



**TOWN OF LEDYARD**  
**CONNECTICUT**  
**PUBLIC WORKS DEPARTMENT**

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Comprehensive  
Municipal Facilities  
Critical Needs  
FY 2014 Update

by

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- I. **Background:** For many years, the Town has addressed its municipal capital needs for its facilities mostly through large building projects, typically new facilities involving bonding. Capital needs for existing buildings have been undertaken piecemeal through the CIP process, or sometimes within the operating budget. Many significant capital needs have failed to muster the support necessary to receive funding through the CIP, with the result that a large backlog has developed. An original comprehensive facilities needs report was submitted last year.
- II. **Purpose:** The purpose of this document is to provide an annual update for the comprehensive record of present critical municipal facilities needs intended to provide a basis for a strategic approach to capital improvements and replacements. This document provides the background for the support of CIP proposals for municipal facilities needs and associated cost estimates. In some cases, the proposed item funding includes contingency. Supporting cost information is available in several cases.
- III. **Scope/Background:** The package will accommodate proposals for critical needs at the following non-BOE facilities.
- Town Hall Complex (includes Annex and Former Ambulance Building)
  - Police Station
  - Emergency Services Building
  - Highway Garage
  - Bill Library
  - Gales Ferry Library
  - Senior Center
  - Gales Ferry Facility
  - ACO Facility
  - Former Ledyard Center Firehouse
- IV. **Proposal:** The following delineates the critical needs by facility, along with whatever details exist by way of cost estimates.
- A. **Town Hall Complex:** The Town Hall complex at 741 Colonel Ledyard Highway consists of a main building, an annex, and the former ambulance building. Since the main building's original construction in 1956, the complex has undergone progressive expansion to arrive at its present configuration, and has received various renovations and improvements through the years. The present critical needs are delineated below:
1. **Boiler Relocation:** The boilers for the main building are oriented in a way that makes access for maintenance difficult. An estimate in the amount of \$13,345 for boiler reorientation was received a few years ago.

2. Fire Door Replacement: In accordance with direction from the Fire Marshal, several doors in the main building were targeted for upgrade to fire door rating. Some doors have been replaced (including one in 2013), but eleven (11) remain. The work includes deck plates, door closers, and in some cases new locksets. At an individual cost of \$3,000 each, the estimated total for this effort is \$33,000.
3. HVAC Improvements: In 2011 the air conditioning units were replaced with more efficient ones, but nothing was done to improve the zonal flow in several areas. This item contemplates these improvements to allow more efficient operation and better local control with additional dampers. The estimated cost of this effort is \$6,400. Additionally, the food locker off the Social Services office needs HVAC improvements and repairs. The A/C heat pump compressor is inoperable and needs replacement along with the associated air handling unit, allowing heating and air conditioning. The cost for this effort is estimated at about \$5,000.
4. Attic Ventilators: Lack of air flow in the attic space in the main building has resulted in buckling of shingles due to overheating. This item involves installation of additional ventilators through the brick sidewalls to increase air flow. The cost is estimated at \$7,500.
5. Fire Alarm System. The alarm cannot be heard in the Assessor's office. An additional horn will solve the problem at a cost of about \$1,625.
6. Emergency Power Provision: There is presently no fixed emergency generator that supplies the Town Hall. The only generator on site supplies the former Ambulance Building, and is of insufficient capacity. An estimate of \$55,800 was received in 2012 for provision and installation of an emergency generator of sufficient capacity to operate the entire Town Hall complex. This should be considered as part of the scope of the new Police Station. The scope should at least accommodate the footprint components for the generator, including pad and buried conduit.
7. Annex Improvements: Comprehensive renovations have been proposed for the entire annex building (Council Chambers, bathrooms, administrative spaces). An estimate was provided in July 2012 to the Mayor's office by a local contractor. The following items are contemplated. These individual items and estimates are oriented to an a la carte approach, i.e. they overlap in accomplishing certain items (e.g., A/C unit removal) in the event not all work is undertaken. If all items are accepted, the proposed cost is \$63,800.
  - A/C Unit Removal: Removal of the obsolete wall units and patching of the holes.

Estimated cost: \$5,600.

- Bathroom Renovations: Substantial improvements involving replacement of fixtures in both bathrooms and handicap/unisex conversion for the men's bathroom.

Estimated cost: \$17,300.

- Council Chamber Renovations: A/C unit removal, residing, electrical/electronic improvements, carpeting, and miscellaneous ancillary work.

Estimated cost: \$54,360.

- Administrative Offices: This item involves only replacement of the carpet. There are no structural changes proposed.

Estimated cost: \$8,250.

- Miscellaneous Materials for Above Work; Estimated cost: \$13,000
- Total Estimate if Accomplished Separately: \$98,510; \$63,800 carried in plan.

8. Removal/Replacement of Annex Buried Heating Oil Tank: The above-ground fill extension for the present heating oil tank for the Annex furnace has been damaged as a result of snow plowing efforts. This has brought into question the integrity of the tank itself. There are also general liabilities with buried fuel tanks. The proposal involves removal of this tank and installation of an above-ground tank. An estimate of \$8,584 was obtained in 2012, which does not include any asphalt and miscellaneous repairs associated with the work. This should be included in the scope of the new Police Station work.

9. Town Hall Complex Parking Lot Improvements. The Town Hall complex parking lot is in serious disrepair and needs substantial drainage improvements. This is part of the scope of the new Police Station.

B. Police Station: This facility was converted to office space from a barn built in 1975; it was rented by the Town in 1995 and ultimately purchased in 1998. The following items represent the critical needs at the present facility that need to be addressed in the event that a new facility is rejected. With approval of the new Police Station, it is anticipated that these items will be largely deferred.

1. HVAC Improvements: Several improvements are needed for the existing HVAC system. The scope of these improvements was put to bid in FY12. The low bid received was in the amount of \$62,547.
2. Parking Lot Drainage and Resurfacing Improvements: This item contemplates the completion of the partial improvements accomplished in

2008. These improvements involve new and existing areas of pavement, as well as widening of access areas. A rough estimate of \$80,000 is offered based on square area.

3. **Municipal Water Connection:** Municipal water is now available at this property. As with the Bill Library, we should make this connection. Based on the cost of connection at the Bill Library with additional contingency for ledge in the area, \$15,000 is estimated for this work.
  4. **Emergency Generator Replacement:** The generator for the facility has demonstrated inconsistency and unreliability in its operation over the last several years. It should be replaced with associated electrical improvements. Based on other estimates received for other facilities, this should be around \$40,000.
  5. **Gutter Deicing Improvements:** The gutters on the building have been susceptible to ice damming in the winter, causing failure to convey melting water away from the eaves. This results in spillage onto pedestrian areas. This work involves measures to limit and eliminate ice damming, at an estimated cost of \$10,000.
  6. **Carpet Replacement:** The facility is due for carpet replacement. The estimated cost is \$10,000.
  7. **Attic Insulation Replacement:** The present insulation has become substantially deteriorated through age and has also been further disrupted through various maintenance efforts at the building. In several areas its effectiveness has been compromised. This item involves replacement of the attic insulation at an estimated cost of \$6,000.
  8. **Septic System Improvements:** The present configuration of the septic system includes a pump station because the leach field is above the building. This has presented numerous and increasing operational hardships that in turn have required regular preventive and corrective maintenance efforts. The system is presently being flushed weekly to maintain its routine function. This item would provide for substantial improvements that would improve its long-term viability and function. It would have to be done in coordination with parking lot paving, since it may occupy some area under the parking lot. The estimated cost is \$25,000, not including asphalt repairs.
- C. **Emergency Services Building:** This relatively new building at 11 Fairway Drive was completed in 2004, and has already developed needs related to some wear, but mostly has some inadequacies of original design and construction. The issue related to emergency power distribution was sufficiently resolved in 2012. Critical needs are described below.

1. Heating Efficiency Improvements: The overhead heaters in the equipment bay represent a very inefficient method of heating a space with such a high ceiling, even with the back-fitting of a large overhead fan. Installation of an infrared heating system will dramatically improve effectiveness and efficiency of heating this space and reduce the annual heating costs significantly. The estimated cost is \$30,000.
  2. Balcony HVAC Units Reorientation: One of the two HVAC units installed in the mezzanine area of the equipment bay was apparently reversed in its orientation in such a way that substantially hinders maintenance and requires use of an articulating lift at a cost of nearly \$700 per day. This effort will reorient it to resolve this problem. The estimated cost is \$3,500.
  3. Roof Access Improvements: To meet present building codes and improve safety, a direct access to and through the roof should be provided from within the building. The height of the roof renders access by ladder or lift a much less safe option. The estimated cost of this access is \$10,000.
  4. Heating Flue Replacement: There are eight (8) flues for the heating system, several of which are already exhibiting deterioration. They should all be replaced. The cost is estimated at \$8,000.
  5. Exterior Paint: The building hasn't been painted since construction. The exterior needs some crack repair, as well, in advance of painting. The estimated cost is \$6,000 for this effort.
  6. Sprinkler System Connection and Activation: The building was constructed with most of the internal piping and fixtures required for sprinkling. The SCWA system is inadequate to provide the flows for this system. With the provision of a stub to the building from the WPCA municipal system (and tank) now installed, these flows are available. This item includes all piping and appurtenances necessary to make the interconnection between the WPCA system and the building for the sprinkler system only. The cost should be no more than \$20,000.
- D. Public Works Complex: This complex includes the Ledyard Highway Garage and associated buildings at 889R Colonel Ledyard Highway. The buildings in this complex were originally constructed in 1985. There have been several improvements and renovations to these facilities, but many of the original features and facets remain, including roofs and driveways/parking areas. The following critical needs exist.
1. Reroofing: The surface of the roofs on the original portion of the main building and on the flammable storage shed need replacement. Leaks have progressively emerged in the last several years in the main building, and are

being managed individually at this time. This effort includes ceiling insulation replacement, which is needed due to deterioration and associated loss of effectiveness. The estimated cost is \$105,000.

2. Fuel Station: The DEEP 30-year limit on the life of buried fuel tanks will come due in 2015. A special appropriation of \$300,000 has been approved for the removal of the tanks and installation of a new above ground fuel station.
3. Replacement of Buildings & Grounds Wooden Shelter: This 27' by 35' wooden shed built in 1982 as a temporary shelter, but now used as a primary B & G storage shed, is substantially worn out due to age coupled with two physical relocations. Suitable replacement is estimated to cost \$99,000.
4. Storage Improvements: Present storage assets are inadequate to keep all sensitive equipment under cover. This has become particularly exacerbated by the imminent elimination of the former Ledyard Center Firehouse, which provided substantial seasonal storage space for sensitive equipment. A simple extension to the existing truck shelter would offer basic protection from the elements. This structure would be prefabricated metal consistent with the present building. This is estimated to cost \$110,000.
5. Driveway and Parking Lot Resurfacing: Most of the present surface of the driveway and parking areas at the facility are the original surface of 1985. This item provides for the resurfacing of these areas. The estimate for this is \$80,000.
6. Undercarriage Wash Station Improvements: The washbay added in 2005 has significantly improved the Public Works Department's efforts in washing snow plowing equipment. The intent has been to reduce the rate of deterioration related to salt intrusion so that the life span of the large trucks could be extended. There is no built-in washing equipment; washing efforts are undertaken manually with portable equipment. The weakness in the manual process has been in the cleaning of the undercarriage areas of the trucks. In order to achieve a 20-year life cycle, improvements are still needed. This item provides a high-pressure/high-volume built-in undercarriage wash system. This was revisited and a cost, not including appurtenances and some installation expenses, of a more compact solution is \$9,989 installed. With appurtenances the cost would be around \$15,000.
7. Welding Facility Improvements: There is no separate welding bay at the Highway Garage. This hampers operations in the garage when large production welding efforts are required. This item provides for outfitting of a bay in the Truck Shelter to be a welding area. The cost is estimated at \$5,000.

8. Equipment Shelter Heating: Though now completely insulated, this important storage building remains unheated. The most efficient way to backfit this building with heat adequate to keep the building nominally above freezing would be infrared. The cost is estimated at \$20,000
  9. Gutter Deicing Improvements: The gutters on the Truck Shed have been susceptible to ice damming in the winter, causing failure to convey melting water away from the eaves and even damage to the gutters themselves. This work involves measures to limit and eliminate ice damming, at an estimated cost of \$4,500.
  10. Exterior Paint: The Salt Shed is due for painting. The estimated cost is \$4,500 for this effort.
  11. Power Indicator Lights. As a means of improving ready awareness of power status an indicator panel for display of the type of power (street vs. generator) and status of three-phase supply would be helpful. The cost of this is estimated at \$2,500.
- E. Bill Library: This old building has seen the rejection of two major renovation projects in recent years. The present building has received some capital investment, most recently in the replacement of carpet. The following critical needs remain which primarily address maintenance issues, rather than improvements.
1. Parking Lot Resurfacing: Though cracksealed within the last few years, the condition of the parking lot warrants resurfacing. The estimated cost is \$20,000.
  2. Exterior Window Replacement: The exterior windows universally need replacement for various reasons, including operational failures to leaking seals. About 25% of the windows were replaced in 2008. Replacement of the remaining seventeen (17) windows was deferred pending the outcome of the decision regarding the major renovation project. With the rejection of this project, we have returned to the need to continue this replacement. The estimated cost to finish this process at \$2,500 per window is \$42,500.
  3. New Sidewalk to South Side Entrance: This was substantially completed.
  4. New Gutters at South Side: This was completed in 2013.
  5. Powder Coating of Front Railing: An alternative approach will be implemented that will be economical enough to cover through the operational budget.



- F. Gales Ferry Library: Limited capital improvements have been undertaken at this old building that is leased from the Gales Ferry Fire District. However, certain issues are in need of urgent attention.
1. HVAC Natural Gas Conversion: This work has been funded and will be accomplished by the end of FY2014.
  2. Well Abandonment: The facility has been connected to municipal water, but the well has never been abandoned. Based on similar work at the Bill Library, the estimated cost of this is \$2,750.
  3. Roof Repair. The roof above the entrance area leaks. The cost for repair is about \$4,200.
- G. Senior Center: This facility was constructed in 1992, and has been in the zone for wear-and-tear related efforts. Design inadequacies have also been targeted. Carpet was replaced in FY13 and drainage improvements at the front of the building were undertaken several years ago. Municipal water connection was also undertaken several years back. The following two items address deterioration of the parking area and front sidewalk.
1. Parking Lot Drainage Improvements and Resurfacing: The original design of the drainage system for the parking area out front of the building relied on infiltration, which has proven inadequate and has negatively affected the rate of deterioration of the asphalt surface. This problem had been partially addressed at the very front of the building, but it needs to be completed. Concurrently, the asphalt areas should be resurfaced. The estimated cost of this effort is \$100,000.
  2. Front Sidewalk Replacement: Due to the effect of cold weather on improper spacing of rebar, the surface of the sidewalk along the front of the building has cracked and is scaling in several spots and continues to deteriorate. The sidewalk needs to be replaced. The estimated cost is \$6,000.
  3. Access Improvements. To comply with fire codes relative to present use, the double door to the Dieter Room needs to be properly equipped with magnetic door holders tied into the fire alarm system. The cost of this improvement is estimated at around \$4,000.
- H. Gales Ferry Landing: In 2001 the BOE abandoned the former Gales Ferry School at 7 Hurlbutt Road. Maintenance responsibilities for this old facility were transferred to the Town. The intent at the time was to minimally maintain the facility in a "mothballed" state pending sale. Having not been sold, the building has been reestablished for use progressively over time to the point of substantial occupancy today. This has put significant burden on the Public Works Department to restore it from its abandoned condition to one adequate for

occupancy. Funds have been devoted to this effort from various sources outside the inadequate operating budget, but major efforts remain if the facility is to have a long term future as an occupied building in the Town's inventory. The following pressing needs exist.

1. Reroofing: The roof on this facility is old and leaking in several spots. There is also associated water damage with respect to the leaks, from underlayment sponginess to internal building issues. There are three repair options for which an estimate was received in March of 2013.
  - Minimal Patch Repair: \$22,000
  - Complete Replacement Roof 1" Overlay: \$140,000
  - Complete Replacement Roof 3" Overlay: \$175,000
2. Asbestos Abatement: Several asbestos tiles in the hallways and certain rooms are loose and in some cases are being dealt with by temporary measures (e.g., patches of carpeting). Based on a quote received in early 2012, the cost of remediating known issues would be about \$12,300.
3. HVAC Natural Gas Conversion: This item couples the serious need to abandon and remove the 5,000-gallon underground heating oil storage with the access to natural gas. It also includes replacement of the existing heating system air compressor. The following cost estimates were received in November 2013 with respect to different possible project scopes:
  - Minimal Boiler Conversion: \$15,000 (\$9,600 boiler plus about \$5,000 for oil tank removal). This approach has major drawbacks associated with the condition of the existing boiler. It would not be a wise choice, unless the steam to water conversion described below will be undertaken at some later date.
  - Boiler Replacement: \$60,000 (\$55,000 for boiler replacement plus about \$5,000 for oil tank removal). This approach would lock us into steam as a heat source, which is substantially more inefficient than water
  - Complete System Conversion and Renovation: \$85,000 (\$80,000 for system conversion plus about \$5,000 for oil tank removal). This approach would be the sensible long-range option. Conversion from the present steam source of heat to water would capture significant fuel savings that would start offsetting the upfront capital investment immediately. This represents essentially a complete system replacement.
4. Electrical Improvements: To support the needs of increasing occupancy (e.g., air conditioning) additional outlets and other electrical upgrades have been partially undertaken. Work continues to be completed piecemeal, with one replacement panel being installed in 2013. Several quotes for work continue to be deferred as funding becomes available. One such job is installation of

adequate outlets in the old gym to eliminate need for and use of extension cords. This alone was quoted at about \$4,000. About \$20,000 should be adequate for all known electrical work.

5. **Parking Lot:** The parking lot has not been resurfaced or treated since well before retirement of the building as a school. The estimated cost is about \$95,000.

I. **ACO Facility:** The ACO Facility is collocated with the Highway Garage and its original buildings were constructed concurrently with it in 1985. Certain capital improvements and repairs have been accomplished over the years, but the following are currently pressing needs.

1. **Internal Kennel Dog Cage Replacement:** This work will first be attempted as an in-house effort.

2. **HVAC Renovation:** The overhead heaters need to be replaced. But because of the particular needs and operational realities associated with the facility, a more comprehensive HVAC solution should be pursued that addresses heating, cooling, and humidity control. The cost estimate for this is \$20,000.

3. **Reroofing:** The roof is of the same construction as the original Highway Garage. It is due for replacement. The estimated cost is \$10,000

4. **Exterior Paint:** The building and kennel pavilion haven't been painted since construction. The estimated cost is \$8,300 for this effort.

J. **Former Ledyard Center Firehouse:** This old facility will be demolished as part of the scope of work for the new Police Station.

V. **Coordination:** In several cases, the work represented by this critical needs package may be divided into several discrete categories by which implementation may be undertaken. Wherever possible, work in each category may be packaged and bid separately to achieve the best value. These categories include parking lot improvements, HVAC improvements, roof repairs, sidewalk improvements, metal building construction, gutter improvements, and natural gas conversion.

VI. **Summary Cost Considerations.** The total estimated funding required for all needs identified in this package is about \$1.37M, assuming deferral of all items for the current Police Station. This represents more than a \$700K (36%) reduction over last year as a result of the approval of the new Police Station and other special appropriations. A detailed summary of the present backlog follows.

## Cost Summary by Facility

**Town Facilities Critical Needs**

	Est	Budget
<b>Town Hall Complex</b>		
Boiler relocation/repairs (TH)	\$13,345	\$14,500
Fire door replacement (continued-TH)	\$33,000	\$34,000
HVAC Zone Improvements (TH)	\$11,400	\$12,000
Roof/Attic Ventilators (TH)	\$7,500	\$7,500
Fire Alarm Improvement	\$1,625	\$1,700
Emergency power provision	\$55,800	\$60,000
<b>Annex Upgrades</b>		
Air conditioner removal	\$5,600	\$5,600
Bathroom renovations	\$17,300	\$17,300
Council chamber Renovations	\$54,360	\$54,360
Admin office renovations	\$8,250	\$8,250
\$13K in materials for above	\$13,000	\$13,000
All of the above "all at once" option	\$63,800	\$67,000
Removal/replacement of buried heating oil tanks (Annex)	\$8,584	\$10,000
Parking lot drainage improvements/resurfacing	funded	funded
<b>Police Station</b>		
HVAC improvements	precluded	precluded
Parking lot drainage improvements/resurfacing (continued)	precluded	precluded
Public water system connection	precluded	precluded
Emergency generator replacement	precluded	precluded
Gutter deicing improvements	precluded	precluded
Carpet replacement	precluded	precluded
Attic Insulation replacement	precluded	precluded
Septic System improvements	precluded	precluded
<b>Emergency Services Building</b>		
Heating efficiency improvements	\$30,000	\$30,000
Balcony HVAC unit reorientation	\$3,500	\$4,000
New roof access per new code requirements	\$10,000	\$10,000
Heating flue replacement	\$8,000	\$8,000
Exterior Repair and Paint	\$6,000	\$7,000
Sprinkler System Connection	\$20,000	\$20,000
<b>Highway Garage</b>		
Reroofing (main building & flammable storage shed)	\$105,000	\$110,000
Removal/replacement of buried fuel tanks with fuel station upgrade	funded	funded
Replacement of wooden B & G storage building	\$99,000	\$99,000
Storage improvements	\$110,000	\$110,000
Parking lot drainage improvements/resurfacing	\$90,000	\$100,000
Truck Underwash Station	\$15,000	\$15,000
Welding Facility Improvements	\$5,000	\$5,000
Equipment Shelter Heat	\$20,000	\$20,000
Truck Shed Gutter Deicing	\$4,500	\$5,000
Salt Shed Paint	\$4,500	\$5,000
Power Indicator Panel	\$2,500	\$2,500

**Town Facilities Critical Needs**

	Est	Budget
<b>Bill Library</b>		
Parking lot resurfacing	\$20,000	\$20,000
Exterior window replacement	\$42,500	\$42,500
New sidewalk to south side door	comp	comp
Gutters on south side	comp	comp
Powder coat front step railings	comp	comp
<b>Gales Ferry Library</b>		
Natural gas conversion for HVAC	funded	funded
Well abandonment	\$2,750	\$3,000
Roof Repair	\$4,200	\$4,200
<b>Senior Center</b>		
Emergency power improvements	eliminated	eliminated
Parking lot drainage improvements/resurfacing	\$100,000	\$100,000
Front sidewalk replacement	\$6,000	\$6,000
Fire Code access improvements	\$4,000	\$4,000
<b>Gales Ferry Landing</b>		
Reroofing	\$175,000	\$175,000
Heating system air compressor replacement	funded	funded
Asbestos tile abatement	\$12,300	\$12,500
Natural gas conversion for HVAC/removal of oil tank	funded	funded
Supplemental Heating System Conversion work	\$35,000	\$40,000
Electrical Improvements	\$20,000	\$20,000
Parking lot resurfacing	\$95,000	\$95,000
<b>ACO Facility</b>		
Cage replacement/refurbishment	funded	funded
HVAC improvements	\$20,000	\$20,000
Reroofing	\$10,000	\$10,000
Exterior painting	\$8,300	\$8,500
<b>Former Ledyard Center Firehouse</b>		
Reroofing, including chimney and gutter repairs	precluded	precluded
Engineering/Architectural Services	\$50,000	\$50,000
Total	\$1,333,104	\$1,367,900
Add'l overlapping items w/ new PD at TH location	\$64,384	\$70,000
Net critical needs at other facilities	\$1,268,720	\$1,297,900