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10.5.d Provide a detailed narrative, comparing the approved project to the proposed Significant Change, and the rationale for such change.

The Applicant diligently pursued the implementation of its DoN approval. It received Part I DPH Plan approval on June 3, 2020. It submitted it submitted its Part II plan review filing on Oct. 23, 2020 and received a response to that filing on Dec. 31, 2020. It then revised its plans to address concerns raised in the DPH Plan Review Part II response and submitted them on March 8, 2021. The Applicant does not propose any changes to the basic plans for the Project or the GSF of renovation requested; however, there are a few additional repairs that are required that were not included in the approved renovations. The primary basis for this Significant Amendment is the material increase in the cost of the Project.

The Applicant requests this Significant Amendment based on the substantially higher construction and related costs for the Project. The Project approved $10,087,722.00 (April 2020 Dollars) to restore the Applicant’s long term care facility at 111 Orient Avenue, East Boston, MA 02128. Through this Amendment, the Applicant seeks approval for an increase in the approved capital expenditure for the Project to $17,496,500.00 (May 2021 Dollars). This is an increase of $7,408,778.00 or 73.4%.

Explanation for Capital Cost Increases

This increase in costs can be organized into a variety of general factors. First the Applicant obtained more accurate estimates of cost as a result of the greater investigation required for the architect’s and engineers’ development of the more detailed architectural, engineering and other plans for its Part II Plan review filings. This more in-depth review resulted in the need for additional phases of construction and also identified additional work that could not be foreseen without the investigations done for the development of construction plans.

The increase in costs also were impacted by the significant increase in construction related labor and material costs. In many areas there are significant differences from when the estimates were done in 2019 to the costs today that are the basis of the bids being received by the Applicant. There are many factors affecting construction costs.[[1]](#footnote-1) For example, “Steel prices jumped significantly towards the end of 2020 and the beginning of 2021, in some cases as much

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as 25% to 50% in raw material value.”[[2]](#footnote-2)  Lumber has increased 112%.[[3]](#footnote-3) Other factors include suppliers incorrect estimate that demand would decline with Covid-19 limiting production; material increase demand for home improvement, renovations and construction due to more time spent at home increasing the demand; import tariffs and government policies; supply and manufacturing material shortages such as copper and crude oil[[4]](#footnote-4); and significant increases in labor costs.

The Applicant’s change in the method of financing was another factor that had a material impact on the cost of the Project. At the time of the filing of the DoN and the development of the Project projections, the Applicant was contemplating using traditional bank financing. After receipt of the DoN, it explored the option of HUD insured financing and it was well underway with the HUD application process, having completed many third-party reviews and reports, when it became apparent that the HUD prevailing wage requirement would have a significant impact on contractor bids. The Applicant then sought financing from local banks and one national bank where it learned that most were just not interested in being involved in lending projects in the long-term care industry at this time and the few that would provide financing, would only do so with significant terms the Applicant found unacceptable. With the lack of other acceptable options, the Applicant continued with the HUD process. Based on the progress to date, it expects to close the financing in five to seven months and be able to commence construction in February 2022.

As part of the HUD application process, the Applicant had to secure bids from contractors who would agree to pay prevailing wages. The impact of this requirement on the contractor bids is approximately $1.3M increase in the cost of labor. This requirement affects not only the contractor, but all the subcontractors. As labor is a large component of cost, small increases in each subcontractor quickly added up to large increases in the total Project costs.

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In addition, upon completion of the HUD physical plant inspection, HUD required additional repairs that were not contemplated in the original DoN. These repairs do not materially impact the approved scope of the DoN, but are costs that are a condition of the HUD approval.

Also, as part of the HUD application process, a complete HUD building inspection was required. This inspection identified additional items that had not been identified by the architects, engineers or other consultants. The total cost of the repairs designated as “critical” was $42,632.50. Many items related to accessibility requirements such as height of towel bars, handles on doors, and mirror accessibility for wheelchair bound residents, but others related to infrastructure type Items. The incremental cost for these accessibility improvements is approximately $19,000.00

The inspection identified an electrical breaker panel manufactured by Federal Pacific Electric (“FPE”). FPE “Stab-Lok” panels have been determined to have a significant failure rate to trip properly with overload and short-circuiting. In over one-third of the panels tested, breakers would not trip when overloaded.[[5]](#footnote-5) While this product has not had a formal recall, it has been identified as requiring replacement under several government financing programs. Replacement of this panel added about $1,000.00.

In addition, the inspection identified that a sprinkler riser in one location was using galvanized piping that requires replacement. This replacement and related further inspections for similar conditions is estimates to cost about $2,500.00.

The more costly area of the critical repairs related to moisture intrusion from roof, windows and façade issues in various locations. While the Project included some window and façade repair, the HUD inspection expanded the already identified areas. All of this repair and remediation work added about $20,000.00 of additional costs

The inspection also identified certain areas of galvanized piping and required replacement of this piping. This is because “. . . poor field performance under typical conditions has shown that galvanized pipe is inappropriate for dry and preaction fire sprinkler systems”. [[6]](#footnote-6) This type of

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piping is not longer an accepted standard as it can develop holes withing 2 to 3 years of installation.[[7]](#footnote-7)

The noncritical repairs required by the HUD inspection added approximately $500,000.00 in costs to the Project. The most significant portion of these repairs is about $250,000 for selective repairs of the building exterior. This includes repairs to wood siding, peeling paid on soffits, and exterior sealants. Another key area is $150,000 for roof repairs. The remaining $100,000.00 is comprised of stairway repairs, fire pump repairs, closing out underground storage tanks, tel data wiring repairs, and demolition, removal and replacement of boilers.

Detailed Description and Rationale for Increased Costs

The following chart provides the comparison by major DoN capital cost category of what was approved as part of the DoN and the current projected capital expenses. It also provides the dollar and percentage increase for each category, comparing the April 2020 approved Dollars to the current requested May 2021 Dollars, without adjustment for inflation. Items that are not

in the Category of Expense from the standard DoN form are zero or not applicable.

**Comparison of Approved and Requested Capital Expenditures**

| **Category of Expense** | **Approved (April 2020 Dollars)** | **Request (May 2021 Dollars)** | **Difference** | **% Change** |
| --- | --- | --- | --- | --- |
| **Land Costs** | **$0** | **$0** | **$0** | **$0** |
| Construction Contract | $8,175,023 | $14,051,044 | $5,876,021 | 71.9% |
| Fixed Equipment | 0 | 474,276 | 474,276 | 100.0% |
| Architectural Cost | 663,790 | 908,500 | 244,710 | 36.9% |
| Pre-Filling Planning Costs | 145,000 | 169,000 | 24,000 | 16.6% |
| Post-Filing Planning Costs | 40,000 | 180,000 | 140,000 | 350.0% |
| Net Interest Construction | 276,695 | 664,258 | 387,653 | 140.1% |
| Major Movable Equipment | 628,909 | 629,000 | 91 | 0% |
| **Total Construction Cost** | **$9,929,417** | **$17,076,078** |  |  |
| **Financing Costs** | 158,305 | 420,422 | 262,177 | 165.6% |
| **TOTAL** | **$10,087,722** | **$17,496,500** | **$7,408,788** | **73.4%** |

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The following item by item discussion is a review in each of the items that make up that particular cost category. It includes the amount of increase and the specific reasons attributed for the cost increase.

A. Construction Contract

There are a variety of areas within the expense category of construction contact that experienced an increase in costs over the original cost estimates. The “prevailing wage” impact of approximately $1.3 million is an element of all construction components involving labor and is not itemized in the following discussion.

As these recent estimates demonstrate, the 18-month period since the original estimates were obtained has experienced significant costs increases. A major aspect of such costs increase is the increase cost of materials. Another common factor in the increase in construction costs arises as a result of additional information obtained when the more detailed architectural and engineering inspections were conducted and final plans developed. The fact that the building is concrete block construction impacted the plans more than originally expected as such things as chases and achieving horizontal access for electrical and related rewiring resulted in more expensive approaches being required.

The following outline reviews the increases in the more major components that comprise the cost category labeled “Construction Contract.

1. Roofing

The initial estimate was $244,778; however, the current estimate is $314,220. This is an increase of $69,442. A material factor in this increase is that it was determined that the coordination and phasing of roof repairs/replacement had to be more closely coordinated in conjunction mechanical systems installation. This means that the roofing must now be done in phases, which significantly increases the costs of the roofing component of the budget.

1. Glass & Glazing

The initial estimate for the replacement windows desperately needed by the Facility in order to achieve energy efficiency and uniformity in temperature for resident comfort was $995,044. Current estimates are now $1,309,221, which is an increase of $314,177. Since the window caulking includes asbestos, the window replacement process will be more labor intensive and a much slower process. This process also is impacted by processes required to assure there will

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be no impact to staff and resident areas. This will increase the associated cost. This resulted in more complex phasing than initially contemplated, further increasing the cost for this component.

1. Drywall

When the initial budget was developed, $414,164 was allocated for drywall costs. This aspect of the budget has now increased to $1,126,014, which is an increase of $711,850. These cost increases are primarily attributed to an increase in framing and drywall materials associated with (i) added soffits, drywall and ceilings; (ii) patient room and common area demising walls as the final room configurations were fully developed; (iii) an increase in framing and drywall materials associated with extensive fire rated shafts walls required to wrap mechanical systems that extend through the building; (iv) an increase in material prices associated with framing and drywalls; and (v) an increase in labor costs to install the drywall scope on a multi-phase process not fully reflected per the initial cost estimate. This is one of the areas where the increased cost in lumber is most evident.

1. Wall Protection/Accessories

$153,957 was the original projected costs for this category of expense. The revised estimate, after more detailed evaluation and planning, is now $346,088. This is an increase of $192,131. This work relates to the application of such protection devices as corner guards and door kick plates, as well as interior signage, cubicle curtains and tracks; toilet and bath accessories such as towel racks and toilet paper holders, metal lockers, and window shades. The predominate reason for this area of increased cost is that upon the development of detailed architectural plans for construction, the areas identified where wall protection was required were much greater than originally estimated and accessory cost have increased materially.

1. Hazardous Material Abatement

The original estimate for the asbestos abatement was $200,844. The current estimates being received indicate an increase of $132,309 and now are projected to be $333,153. The increase in hazardous material abatement costs is associated with the increased levels of asbestos identified since the prior estimate was obtained. The additional areas requiring asbestos removal include within the flooring and window caulking materials. Also, part of this increase is need for increased testing and the inclusion of additional monitoring, inspections and air clearance costs not reflected in prior estimates

1. Demolition Costs

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Demolition was originally estimated at $95,269; however, current costs for this work is estimated to be $288,892. Increased demolition costs are associated with routing of mechanical duct work and refrigeration piping, increased plumbing and drainage piping replacements including cutting of the concrete floor slab at the Garden Level; and demolition of four (4) existing inactive boilers (as required by HUD)which was not included in prior estimates as there was adequate space without such demolition, especially in light of much smaller size of new and efficient boilers. Another major factor in the increase in demolition costs is with the concrete block building construction. Demolition of these concrete block walls is very time consuming and labor intensive. As existing conditions became more apparent, changes were made in the plans for plumbing, electrical, HVAC and other system access throughout building further increasing the demolition required.

1. Plumbing

The costs associated with the plumbing work was $768,390; however, current estimates are now $1,174,841. This is an increase of $406,451. The increase in plumbing costs is primarily related to the expansion in the amount of existing plumbing and drainage piping extending throughout the building that requires replacement. Much of this plumbing was hidden behind existing walls, but was identified as further engineering evaluations were performed in order to develop construction level plans. Additionally, as these plans were developed it was determined that there would be some re-routing of existing-to-remain piping in order for it to remain active to feed building areas to not included in the Phase 1 scope.

1. Mechanical

Mechanical costs were originally estimated to be approximately $979,845. After all the necessary investigation required to prepare detailed construction plans, it was determined that mechanical costs would be much higher and the current projected costs is $2,617,419, an increase of $1,638,574. This increase arose as a result of the fact that final scope details developed for the mechanical system were significantly in excess of prior estimates. The revised scope as a result of the investigation necessary to develop construction level mechanical plans required two (2) new roof-mounted energy recovery units that were not in the initial plans. Furthermore, due to low ceiling height, there was extensive routing of the ductwork for supply and return air from the ERUs to the individual rooms, as well as for the routing of refrigerant piping for heating and air-conditioning from the new roof mounted heat pumps to the to the individual rooms.

1. Electrical

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Replacement of and upgrading electrical systems to current standards was a material component of the capital expenditures for this Project as the wiring and systems in the facility have not been addressed in decades. The initial cost estimate of this extensive work was $1,222,961. The costs for this critical work is now estimated to be $1,775,208, which is an increase of $552,247. These increased costs arise from increased costs in supplies, the required addition of a replacement emergency generator and the increase in electrical panels and rewiring determined through the development of final construction plans.

1. Contractor’s General Requirements

The estimates developed for the DoN, included contractor overhead or general requirements of $104,005. The current estimate being provided now that construction level plans are available $181,266. This is an increase of $77,261. The increase is needed as a result of the extended construction period now projected to be required from the additional work and phasing needed and additional work required.

1. Contractor’s General Conditions Labor Costs

In addition to the Contractor’s General Requirements, the Contractor’s General Conditions Labor Costs has also increased due to the increase in project work and the length of the construction period. Initial Contractor Labor Costs were estimated at $489,762, but the current proposed amount is $857,924. This is an increase of $368,162.

1. Contractor’s Fee

The initial estimated Contractor Fee was $209,898; however, with this increased length of time for construction and the various modifications in the work required, the contractor currently estimates a fee of $362,695, a $152,797 increase of the estimate in the DoN application.

1. Permits & Fees

$75,966 was originally provided as an estimate of the fees the contract would play when the budget for the DoN was prepared in 2019. The latest proposals have increased this expense category to $142,843. This is an unforeseen increase of $66,877. The increased fees are a

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result of the Increased subcontractor trade costs discussed above as local permitting is based on such costs.

1. Contractor’s Insurance

The DoN projected budget had $69,971 for the cost of the Contractor’s insurance. The current estimate for this expense category is now $142,902 resulting in an increase in this cost of $72,931. These increases in cost are attributable to increased cost charged to the contractor for such insurance. This arises in part due to increased subcontractor trade costs as reviewed above. In addition, experts in the industry are indicating that “(d)ue to increasing losses and poor investment returns [by insurance companies], rates for most lines of coverage are increasing, capacity is declining and underwriters are being more selective on which accounts they will even consider.”[[8]](#footnote-8) This article projected increases in all types of insurance required by the contractor and specifically indicated that it projected up to 10% on Builder’s Risk policies in 2021.

1. Payment & Performance Bond

Consistent with the trends seen in the Contractor’s insurance cost, the cost of the Payment and Performance Bond has risen from the prior estimate of $69,966 to $119,531. This is an increase of $49,565. While the underlying reason for the cost increase is the fact the subcontractor costs increased, therefor the insured amount increases, driving up the cost of the policy, this type of insurance also is more costly today than in 2019.

1. Owner’s Project Management

When the original DoN estimates were obtained, it was felt that the Applicant would be able to manage the Project with existing staff. did not require additional staff for Project Management. As the Project has become more complex with multiple phases and events requiring coordination with Facility operations, it was determined that the Applicant would require a professional project manager with knowledge of long-term care facility construction to manage the Project in order to assure the least impact on the residents and the ongoing operation of the nursing home. In addition, it was determined that in light of the increased complexity of this project and its related budget, as well as the significant impact such complex renovation

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has on an operating long term care facility, the Applicant required a Project Manager. The Project Manager will focus on managing the design process; obtaining the permits and construction approvals, making required regulatory filings; monitoring contractor performance and expenditures, negotiating and finalizing contracts and assuring compliance with their terms, organizing and managing the identification and procurement of various Owner Items. The current estimate for these services is $275,000.

1. Façade Repairs

Initial inspections and reviews indicated that while there were some issues with the façade, nothing required immediate attention. However, as more detailed inspections were performed for the Project, including inspections provided by city inspectional officials and HUD, it was determined that repairs are required to address deteriorating areas including failed and spalling bricks at various exterior lintel locations; failing and spalling bricks at the rear stairwell and building corners; and failed bricks and stair treads at a rear egress stairwell. It is also noted that replacement bricks needed to be compatible and properly blend with the existing bricks, which means that not just any “off the shelf” brick can be used. This work is now necessary due to inspectional and HUD related findings, as well as general safety requirements. The projected cost of this work is $248,082.00 and as this aspect had not been in the original budget, it represents an increase of $24,082.00.

Summary of Construction Contract Cost Increases

The total of the difference in the original estimate and the current projected of costs for the construction contract category of the Project budget is $5,876,021. The original budget projected $8,175,023.00 (April 2020 Dollars) for this material cost category and now the Applicant seeks $14,051,044 (May 2021 Dollars). The items discussed above account for a total of $5,520,479.00 of the difference or 94% of the entire increase in the costs attributed to the construction Contract. The remaining areas making up the 6% not discussed in detailed are varied in nature and contributing only a minor portion to the total. A large portion of this amount is assumed to be directly or in directly related to inflation related increase in costs.

1. Fixed Equipment Not in Contract

In the DoN approved expenditures, there was nothing budgeted for Fixed Equipment that was not in the Contractor’s Contract. As part of the HUD review process, the HUD physical plant inspection identified required repairs to certain fixed equipment in order for the Applicant to qualify for the HUD insured financing. As these items were in the nature of repair, they were

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considered to be more appropriately performed outside of the construction contract by the regular vendors used by the Applicant.

One area of required repairs related to the elevator. The HUD inspection identified that a complete overhaul of both the passenger and the freight elevator was required. These requirements were based on prolonging the life of the useful asset, as well and safety and efficiency matters. The additional costs for this work are currently projected to be $174,276.00

Also repairs to the oil boilers was identified in the HUD Inspection. It was identified that three (3) existing, operating boilers had passed their useful life and exhibited significant deferred maintenance concerns. In addition, there was a fourth, older boiler that was inactive and should be removed. HUD required inspections concluded that strong consideration should be given to replacing the oil-fired boilers with new, energy efficient gas boilers. This would eliminate the need for any fuel oil to serve the Facility and allow the removal of the underground fuel tanks. This resulted in additional Fixed Equipment Costs not included in the Construction Contract of another $300,000.00.

The increase in the approved capital expenditure related to Fixed Equipment not in the Contractor’s Contract is $474,276.00. The need for this expenditure was not foreseeable by the Applicant. The Applicant and its consultants had reviewed these two areas of fixed equipment prior to submitting its DoN and determined that material repairs or replacements were not necessary at this time. Based on its consultation with the various service vendors and consultants such work might be required in the future, but was not necessary for the Project completion. The Applicant was surprised when HUD provided these requirements and had no way of knowing that such repairs/improvements would be required. As meeting the HUD insured loan requirements is necessary to secure reasonable lending opportunities, these fixed equipment expenditures must be made.

1. Architectural Costs.

The increase in the architectural costs from $663,790 to $908,500 (an increase of $244,710.00) is due to the various modifications that were required once the scope of changes was apparent for the development of construction level drawings. The additional phasing required, redesign as a result of the discovery of hidden factors and the added engineering costs to meet final routing of mechanical shafts from the roof down to the lower Garden Level and between the East and West Wings all contributed to the overall increase in this line item. The more detailed inspections required for construction level plans identified existing conditions that required changes in plans and more complex solutions to address, adding costs. Also there were some added design and engineering costs related to meeting certain items identified on inspectional

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and requirements set by HUD, including replacement of the existing boiler system. Also, additional design and engineering support was required as a result of the extension of the construction period to 72 weeks versus the initial design contract estimate of 52 weeks. As with the various elements of the construction contract cost increase, the increase in architectural and engineering costs also were not reasonably foreseeable by the Applicant.

1. Pre and Post Filing Planning and Development Costs.

These two categories of expense also are projected to be higher than those set forth in the original DoN approval. These increases are related to the additional costs associated with the filing of this Amendment. In addition, the increased costs in these categories are due in part to the increased cost of the overall budget as some fees are based on certain expenditures and as the DoN expenditures are forecast to increase, so will the cost of certain permits or approvals. The difference in the Pre-Filing costs is only $24,000.00; however, the Post-Filing costs are projected to increase by $140,000.00 or 350%.

1. Net Interest Expense

The approved DoN expenditures related “Net Interest Expense” was $276,695.00. This amount was based on a 16-month construction period and total borrowed amount of $8,042,000.00. The amount requested in this amendment is $563,320.00. This is an increase of $286,625.00 requested for Net Interest Expense. This revised Net Interest Expense is based on a total borrowing of $15,450,000.00 with the construction period now ex tended to 20 months due to the additional phasing required.

1. Financing Costs

As with other capital cost categories, the financing costs associated with this Project also have risen. Originally, the Applicant requested and was approved for $158,305 to secure financing. With the chances in the amount to be borrowed and the change to HUD insured financing, the cost is now estimated to be $420,432.00. The additional costs include the HUD application fees, additional third-party reports and inspections and a loan placement fee not previously contemplated. These additional expenses could not have been reasonably contemplated at the time the DoN was filed.

G. Conclusion: Increased Cost Unforeseeable

The Applicant has worked diligently to implement its DoN approval. It has timely sought plan review approval and construction bids, despite encountering a variety of unexpected challenges. Such challenges included delays in inspectional work as a result of Covid-19 precautions in long term care

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facilities. These more in-depth review of the building’s infrastructure as part of the development of construction and engineering plans uncovered unexpected existing conditions resulting in more costly designs and more phasing of construction that originally contemplated.

Also included in these unexpected challenges was the significant impact various economic and supply factors have had on the cost of construction supplies and related labor. Many critical materials are significantly higher and labor costs have increased. These unexpected cost increases, along with the increased requirement for additional phases in the Project construction affected the bids from contractors, which in many cases were distinctly different than the estimates obtained in 2019.

Lastly, the Applicant had no reason in 2019 to believe that the financing market for long term care facilities would undergo significant changes as a result of Covid-19 and its impact on the financial performance of such facilities. Many lenders no longer service long term care facilities and others required more onerous terms if they will provide a loan. The Applicant did not desire to pursue the more costly and complex HUD insured financing, but at this point in time, this option is its only reasonable choice if it wants to secure more reasonable and acceptable financial terms.

All of the factors discussed above are beyond the control of the Applicant. The Applicant could not have been reasonably foreseen these circumstances when it was developing its DoN. Moreover, these circumstances are not and were not reasonably within the control of the Holder. As a result, the Applicant respectfully requests the consideration of its request for this significant amendment to its approved DoN.

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