

To: All Plan Holders of Record

From: CT Consultants, Inc.

For the Owner

Re: Addendum No. 2

Red Creek Sanitary Sewer Improvements, Project No. 280-S

Lake County Board of County Commissioners

Date: February 22, 2024

This Addendum forms a part of the contract documents and modifies the original bidding documents dated January 2024 and all previous addenda, if any. Acknowledge receipt of this addendum in the space provided in the bid forms. Failure to do so may subject the bidder to disqualification.

QUESTIONS AND ANSWERS

- Q1. What size are the NEMA 4x enclosures on top of the wet well and valve vault?
- A1. The enclosures shall be sized appropriately as required by NEC.
- Q2. Are Contract 'A' and Contract 'B' both required to provide a Resident Engineer's office?
- A2. No project trailer is required for this project. This effort (Specification 015213 FIELD OFFICES) shall be deleted from the scope.
- Q3. Can we perform digging a couple test digs on site?
- A3. It is acceptable to perform test holes along roadsides. Contractor shall contact local agency responsible for the roadway and acquire all necessary permissions.
- Q4. Specification Section 333100-6, 2.1, E. States mechanical joint bolts are to be high strength Low alloy. Notes on Sheet GN-01 2.0 Force Main 2.04 states all bolts on force main are to be stainless steel. Can you confirm the high strength low alloy bolts are acceptable?
- A4. Stainless steel hardware shall be provided.
- O5. What is the schedule for the CEI service? What fees are associated with the service.
- A5. The service shall be constructed with the completion of the clearing of the trees along Mantle Road. Coordination and scheduling shall be with Mike Baucco, 440-358-4978 (WR 61928419), with CEI. The is no additional cost associated with the electrical service, excluding the cost to perform the survey along Mantle Road and the tree/stump removal which is part of Contract B bid.

Addendum No. 2

Date: February 22, 2024

Page 2

Q6. Standard General Conditions 13.03.B states the Owner pays for inspection but Sheet 2, Note 1.11 states that the contractor is to pay for LCDU inspector costs. I am confirming whether or not the contractor is to include full time inspection costs in the bid?

- A6. Yes, the contractor is responsible for inspection fees. Lake County Department of Utilities currently have a rate set at straight \$45/hr, regardless of if a holiday, OT, or normal work hours.
- Q7. Addendum #1 shows tree clearing for the new electric utility down Mantle Rd. Do the stumps need removed? Is this to be additional into Contract B bid items #3 & #4 for the pump station site?
- A7. Yes, all trees shall be cut down, removed, and stumps ground. Refer to bid items 2.4 and 2.6 for Contract B. The distance from the CEI transmission line property to the northern limit is approximately 580 feet. See enclosed CEI service design.

BID DOCUMENTS

- 1. Contract B Alternate If awarded, the contractor shall be responsible for the resurfacing of Huntington Road at the completion of the project. Refer to enclosed details. Refer to enclosed map of limits of resurfacing. After milling, 253 Full Depth Pavement Repair may be directed by the Engineer. This Repair shall be per the bottom half of the enclosed pavement detail. The 6" of ODOT 304 Aggregate shall be paid via Ref. No. 1, ODOT 204 Excavation of Subgrade and Ref. No. 2, ODOT 204 Granular Material, As Per Plan. Ref. No. 3, Pavement Repair, As Per Plan shall consist of the two courses of Type 1 Intermediate Course and Type 1 Surface Course.
- 2. Contract B shall be responsible to coordinate with the Owner to offload the new generator at the Gary L. Kron (GLK) Water Reclamation Facility. The generator is currently scheduled to arrive at the GLK in June. Contract B shall offload the generator and place the generator into storage at the GLK. When the site is ready for the generator, the contractor shall load and deliver the generator and ATS to the pump station site. The GLK is located at 8471 Lakeshore Blvd, Mentor, Ohio. No additional cost shall be incurred by the Owner for this work.

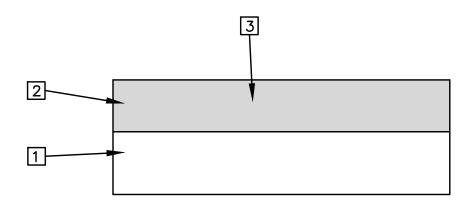
BID FORMS

Add Bid Form Page BF-15E-2 Alternate for Huntington Road for Contract B and Add Bid Form Page BF-15I-2 Alternate for Huntington Road for Combined Contracts A & B.

PLANS

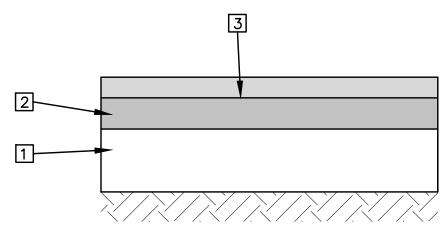
- 1. On Sheet 48 of 52, **delete** Note 1 under Type C Pavement Replacement.
- 2. Add the Generator Foundation Sketch Q17 inadvertently left out of Addendum 1.

CK/RS/BR:rs/br



- 1. EX. PAVEMENT
- 2. 1.5" PAVEMENT MILLING
- 3 1.5" ODOT ITEM 441 TYPE 1 SURFACE COURSE

HUNTINGTON ROAD RESURFACE



- 1. 6" 304 AGGREGATE
- 2. 1.75" ODOT ITEM 441 TYPE 1 INTERMEDIATE COURSE
- 3. 1.25" ODOT ITEM 441 TYPE 1 SURFACE COURSE
- 4. ODOT ITEM 203 SUBBGRADE COMPACTION

HUNTINGTON ROAD RESURFACE



Huntington Road Pavement Resurfacing

Scale: NTS

Limits of Resurfacing

Notes:

- 1. Contract B shall mill 1.5" of existing pavement and replace with 1.5" of ODOT Item 441 Type 1 Surface Course for the full length as noted above.
- 2. Total length of Huntington Road to be resurfaced shall be 932 feet from Mantle Road to the western end of Huntington Road. The limits shall include the aprons at the intersection of Huntington Road and Mantle Road.
- 3. Resurfacing shall be full width of pavement.
- 4. Full depth replacement shall be as determined by the Owner.
- 5. Contractor shall saw cut areas to have full depth replacement in neat, straight lines. The pavement shall be removed, and the subbase restored and compacted per ODOT Item 203.

Proposal to Lake Co. Board of Commissioners
For Red Creek Sanitary Sewer Improvements
Contract B - Alternate - Huntington Road
Project No. 180304

				LINI	UNIT	TOTAL	
REF.	DESCRIPTION	QTY.	MEASURE UNITS	PRICE LABOR	PRICE MATERIAL	UNIT PRICE	ITEM TOTAL
1	(204) EXCAVATION OF SUBGRADE	37.00 CY	CY	\$	S	S	S
2	(204) GRANULAR MATERIAL, AS PER PLAN	37.00	CY	\$	8	S	\$
3	(253) PAVEMENT REPAIR, AS PER PLAN	19.00	CY	S	S	S	\$
4	(254) PAVEMENT PLANING, ASPHALT CONCRETE	2,200.00	SY	\$	8	S	\$
S	(441) ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	92.00	CY	\$	8	S	\$
				INFORMAL TOTAL BID	OTAL BID \$		

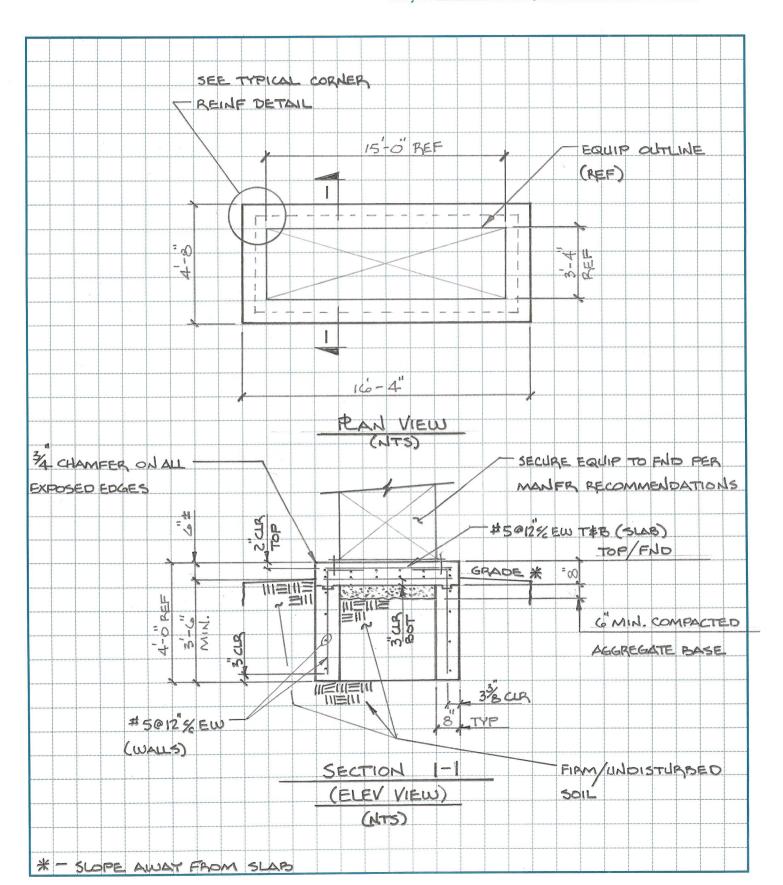
Proposal to Lake Co. Board of Commissioners
For Red Creek Sanitary Sewer Improvements
Combined Contract A & B - Alternate - Huntington Road
Project No. 180304

REF.	DESCRIPTION	QTY.	MEASURE UNITS	UNIT PRICE LABOR	UNIT PRICE MATERIAL	TOTAL UNIT PRICE	ITEM
_	(204) EXCAVATION OF SUBGRADE	37.00 CY	CY	8	\$	\$	\$
2	2 (204) GRANULAR MATERIAL, AS PER PLAN	37.00 CY	CY	8	\$	\$	\$
æ	(253) PAVEMENT REPAIR, AS PER PLAN	19.00	CY	8	\$	\$	\$
4	(254) PAVEMENT PLANING, ASPHALT CONCRETE	2,200.00	SY	8	↔	8	S
5	(441) ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	92.00	CY	S	↔	\$	S
				INFORMAL TOTAL BID	TAL BID §		



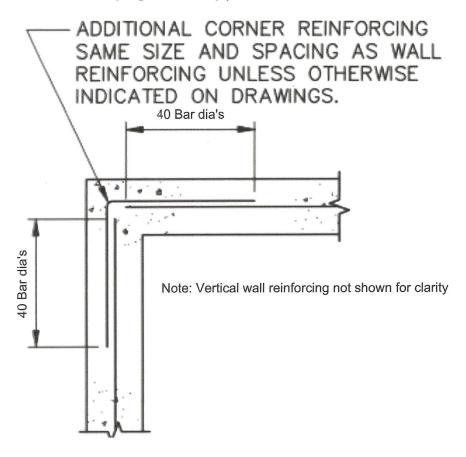
www.ctconsultants.com

Project RED CRK SEWERAGE IMFR PROJ
Project No. 180304 Sheet No. 1 of ______
Calculated By CMM Date 2-16-24
Checked By _____ Date ____
Subject GENERATOR FOUNDATION





Project RED CREEK
Project No. 1803-04 Sheet No. 2 of
Calculated By CMM Date 2-16-24
Checked By Date
Subject GENERATOR FND



TYPICAL WALL CORNER REINFORCING DETAIL

SCALE: N.T.S.





RED CREEK WWTP GENERATOR FOUNDATION 180304

2/16/24 REV. 0

I. FOUNDATION PREPARATION

- 1. FOUNDATION EXCAVATION SHALL BE CHECKED BY A LICENSENED GEOTECHNICAL ENGINEER PRIOR TO SETTING FORMS OR PLACING CONCRETE, TO CONFIRM THAT THE FOLLOWING DESIGN CONDITIONS ARE ACHIEVED IN THE FIELD:
 - a. FOUNDATION EXTENDS BELOW THE ACTUAL FROST DEPTH (ESTIMATED @ 42" BELOW FINISH GRADE)
 - b. NET ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF MIN.
- 2. FOUNDATION EXCAVATION SHALL BE DUG WITH A FLAT BOTTOM BY A METHOD THAT WILL NOT DISTURB THE BEARING MATERIAL.
- SOIL LOOSENED DURING EXCAVATION SHALL BE REMOVED FROM THE FOUNDATION BOTTOM.
- 4. THE FOUNDATION BEARING SURFACE SHALL BE PROTECTED AGAINST WATER ACCUMULATION FROM RAINFALL, SURFACE DRAINAGE, SIDEWALL SEEPAGE, ETC.

II. CAST-IN-PLACE CONCRETE

1. CONCRETE WORK SHALL CONFORM WITH THE LATEST EDITION OF THE FOLLOWING ACI CODES:

ACI 301 --- SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS

ACI 305R --- HOT WEATHER CONCRETING COLD WEATHER CONCRETING

ACI 318 --- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

ACI 117 --- STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS

- 2. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) AND THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
- 3. IN ACCORDANCE WITH PROJECT SPECIFICATION SECTION 030000 CONCRETE WORK, CONCRETE SHALL BE CLASS "A" NORMAL WEIGHT CONCRETE AND DEVELOP A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000PSI. THE DESIGN MIX SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45, INCLUDE A HIGH RANGE WATER REDUCING ADMIXTURE AND PROVIDE 6% ± 1% AIR ENTRAINMENT.
- 4. CONCRETE SHALL BE MOIST CURED FOR SEVEN (7) DAYS AND PERMITTED TO AIR DRY FOR A MINIMUM OF THREE (3) DAYS AND THE STRENGTH CONFIRMED WITH CYLINDER BREAKS PRIOR TO PLACING THE GENERATOR ON THE EQUIPMENT PAD.
- 5. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE MAINTAINED:
 - a. FOUNDATION WALLS CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 3"
 - b. TOP SLAB: 3" BOTTOM, 2" TOP AND SIDES



RED CREEK WWTP GENERATOR FOUNDATION 180304

2/16/24 REV. 0

- EXPOSED EDGES OF CONCRETE EQUIPMENT PAD SHALL BE CHAMFERED 3/4", UNLESS NOTED OTHERWISE.
- 7. KEYWAY DEPTH AND WIDTH SHALL BE A MINIMUM OF 1 1/2" x 1/3 THE FOUNDATION WALL THICKNESS, UNLESS NOTED OTHERWISE; STANDARD LUMBER SIZES ARE SUFFICIENT.
- 8. ALL CONSTRUCTION JOINTS SHALL BE WATER STOPPED WITH PREFORMED PLASTIC WATERSTOP UNLESS OTHERWISE NOTED. THE PREFORMED PLASTIC WATERSTOP MATERIAL SHALL BE SYNKO-FLEX SF302 1'X1" SQUARE WATERSTOP STRIPS WITH SYNKO-FLEX SOLVENT PRIMER SF311, MANUFACTURED BY HENRY COMPANY, OR APPROVED EQUAL.
- 9. PRIOR TO PLACING ANY CONCRETE:
 - a. WORK SHALL BE CLOSELY COORDINATED WITH THE OWNER'S FIELD ENGINEER AND THE WORK OF THE ELECTRICAL CONTRACTORS.
 - b. UNDERGROUND UTILITIES, EMBEDDED CONDUITS AND ASSOCIATED STUB-UPS SHALL BE INSTALLED. CONDUIT SHALL BE PLACED/INSTALLED IN ACCORDANCE WITH APPROVED SHOP DRAWING SUBMITTALS.
- 10. ELEVATION INDICATED ON THE DRAWING IS TOP OF CONCRETE EQUIPMENT PAD, UNLESS NOTED OTHERWISE.
- 11. CONCRETE SURFACE TO BE LIGHTLY BEVELED/SLOPED TO PREVENT WATER FROM POOLING BENEATH THE EQUIPMENT AND SHALL RECEIVE A STEEL TROWEL FINISHED TO PRODUCE A SMOOTH TEXTURE.

III. REINFORCING STEEL

- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GR 60 (FY=60KSI) DEFORMED BILLET STEEL BARS, UNFINISHED.
- 2. REINFORCING BARS SHALL NOT BE SPLICED OR TIED TOGETHER BY TACK WELDING IN THE FIELD.
- 3. REINFORCING BARS SHALL NOT BE BENT IN THE FIELD BY HEATING.
- 4. HOOKS, BENDS, SUPPORTS AND SPACERS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL.
- 5. WHERE NOT SPECIFICALLY SHOWN/NOTED, MINIMUM REBAR LAP SPLICE AND ANCHORAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE "MINIMUM LAP SPLICE & ANCHORAGE DIMENSIONS FOR CAST IN PLACE CONCRETE REINFORCING" PER ACI 318, BUT SHALL NOT BE LESS THAN 12", UNLESS OTHERWISE NOTED.



RED CREEK WWTP GENERATOR FOUNDATION 180304

2/16/24 REV. 0

IV. ANCHOR BOLTS

- POST-INSTALLED ANCHOR BOLTS FOR MOUNTING THE GENERATOR SHALL BE HILTI BRAND (OR APPROVED EQUAL) ADHESIVE ANCHORS FOR INSTALLATION IN SOLID CONCRETE INSTALLED WITH CORRESPONDING EPOXY ADHESIVE (HIT-HY 200 <u>OR</u> HIT-RE 500 V3 OR APPROVED EQUAL) AS APPLICABLE FOR TEMPERATURE AND HOLE CONDITIONS AND CONFORM WITH THE FOLLOWING:
 - a. GENERATOR SHALL BE ANCHORED TO THE EQUIPMENT PAD WITH HOT DIPPED GALVANIZED HAS-E 55 (ASTM F1554, GR-55, HDG) THREADED ROD ANCHOR BOLTS IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATIONS AND REQUIREMENTS. ANCHOR BOLTS SHALL BE DOUBLE NUTTED, UNLESS NOTED OTHERWISE.
 - b. ANCHOR BOLT SIZE, LOCATION, SPACING AND EMBEDMENT SHALL BE IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER SPECIFICATIONS AND REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADEQUATE EDGE DISTANCE IS MAINTAINTED FOR THE SPECIFIED ANCHOR BOLTS. CONTRACTOR SHALL COORDINATE SPECIFIED ANCHOR BOLT EMBEDMENT WITH THE SLAB THICKNESS PRIOR TO FORMING AND PLACING CONCRETE, TO ENSURE ADEQUATE EMBEDMENT PLUS 2" MIN COVER IS ACHIEVED.
 - c. ANCHOR BOLT NUTS SHALL BE ASTM A563 GRADE DH OR ASTM A194 GR 2H HEAVY-HEX CARBON-STEEL NUTS, GALVANIZED FINISH. A GALVANIZED ASTM F436, HARDENED CARBON-STEEL FLAT CIRCULAR WASHER SHALL BE USED UNDER THE NUT OF EACH ANCHOR BOLT.
 - d. ADHESIVE ANCHOR SYSTEMS MUST COMPLY WITH THE LATEST REVISIONS OF ICC-ES ACCEPTANCE CRITERIA AC308 AND HAVE A VALID ICC-ES REPORT IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE.
 - e. DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH INSTRUCTIONS ACCOMPANYING ADHESIVE CARTRIDGES AND APPLICABLE ICC-ESR.
 - f. NO REBAR SHALL BE CUT FOR INSTALLATION OF THE POST INSTALLED ANCHORS.
 - g. BORE HOLE CLEANING PROCEDURES MUST COMPLY WITH INSTRUCTIONS ACCOMPANYING THE ADHESIVE CARTRIDGE AND APPLICABLE ICC-ESR IN ORDER TO PRODUCE A DRY, DUST-FREE HOLE.
 - h. INJECTION OF ADHESIVE SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS ACCOMPANYING PRODUCT AND APPLICABLE ICC-ESR TO PRODUCE AN AIR-VOID FREE INJECTION.
 - i. ALTERNATE DRILLING METHODS, SUCH AS DIAMOND CORING, MUST BE APPROVED IN ADVANCE BY THE ENGINEER AND COMPLY WITH THE APPLICABLE ICC-ES REPORT.
 - THREADED ROD FASTENING ELEMENTS MUST BE CLEAN, DRY AND FREE OF ANY OIL OR CONTAMINANTS.