

DG 17-048  
 Planning and Budgeting  
 Training Center  
 PB-2: Staff Questions 6-25, Staff 6-27 through Staff 6-29, Staff 6-31, Staff 6-32

Please see below for the documents and information requested in the various questions listed above.

- Capital Project Expenditure Application – Attachment PB-2.1 and PB-2.2 (attached to Business Cases)
- Business Case – Attachment PB-2.1 (original dated 1/24/2014)
  - Attachment PB-2.2 (updated Business Case dated 5/1/2014)
- Project Cost History – Attachment PB-2.3 is a Project Cost History dated as of 10/23/2015 that covers costs incurred through November 2014. For additional information on the project costs incurred during the life of the project and subsequent to November 2014, please see Attachment PB-2.6.xlsx.
- Details of the \$1.45 million estimate discussed in the testimony of Steven Mullen in DG 17-048:

|  |                  |
|--|------------------|
| Design/Engineering                     | 70,000           |
| Material                               | 351,240          |
| External Contractor Costs              | 439,050          |
| Internal Costs                         | 15,000           |
| Other Costs (Contingency)              | 87,810           |
| Soft Costs                             | 65,000           |
| Total per 1/24/2014 Business Case      | 1,028,100        |
| Increase due to Water Table/Foundation | 421,900          |
|  | <u>1,450,000</u> |

- Over Expenditure Application – Attachment PB-2.4
- Project Close Out Report (including supporting documents) – Attachment PB-2.5
  - Note: Items listed in Section 3 of the Project Close Out Report do not apply in all cases. Indication that the location of the documents is the “Local W Drive” means that is the location if the document is available. In addition, the “Project Charter” referenced in Item 3.4b is really the same as the “Business Case” referenced in Item 3.4a. Budget documentation is provided in response to PB-3 and PB-4. Status Reports and a discussion of Risks and Issues are included in the Monthly CapEx Update meetings and documentation discussed in response to PB.1 (see Attachment PB-1.3, for example). In addition, please see Section 5 of the Project Close Out Report for a list of Lessons Learned and Section 7 for any Open Issues.

2016 was the first year of using the Project Close Out Reports, and the Financial information in Section 8 relates on to 2016 rather than the entire life of the project. Liberty will continue to “fine tune” its use of the Project Close Out report.

- Summary of expenditures – Attachment PB-2.6.xlsx

Attachment PB-2.3  
 Supplemental

| Concord - Training Center<br>Project Cost History |   |              |                 |
|---|---|--------------|-----------------|
| Date/Item   | Description   | Cost         | Cumulative Cost |
| Jan-14  | Initial Estimate for metal framed building  | 700,000.00   |                 |
| Feb-14  | Estimate for 1-story building with mezzanine (No Site Work)   | 1,148,225.00 |                 |
| Apr-14  | Estimate for 2-story building with changes to entrance elevation and stairways and includes Site work   | 1,641,170.00 |                 |
| Jul-14  | Original North Branch GMP construction contract estimate based on 100% building and Site work plans   | 1,955,492.00 |                 |
| Sep-14  | Final North Branch GMP construction estimate with added winter contingency and trolley hoist allowance. Winter contingency would not have been required if project started in July as originally anticipated.   | 2,041,792.00 |                 |
| CP1   | Builders Risk Insurance - Requested by Liberty Legal  | 1,593.00     | 2,043,385.00    |
| CP2   | Broken Bridge Road Improvements - Includes water line and road improvements. Cost split between Training Center and CNG. Training Center \$201,605, CNG \$287,300   | 488,905.00   | 2,532,290.00    |
| CP5   | Gas Line Sleeve - Addition of 2" Schedule 80 sleeve in order to install gas service after base coat paving is completed. This was needed due to fact that gas service couldn't be installed by Liberty prior to paving.   | 1,527.00     | 2,533,817.00    |
| CP6   | Winter Paving - Installation of Site base paving in winter in order to apply for conditional CO in March. Cost reflects \$26.85 per ton material upcharge for pavement plant winter conditions.   | 11,180.75    | 2,544,997.75    |
| CP7   | Concrete Structure Demolition - Removal of underground concrete bunker (approx. 14x10wx8d) and backfilling of structure with granular structural fill. Structure was located under portion of parking lot and was unknown prior to start of work.   | 4,683.00     | 2,549,680.75    |
| CP8   | Building Water Service - Installation of domestic water service from the new water main to the building. Original North Branch contract included connection to well. Lower future maintenance costs.  | 6,884.00     | 2,556,564.75    |
| CP9   | Road Waterline Revision - Replace a section of existing gravity sewer with ductile iron per City of Concord demand. Also included incasing 40' of waterline bells and fittings adjacent to previously unknown sewer force mains. City originally wanted to reroute waterline which would have cost 3 to 4 times the cost of the scope described above.  | 3,627.30     | 2,560,192.05    |
| CP10  | Road Work Unsuitable Materials - Removal of unsuitable materials (organics) immediately above and below the waterline and the replacement with stone and bank run gravel per City of Concord demands and in accordance with project geotechnical engineer. Removed and replaced 639.6 cubic yards of unsuitable materials (back-up slips available). \$10/cubic yard remove and dispose and \$27/cubic yard replacement. Unit rates established in CP2.   | 26,279.20    | 2,586,471.25    |
| CP11  | Unsuitable Materials (On-Site) - Removal of unsuitable materials encountered during on-site excavation through 11/17/14. Included removal, disposal, and replacement of 471.5 cubic yards of concrete, trash, and misc. debris at contract unit cost of \$30/CY (back-up slips available).  | 14,145.00    | 2,600,616.25    |
| CP12  | Credit For Deleted Fire Dampers - Credit back for cost of two deleted fire dampers  | (250.00)     | 2,600,366.25    |
| CP13R   | Added Data and Power - Addition of three, four-gang floor boxes in each classroom to provide power and data for laptop use for training. Original plan was for wireless, but concerns were raised by Liberty training and IT after issues with large training sessions utilizing wireless have recently occurred.   | 10,549.00    | 2,610,915.25    |
| CP14  | Red Lobby Phone - New requirement at all Liberty facilities   | 514.00       | 2,611,429.25    |
| CP15  | Broken Bridge Road Underdrain - Addition of new catch basin and 6" underdrain. Underdrain required due to water seeping up through waterline gate valve as a result of install of new waterline on Broken Bridge Road and use of crushed stone fill under waterline. Crushed stone was utilized due to organics. New catch basin was required due to fact that existing catch basin to be reused was in poor condition at the base of the structure and structure could not be cored to accept new 15" outlet pipe. | 15,073.00    | 2,626,502.25    |
| CP16  | Fast Track Schedule - directive from Liberty management to ensure completion and temporary CO by 3/31/15. Included working all weekends and certain double shifts.  | 158,627.00   | 2,785,129.25    |
| CP18  | Gas Detection System - Installation of building gas detection system. Fire department had already reviewed and approved building plans but added gas detection system as a last minute change. Required to obtain CO.   | 15,438.00    | 2,800,567.25    |
| CP20  | Roof Hatch Safety Railing - Added Liberty safety team requirement. Railing was not required by code.  | 1,677.00     | 2,802,244.25    |
| CP21  | Hoist Beam Allowance Reconciliation - Original allowance of \$7,500 for hoist and trolley system did not cover total cost of install.   | 2,731.00     | 2,804,975.25    |
| CP22  | Rubber Stair Tread Grip Tape - Added Liberty safety team requirement  | 742.00       | 2,805,717.25    |

(1)

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|        |   |            |              |                            |                         |
|--------|---|------------|--------------|----------------------------|-------------------------|
| CP23   | Winter Conditions Allowance Closeout - Original allowance was not adequate due to harsh winter and need for extra project heat and tenting due to delay in project start date resulting from hold up on roadway turn-around easement from City of Concord. City would not let project start until easement was completed.   | 46,567.00  | 2,852,284.25 |                            |                         |
| CP24   | Building Sign/Canopy Closeout - Original sign allowance was not adequate to cover cost of canopy and sign. Significant additional funds were needed for zoning board variance due to size of sign.  | 15,821.00  | 2,868,105.25 |                            |                         |
| CP25   | Water Services - Original City approved off-site roadwork plans indicated that city was responsible for install of water services to residences on Broken Bridge. Prior to allowing road work to continue in spring 2015 City indicated that the direction on the plans was incorrect and Liberty is responsible for the water services. City would not let roadwork commence until this was agreed to. Road work needed to be completed prior to getting final CO. | 10,837.00  | 2,878,942.25 | Excel file<br>2,857,667.52 | Difference<br>21,274.73 |
| Oct-14 | Miller - Testing agency fees not included in original project estimate.   | 14,000.00  | 2,892,942.25 | 6,110.43                   | 7,889.57                |
| Jul-14 | CMK - Architectural fees not included in original project estimate.   | 152,600.00 | 3,045,542.25 | 163,149.18                 | (10,549.18)             |
| Jul-14 | Northpoint - Civil Engineering fees for building and roadwork not included in original project estimate   | 102,561.00 | 3,148,103.25 | 133,344.86                 | (30,783.86)             |
| Oct-14 | Securadyne - Security excluded from original North Branch contract  | 58,898.00  | 3,207,001.25 | 58,989.70                  | (91.70)                 |
| Oct-14 | City Fee - Traffic impact fee not included in original project estimate   | 19,015.00  | 3,226,016.25 |                            |                         |
| Oct-14 | City Fee - City of Concord Inspection Fee not included in original project estimate   | 33,300.00  | 3,259,316.25 |                            |                         |
| Oct-14 | City Fee - Water Investment Fee not included in original project estimate   | 2,595.00   | 3,261,911.25 | 64,692.85                  | (9,782.85)              |
| Nov-14 | FFE - Not included in original project estimate   | 23,810.00  | 3,285,721.25 | 23,810.78                  | (0.78)                  |

CP = Change Proposal

WB Mason

Difference In estimates/to-date costs above versus Excel spreadsheet 22,044.07 ← (22,044.07)

**Items not included in 10-23-15 Project Cost Summary above:**

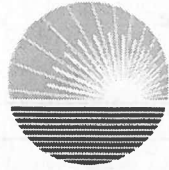
|  |                     |
|--|---------------------|
| Contract employees   | 8,607.25            |
| Electric Meter Training Board                                    | 15,238.17           |
| Technology Cabling   | 14,475.33           |
| Electric Pole  | 2,312.92            |
| Technology Costs   | 3,570.68            |
| GZA Environmental  | 86,155.17           |
| P Card Purchases   | 1,679.06            |
| Pressure Testing Instrument                                      | 386.00              |
| Manhole Cover and Guard  | 1,373.02            |
| NE Controls  | 1,399.00            |
| NH Dept. of Revenue (Permits/Fees)                               | 827.60              |
| NH Dept. of Labor (Elevator Inspection Fee)                      | 100.00              |
| Reeds Ferry (Storage Shed)                                       | 4,758.00            |
| RH White   | 238,325.00          |
| Freight  | 783.03              |
| Tools & Equipment  | 9,809.00            |
| Shope Equipment  | 7,568.88            |
| Company Labor  | 47,148.95           |
| Burdens  | 287,072.30          |
| Amount transferred to INATGAS CNG Facility Project 8840-ENIC0110 | (287,299.20)        |
| Cost Code Adjustments  | 6,715.08            |
| AFUDC  | 41,689.85           |
| Misc. Vendors  | 7,380.00            |
| Materials/Supplies   | 23,685.83           |
| Employee Reimbursements  | 1,147.32            |
| <b>Total</b>   | <b>3,832,673.56</b> |

Spreadsheet total as of December 31, 2016 (Attachment PB-6)

3,832,673.56  
Difference -

(2)

3



**Liberty Utilities**<sup>SM</sup>  
WATER | GAS | ELECTRIC

**Over Expenditure Spending Request Form**

|  |   |  |
|--|---|--|
| <b>REQUESTED BY (Dept):</b>  | Michael G. Knott  |  |
| <b>PROJECT# &amp; DESCRIPTION:</b>   | Energy North Training Center                                  |  |
| <b>ADDITIONAL DESCRIPTION:</b>   | Cost increase for the construction of the new training center |  |
|  | Original budget was \$1,028,100 and it is now \$2,347,000     |  |
| <b>COST &amp; MANHOURS:</b>  | \$1,318,900   | Hrs  |
| <b>REASON FOR REQUEST:</b><br><small>(right click on box &amp; select properties to check off)</small> | Nonbudget <input type="checkbox"/>                            | Overbudget <input checked="" type="checkbox"/> |
| <b>REQUESTOR SIGNATURE</b><br><small>(name &amp; signature) :</small>                                  | Michael G. Knott  |  |
| <b>APPROVED BY</b><br><small>(name &amp; signature) :</small>  |   |  |
| <b>APPROVED BY</b><br><small>(name &amp; signature) :</small>  |   |  |

|   |
|---|
| <b>1. DESCRIPTION</b>   |
| <p>The training facility was to be located on the southernmost property line of 0f lot 109-1-2. Due to the wetlands located on the property, and as the design further developed, it was in the interest of the permitting and construction process of the proposed building site to slide the building further away from the wetlands. This was intended to accommodate the required parking, circulation drives as required by fire department, and to allow the installation of a leak field that meets the requirements of the trainers.</p> <p>Additionally due to the site soil conditions and groundwater elevations the site requires over excavation of underlying soils and the use of a dewatering process during footing and foundation work in order to pour concrete without restriction. The high water table requires considerable additional site drainage and an increase in the size of the storm water pond in order to create bearing capacity for the structures and the parking lot with under drains to provide water proofing and stability (\$422K total). Subcontractor bids for this project also came back much higher than anticipated. The price was raised by approximately \$600K due to these bids. Lastly, the aforementioned cost increases have driven higher soft costs (Architect, Civil Engineer, Construction Management etc.) by an additional \$150K . Placing a 15% contingency on these increases adds an additional \$175K.</p> |

|  |
|--|
| <b>2. WHAT WILL BE ACHIEVED BY THIS EXPENDITURE? (changes, improvements)</b> |
|--|

We will be able to train our employees in a safe and professional atmosphere.

**3. WHY IS THIS EXPENDITURE NECESSARY?**

The training center is necessary because we need to train our employees and the additional funds are needed due to the water table issues during construction.

**4. WHAT ALTERNATIVES WERE CONSIDERED AND REJECTED? WHY?**

We could have moved the training center which would be expensive as we would have to buy land. We could also send our employees to an outside trainer but this would be both expensive and would not be feasible due to the nature of our business.

**5. RISKS/CONSEQUENCES IF EXPENDITURE NOT APPROVED** (provide dollar impact where possible)

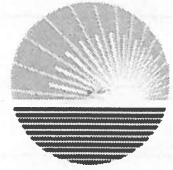
The training center does not get built or it is built in a cheap manner and falls into quick disrepair.

**6. CHECK OFF ONE RANKING THAT APPLIES TO REQUEST** (see definition of ranking terms)

(right click on box & select properties to check off)

|                      |                          |                               |                                     |
|----------------------|--------------------------|-------------------------------|-------------------------------------|
| 1. Legal requirement | <input type="checkbox"/> | 2. Essential                  | <input checked="" type="checkbox"/> |
| 3. Important         | <input type="checkbox"/> | 4. Valuable but discretionary | <input type="checkbox"/>            |

**Capital Expenditure Summary Form**



**Liberty Utilities**<sup>SM</sup>  
 WATER | GAS | ELECTRIC

**LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION**

|  |  |  |  |
|--|--|--|--|
| DIVISION/COMPANY:<br>New Hampshire Energy<br>North   |  | HOME OFFICE<br>REF #:                                  |  |
| PROJECT TITLE:<br>Construct Training Center<br>at Broken Bridge in<br>Concord NH   |  | EXPECTED PROJECT<br>TOTAL: 1,028,100                   |  |
| PROJECT TYPE (circle one):   |  | System Maint / System Project<br>/ <u>Growth</u> / LXA |  |
| PROJECT START DATE:  |  | PROJECT END DATE:                                      |  |
| January 2014   |  | December 2014  |  |
| CURRENT UTILITY<br>EARNINGS STATUS:  |  | JOB COST/FWO #:  |  |
| Type of Capital Project:   |  |  |  |
| <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Growth<br/> <input type="checkbox"/> Improvement Upgrades<br/> <input type="checkbox"/> Infrastructure Replacement                 </div>  |  |  |  |
| PROJECT DESCRIPTION & LOCATION: The project will consist of ground up construct of the Liberty Utilities Training Center building to be located on Broken Bridge Rd in Concord NH. There will be site work for a foundation, septic system and asphalt parking area. The masonry building will consist of office space, first and second floor classroom space, high bay lab / training area with a mezzanine, lunch room, standard and ADA compliant restrooms. A well for potable water and fire suppression will also be installed. |  |  |  |
| IS THIS PROJECT GROWTH RELATED? IF "YES", DESCRIBE THE SPECIFIC LOCATION (MAP) AND LIST APPLICABLE DEVELOPERS WHERE GROWTH WILL OCCUR (CONSULT WITH DEVELOPMENT SERVICES REGARDING FUNDING). This is not growth related.   |  |  |  |
| PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. There is permitting from the City of Concord.  |  |  |  |
| COST ESTIMATE FOR TOTAL PROJECT, NATURE OF ESTIMATE (FIRM FIXED PRICE, INTERNALLY OR EXTERNALLY GENERATED), TIMING OF SPENDING BY QUARTER, AND RISKS ASSOCIATED WITH COST ESTIMATES.   |  |  |  |
| WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT?   |  |  |  |
| IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED:  |  |  |  |
| 1. Original Cost of Plant to be removed (if known):<br>2. What is the replacement cost of the plant being removed (if original cost not known)?<br>3. Original Work Order of Plant to be removed (if known):   |  |  |  |

**Business Case**

|  |               |  |                                     |   |              |
|--|---------------|--|-------------------------------------|---|--------------|
| 4. Is the Plant being removed reusable?                                  |               |  |                                     |   |              |
| 5. What is the year of original installation of the plant being removed? |               |  |                                     |   |              |
|  |               |  |                                     |   |              |
| PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)             |               |  |                                     |   |              |
| CATEGORY & STATUS OF PROJECT<br>(tick as appropriate)                    |               | FINANCIAL SUMMARY  |                                     |   |              |
| Safety   |               | Rate Recovery (over 18 months)   | <input type="checkbox"/>            | If yes, is customer affordability an issue? |              |
| Mandated   |               | Will this, and other approved projects, cause a rate shock   | <input type="checkbox"/>            |   |              |
| Impending Regulatory Obligation  |               | Have Health & Safety implications been considered?   | <input type="checkbox"/>            | If yes, is customer affordability an issue? |              |
| Rate Recovery-Immediate Return   |               | Has Environmental Compliance review been done?   | Yes                                 |   |              |
| Rate Recovery (3 to 6 months)  |               | Has Tech Services review been done?  | Yes                                 |   |              |
| Rate Recovery (6 to 12 months)   |               |  |                                     |   |              |
| Rate Recovery (12 to 18 months)  |               |  |                                     |   |              |
| Was this Capital Expenditure included in the Annual Budget?              |               | Yes  | What amount was budgeted? 1,028,100 |   |              |
| ANALYSIS OF PROJECT VALUE  |               | CAPITAL EXPENDITURE BUDGET UTILIZATION   |                                     |   |              |
| Design/Engineering   | \$135K        | (A) Capital budget<br>(B) Over (under) run vs. Budget<br>(C) (A+B) Total Estimated Project Cost<br>(D) Less Approved Spend to Date<br>(E) Less Future Approval Requests<br>(F) (C-D-E) Approval Amount Requested (current application) | Authorized Amount                   | To be spent in:                             |              |
| Material   | \$351,240     |  | \$1,028,000                         | Current Year                                | Future Years |
| External contractor costs  | \$439,050     |  |                                     | \$1,028,000                                 |              |
| Internal costs   | \$15,000      |  |                                     |   |              |
| Other costs (contingency)  | \$87,810      |  |                                     |   |              |
| Working capital requirements   |               |  |                                     |   |              |
| Project Total Cost   | 1,028,100     |  |                                     |   |              |
|  | Name          | Signature  | Date                                |   |              |
| Requesting Party   | Michael Knott |  |                                     |   |              |
| President – LU East  |               |  |                                     |   |              |
| Vice President Finance   |               |  |                                     |   |              |
| CFO  |               |  |                                     |   |              |
| CEO  |               |  |                                     |   |              |
|  |               |  |                                     |   |              |
|  |               |  |                                     |   |              |
|  |               |  |                                     |   |              |