870.00	\$ 8,850.00
Equipment Rental	\$ 4,150.00	\$ 680.00	\$ 4,830.00	\$ 10,085.00
Traffic Signage				
Number of signs replaced	95	70	165	580
Number of new signs	605	212	817	1,037
Specialized Sign Project	370	31	401	372
Painted Street Markings				
Centerline Painting (miles)	0	86	86	101
Traffic Arrows/Stop-Bars/Crosswalk	0	618	618	1,314
Snow Removal Damage				
Damaged Mailbox Repaired/Replaced	7	4	11	34
City Hall				
Number of work orders	15	14	29	62
Civil Defense				
Sirens operational percentage	100%	100%	100%	100%
Municipal Service Building				
Number of work orders	25	16	41	80

	2022 1st Quarter	2022 2nd Quarter	YTD	2021 Actual
Engineering				
WISLER Pavement Rating	6.42	6.25	6.25	6.25
Number of plans reviewed within two weeks of submission	5	23	28	37
City maps updated annually	3	4	7	14
Linear feet of sanitary sewer relining	0	0	0	11,982
Annual cost of citywide ADA Infrastructure Improvements	\$ -	\$ -	\$ -	\$ 833,000.00

2022 Capital Improvement Projects	Contract Amount	Contract Approved	Construction Start Date	Construction Comp. Date
Annual Sidewalk Program	\$157,980.00	3/21/2022	5/15/2022	TBD
Calumet Drive (Saemann Avenue to Geele Avenue)	\$619,373.15	3/21/2022	5/3/2022	7/1/2022
North Avenue (Taylor Drive to Calumet Drive)	\$1,309,283.23	5/16/2022	7/5/2022	TBD
St. Clair Avenue (S. 14th St to S. 10th Street)	\$584,029.94	5/23/2022	8/1/2022	TBD
Evergreen Park Bridge Installation	\$265,780.75	6/20/2022	8/1/2022	TBD