EDGEMOOR GERIATRIC HOSPITAL
ADAPTIVE RE-USE STUDY

Magnolia Avenue
Santee, California

Prepared for the
County of San Diego, California

matalon
architecture & planning

June 1st, 2008

TABLE OF CONTENTS:

I. Executive Summary

Matalon Architecture & Planning has been retained by the County of San Diego to evaluate a representative cross section of the Edgemoor Geriatric Hospital's existing buildings to determine the viability of adaptive reuse of the buildings, and the cost of rehabilitating the structures for such uses.

The Edgemoor Geriatric Hospital facility contains twenty-seven (27) hospital and accessory structures. (See Figure 1, pg. 7)The following buildings were evaluated for retention and/or adaptive reuse as being representative of the other on-site structures, based on similarities in age, condition, construction, size, and architectural styles of the total facility:

- Building #2; Women's Ambulatory Ward of 1925
- Building #3; Dining and Recreation Building of 1923-24
- Building #8; Dairy Barn/Men's Ambulatory Ward of circa 1913
- Building #16; Dining Room and Kitchen of 1951
- Building #19; Custodial Wards of 1945

Building 2 is similar in construction, materials, and condition to Buildings 6, 14, and 15 due to their similar vintage. Rehabilitation unit costs for Building 2 are applicable to Buildings 6, 14, and 15.

Conclusions reached for Building 3 are only applicable to that structure.

● Building 8 is similar in construction, materials, and condition to Buildings 7, 9, and 12 due to the buildings' similar vintage and square footage. Rehabilitation unit costs for Building 8 are also applicable to Buildings 7, 9, and 12.
● Building 16 is similar in construction, materials, and condition to Buildings 1, 13, and 17 due to their similar vintage. Rehabilitation unit costs for Building 16 are also applicable to Buildings 1, 13, and 17.
● Building 19 is similar to Building 18. While the two buildings were constructed over a decade apart, they have the same square footage and were constructed in a similar styling and manner, with like materials, and are in comparable condition. Conclusions reached for Building 19 are also applicable to Building 18.
● Buildings 4 and 5 would be ineffective for adaptive reuse due to their size. These buildings are 1,000 square feet or less, thereby providing limited opportunities for potential future uses. Buildings 20-25 have limited historical value and have been vacant for a number of years, and as a result are deteriorated. Additionally, Buildings 25-27 are less than 200 square feet.
● Building 11 is not technically a building; it is a corridor connecting Buildings 18 and 19. Retention and reuse of Building 11 would not be practical without also retaining the adjoining buildings.

Table 1 lists the buildings evaluated and the buildings similar in age, condition, and construction on the site.

Table 1. Structures Data

Building	Date of Construction	Approximate Square Footage*
Building 2	**1925**	**7,684**
Building 6	1926	4,252
Building 14	1926	3,612
Building 15	1926	2,549
Building 3	**1923/4**	**4,635**
Building 8	**1913**	**4,165**
Building 7	1913	4,547
Building 9	1913	4,547
Building 12	1913	2,550
Building 16	**1951**	**10,458**
Building 1	1958	3,290
Building 13	1961	18,280
Building 17	1951	31,570
Building 19	**1945**	**13,996**
Building 18	1929	14,182
Reuse Potential Not Evaluated Because of Size/Historic Significance/Condition		
Building 4	1913	1,296
Building 5	1913	801
Building 20	1954	560
Building 21	1951	1,827
Building 22	1951	1,827
Building 23	1951	1,827
Building 24	1951	1,827
Building 25	1951	491
Building 26	1940	510
Building 27	1940	510
Other		
Building 11	1954	846

Note: Building 10 will be retained and is not included in the demolition analysis. It was not considered for adaptive reuse potential.

* Approximate square footage obtained from calculations made by Nasland Engineering October 11 2007.

The criterion considered in this study included:

- The individual buildings' overall condition of building materials and systems
- The specific state of each of the individual buildings' structures relative to current codes, including the consideration of alternative regulations provided by the 2007 California Historical Building Code (CHBC).
- The estimated costs of renovation of each of the individual buildings for commercial reuse; building exteriors will be renovated consistent with the California Historical Building Code and use of historic materials.

The team, composed of architects, structural engineers and cost estimators researched available County records regarding the existing buildings, and met with County Staff on site to review the existing condition of the overall campus as well as the specific buildings.

Six subsequent site meetings took place to examine and evaluate the exteriors and interiors of the buildings, the building systems, and any specialized items that appeared to be of concern. Several of these site meetings included tours with Edgemoor maintenance staff who have a working knowledge of both the history as well as the on-going operational issues with the buildings.

From the information gathered from the site visits, the team assessed the viability of rehabilitating these buildings by bringing them up to current codes, while maintaining the original character of the exteriors of the era in which they were built. Associated costs were developed for these projected efforts.

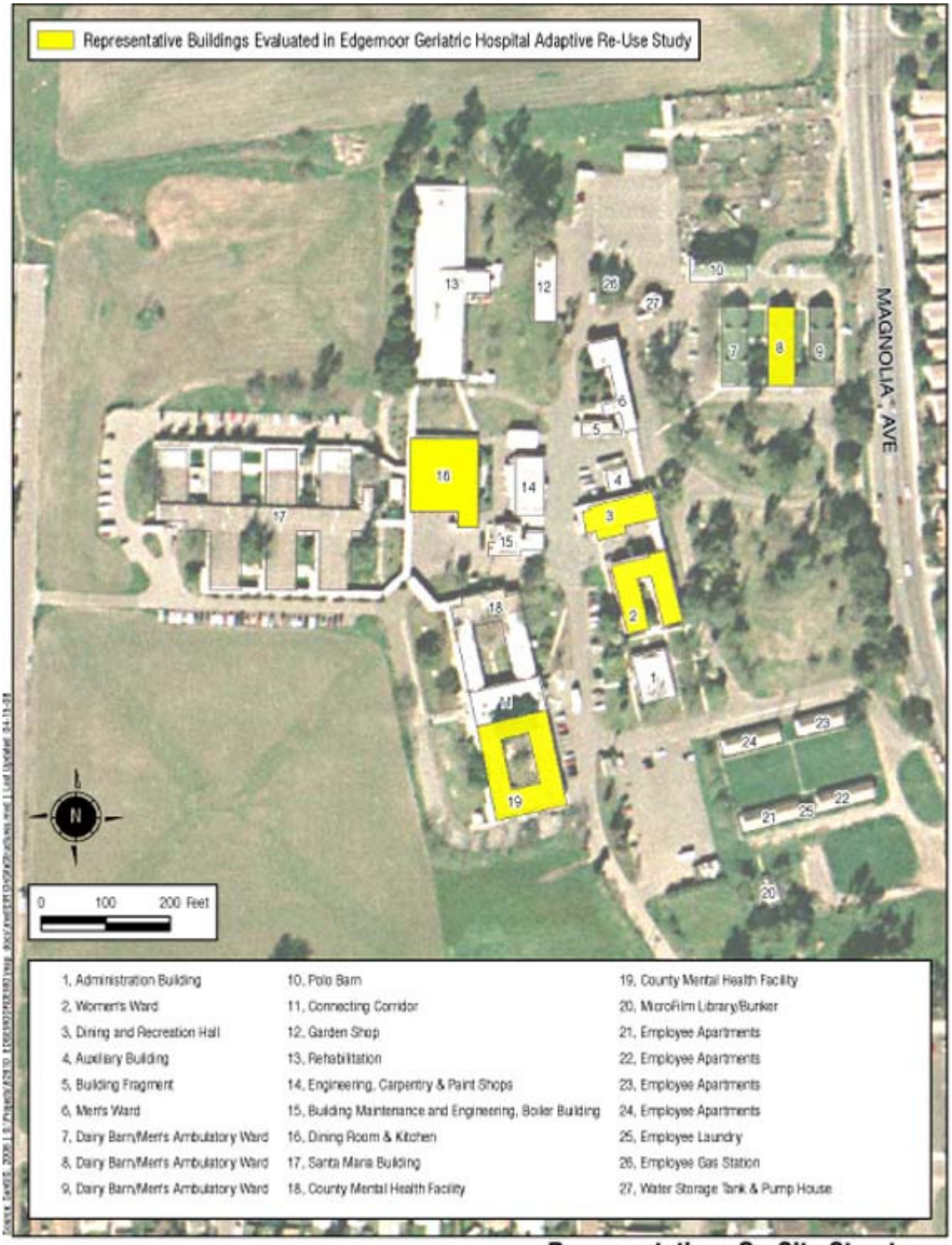
The team also assessed, based on the configurations of the buildings' layout and structural systems, whether or not the buildings would be suitable for adaptive re-use for commercial uses,.

Lastly, the team assessed the viability of relocating the buildings from their current site, and associated costs to do so.

For the buildings evaluated in this study, it was concluded that the existing condition of all of the buildings would allow rehabilitation. Costs vary between building due to the differing existing conditions of each of the buildings' materials, systems and components.

The size and layout of Building #2 (Women's Ambulatory Ward), Building #3 (Dining and Recreation Hall), Building #8 (Dairy Barn/Men's Ambulatory Ward), and Building #16 ((Dining Room and Kitchen) could be compatible with adaptive re-use for commercial uses. However, due to the structural system and layout of Building #19 (Men's and Women's Custodial Wards) commercial adaptive re-uses are limited.

Lastly, it has been determined that Building #2 (Women's Ambulatory Ward) and Building #3 (Dining and Recreation Hall), can be relocated from their current locations. Due to the concrete structural systems of Buildings #16 and #19 which are tied into concrete slabs on grade, relocation would be excessively complex, and therefore not recommended.



Representatives On-Site Structures

FIGURE 1

HDR
ONE COMPANY | *Many Solutions*

II. Individual Building Analyses

Building No. 2 – Women's Ambulatory Ward

1. History and Construction

The building was constructed in 1925 as one of several buildings constructed for use by the County of San Diego as a sustainable farm facility which provided care of the aged, indigent, orphans and mentally ill. The historic use of the building was as a Women's Ambulatory Ward. Located in the central portion of the site, the building is currently utilized as offices, pharmacy, conference rooms and for storage. These uses will be terminated when the new Skilled Nursing Facility is completed in August 2008. The structure is mostly single story but has a two-story portion in the front of the U-shaped building (Figure 1). It is of wood construction with stucco on the exterior walls (Figure 2). The flat roof on the single story portion consists of built-up asphalt roofing, while the gable roof on the two story section has asphalt shingles.

2. Building Conditions & Recommendations

A. General Overview

The overall condition of the building is generally poor as further described in this section, and has limited uses in only approximately half of the structure. The current heating, plumbing and electrical systems are operative only in the occupied spaces. Cooling is provided in limited areas by air cooling units which were retrofitted into existing windows. The 2nd story pitched roof was replaced approximately two and one-half years ago, but not with materials and methods true to the era of the original construction. There is significant damage from previous water leakage through the roofs (Figure 4). There are deficiencies related to updated Americans with Disabilities Act (ADA) requirements; which include path-of-travel, restroom facilities, door hardware, signage, and mounting heights of fixtures, where alternative provisions of the CHBC either do not apply or do not provide a significant cost savings advantage.

B. Building Exterior

If the building were to be remodeled and brought up to current codes, while maintaining the original character of the era in which it was built, numerous items/systems would need to be corrected to the exterior. Over the years, extraneous elements have been retrofitted on to the exterior of the building. These include exterior-mounted electrical conduit, security lighting, and the previously mentioned air cooling units placed into portions of the existing windows. These elements shall need to be removed. The exterior wood windows all show aging with cracking frames and putty, as well as signs of numerous layers of paint. Four of the existing windows

were at some time boarded off with plywood. All of these windows shall need to be retrofitted as well as be dual-glazed for energy conservation conformance (if possible), or replaced with dual-glazed wood windows to match the existing windows. Six of the exterior doors have been removed and in-filled with plywood. These doors and their transoms should be replaced.

The exterior cement plaster walls are in poor condition with spalling and cracking in areas (Figure 3); most problematically at the sill plate around approximately fifty percent of the perimeter of the building. The sill plate of the wall framing has deteriorated over the years, and has collapsed, forcing the exterior plaster to crack and push out along this joint. There is no insulation in the walls or the roof. Due to the fact that the extraneous elements that have been added along the exterior need to be removed, the windows need to be removed to be reconditioned or replaced, R-19 insulation needs to be added between the framing studs, and the sill plate needs to be replaced, it is recommended that the total exterior of the building be stripped. Once fully stripped of the existing plaster, these recommended elements may be replaced in good order, plywood panels be added (for code/structural shear requirements) and then a cement plaster mix that is consistent of the building's original era be applied throughout.

The roofing of the building should be re-roofed with materials and methods relevant to the original era of the building, the exposed decking and roof joists should be sanded down and repainted. When the existing roofing materials are off of the building, the existing roof sheathing should be inspected for compliance with current code requirements (and applicable CHBC provisions), and replaced if necessary. R-30 insulation should be added to the interior of the roof. One of the two large 48" by 96" skylights have been boarded up. This skylight should be uncovered and reconditioned for future use.

The current concrete entry ramps do not meet updated ADA requirements nor CHBC alternatives. Therefore these ramps shall need to be removed and replaced with updated ADA ramps and railings. The existing stairs shall also need to be removed and designed to work with the new ramp.

C. Building Interior

The interior finishes on the east wing of the building are in fair condition for the current on-going operations at that location. However the interior finishes on the west wing of the building are in very poor condition. Water damage is evident throughout the interior, especially in the hallway, and it is only accessed when necessary. The plaster on the walls is spalling and cracking in numerous areas, and has been pulled off to the wood lathing in others. In some areas, the ceiling plaster has been covered with plywood panels. The interior doors have been painted over with numerous layers

of paint. In many areas it appears that when a textured spray was applied to the corridor walls, it was sprayed on the doors as well. The glass head transoms over the doors have been painted over. The carpeting is worn out and stained. The existing common rest rooms have been abandoned. The fire sprinkler system would require replacement due to its age and effective coverage. Suspect signs of asbestos were observed in the flooring and lead paint is assumed to exist on some or all exterior and interior surfaces.

If the building was to be remodeled and brought up to current codes, numerous items would need to be corrected to the interior of the complete building (both east and west wings). All flooring should be replaced, the plaster walls should be patched, repaired and painted, all wood doors should be replaced with new doors (and ADA-compliant hardware) and the ceilings should be removed and replaced with gypsum board. While the ceiling area is exposed, the new updated fire sprinkler system should be placed up in the attic area. New common ADA-compliant restrooms should be added.

D. Heating, Venting and Air Conditioning (HVAC)

The heating system for the building depends upon an inefficient, old central steam plant of the campus. A new heating system will be required. Air cooling is currently provided by air cooling units placed into portions of the existing windows. A small split system heat pump conditions the pharmacy area of the building. A new energy-efficient split system HVAC package should be installed for future uses of the complete building. Exterior condensing units should be screened away from the building with landscaping or screen walls.

E. Structural System

Code Compliance

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted as required by that analysis where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the lower standards of the CHBC are not used, the change of building occupancy for the proposed adaptive reuse, would require vertical and lateral load resisting systems of the buildingto meet the minimum current

CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Ceiling Framing

The existing second story roof framing was likely originally sheathed with skip sheathing, as was typical of the construction era. Other buildings on site were observed to have plywood sheathing installed over the skip sheathing. Skip sheathing does not provide adequate resistance to wind and earthquake forces, and is thus not permitted for use a structural diaphragm by either the CBC or CHBC. Straight lumber sheathing (where sheathing boards are oriented perpendicular to roof framing) provides limited structural resistance to wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the roof diaphragm.

If the lower standards of the CHBC are not used, and straight lumber sheathing is currently installed, the existing straight roof sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the roof diaphragm.

Evidence of water and/or termite damage was observed at exposed rafter tails at second story roof eaves, and at interior ceiling and wall finishes. Considering this observed damage, the roof and ceiling framing and roof sheathing are likely similarly damaged. Roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Wall Framing

The existing walls are finished with horizontal wood lath and a thin coat of plaster (less than 1/2-inch thick, approximate). The existing plaster was also observed to be damaged in numerous locations, and is therefore considered to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, the lath and plaster at the exterior face of all exterior walls should be removed, and replaced with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, the wall framing and sheathing are likely similarly damaged. Wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Floor Framing

The existing floor is sheathed with diagonal lumber sheathing with a plywood overlay. The existing sheathing is anticipated to provide adequate structural strength to resist wind and earthquake and wind forces, but the existing sheathing and nailing should nonetheless be checked for its compliance with the CHBC or CBC (as applicable), and retrofitted as necessary.

Evidence of water and/or termite damage to floor framing was observed at multiple locations, especially at exterior wall mudsills (the wood plates on top of foundation stem walls). Considering this observed damage, the observed damage to floor framing and sheathing is likely similar throughout the building. Floor framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Foundation

If this building is relocated to a historic district on site, a new foundation will be required. The new foundation will require continuous strip footings and stem walls at the building perimeter walls, and new isolated footings and posts at interior floor supports. The relocated building framing must

be attached to the new foundation with sill anchor bolts, post bases, holdowns, and all other fasteners required to satisfy the CBC, except that foundation design loads for the building, if qualified as a historical building in accordance with the CHBC, may be those prescribed by the CHBC.

3. Potential Adaptive Re-use of the Building

There are several load-bearing interior walls within this building. However, as this is a wood framed structure, adjustments can be made to accommodate adaptive re-uses of the building.

4. Potential Relocation of the Building

It is feasible to relocate this building. The building would have to be cut into smaller pieces for the move. The collapsed sill plate will complicate matters. Additional bracing would need to be added to the exterior walls for the move. Also, several bearing walls in the east wing have been replaced with post and beams. These elements shall need to be cross-braced in both directions during lifting and moving of the structure.

5. Estimating Costs - Please refer to Appendix B for a detailed cost estimate.

Estimated construction costs to rehabilitate this building are $2,421,580.

Estimated costs to relocate this building are $720,383.

Estimated soft costs for the rehabilitation and relocation of this building are $965,674.

Total estimated construction costs, relocation costs, and soft costs are $4,107,637.

Building No. 3 – Dining and Recreation Hall

1. History and Construction

The building was constructed in 1923 or 1924 as one of several buildings constructed for use by the County of San Diego as a sustainable farm facility which provided care of the aged, indigent, orphans and mentally ill. The historic use of the building was as a Dining and Recreation Hall. Located in the central portion of the site, the building is currently utilized as a conference/training room, housekeeping and laundry area. The structure is single-story with a flat roof and multiple window openings (Figures 9 & 10). It is of wood construction with wood lath and stucco on the exterior walls. Two shed type structures were added onto the building (Figure 12). The flat roof of the main building consists of built-up asphalt roofing, while the shed roofs on the additions have asphalt shingles.

2. Building Conditions and Recommendations

A. General Overview

The overall condition of the building is generally fair for the current on-going operations, as further described in this section. The current mechanical, plumbing, and electrical systems are operative. There are signs of leaking from the flat roof in several locations (Figure 13). There are deficiencies with regard to updated ADA requirements; which include restroom facilities, door hardware, signage, and mounting heights of fixtures, where alternative provisions of the CHBC either do not apply or do not provide a significant cost savings advantage. There are two “lean-to” additions that were added to the original building that are not reflective of its original design (Figures 12 and 14).

B. Building Exterior

If the building were to be remodeled and brought up to current codes, while maintaining the original character of the era in which it was built, several items/systems would need to be corrected. The existing “lean-to" additions should be removed. The re-exposed exterior walls would need to be refinished. The exterior wood windows (Figure 15) shall either need to be retrofitted (if possible) to be dual-glazed for energy conservation conformance or replaced with dual glazed wood windows to match the existing windows. The exterior wood framed walls are in fair condition with minor cracking and spalling of the plaster on the surfaces. Only one area was found with significant failure (Figure 11). However, due to much of the requisite window retrofitting or replacement, patching and repair to where the “lean-to” additions are removed, the need for adding plywood panels (for code/structural shear requirements), and the need for adding R-19 insulation between the framing studs, it is recommended that the

total exterior of the building be stripped and replaced with a cement plaster mix that is consistent of the building's original era be applied.

The roofing of the building should be re-roofed and R-30 insulation should be added under its structure. When the existing roofing materials are off of the building, the existing roof sheathing should be inspected for compliance with current code requirements (and applicable CHBC provisions), and replaced if necessary. A large skylight had been boarded off. It is suggested to open the opening back up and install a new skylight in this original location.

Once the "lean-to" additions are removed, there is a grade change at the original exterior doors of the building. Updated ADA ramps shall need to be provided at these two door locations.

C. Building Interior

The interior finishes are in fair to poor condition (Figures 13, 16 and 19). Water damage is evident at portions of the ceiling, as well as numerous obvious patch repairs throughout. The interior doors will need to be increased in width (minimum 29½ inches clear opening per CHBC) and provided with ADA hardware. The vinyl flooring is worn out. The only restroom is located in one of the additions to be removed, and is insufficient. The fire sprinkler system would require replacement due to its age and effective coverage. Suspect signs of asbestos were observed in the flooring and lead paint is assumed to exist on some or all of the exterior and interior surfaces.

If the building was to be remodeled and brought up to current codes, several items would need to be corrected to the interior. All flooring should be replaced, the interior walls should be repainted, the aged and worn wood doors should be replaced with new doors (and updated ADA hardware) and the ceilings should be removed and replaced throughout with gypsum board. While the ceiling area is exposed, the new updated fire sprinkler system should be placed in the attic area. Surface mounted electrical items (Figure 17) should be removed and run inside the cavities of the walls. One men's and one women's restroom shall be required to be added to the building.

D. Heating, Venting and Air Conditioning (HVAC)

The heating for the building is provided by steam from the old, inefficient central plant on campus. Air cooling is currently provided by air cooling units placed into portions of the existing windows. A new energy-efficient split system HVAC package should be installed for future uses of the building. Exterior condensing units should be screened away from the building with landscaping or screen walls.

E. Structural System

Code Compliance

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the lower standards of the CHBC are not used, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Ceiling

The existing roof framing was likely originally sheathed with diagonal lumber sheathing, as was typical of the construction era for flat roofs. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. Note that skip sheathing, if existing, does not provide adequate resistance to wind and earthquake forces, and is thus not permitted for use a structural diaphragm by either the CBC or CHBC. Straight lumber sheathing (if existing), provides limited structural resistance to wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the roof diaphragm.

If the lower standards of the CHBC are not used, and straight lumber sheathing is currently installed, the existing straight roof sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the roof diaphragm.

Evidence of water and/or termite damage was observed at ceiling and wall finishes. Extensive cracking and spalling of the ceiling plaster was also observed. Considering this observed damage, the roof and ceiling framing and roof sheathing are likely similarly damaged. Therefore, the entire lath and plaster ceiling should be removed and replaced with a gypsum board ceiling in accordance with the architectural recommendations for this building. Roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Walls

The existing walls are finished with horizontal wood lath and a thin coat of plaster (less than 1/2-inch thick, approximate). The existing plaster was also observed to be damaged in numerous locations, and is therefore considered to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, the lath and plaster at the exterior face of all exterior walls should be removed and replaced with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, the wall framing and sheathing are likely similarly damaged. Therefore, wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable)for such elements.

Floor Framing

The existing floor is sheathed with diagonal lumber sheathing. The existing sheathing likely provides adequate structural strength to resist wind and earthquake and wind forces, but the existing sheathing and nailing should be checked for its compliance with the CHBC or CBC (as applicable), and retrofitted as necessary.

Evidence of water and/or termite damage to floor framing was observed at multiple locations, especially at exterior wall mudsills (the wood plates on top of foundation stem walls). Considering this observed damage, the observed damage to floor framing and sheathing is likely similar throughout the building. Therefore, floor framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Foundation

If the building is relocated to a historic district on site, a new foundation will be required. The new foundation will require continuous strip footings and stem walls at the building perimeter walls, and new isolated footings and posts at interior floor supports. The relocated building framing must be attached to the new foundation with sill anchor bolts, post bases, holdowns, and all other fasteners required to satisfy the CBC, except that foundation design loads for the building, if qualified as a historical building in accordance with the CHBC, may be those prescribed by the CHBC.

3. Potential Adaptive Re-use of the Building

There are several load-bearing interior walls within this building. However, as this is a wood framed structure, adjustments can be made to the floor plan to accommodate adaptive re-uses of the building.

4. Potential Relocation of the Building

It is feasible to relocate this building. The building would have to be cut into smaller pieces for the move. A portion of this structure is post and beam construction. These elements shall need to be cross-braced in both directions during lifting and moving of the structure.

5. Estimating Costs - Please refer to Appendix B for a detailed cost estimate.

Estimated construction costs to rehabilitate this building are $1,423,246.

Estimated costs to relocate this building are $417,833.

Estimated soft costs for the rehabilitation and relocation of this building are $565,845.

Total estimated construction costs, relocation costs, and soft costs are $2,406,924.

Building No. 8 – Dairy Barn / Men's Ambulatory Ward

1. History and Construction

The building was constructed in 1913 by Walter Dupee, who ran a successful Dairy and Polo Farm at the site until 1923 when the County of San Diego purchased the property and used the site as a sustainable farm facility which provided care of the aged, indigent, orphans and mentally ill. The historic use of the building was originally as a Dairy Barn, next as a Men's Ambulatory Ward and is currently used as a Senior Center. Located in the northeast corner of the site, the structure is the middle of three adjacent single story buildings connected by covered walkways (Figure 20). It is of wood construction with stucco on the exterior walls (Figure 21). The building has a gable roof with a full height attic space used for storage (Figure 22). There are four dormer windows located in the attic (Figure 23). The roofing consists of asphalt shingles.

2. Building Conditions and Recommendations

A. General Overview

The overall condition of the building is fair to poor for the current on-going operations, as further described in this section. The building's heating was originally supplied by steam from the campus' central plant. However, the supply lines for this system have been abandoned. The interior spaces have been retrofitted with several small surface mounted electrical heaters. The current plumbing and electrical systems are operative. The building has been re-roofed recently, but not with era-specific materials (wood shingles) and methods. There are significant signs of water intrusion on the attic framing members as well as saturated insulation batts (Figure 24) from the previous roof. The wood windows and doors were in poor condition (Figures 25 and 26). Wood eve rot was observed in several locations. (Figure 27) The water system has been retrofitted to the exterior of the buildings (Figure 28). There is evidence of hodge-podge electrical retrofitting within the building (Figures 29, 30). Visual signs of asbestos were observed in ceilings, flooring, and piping insulation (Figure 32, 33, and 34). Lead paint is assumed to exist on some of all exterior and interior surfaces (Figures 35 and 36). In addition, the fire sprinkler system appeared to be out of date and does not provide current code coverage (Figure 37). There are deficiencies related to the updated Americans with Disabilities Act (ADA) requirements which include restroom facilities, door hardware, signage, and mounting heights of fixtures, where alternative provisions of the CHBC either do not apply or do not provide a significant cost savings advantage.

B. Building Exterior

If the building were to be remodeled and brought up to current codes, while maintaining the original character of the era in which it was built, several items/systems would need to be corrected. Over the years, extraneous elements have been retrofitted on to the exterior of the building. These include exterior-mounted plumbing lines, and air cooling units placed into portions of the existing windows. These elements shall need to be removed. The exterior wood windows shall either need to be retrofitted (if possible) to be dual-glazed for energy conservation conformance or replaced with dual glazed wood windows to match the existing windows.

The exterior walls appear to be concrete up to approximately 36", and then wood framing with cement plaster up to the top plate. The original exterior finish of the building was wood siding. There is no insulation in the walls. These walls are in fair condition with minor cracking and spalling of the plaster on the surfaces. However, due to much of the requisite retrofitting to the windows, re-routing of piping, and the need to insulate the walls above the concrete wainscoat, it is recommended that the exterior of the building be stripped to the wood frame. Once fully stripped of the existing plaster, it is recommended that these elements be placed in good order, plywood panels be added (for code/structural shear requirements) and then wood siding reflective of the original building be replaced.

The roofing of the building should be re-roofed with (fire treated) wood shingles relevant to the original era of the building. The existing roof sheathing is required to be removed and replaced with properly nailed wood structural panel sheathing. Also, the exposed decking, joists and fascia boards be repaired and repainted. The Water-infiltrated R-30 insulation should be replaced in the roof.

The current concrete entry ramps do not meet updated ADA requirements nor CHBC alternatives. Therefore these ramps shall need to be removed and replaced with updated ADA ramps and railings. The existing stairs shall also need to be removed and designed to work with the new ramp.

C. Building Interior

The interior finishes are in fair condition. However, as noted previously visual signs of asbestos were observed in ceilings, flooring, and piping insulation. Also, though the original steam supply for heating was abandoned, the original radiators and steam piping were left in place throughout the interior (Figures 31 & 34). The existing restrooms will require ADA upgrades, including, appropriate finishes for such use.

If the building was to be remodeled and brought up to current codes, numerous items would need to be corrected to the interior. The existing flooring would need to be abated and replaced. The extraneous surface mounted electrical wiring, steam piping, and abandoned radiators would need to be removed. The ceilings would need to be abated and replaced. While the ceiling area is exposed, the new updated fire sprinkler system should be installed. Due to the extensive retro-fitting or replacement of the windows, the plaster interior of the walls shall need to be extensively patched and repaired. The aged and worn wood doors should be replaced with new doors (and updated ADA hardware). The existing men's and women's restrooms should be fully gutted and replaced with new ADA facilities.

D. Heating, Venting and Air Conditioning (HVAC)

As previously stated, the heating for the building is provided by small inefficient surface mounted electrical heaters. Air cooling is currently provided by air cooling units placed into portions of the existing windows. A new energy-efficient split system HVAC package should be installed for future uses of the building. Exterior condensing units should be screened away from the building with landscaping or screen walls.

E. Structural System

Code Compliance

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the lower standards of the CHBC are not used, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Attic Framing

The existing roof is a conventionally framed gable roof with the attic floor framing acting as collar ties. Therefore, the attic floor framing is an

integral part of the roof framing system, and cannot be removed without maintaining structurally adequate collar ties.

The existing roof framing is sheathed with skip sheathing overlain by plywood sheathing. Skip sheathing does not provide adequate structural stability against wind and earthquake forces, and is thus not permitted for use as a structural diaphragm by the CHBC or CBC (as applicable). Therefore, the existing roof sheathing (including both the existing skip sheathing and plywood sheathing) would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CHBC or CBC (as applicable).

If the roof framing is to support new, heavier roofing (such as lightweight concrete tiles, as currently included in the architectural recommendations for this building), the existing framing should be analyzed for its adequacy to carry the proposed additional loads in conjunction with all design loads required by the CHBC or CBC (as applicable). Strengthening of the existing roof framing members may be required, and could be accomplished by attaching new framing members to the existing members. Other engineered solutions would also be acceptable.

The attic floor is sheathed with straight lumber sheathing (where sheathing boards are oriented perpendicular to framing members). Straight lumber sheathing provides limited structural resistance to wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing straight sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the attic floor diaphragm.

If the lower standards of the CHBC are not used, the existing attic floor sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the attic floor diaphragm.

The existing attic floor framing should be analyzed for its adequacy to carry the proposed additional sheathing weights, if required, in conjunction with all design loads (including collar tie loads) required by the CHBC or CBC (as applicable). Strengthening of the existing attic floor framing members may be required, and could be accomplished by attaching new framing members to the existing members. Other engineered solutions would also be acceptable.

Evidence of water and/or termite damage was observed at roof framing and ceiling and wall finishes. Considering this observed damage, the roof and attic framing and sheathing are likely similarly damaged. Therefore, roof and attic framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC (as applicable) for such elements.

Wall Framing

The existing walls are likely finished with horizontal wood lath and a thin coat of plaster. The existing plaster was also observed to be damaged in several locations, and is therefore considered to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, the lath and plaster at the exterior face of all exterior walls should be removed and replaced with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, the wall framing and sheathing are likely similarly damaged. Therefore, wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable)for such elements.

Foundation

The building is supported by an elevated concrete slab-on-grade with concrete or masonry stem walls in some portions of the building extending approximately two feet above finish floor. The existing footings and stem walls should be analyzed for their adequacy to carry the all design loads required by the CHBC or CBC (as applicable). Some modification of the existing foundation may be necessary, such as extension of existing footing width and/or depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels. Hardware attaching a wood stud wall to the foundation and stem walls is likely not installed or otherwise inadequate. Therefore, existing building framing must be attached to the new foundation with sill anchor

bolts, post bases, hold downs, and all other fasteners required to satisfy CHBC or CBC requirements (as applicable).

3. Potential Adaptive Re-use of the Building

The building's post and beam structure with wood load bearing walls is somewhat flexible for adaptive re-uses. Adjustments can be made to the building to accommodate office, retail, or community service spaces.

4. Potential Relocation of the Building

This building is located adjacent to the existing Polo Barn. Alternative locations were not assumed.

5. Estimating Costs - Please refer to Appendix B for a detailed cost estimate.

Estimated construction costs to rehabilitate this building are $1,690,210.

Estimated soft costs for the rehabilitation of this building are $519,196.

Total estimated construction costs and soft costs are $2,209,406.

Building No. 16 – Dining Room and Kitchen

1. History and Construction

The building was constructed in 1951 by the County of San Diego Department of Public Works. It's original and current use is as a Dining Room and Kitchen for the Edgemoor Geriatric Hospital. The three-bay structure consists of two outer bays on either side of a single, high roofed middle bay (Figures 42 & 43). The roof height of the middle bay is approximately 20 feet. The building has a slightly sloped roof, peaked at the center with hot-mopped asphalt and gravel roofing material.

2. Building Conditions and Recommendations

A. General Overview

The overall condition of the building is fair for the current on-going operations, as further described in this section. The current mechanical, plumbing and electrical systems are operative. The exterior of the building is in fairly good repair. There are deficiencies related to the updated Americans with Disabilities Act (ADA) requirements which include restroom facilities, door hardware, signage, and mounting heights of fixtures, where alternative provisions of the CHBC either do not apply or do not provide a significant cost savings advantage. A "lean-to" addition was added to the south side of the building for additional storage, and additional refrigeration equipment has been added to the building.

B. Building Exterior

If the building were to be remodeled and brought up to current codes, while maintaining the original character of the era in which it was built, several items/systems would need to be corrected. Over the years, extraneous elements have been added and retrofitted on to the exterior of the building. These include exterior-mounted conduit, lighting and mechanical units. These elements shall need to be removed. The exterior steel windows shall need to be retrofitted (if possible) to be dual glazed for energy conservation conformance or replaced with dual glazed steel windows to match the existing windows. Six vinyl windows were added to the east end of the kitchen. These shall need to be replaced with metal windows true to the era of the building's original construction.

The exterior concrete walls and cement plaster infill wall are in fair condition with minor cracking and spalling. However, these existing walls do not appear to satisfy current code requirements for concrete buildings. Therefore, the existing concrete walls and frames are expected to require significant retrofit. In addition, the exterior faces of the walls shall need to be patched, repaired, and repainted. The mass of these walls provides sufficient mass for energy conservation purposes.

There are signs of numerous patches in the ceiling of the clearstory. The complete roof should be removed down to the structure and replaced. R-30 insulation should be installed to the underside of the roof deck. Code-compliant roof-to-wall connections shall need to be installed. The exposed fascia should be scraped and repainted. The extraneous refrigeration equipment and patchwork screening on top of the roof should be removed.

C. Building Interior

The interior finishes appear to be in fair condition for the current on-going operations. There are some small cracks in the interior of the building, especially around the window openings and doorways (Figures 44 & 45). The vinyl composite tile flooring at the southern entry to the kitchen is worn out. The quarry tile flooring in the kitchen is in good condition, but would have to be removed for any other uses. Old electrical wiring with exposed electrical conduit was in use in some areas (Figures 48 and 49). The building appears to be free of asbestos and lead. See Appendix A for a partial list of asbestos and lead surveys of the buildings. The fire sprinkler system appears to be out of date and does not provide current code coverage (Figures 50 and 51). Men's and Women's restrooms and doors do not meet updated ADA requirements nor CHBC alternatives (Figure 52).

If the building were to be remodeled and brought up to current codes, all flooring should be removed and replaced except for the quarry tile in the kitchen. Extraneous electrical wiring and fixtures should be removed and placed into the walls and column covers. The interior walls should be patched, repaired, and repainted. All doors should be reconditioned and retro-fitted with updated ADA hardware. Doors to the existing rest rooms shall need to be widened to ADA widths. The ceiling in the northern portion of the building should be removed and replaced. The exposed HVAC duct and fire sprinkler system should be placed above the ceiling while it is being replaced. The restrooms will need to be retrofitted to comply with updated ADA requirements or CHBC alternatives. This would entail removing existing fixtures and partitions and replacing them with new fixtures in new configurations.

D. Heating, Venting and Air Conditioning (HVAC)

The heating for the building is serviced by steam from the old, inefficient central plant for the overall campus. A new upgraded system would be required for the rehabilitated building. The northern portion of the building is cooled by split system HVAC package, with exposed ducts at the interior. There is no significant cooling in the kitchen portion of the building. Large portable fans are currently utilized by staff. This portion of the building shall need to be supplemented with an energy-efficient split

system HVAC package. Exterior condensing units should be screened away from the building with landscaping or screen walls.

E. Structural System

Code Compliance

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the lower standards of the CHBC are not used, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof Framing

The existing roof framing was originally sheathed with diagonal lumber sheathing, as was typical of the construction. The existing sheathing and nailing would be required to be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. The existing roof diaphragm is likely inadequate for out-of-plane support of the existing concrete walls, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, the existing roof diaphragm would likely need to be strengthened by the addition of wood structural panel sheathing over the existing diagonal sheathing.

No significant anchorage of the existing concrete walls to the existing roof diaphragm to resist out-of-plane wind and earthquake forces was indicated on the available structural drawings, and would not typically have been installed during the era of construction. Therefore, anchorage of the concrete walls to the roof diaphragm would need to be designed and installed at all roof-to-wall connections to conform to the requirements of the CHBC or CBC (as applicable). Adequate blocking, framing, strapping and chords would also need to be installed as required to conform to the CHBC or CBC requirements (as applicable) for sub-diaphragm design.

Evidence of water and/or termite damage was observed at ceiling and wall finishes. Considering this observed damage, the roof framing and roof sheathing are likely similarly damaged. Therefore, roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites should be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements.

Walls

The north, south, and west walls are 8-inch thick reinforced cast-in-place concrete walls. The east wall consists of a concrete frame with wood stud and sheathing infill.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing walls and frames would be required to be analyzed in accordance with the design requirements of the CHBC. It appears that some level of retrofit may be required, particularly at the concrete frame (see the recommendations below for suggested retrofit at this element). Destructive testing of the existing concrete elements would be required to determine the mechanical properties of the existing concrete and reinforcing steel, and non-destructive testing would be recommended to verify the reinforcing pattern in the existing concrete elements.

If the lower standards of the CHBC are not used, then the existing walls and frames do not appear to satisfy CBC requirements for concrete buildings. Therefore, the existing concrete walls and frames would likely require significant retrofit. Two common retrofit methods for such construction include: (1) application of reinforced shotcrete to the existing concrete elements as required to provide adequate strength and ductility per the CBC, and (2) construction of new cast-in-place concrete frames against the existing concrete elements as required to provide adequate strength and ductility per the CBC. At the east wall, the existing infill wall should be removed and replaced with a reinforced concrete masonry or cast-in-place concrete wall as required to provide adequate strength and ductility per the CBC.

Foundation

The building is supported by a concrete slab-on-grade with concrete footings and stem walls. The existing footings and stem walls should be analyzed for their adequacy to carry the design loads proscribed by the CHBC or CBC (as applicable). Some modification of the existing foundation may be necessary, such as extension of existing footing and stem wall width and/or footing depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels. In the kitchen, the existing slab-on-grade includes several

pits and drains, and is sloped to accommodate drainage. The existing sloped areas and pits would need to be removed and replaced with a new reinforced concrete slab-on-grade to accommodate the proposed adaptive reuse.

3. Potential Adaptive Re-use of the Building

This building's concrete frame structure allows for flexibility in opening up walls. Its large clearstory-lit volume of the current kitchen affords potential for reuse. Should the kitchen use be abandoned, the quarry tile shall need to be removed as it has trenches and level changes that relate to the existing kitchen equipment. Also, all of the major utilities to the kitchen equipment would have to be removed and capped.

4. Potential Relocation of the Building

Due to the heavy concrete frame and block infill structure of the building, which is cast into a slab on grade, relocation would be excessively complex, and therefore not recommended.

5. Estimating Costs - Please refer to Appendix B for a detailed cost estimate.

Estimated construction costs to rehabilitate this building are $3,185,088.

Estimated soft costs for the rehabilitation of this building are $978,434.

Total estimated construction costs and soft costs are $4,163,522.

Building No. 19 – Men's and Women's Custodial Wards

1. History and Construction

The building was constructed in 1945 as one of several buildings constructed for use by the County of San Diego as a sustainable farm facility which provided care of the aged, indigent, orphans and mentally ill. The historic use of the building was as Men's and Women's Custodial Wards. The building is currently utilized as a skilled nursing facility for head traumas and Huntington's disease. The single story, U-shaped structure is constructed entirely of concrete with exterior stucco wall covering (Figure 56 & 57). The building's flat roof consists of built-up asphalt roofing.

2. Building Conditions and Recommendations

A. General Overview

The overall condition of the building is generally fair to poor for the current on-going operations as further described in this section. The current mechanical, plumbing and electrical systems are operative, but in need of continuous maintenance. The roof leaks in several locations, and the subterranean plumbing chase is often flooded. There are deficiencies related to the updated Americans with Disabilities Act (ADA) requirements which include restroom facilities, door hardware, signage, and mounting heights of fixtures, where alternative provisions of the CHBC either do not apply or do not provide a significant cost savings advantage.

B. Building Exterior

If the building were to be remodeled and brought up to current codes, while maintaining the original character of the era in which it was built, numerous items/systems would need to be corrected. Over the years, extraneous elements have been retrofitted on to the exterior of the building. These include exterior-mounted electrical conduit, security lighting, and air cooling units placed into portions of the existing windows. These elements shall need to be removed. The exterior steel windows shall either need to be retrofitted (if possible) to be dual-glazed for energy conservation conformance or replaced with dual glazed steel windows to match the existing windows.

The exterior concrete walls are in fair condition with minor cracking and spalling of the plaster on the surfaces. However, due to much of the requisite retrofitting to the windows, security lighting, and electrical re-routing, there shall need to be significant patch, repair, and repainting of the overall exterior walls. No insulation was observed in the building shell.

The thermal mass of the concrete exterior walls should compensate for this on the vertical surfaces.

Due to the on-going leakage problems from the roof, the current roofing should be stripped down to the concrete roof structure and re-built back up. Current holes in the concrete roof structure due to piping installations should be filled in as well.

The current concrete entry ramps shall need to be removed and replaced with updated ADA ramps and railings.

C. Building Interior

The interior finishes appear to be in fair condition for the current on-going operations. Wear is apparent on many portions of the flooring, walls, corridor handrails, and doors. "Popcorn" spray-on acoustic finish on the ceilings is suspect of containing asbestos. Extraneous conduit and piping, including the fire sprinkler system, have been added along the ceilings of the common corridors. While some asbestos-containing floor covering materials have been abated in the building, it appears that some still exist.

If the building were to be remodeled and brought up to current codes, all flooring should be replaced, the corridor handrails removed, the aged and worn wood doors reconditioned and retrofitted with ADA hardware, the ceilings removed/abated, the ceiling-mounted plumbing, fire sprinkler, and electrical systems be moved up into the attic spaces, and the ceilings replaced with gypsum board system. All wall finishes should be painted. The restrooms shall need to be modified to comply with updated ADA requirements. This would entail removing existing fixtures and partitions and replacing them with new fixtures in new configurations.

D. Heating, Venting and Air Conditioning (HVAC)

The heating for the building is provided by steam from the campus's old, inefficient central plant, and distributed by radiating vents in the individual rooms. The system would need to be upgraded. Air cooling is currently provided by air cooling units placed into portions of the existing windows. This system should be removed and replaced with an energy-efficient split system HVAC package. Exterior condensing units should be screened away from the building with landscaping or screen walls.

E. Structural System

<u>Code Compliance</u>

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as

required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the lower standards of the CHBC are not used, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof

The existing roof is a cast-in-place concrete slab. The existing roof slab should be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. Destructive and non-destructive testing should be performed to verify the existing conditions of construction (such as concrete thickness, concrete compressive strength, reinforcing sizes and layout, and reinforcing type and strength). The existing roof diaphragm is likely adequate for the requirements of the CHBC and CBC (as applicable), though a complete analysis for design loads in accordance with the CHBC or CBC (as applicable) would need to be performed.

Damage to the existing roof slab was observed at pipe penetrations in one location. Similar damage is expected to exist elsewhere in the building. Such damage should be repaired in a manner to preserve the strength of the existing slab as undamaged.

Walls

The exterior walls and most of the interior corridor walls appear to be cast-in-place concrete walls. The existing walls, if reinforced, would likely satisfy CHBC and CBC requirements (as applicable) for concrete buildings, except for possibly a few locations at wall openings if the building is required to be analyzed in accordance with the CBC. Therefore, some retrofit may be required at wall piers, unless the building is to be qualified as a historical building in accordance with the CHBC. Destructive and non-destructive testing should be performed to verify the existing conditions of construction (such as concrete thickness, concrete compressive strength, reinforcing sizes and layout, and reinforcing type and strength). The existing walls should be analyzed for their

conformance to the requirements of the CHBC or CBC (as applicable) and retrofitted as needed.

Foundation

The building is supported by a concrete slab-on-grade with concrete footings and stem walls. The existing footings and stem walls should be analyzed for their adequacy to carry the design loads proscribed by the CHBC or CBC (as applicable). Some modification of the existing foundation may be necessary, such as extension of existing footing and stem wall width and/or footing depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels.

3. Potential Adaptive Re-use of the Building

Due to the inflexible nature of the building's concrete wall structure, and its double-loaded corridor configuration with small individual rooms, a commercial adaptive re-use of this building would be limited.

4. Potential Relocation of the Building

Due to the heavy concrete wall structure of the building which is cast into a slab on grade, relocation would be excessively complex, and therefore not recommended.

5. Estimating Costs - Please refer to Appendix B for a detailed cost estimate.

Estimated construction costs to rehabilitate this building are $4,282,232.

Estimated soft costs for the rehabilitation of this building are $1,315,585.

Total estimated construction costs and soft costs are $5,597,817.

III. Conclusions

Based on evaluation of the buildings, it has been determined that the condition of the buildings would allow for rehabilitation. The costs, which are substantial, to restore, upgrade for reuse, and bring the buildings into compliance with current codes vary between buildings due to the differing existing condition of each and the buildings' varying materials, systems and components.

It has been determined that the size and configuration of Buildings #2 (Women's Ambulatory Ward), #3 (Dining and Recreation Hall), #8 (Dairy Barn/Men's Ambulatory Ward), and #16 ((Dining Room and Kitchen), allow adaptive re-use for commercial uses. However, due to the structural system and layout of Building #19 (Men's and Women's Custodial Wards) commercial adaptive re-uses are limited.

Lastly, it has been determined that Building #2 (Women's Ambulatory Ward) and Building #3 (Dining and Recreation Hall), can be relocated from their current locations. Due to the concrete structural systems of Buildings #16 and #19 which are tied into concrete slabs on grade, it is excessively complex to relocate these two buildings. Building #8 (Dairy Barn/Men's Ambulatory Ward) was not reviewed for potential relocation.

Table 2 below provides a cost overview for the rehabilitation costs, relocation costs, and soft costs for each individual building, as well as the total cost for all buildings combined.

Table 2

Building	Size		Construction	Relocation	Soft Costs	Total Costs
2	7,684	s.f.	$2,421,580	$720,383	$965,674	$4,107,637
3	4,635	s.f.	$1,423,246	$417,833	$565,845	$2,406,924
8	4,165	s.f.	$1,690,210	$-	$519,196	$2,209,406
16	10,458	s.f.	$3,185,088	$-	$978,434	$4,163,522
19	13,996	s.f.	$4,282,232	$-	$1,315,585	$5,597,817
Totals	**40,938**	**s.f.**	**$13,002,356**	**$1,138,216**	**$4,344,734**	**$18,485,306**

As discussed in the Executive Summary, the findings for buildings 2, 3, 8, 16, and 19 can be appropriated to the other buildings at the Edgemoor Facility. This is due to the fact that these five buildings are representative of the other on-site structures based on similarities in age, condition, construction, size, and architectural style of the total facility.

APPENDIX A

STRUCTURAL OBSERVATION REPORT

aark engineering inc.

REPORT OF STRUCTURAL OBSERVATION

May 23, 2008

Project: Adaptive Reuse Study of
Edgemoor Geriatric Hospital
Santee, CA

Job No: MAP.007

Date of Observation: November 30, 2007

Observation Performed By: Aaron Steele, SE

Observation Report By: Aaron Steele, SE

BACKGROUND AND SCOPE OF OBSERVATION

At the request of Matalon Architecture & Planning, Aark Engineering Inc. (AARK) performed limited structural observations of and reviewed the available construction documents for Buildings 2, 3, 8, 16 and 19 for the purpose of determining the subject buildings' current structural condition and the general structural feasibility for their adaptive reuse. AARK's scope of services for the subject structural observation did not include intrusive or destructive observations or testing, structural calculations or analyses.

Following is a summary of AARK's general findings and recommendations, which are based upon the requirements of the recently adopted 2007 California Building Code (henceforth CBC) and 2007 California Historical Building Code (henceforth CHBC).

None of the existing buildings included in the scope of this report are currently qualified historical buildings (as defined and governed by the CHBC), and therefore do not currently fall under the jurisdiction of the CHBC. However, since the buildings may be qualified as historical buildings as a part of the proposed adaptive reuse, AARK addresses the general requirements of both building codes in this report. Due to the limited scope of this study, AARK cannot readily quantify the comparative structural effects of application of the CBC requirements versus application of the CHBC requirements to the subject structures. As such,

AARK provides in this report our opinion of how the application of either of these codes may generally affect the retrofit requirements for the subject structures based upon our limited observations of the existing structures and review of the available construction documents.

REFERENCE DOCUMENTS

Edgemoor Geriatric Hospital Building Survey dated August 30, 2007.

Edgemoor Facility Demolition Report dated September 2007 by HDR.

Construction Drawings for Building 16 (Dining Room and Kitchen).

APPENDIX A: SITE MAP

APPENDIX B: PHOTOS

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are made regarding the current structural condition of the subject buildings. No findings or recommendations are made regarding non-structural components or findings, except where such items affect structural components. These findings are based on direct visual observation of the subject building by AARK, except where noted otherwise.

A site map indicating the building locations and selected photographs from AARK's observation follow this report in Appendices A and B, respectively.

BUILDING 2 – WOMEN'S AMBULATORY WARD

General

Building 2 is understood to have been constructed in 1925, and is a one- and two-story wood-framed building with flat and pitched roofs. Based on AARK's limited observation, the overall structural condition of the building is considered fair (relative to CHBC requirements) to poor (relative to CBC requirements).

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted as required by that analysis where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the building is not qualified as a historical building in accordance with the CHBC, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Ceiling Framing

The existing roof and ceiling framing could not be readily observed during AARK's observation, except as noted. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of

exposed framing and finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing second story roof framing was likely originally sheathed with skip sheathing, as was typical of the construction era. Other buildings on site were observed to have plywood sheathing installed over the skip sheathing. Skip sheathing does not provide adequate resistance to wind and earthquake forces, and is thus not permitted for use a structural diaphragm by either the CBC or CHBC. Straight lumber sheathing (where sheathing boards are oriented perpendicular to roof framing) provides limited structural resistance to wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the roof diaphragm.

If the building is not qualified as a historical building in accordance with the CHBC, and straight lumber sheathing is currently installed, the existing straight roof sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the roof diaphragm.

Evidence of water and/or termite damage was observed at exposed rafter tails at second story roof eaves, and at interior ceiling and wall finishes. Considering this observed damage, AARK anticipates the roof and ceiling framing and roof sheathing to be similarly damaged. AARK therefore recommends that roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC (as applicable) requirements for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 20% (approximate) of the existing roof and ceiling framing and roof sheathing is damaged such that it requires replacement.

Wall Framing

The existing wall framing could not be readily observed during AARK's observation. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of wall and ceiling finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing walls are finished with horizontal wood lath and a thin coat of plaster (less than 1/2-inch thick, approximate). The existing plaster was also observed to be damaged in numerous locations, and is therefore considered by AARK to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, AARK recommends the removal of the lath and plaster at the exterior face of all exterior walls, and sheathing of these walls with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, AARK anticipates the wall framing and sheathing to be similarly damaged. AARK therefore recommends that wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements for such elements (as applicable). Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing wall framing and sheathing is damaged such that it requires replacement.

Floor Framing

Access to the existing floor framing was limited during AARK's observation. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing floor framing are based upon AARK's limited observation of the existing framing and exterior wall finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing floor is sheathed with diagonal lumber sheathing with a plywood overlay. AARK anticipates that the existing sheathing provides adequate structural strength to resist wind and earthquake and wind

forces, but recommends that the existing sheathing and nailing be checked for its compliance with the CHBC or CBC (as applicable), and retrofitted as necessary.

Evidence of water and/or termite damage to floor framing was observed at multiple locations, especially at exterior wall mudsills (the wood plates on top of foundation stem walls). Considering this observed damage, AARK anticipates the observed damage to floor framing and sheathing to be similar throughout the building. AARK therefore recommends that floor framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing floor framing and sheathing is damaged such that it requires replacement, except that AARK recommends replacement of 100% of the mudsills.

Foundation

Since the proposed adaptive reuse plan for this building is understood to include its relocation, a new foundation will be required. The new foundation will require continuous strip footings and stem walls at the building perimeter walls, and new isolated footings and posts at interior floor supports. The relocated building framing must be attached to the new foundation with sill anchor bolts, post bases, holdowns, and all other fasteners required to satisfy the CBC, except that foundation design loads for the building, if qualified as a historical building in accordance with the CHBC, may be those prescribed by the CHBC.

Feasibility of Relocation

Since this building is of wood construction with a raised floor, it would be feasible to split it into sections, lift it off its foundation, and relocate it to another site and onto new foundations.

BUILDING 3 – ORIGINAL DINING AND RECREATION HALL

General

Building 3 is understood to have been constructed in 1923 or 1924, and is a one-story wood-framed building with a flat roof and numerous window openings. Based on AARK's limited observation, the overall structural condition of the building is considered fair (relative to CHBC requirements) to poor (relative to CBC requirements).

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the building is not qualified as a historical building in accordance with the CHBC, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Ceiling

The existing roof and ceiling framing could not be readily observed during AARK's observation, except as noted. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of exposed framing and finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing roof framing was likely originally sheathed with diagonal lumber sheathing, as was typical of the construction era for flat roofs. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. Note that skip sheathing, if existing, does not provide adequate resistance to wind and earthquake forces, and is thus not permitted for use a structural diaphragm by either the CBC or CHBC. Straight lumber sheathing (if existing), provides limited structural resistance to

wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the roof diaphragm.

If the building is not qualified as a historical building in accordance with the CHBC, and straight lumber sheathing is currently installed, the existing straight roof sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. If diagonal sheathing or wood structural panel sheathing are installed, the existing sheathing and nailing would be required to be analyzed for its conformance to the CBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the roof diaphragm.

Evidence of water and/or termite damage was observed at ceiling and wall finishes. Extensive cracking and spalling of the ceiling plaster was also observed. Considering this observed damage, AARK anticipates the roof and ceiling framing and roof sheathing to be similarly damaged. AARK recommends that the entire lath and plaster ceiling be removed and replaced with a gypsum board ceiling in accordance with the architectural recommendations for this building. AARK recommends that roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 20% (approximate) of the existing roof and ceiling framing and roof sheathing is damaged such that it requires replacement.

Walls

The existing wall framing could not be readily observed during AARK's observation. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of wall and ceiling finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing walls are finished with horizontal wood lath and a thin coat of plaster (less than 1/2-inch thick, approximate). The existing plaster was also observed to be damaged in numerous locations, and is

therefore considered by AARK to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, AARK recommends the removal of the lath and plaster at the exterior face of all exterior walls, and sheathing of these walls with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, AARK anticipates the wall framing and sheathing to be similarly damaged. AARK therefore recommends that wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing wall framing and sheathing is damaged such that it requires replacement.

Floor Framing

Access to the existing floor framing was limited during AARK's observation. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing floor framing are based upon AARK's limited observation of the existing framing and exterior wall finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing floor is sheathed with diagonal lumber sheathing. AARK anticipates that the existing sheathing provides adequate structural strength to resist wind and earthquake and wind forces, but recommends that the existing sheathing and nailing be checked for its compliance with the CHBC or CBC (as applicable), and retrofitted as necessary.

Evidence of water and/or termite damage to floor framing was observed at multiple locations, especially at exterior wall mudsills (the wood plates on top of foundation stem walls). Considering this observed damage, AARK anticipates the observed damage to floor framing and sheathing to be similar throughout the building. AARK therefore recommends that floor framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of

the subject framing, AARK estimates that less than 10% (approximate) of the existing floor framing and sheathing is damaged such that it requires replacement, except that AARK recommends replacement of 100% of the mudsills.

Foundation

Since the proposed adaptive reuse plan for this building is understood to include its relocation, a new foundation will be required. The new foundation will require continuous strip footings and stem walls at the building perimeter walls, and new isolated footings and posts at interior floor supports. The relocated building framing must be attached to the new foundation with sill anchor bolts, post bases, holdowns, and all other fasteners required to satisfy the CBC, except that foundation design loads for the building, if qualified as a historical building in accordance with the CHBC, may be those prescribed by the CHBC.

Feasibility of Relocation

Since this building is of wood construction with a raised floor, it would be feasible to split it into sections, lift it off its foundation, and relocate it to another site and onto new foundations.

BUILDING 8 – ORIGINAL DAIRY BARN / MEN'S AMBULATORY WARD

General

Building 8 is understood to have been constructed in 1913, and is a one-story wood-framed building with a pitched roof and large attic. Based on AARK's limited observation, the overall structural condition of the building is considered fair (relative to CHBC or CBC requirements).

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the building is not qualified as a historical building in accordance with the CHBC, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof and Attic Framing

The existing roof framing and sheathing was readily observed from the attic space. The attic floor framing could not be observed. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of exposed framing and finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing roof is a conventionally framed gable roof with the attic floor framing acting as collar ties. Therefore, the attic floor framing is an integral part of the roof framing system, and cannot be removed without maintaining structurally adequate collar ties.

The existing roof framing is sheathed with skip sheathing overlain by plywood sheathing. Skip sheathing does not provide adequate structural stability against wind and earthquake forces, and is thus not permitted for use as a structural diaphragm by the CHBC or CBC (as applicable). Therefore, the existing roof sheathing (including both the existing skip sheathing and plywood sheathing) would be required to be

removed and replaced with properly nailed wood structural panel sheathing in conformance to the CHBC or CBC (as applicable).

If the roof framing is to support new, heavier roofing (such as lightweight concrete tiles, as currently included in the architectural recommendations for this building), the existing framing should be analyzed for its adequacy to carry the proposed additional loads in conjunction with all design loads required by the CHBC or CBC (as applicable). Strengthening of the existing roof framing members may be required, and could be accomplished by attaching new framing members to the existing members. Other engineered solutions would also be acceptable.

The attic floor is sheathed with straight lumber sheathing (where sheathing boards are oriented perpendicular to framing members). Straight lumber sheathing provides limited structural resistance to wind and earthquake forces, and is disallowed by the CBC. Straight sheathing is permitted by the CHBC, provided that the sheathing meets the fastening and design requirements set forth in the CHBC.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing straight sheathing would be required to be analyzed for its conformance to the CHBC, and retrofitted as necessary. Straps and blocking and/or other hardware may be required at re-entrant corners to properly distribute wind and earthquake forces through the attic floor diaphragm.

If the building is not qualified as a historical building in accordance with the CHBC, the existing attic floor sheathing would be required to be removed and replaced with properly nailed wood structural panel sheathing in conformance to the CBC. Straps and blocking and/or other hardware may be required at re-entrant building corners to properly distribute wind and earthquake forces through the attic floor diaphragm.

The existing attic floor framing should be analyzed for its adequacy to carry the proposed additional sheathing weights, if required, in conjunction with all design loads (including collar tie loads) required by the CHBC or CBC (as applicable). Strengthening of the existing attic floor framing members may be required, and could be accomplished by attaching new framing members to the existing members. Other engineered solutions would also be acceptable.

Evidence of water and/or termite damage was observed at roof framing and ceiling and wall finishes. Considering this observed damage, AARK anticipates the roof and attic framing and sheathing to be similarly damaged. AARK recommends that roof and attic framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if

required, to satisfy CHBC or CBC (as applicable) requirements for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing roof and ceiling framing and roof sheathing is damaged such that it requires replacement.

Wall Framing

The existing wall framing could not be readily observed during AARK's observation. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of wall and ceiling finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing walls are likely finished with horizontal wood lath and a thin coat of plaster. The existing plaster was also observed to be damaged in several locations, and is therefore considered by AARK to be unsuitable for structural use. Such a wall finish without structural sheathing does not provide adequate structural strength to resist wind and earthquake forces, regardless of whether the building is qualified as a historical building in accordance with the CHBC. Therefore, AARK recommends the removal of the lath and plaster at the exterior face of all exterior walls, and sheathing of these walls with wood structural panel sheathing as required to satisfy CHBC or CBC requirements (as applicable) for wood shear walls. All hardware associated with such shear walls (such as sill plate fasteners, holdowns, straps and additional fasteners at top plate splices) would also need to be installed as required to satisfy CHBC or CBC requirements (as applicable).

Evidence of water and/or termite damage was observed at interior and exterior wall finishes. Considering this observed damage, AARK anticipates the wall framing and sheathing to be similarly damaged. AARK therefore recommends that wall framing members and sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing wall framing and sheathing is damaged such that it requires replacement.

Foundation

The building is supported by an elevated concrete slab-on-grade with concrete or masonry stem walls in some portions of the building extending approximately two feet above finish floor. AARK recommends that the existing footings and stem walls be analyzed for their adequacy to carry the all design loads required by the CHBC or CBC (as applicable). AARK anticipates that some modification of the existing foundation may

be necessary, such as extension of existing footing width and/or depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels. AARK also anticipates that hardware attaching wood stud walls to the foundation and stem walls is likely not installed or otherwise inadequate. Therefore, existing building framing must be attached to the new foundation with sill anchor bolts, post bases, holdowns, and all other fasteners required to satisfy CHBC or CBC requirements (as applicable).

Feasibility of Relocation

Since this building is a concrete building with a concrete slab-on-grade and concrete stem walls of varying height, relocation, which would be possible, would be excessively complex, and would therefore not be recommended for the proposed adaptive reuse.

BUILDING 16 – DINING ROOM AND KITCHEN

General

Building 16 is understood to have been constructed in 1951 by the County of San Diego Department of Public Works, and is a one-story concrete bearing wall and concrete frame building with a pitched wood- and steel-framed roof. Based on AARK's limited observation, the overall structural condition of the building (relative to current CBC requirements) is considered fair (relative to CHBC requirements) to poor (relative to CBC requirements).

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the building is not qualified as a historical building in accordance with the CHBC, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof Framing

The existing roof framing could not be readily observed during AARK's observation, though some of the original structural construction drawings for this building were available. Therefore, the following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of finishes, review of the available drawings (which are assumed to be accurate for the purpose of this report—the accuracy of these drawings should be confirmed by destructive and/or non-destructive testing as required to sufficiently verify their correctness) and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing roof framing was originally sheathed with diagonal lumber sheathing, as was typical of the construction. The existing sheathing and nailing would be required to be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. AARK anticipates that the existing roof diaphragm is likely inadequate for out-of-plane support of the existing concrete walls, regardless of whether

the building is qualified as a historical building in accordance with the CHBC. Therefore, the existing roof diaphragm would likely need to be strengthened by the addition of wood structural panel sheathing over the existing diagonal sheathing.

No significant anchorage of the existing concrete walls to the existing roof diaphragm to resist out-of-plane wind and earthquake forces was indicated on the available structural drawings, and would not typically have been installed during the era of construction. Therefore, anchorage of the concrete walls to the roof diaphragm would need to be designed and installed at all roof-to-wall connections to conform to the requirements of the CHBC or CBC (as applicable). Adequate blocking, framing, strapping and chords would also need to be installed as required to conform to the CHBC or CBC requirements (as applicable) for subdiaphragm design.

Evidence of water and/or termite damage was observed at ceiling and wall finishes. Considering this observed damage, AARK anticipates the roof framing and roof sheathing to be similarly damaged. AARK recommends that roof and ceiling framing members and roof sheathing elements found to be structurally damaged by water intrusion, mold or fungus, or termites be replaced and retrofitted, if required, to satisfy CHBC or CBC requirements (as applicable) for such elements. Based upon AARK's limited observation of the subject framing, AARK estimates that less than 10% (approximate) of the existing roof and ceiling framing and roof sheathing is damaged such that it requires replacement.

Walls

The following findings, conclusions and recommendations regarding the general condition and adequacy of the existing walls are based upon AARK's limited observation of wall and ceiling finishes, review of the available original structural construction drawings, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The north, south, and west walls are 8-inch thick reinforced cast-in-place concrete walls. The east wall consists of a concrete frame with wood stud and sheathing infill.

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the existing walls and frames would be required to be analyzed in accordance with the design requirements of the CHBC. Based upon AARK's limited observation and review of the drawings, it appears that some level of retrofit may be required, particularly at the concrete frame (see the recommendations below for suggested retrofit at this element). Destructive testing of the existing concrete elements would be required to determine the mechanical properties of the existing concrete and reinforcing

steel, and non-destructive testing would be recommended to verify the reinforcing pattern in the existing concrete elements.

If the building is not qualified as a historical building in accordance with the CHBC, then the existing walls and frames do not appear to satisfy CBC requirements for concrete buildings. Therefore, AARK anticipates that the existing concrete walls and frames would require significant retrofit. Two common retrofit methods for such construction include: (1) application of reinforced shotcrete to the existing concrete elements as required to provide adequate strength and ductility per the CBC, and (2) construction of new cast-in-place concrete frames against the existing concrete elements as required to provide adequate strength and ductility per the CBC. At the east wall, the existing infill wall should be removed and replaced with a reinforced concrete masonry or cast-in-place concrete wall as required to provide adequate strength and ductility per the CBC.

Foundation

The building is supported by a concrete slab-on-grade with concrete footings and stem walls. AARK recommends that the existing footings and stem walls be analyzed for their adequacy to carry the design loads proscribed by the CHBC or CBC (as applicable). AARK anticipates that some modification of the existing foundation may be necessary, such as extension of existing footing and stem wall width and/or footing depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels. In the kitchen, the existing slab-on-grade includes several pits and drains, and is sloped to accommodate drainage. The existing sloped areas and pits would need to be removed and replaced with a new reinforced concrete slab-on-grade to accommodate the proposed adaptive reuse.

Feasibility of Relocation

Since this building is a concrete building with a concrete slab-on-grade and deep stem walls, relocation, which would be possible, would be excessively complex, and would therefore not be recommended for the proposed adaptive reuse.

BUILDING 19 – ORIGINAL MEN'S AND WOMEN'S CUSTODIAL WARDS

General

Building 19 is understood to have been constructed in 1945, and is a one-story concrete bearing wall building with a flat concrete roof slab. Based on AARK's limited observation, the overall structural condition of the building is considered good (relative to CHBC requirements) to fair (relative to CBC requirements)..

If the building is to be qualified as a historical building in accordance with the CHBC as a part of the proposed adaptive reuse, the vertical load carrying system would be required to be analyzed and retrofitted (as required) where signs of distress are exhibited, where a complete load path cannot be determined, or where higher live or dead loads are anticipated as a part of the proposed adaptive reuse. The lateral load resisting system would be permitted to be analyzed for reduced lateral loads in accordance with CHBC Section 8-706.1. Specifically, these reduced lateral loads would be equal to 75% of the forces prescribed by the 1995 edition of the CBC.

If the building is not qualified as a historical building in accordance with the CHBC, and assuming a change of building occupancy for the proposed adaptive reuse, the vertical and lateral load resisting systems of the building would be required to meet the minimum current CBC requirements for structural elements of new buildings per CBC Section 3410.4.

Roof

The following findings, conclusions and recommendations regarding the general condition and adequacy of the existing roof and ceiling framing are based upon AARK's limited observation of the existing roof, ceiling finishes, and AARK's knowledge of similar buildings and construction methods of the same construction era.

The existing roof is a cast-in-place concrete slab. The existing roof slab should be analyzed for its conformance to the CHBC or CBC (as applicable), and retrofitted as necessary. Destructive and non-destructive testing should be performed to verify the existing conditions of construction (such as concrete thickness, concrete compressive strength, reinforcing sizes and layout, and reinforcing type and strength). AARK anticipates that the existing roof diaphragm is generally adequate for the requirements of the CHBC and CBC (as applicable), though a complete analysis for design loads in accordance with the CHBC or CBC (as applicable) would need to be performed.

Damage to the existing roof slab was observed at pipe penetrations in one location. Similar damage is expected to exist elsewhere in the building. AARK recommends that such damage be repaired in a manner to preserve the strength of the existing slab as undamaged.

Walls

The following findings, conclusions and recommendations regarding the general condition and adequacy of the existing walls are based upon AARK's limited observation of the existing walls and AARK's knowledge of similar buildings and construction methods of the same construction era.

The exterior walls and most of the interior corridor walls appear to be cast-in-place concrete walls. AARK anticipates that the existing walls, if reinforced, would likely satisfy CHBC and CBC requirements (as applicable) for concrete buildings, except for possibly a few locations at wall openings if the building is required to be analyzed in accordance with the CBC. Therefore, AARK anticipates that some retrofit may be required at wall piers, unless the building is to be qualified as a historical building in accordance with the CHBC. Destructive and non-destructive testing should be performed to verify the existing conditions of construction (such as concrete thickness, concrete compressive strength, reinforcing sizes and layout, and reinforcing type and strength). The existing walls should be analyzed for their conformance to the requirements of the CHBC or CBC (as applicable) and retrofitted as needed.

Foundation

The building is supported by a concrete slab-on-grade with concrete footings and stem walls. AARK recommends that the existing footings and stem walls be analyzed for their adequacy to carry the design loads proscribed by the CHBC or CBC (as applicable). AARK anticipates that some modification of the existing foundation may be necessary, such as extension of existing footing and stem wall width and/or footing depth by placing new footings adjacent to existing footings, and tying the new footings to the existing with drilled-in epoxy dowels.

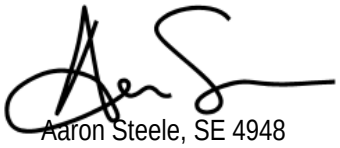
Feasibility of Relocation

Since this building is a concrete building with a concrete slab-on-grade and deep stem walls, relocation, which would be possible, would be excessively complex, and would therefore not be recommended for the proposed adaptive reuse.

SIGNATURE

This report is issued as a summary of the subject structural observation performed by Aark Engineering Inc. The findings and recommendations in this report are limited to those that can readily be made from the visible conditions of the subject structure(s). No guarantee or warranty is provided by this report.

Respectfully submitted,

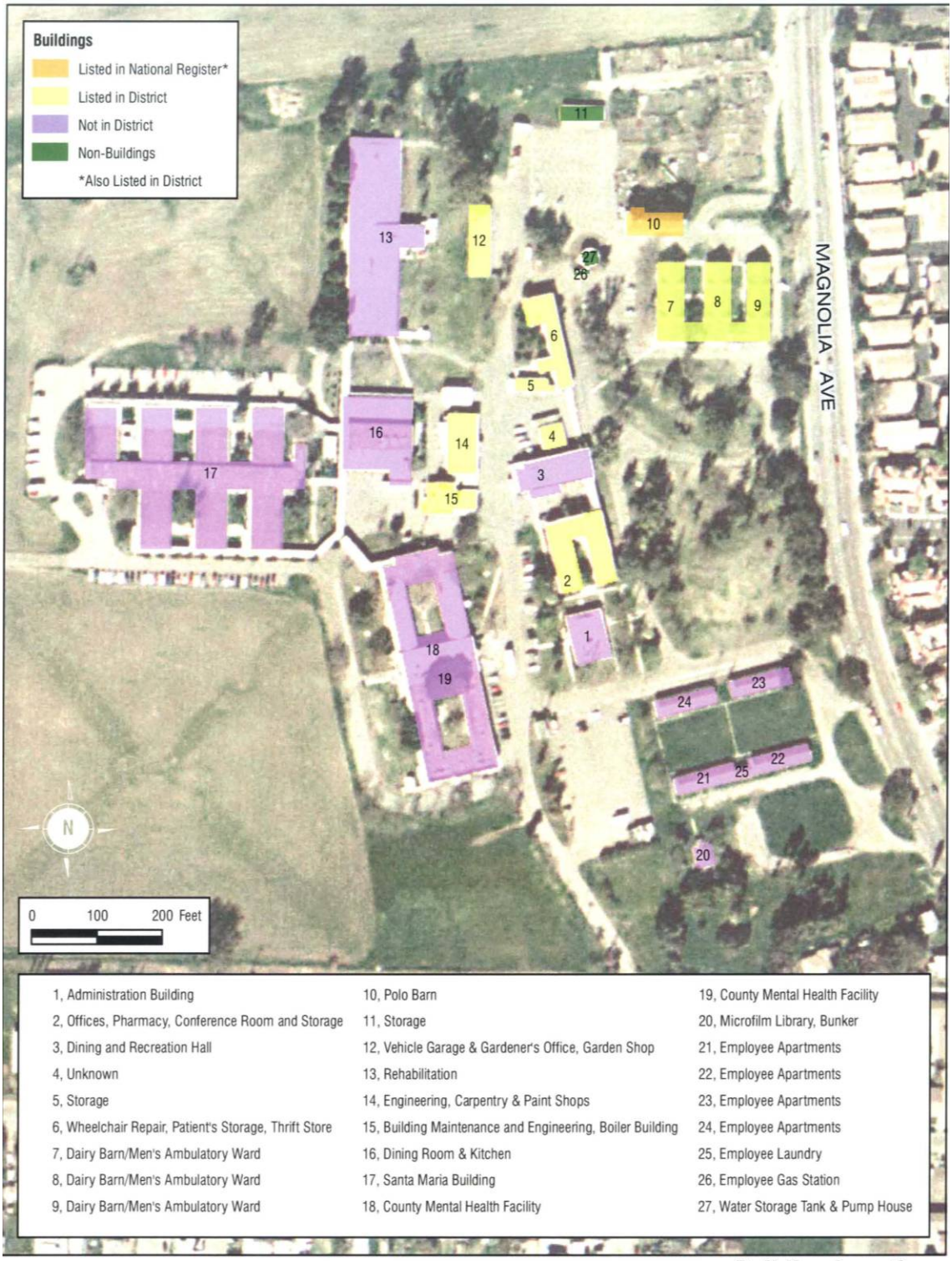


Aaron Steele, SE 4948

Principal Structural Engineer

APPENDIX A

Site Map



Building Locations

APPENDIX B

Selected Photographs

SELECTED PHOTOGRAPHS FROM STRUCTURAL OBSERVATION

Figure 1. View of front of Building 2.

Figure 1. View of rear of Building 2.

Figure 3. Hallway in Building 2.

Figure 4. Raised Floor in Building 2.

Figure 5. Horizontal Check in Beam in Buidling 2.

Figure 6. View of front of Building 3.

Figure 7. View of side of Building 3

Figure 8. Wood lath and damaged plaster finish on exterior wall of Building 3.

Figure 9. Additions to Building 3.

Figure 10. Raised floor in Building 3

Figure 11. Water Damage to the ceiling of Building 3.

Figure 12. Raised wood floor of Building 3.

Figure 13. Small plaster cracks above a door opening in Building 3.

Figure 14. Front view of Building 8 (center) and adjacent buildings.

Figure 15. Front view of Building 8.

Figure 16. Interior view of attic of Building 8.

Figure 17. Exterior view of Building 8.

Figure 18. Attic framing members with signs of water intrusion in Building 8.

Figure 19. Interior of Building 8 with steel pipe columns supporting the attic framing.

Figure 20. Exterior view of Building 16.

Figure 21. Middle bay of Building 16.

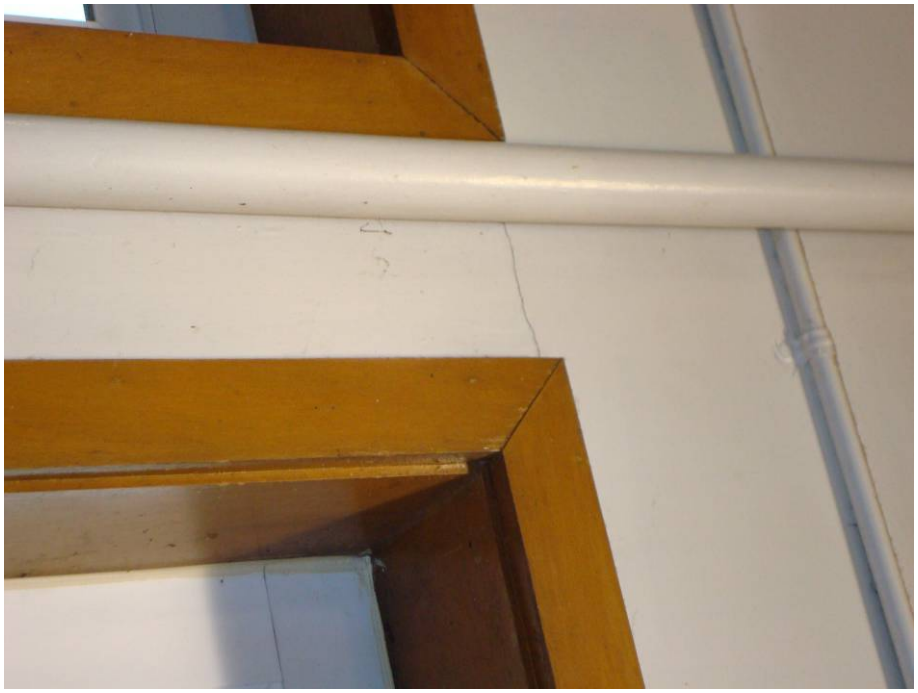


Figure 22. Typical cracks in the concrete walls near window openings in Building 16.

Figure 23. Typical cracks in the concrete walls at door openings in Building 16.

Figure 24. Concrete gravity frame in Building 16.

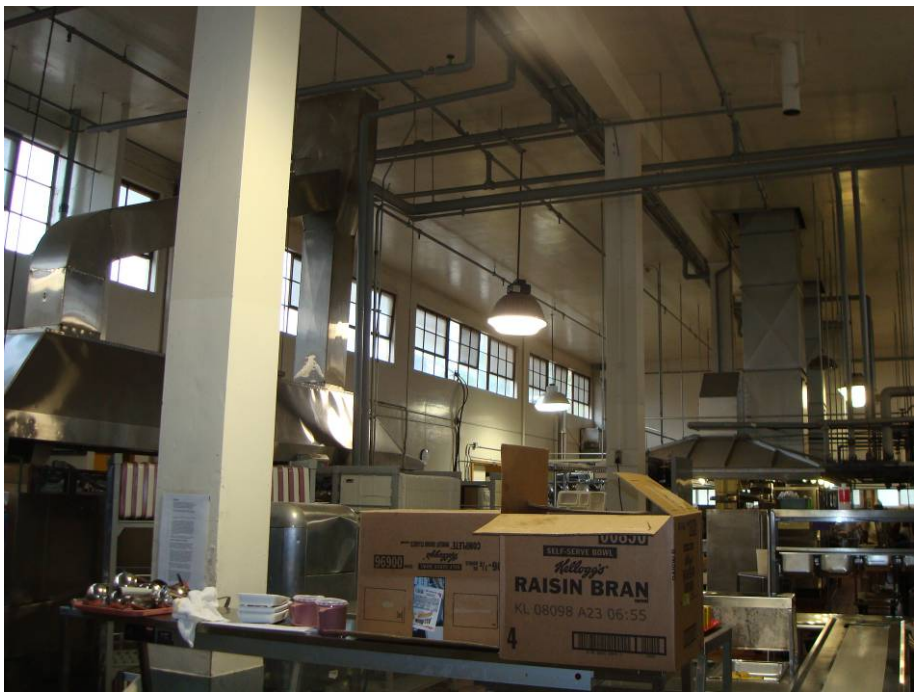


Figure 25. Concrete Gravity Frames in Building 16.

Figure 26. Exterior concrete frame with infill walls in Building 16.

Figure 27. Front view of Building 19.

Figure 28. Courtyard view of Building 19.

Figure 29. Concrete roof slab supported by concrete walls of Building 19.

APPENDIX B

DETAILED COST ESTIMATE

Waller Consulting
2111 West California Street San Diego, CA 92110 tel.619.819.9356 fac.619.819.9364

Edgemoor Geriatric Hospital Adaptive Re-Use Study

Rough Order of Magnitude Cost Estimate
Project Number 08.002

Prepared 26 March 2008

by

Waller Consulting

This estimate is based on the following documents and verbal direction received from Matalon Architecture and Planning and the County of San Diego:

Reports:	Edgemoor Geriatric Hospital Adaptive Re-Use Study, 1st Draft, dated 17 December 2007	Received **22 January 2008**
	Report of Structural Observation, dated 17 December 2007	Received **22 January 2008**
	Appendix A: Hazardous Material Survey	Received **22 January 2008**
	CD ROM with as-built drawings	Received **13 February 2008**
	Soils Report, dated 7 May 1999	Received **13 February 2008**
	Edgemoor Geriatric Hospital Adaptive Re-Use Study, 2nd Draft, dated 17 February 2008	Received **22 January 2008**

This estimate excludes the following:

A.	8A Award	E.	Shift Work	I.	Sitework
B.	Escalation beyond **June 2010**	F.	Per Diem	J.	Utility relocation
C.	Compressed Schedule	G.	Furniture, Fixtures and Equipment	K.	Construction phasing
D.	Night Work	H.	Paint to Exterior walls of buildings 16 & 19		

Estimate Conditions and Assumptions:
This estimate is an opinion of probable cost. The prices reflected are based on various sources including historical data, verbal quotes from installers and suppliers, and cost data books such as RS Means and Lee Saylor. All unit costs shown are burdened to include all subcontractor costs necessary to provide an installed cost to the general contractor. These unit costs include all applicable sales taxes, freight, worker's compensation, subcontractor overhead and profit, material, labor and equipment. Labor costs are based on prevailing wages in San Diego County.

In response to recent market conditions, the estimate is priced at current opinions of cost. Market demands have made it challenging to determine future costs. The escalation rate used is the estimator's best guess tool as to what may costs will be at bid time. The estimate anticipates a reasonable price and is not responsive to other market factors which diminish a competitive bid environment. A low response of bidders can be symptomatic of an unstable bidding market. The results of which could produce the following bid deviation*:

4-5 Bids	-4% to +4%
2-3 Bids	+8% to +12%
1 Bid	+15% to +40%

*From Saylor Publications, Inc. "2007 Current Construction Costs".

No interior historical rehabilitation would be required per Client's direction.
All interior doors are non-historical per Client's direction.
Raising of buildings #2 and #3 is excluded as all buildings would have to be raised out of the 100 year floodplain and are by others.
Developer constructive project to a finished shelf for Tenant Improvements by Lessee was assumed.

Building	Description	Unit of Measure	Quantity	Unit Cost	Total Cost
Base Bid					
Building 2	Historic: Women's Ambulatory Ward (1925)	SF	7,684	315.15	$ 2,421,580
Building 3	Historic: Dining and Recreation Building (1923-1924)	SF	4,635	307.06	$ 1,423,246
Building 8	Historic: Men's Dairy Barn (1913)	SF	4,165	405.81	$ 1,690,210
Building 16	Moderately Historic: Dining Room and Kitchen (1951)	SF	10,458	304.56	$ 3,185,088
Building 19	Historic: Custodial Wards (1945)	SF	13,966	306.62	$ 4,282,232
Sitework	Site Improvements, BY OTHERS				**NIC**
			Total Projected Construction Cost - Base Bid		**$ 13,002,356**
Alternate #1					
Building 2	Historic: Relocate Women's Ambulatory Ward (1925)	SF	7,684	93.75	$ 720,383
Building 3	Historic: Relocate Dining and Recreation Building (1923-1924)	SF	4,635	90.15	$ 417,833
			Total Projected Construction Cost - Alternate #1		**$ 1,138,216**
Base Bid					
Soft Costs		LS	1	4,003,867.42	$ 4,003,867
			Total Projected Project Cost - Base Bid		**$ 17,006,223**
Base Bid and Alternate #1					
Soft Costs		LS	1	4,344,733.63	$ 4,344,734
			Total Projected Project Cost - Base Bid and Alternate #1		**$ 18,485,306**

Soft Cost Summary			$/sf	Total
Total Projected Construction Cost			**$**	**14,140,572**
A/E Fees	12.00	%	$	1,696,869
County Storm Water Inspections	1.00	LS	$	25,000
County Department of Environmental Health	1.00	LS	$	37,500
County Overhead, Project Manager	1.00	LS	$	37,500
Plan Check	0.33	%	$	46,664
Permits	0.75	%	$	106,054
Permit and Plan Check Contingency	5.00	%	$	7,636
Developer PM/CM Services	3.00	%	$	424,217
Testing and Inspection Services	2.00	%	$	282,811
Project and Construction Contingency	10.00	%	$	1,680,482

Total Projected Project Soft Costs	*Project Square Footage*	*40,908 sf*	*Cost Per Square Foot*	*$ 106.21 /sf*	**$**	**4,344,734**

Soft Cost Summary			$/sf	Total
Total Projected Construction Cost			**$**	**13,002,356**
A/E Fees	12.00	%	$	1,560,283
County Storm Water Inspections	1.00	LS	$	25,000
County Department of Environmental Health	1.00	LS	$	37,500
County Overhead, Project Manager	1.00	LS	$	37,500
Plan Check	0.33	%	$	42,908
Permits	0.75	%	$	97,518
Permit and Plan Check Contingency	5.00	%	$	7,021
Developer PM/CM Services	3.00	%	$	390,071
Testing and Inspection Services	2.00	%	$	260,047
Project and Construction Contingency	10.00	%	$	1,546,020

Total Projected Project Soft Costs	*Project Square Footage*	*40,908 sf*	*Cost Per Square Foot*	*$ 97.87 /sf*	**$**	**4,003,867**

Hard Costs: Section Summary						$/EA		Total
General Requirements							$	-
Division 01	General Requirements					$ 0/SF	$	-
Facility Construction							$	603,866
Division 02	Existing Conditions					$ 11.95/SF	$	91,828
Division 03	Concrete					$ 0/SF	$	-
Division 04	Masonry					$ 0/SF	$	-
Division 05	Metals					$ 2.84/SF	$	21,854
Division 06	Wood, Plastics and Composites					$ 11.6/SF	$	89,161
Division 07	Thermal and Moisture Protection					$ 7.54/SF	$	57,923
Division 08	Openings					$ 17.19/SF	$	132,103
Division 09	Finishes					$ 26.76/SF	$	205,605
Division 10	Specialties					$ 0.7/SF	$	5,390
Division 11	Equipment					$ 0/SF	$	-
Division 12	Furnishings					$ 0/SF	$	-
Division 13	Special Construction					$ 0/SF	$	-
Division 14	Conveying Equipment					$ 0/SF	$	-
Facility Services							$	610,707
Division 21	Fire Suppression					$ 5.75/SF	$	44,146
Division 22	Plumbing					$ 16.29/SF	$	125,158
Division 23	Heating, Ventilating, and Air Conditioning					$ 29.81/SF	$	229,067
Division 25	Integrated Automation					$ 0/SF	$	-
Division 26	Electrical					$ 27.63/SF	$	212,335
Division 27	Communications					$ 0/SF	$	-
Division 28	Electronic Safety and Security					$ 0/SF	$	-
Site and Infrastructure							$	36,598
Division 31	Earthwork					$ 0.05/SF	$	402
Division 32	Exterior Improvements					$ 4.71/SF	$	36,196
Division 33	Utilities					$ 0/SF	$	-
Division 34	Transportation					$ 0/SF	$	-
Division 35	Waterway and Marine Construction					$ 0/SF	$	-
Process Equipment							$	-
Division 40	Process Integration					$ 0/SF	$	-
Division 41	Material Processing and Handling Equipment					$ 0/SF	$	-
Division 42	Process Heating, Cooling, and Drying Equipment					$ 0/SF	$	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment					$ 0/SF	$	-
Division 44	Pollution Control Equipment					$ 0/SF	$	-
Division 45	Industry-Specific Manufacturing Equipment					$ 0/SF	$	-
Division 48	Electrical Power Generation					$ 0/SF	$	-
Sales Tax		7.75	%		$ 594,916		$	46,106
Subcontractor Mark-up		15	%		$ 1,297,276		$	194,591
Subtotal Net Direct Building Cost						**$ 194.15/SF**	**$**	**1,491,867**
Prime Contractor General Conditions, Home Office Overhead		11	%				$	164,105
Prime Contractor Profit		8	%				$	132,478
Bond		1.5	%				$	26,827
Escalation to Midpoint of Construction, 06/2010		16	%				$	290,444
Design Contingency		15	%				$	315,858
Phasing Factor, Excluded		0	%				$	-

Total Projected Construction Cost	*Project Square Footage*	*7,684 SF*	*Cost Per Square Foot*	*$ 315 /SF*	**$**	**2,421,580**
		12,795 HRS				

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**										**$ 0/SF**	**$0**
Division 02	**Existing Conditions**										**$ 11.95/SF**	**$91,828**
02.40.00	*Demolition and Structure Moving*	**$ 11.95/SF**	**$91,828**									
Division 03	**Concrete**										**$ 0/SF**	**$0**
Division 04	**Masonry**										**$ 0/SF**	**$0**
Division 05	**Metals**										**$ 2.84/SF**	**$21,854**
05.50.00	*Metal Fabrications*	**$ 2.84/SF**	**$21,854**									
Division 06	**Wood, Plastics and Composites**										**$ 11.6/SF**	**$89,161**
06.10.00	*Rough Carpentry*	**$ 11.6/SF**	**$89,161**									
Division 07	**Thermal and Moisture Protection**										**$ 7.54/SF**	**$57,923**
07.00.00	*Thermal and Moisture Protection*	**$ 1.47/SF**	**$11,258**									
07.50.00	*Membrane Roofing*	**$ 4.85/SF**	**$37,254**									
07.60.00	*Flashing and Sheet Metal*	**$ 1.22/SF**	**$9,412**									
Division 08	**Openings**										**$ 17.19/SF**	**$132,103**
08.10.00	*Doors and Frames*	**$ 7.77/SF**	**$59,691**									
08.30.00	*Specialty Doors and Frames*	**$ 0/SF**	**$0**									
08.50.00	*Windows*	**$ 9.39/SF**	**$72,130**									
08.60.00	*Roof Windows and Skylights*	**$ 0.04/SF**	**$282**									
Division 09	**Finishes**										**$ 26.76/SF**	**$205,605**
09.20.00	*Plaster and Gypsum Board*	**$ 12.89/SF**	**$99,061**									
09.50.00	*Ceilings*	**$ 1.95/SF**	**$14,965**									
09.60.00	*Flooring*	**$ 4.68/SF**	**$35,961**									
09.70.00	*Wall Finishes*	**$ 4.45/SF**	**$34,157**									
09.90.00	*Painting and Coating*	**$ 2.79/SF**	**$21,461**									
Division 10	**Specialties**										**$ 0.7/SF**	**$5,390**
10.00.00	*Specialties*	**$ 0.7/SF**	**$5,390**									
Division 11	**Equipment**										**$ 0/SF**	**$0**
Division 12	**Furnishings**										**$ 0/SF**	**$0**
Division 13	**Special Construction**										**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**										**$ 0/SF**	**$0**
Division 21	**Fire Suppression**										**$ 5.75/SF**	**$44,146**
21.00.00	*Fire Suppression*	**$ 5.75/SF**	**$44,146**									
Division 22	**Plumbing**										**$ 16.29/SF**	**$125,158**
22.00.00	*Plumbing*	**$ 16.29/SF**	**$125,158**									
Division 23	**Heating, Ventilating, and Air Conditioning**										**$ 29.81/SF**	**$229,067**
23.00.00	*Heating, Ventilating, and Air-Conditioning (HVAC)*	**$ 29.81/SF**	**$229,067**									
Division 25	**Integrated Automation**										**$ 0/SF**	**$0**
Division 26	**Electrical**										**$ 27.63/SF**	**$212,335**
26.00.00	*Electrical*	**$ 27.63/SF**	**$212,335**									
Division 27	**Communications**										**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**										**$ 0/SF**	**$0**
Division 31	**Earthwork**										**$ 0.05/SF**	**$402**
31.00.00	*Earthwork*	**$ 0.05/SF**	**$402**									
Division 32	**Exterior Improvements**										**$ 4.71/SF**	**$36,196**
32.10.00	*Bases, Ballasts, and Paving*	**$ 4.71/SF**	**$36,196**									
Division 33	**Utilities**										**$ 0/SF**	**$0**
Division 34	**Transportation**										**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**										**$ 0/SF**	**$0**
Division 40	**Process Integration**										**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**										**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**										**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**										**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**										**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**										**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**										**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$603,866**
Division 02 Existing Conditions											***$91,828***
02.40.00 Demolition and Structure Moving											
Site Demolition											
Demolish non-historic wood framed building											
Demolish building	4,704	CF		0.003	1.00	43.91	0.13	0.14	14.11	0.27	$1,268
Demolish foundation	392	SF		0.025	1.00	43.91	1.10	0.64	9.80	1.73	$680
Haul and dispose, ALLOWANCE	39	TONS		0.111	1.00	60.79	6.75	5.56	4.36	12.31	$483
Tipping Fees	39	TONS				60.79	0.00		-	50.00	$1,960
Patch and repair paving, AC paving	392	SF	1.77	0.05	1.00	53.06	2.66		19.66	4.43	$1,738
Demolish concrete ramps and steps											
Demo ramps and steps	708	SF		0.025	1.00	43.91	1.10	0.95	17.70	2.05	$1,453
Demo railings	151	LF		0.054	1.00	43.91	2.37	0.55	8.15	2.92	$441
Haul and dispose, ALLOWANCE	27	TONS		0.111	1.00	60.79	6.75	5.56	2.95	12.31	$327
Tipping Fees	27	TONS				60.79	0.00		-	50.00	$1,328
Patch and repair paving	708	SF	1.77	0.05	1.00	53.06	2.66		35.51	4.43	$3,140
Demo wood steps and landing											
Demo steps and landing, complete	37	SF		0.108	1.00	43.91	4.75	1.91	4.00	6.66	$246
Patch and repair paving	37	SF	0.70	0.020	1.00	53.06	1.04		0.73	1.74	$64
Structural Demolition											
Remove floor framing (10% of floor)	768	SF		0.015	2.00	43.91	1.32		23.05	1.32	$1,012
Remove floor sheathing (10% of floor)	768	SF		0.021	2.00	53.06	2.23		32.27	2.23	$1,712
Remove ceiling framing (20% of floor)	1,537	SF		0.022	2.00	53.06	2.33		67.62	2.33	$3,588
Remove roof framing (20% of floor)	1,410	SF		0.020	2.00	53.06	2.12		56.39	2.12	$2,992
Remove roof sheathing (100% of roof)	7,049	SF		0.011	1.00	53.06	0.58		77.54	0.58	$4,114
Remove exterior walls framing (10% of walls)	977	SF		0.017	2.00	53.06	1.80		33.20	1.80	$1,762
Remove exterior walls wood lath and plaster (100% of walls)	11,947	SF		0.024	1.00	53.06	1.27		286.73	1.27	
Architectural Demolition											
Window, remove existing wood windows, 3'x4'	42	EA		1.500	1.00	43.91	65.87		63.00	65.87	$2,766
Window, remove window screen, 3'x4'	42	EA		0.569	1.00	43.91	25.00		23.91	25.00	$1,050
Wall finishes, remove drywall and plaster (60% of walls)	11,269	SF		0.025	1.00	43.91	1.10		282.31	1.10	$12,396
Roofing, remove roof shingles	1,474	SF		0.017	1.00	43.91	0.75		25.18	0.75	$1,106
Roofing, remove miscellaneous flashing	736	LF		0.025	1.00	43.91	1.10		18.40	1.10	$808
Roofing, remove built-up roof cover	7,075	SF		0.017	1.00	43.91	0.75		120.28	0.75	$5,281
Interior door, remove doors, complete	44	EA		1.936	1.00	43.91	85.01		85.18	85.01	$3,740
Remove and abate asbestos floor finishes	6,994	SF		0.046	1.00	43.91	2.00		318.56	2.00	$13,988
Floor finishes, remove existing base	2,174	LF		0.011	1.00	43.91	0.50		24.78	0.50	$1,088
Exterior wall, remove existing stucco		SF		0.025	1.00	43.91	1.10		-	1.10	$0
Exterior door, remove existing hardware	5	EA		0.250	1.00	43.91	10.98		1.25	10.98	$55
Ceiling finishes, remove existing drywall plaster ceiling	6,452	SF		0.025	1.00	43.91	1.10		161.30	1.10	$7,083
Ceiling finishes, remove existing acoustical ceiling, complete	571	SF		0.025	1.00	43.91	1.10		14.28	1.10	$627
Accessible grab bars, set	3	EA		0.569	1.00	43.91	25.00		1.71	25.00	$75
Accessible stall partition	1	EA		1.936	1.00	43.91	85.00		1.94	85.00	$85

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Mirror, 24"x36"	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Paper towel and waste combo dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Seat cover dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Soap dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Standard stall partition	1	EA		1.936	1.00	43.91	85.00		1.94	85.00	$85
Toilet paper dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Haul and dispose, ALLOWANCE	84	TONS		0.111	1.00	60.79	6.75	5.56	9.33	12.31	$1,034
Tipping Fees	84	TONS				60.79	0.00		-	50.00	$4,200
Selective Removal for Reconditioning											
Window, recondition existing wood window with dual glaze, 3'x4'	42	EA		2.000	1.00	53.06	106.12		84.00	106.12	$4,457
Skylight, recondition metal framing skylight, 4'x8'	2	EA		16.000	1.00	52.46	839.36		32.00	839.36	$1,679
Exterior door, recondition transoms	23	SF		0.286	1.00	53.06	15.16		6.43	15.16	$341
Exterior door, recondition existing doors, single	5	EA		3.000	1.00	53.06	159.18		15.00	159.18	$796
Exterior door, recondition existing door frame	85	LF		0.118	1.00	53.06	6.24		10.00	6.24	$531
Subtotal Demolition and Structure Moving			1,977				95,019	2,559	2,000		$91,828
Division 05 Metals											***$21,854***
05.50.00 Metal Fabrications											
Guardrails	209	LF	85.00	0.369	1.00	53.06	19.57		77.07	104.57	$21,854
Subtotal Metal Fabrications			17,765				4,089	-	77		$21,854
Division 06 Wood, Plastics and Composites											***$89,161***
06.10.00 Rough Carpentry											
Wood stair and landing, complete	37	SF	31.30	0.885	1.00	53.06	46.96		32.74	78.26	$2,896
Floor framing (10% of floor)	768	SF	2.43	0.079	2.00	53.06	8.35		120.89	10.78	$8,285
Floor sheathing (10% of floor)	768	SF	1.25	0.015	2.00	53.06	1.59		23.05	2.84	$2,184
Ceiling framing (20% of ceiling)	1,537	SF	1.74	0.049	2.00	53.06	5.22		151.11	6.96	$10,691
Roof framing (20% of roof)	1,410	SF	4.66	0.026	2.00	53.06	2.76	0.25	73.31	7.68	$10,822
Roof sheathing (100% of roof)	7,049	SF	1.25	0.015	1.00	53.06	0.80		105.74	2.05	$14,422
Roof reinforcement, (2) 2x8 rafters (50% of rafters)	888	BF	1.71	0.025	2.00	53.06	2.70		45.10	4.40	$3,909
Exterior walls framing (10% of walls)	977	SF	0.79	0.026	1.00	53.06	1.36		25.00	2.15	$2,101
Structural plywood sheathing to exterior walls (100% of walls)	11,947	SF	1.25	0.015	1.00	53.06	0.80		179.21	2.05	$24,442
Install new sills at all walls, 2x6 (100% of walls)	575	BF	1.22	0.058	2.00	53.06	6.17		66.91	7.39	$4,251
Install new anchor bolts at all wall sills (100% of walls)	288	EA	1.74	0.049	1.00	53.06	2.61		14.13	4.35	$1,250
Install hold downs at shear walls (2 hold downs for every 20' of wall)	58	EA	15.65	0.442	1.00	53.06	23.48		25.44	39.13	$2,250
Provide blocking and shear wall top plates and diaphragm ties	58	EA	3.48	0.098	2.00	53.06	10.43		11.31	13.91	$800
Miscellaneous connections (20%)	1	LS								860.00	$860
Subtotal Rough Carpentry			41,571				46,372	359	874		$89,161
Division 07 Thermal and Moisture Protection											***$57,923***
07.00.00 Thermal and Moisture Protection											

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Exterior wall insulation	8,530	SF	0.35	0.007	1.00	53.06	0.37		59.71	0.72	$6,154
Roof insulation	7,075	SF	0.35	0.007	1.00	53.06	0.37		49.53	0.72	$5,104
Subtotal Thermal and Moisture Protection			5,462				5,796	-	109		$11,258
07.50.00 Membrane Roofing											
Built-up roofing	7,075	SF	2.45	0.066	1.00	42.66	2.82		466.95	5.27	$37,254
Subtotal Membrane Roofing			17,334				19,920	-	467		$37,254
07.60.00 Flashing and Sheet Metal											
Install miscellaneous flashing	736	LF	6.09	0.157	1.00	42.66	6.70		115.55	12.79	$9,412
Subtotal Flashing and Sheet Metal			4,482				4,929	-	116		$9,412
Division 08 Openings											***$132,103***
08.10.00 Doors and Frames											
Interior door, non-historic											
Install new ADA compliant door and hardware	44	EA	665.20	8.000	1.00	53.06	424.48		352.00	1,089.68	$47,946
Exterior door											
Recondition door, hardware,single	5	EA	1,500.00	16.000	1.00	53.06	848.96		80.00	2,348.96	$11,745
Subtotal Doors and Frames			36,769				22,922	-	432		$59,691
08.30.00 Specialty Doors and Frames											
						43.91	0.00		-	0.00	$0
Subtotal Specialty Doors and Frames			-				-	-	-		$0
08.50.00 Windows											
Reinstall recondition wood window, 3'x4'	42	EA	1,500.00	3.000	1.00	52.46	157.38		126.00	1,657.38	$69,610
Install window screens	42	EA	30.00	0.572	1.00	52.46	30.00		24.02	60.00	$2,520
Subtotal Windows			64,260				7,870	-	150		$72,130
08.60.00 Roof Windows and Skylights											
Skylight, replace one broken glaze,1'x2'	1	EA	125.00	3.000	1.00	52.46	157.38		3.00	282.38	$282
Subtotal Roof Windows and Skylights			125				157	-	3		$282
Division 09 Finishes											***$205,605***
09.20.00 Plaster and Gypsum Board											
Exterior wall											

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Integral color stucco, historically significant	11,947	SF	2.50	0.119	1.00	48.67	5.79		1,421.69	8.29	$99,061
Subtotal Plaster and Gypsum Board			29,868				69,194	-	1,422		$99,061
09.50.00 Ceilings											
Drywall to ceiling	6,452	SF	0.67	0.026	1.00	53.06	1.38		167.75	2.05	$13,224
Install acoustical ceiling, including framing	571	SF	1.93	0.023	1.00	48.67	1.12		13.13	3.05	$1,741
Subtotal Ceilings			5,425				9,540	-	181		$14,965
09.60.00 Flooring											
Install rubber base	1,891	LF	0.65	0.030	1.00	49.40	1.48		56.73	2.13	$4,032
Install commercial grade carpet	6,000	SF	2.53	0.012	1.00	39.23	0.47		72.00	3.00	$18,005
Install ceramic tile flooring	994	SF	2.48	0.164	1.00	49.40	8.10		163.02	10.58	$10,518
Install ceramic tile coved base	283	LF	4.58	0.151	1.00	49.40	7.46		42.73	12.04	$3,407
Subtotal Flooring			20,170				15,791	-	334		$35,961
09.70.00 Wall Finishes											
Wall finishes, install drywall (60% of walls)	11,269	SF	0.67	0.021	1.00	53.06	1.11		236.65	1.78	$20,107
Wall finishes, Ceramic tile wainscot	1,230	SF	5.05	0.129	1.00	49.40	6.37		158.67	11.42	$14,050
Subtotal Wall Finishes			13,762				20,395	-	395		$34,157
09.90.00 Painting and Coating											
Wall finishes, paint to drywall	19,593	SF	0.30	0.010	1.00	46.99	0.47		195.93	0.77	$15,085
Roofing, repaint overhang to match existing color	1,092	SF	0.30	0.010	1.00	46.99	0.47		10.92	0.77	$841
Roofing, repaint fascia board, 2x12	46	LF	0.60	0.250	1.00	46.99	11.75		11.50	12.35	$568
Ceiling finishes, paint to drywall ceiling	6,452	SF	0.30	0.010	1.00	46.99	0.47		64.52	0.77	$4,967
Subtotal Painting and Coating			8,169				13,292	-	283		$21,461
Division 10 Specialties											***$5,390***
10.00.00 Specialties											
Accessible grab bars, set	3	EA	93.91	1.426	1.00	43.91	62.62		4.28	156.53	$470
Accessible stall partition	1	EA	626.09	9.506	1.00	43.91	417.41		9.51	1,043.50	$1,043
Mirror, 24"x36"	2	EA	96.50	1.524	1.00	43.91	66.92		3.05	163.42	$327
Paper towel and waste combo dispenser	2	EA	383.10	2.000	1.00	43.91	87.82		4.00	470.92	$942
Seat cover dispenser	2	EA	143.48	2.178	1.00	43.91	95.64		4.36	239.12	$478
Signage, ALLOWANCE	1	LS	26.09	0.396	1.00	43.91	17.39		0.40	1,000.00	$1,000
Soap dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130
Standard stall partition	1	EA	521.74	7.921	1.00	43.91	347.81		7.92	869.55	$870
Toilet paper dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Specialties			2,858				1,576	-	36		$5,390
Facility Services											**$610,707**
Division 21 Fire Suppression											***$44,146***
21.00.00 Fire Suppression											
Renovation work											
Remove existing sprinkler system	7,600	SF		0.018	1.00	57.57	1.04		136.80	1.04	$7,876
New wet sprinkler heads and associated piping	66	EA	200.00	3.500	1.00	57.57	201.50		231.00	401.50	$26,499
New fire sprinkler standpipe	1	EA	1,620.00	27.500	1.00	57.57	1,583.18		27.50	3,203.18	$3,203
New attic dry sprinkler heads and associated piping	13	EA	275.00	4.000	1.00	57.57	230.28		52.00	505.28	$6,569
Subtotal Fire Suppression			18,395				25,751	-	447		$44,146
Division 22 Plumbing											***$125,158***
22.00.00 Plumbing											
Demolition											
Remove water closet and wall piping	8	EA		1.000	1.00	57.57	57.57		8.00	57.57	$461
Remove lavatory and wall piping	9	EA		1.000	1.00	57.57	57.57		9.00	57.57	$518
Remove shower and wall piping	2	EA		2.700	1.00	57.57	155.44		5.40	155.44	$311
Remove mop sink and wall piping	2	EA		1.200	1.00	57.57	69.08		2.40	69.08	$138
Remove kitchen hookups and wall piping	2	EA		1.500	1.00	57.57	86.36		3.00	86.36	$173
Remove urinal and wall piping	1	EA		2.000	1.00	57.57	115.14		2.00	115.14	$115
New plumbing fixtures & associated piping											
Water closet	11	EA	2,175.00	37.800	1.00	57.57	2,176.15		415.80	4,351.15	$47,863
Lavatory	11	EA	2,000.00	36.000	1.00	57.57	2,072.52		396.00	4,072.52	$44,798
Urinal	2	EA	2,190.00	36.500	1.00	57.57	2,101.31		73.00	4,291.31	$8,583
Mop sink	2	EA	2,200.00	36.500	1.00	57.57	2,101.31		73.00	4,301.31	$8,603
Electric water cooler	2	EA	2,630.00	38.000	1.00	57.57	2,187.66		76.00	4,817.66	$9,635
Floor drain	2	EA	225.00	8.000	1.00	57.57	460.56		16.00	685.56	$1,371
Water heater	2	EA	950.00	6.000	1.00	57.57	345.42		12.00	1,295.42	$2,591
Subtotal Plumbing			62,315				62,843	-	1,092		$125,158
Division 23 Heating, Ventilating, and Air Conditioning											***$229,067***
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Remove existing heating and cooling systems	7,600	SF		0.038	1.00	54.65	2.08		288.80	2.08	$15,783
New HVAC split system w/ controls	7,600	SF	18.50	0.175	1.00	54.65	9.56		1,330.00	28.06	$213,285
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			140,600				88,467	-	1,619		$229,067
Division 26 Electrical											***$212,335***
26.00.00 Electrical											
Remove existing electrical systems	7,600	SF		0.040	1.00	53.83	2.15		304.00	2.15	$16,364

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
New electrical power and distribution	7,600	SF	5.00	0.150	1.00	53.83	8.07		1,140.00	13.07	$99,366
New light fixtures and controls	7,600	SF	3.72	0.065	1.00	53.83	3.50		494.00	7.22	$54,864
New addressable fire alarm system	7,600	SF	1.10	0.025	1.00	53.83	1.35		190.00	2.45	$18,588
New security/access control system	7,600	SF	0.70	0.018	1.00	53.83	0.97		136.80	1.67	$12,684
New telecommunications system	7,600	SF	0.57	0.015	1.00	53.83	0.81		114.00	1.38	$10,469
Subtotal Electrical			84,284				128,051	-	2,379		$212,335
Site and Infrastructure											**$36,598**
Division 31 Earthwork											***$402***
31.00.00 Earthwork											
Recompaction											
Ramps	925	SF		0.01	1.00	60.79	0.30	0.13	4.63	0.43	$402
Subtotal Earthwork			-				282	121	5		$402
Division 32 Exterior Improvements											***$36,196***
32.10.00 Bases, Ballasts, and Paving											
Concrete ramp, complete	925	SF	15.65	0.41	1.00	53.06	21.52	1.96	375.19	39.13	$36,196
Subtotal Bases, Ballasts, and Paving			14,478				19,908	1,810	375		$36,196

Hard Costs: Section Summary		$/EA	Total
General Requirements			$ -
Division 01	General Requirements	$ 0/SF	$ -
Facility Construction			$ 345,739
Division 02	Existing Conditions	$ 13.85/SF	$ 64,193
Division 03	Concrete	$ 0/SF	$ -
Division 04	Masonry	$ 0/SF	$ -
Division 05	Metals	$ 2.32/SF	$ 10,770
Division 06	Wood, Plastics and Composites	$ 10.81/SF	$ 50,110
Division 07	Thermal and Moisture Protection	$ 8.17/SF	$ 37,891
Division 08	Openings	$ 16.22/SF	$ 75,189
Division 09	Finishes	$ 22.19/SF	$ 102,853
Division 10	Specialties	$ 1.02/SF	$ 4,734
Division 11	Equipment	$ 0/SF	$ -
Division 12	Furnishings	$ 0/SF	$ -
Division 13	Special Construction	$ 0/SF	$ -
Division 14	Conveying Equipment	$ 0/SF	$ -
Facility Services			$ 370,922
Division 21	Fire Suppression	$ 7.47/SF	$ 34,640
Division 22	Plumbing	$ 14.47/SF	$ 67,085
Division 23	Heating, Ventilating, and Air Conditioning	$ 30.14/SF	$ 139,701
Division 25	Integrated Automation	$ 0/SF	$ -
Division 26	Electrical	$ 27.94/SF	$ 129,496
Division 27	Communications	$ 0/SF	$ -
Division 28	Electronic Safety and Security	$ 0/SF	$ -
Site and Infrastructure			$ 18,398
Division 31	Earthwork	$ 0.04/SF	$ 202
Division 32	Exterior Improvements	$ 3.93/SF	$ 18,196
Division 33	Utilities	$ 0/SF	$ -
Division 34	Transportation	$ 0/SF	$ -
Division 35	Waterway and Marine Construction	$ 0/SF	$ -
Process Equipment			$ -
Division 40	Process Integration	$ 0/SF	$ -
Division 41	Material Processing and Handling Equipment	$ 0/SF	$ -
Division 42	Process Heating, Cooling, and Drying Equipment	$ 0/SF	$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment	$ 0/SF	$ -
Division 44	Pollution Control Equipment	$ 0/SF	$ -
Division 45	Industry-Specific Manufacturing Equipment	$ 0/SF	$ -
Division 48	Electrical Power Generation	$ 0/SF	$ -
Sales Tax	7.75 %	$ 353,473	$ 27,394
Subcontractor Mark-up	15 %	$ 762,454	$ 114,368
Subtotal Net Direct Building Cost		**$ 189.17/SF**	**$ 876,822**
Prime Contractor General Conditions, Home Office Overhead	11 %		$ 96,450
Prime Contractor Profit	8 %		$ 77,862
Bond	1.5 %		$ 15,767
Escalation to Midpoint of Construction, 06/2010	16 %		$ 170,704
Design Contingency	15 %		$ 185,641
Phasing Factor, Excluded	0 %		$ -

Total Projected Construction Cost	*Project Square Footage*	*4,635 SF* *7,231 HRS*	*Cost Per Square Foot*	*$ 307 /SF*	**$**	**1,423,246**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 1 Summary											
Division 01	**General Requirements**									**$ 0/SF**	**$0**
Division 02	**Existing Conditions**									**$ 13.85/SF**	**$64,193**
02.40.00	*Demolition and Structure Moving*	**$ 13.85/SF**	**$64,193**								
Division 03	**Concrete**									**$ 0/SF**	**$0**
Division 04	**Masonry**									**$ 0/SF**	**$0**
Division 05	**Metals**									**$ 2.32/SF**	**$10,770**
05.50.00	*Metal Fabrications*	**$ 2.32/SF**	**$10,770**								
Division 06	**Wood, Plastics and Composites**									**$ 10.81/SF**	**$50,110**
06.10.00	*Rough Carpentry*	**$ 10.81/SF**	**$50,110**								
Division 07	**Thermal and Moisture Protection**									**$ 8.17/SF**	**$37,891**
07.00.00	*Thermal and Moisture Protection*	**$ 1.31/SF**	**$6,068**								
07.50.00	*Membrane Roofing*	**$ 5.27/SF**	**$24,406**								
07.60.00	*Flashing and Sheet Metal*	**$ 1.6/SF**	**$7,417**								
Division 08	**Openings**									**$ 16.22/SF**	**$75,189**
08.10.00	*Doors and Frames*	**$ 4.51/SF**	**$20,902**								
08.30.00	*Specialty Doors and Frames*	**$ 1.25/SF**	**$5,771**								
08.50.00	*Windows*	**$ 10.47/SF**	**$48,517**								
Division 09	**Finishes**									**$ 22.19/SF**	**$102,853**
09.20.00	*Plaster and Gypsum Board*	**$ 10.89/SF**	**$50,497**								
09.50.00	*Ceilings*	**$ 2.36/SF**	**$10,927**								
09.60.00	*Flooring*	**$ 5.21/SF**	**$24,155**								
09.70.00	*Wall Finishes*	**$ 1.49/SF**	**$6,903**								
09.90.00	*Painting and Coating*	**$ 2.24/SF**	**$10,371**								
Division 10	**Specialties**									**$ 1.02/SF**	**$4,734**
10.00.00	*Specialties*	**$ 1.02/SF**	**$4,734**								
Division 11	**Equipment**									**$ 0/SF**	**$0**
Division 12	**Furnishings**									**$ 0/SF**	**$0**
Division 13	**Special Construction**									**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**									**$ 0/SF**	**$0**
Division 21	**Fire Suppression**									**$ 7.47/SF**	**$34,640**
21.00.00	*Fire Suppression*	**$ 7.47/SF**	**$34,640**								
Division 22	**Plumbing**									**$ 14.47/SF**	**$67,085**
22.00.00	*Plumbing*	**$ 14.47/SF**	**$67,085**								
Division 23	**Heating, Ventilating, and Air Conditioning**									**$ 30.14/SF**	**$139,701**
23.00.00	*Heating, Ventilating, and Air-Conditioning (HVAC)*	**$ 30.14/SF**	**$139,701**								
Division 25	**Integrated Automation**									**$ 0/SF**	**$0**
Division 26	**Electrical**									**$ 27.94/SF**	**$129,496**
26.00.00	*Electrical*	**$ 27.94/SF**	**$129,496**								
Division 27	**Communications**									**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**									**$ 0/SF**	**$0**
Division 31	**Earthwork**									**$ 0.04/SF**	**$202**
31.00.00	*Earthwork*	**$ 0.04/SF**	**$202**								
Division 32	**Exterior Improvements**									**$ 3.93/SF**	**$18,196**
32.10.00	*Bases, Ballasts, and Paving*	**$ 3.93/SF**	**$18,196**								
Division 33	**Utilities**									**$ 0/SF**	**$0**
Division 34	**Transportation**									**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**									**$ 0/SF**	**$0**
Division 40	**Process Integration**									**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**									**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**									**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**									**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**									**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**									**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**									**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$345,739**
Division 02 Existing Conditions											***$64,193***
02.40.00 Demolition and Structure Moving											
Site Demolition											
Demolish non-historic wood framed building											
Demolish building	9,360	CF		0.003	1.00	43.91	0.13	0.14	28.08	0.27	$2,523
Demolish foundation	780	SF		0.025	1.00	43.91	1.10	0.64	19.50	1.73	$1,352
Haul and dispose, ALLOWANCE	78	TONS		0.111	1.00	60.79	6.75	5.56	8.67	12.31	$960
Tipping Fees	78	TONS				60.79	0.00		-	50.00	$3,900
Patch and repair paving, AC paving	780	SF	1.77	0.05	1.00	53.06	2.66		39.12	4.43	$3,459
Demo concrete ramps and steps											
Demo ramps and steps	178	SF		0.200	1.00	43.91	8.76	0.95	35.51	9.71	$1,729
Haul and dispose, ALLOWANCE	7	TONS		0.111	1.00	60.79	6.75	5.56	0.74	12.31	$82
Tipping Fees	7	TONS				60.79	0.00		-	50.00	$334
Patch and repair paving	178	SF	1.77	0.06	1.00	42.98	2.66		11.02	4.43	$789
Structural Demolition											
Remove floor framing (10% of floor)	447	SF		0.015	2.00	43.91	1.32		13.41	1.32	$589
Remove floor sheathing (10% of floor)	447	SF		0.021	2.00	53.06	2.23		18.77	2.23	$996
Remove ceiling framing (20% of floor)	923	SF		0.022	2.00	53.06	2.33		40.59	2.33	$2,154
Remove roof framing (20% of floor)	923	SF		0.020	2.00	53.06	2.12		36.90	2.12	$1,958
Remove roof sheathing (100% of roof)	4,613	SF		0.011	1.00	53.06	0.58		50.74	0.58	$2,692
Remove exterior walls framing (10% of walls)	459	SF		0.017	2.00	53.06	1.80		15.59	1.80	$827
Remove exterior walls wood lath and plaster (100% of walls)	6,090	SF		0.024	1.00	53.06	1.27		146.16	1.27	$7,755
Architectural Demolition											
Window, remove existing wood windows, 3'x4'	6	EA		1.500	1.00	43.91	65.87		9.00	65.87	$395
Window, remove existing wood windows, 4'x5'	22	EA		1.500	1.00	43.91	65.87		33.00	65.87	$1,449
Window, remove existing screen, 3'x4'	6	EA		0.569	1.00	43.91	24.98		3.41	24.98	$150
Window, remove existing screen, 4'x5'	22	EA		0.569	1.00	43.91	24.98		12.52	24.98	$550
Wall finishes, remove drywall and plaster	74	SF		0.025	1.00	43.91	1.10		1.85	1.10	$81
Roofing, remove roof shingles	74	SF		0.017	1.00	43.91	0.75		1.26	0.75	$55
Roofing, remove miscellaneous flashing	290	LF		0.025	1.00	43.91	1.10		7.25	1.10	$318
Roofing, remove parapet coping	290	LF		0.025	1.00	43.91	1.10		7.25	1.10	$318
Roofing, remove built-up roof cover	4,635	SF		0.017	1.00	43.91	0.75		78.80	0.75	$3,460
Interior wall, remove existing drywall and plaster finish	338	SF		0.025	1.00	43.91	1.10		8.45	1.10	$371
Interior door, remove doors, complete	9	EA		1.936	1.00	43.91	85.01		17.42	85.01	$765
Remove and abate asbestos floor finishes	5,172	SF		0.046	1.00	43.91	2.02		237.91	2.02	$10,447
Floor finishes, remove existing base	836	LF		0.011	1.00	43.91	0.48		9.20	0.48	$404
Exterior wall, remove existing stucco		SF		0.025	1.00	43.91	1.10		-	1.10	$0
Exterior door, remove existing hardware	5	EA		0.250	1.00	43.91	10.98		1.25	10.98	$55
Ceiling finishes, remove existing drywall plaster ceiling	2,582	SF		0.025	1.00	43.91	1.10		64.55	1.10	$2,834
Ceiling finishes, remove existing drywall plaster ceiling	1,848	SF		0.025	1.00	43.91	1.10		46.20	1.10	$2,029
Reseal slab on grade	74	SF	0.45	0.024	1.00	43.91	1.05		1.77	1.50	$111
Accessible grab bars, set	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Accessible stall partition	1	EA		0.569	1.00	43.91	24.98		0.57	24.98	$25
Mirror, 24"x36"	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Paper towel and waste combo dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Seat cover dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Soap dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Standard stall partition	1	EA		0.569	1.00	43.91	24.98		0.57	24.98	$25
Toilet paper dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Haul and dispose, ALLOWANCE	45	TONS		0.111	1.00	60.79	6.75	5.56	5.00	12.31	$554
Tipping Fees	45	TONS				60.79	0.00		-	50.00	$2,250
Selective Removal for Reconditioning											
Window, recondition existing wood window with dual glaze, 3'x4'	6	EA		2.000	1.00	53.06	106.12		12.00	106.12	$637
Window, recondition existing wood window with dual glaze, 4'x5'	22	EA		2.000	1.00	53.06	106.12		44.00	106.12	$2,335
Exterior door, recondition transoms	29	SF		0.286	1.00	53.06	15.16		8.29	15.16	$440
Exterior door, recondition existing doors, single	3	EA		2.000	1.00	53.06	106.12		6.00	106.12	$318
Exterior door, recondition existing doors, double	2	EA		3.000	1.00	53.06	159.18		6.00	159.18	$318
Exterior door, recondition existing door frame	91	LF		0.118	1.00	53.06	6.24		10.71	6.24	$568
Recondition entrance framing,4'x7'	22	LF		0.227	1.00	53.06	12.06		5.00	12.06	$265
Recondition wood base	35	LF		0.143	1.00	53.06	7.58		5.00	7.58	$265
Subtotal Demolition and Structure Moving			1,733				53,300	2,676	1,116		$64,193
Division 05 Metals											***$10,770***
05.50.00 Metal Fabrications											
Guardrails	103	LF	85.00	0.37	1.00	53.06	19.57		37.98	104.57	$10,770
Subtotal Metal Fabrications			8,755				2,015	-	38		$10,770
Division 06 Wood, Plastics and Composites											***$50,110***
06.10.00 Rough Carpentry											
Floor framing (10% of floor)	447	SF	2.43	0.079	2.00	53.06	8.35		70.31	10.78	$4,819
Floor sheathing (10% of floor)	447	SF	1.25	0.015	2.00	53.06	1.59		13.41	2.84	$1,270
Ceiling framing (20% of ceiling)	923	SF	1.74	0.049	2.00	53.06	5.22		90.72	6.96	$6,418
Roof framing (20% of roof)	923	SF	4.66	0.026	2.00	53.06	2.76	0.25	47.98	7.68	$7,082
Roof sheathing (100% of roof)	4,613	SF	1.25	0.015	1.00	53.06	0.80		69.20	2.05	$9,438
Roof reinforcement, (2) 2x8 rafters (50% of rafters)	668	BF	1.71	0.025	2.00	53.06	2.70		33.93	4.40	$2,940
Exterior walls framing (10% of walls)	459	SF	0.79	0.026	1.00	53.06	1.36		11.74	2.15	$986
Structural plywood sheathing to exterior walls (100% of walls)	6,090	SF	1.25	0.015	1.00	53.06	0.80		91.35	2.05	$12,460
Install new sills at all walls, 2x6 (100% of walls)	287	BF	1.22	0.058	2.00	53.06	6.17		33.40	7.39	$2,122
Install new anchor bolts at all wall sills (100% of walls)	144	EA	1.74	0.049	1.00	53.06	2.61		7.06	4.35	$624
Install hold downs at shear walls (2 hold downs for every 20' of wall)	29	EA	15.65	0.442	1.00	53.06	23.48		12.70	39.13	$1,123
Provide blocking and shear wall top plates and diaphragm ties	29	EA	3.48	0.098	2.00	53.06	10.43		5.64	13.91	$399
Miscellaneous connections (20%)	1	LS								429.25	$429
Subtotal Rough Carpentry			23,584				25,862	235	487		$50,110

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 07 Thermal and Moisture Protection											***$37,891***
07.00.00 Thermal and Moisture Protection											
Exterior wall insulation	3,776	SF	0.35	0.007	1.00	53.06	0.37		26.43	0.72	$2,724
Roof insulation	4,635	SF	0.35	0.007	1.00	53.06	0.37		32.45	0.72	$3,344
Subtotal Thermal and Moisture Protection			2,944				3,124	-	59		$6,068
07.50.00 Membrane Roofing											
Built-up roofing	4,635	SF	2.45	0.066	1.00	42.66	2.82		305.91	5.27	$24,406
Subtotal Membrane Roofing			11,356				13,050	-	306		$24,406
07.60.00 Flashing and Sheet Metal											
Install miscellaneous flashing	290	LF	6.09	0.157	1.00	42.66	6.70		45.53	12.79	$3,708
Install painted parapet coping	290	LF	6.09	0.157	1.00	42.66	6.70		45.53	12.79	$3,708
Subtotal Flashing and Sheet Metal			3,532				3,885	-	91		$7,417
Division 08 Openings											***$75,189***
08.10.00 Doors and Frames											
Interior door, non-historic											
Install new ADA compliant door and hardware	9	EA	665.20	8.000	1.00	53.06	424.48		72.00	1,089.68	$9,807
Exterior door						53.06	0.00		-	0.00	$0
Recondition door, hardware, single	3	EA	1,219.00	15.313	1.00	53.06	812.51		45.94	2,031.51	$6,095
Recondition door, hardware, double	2	EA	1,500.00	18.847	1.00	53.06	1,000.02		37.69	2,500.02	$5,000
Subtotal Doors and Frames			12,644				8,258	-	156		$20,902
08.30.00 Specialty Doors and Frames											
Install ADA compliant hardware (exit device and closer)	5	EA	978.54	4.000	1.00	43.91	175.64		20.00	1,154.18	$5,771
Subtotal Specialty Doors and Frames			4,893				878	-	20		$5,771
08.50.00 Windows											
Reinstall recondition wood window, 3'x4'	6	EA	1,500.00	3.000	1.00	52.46	157.38		18.00	1,657.38	$9,944
Reinstall recondition wood window, 4'x5'	22	EA	1,500.00	3.000	1.00	52.46	157.38		66.00	1,657.38	$36,462
Install window screen, 3'x4'	6	EA	30.00	0.565	1.00	52.46	29.64		3.39	59.64	$358
Install window screen, 4'x5'	22	EA	50.00	0.565	1.00	52.46	29.64		12.43	79.64	$1,752
Subtotal Windows			43,280				5,237	-	100		$48,517
Division 09 Finishes											***$102,853***

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
09.20.00 Plaster and Gypsum Board											
Exterior wall											
Integral color stucco, historically significant	6,090	SF	2.50	0.119	1.00	48.67	5.79		724.71	8.29	$50,497
Subtotal Plaster and Gypsum Board			15,225				35,272	-	725		$50,497
09.50.00 Ceilings											
Drywall to ceiling	2,582	SF	0.67	0.026	1.00	53.06	1.38		67.13	2.05	$5,292
Install acoustical ceiling, including framing	1,848	SF	1.93	0.023	1.00	48.67	1.12		42.50	3.05	$5,635
Subtotal Ceilings			5,297				5,631	-	110		$10,927
09.60.00 Flooring											
Install rubber base	683	LF	0.65	0.030	1.00	49.40	1.48		20.49	2.13	$1,456
Install commercial grade carpet	4,468	SF	2.53	0.012	1.00	39.23	0.47		53.62	3.00	$13,407
Install ceramic tile flooring	704	SF	2.48	0.164	1.00	49.40	8.10		115.46	10.58	$7,449
Install ceramic tile coved base	153	LF	4.58	0.151	1.00	49.40	7.46		23.10	12.04	$1,842
Subtotal Flooring			14,195				9,960	-	213		$24,155
09.70.00 Wall Finishes											
Wall finishes, install drywall	412	SF	0.67	0.021	1.00	53.06	1.11		8.65	1.78	$735
Wall finishes, Ceramic tile wainscot	540	SF	5.05	0.129	1.00	49.40	6.37		69.66	11.42	$6,168
Subtotal Wall Finishes			3,003				3,900	-	78		$6,903
09.90.00 Painting and Coating											
Wall finishes, paint to drywall	9,065	SF	0.30	0.010	1.00	46.99	0.47		90.65	0.77	$6,979
Ceiling finishes, paint to drywall ceiling	4,405	SF	0.30	0.010	1.00	46.99	0.47		44.05	0.77	$3,391
Subtotal Painting and Coating			4,041				6,330	-	135		$10,371
Division 10 Specialties											***$4,734***
10.00.00 Specialties											
Accessible grab bars, set	2	EA	93.91	1.426	1.00	43.91	62.62		2.85	156.53	$313
Accessible stall partition	1	EA	626.09	9.506	1.00	43.91	417.41		9.51	1,043.50	$1,043
Mirror, 24"x36"	2	EA	96.50	1.524	1.00	43.91	66.92		3.05	163.42	$327
Paper towel and waste combo dispenser	2	EA	383.10	2.000	1.00	43.91	87.82		4.00	470.92	$942
Seat cover dispenser	2	EA	143.48	2.178	1.00	43.91	95.64		4.36	239.12	$478
Signage, ALLOWANCE	1	LS	26.09	0.396	1.00	43.91	17.39		0.40	500.00	$500
Soap dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130
Standard stall partition	1	EA	521.74	7.921	1.00	43.91	347.81		7.92	869.55	$870
Toilet paper dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Specialties			2,764				1,513	-	34		$4,734
Facility Services											**$370,922**
Division 21 Fire Suppression											***$34,640***
21.00.00 Fire Suppression											
Renovation work											
Remove existing sprinkler system	5,000	SF		0.018	1.00	57.57	1.04		90.00	1.04	$5,181
New wet sprinkler heads and associated piping	44	EA	200.00	3.500	1.00	57.57	201.50		154.00	401.50	$17,666
New fire sprinkler standpipe	1	EA	1,620.00	27.500	1.00	57.57	1,583.18		27.50	3,203.18	$3,203
New attic dry sprinkler heads and associated piping	17	EA	275.00	4.000	1.00	57.57	230.28		68.00	505.28	$8,590
Subtotal Fire Suppression			15,095				19,545	-	340		$34,640
Division 22 Plumbing											***$67,085***
22.00.00 Plumbing											
Demolition											
Remove water closet and wall piping	3	EA		1.000	1.00	57.57	57.57		3.00	57.57	$173
Remove lavatory and wall piping	2	EA		1.000	1.00	57.57	57.57		2.00	57.57	$115
Remove mop sink and wall piping	1	EA		1.200	1.00	57.57	69.08		1.20	69.08	$69
Remove laundry hookups and wall piping	1	LS		47.000	1.00	57.57	2,705.79		47.00	2,705.79	$2,706
Remove drinking fountain and wall piping	1	EA		1.000	1.00	57.57	57.57		1.00	57.57	$58
Remove metal sink and wall piping	1	EA		1.100	1.00	57.57	63.33		1.10	63.33	$63
New plumbing fixtures & associated piping											
Water closet	6	EA	2,175.00	37.800	1.00	57.57	2,176.15		226.80	4,351.15	$26,107
Lavatory	4	EA	2,000.00	36.000	1.00	57.57	2,072.52		144.00	4,072.52	$16,290
Urinal	1	EA	2,190.00	36.500	1.00	57.57	2,101.31		36.50	4,291.31	$4,291
Mop sink	1	EA	2,200.00	36.500	1.00	57.57	2,101.31		36.50	4,301.31	$4,301
Electric water cooler	2	EA	2,630.00	38.000	1.00	57.57	2,187.66		76.00	4,817.66	$9,635
Floor drain	1	EA	225.00	8.000	1.00	57.57	460.56		8.00	685.56	$686
Water heater	2	EA	950.00	6.000	1.00	57.57	345.42		12.00	1,295.42	$2,591
Subtotal Plumbing			32,825				34,260	-	595		$67,085
Division 23 Heating, Ventilating, and Air Conditioning											***$139,701***
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Remove existing heating and cooling systems	4,635	SF		0.038	1.00	54.65	2.08		176.13	2.08	$9,626
New HVAC split system w/ controls	4,635	SF	18.50	0.175	1.00	54.65	9.56		811.13	28.06	$130,075
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			85,748				53,953	-	987		$139,701
Division 26 Electrical											***$129,496***
26.00.00 Electrical											
Remove existing electrical systems	4,635	SF		0.040	1.00	53.83	2.15		185.40	2.15	$9,980

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
New electrical power and distribution	4,635	SF	5.00	0.150	1.00	53.83	8.07		695.25	13.07	$60,600
New light fixtures and controls	4,635	SF	3.72	0.065	1.00	53.83	3.50		301.28	7.22	$33,460
New addressable fire alarm system	4,635	SF	1.10	0.025	1.00	53.83	1.35		115.88	2.45	$11,336
New security/access control system	4,635	SF	0.70	0.018	1.00	53.83	0.97		83.43	1.67	$7,736
New telecommunications system	4,635	SF	0.57	0.015	1.00	53.83	0.81		69.53	1.38	$6,384
Subtotal Electrical			51,402				78,094	-	1,451		$129,496
Site and Infrastructure											**$18,398**
Division 31 Earthwork											***$202***
31.00.00 Earthwork											
Recompaction											
Ramps	465	SF		0.01	1.00	60.79	0.30	0.13	2.33	0.43	$202
Subtotal Earthwork			-				142	61	2		$202
Division 32 Exterior Improvements											***$18,196***
32.10.00 Bases, Ballasts, and Paving											
Concrete ramps, complete	465	SF	15.65	0.41	1.00	53.06	21.52	1.96	188.61	39.13	$18,196
Subtotal Bases, Ballasts, and Paving			7,278				10,008	910	189		$18,196

Hard Costs: Section Summary						$/EA		Total
General Requirements							$	-
Division 01	General Requirements					$ 0/SF	$	-
Facility Construction							$	504,599
Division 02	Existing Conditions					$ 25.65/SF	$	106,848
Division 03	Concrete					$ 4.79/SF	$	19,954
Division 04	Masonry					$ 0/SF	$	-
Division 05	Metals					$ 1.36/SF	$	5,647
Division 06	Wood, Plastics and Composites					$ 17.19/SF	$	71,614
Division 07	Thermal and Moisture Protection					$ 12.11/SF	$	50,453
Division 08	Openings					$ 36.68/SF	$	152,766
Division 09	Finishes					$ 22.06/SF	$	91,875
Division 10	Specialties					$ 1.31/SF	$	5,443
Division 11	Equipment					$ 0/SF	$	-
Division 12	Furnishings					$ 0/SF	$	-
Division 13	Special Construction					$ 0/SF	$	-
Division 14	Conveying Equipment					$ 0/SF	$	-
Facility Services							$	351,460
Division 21	Fire Suppression					$ 10.38/SF	$	43,230
Division 22	Plumbing					$ 15.93/SF	$	66,330
Division 23	Heating, Ventilating, and Air Conditioning					$ 30.14/SF	$	125,535
Division 25	Integrated Automation					$ 0/SF	$	-
Division 26	Electrical					$ 27.94/SF	$	116,365
Division 27	Communications					$ 0/SF	$	-
Division 28	Electronic Safety and Security					$ 0/SF	$	-
Site and Infrastructure							$	20,537
Division 31	Earthwork					$ 2.58/SF	$	10,754
Division 32	Exterior Improvements					$ 2.35/SF	$	9,783
Division 33	Utilities					$ 0/SF	$	-
Division 34	Transportation					$ 0/SF	$	-
Division 35	Waterway and Marine Construction					$ 0/SF	$	-
Process Equipment							$	-
Division 40	Process Integration					$ 0/SF	$	-
Division 41	Material Processing and Handling Equipment					$ 0/SF	$	-
Division 42	Process Heating, Cooling, and Drying Equipment					$ 0/SF	$	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment					$ 0/SF	$	-
Division 44	Pollution Control Equipment					$ 0/SF	$	-
Division 45	Industry-Specific Manufacturing Equipment					$ 0/SF	$	-
Division 48	Electrical Power Generation					$ 0/SF	$	-
Sales Tax		7.75	%		$ 444,183		$	34,424
Subcontractor Mark-up		15	%		$ 868,478		$	130,272
Subtotal Net Direct Building Cost						**$ 250.01/SF**	**$**	**1,041,291**
Prime Contractor General Conditions, Home Office Overhead		11	%				$	114,542
Prime Contractor Profit		8	%				$	92,467
Bond		1.5	%				$	18,724
Escalation to Midpoint of Construction, 06/2010		16	%				$	202,724
Design Contingency		15	%				$	220,462
Phasing Factor, Excluded		0	%				$	-
Total Projected Construction Cost	*Project Square Footage*	*4,165 SF*	*8,054 HRS*	*Cost Per Square Foot*	*$ 406 /SF*		**$**	**1,690,210**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**									**$ 0/SF**	**$0**
Division 02	**Existing Conditions**									**$ 25.65/SF**	**$106,848**
02.40.00	*Demolition and Structure Moving*	**$ 25.65/SF**	**$106,848**								
Division 03	**Concrete**									**$ 4.79/SF**	**$19,954**
03.10.00	*Concrete Forming and Accessories*	**$ 2.14/SF**	**$8,931**								
03.20.00	*Concrete Reinforcing*	**$ 0.86/SF**	**$3,592**								
03.30.00	*Cast-in-Place Concrete*	**$ 1.78/SF**	**$7,431**								
Division 04	**Masonry**									**$ 0/SF**	**$0**
Division 05	**Metals**									**$ 1.36/SF**	**$5,647**
05.50.00	*Metal Fabrications*	**$ 1.36/SF**	**$5,647**								
Division 06	**Wood, Plastics and Composites**									**$ 17.19/SF**	**$71,614**
06.10.00	*Rough Carpentry*	**$ 17.19/SF**	**$71,614**								
Division 07	**Thermal and Moisture Protection**									**$ 12.11/SF**	**$50,453**
07.00.00	*Thermal and Moisture Protection*	**$ 1.24/SF**	**$5,181**								
07.40.00	*Roofing and Siding Panels*	**$ 10.87/SF**	**$45,271**								
Division 08	**Openings**									**$ 36.68/SF**	**$152,766**
08.10.00	*Doors and Frames*	**$ 10.41/SF**	**$43,359**								
08.30.00	*Specialty Doors and Frames*	**$ 1.6/SF**	**$6,649**								
08.50.00	*Windows*	**$ 24.67/SF**	**$102,758**								
Division 09	**Finishes**									**$ 22.06/SF**	**$91,875**
09.20.00	*Plaster and Gypsum Board*	**$ 3.64/SF**	**$15,164**								
09.50.00	*Ceilings*	**$ 2.03/SF**	**$8,446**								
09.60.00	*Flooring*	**$ 4.17/SF**	**$17,363**								
09.70.00	*Wall Finishes*	**$ 7.95/SF**	**$33,105**								
09.90.00	*Painting and Coating*	**$ 4.27/SF**	**$17,797**								
Division 10	**Specialties**									**$ 1.31/SF**	**$5,443**
10.00.00	*Specialties*	**$ 1.31/SF**	**$5,443**								
Division 11	**Equipment**									**$ 0/SF**	**$0**
Division 12	**Furnishings**									**$ 0/SF**	**$0**
Division 13	**Special Construction**									**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**									**$ 0/SF**	**$0**
Division 21	**Fire Suppression**									**$ 10.38/SF**	**$43,230**
21.00.00	*Fire Suppression*	**$ 10.38/SF**	**$43,230**								
Division 22	**Plumbing**									**$ 15.93/SF**	**$66,330**
22.00.00	*Plumbing*	**$ 15.93/SF**	**$66,330**								
Division 23	**Heating, Ventilating, and Air Conditioning**									**$ 30.14/SF**	**$125,535**
23.00.00	*Heating, Ventilating, and Air-Conditioning (HVAC)*	**$ 30.14/SF**	**$125,535**								
Division 25	**Integrated Automation**									**$ 0/SF**	**$0**
Division 26	**Electrical**									**$ 27.94/SF**	**$116,365**
26.00.00	*Electrical*	**$ 27.94/SF**	**$116,365**								
Division 27	**Communications**									**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**									**$ 0/SF**	**$0**
Division 31	**Earthwork**									**$ 2.58/SF**	**$10,754**
31.00.00	*Earthwork*	**$ 2.58/SF**	**$10,754**								
Division 32	**Exterior Improvements**									**$ 2.35/SF**	**$9,783**
32.10.00	*Bases, Ballasts, and Paving*	**$ 2.35/SF**	**$9,783**								
Division 33	**Utilities**									**$ 0/SF**	**$0**
Division 34	**Transportation**									**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**									**$ 0/SF**	**$0**
Division 40	**Process Integration**									**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**									**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**									**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**									**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**									**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**									**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**									**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$504,599**
Division 02 Existing Conditions											***$106,848***
02.40.00 Demolition and Structure Moving											
Site Demolition											
Demolish non-historic wood framed building											
Demolish building	13,908	CF		0.003	1.00	43.91	0.13	0.14	41.72	0.27	$3,749
Demolish foundation	1,159	SF		0.025	1.00	43.91	1.10	0.64	28.98	1.73	$2,009
Haul and dispose, ALLOWANCE	116	TONS		0.111	1.00	60.79	6.75	5.56	12.88	12.31	$1,427
Tipping Fees	116	TONS				60.79	0.00		-	50.00	$5,795
Patch and repair paving, AC paving	1,159	SF	1.77	0.05	1.00	53.06	2.66		58.12	4.43	$5,140
Demo concrete ramps and steps											
Demo ramps and steps	185	SF		0.200	1.00	43.91	8.76	0.95	36.91	9.71	$1,797
Demo railings	51	LF		0.054	1.00	43.91	2.37	0.55	2.75	2.92	$149
Haul and dispose, ALLOWANCE	7	TONS		0.111	1.00	60.79	6.75	5.56	0.77	12.31	$85
Tipping Fees	7	TONS				60.79	0.00		-	50.00	$347
Patch and repair paving	185	SF	1.77	0.06	1.00	42.98	2.66		11.45	4.43	$820
Structural Demolition											
Remove attic floor framing (10% of floor)	416	SF		0.015	2.00	43.91	1.32		12.47	1.32	$548
Remove ceiling framing (20% of floor)	1,114	SF		0.022	2.00	53.06	2.33		49.03	2.33	$2,602
Remove roof framing (20% of floor)	1,114	SF		0.020	2.00	53.06	2.12		44.58	2.12	$2,365
Remove roof sheathing (100% of roof)	5,572	SF		0.011	1.00	53.06	0.58		61.29	0.58	$3,252
Remove exterior walls framing (10% of walls)	300	SF		0.017	2.00	53.06	1.80		10.21	1.80	$542
Remove exterior walls wood lath and plaster (100% of walls)	2,377	SF		0.024	1.00	53.06	1.27		57.05	1.27	$3,027
Architectural Demolition											
Window, remove existing wood windows, 2'6"x4'0"	62	EA		1.500	1.00	43.91	65.87		93.00	65.87	$4,084
Window, remove and replace screen, 2'6"x4'0"	62	EA		0.569	1.00	43.91	24.98		35.28	24.98	$1,549
Remove interior door, double, complete	2	EA		1.500	1.00	43.91	65.87		3.00	65.87	$132
Remove closet door, single, complete	9	EA		1.480	1.00	43.91	65.00		13.32	65.00	$585
Interior door, widen opening, single	19	EA	350.00	12.000	1.00	43.91	526.92		228.00	876.92	$16,661
Wall finishes, remove drywall and plaster (75% of walls)	8,548	SF		0.025	1.00	43.91	1.10		213.69	1.10	$9,383
Roofing, remove roof shingles	5,931	SF		0.017	1.00	43.91	0.75		100.83	0.75	$4,427
Remove existing ceiling insulation	4,805	SF		0.017	1.00	43.91	0.75		82.07	0.75	$3,604
Interior door, remove doors, complete	19	EA		1.500	1.00	43.91	65.87		28.50	65.87	$1,251
Remove and abate asbestos floor finishes	3,805	SF		0.046	1.00	43.91	2.02		175.03	2.02	$7,686
Floor finishes, remove existing base	1,076	LF		0.025	1.00	43.91	1.10		26.90	1.10	$1,181
Exterior wall, remove existing stucco		SF		0.025	1.00	43.91	1.10		-	1.10	$0
Remove and abate asbestos ceiling finishes	4,121	SF		0.046	1.00	43.91	2.02		189.57	2.02	$8,324
Remove accessible toilet stall partition	1	EA		0.569	1.00	43.91	24.98		0.57	24.98	$25
Remove grab bars, set	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove mirror, 24"x36"	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove paper towel dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove seat cover dispenser	4	EA		0.569	1.00	43.91	24.98		2.28	24.98	$100
Remove soap dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Remove toilet paper dispenser	4	EA		0.569	1.00	43.91	24.98		2.28	24.98	$100
Remove toilet stall partition	1	EA		0.569	1.00	43.91	24.98		0.57	24.98	$25
Remove waste dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove waste dispenser	4	EA		0.569	1.00	43.91	24.98		2.28	24.98	$100
Haul and dispose, ALLOWANCE	91	TONS		0.111	1.00	60.79	6.75	5.56	10.11	12.31	$1,120
Tipping Fees	91	TONS				60.79	0.00		-	50.00	$4,550
Selective Removal for Reconditioning											
Window, recondition existing wood window with dual glaze, 2'6"x4'0"	62	EA		2.000	1.00	53.06	106.12		124.00	106.12	$6,579
Exterior door, recondition transoms	18	SF		0.286	1.00	53.06	15.16		5.14	15.16	$273
Exterior door, recondition existing doors, single	3	EA		2.000	1.00	53.06	106.12		6.00	106.12	$318
Exterior door, recondition existing doors, double	2	EA		3.000	1.00	53.06	159.18		6.00	159.18	$318
Exterior door, recondition existing door frame	91	LF		0.118	1.00	53.06	6.24		10.71	6.24	$568
Subtotal Demolition and Structure Moving			9,034				83,076	4,046	1,793		$106,848
Division 03 Concrete											***$19,954***
03.10.00 Concrete Forming and Accessories											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	900	SF	1.83	0.091	1.00	53.06	4.83		81.90	6.66	$5,996
Drilled-in epoxy dowels at 48" o.c.	75	EA	15.65	0.442	1.00	53.06	23.48		33.19	39.13	$2,935
Subtotal Concrete Forming and Accessories			1,650				6,106	-	-		$8,931
03.20.00 Concrete Reinforcing											
Wall footing, 2'0" wide x 1'6" high, 80#/CY, ALLOWANCE	2	TONS	1,500.00	8.889	1.00	60.43	537.16		15.67	2,037.16	$3,592
Subtotal Concrete Reinforcing			2,645				947	-	16		$3,592
03.30.00 Cast-in-Place Concrete											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	38	CY	104.35	1.500	1.00	53.06	79.59	9.91	57.50	193.85	$7,431
Subtotal Cast-in-Place Concrete			4,000				3,051	380	58		$7,431
Division 05 Metals											***$5,647***
05.50.00 Metal Fabrications											
Guardrails	54	LF	85.00	0.369	1.00	53.06	19.57		19.91	104.57	$5,647
Subtotal Metal Fabrications			4,590				1,057	-	20		$5,647
Division 06 Wood, Plastics and Composites											***$71,614***
06.10.00 Rough Carpentry											
Attic floor framing (10% of floor)	416	SF	2.43	0.079	2.00	53.06	8.35		65.40	10.78	$4,482
Attic floor sheathing (100% of floor)	4,157	SF	1.25	0.015	2.00	53.06	1.59		124.71	2.84	$11,813
Ceiling framing (20% of ceiling)	1,114	SF	1.74	0.049	2.00	53.06	5.22		109.58	6.96	$7,752

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Ceiling framing	412	SF	1.74	0.049	2.00	53.06	5.22		40.51	6.96	$2,866
Roof framing (20% of roof)	1,114	SF	4.66	0.026	2.00	53.06	2.76	0.25	57.95	7.68	$8,554
Roof sheathing (100% of roof)	5,572	SF	1.25	0.015	1.00	53.06	0.80		83.58	2.05	$11,400
Roof reinforcement, (2) 2x8 rafters (50% of rafters)	1,467	BF	1.71	0.025	2.00	53.06	2.70		74.49	4.40	$6,456
Attic floor reinforcement, (2) 2x10 wood joists (100% of rafters)	1,290	BF	1.71	0.025	2.00	53.06	2.70		65.52	4.40	$5,678
Exterior walls framing (10% of walls)	300	SF	0.79	0.026	1.00	53.06	1.36		7.69	2.15	$646
Structural plywood sheathing to exterior walls (100% of walls)	2,377	SF	1.25	0.015	1.00	53.06	0.80		35.66	2.05	$4,863
Install new sills at all walls, 2x6 (100% of walls)	300	BF	1.22	0.058	2.00	53.06	6.17		34.91	7.39	$2,218
Attic floor reinforcement, wood column, 6x6, 10' high	300	BF	3.39	0.049	1.50	53.06	3.92		22.15	7.31	$2,193
Install new anchor bolts at all wall sills (100% of walls)	150	EA	1.74	0.049	1.00	53.06	2.61		7.37	4.35	$652
Install hold downs at shear walls (2 hold downs for every 20' of wall)	30	EA	15.65	0.442	1.00	53.06	23.48		13.27	39.13	$1,174
Provide blocking and shear wall top plates and diaphragm ties	30	EA	3.48	0.098	2.00	53.06	10.43		5.90	13.91	$417
Miscellaneous connections (20%)	1	LS								448.70	$449
Subtotal Rough Carpentry			31,156				39,726	284	749		$71,614
Division 07 Thermal and Moisture Protection											***$50,453***
07.00.00 Thermal and Moisture Protection											
Exterior wall insulation	2,377	SF	0.35	0.007	1.00	53.06	0.37		16.64	0.72	$1,715
Roof insulation	4,805	SF	0.35	0.007	1.00	53.06	0.37		33.64	0.72	$3,466
Subtotal Thermal and Moisture Protection			2,514				2,668	-	50		$5,181
07.40.00 Roofing and Siding Panels											
Install fire treated wood shingles	5,931	SF	5.50	0.050	1.00	42.66	2.13		296.55	7.63	$45,271
Subtotal Roofing and Siding Panels			32,621				12,651	-	297		$45,271
Division 08 Openings											***$152,766***
08.10.00 Doors and Frames											
Interior door, non-historic											
Recondition door, hardware, double	2	EA	1,350.00	16.962	1.00	53.06	900.00		33.92	2,250.00	$4,500
Recondition door, hardware, single	19	EA	831.50	13.760	1.00	53.06	730.11		261.44	1,561.61	$29,671
Exterior door											
Recondition door, hardware, single	3	EA	831.50	13.786	1.00	53.06	731.49		41.36	1,562.99	$4,689
Recondition door, hardware, double	2	EA	1,350.00	16.962	1.00	53.06	900.00		33.92	2,250.00	$4,500
Subtotal Doors and Frames			23,693				19,666	-	371		$43,359
08.30.00 Specialty Doors and Frames											
Install ADA compliant hardware (exit device and closer)	5	EA	978.54	8.000	1.00	43.91	351.28		40.00	1,329.82	$6,649
Subtotal Specialty Doors and Frames			4,893				1,756	-	40		$6,649

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
08.50.00 Windows											
Reinstall recondition wood window, 2'6"x4'0"	62	EA	1,500.00	3.000	1.00	52.46	157.38		186.00	1,657.38	$102,758
Subtotal Windows			93,000				9,758	-	186		$102,758
Division 09 Finishes											***$91,875***
09.20.00 Plaster and Gypsum Board											
Exterior wall											
Install wood siding	2,377	SF	3.80	0.053	1.00	48.67	2.58		125.98	6.38	$15,164
Subtotal Plaster and Gypsum Board			9,033				6,131	-	126		$15,164
09.50.00 Ceilings											
Drywall to ceiling	4,121	SF	0.67	0.026	1.00	53.06	1.38		107.15	2.05	$8,446
Subtotal Ceilings			2,761				5,685	-	107		$8,446
09.60.00 Flooring											
Install rubber base	853	LF	0.65	0.030	1.00	49.40	1.48		25.59	2.13	$1,819
Install commercial grade carpet	3,456	SF	2.53	0.012	1.00	39.23	0.47		41.47	3.00	$10,371
Install ceramic tile flooring	349	SF	2.48	0.164	1.00	49.40	8.10		57.24	10.58	$3,693
Install ceramic tile coved base	123	LF	4.58	0.151	1.00	49.40	7.46		18.57	12.04	$1,481
Subtotal Flooring			10,727				6,636	-	143		$17,363
09.70.00 Wall Finishes											
Wall finishes, install drywall (75% of walls)	8,548	SF	0.67	0.021	1.00	53.06	1.11		179.50	1.78	$15,251
Wall finishes, Ceramic tile wainscot	1,563	SF	5.05	0.129	1.00	49.40	6.37		201.63	11.42	$17,854
Subtotal Wall Finishes			13,620				19,485	-	381		$33,105
09.90.00 Painting and Coating											
Wall finishes, paint to drywall	11,397	SF	0.30	0.010	1.00	46.99	0.47		113.97	0.77	$8,775
Paint to 4" diameter column, 9'h	5	EA	12.00	0.500	1.00	46.99	23.50		2.50	35.50	$177
Exterior wall, paint to match existing	4,175	SF	0.30	0.010	1.00	46.99	0.47		41.75	0.77	$3,214
Roofing, repaint fascia board, 2x12	142	LF	0.60	0.250	1.00	46.99	11.75		35.50	12.35	$1,753
Ceiling finishes, paint to drywall ceiling	4,121	SF	0.30	0.010	1.00	46.99	0.47		41.21	0.77	$3,173
Repair and repaint exposed deck and joists, 24" oc	915	SF	0.30	0.010	1.00	46.99	0.47		9.15	0.77	$704
Subtotal Painting and Coating			6,328				11,469	-	244		$17,797
Division 10 Specialties											***$5,443***
10.00.00 Specialties											

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Accessible grab bars, set	2	EA	93.91	1.426	1.00	43.91	62.62		2.85	156.53	$313
Accessible stall partition	1	EA	626.09	9.506	1.00	43.91	417.41		9.51	1,043.50	$1,043
Mirror, 24"x36"	2	EA	96.50	1.524	1.00	43.91	66.92		3.05	163.42	$327
Paper towel and waste combo dispenser	2	EA	383.10	2.000	1.00	43.91	87.82		4.00	470.92	$942
Seat cover dispenser	4	EA	143.48	2.178	1.00	43.91	95.64		8.71	239.12	$956
Signage, ALLOWANCE	1	LS	26.09	0.396	1.00	43.91	17.39		0.40	600.00	$600
Soap dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130
Standard stall partition	1	EA	521.74	7.921	1.00	43.91	347.81		7.92	869.55	$870
Toilet paper dispenser	4	EA	39.13	0.594	1.00	43.91	26.08		2.38	65.21	$261
Subtotal Specialties			3,130				1,756	-	40		$5,443
Facility Services											**$351,460**
Division 21 Fire Suppression											***$43,230***
21.00.00 Fire Suppression											
Renovation work											
Remove existing sprinkler system	5,000	SF		0.018	1.00	57.57	1.04		90.00	1.04	$5,181
New wet sprinkler heads and associated piping	44	EA	200.00	3.500	1.00	57.57	201.50		154.00	401.50	$17,666
New fire sprinkler standpipe	1	EA	1,620.00	27.500	1.00	57.57	1,583.18		27.50	3,203.18	$3,203
New attic dry sprinkler heads and associated piping	34	EA	275.00	4.000	1.00	57.57	230.28		136.00	505.28	$17,180
Subtotal Fire Suppression			19,770				23,460	-	408		$43,230
Division 22 Plumbing											***$66,330***
22.00.00 Plumbing											
Demolition											
Remove water closet and wall piping	4	EA		1.000	1.00	57.57	57.57		4.00	57.57	$230
Remove lavatory and wall piping	3	EA		1.000	1.00	57.57	57.57		3.00	57.57	$173
Remove shower and wall piping	1	EA		2.700	1.00	57.57	155.44		2.70	155.44	$155
Remove mop sink and wall piping	1	EA		1.200	1.00	57.57	69.08		1.20	69.08	$69
Remove bathtub and wall piping	2	EA		1.600	1.00	57.57	92.11		3.20	92.11	$184
Remove metal sink and wall piping	1	EA		1.100	1.00	57.57	63.33		1.10	63.33	$63
New plumbing fixtures & associated piping											
Water closet	4	EA	2,175.00	37.800	1.00	57.57	2,176.15		151.20	4,351.15	$17,405
Lavatory	3	EA	2,000.00	36.000	1.00	57.57	2,072.52		108.00	4,072.52	$12,218
Mop sink	1	EA	2,200.00	36.500	1.00	57.57	2,101.31		36.50	4,301.31	$4,301
Sink	1	EA	2,000.00	36.000	1.00	57.57	2,072.52		36.00	4,072.52	$4,073
Shower	1	EA	1,475.00	25.500	1.00	57.57	1,468.04		25.50	2,943.04	$2,943
Bathtub	2	EA	4,770.00	37.000	1.00	57.57	2,130.09		74.00	6,900.09	$13,800
Electric water cooler	1	EA	2,630.00	38.000	1.00	57.57	2,187.66		38.00	4,817.66	$4,818
Floor drain	4	EA	225.00	8.000	1.00	57.57	460.56		32.00	685.56	$2,742
Water heater	1	EA	2,350.00	14.000	1.00	57.57	805.98		14.00	3,155.98	$3,156
Subtotal Plumbing			35,795				30,535	-	530		$66,330

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 23 Heating, Ventilating, and Air Conditioning											***$125,535***
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Remove existing heating and cooling systems	4,165	SF		0.038	1.00	54.65	2.08		158.27	2.08	$8,649
New HVAC split system w/ controls	4,165	SF	18.50	0.175	1.00	54.65	9.56		728.88	28.06	$116,886
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			77,053				48,482	-	887		$125,535
Division 26 Electrical											***$116,365***
26.00.00 Electrical											
Remove existing electrical systems	4,165	SF		0.040	1.00	53.83	2.15		166.60	2.15	$8,968
New electrical power and distribution	4,165	SF	5.00	0.150	1.00	53.83	8.07		624.75	13.07	$54,455
New light fixtures and controls	4,165	SF	3.72	0.065	1.00	53.83	3.50		270.73	7.22	$30,067
New addressable fire alarm system	4,165	SF	1.10	0.025	1.00	53.83	1.35		104.13	2.45	$10,187
New security/access control system	4,165	SF	0.70	0.018	1.00	53.83	0.97		74.97	1.67	$6,951
New telecommunications system	4,165	SF	0.57	0.015	1.00	53.83	0.81		62.48	1.38	$5,737
Subtotal Electrical			46,190				70,175	-	1,304		$116,365
Site and Infrastructure											**$20,537**
Division 31 Earthwork											***$10,754***
31.00.00 Earthwork											
Recompaction											
Ramps	250	SF		0.01	1.00	60.79	0.30	0.13	1.25	0.43	$109
Footings	600	SF		0.01	2.00	60.79	0.61	0.13	6.01	0.74	$443
Excavation											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	64	CY		1.000	1.50	43.91	65.87	3.13	95.83	69.00	$4,408
Hauling											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	38	CY		0.194	1.00	60.79	11.81	12.52	7.45	24.33	$933
Fill											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	26	CY		0.706	2.00	60.79	85.83	3.130	36.08	88.96	$2,274
Tipping											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	52	TONS			1.00	60.79	0.00		-	50.00	$2,588
Subtotal Earthwork			-				7,296	871	147		$10,754
Division 32 Exterior Improvements											***$9,783***
32.10.00 Bases, Ballasts, and Paving											
Concrete ramps, complete	250	SF	15.65	0.41	1.00	53.06	21.52	1.96	101.40	39.13	$9,783
Subtotal Bases, Ballasts, and Paving			3,913				5,380	489	101		$9,783

Hard Costs: Section Summary		$/EA	Total
General Requirements			$ -
Division 01	General Requirements	$ 0/SF	$ -
Facility Construction			$ 810,983
Division 02	Existing Conditions	$ 7.08/SF	$ 74,070
Division 03	Concrete	$ 27.46/SF	$ 287,214
Division 04	Masonry	$ 3.74/SF	$ 39,128
Division 05	Metals	$ 0.54/SF	$ 5,647
Division 06	Wood, Plastics and Composites	$ 2.75/SF	$ 28,796
Division 07	Thermal and Moisture Protection	$ 6.18/SF	$ 64,644
Division 08	Openings	$ 19.16/SF	$ 200,355
Division 09	Finishes	$ 9.99/SF	$ 104,482
Division 10	Specialties	$ 0.64/SF	$ 6,647
Division 11	Equipment	$ 0/SF	$ -
Division 12	Furnishings	$ 0/SF	$ -
Division 13	Special Construction	$ 0/SF	$ -
Division 14	Conveying Equipment	$ 0/SF	$ -
Facility Services			$ 788,603
Division 21	Fire Suppression	$ 5.73/SF	$ 59,919
Division 22	Plumbing	$ 11.6/SF	$ 121,291
Division 23	Heating, Ventilating, and Air Conditioning	$ 30.14/SF	$ 315,209
Division 25	Integrated Automation	$ 0/SF	$ -
Division 26	Electrical	$ 27.94/SF	$ 292,184
Division 27	Communications	$ 0/SF	$ -
Division 28	Electronic Safety and Security	$ 0/SF	$ -
Site and Infrastructure			$ 47,204
Division 31	Earthwork	$ 3.58/SF	$ 37,421
Division 32	Exterior Improvements	$ 0.94/SF	$ 9,783
Division 33	Utilities	$ 0/SF	$ -
Division 34	Transportation	$ 0/SF	$ -
Division 35	Waterway and Marine Construction	$ 0/SF	$ -
Process Equipment			$ -
Division 40	Process Integration	$ 0/SF	$ -
Division 41	Material Processing and Handling Equipment	$ 0/SF	$ -
Division 42	Process Heating, Cooling, and Drying Equipment	$ 0/SF	$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment	$ 0/SF	$ -
Division 44	Pollution Control Equipment	$ 0/SF	$ -
Division 45	Industry-Specific Manufacturing Equipment	$ 0/SF	$ -
Division 48	Electrical Power Generation	$ 0/SF	$ -
Sales Tax	7.75 %	$ 779,084	$ 60,379
Subcontractor Mark-up	15 %	$ 1,700,498	$ 255,075
Subtotal Net Direct Building Cost		**$ 187.63/SF**	**$ 1,962,243**
Prime Contractor General Conditions, Home Office Overhead	11 %		$ 215,847
Prime Contractor Profit	8 %		$ 174,247
Bond	1.5 %		$ 35,285
Escalation to Midpoint of Construction, 06/2010	16 %		$ 382,020
Design Contingency	15 %		$ 415,446
Phasing Factor, Excluded	0 %		$ -

Total Projected Construction Cost	*Project Square Footage*	*10,458 SF*	*Cost Per Square Foot*	*$ 305 /SF*	**$**	**3,185,088**
		14,693 HRS				

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**									**$ 0/SF**	**$0**
Division 02	**Existing Conditions**									**$ 7.08/SF**	**$74,070**
02.40.00	*Demolition and Structure Moving*	**$ 7.08/SF**	**$74,070**								
Division 03	**Concrete**									**$ 27.46/SF**	**$287,214**
03.00.00	*Concrete*	**$ 11.67/SF**	**$122,049**								
03.10.00	*Concrete Forming and Accessories*	**$ 11.8/SF**	**$123,366**								
03.20.00	*Concrete Reinforcing*	**$ 0.98/SF**	**$10,203**								
03.30.00	*Cast-in-Place Concrete*	**$ 3.02/SF**	**$31,595**								
Division 04	**Masonry**									**$ 3.74/SF**	**$39,128**
04.20.00	*Unit Masonry*	**$ 3.74/SF**	**$39,128**								
Division 05	**Metals**									**$ 0.54/SF**	**$5,647**
05.50.00	*Metal Fabrications*	**$ 0.54/SF**	**$5,647**								
Division 06	**Wood, Plastics and Composites**									**$ 2.75/SF**	**$28,796**
06.10.00	*Rough Carpentry*	**$ 2.75/SF**	**$28,796**								
Division 07	**Thermal and Moisture Protection**									**$ 6.18/SF**	**$64,644**
07.50.00	*Membrane Roofing*	**$ 4.96/SF**	**$51,908**								
07.60.00	*Flashing and Sheet Metal*	**$ 1.22/SF**	**$12,736**								
Division 08	**Openings**									**$ 19.16/SF**	**$200,355**
08.10.00	*Doors and Frames*	**$ 4.48/SF**	**$46,848**								
08.30.00	*Specialty Doors and Frames*	**$ 1.53/SF**	**$15,984**								
08.50.00	*Windows*	**$ 13.15/SF**	**$137,524**								
Division 09	**Finishes**									**$ 9.99/SF**	**$104,482**
09.50.00	*Ceilings*	**$ 1.19/SF**	**$12,449**								
09.60.00	*Flooring*	**$ 3.44/SF**	**$35,983**								
09.70.00	*Wall Finishes*	**$ 2.12/SF**	**$22,180**								
09.90.00	*Painting and Coating*	**$ 3.24/SF**	**$33,870**								
Division 10	**Specialties**									**$ 0.64/SF**	**$6,647**
10.00.00	*Specialties*	**$ 0.64/SF**	**$6,647**								
Division 11	**Equipment**									**$ 0/SF**	**$0**
Division 12	**Furnishings**									**$ 0/SF**	**$0**
Division 13	**Special Construction**									**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**									**$ 0/SF**	**$0**
Division 21	**Fire Suppression**									**$ 5.73/SF**	**$59,919**
21.00.00	*Fire Suppression*	**$ 5.73/SF**	**$59,919**								
Division 22	**Plumbing**									**$ 11.6/SF**	**$121,291**
22.00.00	*Plumbing*	**$ 11.6/SF**	**$121,291**								
Division 23	**Heating, Ventilating, and Air Conditioning**									**$ 30.14/SF**	**$315,209**
23.00.00	*Heating, Ventilating, and Air-Conditioning (HVAC)*	**$ 30.14/SF**	**$315,209**								
Division 25	**Integrated Automation**									**$ 0/SF**	**$0**
Division 26	**Electrical**									**$ 27.94/SF**	**$292,184**
26.00.00	*Electrical*	**$ 27.94/SF**	**$292,184**								
Division 27	**Communications**									**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**									**$ 0/SF**	**$0**
Division 31	**Earthwork**									**$ 3.58/SF**	**$37,421**
31.00.00	*Earthwork*	**$ 3.58/SF**	**$37,421**								
Division 32	**Exterior Improvements**									**$ 0.94/SF**	**$9,783**
32.10.00	*Bases, Ballasts, and Paving*	**$ 0.94/SF**	**$9,783**								
Division 33	**Utilities**									**$ 0/SF**	**$0**
Division 34	**Transportation**									**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**									**$ 0/SF**	**$0**
Division 40	**Process Integration**									**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**									**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**									**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**									**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**									**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**									**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**									**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$810,983**
Division 02 Existing Conditions											***$74,070***
02.40.00 Demolition and Structure Moving											
Site Demolition											
Demolish non-historic wood framed building											
Demolish building	6,756	CF		0.003	1.00	43.91	0.13	0.14	20.27	0.27	$1,821
Demolish foundation	563	SF		0.025	1.00	43.91	1.10	0.64	14.08	1.73	$976
Haul and dispose, ALLOWANCE	56	TONS		0.111	1.00	60.79	6.75	5.56	6.26	12.31	$693
Tipping Fees	56	TONS				60.79	0.00		-	50.00	$2,815
Patch and repair paving, AC paving	563	SF	1.77	0.05	1.00	53.06	2.66		28.23	4.43	$2,497
Structural Demolition											
Remove roof sheathing (100% of roof)	12,171	SF		0.011	1.00	53.06	0.58		133.88	0.58	$7,104
Demolish infill at exterior walls, 12'h	1,558	SF		0.025	2.00	53.06	2.65	1.13	77.90	3.78	$5,894
Destructive and non-destructive concrete testing, ALLOWANCE	1	LS								5,000.00	$5,000
Remove concrete slab on grade, 5"	4,879	SF		0.022	1.00	53.06	1.18	0.53	108.41	1.71	$8,338
Architectural Demolition											
Window, remove existing vinyl window, 4'0"x3'0"	6	EA		1.500	1.00	43.91	65.87		9.00	65.87	$395
Window, remove steel window, 7'0"x1'5"	3	EA		1.500	1.00	43.91	65.87		4.50	65.87	$198
Window, remove steel window, 6'8"x4'0"	10	EA		1.500	1.00	43.91	65.87		15.00	65.87	$659
Window, remove steel window, 5'0"x4'0"	20	EA		1.500	1.00	43.91	65.87		30.00	65.87	$1,317
Window, remove steel window, 5'0"x1'5"	6	EA		1.500	1.00	43.91	65.87		9.00	65.87	$395
Window, remove steel window, 4'0"x5'0"	26	EA		1.500	1.00	43.91	65.87		39.00	65.87	$1,712
Window, remove steel window, 4'0"x1'5"	24	EA		1.500	1.00	43.91	65.87		36.00	65.87	$1,581
Window, remove steel window, 3'4"x1'5"	1	EA		1.500	1.00	43.91	65.87		1.50	65.87	$66
Window, remove screen, 6'8"x4'0"	10	EA		0.569	1.00	43.91	24.98		5.69	24.98	$250
Window, remove screen, 5'0"x4'0"	20	EA		0.569	1.00	43.91	24.98		11.38	24.98	$500
Remove partial wall, 8'h	520	SF		0.034	1.00	43.91	1.50		17.76	1.50	$780
Roofing, remove built-up roofing	9,858	SF		0.017	1.00	43.91	0.75		167.59	0.75	$7,359
Interior door, remove doors, single, complete	15	EA		1.500	1.00	43.91	65.87		22.50	65.87	$988
Interior door, remove doors, double, complete	1	EA		1.500	1.00	43.91	65.87		1.50	65.87	$66
Interior door, widen opening, single	1	EA	350.00	12.000	1.00	43.91	526.92		12.00	876.92	$877
Floor finishes, remove existing floor finish	9,520	SF		0.025	1.00	43.91	1.10		238.49	1.10	$10,472
Floor finishes, remove existing base	1,164	LF		0.025	1.00	43.91	1.10		29.10	1.10	$1,278
Exterior door, widen opening, single	1	EA	550.00	16.000	1.00	43.91	702.56		16.00	1,252.56	$1,253
Exterior door and framing, remove existing door and frame, single	1	EA		1.500	1.00	43.91	65.87		1.50	65.87	$66
Exterior door, remove existing hardware	10	EA		0.569	1.00	43.91	24.98		5.69	24.98	$250
Ceiling finishes, remove existing acoustical ceiling, complete	3,891	SF		0.025	1.00	43.91	1.10		97.28	1.10	$4,271
Remove accessible grab bars, set	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove accessible stall partition	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove mirror, 24"x36"	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove paper towel	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove seat cover dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove soap dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Remove standard stall partition	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Remove toilet paper dispenser	2	EA		0.569	1.00	43.91	24.98		1.14	24.98	$50
Haul and dispose, ALLOWANCE	61	TONS		0.111	1.00	60.79	6.75	5.56	6.78	12.31	$751
Tipping Fees	61	TONS				60.79	0.00		-	50.00	$3,050
Subtotal Demolition and Structure Moving			1,899				55,019	6,287	1,175		$74,070
Division 03 Concrete											***$287,214***
03.00.00 Concrete											
Shotcrete to exterior wall, 6" thick	9,997	SF	6.00	0.111	1.00	53.06	5.90	0.31	1,110.78	12.21	$122,049
Subtotal Concrete			59,982				58,938	3,129	1,111		$122,049
03.10.00 Concrete Forming and Accessories											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	1,794	SF	1.83	0.091	1.00	53.06	4.83		163.25	6.66	$11,952
Drilled-in epoxy dowels at 48" o.c.											
Footings	150	EA	15.65	0.442	1.00	53.06	23.48		66.15	39.13	$5,850
Concrete slab on grade, 5"	199	EA	15.65	0.442	1.00	53.06	23.48		87.83	39.13	$7,767
Shotcrete walls, ALLOWANCE	2,499	EA	15.65	0.442	1.00	53.06	23.48		1,105.88	39.13	$97,797
Subtotal Concrete Forming and Accessories			3,290				75,511	-	-		$123,366
03.20.00 Concrete Reinforcing											
Wall footing, 2'0" wide x 1'6" high, 80#/CY, ALLOWANCE	4	TONS	1,500.00	8.889	1.00	60.43	537.16		31.24	2,037.16	$7,160
Concrete slab on grade, 5"	1	TONS	1,500.00	8.889	1.00	60.43	537.16		13.28	2,037.16	$3,042
Subtotal Concrete Reinforcing			7,513				2,690	-	45		$10,203
03.30.00 Cast-in-Place Concrete											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	76	CY	104.35	1.500	1.00	53.06	79.59	9.91	114.62	193.85	$14,812
Concrete slab on grade, 5"	87	CY	104.35	1.500	1.00	53.06	79.59	9.91	129.87	193.85	$16,783
Subtotal Cast-in-Place Concrete			17,008				12,972	1,615	244		$31,595
Division 04 Masonry											***$39,128***
04.20.00 Unit Masonry											
8" reinforced CMU, fully grouted, exterior wall	1,488	SF	12.17	0.199	1.20	48.86	11.69	2.43	355.92	26.30	$39,128
Subtotal Unit Masonry			18,115				17,390	3,623	356		$39,128
Division 05 Metals											***$5,647***
05.50.00 Metal Fabrications											
Guardrails	54	LF	85.00	0.369	1.00	53.06	19.57		19.91	104.57	$5,647

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Metal Fabrications			4,590				1,057	-	20		$5,647
Division 06 Wood, Plastics and Composites											***$28,796***
06.10.00 Rough Carpentry											
Roof sheathing (100% of roof)	12,171	SF	1.25	0.015	1.00	53.06	0.80		182.57	2.05	$24,901
Roof reinforcement, (2) 2x8 rafters (20% of rafters)	533	BF	1.71	0.025	2.00	53.06	2.70		27.09	4.40	$2,348
Install wall anchors at 4' on center with 4x blocking and light gage metal straps.	111	EA	3.48	0.098	2.00	53.06	10.43		21.88	13.91	$1,548
Subtotal Rough Carpentry			16,511				12,285	-	232		$28,796
Division 07 Thermal and Moisture Protection											***$64,644***
07.50.00 Membrane Roofing											
Built-up roofing	9,858	SF	2.45	0.066	1.00	42.66	2.82		650.63	5.27	$51,908
Subtotal Membrane Roofing			24,152				27,756	-	651		$51,908
07.60.00 Flashing and Sheet Metal											
Install miscellaneous flashing	996	LF	6.09	0.157	1.00	42.66	6.70		156.37	12.79	$12,736
Subtotal Flashing and Sheet Metal			6,066				6,671	-	156		$12,736
Division 08 Openings											***$200,355***
08.10.00 Doors and Frames											
Interior door, non-historic											
Install new ADA compliant door and hardware, single, complete	1	EA	665.20	8.000	1.00	53.06	424.48		8.00	1,089.68	$1,090
Recondition door and hardware, single	14	EA	831.50	13.786	1.00	53.06	731.49		193.00	1,562.99	$21,882
Exterior door											
Install new door and frame, single	2	EA	975.00	12.250	1.00	53.06	650.00		24.50	1,625.00	$3,250
Recondition existing door, single	4	EA	1,219.00	15.313	1.00	53.06	812.51		61.25	2,031.51	$8,126
Recondition existing door, single	5	EA	1,500.00	18.847	1.00	53.06	1,000.02		94.24	2,500.02	$12,500
Subtotal Doors and Frames			26,632				20,215	-	381		$46,848
08.30.00 Specialty Doors and Frames											
Install ADA compliant hardware (exit device and closer)	11	EA	978.54	4.000	1.00	43.91	175.64		44.00	1,154.18	$12,696
Install new ADA compliant door and hardware, double, complete	1	EA	2,757.08	10.000	1.00	53.06	530.60		10.00	3,287.68	$3,288
Subtotal Specialty Doors and Frames			13,521				2,463	-	54		$15,984
08.50.00 Windows											
Install Historic Replica Windows											
Window, steel window with dual glaze, 7'0"x1'5"	3	EA	840.00	3.000	1.00	52.46	157.38		9.00	997.38	$2,992

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Window, steel window with dual glaze, 6'8"x4'0"	10	EA	2,240.00	3.000	1.00	52.46	157.38		30.00	2,397.38	$23,974
Window, steel window with dual glaze, 5'0"x4'0"	20	EA	1,600.00	3.000	1.00	52.46	157.38		60.00	1,757.38	$35,148
Window, steel window with dual glaze, 5'0"x1'5"	6	EA	600.00	3.000	1.00	52.46	157.38		18.00	757.38	$4,544
Window, steel window with dual glaze, 4'0"x5'0"	26	EA	1,600.00	3.000	1.00	52.46	157.38		78.00	1,757.38	$45,692
Window, steel window with dual glaze, 4'0"x3'0"	6	EA	960.00	3.000	1.00	52.46	157.38		18.00	1,117.38	$6,704
Window, steel window with dual glaze, 4'0"x1'5"	24	EA	480.00	3.000	1.00	52.46	157.38		72.00	637.38	$15,297
Window, steel window with dual glaze, 3'4"x1'5"	1	EA	420.00	3.000	1.00	52.46	157.38		3.00	577.38	$577
Window, install screen, 6'8"x4'0"	10	EA	70.00	0.569	1.00	52.46	29.85		5.69	99.85	$998
Window, install screen, 5'0"x4'0"	20	EA	50.00	0.569	1.00	52.46	29.85		11.38	79.85	$1,597
Subtotal Windows			121,520				16,004	-	305		$137,524
Division 09 Finishes											***$104,482***
09.50.00 Ceilings											
Install acoustical ceiling, including framing	3,891	SF	1.93	0.023	1.00	48.67	1.12		89.49	3.05	$11,865
Patch to existing wood soffit	70	SF	2.50	0.120	1.00	48.67	5.84		8.40	8.34	$584
Subtotal Ceilings			7,685				4,764	-	98		$12,449
09.60.00 Flooring											
Install rubber base	982	LF	0.65	0.030	1.00	49.40	1.48		29.46	2.13	$2,094
Install commercial grade carpet	9,107	SF	2.53	0.012	1.00	39.23	0.47		109.28	3.00	$27,328
Install ceramic tile flooring	413	SF	2.48	0.164	1.00	49.40	8.10		67.73	10.58	$4,370
Install ceramic tile coved base	182	LF	4.58	0.151	1.00	49.40	7.46		27.48	12.04	$2,191
Subtotal Flooring			25,537				10,446	-	234		$35,983
09.70.00 Wall Finishes											
Patch to existing dry wall	2,092	SF	0.67	0.021	1.00	53.06	1.11		43.93	1.78	$3,733
Wall finishes, Ceramic tile wainscot	1,615	SF	5.05	0.129	1.00	49.40	6.37		208.34	11.42	$18,447
Subtotal Wall Finishes			9,557				12,623	-	252		$22,180
09.90.00 Painting and Coating											
Wall finishes, paint to drywall	14,867	SF	0.30	0.010	1.00	46.99	0.47		148.67	0.77	$11,446
Roofing, repaint fascia board, 2x12	699	LF	0.60	0.250	1.00	46.99	11.75		174.75	12.35	$8,631
Ceiling finishes, paint to expose wood soffit	701	SF	0.30	0.010	1.00	46.99	0.47		7.01	0.77	$540
Ceiling finishes, paint to drywall ceiling	6,626	SF	0.30	0.010	1.00	46.99	0.47		66.26	0.77	$5,101
Paint to columns, 1'x1'x11'	6	EA	12.00	0.500	1.00	46.99	23.50		3.00	35.50	$213
Paint to columns, 1'x1'x20'	6	EA	24.00	1.000	1.00	46.99	46.99	12.00	6.00	82.99	$498
Window, repair and paint windows, 5'0"x4'0"	436	SF	0.30	0.010	1.00	46.99	0.47		4.36	0.77	$336
Exterior wall, paint to existing cement plaster	9,229	SF	0.30	0.010	1.00	46.99	0.47		92.29	0.77	$7,105
Subtotal Painting and Coating			10,193				23,605	72	502		$33,870

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 10 Specialties											***$6,647***
10.00.00 Specialties											
Accessible grab bars, set	2	EA	93.91	1.426	1.00	43.91	62.62		2.85	156.53	$313
Accessible stall partition	2	EA	626.09	9.506	1.00	43.91	417.41		19.01	1,043.50	$2,087
Mirror, 24"x36"	2	EA	96.50	1.524	1.00	43.91	66.92		3.05	163.42	$327
Paper towel and waste combo dispenser	2	EA	383.10	2.000	1.00	43.91	87.82		4.00	470.92	$942
Seat cover dispenser	2	EA	143.48	2.178	1.00	43.91	95.64		4.36	239.12	$478
Signage, ALLOWANCE	1	LS	26.09	0.396	1.00	43.91	17.39		0.40	500.00	$500
Soap dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130
Standard stall partition	2	EA	521.74	7.921	1.00	43.91	347.81		15.84	869.55	$1,739
Toilet paper dispenser	2	EA	39.13	0.594	1.00	43.91	26.08		1.19	65.21	$130
Subtotal Specialties			3,912				2,278	-	52		$6,647
Facility Services											**$788,603**
Division 21 Fire Suppression											***$59,919***
21.00.00 Fire Suppression											
Renovation work											
Remove existing sprinkler system	12,500	SF		0.018	1.00	57.57	1.04		225.00	1.04	$12,953
New wet sprinkler heads and associated piping	109	EA	200.00	3.500	1.00	57.57	201.50		381.50	401.50	$43,763
New fire sprinkler standpipe	1	EA	1,620.00	27.500	1.00	57.57	1,583.18		27.50	3,203.18	$3,203
Subtotal Fire Suppression			23,420				36,499	-	634		$59,919
Division 22 Plumbing											***$121,291***
22.00.00 Plumbing											
Demolition											
Remove water closet and wall piping	5	EA		1.000	1.00	57.57	57.57		5.00	57.57	$288
Remove lavatory and wall piping	4	EA		1.000	1.00	57.57	57.57		4.00	57.57	$230
Remove mop sink and wall piping	1	EA		1.200	1.00	57.57	69.08		1.20	69.08	$69
Remove kitchen hookups and wall piping	1	LS		154.000	1.00	57.57	8,865.78		154.00	8,865.78	$8,866
Remove urinal and wall piping	1	EA		2.000	1.00	57.57	115.14		2.00	115.14	$115
New plumbing fixtures & associated piping											
Water closet	8	EA	2,325.00	61.000	1.00	57.57	3,511.77		488.00	5,836.77	$46,694
Lavatory	6	EA	2,150.00	57.600	1.00	57.57	3,316.03		345.60	5,466.03	$32,796
Urinal	2	EA	2,340.00	58.400	1.00	57.57	3,362.09		116.80	5,702.09	$11,404
Mop sink	1	EA	2,350.00	58.400	1.00	57.57	3,362.09		58.40	5,712.09	$5,712
Electric water cooler	1	EA	2,780.00	60.800	1.00	57.57	3,500.26		60.80	6,280.26	$6,280
Floor drain	2	EA	375.00	12.800	1.00	57.57	736.90		25.60	1,111.90	$2,224
Water heater	2	EA	2,500.00	14.000	1.00	57.57	805.98		28.00	3,305.98	$6,612
Subtotal Plumbing			47,060				74,231	-	1,289		$121,291

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 23 Heating, Ventilating, and Air Conditioning											***$315,209***
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Remove existing heating and cooling systems	10,458	SF		0.038	1.00	54.65	2.08		397.40	2.08	$21,718
New HVAC split system w/ controls	10,458	SF	18.50	0.175	1.00	54.65	9.56		1,830.15	28.06	$293,491
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			193,473				121,736	-	2,228		$315,209
Division 26 Electrical											***$292,184***
26.00.00 Electrical											
Remove existing electrical systems	10,458	SF		0.040	1.00	53.83	2.15		418.32	2.15	$22,518
New electrical power and distribution	10,458	SF	5.00	0.150	1.00	53.83	8.07		1,568.70	13.07	$136,733
New light fixtures and controls	10,458	SF	3.72	0.065	1.00	53.83	3.50		679.77	7.22	$75,496
New addressable fire alarm system	10,458	SF	1.10	0.025	1.00	53.83	1.35		261.45	2.45	$25,578
New security/access control system	10,458	SF	0.70	0.018	1.00	53.83	0.97		188.24	1.67	$17,454
New telecommunications system	10,458	SF	0.57	0.015	1.00	53.83	0.81		156.87	1.38	$14,405
Subtotal Electrical			115,979				176,205	-	3,273		$292,184
Site and Infrastructure											**$47,204**
Division 31 Earthwork											***$37,421***
31.00.00 Earthwork											
Recompaction											
Ramps	250	SF		0.01	1.00	60.79	0.30	0.13	1.25	0.43	$109
Footings	1,196	SF		0.01	2.00	60.79	0.61	0.13	11.98	0.74	$884
Excavation											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	229	CY		1.000	1.50	43.91	65.87	3.13	343.85	69.00	$15,816
Hauling											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	76	CY		0.194	1.00	60.79	11.81	12.52	14.84	24.33	$1,859
Fill											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	153	CY		0.706	2.00	60.79	85.83	3.130	215.78	88.96	$13,596
Tipping											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	103	TONS			1.00	60.79	0.00		-	50.00	$5,158
Subtotal Earthwork			-				29,922	2,341	588		$37,421
Division 32 Exterior Improvements											***$9,783***
32.10.00 Bases, Ballasts, and Paving											
Concrete ramps, complete	250	SF	15.65	0.41	1.00	53.06	21.52	1.96	101.40	39.13	$9,783
Subtotal Bases, Ballasts, and Paving			3,913				5,380	489	101		$9,783

Hard Costs: Section Summary						$/EA		Total
General Requirements							$	-
Division 01	General Requirements					$ 0/SF	$	-
Facility Construction							$	988,391
Division 02	Existing Conditions					$ 12.43/SF	$	173,646
Division 03	Concrete					$ 10.23/SF	$	142,901
Division 04	Masonry					$ 0/SF	$	-
Division 05	Metals					$ 5.04/SF	$	70,372
Division 06	Wood, Plastics and Composites					$ 0.83/SF	$	11,573
Division 07	Thermal and Moisture Protection					$ 6.82/SF	$	95,188
Division 08	Openings					$ 20.96/SF	$	292,754
Division 09	Finishes					$ 12.32/SF	$	172,116
Division 10	Specialties					$ 2.14/SF	$	29,840
Division 11	Equipment					$ 0/SF	$	-
Division 12	Furnishings					$ 0/SF	$	-
Division 13	Special Construction					$ 0/SF	$	-
Division 14	Conveying Equipment					$ 0/SF	$	-
Facility Services							$	1,131,190
Division 21	Fire Suppression					$ 5.12/SF	$	71,476
Division 22	Plumbing					$ 17.8/SF	$	248,580
Division 23	Heating, Ventilating, and Air Conditioning					$ 30.14/SF	$	420,942
Division 25	Integrated Automation					$ 0/SF	$	-
Division 26	Electrical					$ 27.94/SF	$	390,193
Division 27	Communications					$ 0/SF	$	-
Division 28	Electronic Safety and Security					$ 0/SF	$	-
Site and Infrastructure							$	109,392
Division 31	Earthwork					$ 3.57/SF	$	49,913
Division 32	Exterior Improvements					$ 4.26/SF	$	59,478
Division 33	Utilities					$ 0/SF	$	-
Division 34	Transportation					$ 0/SF	$	-
Division 35	Waterway and Marine Construction					$ 0/SF	$	-
Process Equipment							$	-
Division 40	Process Integration					$ 0/SF	$	-
Division 41	Material Processing and Handling Equipment					$ 0/SF	$	-
Division 42	Process Heating, Cooling, and Drying Equipment					$ 0/SF	$	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment					$ 0/SF	$	-
Division 44	Pollution Control Equipment					$ 0/SF	$	-
Division 45	Industry-Specific Manufacturing Equipment					$ 0/SF	$	-
Division 48	Electrical Power Generation					$ 0/SF	$	-
Sales Tax		7.75	%	$	1,061,839		$	82,293
Subcontractor Mark-up		15	%	$	2,179,313		$	326,897
Subtotal Net Direct Building Cost						**$ 188.9/SF**	**$**	**2,638,163**
Prime Contractor General Conditions, Home Office Overhead		11	%				$	290,198
Prime Contractor Profit		8	%				$	234,269
Bond		1.5	%				$	47,439
Escalation to Midpoint of Construction, 06/2010		16	%				$	513,611
Design Contingency		15	%				$	558,552
Phasing Factor, Excluded		0	%				$	-

Total Projected Construction Cost	*Project Square Footage*	*13,966 SF*	*Cost Per Square Foot*	*$ 307 /SF*	**$**	**4,282,232**
		21,692 HRS				

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**										**$ 0/SF**	**$0**
Division 02	**Existing Conditions**										**$ 12.43/SF**	**$173,646**
02.40.00	*Demolition and Structure Moving*	**$ 12.43/SF**	**$173,646**									
Division 03	**Concrete**										**$ 10.23/SF**	**$142,901**
03.10.00	*Concrete Forming and Accessories*	**$ 1.69/SF**	**$23,637**									
03.20.00	*Concrete Reinforcing*	**$ 0.68/SF**	**$9,507**									
03.30.00	*Cast-in-Place Concrete*	**$ 1.41/SF**	**$19,667**									
03.80.00	*Concrete Cutting and Boring*	**$ 6.45/SF**	**$90,090**									
Division 04	**Masonry**										**$ 0/SF**	**$0**
Division 05	**Metals**										**$ 5.04/SF**	**$70,372**
05.50.00	*Metal Fabrications*	**$ 5.04/SF**	**$70,372**									
Division 06	**Wood, Plastics and Composites**										**$ 0.83/SF**	**$11,573**
06.10.00	*Rough Carpentry*	**$ 0.83/SF**	**$11,573**									
Division 07	**Thermal and Moisture Protection**										**$ 6.82/SF**	**$95,188**
07.50.00	*Membrane Roofing*	**$ 4.84/SF**	**$67,541**									
07.60.00	*Flashing and Sheet Metal*	**$ 1.98/SF**	**$27,647**									
Division 08	**Openings**										**$ 20.96/SF**	**$292,754**
08.10.00	*Doors and Frames*	**$ 10.64/SF**	**$148,562**									
08.50.00	*Windows*	**$ 10.32/SF**	**$144,192**									
Division 09	**Finishes**										**$ 12.32/SF**	**$172,116**
09.50.00	*Ceilings*	**$ 1.75/SF**	**$24,494**									
09.60.00	*Flooring*	**$ 4.18/SF**	**$58,402**									
09.70.00	*Wall Finishes*	**$ 2.91/SF**	**$40,642**									
09.90.00	*Painting and Coating*	**$ 3.48/SF**	**$48,578**									
Division 10	**Specialties**										**$ 2.14/SF**	**$29,840**
10.00.00	*Specialties*	**$ 2.14/SF**	**$29,840**									
Division 11	**Equipment**										**$ 0/SF**	**$0**
Division 12	**Furnishings**										**$ 0/SF**	**$0**
Division 13	**Special Construction**										**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**										**$ 0/SF**	**$0**
Division 21	**Fire Suppression**										**$ 5.12/SF**	**$71,476**
21.00.00	*Fire Suppression*	**$ 5.12/SF**	**$71,476**									
Division 22	**Plumbing**										**$ 17.8/SF**	**$248,580**
22.00.00	*Plumbing*	**$ 17.8/SF**	**$248,580**									
Division 23	**Heating, Ventilating, and Air Conditioning**										**$ 30.14/SF**	**$420,942**
23.00.00	*Heating, Ventilating, and Air-Conditioning (HVAC)*	**$ 30.14/SF**	**$420,942**									
Division 25	**Integrated Automation**										**$ 0/SF**	**$0**
Division 26	**Electrical**										**$ 27.94/SF**	**$390,193**
26.00.00	*Electrical*	**$ 27.94/SF**	**$390,193**									
Division 27	**Communications**										**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**										**$ 0/SF**	**$0**
Division 31	**Earthwork**										**$ 3.57/SF**	**$49,913**
31.00.00	*Earthwork*	**$ 3.57/SF**	**$49,913**									
Division 32	**Exterior Improvements**										**$ 4.26/SF**	**$59,478**
32.10.00	*Bases, Ballasts, and Paving*	**$ 4.26/SF**	**$59,478**									
Division 33	**Utilities**										**$ 0/SF**	**$0**
Division 34	**Transportation**										**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**										**$ 0/SF**	**$0**
Division 40	**Process Integration**										**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**										**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**										**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**										**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**										**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**										**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**										**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$988,391**
Division 02 Existing Conditions											***$173,646***
02.40.00 Demolition and Structure Moving											
Site Demolition											
Demolish non-historic wood framed building											
Demolish building	6,756	CF		0.003	1.00	43.91	0.13	0.14	20.27	0.27	$1,821
Demolish foundation	563	SF		0.025	1.00	43.91	1.10	0.64	14.08	1.73	$976
Haul and dispose, ALLOWANCE	56	TONS		0.111	1.00	60.79	6.75	5.56	6.26	12.31	$693
Tipping Fees	56	TONS				60.79	0.00		-	50.00	$2,815
Patch and repair paving, AC paving	563	SF	1.77	0.05	1.00	53.06	2.66		28.23	4.43	$2,497
Demo concrete ramps and steps											
Demo ramps and steps	1,428	SF		0.200	1.00	43.91	8.76	0.95	284.89	9.71	$13,872
Demo railings	316	LF		0.054	1.00	43.91	2.37	0.55	17.06	2.92	$923
Haul and dispose, ALLOWANCE	54	TONS		0.111	1.00	60.79	6.75	5.56	5.95	12.31	$659
Tipping Fees	54	TONS				60.79	0.00		-	50.00	$2,678
Patch and repair paving	1,428	SF	1.77	0.06	1.00	42.98	2.66		88.41	4.43	$6,333
Structural Demolition											
Remove roof sheathing (100% of roof)	12,171	SF		0.011	1.00	53.06	0.58		133.88	0.58	$7,104
Demolish infill at exterior walls, 12'h	1,558	SF		0.025	2.00	53.06	2.65	1.13	77.90	3.78	$5,894
Destructive and non-destructive concrete testing, ALLOWANCE	1	LS								5,000.00	$5,000
Architectural Demolition											
Window, remove steel window, 9'7"x4'0"	1	EA		1.500	1.00	43.91	65.87		1.50	65.87	$66
Window, remove steel window, 3'4"x4'0"	82	EA		1.500	1.00	43.91	65.87		123.00	65.87	$5,401
Window, remove steel window, 2'0"x4'0"	4	EA		1.500	1.00	43.91	65.87		6.00	65.87	$263
Remove wooden handrails	1,362	LF		0.025	1.00	43.91	1.10		34.12	1.10	$1,498
Roofing, remove built-up roof cover	12,827	SF		0.017	1.00	43.91	0.75		218.06	0.75	$9,575
Interior door, remove doors, complete	7	EA		1.500	1.00	43.91	65.87		10.50	65.87	$461
Interior door, widen opening	7	EA	350.00	12.000	1.00	43.91	526.92		84.00	876.92	$6,138
Remove and abate asbestos floor finishes	12,089	SF		0.046	1.00	43.91	2.02		556.09	2.02	$24,418
Floor finishes, remove existing base	4,428	LF		0.025	1.00	43.91	1.10		110.70	1.10	$4,861
Ceiling finishes, remove existing drywall plaster ceiling	7,171	SF		0.025	1.00	43.91	1.10		179.27	1.10	$7,872
Remove and abate asbestos ceiling finishes	4,780	SF		0.046	1.00	43.91	2.02		219.90	2.02	$9,656
Window, sawcut opening, 8" deep	3,473	LF		0.025	1.00	43.91	1.10		86.83	1.10	$3,812
Window, patch opening, 8" deep	3,473	LF	2.00	0.050	1.00	43.91	2.20		173.65	4.20	$14,571
Accessible grab bars, set	7	EA		0.569	1.00	43.91	24.98		3.98	24.98	$175
Accessible stall partition	7	EA		0.569	1.00	43.91	24.98		3.98	24.98	$175
Mirror, 24"x36"	7	EA		0.569	1.00	43.91	24.98		3.98	24.98	$175
Paper towel	7	EA		0.569	1.00	43.91	24.98		3.98	24.98	$175
Seat cover dispenser	18	EA		0.569	1.00	43.91	24.98		10.24	24.98	$450
Soap dispenser	7	EA		0.569	1.00	43.91	24.98		3.98	24.98	$175
Standard stall partition	11	EA		0.569	1.00	43.91	24.98		6.26	24.98	$275
Toilet paper dispenser	18	EA		0.569	1.00	43.91	24.98		10.24	24.98	$450
Haul and dispose, ALLOWANCE	174	TONS		0.111	1.00	60.79	6.75	5.56	19.33	12.31	$2,142

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Tipping Fees	174	TONS				60.79	0.00		-	50.00	$8,700
Selective Removal for Reconditioning											
Window, recondition dual glaze steel window, 9'7"x4'0"	1	EA		2.000	1.00	53.06	106.12		2.00	106.12	$106
Window, recondition dual glaze steel window, 3'4"x4'0"	82	EA		2.000	1.00	53.06	106.12		164.00	106.12	$8,702
Window, recondition dual glaze steel window, 2'0"x4'0"	4	EA		2.000	1.00	53.06	106.12		8.00	106.12	$424
Interior door, recondition doors, single	68	EA		2.000	1.00	53.06	106.12		136.00	106.12	$7,216
Interior door, recondition doors, double	4	EA		3.000	1.00	53.06	159.18		12.00	159.18	$637
Exterior door, recondition door, single	10	EA		2.000	1.00	53.06	106.12		20.00	106.12	$1,061
Exterior door, recondition doors, double	2	EA		3.000	1.00	53.06	159.18		6.00	159.18	$318
Exterior door, recondition door frame	390	LF		0.118	1.00	53.06	6.24		45.88	6.24	$2,435
Subtotal Demolition and Structure Moving			12,928				135,363	6,163	2,940		$173,646
Division 03 Concrete											***$142,901***
03.10.00 Concrete Forming and Accessories											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	2,382	SF	1.83	0.091	1.00	53.06	4.83		216.76	6.66	$15,870
Drilled-in epoxy dowels at 48" o.c.											
Footings	199	EA	15.65	0.44	1.00	53.06	23.48		87.83	39.13	$7,767
Subtotal Concrete Forming and Accessories			4,368				16,162	-	-		$23,637
03.20.00 Concrete Reinforcing											
Wall footing, 2'0" wide x 1'6" high, 80#/CY, ALLOWANCE	5	TONS	1,500.00	8.889	1.00	60.43	537.16		41.48	2,037.16	$9,507
Subtotal Concrete Reinforcing			7,000				2,507	-	41		$9,507
03.30.00 Cast-in-Place Concrete											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	101	CY	104.35	1.500	1.00	53.06	79.59	9.91	152.18	193.85	$19,667
Subtotal Cast-in-Place Concrete			10,587				8,075	1,006	152		$19,667
03.80.00 Concrete Cutting and Boring											
Strengthen (e) concrete openings	171	EA	120.00	6.000	1.00	53.06	318.36		1,026.00	438.36	$74,960
Wall openings, overcut recast with new edge reinf doweled into the existing wall.	5	EA	139.13	3.278	1.00	53.06	173.91	34.78	16.39	347.83	$1,739
Concrete coring for openings	154	EA	34.78	0.819	1.00	53.06	43.48	8.70	126.19	86.96	$13,391
Subtotal Concrete Cutting and Boring			26,572				62,005	1,513	1,169		$90,090
Division 05 Metals											***$70,372***
05.50.00 Metal Fabrications											
Guardrails	673	LF	85.00	0.369	1.00	53.06	19.57		248.16	104.57	$70,372
Subtotal Metal Fabrications			57,205				13,167	-	248		$70,372

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 06 Wood, Plastics and Composites											***$11,573***
06.10.00 Rough Carpentry											
Roof reinforcement, (2) 2x8 rafters (20% of rafters)	596	BF	1.71	0.025	2.00	53.06	2.70		30.26	4.40	$2,622
Install wall anchors at 4' on center with 4x blocking and light gage metal straps.	199	EA	3.48	0.098	2.00	53.06	10.43		39.18	13.91	$2,772
Ceiling framing	1,195	SF	2.07	0.058	1.00	53.06	3.10		69.82	5.17	$6,178
Subtotal Rough Carpentry			4,183				7,389	-	139		$11,573
Division 07 Thermal and Moisture Protection											***$95,188***
07.50.00 Membrane Roofing											
Built-up roofing	12,827	SF	2.45	0.066	1.00	42.66	2.82		846.58	5.27	$67,541
Subtotal Membrane Roofing			31,426				36,115	-	847		$67,541
07.60.00 Flashing and Sheet Metal											
Install miscellaneous flashing	2,162	LF	6.09	0.157	1.00	42.66	6.70		339.43	12.79	$27,647
Subtotal Flashing and Sheet Metal			13,167				14,480	-	339		$27,647
Division 08 Openings											***$292,754***
08.10.00 Doors and Frames											
Interior door, non-historic											
Install new ADA compliant door and hardware, single	7	EA	665.20	8.000	1.00	53.06	424.48		56.00	1,089.68	$7,628
Recondition door, single	64	EA	831.50	13.786	1.00	53.06	731.50		882.32	1,563.00	$100,032
Recondition door, double	4	EA	1,350.00	16.962	1.00	53.06	900.00		67.85	2,250.00	$9,000
Exterior door											
Install new ADA compliant door and hardware, single	5	EA	1,500.00	16.000	1.00	53.06	848.96		80.00	2,348.96	$11,745
Recondition door, single	5	EA	1,219.00	15.313	1.00	53.06	812.50		76.56	2,031.50	$10,158
Recondition door, double	4	EA	1,500.00	18.847	1.00	53.06	1,000.00		75.39	2,500.00	$10,000
Subtotal Doors and Frames			82,867				65,695	-	1,238		$148,562
08.50.00 Windows											
Window, install recondition steel windows, 9'7"x4'0"	1	EA	1,500.00	3.000	1.00	52.46	157.38		3.00	1,657.38	$1,657
Window, install recondition steel windows, 3'4"x4'0"	82	EA	1,500.00	3.000	1.00	52.46	157.38		246.00	1,657.38	$135,905
Window, install recondition steel window, 2'0"x4'0"	4	EA	1,500.00	3.000	1.00	52.46	157.38		12.00	1,657.38	$6,630
Subtotal Windows			130,500				13,692	-	261		$144,192
Division 09 Finishes											***$172,116***
09.50.00 Ceilings											
Drywall to ceiling	11,951	SF	0.67	0.026	1.00	53.06	1.38		310.73	2.05	$24,494

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Ceilings			8,007				16,487	-	311		$24,494
09.60.00 Flooring											
Install rubber base	4,000	LF	0.65	0.030	1.00	49.40	1.48		120.00	2.13	$8,528
Install commercial grade carpet	10,975	SF	2.53	0.012	1.00	39.23	0.47		131.70	3.00	$32,933
Install ceramic tile flooring	1,114	SF	2.48	0.164	1.00	49.40	8.10		182.70	10.58	$11,788
Install ceramic tile coved base	428	LF	4.58	0.151	1.00	49.40	7.46		64.63	12.04	$5,153
Subtotal Flooring			35,090				23,312	-	499		$58,402
09.70.00 Wall Finishes											
Wall finishes, Ceramic tile wainscot	3,558	SF	5.05	0.129	1.00	49.40	6.37		458.98	11.42	$40,642
Subtotal Wall Finishes			17,968				22,674	-	459		$40,642
09.90.00 Painting and Coating											
Wall finishes, paint to drywall	34,101	SF	0.30	0.010	1.00	46.99	0.47		341.01	0.77	$26,254
Ceiling finishes, paint to drywall ceiling	11,951	SF	0.30	0.010	1.00	46.99	0.47		119.51	0.77	$9,201
Exterior finishes, paint to existing CIP walls	17,045	SF	0.30	0.010	1.00	46.99	0.47		170.45	0.77	$13,123
Subtotal Painting and Coating			18,929				29,649	-	631		$48,578
Division 10 Specialties											***$29,840***
10.00.00 Specialties											
Accessible grab bars, set	7	EA	93.91	1.426	1.00	43.91	62.62		9.98	156.53	$1,096
Accessible stall partition	7	EA	626.09	9.506	1.00	43.91	417.41		66.54	1,043.50	$7,304
Mirror, 24"x36"	7	EA	96.50	1.524	1.00	43.91	66.92		10.67	163.42	$1,144
Paper towel and waste combo dispenser	7	EA	383.10	2.000	1.00	43.91	87.82		14.00	470.92	$3,296
Seat cover dispenser	18	EA	143.48	2.178	1.00	43.91	95.64		39.20	239.12	$4,304
Signage, ALLOWANCE	1	LS	26.09	0.396	1.00	43.91	17.39		0.40	1,500.00	$1,500
Soap dispenser	7	EA	39.13	0.594	1.00	43.91	26.08		4.16	65.21	$456
Standard stall partition	11	EA	521.74	7.921	1.00	43.91	347.81		87.13	869.55	$9,565
Toilet paper dispenser	18	EA	39.13	0.594	1.00	43.91	26.08		10.69	65.21	$1,174
Subtotal Specialties			17,723				10,660	-	243		$29,840
Facility Services											**$1,131,190**
Division 21 Fire Suppression											***$71,476***
21.00.00 Fire Suppression											
Renovation work:											
Remove existing sprinkler system	13,966	SF		0.018	1.00	57.57	1.04		251.39	1.04	$14,472
New wet sprinkler heads and associated piping	134	EA	200.00	3.500	1.00	57.57	201.50		469.00	401.50	$53,800

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
New fire sprinkler standpipe	1	EA	1,620.00	27.500	1.00	57.57	1,583.18		27.50	3,203.18	$3,203
Subtotal Fire Suppression			28,420				43,056	-	748		$71,476
Division 22 Plumbing											***$248,580***
22.00.00 Plumbing											
Demolition											
Remove water closet and wall piping	18	EA		1.000	1.00	57.57	57.57		18.00	57.57	$1,036
Remove lavatory and wall piping	10	EA		1.000	1.00	57.57	57.57		10.00	57.57	$576
Remove shower and wall piping	4	EA		2.700	1.00	57.57	155.44		10.80	155.44	$622
Remove mop sink and wall piping	2	EA		1.200	1.00	57.57	69.08		2.40	69.08	$138
Remove drinking fountain and wall piping	1	EA		1.000	1.00	57.57	57.57		1.00	57.57	$58
Remove bathtub and wall piping	2	EA		1.600	1.00	57.57	92.11		3.20	92.11	$184
Remove urinal and wall piping	1	EA		2.000	1.00	57.57	115.14		2.00	115.14	$115
Remove countertop lavatory and wall piping	5	EA		0.880	1.00	57.57	50.66		4.40	50.66	$253
New plumbing fixtures & associated piping											
Water closet	16	EA	2,325.00	61.000	1.00	57.57	3,511.77		976.00	5,836.77	$93,388
Lavatory	10	EA	2,150.00	57.600	1.00	57.57	3,316.03		576.00	5,466.03	$54,660
Urinal	1	EA	2,340.00	58.400	1.00	57.57	3,362.09		58.40	5,702.09	$5,702
Mop sink	2	EA	2,350.00	58.400	1.00	57.57	3,362.09		116.80	5,712.09	$11,424
Sink	5	EA	2,150.00	57.600	1.00	57.57	3,316.03		288.00	5,466.03	$27,330
Shower	4	EA	1,625.00	40.800	1.00	57.57	2,348.86		163.20	3,973.86	$15,895
Bathtub	2	EA	4,920.00	59.200	1.00	57.57	3,408.14		118.40	8,328.14	$16,656
Electric water cooler	1	EA	2,780.00	60.800	1.00	57.57	3,500.26		60.80	6,280.26	$6,280
Floor drain	7	EA	375.00	12.800	1.00	57.57	736.90		89.60	1,111.90	$7,783
Water heater	5	EA	950.00	6.000	1.00	57.57	345.42		30.00	1,295.42	$6,477
Subtotal Plumbing			102,985				145,595	-	2,529		$248,580
Division 23 Heating, Ventilating, and Air Conditioning											***$420,942***
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Remove existing heating and cooling systems	13,966	SF		0.038	1.00	54.65	2.08		530.71	2.08	$29,003
New HVAC split system w/ controls	13,966	SF	18.50	0.175	1.00	54.65	9.56		2,444.05	28.06	$391,938
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			258,371				162,571	-	2,975		$420,942
Division 26 Electrical											***$390,193***
26.00.00 Electrical											
Remove existing electrical systems	13,966	SF		0.040	1.00	53.83	2.15		558.64	2.15	$30,072
New electrical power and distribution	13,966	SF	5.00	0.150	1.00	53.83	8.07		2,094.90	13.07	$182,598
New light fixtures and controls	13,966	SF	3.72	0.065	1.00	53.83	3.50		907.79	7.22	$100,820
New addressable fire alarm system	13,966	SF	1.10	0.025	1.00	53.83	1.35		349.15	2.45	$34,157
New security/access control system	13,966	SF	0.70	0.018	1.00	53.83	0.97		251.39	1.67	$23,308
New telecommunications system	13,966	SF	0.57	0.015	1.00	53.83	0.81		209.49	1.38	$19,237

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Electrical			154,883				235,310	-	4,371		$390,193
Site and Infrastructure											**$109,392**
Division 31 Earthwork											***$49,913***
31.00.00 Earthwork											
Recompaction											
Ramps	1,520	SF		0.01	1.00	60.79	0.30	0.13	7.61	0.43	$661
Footings	1,196	SF		0.01	2.00	60.79	0.61	0.13	11.98	0.74	$884
Excavation											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	304	CY		1.000	1.50	43.91	65.87	3.13	456.55	69.00	$21,000
Hauling											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	101	CY		0.194	1.00	60.79	11.81	12.52	19.71	24.33	$2,469
Fill											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	203	CY		0.706	2.00	60.79	85.83	3.130	286.50	88.96	$18,052
Tipping											
Wall footing, 2'0" wide x 1'6" high, 3' TOF, ALLOWANCE	137	TONS			1.00	60.79	0.00		-	50.00	$6,848
Subtotal Earthwork			-				39,852	3,213	782		$49,913
Division 32 Exterior Improvements											***$59,478***
32.10.00 Bases, Ballasts, and Paving											
Concrete ramps, complete	1,520	SF	15.65	0.41	1.00	53.06	21.52	1.96	616.53	39.13	$59,478
Subtotal Bases, Ballasts, and Paving			23,791				32,713	2,974	617		$59,478

Hard Costs: Section Summary		$/EA	Total
General Requirements			$ -
Division 01	General Requirements	$ 0/SF	$ -
Facility Construction			$ 165,483
Division 02	Existing Conditions	$ 9.22/SF	$ 70,841
Division 03	Concrete	$ 11.43/SF	$ 87,826
Division 04	Masonry	$ 0/SF	$ -
Division 05	Metals	$ 0/SF	$ -
Division 06	Wood, Plastics and Composites	$ 0.89/SF	$ 6,816
Division 07	Thermal and Moisture Protection	$ 0/SF	$ -
Division 08	Openings	$ 0/SF	$ -
Division 09	Finishes	$ 0/SF	$ -
Division 10	Specialties	$ 0/SF	$ -
Division 11	Equipment	$ 0/SF	$ -
Division 12	Furnishings	$ 0/SF	$ -
Division 13	Special Construction	$ 0/SF	$ -
Division 14	Conveying Equipment	$ 0/SF	$ -
Facility Services			$ 4,587
Division 21	Fire Suppression	$ 0.29/SF	$ 2,205
Division 22	Plumbing	$ 0.31/SF	$ 2,382
Division 23	Heating, Ventilating, and Air Conditioning	$ 0/SF	$ -
Division 25	Integrated Automation	$ 0/SF	$ -
Division 26	Electrical	$ 0/SF	$ -
Division 27	Communications	$ 0/SF	$ -
Division 28	Electronic Safety and Security	$ 0/SF	$ -
Site and Infrastructure			$ 207,135
Division 31	Earthwork	$ 26.96/SF	$ 207,135
Division 32	Exterior Improvements	$ 0/SF	$ -
Division 33	Utilities	$ 0/SF	$ -
Division 34	Transportation	$ 0/SF	$ -
Division 35	Waterway and Marine Construction	$ 0/SF	$ -
Process Equipment			$ -
Division 40	Process Integration	$ 0/SF	$ -
Division 41	Material Processing and Handling Equipment	$ 0/SF	$ -
Division 42	Process Heating, Cooling, and Drying Equipment	$ 0/SF	$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment	$ 0/SF	$ -
Division 44	Pollution Control Equipment	$ 0/SF	$ -
Division 45	Industry-Specific Manufacturing Equipment	$ 0/SF	$ -
Division 48	Electrical Power Generation	$ 0/SF	$ -

Sales Tax	7.75	%	$ 112,457			$ 8,715
Subcontractor Mark-up	15	%	$ 385,920			$ 57,888
Subtotal Net Direct Building Cost				**$ 57.76/SF**	**$**	**443,808**
Prime Contractor General Conditions, Home Office Overhead	11	%			$	48,819
Prime Contractor Profit	8	%			$	39,410
Bond	1.5	%			$	7,981
Escalation to Midpoint of Construction, 06/2010	16	%			$	86,403
Design Contingency	15	%			$	93,963
Phasing Factor, Excluded	0	%			$	-

Total Projected Construction Cost	*Project Square Footage*	*7,684 SF*	*Cost Per Square Foot*	*$ 94 /SF*	**$**		**720,383**
		1,915 HRS					

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**									**$ 0/SF**	**$0**
Division 02	**Existing Conditions**									**$ 9.22/SF**	**$70,841**
02.40.00	*Demolition and Structure Moving*	**$ 9.22/SF**	**$70,841**								
Division 03	**Concrete**									**$ 11.43/SF**	**$87,826**
03.10.00	*Concrete Forming and Accessories*	**$ 5.99/SF**	**$46,035**								
03.20.00	*Concrete Reinforcing*	**$ 1.88/SF**	**$14,460**								
03.30.00	*Cast-in-Place Concrete*	**$ 3.56/SF**	**$27,331**								
Division 04	**Masonry**									**$ 0/SF**	**$0**
Division 05	**Metals**									**$ 0/SF**	**$0**
Division 06	**Wood, Plastics and Composites**									**$ 0.89/SF**	**$6,816**
06.10.00	*Rough Carpentry*	**$ 0.89/SF**	**$6,816**								
Division 07	**Thermal and Moisture Protection**									**$ 0/SF**	**$0**
Division 08	**Openings**									**$ 0/SF**	**$0**
Division 09	**Finishes**									**$ 0/SF**	**$0**
Division 10	**Specialties**									**$ 0/SF**	**$0**
Division 11	**Equipment**									**$ 0/SF**	**$0**
Division 12	**Furnishings**									**$ 0/SF**	**$0**
Division 13	**Special Construction**									**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**									**$ 0/SF**	**$0**
Division 21	**Fire Suppression**									**$ 0.29/SF**	**$2,205**
21.00.00	*Fire Suppression*	**$ 0.29/SF**	**$2,205**								
Division 22	**Plumbing**									**$ 0.31/SF**	**$2,382**
22.00.00	*Plumbing*	**$ 0.31/SF**	**$2,382**								
Division 23	**Heating, Ventilating, and Air Conditioning**									**$ 0/SF**	**$0**
Division 25	**Integrated Automation**									**$ 0/SF**	**$0**
Division 26	**Electrical**									**$ 0/SF**	**$0**
Division 27	**Communications**									**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**									**$ 0/SF**	**$0**
Division 31	**Earthwork**									**$ 26.96/SF**	**$207,135**
31.00.00	*Earthwork*	**$ 26.96/SF**	**$207,135**								
Division 32	**Exterior Improvements**									**$ 0/SF**	**$0**
Division 33	**Utilities**									**$ 0/SF**	**$0**
Division 34	**Transportation**									**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**									**$ 0/SF**	**$0**
Division 40	**Process Integration**									**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**									**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**									**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**									**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**									**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**									**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**									**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$165,483**
Division 02 Existing Conditions											***$70,841***
02.40.00 Demolition and Structure Moving											
Relocate existing building											
Move existing building to new location	1	LS									$50,000
Paving at existing location	7,049	SF	1.18	0.03	1.00	53.06	1.77		235.66	2.96	$20,841
Subtotal Demolition and Structure Moving			8,336				12,504	-	236		$70,841
Division 03 Concrete											***$87,826***
03.10.00 Concrete Forming and Accessories											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	1,725	SF	1.83	0.091	1.00	53.06	4.83		156.98	6.66	$11,492
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	4,600	SF	1.83	0.091	1.00	53.06	4.83		418.60	6.66	$30,646
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	461	SF	2.88	0.105	1.00	53.06	5.57		48.42	8.45	$3,896
Subtotal Concrete Forming and Accessories			12,926				33,109	-	-		$46,035
03.20.00 Concrete Reinforcing											
Wall footing, 2'0" wide x 1'6" high, 80#/CY, ALLOWANCE	3	TONS	1,500.00	8.889	1.00	60.43	537.16		30.04	2,037.16	$6,885
Stem wall, 1'0' wide x 4'0" high, 60#/CY, ALLOWANCE	3	TONS	1,500.00	8.889	1.00	60.43	537.16		30.04	2,037.16	$6,885
Spread, isolated footing, 18"-dia x 24h", 80#/CY, ALLOWANCE	0.3	TONS	1,500.00	8.889	1.00	60.43	537.16		3.01	2,037.16	$690
Subtotal Concrete Reinforcing			10,647				3,813	-	63		$14,460
03.30.00 Cast-in-Place Concrete											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	73	CY	104.35	0.720	1.00	53.06	38.20	9.91	52.90	152.46	$11,202
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	98	CY	104.35	0.720	1.00	53.06	38.20	9.91	70.53	152.46	$14,936
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	7	CY	104.35	0.900	1.00	53.06	47.75	9.91	6.63	162.01	$1,193
Subtotal Cast-in-Place Concrete			18,657				6,901	1,772	130		$27,331
Division 06 Wood, Plastics and Composites											***$6,816***
06.10.00 Rough Carpentry											
Wood columns, 6x6, 3' high	441	BF	1.60	0.02	1.00	53.06	1.31		10.84	2.91	$1,280
Wood columns, connections	98	EA	8.70	0.250	1.00	53.06	13.27		24.48	21.96	$2,150
Hold downs at shear walls	58	EA	15.65	0.44	1.00	53.06	23.48		25.44	39.13	$2,250
Miscellaneous connections (20%)	1	LS									$1,136
Subtotal Rough Carpentry			2,456				3,224	-	61		$6,816
Facility Services											**$4,587**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 21 Fire Suppression											***$2,205***
21.00.00 Fire Suppression											
Relocate building, extra fire protection costs:	1	LS	1,100.00	19.200	1.00	57.57	1,105.34		19.20	2,205.34	$2,205
Subtotal Fire Suppression			1,100				1,105	-	19		$2,205
Division 22 Plumbing											***$2,382***
22.00.00 Plumbing											
Relocate building, extra costs											
Domestic water	1	LS	520.00	9.000	1.00	57.57	518.13		9.00	1,038.13	$1,038
Sanitary sewer	1	LS	670.00	11.700	1.00	57.57	673.57		11.70	1,343.57	$1,344
Subtotal Plumbing			1,190				1,192	-	21		$2,382
Site and Infrastructure											**$207,135**
Division 31 Earthwork											***$207,135***
31.00.00 Earthwork											
Excavation											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	73	CY		0.120	1.00	60.79	7.30	3.13	8.83	10.43	$767
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	43	CY		0.120	1.00	60.79	7.30	3.13	5.12	10.43	$444
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	7	CY		0.120	1.00	60.79	7.30	3.13	0.88	10.43	$77
Hauling											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	92	CY		0.194	1.00	42.98	8.35	12.52	17.84	20.87	$1,917
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	53	CY		0.194	1.00	42.98	8.35	12.52	10.34	20.87	$1,111
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	9	CY		0.194	1.00	42.98	8.35	12.52	1.79	20.87	$192
Tipping											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	124	TONS	50.00		1.00	42.98	0.00		-	50.00	$6,199
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	72	TONS	50.00		1.00	42.98	0.00		-	50.00	$3,594
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	12	TONS	50.00		1.00	42.98	0.00		-	50.00	$621
Fine grading											
Building pad	7,049	SF		0.01	1.00	60.79	0.30	0.13	35.29	0.43	$3,065
Building over-ex											
Excavation	1,504	CY		0.120	1.00	60.79	7.30	3.13	180.72	10.43	$15,694
Engineered fill, compacted	1,504	CY	10.43	0.35	1.00	42.98	14.87	1.65	520.33	26.96	$40,543
Hauling	1,504	CY		0.194	1.00	42.98	8.35	12.52	292.18	20.87	$31,391
Tipping	2,030	TONS			1.00	60.79	0.00		-	50.00	$101,520
Subtotal Earthwork			26,108				50,243	29,264	1,073		$207,135

Hard Costs: Section Summary						$/EA		Total
General Requirements							$	-
Division 01	General Requirements					$ 0/SF	$	-
Facility Construction							$	92,561
Division 02	Existing Conditions					$ 8.09/SF	$	43,638
Division 03	Concrete					$ 8.32/SF	$	44,877
Division 04	Masonry					$ 0/SF	$	-
Division 05	Metals					$ 0/SF	$	-
Division 06	Wood, Plastics and Composites					$ 0.75/SF	$	4,046
Division 07	Thermal and Moisture Protection					$ 0/SF	$	-
Division 08	Openings					$ 0/SF	$	-
Division 09	Finishes					$ 0/SF	$	-
Division 10	Specialties					$ 0/SF	$	-
Division 11	Equipment					$ 0/SF	$	-
Division 12	Furnishings					$ 0/SF	$	-
Division 13	Special Construction					$ 0/SF	$	-
Division 14	Conveying Equipment					$ 0/SF	$	-
Facility Services							$	4,587
Division 21	Fire Suppression					$ 0.41/SF	$	2,205
Division 22	Plumbing					$ 0.44/SF	$	2,382
Division 23	Heating, Ventilating, and Air Conditioning					$ 0/SF	$	-
Division 25	Integrated Automation					$ 0/SF	$	-
Division 26	Electrical					$ 0/SF	$	-
Division 27	Communications					$ 0/SF	$	-
Division 28	Electronic Safety and Security					$ 0/SF	$	-
Site and Infrastructure							$	122,174
Division 31	Earthwork					$ 22.65/SF	$	122,174
Division 32	Exterior Improvements					$ 0/SF	$	-
Division 33	Utilities					$ 0/SF	$	-
Division 34	Transportation					$ 0/SF	$	-
Division 35	Waterway and Marine Construction					$ 0/SF	$	-
Process Equipment							$	-
Division 40	Process Integration					$ 0/SF	$	-
Division 41	Material Processing and Handling Equipment					$ 0/SF	$	-
Division 42	Process Heating, Cooling, and Drying Equipment					$ 0/SF	$	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment					$ 0/SF	$	-
Division 44	Pollution Control Equipment					$ 0/SF	$	-
Division 45	Industry-Specific Manufacturing Equipment					$ 0/SF	$	-
Division 48	Electrical Power Generation					$ 0/SF	$	-
Sales Tax		7.75	%		$ 58,276		$	4,516
Subcontractor Mark-up		15	%		$ 223,839		$	33,576
Subtotal Net Direct Building Cost						**$ 47.73/SF**	**$**	**257,415**
Prime Contractor General Conditions, Home Office Overhead		11	%				$	28,316
Prime Contractor Profit		8	%				$	22,858
Bond		1.5	%				$	4,629
Escalation to Midpoint of Construction, 06/2010		16	%				$	50,115
Design Contingency		15	%				$	54,500
Phasing Factor, Excluded		0	%				$	-

Total Projected Construction Cost	*Project Square Footage*	*5,393 SF*	*Cost Per Square Foot*	*$ 77 /SF*	**$**	**417,833**
		1,125 HRS				

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	**General Requirements**									**$ 0/SF**	**$0**
Division 02	**Existing Conditions**									**$ 8.09/SF**	**$43,638**
02.40.00	*Demolition and Structure Moving*	**$ 8.09/SF**	**$43,638**								
Division 03	**Concrete**									**$ 8.32/SF**	**$44,877**
03.10.00	*Concrete Forming and Accessories*	**$ 4.39/SF**	**$23,656**								
03.20.00	*Concrete Reinforcing*	**$ 1.36/SF**	**$7,349**								
03.30.00	*Cast-in-Place Concrete*	**$ 2.57/SF**	**$13,872**								
Division 04	**Masonry**									**$ 0/SF**	**$0**
Division 05	**Metals**									**$ 0/SF**	**$0**
Division 06	**Wood, Plastics and Composites**									**$ 0.75/SF**	**$4,046**
06.10.00	*Rough Carpentry*	**$ 0.75/SF**	**$4,046**								
Division 07	**Thermal and Moisture Protection**									**$ 0/SF**	**$0**
Division 08	**Openings**									**$ 0/SF**	**$0**
Division 09	**Finishes**									**$ 0/SF**	**$0**
Division 10	**Specialties**									**$ 0/SF**	**$0**
Division 11	**Equipment**									**$ 0/SF**	**$0**
Division 12	**Furnishings**									**$ 0/SF**	**$0**
Division 13	**Special Construction**									**$ 0/SF**	**$0**
Division 14	**Conveying Equipment**									**$ 0/SF**	**$0**
Division 21	**Fire Suppression**									**$ 0.41/SF**	**$2,205**
21.00.00	*Fire Suppression*	**$ 0.41/SF**	**$2,205**								
Division 22	**Plumbing**									**$ 0.44/SF**	**$2,382**
22.00.00	*Plumbing*	**$ 0.44/SF**	**$2,382**								
Division 23	**Heating, Ventilating, and Air Conditioning**									**$ 0/SF**	**$0**
Division 25	**Integrated Automation**									**$ 0/SF**	**$0**
Division 26	**Electrical**									**$ 0/SF**	**$0**
Division 27	**Communications**									**$ 0/SF**	**$0**
Division 28	**Electronic Safety and Security**									**$ 0/SF**	**$0**
Division 31	**Earthwork**									**$ 22.65/SF**	**$122,174**
31.00.00	*Earthwork*	**$ 22.65/SF**	**$122,174**								
Division 32	**Exterior Improvements**									**$ 0/SF**	**$0**
Division 33	**Utilities**									**$ 0/SF**	**$0**
Division 34	**Transportation**									**$ 0/SF**	**$0**
Division 35	**Waterway and Marine Construction**									**$ 0/SF**	**$0**
Division 40	**Process Integration**									**$ 0/SF**	**$0**
Division 41	**Material Processing and Handling Equipment**									**$ 0/SF**	**$0**
Division 42	**Process Heating, Cooling, and Drying Equipment**									**$ 0/SF**	**$0**
Division 43	**Process Gas and Liquid Handling, Purification, and Storage Equipment**									**$ 0/SF**	**$0**
Division 44	**Pollution Control Equipment**									**$ 0/SF**	**$0**
Division 45	**Industry-Specific Manufacturing Equipment**									**$ 0/SF**	**$0**
Division 48	**Electrical Power Generation**									**$ 0/SF**	**$0**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Level 2 Summary: Detail Line Items											
Facility Construction											**$92,561**
Division 02 Existing Conditions											***$43,638***
02.40.00 Demolition and Structure Moving											
Relocate existing building											
Move existing building to new location	1	LS									$30,000
Paving at existing location	4,613	SF	1.18	0.03	1.00	53.06	1.77		154.22	2.96	$13,638
Subtotal Demolition and Structure Moving			5,455				8,183	-	154		$43,638
Division 03 Concrete											***$44,877***
03.10.00 Concrete Forming and Accessories											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	864	SF	1.83	0.091	1.00	53.06	4.83		78.62	6.66	$5,756
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	2,304	SF	1.83	0.091	1.00	53.06	4.83		209.66	6.66	$15,350
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	302	SF	2.88	0.105	1.00	53.06	5.57		31.69	8.45	$2,550
Subtotal Concrete Forming and Accessories			6,678				16,978	-	-		$23,656
03.20.00 Concrete Reinforcing											
Wall footing, 2'0" wide x 1'6" high, 80#/CY, ALLOWANCE	2	TONS	1,500.00	8.889	1.00	60.43	537.16		15.05	2,037.16	$3,449
Stem wall, 1'0' wide x 4'0" high, 60#/CY, ALLOWANCE	2	TONS	1,500.00	8.889	1.00	60.43	537.16		15.05	2,037.16	$3,449
Spread, isolated footing, 18"-dia x 24h", 80#/CY, ALLOWANCE	0.2	TONS	1,500.00	8.889	1.00	60.43	537.16		1.97	2,037.16	$452
Subtotal Concrete Reinforcing			5,411				1,938	-	32		$7,349
03.30.00 Cast-in-Place Concrete											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	37	CY	104.35	0.720	1.00	53.06	38.20	9.91	26.50	152.46	$5,611
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	49	CY	104.35	0.720	1.00	53.06	38.20	9.91	35.33	152.46	$7,481
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	5	CY	104.35	0.900	1.00	53.06	47.75	9.91	4.34	162.01	$781
Subtotal Cast-in-Place Concrete			9,463				3,511	899	66		$13,872
Division 06 Wood, Plastics and Composites											***$4,046***
06.10.00 Rough Carpentry											
Wood columns, 6x6, 3' high	288	BF	1.60	0.02	1.00	53.06	1.31		7.10	2.91	$838
Wood columns, connections	64	EA	8.70	0.250	1.00	53.06	13.27		16.02	21.96	$1,407
Hold downs at shear walls	29	EA	15.65	0.44	1.00	53.06	23.48		12.74	39.13	$1,127
Miscellaneous connections (20%)	1	LS									$674
Subtotal Rough Carpentry			1,469				1,903	-	36		$4,046
Facility Services											**$4,587**

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 21 Fire Suppression											***$2,205***
21.00.00 Fire Suppression											
Relocate building, extra fire protection costs:	1	LS	1,100.00	19.200	1.00	57.57	1,105.34		19.20	2,205.34	$2,205
Subtotal Fire Suppression			1,100				1,105	-	19		$2,205
Division 22 Plumbing											***$2,382***
22.00.00 Plumbing											
Relocate building, extra costs											
Domestic water	1	LS	520.00	9.000	1.00	57.57	518.13		9.00	1,038.13	$1,038
Sanitary sewer	1	LS	670.00	11.700	1.00	57.57	673.57		11.70	1,343.57	$1,344
Subtotal Plumbing			1,190				1,192	-	21		$2,382
Site and Infrastructure											**$122,174**
Division 31 Earthwork											***$122,174***
31.00.00 Earthwork											
Excavation											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	37	CY		0.120	1.00	60.79	7.30	3.13	4.42	10.43	$384
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	21	CY		0.120	1.00	60.79	7.30	3.13	2.56	10.43	$223
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	5	CY		0.120	1.00	60.79	7.30	3.13	0.58	10.43	$50
Hauling											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	46	CY		0.194	1.00	42.98	8.35	12.52	8.94	20.87	$960
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	27	CY		0.194	1.00	42.98	8.35	12.52	5.18	20.87	$557
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	6	CY		0.194	1.00	42.98	8.35	12.52	1.17	20.87	$126
Tipping											
Wall footing, 2'0" wide x 1'6" high, ALLOWANCE	62	TONS			1.00	42.98	0.00		-	50.00	$3,105
Stem wall, 1'0' wide x 4'0" high, ALLOWANCE	36	TONS			1.00	42.98	0.00		-	50.00	$1,800
Spread, isolated footing, 18"-dia x 24h", ALLOWANCE	8	TONS			1.00	42.98	0.00		-	50.00	$407
Fine grading											
Building pad	4,613	SF		0.01	1.00	60.79	0.30	0.13	23.10	0.43	$2,006
Building over-ex											
Excavation	895	CY		0.120	1.00	60.79	7.30	3.13	107.54	10.43	$9,339
Engineered fill, compacted	895	CY	10.43	0.35	1.00	42.98	14.87	1.65	309.64	26.96	$24,126
Hauling	895	CY		0.194	1.00	42.98	8.35	12.52	173.87	20.87	$18,680
Tipping	1,208	TONS			1.00	60.79	0.00		-	50.00	$60,413
Subtotal Earthwork			9,339				29,840	17,272	637		$122,174

APPENDIX C

HAZARDOUS MATERIALS SURVEY

APPENDIX D

PHOTOGRAPHIC DOCUMENTATION

Figure 1. View of front of Building 2.

Figure 1. View of rear of Building 2.

Figure 3. View of Water Damage of Building 2.

Figure 4. Hallway in Building 2.

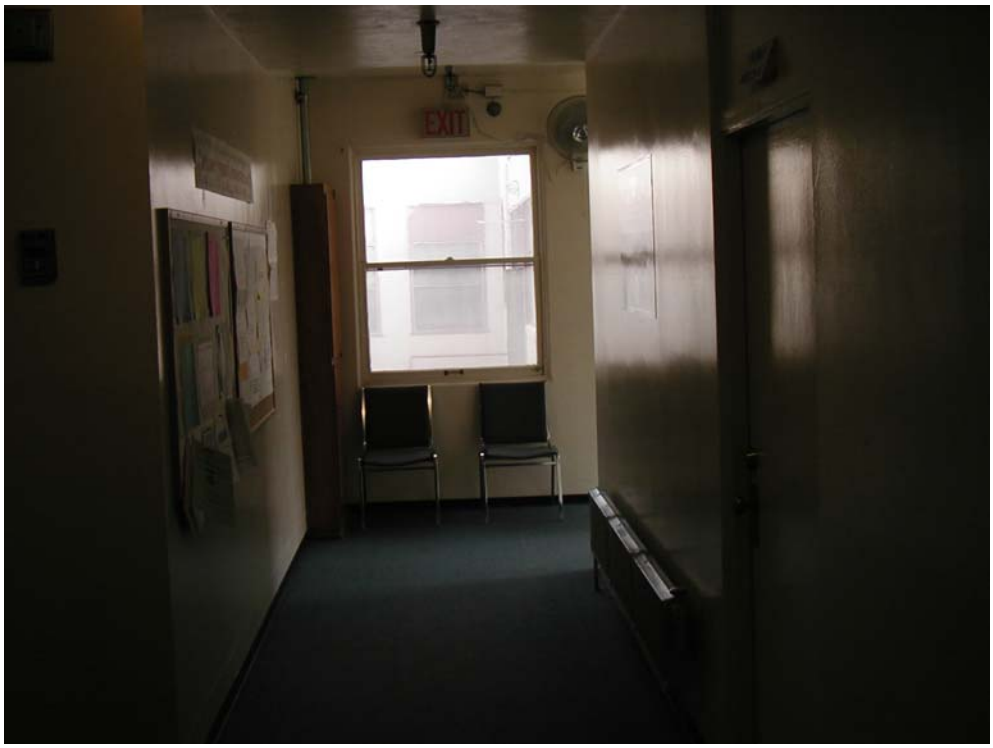


Figure 5. View of Wood Windows of Building 2.

Figure 6. View of Interior Finishes of Building 2.

Figure 7. Raised Floor in Building 2.

Figure 8. Split Beam in Building 2.

Figure 9. View of front of Building 3.

Figure 10. View of side of Building 3.

Figure 11. Wood lath and stucco on exterior wall of Building 3.

Figure 12. Shed Additions to Building 3.

Figure 13. Water Damage to the ceiling of Building 3

Figure 14. View of Asphalt Shingles of Building 3.

Figure 15. View of Windows of Building 3.

Figure 16. View of Interior Finishes of Building3.

Figure 17. View of AC System and Electrical Wiring of Building 3.

Figure 18. Raised wood floor of Building 3.

Figure 19. Small cracks above a door opening in Building 3.

Figure 20. Front view of Building 8 (center) and adjacent buildings.

Figure 21. Front view of Building 8.

Figure 22. Interior view of attic of Building 8.

Figure 23. Exterior view of Building 8.

Figure 24. Attic framing members with signs of water intrusion in Building 8.

Figure 25. View of Wood Windows of Building8.

Figure 26. View of Exterior Door of Building 8.

Figure 27. View of Wood Eve Rot of Building 8.

Figure 28. View of Retrofitted Water System.

Figure 29. View of Old Electrical Wiring of Building 8.

Figure 30. View of Old Electrical Wiring of Building 8.

Figure 31. View of Heating System.

Figure 32. View of Asbestos Flooring of Building 8.

Figure 33. View of Asbestos Ceiling of Building 8.

Figure 34. View of Asbestos Wall in Building 8.

Figure 35. View of Interior Lead Paint in Building 8.

Figure 36. View of Exterior Lead Paint in Building 8.

Figure 37. View of Outdated Fire Sprinkle of Building 8.

Figure 38. View of Attic Debris Fire Hazard of Building 8.

Figure 39. View of Attic Debris Fire Hazard of Building 8.

Figure 40. View of Attic Debris Fire Hazard of Building 8.

Figure 41. Interior of Building 8 with steel pipe columns supporting the ceiling framing.

Figure 42. Exterior view of Building 16.

Figure 43. Middle bay of Building 16.

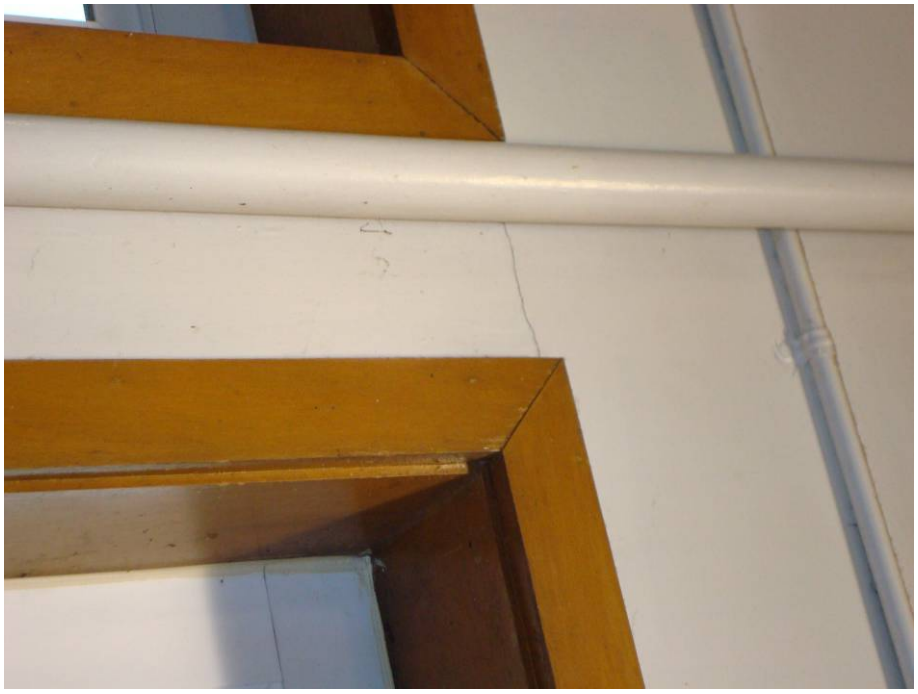


Figure 44. Typical cracks in the concrete walls near window openings in Building 16.

Figure 45. Typical cracks in the concrete walls at door openings in Building 16.

Figure 46. View of Interior Wood Windows.

Figure 47. View of Interior Finishes of Building 16.

Figure 48. View of Exposed Electrical Conduit of Building 16.

Figure 49. View of Exposed Electrical Conduit of Building 16.

Figure 50. View of Outdated Fire Sprinkler System of Building 16.

Figure 51. View of Outdated Fire Sprinkler System of Building 16.

Figure 52. View of Non-ADA Compliant Women's Restroom of Building 16.

Figure 53. Concrete gravity frame in Building 16.

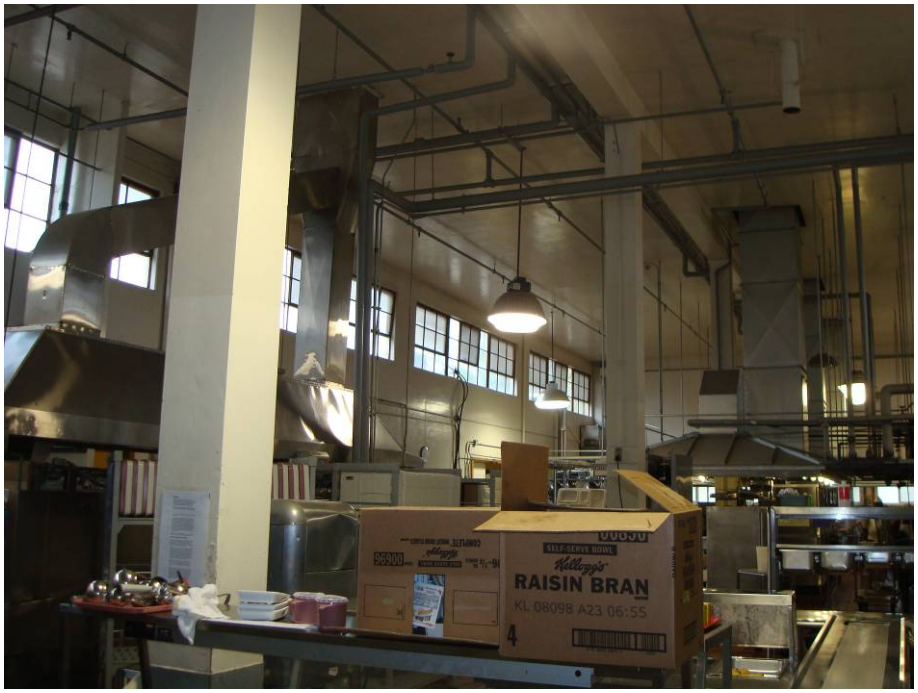


Figure 54. Concrete Gravity Frames in Building 16.

Figure 55. Exterior concrete frame with infill walls in Building 16.

Figure 56. Front view of Building 19 .

Figure 57. Courtyard view of Building 19.

Figure 58. Concrete roof slab supported by concrete walls of Building 19.

Lead-Based Paint Sample Report

Sampling Location:

Edgemoor Geriatric Hospital

9065 Edgemoor Drive, Santee

Collected By: Rene Van Vreeswyk ***Project #:*** 0304-036

Date Collected	*Sample#*	*Material Description*	*Sample Location*	*Condition*	*XRF Reading*	*LBP?*
Edgemoor Bldg 19 A5 Aids						
15-Jul-03	71503-L01	Beige Plaster Wall	Interior Restroom	Intact	0.0	No
15-Jul-03	71503-L02	Beige Plaster Wall	Interior Restroom	Intact	0.22	No
15-Jul-03	71503-L03	Beige Concrete Floor	Interior Restroom	Intact	0.0	No
15-Jul-03	71503-L04	Beige/green Plaster Wall	Interior Restroom	Intact	0.0	No
Edgemoor Hospital Site						
17-Mar-03	31703-1	Tan Wood Ceiling	Exterior Walkway Cover	Poor	0.05	No
17-Mar-03	31703-2	Tan Wood Ceiling	Exterior Walkway Cover	Poor	0.01	No
17-Mar-03	31703-3	Tan Wood Beam	Exterior Walkway Cover	Poor	0.03	No
17-Mar-03	31703-4	Tan Wood Trim	Exterior Walkway Cover	Poor	0.03	No
17-Mar-03	31703-5	Tan Metal Flashing	Exterior Walkway Cover	Fair	0.01	No
17-Mar-03	31703-6	Brown Metal Support Pole	Exterior Walkway Cover	Fair	0.8	No
17-Mar-03	31703-7	Brown Metal Support Pole	Exterior Walkway Cover	Fair	0.19	No

A Niton XL XRF was used to measure lead on specific building components expressing a lead concentration in milligram per square centimeter (mg/cm2). According to the HUD Guidelines, a sample containing 1.0 mg/cm2 or greater is considered to be a LBP ("high" concentration). However, readings less than 1.0 mg/cm2 could have lead present in lower concentrations that might cause employee exposure during aggressive removal. If a painted surface was not tested, it should be assumed to be a high LBP surface until tested. Any building component similar to the building components identified as LBP above should be treated as LBP.

Tuesday, August 28, 2007 ***Page 1 of 1***

Asbestos Material Status Report

Facility Name and Location
Edgemoor Geriatric Hospital
9065 Edgemoor Drive, Santee

Date Collected	Collected By	Material Description	Material Location	ACM?	Status	Comments
Edgemoor Bldg 1 Admin						
12-Jun-95	Van Vreeswyk,	Acoustic Spray, White	Administration building	Yes	In Place	
12-Jun-95	Van Vreeswyk,	Floor Covering - Tile & Mastic, 9"x9", brown	Administration building	Yes	In Place	
Edgemoor Bldg 13 Rehab						
01-Jul-88	Diagnostic Engineering,	Acoustic Spray, Ceiling	Staff Room & Corridors	Yes	In Place	
02-Jul-88	Diagnostic Engineering,	Acoustic Spray, Ceiling	Staff Room & Corridors	Yes	In Place	
31-Jul-97	Wood, Gary E.	Floor Covering - Tile & Mastic, Gray & black tar	Rehab building - All Areas	Yes	In Place	
01-Jul-88	Diagnostic Engineering,	Insulation, Pipe Elbow, 3" OD	Ceiling Cavity	Yes	In Place	
02-Jul-88	Diagnostic Engineering,	Insulation, Pipe Elbow, 3" OD	Ceiling Cavity	Yes	In Place	
02-Jul-88	Diagnostic Engineering,	Insulation, Pipe Run, 4" OD	Mechanical Room	Yes	In Place	
Edgemoor Bldg 14 Engineering						
10-May-02	Rene Van Vreeswyk	Gasket/Packing, gasket to Boiler 1, large hatch	Boiler 1, Boiler room	Yes	Abated	
15-May-02	Rene Van Vreeswyk	Insulation, Pipe insulation	Varied pipes in boiler room and basement	Yes	Abated	
15-May-02	Rene Van Vreeswyk	Insulation, Tank insulation	Boiler room hot water tanks	Yes	Abated	
Edgemoor Bldg 17 Santa Maria						
12-Jun-95	Van Vreeswyk,	Floor Covering - Tile & Mastic, 9"x9", green	Santa Maria building	Yes	In Place	
17-Sep-97	Philippi, Ed	Roofing Material, Roofing Core	Santa Maria Building, Wings B4 & B6	Yes	In Place	

Asbestos Material Status Report

Facility Name and Location
Edgemoor Geriatric Hospital
9065 Edgemoor Drive, Santee

Date Collected	Collected By	Material Description	Material Location	ACM?	Status	Comments
Edgemoor Bldg 18 A4 Disorders						
11-Apr-85	Marshall, Larry G.	Acoustic Spray, White	Bldg. A-4	Yes	In Place	
Edgemoor Bldg 19 A5 Aids						
26-May-95	Thomas Fiorentine,	Floor Covering, Debris: brown	A-5 Ward	Yes	Abated	
26-May-95	Thomas Fiorentine,	Floor Covering, Off-white	A-5 Ward	Yes	In Place	
15-Jul-03	Rene Van Vreeswyk	Plaster, Plaster wall	Pop-out wall behind toilets and wash basins	Yes	Abated	Lower section of wall removed for plumbing repair.
Edgemoor Bldg 2 Bldg A1						
13-Feb-07	Gary Wood	Caulking Compound, gray, tarlike	around roof penetrations	Yes	Abated	
Edgemoor Bldg 6 Bldg A3						
12-Apr-91	Martin, Lisa G.	Roofing Material, Roofing Core	Bldg A-3	Yes	In Place	
Edgemoor Bldg 8 Senior Ctr						
13-Feb-07	Gary Wood	Caulking Compound, gray, tarlike	around roof penetrations of bldgs. 7, 8 & 9	Yes	Abated	
31-Jul-97	Tom Fiorentine,	Floor Covering - Tile & Mastic, Black	Senior Center - Lobby and Hall areas	Yes	In Place	
Edgemoor Hospital Site						
15-Jun-95	Van Vreeswyk,	Acoustic Spray, Off-white	Administration building and Bldg. A-4	Yes	In Place	
24-Feb-89	Rundle, Ann	Insulation, Pipe Run	Steam tunnel and Santa Maria building	Yes	In Place	
05-Apr-90	Wood, Gary E.	Insulation, Heat Exchanger	Boiler room	Yes	Partially Abated	

Asbestos Material Status Report

Facility Name and Location

Edgemoor Geriatric Hospital

9065 Edgemoor Drive, Santee

Date Collected	*Collected By*	*Material Description*	*Material Location*	*ACM?*	*Status*	*Comments*
29-Nov-95	Middlestead, Mark D.	Insulation, Pipe Run	Steam tunnel and Santa Maria building	Yes	In Place	
13-Jul-93	Malott, Kevin T.	Roofing Material, Caulking	Dietary Building	Yes	In Place	
13-Jul-93	Malott, Kevin T.	Roofing Material, Roofing Core	Dietary Building	Yes	In Place	