Town of Wolfeboro Parks & Recreation Department Request for Proposals Bridge Falls Path Lighting

Background

The Town of Wolfeboro Parks and Recreation Department has undertaken a 2022 voter approved project to design, specify and purchase thirty (30) new "Dark Sky" compliant light assemblies for the Railroad Ave. to Center Street section of the **Bridge Falls Path**. The lighting design has been completed, the light poles and fixtures have been procured and it is now the intent of the **Wolfeboro Parks and Recreation Department** to hire a contractor to install and commission the replacement lighting system.

Scope of Services:

The following contractor requirements and information are to include but not limited to the following services and specifications required to provide a fully functioning "turnkey" lighting system.

I. Lighting Conduit: (Designated in Red on the Attachment A. Project Overview Map)

- The total lateral length of the electrical lighting circuit is 2,440ft.
 - Excavation and installation of 1" Schedule 40, Electrical grade PVC conduit system along a **2,255ft**. section of the total circuit length (per Attachment B. UR-LT, Ditch Specification). Electrical conduit shall be connected to the precast conduits of the light post foundations to form a **continuous** run from electrical service to light and from light to light.
 - Note that a 50ft section of the above 2,255ft, will require a 36" depth and schedule 80 conduit under the proposed private driveway extension of Willow Street.
 - Excavation and conduit installation along a **55ft**. section has already been completed during a 2022 parking lot project.
 - The remaining 130ft. will need to be affixed to the walking bridge structure within a galvanized steel EMT (Electrical Metal Tubing) with weatherproof fittings and boxes.
 - Longitudinal runs of conduit will be installed in as straight and direct a line as possible.
 - All conduit end joints, and internal finish shall be free of sharp edges and burrs which could damage the cable while pulling.
 - Provide and Install sand backfill material as a bedding and direct cover material for conduit system as per provided specifications.
 - Backfill and compact the existing excavated material above the sand bedding in 12-inch interval lifts to ensure settling is minimized.
 - Install a continuous caution/warning tape approximately 10" above the conduit and 8" below the finished grade of the ditch line.
 - All buried conduit joints shall be cleaned and glued per manufacturer's recommendations.
 - All above grade PVC "riser" conduits shall be provided for in Schedule 80 as required.

II. Precast Concrete Base Foundations:

- Excavate (drilling preferred) and install thirty (30) provided precast concrete post light foundations (20" diameter x 5ft. length) with preset anchor bolts, integral PVC conduit sweeps, and grounding wire.
- Precast light bases shall be orientated with the integral conduit sweeps corresponding to the directional conduit runs within the ditch line.
- Provide and Install a minimum 6" depth of 34" stone base material leveled and compacted to ensure a 12" above grade reveal.
- Provide and install ¾" crushed gravel backfill around each precast foundation and compact at a minimum of 12" lifts.
- Precast lighting base foundations and corresponding light posts shall be placed in a tangent line where feasible (straight sections of path). The general layout and staking of the proposed lighting location will be provided for by the Wolfeboro Municipal Electric Department (WMED) staff.

III. Light Posts and Lights: (Total Quantity of 30)

- Note: four (4) 12ft. light posts with "Sitelink" shafts have been purchased and will be designated for use at locations to accommodate both voltage and communications (video) cables. These posts are equipped with integrated receptacles within the base which shall be wired accordingly.
- The remaining twenty-six (26) 12ft. posts are fluted, "Voltage Only" posts. Note that two (2) of
 these remaining posts are also equipped with integrated receptacles within the base which shall be
 wired accordingly.
- Install light posts on concrete bases and torque provided hardware per manufacturer's specifications.
- Assemble and install "Bishops Crook" bracket and "Prague" lighting fixture on the light posts per the manufacturer's specifications (See Attachment C).

IV. Communication / Video Conduit: (Designated in Yellow on the attached project overview map)

- A 1" Schedule 40 Communication / Video Conduit system installation will be included in this project which will share space within 1,465ft. section of the ditch line as shown.
- The Communication / Video Conduit shall be interconnected with (4) four new designated "Sitelink" shaft light poles and terminate at the newly constructed Willow Street Electrical Service pedestal. The four (4) "Sitelink" post shafts have raceways for both voltage and communication cabling.
- The remaining 130ft. will need to be affixed to the walking bridge structure within a galvanized steel EMT (Electrical Metal Tubing) with weatherproof fittings and boxes.
- All above grade PVC "riser" conduits shall be provided for in Schedule 80 as required and openings shall "capped" at this time.
- The installation of the conduit and EMT raceway, including its interconnection to the four (4) lights designated with video access, will be the extent of the scope of work performed within this agreement on the Communication / Video Circuit. Provision of video cameras, and the wiring of such equipment will be performed under a future agreement.

V. Electrical Service:

- Provide and install a pedestal style (typical pressure treated posts with horizontal decking backboard) 200-amp electric service with main disconnect and corresponding circuit breakers within a NEMA 3R enclosure with lockable door. This electric service is to replace the existing 100-amp service located on an overhead service pole, approximately 50ft. from the intersection of Willow Street and the Bridge Falls Path. Provide minimum of 16" clear horizontal space for future communications/video equipment.
- Excavate and install single 3" schedule 40, underground conduit and two (2) 2" schedule 40 conduits approximately 30ft. in distance from pole #13 Willow St. This will accommodate underground service feed to the new meter pedestal. (See Attachment D. URI-1D, Ditch Specification) detailing the underground specification. Conduit and Aluma-form pole brackets with clamps to be provided by WMED.

VI. General/Miscellaneous Information:

- The scheduling of "Dig Safe" requests to identify, locate and mark all existing underground utilities will be the responsibility of the Contractor.
- The Contractor shall leave the work site in an acceptable clean and safe manner at the end of each workday.
- The Contractor shall limit the daily scope and extent of work to ensure that an open ditch will not be left without cover overnight and weekends.
- It will be the Contractor's responsibility to appropriately barricade and cone the work area to ensure safe travel for pedestrians and bicyclists.
- Inspections of ditch, conduit, precast foundations, light posts and lights will be performed by a staff member of the Wolfeboro Municipal Electric Department as needed.
- The Contractor shall remove and be responsible for disposal of all existing light fixtures, light poles, and associated electrical equipment relative of the old lighting system including all above grade equipment. Subsurface conduits, splice boxes, and conductor may be removed at the discretion of the Contractor based upon any salvage value to which they are entitled.
- All excess earthen material shall be removed from site by the Contractor upon job completion.
- The Contractor shall **not** be responsible for excavation of ledge and rocks larger than .5 cu/yard in volume and therefore shall **not** be included in the contractor's bid price. The drilling, splitting blasting and hammering of ledge shall be considered at a negotiated cost if encountered.
- Working hours at the location will be limited from 7AM-5PM, Monday through Friday excluding holidays and during any prescheduled events utilizing the Bridge Falls Path corridor.
- The Contractor must provide a timeline schedule to ensure that the substantial completion date is no later than October 1, 2023.
- The Contractor shall be responsible for Erosion Control/Stormwater Pollution Prevention per accepted Best Management Practices (BMP's) throughout the trail construction zone.

VII. Bid Option 1.

- Provide, spread, level, and compaction roll a top dressing of Stone Dust along the 2,255ft. of the trail excavated trail surface area. Total quantity of material is calculated at 15 cu/yds.
- This option may or may not be accepted based upon budgetary considerations.

VIII. Bid Option 2.

- Install and wire five (5) parking lot lights at the adjacent Railroad Warehouse Parking Lot. Note precast bases and conduits are all in place, these will be the same lights used along the trail.
- This option may or may not be accepted based upon budgetary considerations.

Materials to be provided by the Town of Wolfeboro:

- Lighting Fixtures with 25ft pre-wired leads.
- Lighting Posts with bases.
- Four (4) "Sitelink" Light Posts with provision for voltage and communication raceways as well as (four) 4 outdoor rated, 20 Amp, GFCI protected, duplex electrical receptacles with in-use covers.
- Concrete Precast Post Foundations with integral PVC conduit, pre-set anchor bolts, and ground wire.
- Electrical Grade Conduit (1" Schedule 40 with Couplings).
- Electrical Grade Conduit (1" Schedule 80 with Couplings).
- Electrical Grade Conduit (2" Schedule 40 with Couplings).
- Electrical Grade Conduit (3" Schedule 40 with Couplings).
- Meter riser conduit slip-joints.
- Conduit weather heads.
- "Aluma-form" pole stand-off brackets and clamps.

Materials to be provided by the Electrical Contractor:

- Sand (ditch backfill).
- Crushed gravel 3/4" (precast concrete post backfill).
- Stone Dust (See Section VII. Bid Option "1")
- Electric Warning Tape for full ditch line.
- Galvanized Steel EMT conduit, hangers, connectors, and termination boxes for the bridge crossing.
- Grounds, wiring connectors, terminations, splices, PVC primer / adhesive.
- No. 8 Copper THHN conductor (Hot, Neutral and Grounding as required)

BAM5/8/23

Instructions to Bidders

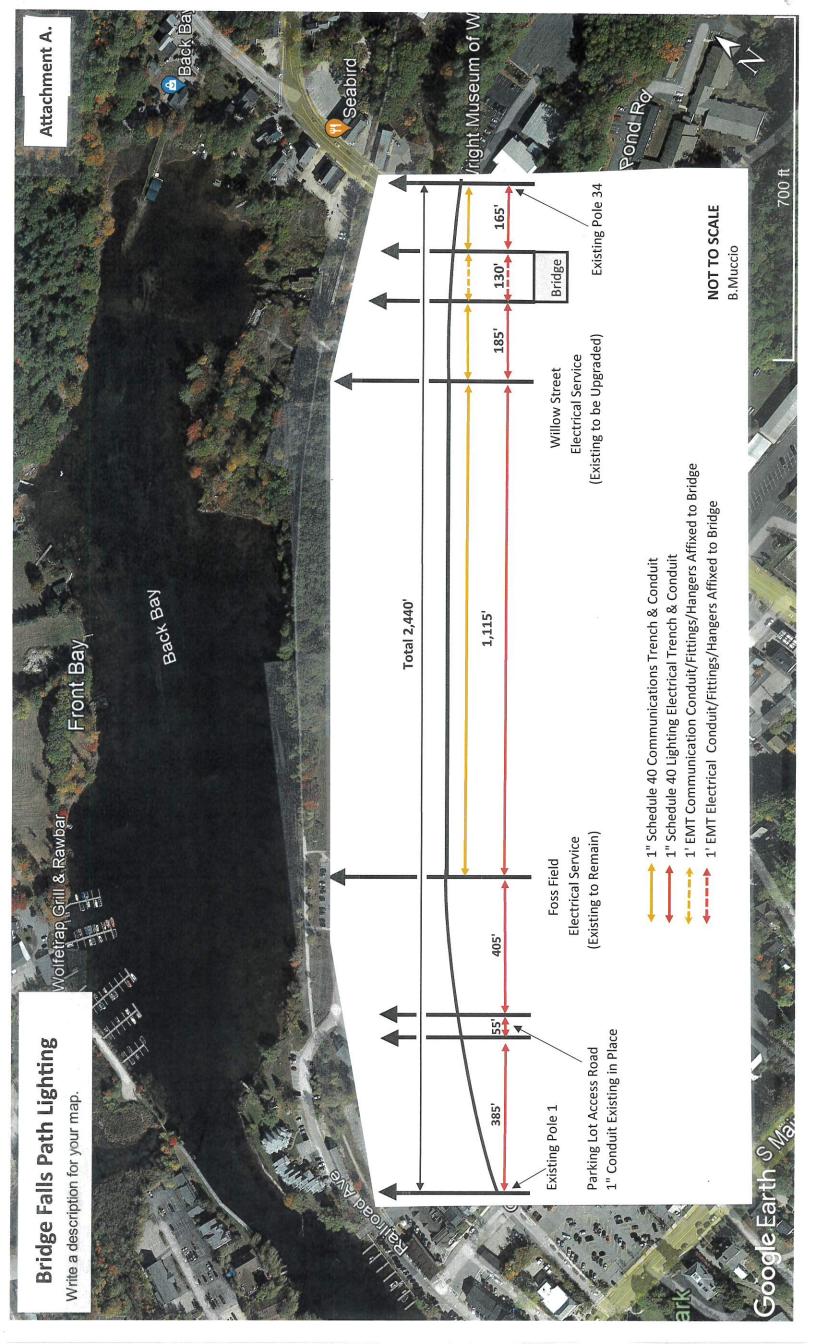
Instructions For Submitting Proposals:

- Interested bidders shall complete the Total Bid Price line item below including an authorized signature attesting to the bid information as being valid as well as acknowledging the "Anti Collusion Clause".
- The proposals must be submitted in an envelope plainly marked "Bridge Falls Path Lighting" and must be received **no** later than Thursday May 25th, 2023, at 2:00 PM. Proposals will be publicly opened and read aloud at Wolfeboro Town Hall, 84 South Main Street, Wolfeboro, NH, following the 2:00 PM deadline.

Questions regarding this bid or to schedule a site visit will be addressed by contacting Barry Muccio of the Wolfeboro Municipal Electric Department at (603)569-6975 or via e-mail: meddirector@wolfeboronh.us

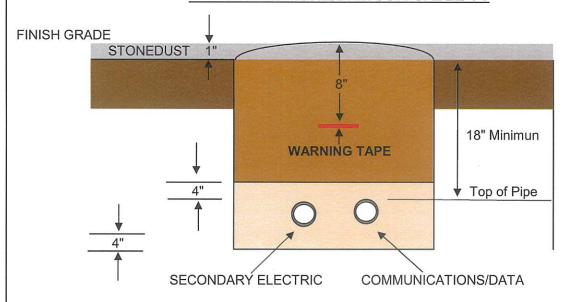
	Bid Prices					
	(Per Descrip	tion of Work Sco	\$			
	Bid Option '	'1." (Provide and	\$	5		
	Bid Option '	d Option "2" (Install & wire five (5) Parking Lot Lights)			\$	
	Return mail	to:	Town of Wolfeboro Attention: Finance Department PO Box 629 Wolfeboro, NH 03894			
	Return via I	E-mail:	bids@wolfeboronh.us			
without	collusion of t joint venture, Signa Print	e, fair, and made "means any natura				
	Addı	ess:				
	Date	•				

The Town of Wolfeboro Municipal Electric Department reserves the right to reject any or all proposals without explanation, to waive technicalities and informalities and to re-advertise for new proposals for whatever reason deemed to be in the best interest of the Town of Wolfeboro. Proposals which fail to meet the requirements, or which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations or irregularities of any kind including evidence of collusion, or in which errors occur or which contain abnormally high or abnormally low prices may be rejected as informal.



INSTALLATION REQUIREMENTS FOR UNDERGROUND CONDUIT

BRIDGE FALLS PATH LIGHTING SECONDARY CONDUITS WITH TELEPHONE/DATA/OR CABLE TV



Note:

- 1" Conduit required for Lighting Electrical Circuit and Communication / Data Cables
- * Trench width as required to maintain 4" spacing between all conduits and trench sidewalls.
- * Trenches to be in as straight line as possible, no more than 180 degree radius of sweep per run.
- * Schedule 80 PVC required under all roadways and/or driveways.
- * A pulling string must be installed in each conduit.
- * TRENCH INSPECTION IS REQUIRED BY WOLFEBORO MED PRIOR TO BACKFILLING.





UNDISTURBED EARTH



SAND OR FINE BACKFILL



STONEDUST - FINISH GRADE

NOT TO SCALE

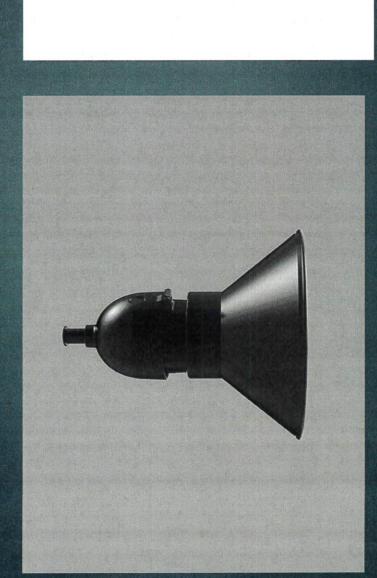


Wolfeboro Municipal Electric Department 569-8157 TRENCH FOR JOINT LIGHTING CIRCUIT
AND COMMUNICATIONS/DATA

LT TRENCH

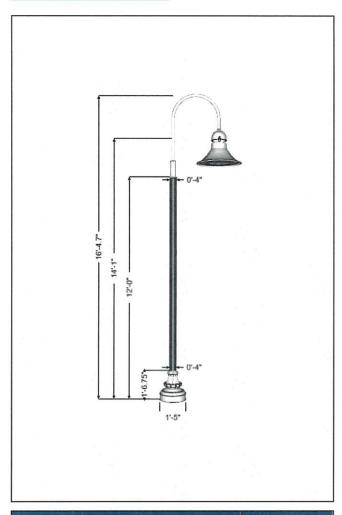
UR-LT 6/3/2022

on "Bishops Crook" Tenon Bracket GlasWerks LED Prague Pendant





Assembly Drawing



Description	Height/Width	
Assembly Overall Height	16'-4.7"	
Luminaire Mounting Height	14'-1"	
Pole Height	12'-0"	
Pole Shaft OD At Top	0'-4"	
Pole Shaft OD At Bottom	0'-4"	
Pole Base Height	1'-6.75"	
Pole Base Width	1'-5"	

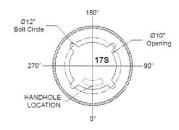
Windload

Passed Wind Speed: 90 mph

Windload Result: 54%

Evaluated per: AASHTO 2013

Anchorage/Orientation Plan



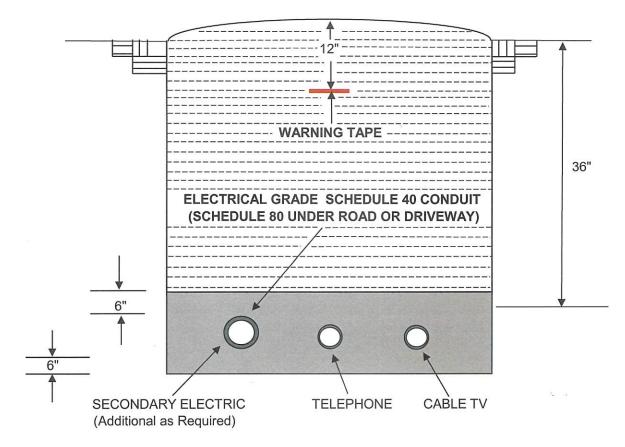
Note: Door = Hand Hole

Ordering Information

Qty	Catalog Number		
27	GPLF3 P10 30K MVOLT ASY NPT BK		
27	BCR 30IN 1A TN NPT BK		
27	WDA 12 F4C 17S C06 BK		
1	TMP-157		
27	AB-31-4		

INSTALLATION REQUIREMENTS FOR UNDERGROUND CONDUIT

ONE OR MORE SECONDARY CONDUITS WITH TELEPHONE AND/OR CABLE TV



Note:

- * 3" Conduit required for 200 Amp services or less, 4" Conduit required for 400 Amp services.
- * Trench width as required to maintain 6" spacing between all conduits and trench sidewalls.
- * Trenches to be in as straight line as possible, no more than 180 degree radius of sweep per run.
- * Rigid steel sweeps required for all runs over 150 ft.
- * Schedule 80 PVC required under all roadways and/or driveways.
- A pulling string must be installed in each conduit.
- * Conduit requirements and specifications for Phone and Cable installations shall require consultation with each utility.
- * TRENCH INSPECTION IS REQUIRED BY WOLFEBORO MED PRIOR TO BACKFILLING.





NOT TO SCALE

TRENCH



TRENCH FOR JOINT SECONDARY ELECTRIC, CABLE TV & TELEPHONE

UR1-1D 3/2/2020