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## ***PROJECT INFORMATION & BACKGROUND***

### ***Project Information***

The Phase IV addition and renovation is the last phase of construction to be done on the Frederick Memorial Hospital facility. After the completion of Phase III, Frederick Memorial Hospital is a 298 bed hospital dedicated to serving the areas residents providing a variety of healthcare services. Phase IV is the complete renovation of the G wing of the hospital. The renovated G wing will feature a new entry vestibule, an employee gym, medical exam rooms, physical therapy facility, and administrative offices. The interior courtyard of the G wing, previously a garden, will be infilled to create more usable square footage for each floor in the wing. The building envelope is brick façade. Red brick will be on the exterior of the partially exposed basement and first two floors, and yellow brick on the third floor. The existing façade is to remain and the new façade is placed in front of the existing exterior wall.

The most unique feature of the project is the fact that the wing is connected and integral with the rest of the hospital. Temporary partitions have to be constructed and maintained so that hospital workers and patients cannot enter the jobsite, and construction workers cannot enter the hospital. Special care has to be made so that no construction dust and debris infiltrates into the hospital. Infection control procedures are stringent for these reasons. Contractors are additionally required to notify the hospital when they will be using torches or other equipment, which will produce smoke or odor, to demolish existing systems. There are weekly construction utility interrupt request meetings in which the contractors outline where they are going to be working and what they are going to be doing.

### ***Client Information***

The owner of the project is Frederick Memorial Hospital. FMH, a private not for profit hospital, opened its doors in 1902 and has been providing cost-efficient healthcare to the residents of Frederick ever since. The hospital began a multi-phase project to improve the quality and size of the hospital in 2000. The most recently completed phase was the construction of the F wing which is adjacent to the G wing. The hospital has high expectations when it comes to the cost of the project. As it is the last phase of a six year

project, their budget is tight, and it is essential that the project costs remain low. This has been evident in their insistence on thorough bid and scope reviews to make sure that nothing is bought twice. Imperative to the owner's satisfaction is running a safe and predictable job site.

### ***Project Cost Evaluation***

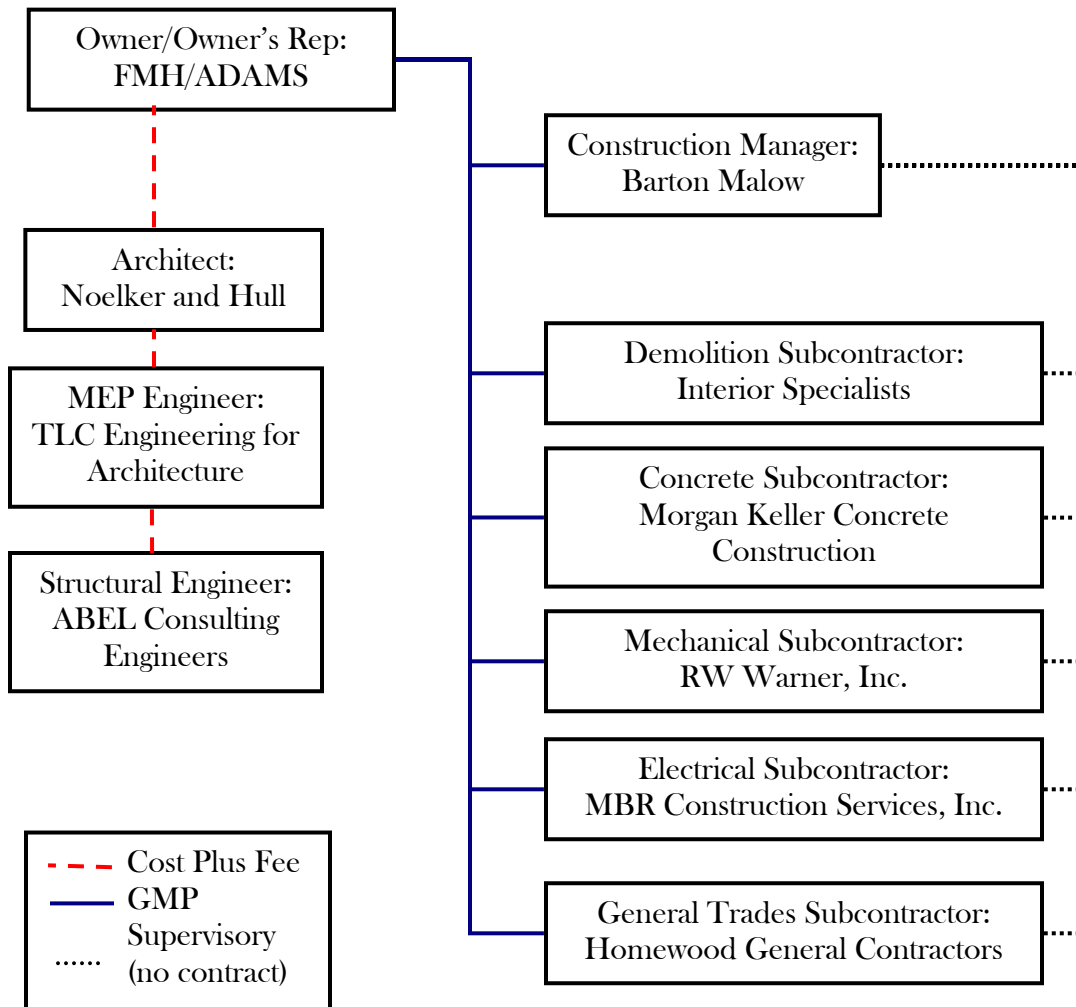
- Total Project Cost
  - \$10,234,749
  - At 85,000 SF - \$120.41/SF
  
- Major Building System Cost
  - Mechanical: \$1,954,469 - \$22.99/SF
  - Electrical: \$1,036,900 - \$12.20/SF
  - Structural: \$717,974 - \$8.45/SF
  - Sitework: \$766,375 - \$9.02/SF
  
- Square Foot Estimate From RS Means 2005
  - Total Estimate Cost = \$15,916,414
  
- D4 Cost Parametric Estimate
  - Total Estimate Cost = \$11,048,366

### ***Project Summary Schedule***

One key element of the schedule is that the foundation, structural, and exterior finishes are phased in order to finish before winter. The shell of the building is constructed first so that during the winter months the space inside can be conditioned. A unique feature of the finish sequence is that the interior finishing crews work from the top floor down. This is done in order to ensure that once floors are finished they are not walked through by the construction workers; this is essential for infection control. The summary schedule is shown on the next page. The full detailed project schedule is shown in appendix A.

ID	Task Name	Start	Finish	2005												2006											
				Ja	Fe	Ma	Ap	Ma	Ju	Jul	Au	Se	Oc	No	De	Ja	Fe	Ma	Ap	Ma	Ju	Jul	Au	Se	Oc	No	De
1	Design	Tue 2/1/05	Mon 7/25/05													<b>Design</b>											
2	Bid Package #1 Procure	Mon 6/6/05	Fri 7/22/05													<b>Bid Package #1 Procure</b>											
3	Bid Package #2 Procure	Mon 7/25/05	Mon 9/12/05													<b>Bid Package #2 Procure</b>											
4	Demolition	Mon 7/25/05	Tue 9/13/05													<b>Demolition</b>											
5	Site Utilities	Thu 9/8/05	Wed 10/5/05													<b>Site Utilities</b>											
6	Courtyard Infill Structure	Wed 9/7/05	Mon 11/7/05													<b>Courtyard Infill Structure</b>											
7	Entrance Canopy Structure	Wed 9/7/05	Wed 10/5/05													<b>Entrance Canopy Structure</b>											
8	Exterior Framing and Sheathing	Mon 10/17/05	Wed 11/2/05													<b>Exterior Framing and Sheathing</b>											
9	Exterior Masonry	Wed 8/31/05	Mon 11/14/05													<b>Exterior Masonry</b>											
10	Exterior Windows and Storefront	Tue 10/18/05	Mon 11/14/05													<b>Exterior Windows and Storefront</b>											
11	Roofing	Tue 11/22/05	Mon 12/19/05													<b>Roofing</b>											
12	Interior - Area G 4th Floor	Mon 10/17/05	Tue 3/7/06													<b>Interior - Area G 4th Floor</b>											
13	Interior - Area G 3rd Floor	Thu 10/27/05	Tue 4/4/06													<b>Interior - Area G 3rd Floor</b>											
14	Interior - Area G 2nd Floor	Thu 11/3/05	Fri 4/28/06													<b>Interior - Area G 2nd Floor</b>											
15	Interior - Area G 1st Floor	Thu 11/10/05	Mon 5/15/06													<b>Interior - Area G 1st Floor</b>											
16	Interior - Area G Basement	Thu 11/17/05	Wed 5/3/06													<b>Interior - Area G Basement</b>											
17	Commissioning	Fri 3/24/06	Tue 5/2/06													<b>Commissioning</b>											
18	WTC List & Punchlist	Wed 3/1/06	Thu 5/11/06													<b>WTC List &amp; Punchlist</b>											
19	Substantial Completion	Mon 5/15/06	Mon 5/15/06													<b>5/15 ◆ Substantial Completion</b>											

***Project Delivery System***

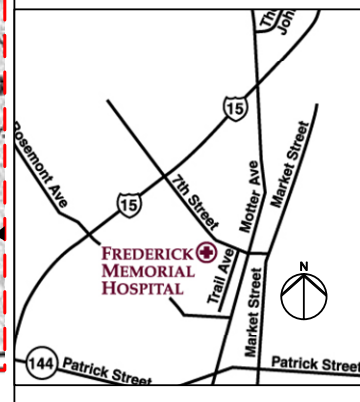
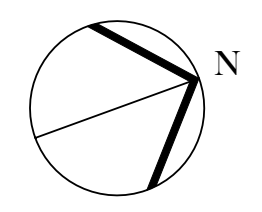


***Site Layout Planning***

The site plan during active construction is shown on the following page. The crane used is an 80 ton mobile crane. Concrete trucks and all other vehicles enter from the south and travel one-way through the site. There is limited on site parking for subcontractors; all crews must park in public parking off site because of an existing agreement between the neighborhood and the hospital regarding contractor parking. There is no need for temporary power as it is supplied through the existing hospital. The site plan is shown on the following page.

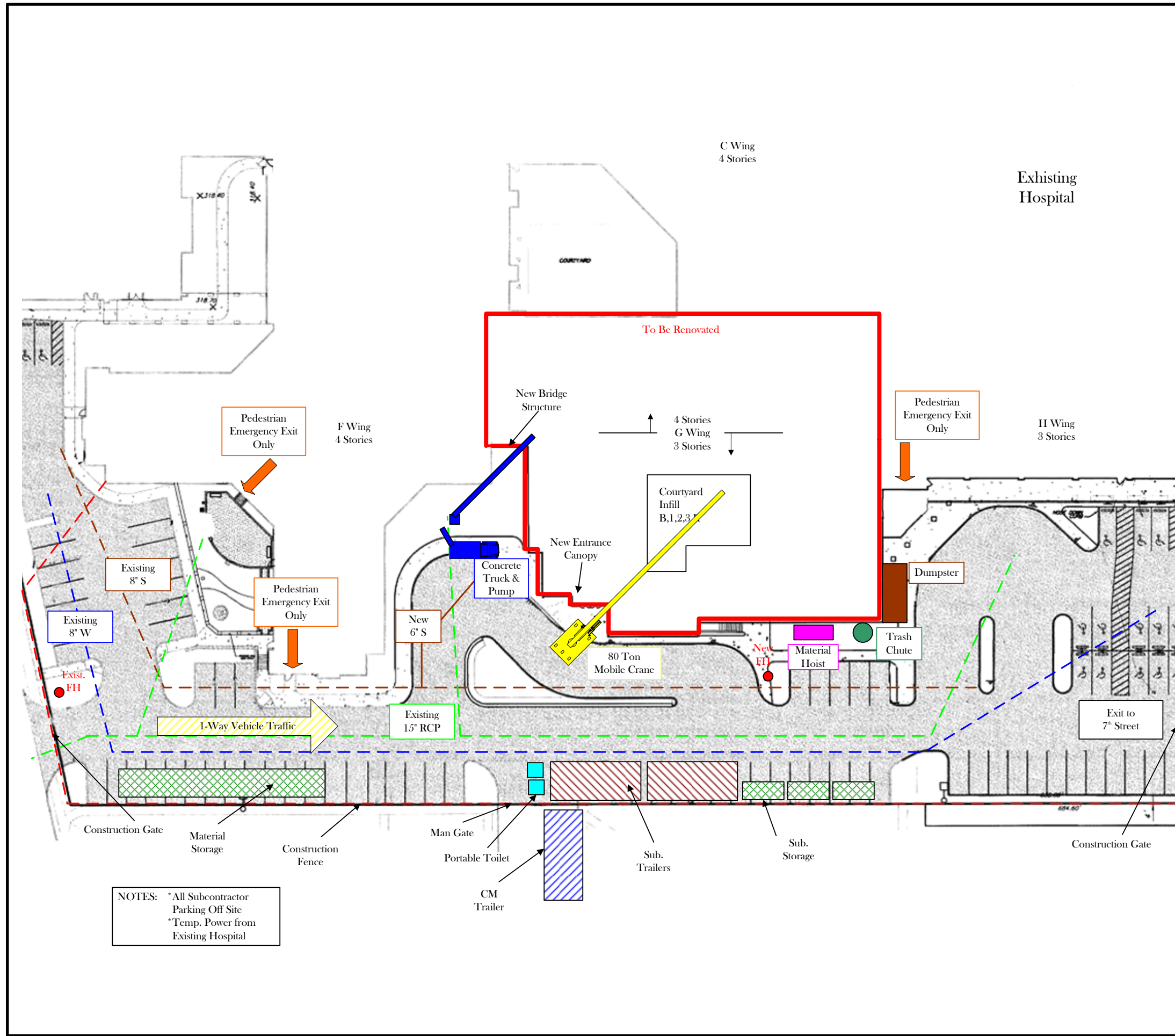
Frederick Memorial Hospital

Project 2000 Phase 4 Additions & Renovations



NAME  
**Abe Vogel**  
 4.03.06

TITLE  
**SITE PLAN**



NOTES: \*All Subcontractor Parking Off Site  
 \*Temp. Power from Existing Hospital