



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**

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August 1, 2014

Village of Lombard  
1051 S. Hammerschmidt  
Lombard, IL 60148

Attention: Mr. Luke Sharp

Subject: Civic Center / Garfield Lift Station / Westmore Lift Station Generators  
95% Submittal  
Village of Lombard  
(CBBEL Project No. 14-0120)

References: Village Comments Via Email Dated July 1, 2014.

Dear Mr. Sharp:

Enclosed please find the following responses to the above referenced review comments.

Comment 1: See attachment one line diagram info – applies to Sheets E1 and E3

- o Provide conductor sizes (typ).
- o Provide primary O.C.P.D. rating for 5Kva transformer.
- o Are these part of a panel board?
- o Generator breaker exceeds generator output rating and wire ampacity.

**Response 1: The electrical diagram drawings for the pump control cabinets at Garfield and Westmore as manufactured by Flolo are included and show these details. The generator main breaker for Garfield was changed to 70A. The wiring from the generator to ATS, and ATS to pump controller at Westmore was changed to #1/0 awg for the 125A generator breaker.**

Comment 2: Sheets E1 and E3, Note 1 – Ensure we cover this – Bond all conduits, enclosures, and equipment with #6 Copper.

**Response 2: Note 1 was expanded to cover this.**

Comment 3: Sheet E2 - It appears that a transformer is missing in the plans to provide the 120/240V power. Confirm diagram is correct.

**Response 3: The existing transformer in the main switchboard is now shown.**

Comment 4: Use "LB Mogul" conduit Elbows where "LB" is mentioned - E2. The same with "LB Boxes" mentioned on sheet E2 – top right.

**Response 4: This note was added as requested.**

Comment 5: Sheet D1 – Note 7 – Primed and painted using a rust resistant coating.

**Response 5: This note was added as requested.**

Comment 6: Sheet D2 – add another note: All enclosures, conduits, and equipment shall be bonded with NEC compliant sizing (250.122)

**Response 6: This note was added as requested.**

Comment 7: Add to Sheet GN - Contractor must secure a no fee permit for each location for the electrical work.

**Response 7: This note was added as requested.**

Comment 8: NICOR tentative gas line installation date is August 25th.

**Response 8: Noted.**

Comment 9: Sheet GN – need a line in there for tree protection within work zone – keep it simple, width of crown, up before construction starts. No trimming unless authorized by the Village.

**Response 9: A note has been added to cover this and also references the tree protection spec 107.24.**

Comment 10: Sheet GN - Excavation and Backfill Notes: Village to pretest and confirm spoil conditions at each location prior to the start of the project. Contractor will know ahead of time, what they are going to encounter but will need to manifest the loads on their own, etc, etc.

**Response 10: This information has been added to this note.**

Comment 11: Sheet GN – Shop Drawing Review Note # 7 – only need 3 copies not 4.

**Response 11: This note was revised as requested.**

Comment 12: Sheet GN – Add the following:



- Restoration Plan – seed and blanket are allowed at all sites. Contractor responsible for 10 waterings of seed/blanket. Coordinate with Village staff if hydrant meter is needed
- Wire Labeling: All wires shall be tagged at every termination point using oil and waterproof tags with indelible markings. Short wire lengths (less than 8”) where the entire conductor is visible may be tagged at just one end. Wire tag numbers shall be as indicated in the drawings.
- Do not route any communication cables in wire ways with 120VAC wiring. Route all these cables away from 120VAC wiring. Where 120VAC wiring conductors must be crossed, do so at right angles and provide at least 1” separation.
- Garfield Control Cabinet shall be returned to the Village for disposal; all other wire and miscellaneous pieces can be disposed of by the contractor.

**Response 12: These notes have been added to this sheet.**

Comment 13: Sheets E1 and E3, Note 1 – stress that Village will deliver, but contractor will be responsible offloading and installation. Do we mention that the crane is on them? I like to specify ahead of time.

**Response 13: We expanded on note 1 to clarify that the crane was to be furnished and coordinated by the contractor.**

Comment 14: Sheets E1, E2 and E3 – I believe we need a SCADA wire/cable tag ID diagram? See below...and advise. Something reflecting how many wires will be pulled, tagged, labeled, and where to terminate. Does Flolo need to provide this for inclusion into the plans? They will be providing info on Garfield, but what about the other 2 sites?

**Response 14: The specifications include requirements for the contractor to furnish and install wire identification tags.**

Comment 15: Sheets E1, E2 and E3 – contractor responsible for working with the Village’s SCADA integrator Energenecs/Kamp, etc to ensure enough lead time is given for integration of newly installed equipment, etc to occur.

**Response 15: A note has been added to the plans.**

Comment 16: Sheet E1, Note 3 – Existing cables shall be plugged and abandoned.

**Response 16: This note has been revised as requested.**

Comment 17: Sheet E1 – Make mention that by pass pumping at Garfield, if needed, can be accomplished inside the valve vault next to wet well.

**Response 17: A note 6 has been added with this information.**

Comment 18: Sheet E1, Note 5 – Flolo will furnish the new transducer cable and floats; not the Village.

**Response 18: Although this material will be supplied by Flolo, it will ultimately be furnished by the Village so we did not change the note.**

Comment 19: Sheet E2 – nothing mentioned about using the Village's portable generator, coring a hole thru the building, running temp cables, etc for backup power while the existing generator is decommissioned.

**Response 19: A manual transfer switch and receptacle was added to the plans for connection of the Village's 200kw portable generator. This will allow manual backup power during construction as well as in the future if the stationary generator needs to be taken out of service.**

Comment 20: Sheet E2 - Proposed CCRF gen set is a 450kW, not 400kW as listed.

**Response 20: The call out was revised.**

Comment 21: Sheet E2 – are the 2 differently sized concrete pads dowel barred in, or expansion joint between the 2?

**Response 21: The note was revised to indicate an expansion joint between pads.**

Comment 22: Sheet E2 - Village to coordinate delivery of 450kW gen set to Civic once prep work is complete, but contractor will be responsible for offloading and installation. Do we mention that the crane is on them? I like to specify ahead of time.

**Response 22: We expanded on note 1 to clarify that the crane was to be furnished and coordinated by the contractor.**

Comment 23: Sheet E3 – contractor responsible for watering the shrubs 10 times.

**Response 23: This was added to the call out note.**

Comment 24: Sheet D1 – who supplies the manual shut off valve on the Nicor line? I say contractor. Just ensure note 6 covers this. I have the regulators in my possession.

**Response 24: A note has been added to the plans that the primary regulators will be furnished by the village and installed by the contractor.**

Comment 25: Bollard detail – nowhere on the plans do I see a reference to any bollards?



**Response 25:** Bollards were added to the Garfield and CCRF sites.

Comment 26: Sheet D2 – we only have 2 floats in our system – all pumps off, and high level. The middle float goes away. The high level float, if tripped, will activate a high level alarm and fire all pumps.

**Response 26:** Detail has been revised to indicate a 2 float setup.

Comment 27: Sheet D2 - Bottom right title – Change Garfield “Light” Station – to Garfield “Lift” Station.

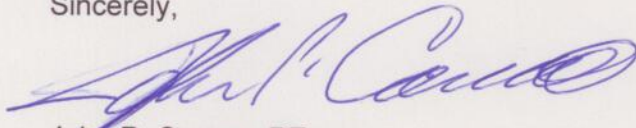
**Response 27:** Change has been made.

Comment 28: As long as you have a project code WA 13 02 that's good. Just make sure Burke places on cover sheet.

**Response 28:** The project code has been placed on cover sheet.

If you have any questions, please call.

Sincerely,



John P. Caruso, PE  
Head, Mechanical/Electrical Department

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