



Brookline Safety Complex - Police Station Addition

Assumptions & Clarifications

October 19, 2011

The following list of items is intended to assist you in understanding any assumptions that have been made in the preparation of this Schematic Estimate:

Division 1 – General Requirements

- 1 .01 This estimate is based upon the following documents:
 1. Presentation Drawings for the Brookline Safety Complex dated January 14, 2008 as prepared by Dennis Mires P.A., The Architects,
 - Proposed First Floor Plan & Second Unfinished Floor Plans. A101 & A101
 - Proposed Exterior Building Elevations. A201.
 - Proposed Site Plan dated January 02, 2008.
 2. Memo to John Urdi describing existing mechanical conditions/equipment of the Brookline Safety Complex prepared by Design Day Mechanicals Inc. dated November 15, 2007.
 3. Memo to John Urdi describing existing electrical conditions/equipment of the Brookline Safety Complex prepared by Reno Engineering & Light Design dated November 14, 2007.
- 1 .02 The cost of the building permit has not been included along with any municipal fees including but not limited to: investment, meter, sewer, water, gas, fire department, and impact fees as it is assumed that as this is a municipal project that they will be waived.
- 1 .03 The moving of furniture, equipment and other loose items from the existing Police Station is to be performed by the Owner.
- 1 .04 Testing agency is to be hired and paid for by the Owner. (Testing concrete, earth compaction, masonry, roof, steel, air quality, air infiltration, and sound rating, etc). The CM will assist in any coordination required to accommodate testing.
- 1 .05 As the addition is attached to a facility currently owned and insured by the Town Of Brookline, thus it been assumed that builder's risk insurance will be an Owner furnished item.
- 1 .06 The cost of a payment and performance bond for the construction is included.
- 1 .07 It is assumed that for each item there will be a minimum of three products specified to promote competition without proprietary restrictions of any of the three in the construction documents.
- 1 .08 This estimate is based on current market conditions and assumes reasonable fluctuations in the same. However, in the event that extraordinary changes in market conditions should occur, such as the steel crisis of 2004, this estimate will be adjusted accordingly.
- 1 .09 The following items are assumed to be part of the Owner's FF&E
 - A. Projection Screen.
 - B. Gun Lockers.
 - E. File Cabinets at Records Rm.
 - F. Residential Appliances U.N.O. below.

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- C. Desks and other furniture.
- D. Furniture, etc. in Arms Room.
- G. Bedding for the bunks @ cells.
- 1 .10 The work at the Bunk Addition and any work at the existing building except that which facilitates the new construction (including the new toilet room within the existing building) are not represented in this estimate.

Division 2 – Site Construction

- 2 .01 Rock excavation and boulders (over ½ cubic yard in trench excavation and over 2 cubic yard in open excavation) are not included and if encountered will be paid as a change in work. Test pits appeared on the schematic site plan provided by Dennis Mires, however, this information was unavailable from the Architect for this estimate.
- 2 .02 Hazardous material removal and disposal has not been included in this estimate.
- 2 .03 The building finish floor is assumed at elevation 297.0' to match the finished floor elevation of the existing building. Structural fill is provided to raise building foundation/pad to the required grade and common fill is provided to raise paving and lawn areas to contour the site to shed storm water away from the building. The northwest parking extension shall tie-into the existing parking and shed water toward the existing CB-A. The proposed southwest parking/drive will gradually slope away from the buildings Sally port and tie into the existing drive around the safety complex. Two new catch basins and ADS drain piping have been included for storm water in this SW parking area and tie into existing CB-C. It has been assumed that the existing detention pond located east of the new addition has been designed to accommodate future storm drainage loads associated with the new addition.
- 2 .04 It has been assumed that the existing water supply from the onsite well will be sufficient for the new addition. Site hydrants or storage cisterns for fire trucks have not been included.
- 2 .05 Per conversations with Architect, the proposed 20,000-gallon cistern has been moved west of its proposed location to avoid removing existing pavement at the existing safety complex. It has been assumed that the underground tank will be perpendicular to the proposed concrete walk with the nose of the tank approximately 17' in from the curb line and the remaining portion of the tank under the new SW parking area. This type of configuration is required to allow a 12'x12' building to house the diesel powered fire pump for the fire protection system. An 8" ductile iron water line is included from the fire pump to the existing water line at the building. It has been assumed that the existing line is stubbed 10' out from the building. A 2" water line has been run from the existing building to the new fire pump house to be used as a cistern fill line.
- 2 .06 The existing septic system design is assumed to accommodate the police station addition. The existing sewer line below the proposed building footprint has also been assumed to be ductile iron material in anticipation of this addition. The existing septic tank and field are to remain unchanged. Modifications to the existing are not anticipated and thus have not been included.
- 2 .07 Per the mechanical engineer's memo, excavation and backfill has been included for (1) –1,000 gallon underground propane tank and associated fuel line to the building. It has been assumed that the cost of the tank and fuel line is to be borne by the Owner's propane vendor and that this tank will be located proximate to the existing tank.

- 2 .08 All drives and parking will be 3" thick bituminous concrete. 6" base course of crushed bank run gravel and a 12" sub-base course of bank run gravel is provided below all pavement areas.
- 2 .09 Vertical granite curbing is limited to areas where the concrete walks are adjacent to paving for a total of 170 linear feet.
- 2 .10 Eight inches of crushed bank run gravel has been included below all concrete walks. All proposed walks indicated on the site plan are included as 4" thick, broom finished concrete.
- 2 .11 Four inches of topsoil will be spread at new lawn and disturbed areas. These areas to be fine graded and hydro-seeded.
- 2 .12 Two small existing trees are included to be relocated to accommodate the proposed SW parking area. New landscape materials/plants have not been included.
- 2 .13 An irrigation system for lawn areas has not been included with this estimate.
- 2 .14 A perimeter drip edge/mow strip has been included at the perimeter of the new addition similar to the strip that exists.
- 2 .15 Per prior scope discussions, the impound yard and work associated with it are not included with this estimate.
- 2 .16 Two guardrail sections are indicated on Progress Site Plan dated 01-02-2008; the guardrail in question is not within the work limits for this addition and has not been included in this estimate.
- 2 .17 New traffic signalization on major roads has not been included in this estimate.
- 2 .18 The two (2) posts at the existing entry and the eight (8) window units at the tower are to be re-used for new construction. Any siding, trim and windows and doors at the existing west elevation that are to be removed in order to facilitate the new addition are assumed to be demolition materials.

Division 3 – Concrete

- 3 .01 Concrete foundations are to be 4 feet below finish grade at the bottom of spread footings. Foundation walls at exterior perimeter to be 10" thick (CMU) and 8" thick (wood stud) at building perimeter. 8" thick frost walls at exit pad locations with reinforcing steel as required. Continuous spread footings and thickened slab haunches have been included to support interior CMU and load bearing wood partitions. Elevator base slab (including sump pit) with 4' high, 8" thick reinforced walls. Concrete to be 3000 psi.
- 3 .02 Slab on grade at the first floor level is included as 4" thick, 3000 psi concrete, reinforced with 6 x 6 - W1.4xW1.4 welded wire mesh. Slab on grade at the Sally port is included as 6" thick, 3,000 psi concrete, reinforced with 6 x 6 – W2.9xW2.9 welded wire mesh.
- 3 .03 Slabs on grade will be finished using a combination of lasers and wet hand screeds. Saw cut control joints to limit cracking are included as required. Expansion joint material at vertical transitions between concrete walls and CMU are included at all slab on grade areas.
- 3 .04 Vapor barrier below all slabs on grade is included as Stego Wrap (15 mil) or equal.
- 3 .05 Site concrete will be 4000 psi, which consists of 4" sidewalks, (6) light pole bases, (8) bollard bases and exit pads.
- 3 .06 Reinforced concrete hold down pad for underground propane gas tank.
- 3 .07 Reinforcing steel shall be deformed bars with a minimum yield point of 60,000 psi.

- 3 .08 At this time, geo-technical investigations have not been made available to us for this project, therefore, it is has been assumed that foundations will be designed based upon 3,000 PSF loadings.

Division 4 – Masonry

- 4 .01 Eight inch, reinforced masonry partitions have been included at the Sallyport, Booking, Holding Cells 1-3, Interview Room and the elevator shaft.
- 4 .02 The building CMU will be all running bond standard block. We have not included scored or other special shaped block.
- 4 .03 Horizontal ladder reinforcing will be hot dip galvanized coating at exterior and mill galvanized at interior CMU walls.
- 4 .04 Bull nose block has been included for all masonry block corners.
- 4 .05 Typical exterior wall construction assembly for the Sallyport, Holding Cells and Booking is as follows: 8" reinforced block wall, with 2x4 pressure-treated wood strapping at 24" o.c., 1-1/2" rigid insulation placed between the strapping, 1/2" plywood sheathing, building wrap and vinyl siding.
- 4 .06 The voids or empty cells of the CMU backup walls will be filled with an insulation product similar or equal to Vermiculite.

Division 5 – Metals

- 5 .01 Steel wall rails are included on one side of each stair leading to the unfinished space on the second floor.
- 5 .02 Angle frame/grate at sump pit, elevator sill angles and the elevator pit ladder have not been included in this phase of construction.
- 5 .03 Galvanized and primed metal lintels are included at the masonry partitions.
- 5 .04 A total of eight (8), 8" x 7' long heavy-duty bollards are included at the Sallyport garage bays. Plastic bollard covers are included similar to the existing buildings garage bays.

Division 6 – Wood & Plastics

- 6 .01 The following millwork and interior finish carpentry items have been included.
1. Five high 12" deep plywood shelves with a hardwood nosing have been included at perimeter of the Supply Closet, at the East wall at Jan and along the East wall of AV.
 2. Solid surface (Corian or equal) counters have been included at Women's and Men's Locker Rooms.
 3. The base and wall cabinets at the Break Room have been included as solid oak raised panel door by Armstrong or equal. The counters at these cabinets have been included as 3/4" plywood core post form plastic laminate in the standard range of finishes.
 4. 30" plastic laminate work counters have been included at the Squad Room, and Radios. Base cabinets have been included under 30% of the counters.
 5. Plastic laminate counters have been included at the Lobby adjacent to the Asst and at the pass-thru at Evidence. Base cabinets have been included under 30% of the counters.
 6. At the Booking area, casework has been included at an Allowance of \$200 per

lineal foot.

7. Five high 24" deep plywood shelves have been included at "STO" of the Sallyport and at the north and west walls of Evidence.
- 6 .02 Wood trim has not been included at hollow metal door' frames, window openings nor any other miscellaneous application.
- 6 .03 The sills at window openings will have a plastic laminate sill with a hardwood apron. These openings will have drywall returns. The window units within the 2nd Floor unfinished space will not receive sills.
- 6 .04 All exterior trim will match existing in appearance and quality.
- 6 .05 It has been assumed that ply clips are acceptable to support plywood edges at roof areas in lieu of wood blocking.
- 6 .06 Floor under-layment has not been included at the Second Floor plywood deck.
- 6 .07 All wood-framed wall construction has been included as 2x6.
- 6 .08 Plywoods have been included at the following locations in the thickness noted:
 1. ½" OSB wall sheathing at wood-framed walls and ½" pressure-treated plywood at exterior masonry walls.
 2. 5/8" Advantech roof sheathing.
 3. ¾" T&G floor deck sheathing. Fire-treated is used as utility backboards.

Division 7 – Thermal and Moisture Protection

- 7 .01 The roof system assembly is comprised of the following materials:
 1. Roof shingles are to match the existing in quality and appearance.
 2. 30 mil ice and water shield is included at two widths at eaves and the dormer valleys. 30# felt is included at the balance of the roof area.
 3. .032 mill finish aluminum drip edge is included at all rakes and eaves. All step and transitional flashings will also be .032 mill finish aluminum.
 4. Ridge vent has been included as roll type.
- 7 .02 Vinyl siding (both clapboard and shake) is to match the existing in quality and appearance. All surfaces above the eave line elevation have been included with vinyl shakes while those below it will receive vinyl clapboard siding.
- 7 .03 Building insulation has been included as follows:
 1. Attics areas have been included with R-38 batt insulation at the bottom chord of trusses or within the roof rafters. This has also been included at the fire pump house.
 2. Wood framed exterior walls have been included with R-19 kraft-faced batts. The second floor and pump house perimeter walls will also be insulated.
 3. Sound batts have been included at all wood-framed partitions at the 1st and 2nd Floors.
 4. 3-1/2" sound batts have been included above the layer of drywall attached to the open web wood joists that comprise the Second Floor framing.
- 7 .04 The fire pump house has been clad with vinyl clapboard siding and trim that will match the existing building in quality and appearance.
- 7 .05 Sealants have been included at masonry control joints, perimeters of windows and door frames to insure the integrity of the building envelope. Sealants have been also included in exposed concrete floor saw cut joints.
- 7 .06 Firestop has been included at fire-rated partitions as required in new construction. The mechanical and electrical trades are to include firestopping with their work.

Division 8 – Doors & Windows

- 8 .01 All exterior doors are field painted insulated galvanized hollow metal doors and frames. A single door and frame have been included at the Fire Pump House. The door at the re-configured Safety Complex entry shall be relocated from the existing entry including sidelights. The new main entry to the Police Station will match that of the adjacent Safety Complex entry. All other new exterior doors will have a 5" x 24" vision panel with tempered insulated glass.
- 8 .02 The door between the Sallyport and Booking has been included as an insulated galvanized hollow metal door and frame with a 5" x 24" vision panel with tempered insulated glass. The door from the Sallyport to the Cage has not been included as it was not included in previous drawing iterations.
- 8 .03 Pre-finished veneer wood doors (1 ¾" thick) are included at the balance of the project. All doors are solid slabs except as noted below.
- Openings at the following doors have been included with a 5" x 24" vision panel: Break Room/Stair and Top of Stairs (2).
 - Openings at the following doors have been included with a half-light of tempered glass: Vestibule to Lobby, Assistant, Chief, Sgts, Detective, Break, Exercise and Hall to Booking.
- 8 .04 Four (4) Level 2 bullet resistant slab doors and frames have been included for the following openings:
1. Soft Conference Room.
 2. Public Toilet at Lobby.
 3. Door from the Lobby to the hall.
 4. Door from the Vestibule to the stair.
- These doors will have a continuous geared hinge, mortise lockset, closer and stop.
- 8 .05 The windows at the Lobby, Assistant, Chief and Sergeant have been included with Armortex or equal Level 2 bullet-resistant fixed steel windows with a powder coated white finish to match the vinyl windows. These units will have vertical/horizontal mullions to match a hung window in appearance but will not have a true offset horizontal. These units will not have grilles nor are they thermally broken or insulated. These units will be fixed. Two units @ 3'-4"w x 3'-4"h and three units @ 3'-4"w x 6'-8"h.
- 8 .06 The balance of the exterior windows on the project will be vinyl similar to either Harvey's Vicon or Paradigm Premium Designer. All units have been included as fixed. Four banks of two 3'-4" x 3'-4" units and two banks of three 3'-4" x 3'-4" units have been included. Windows have been included at the tower to match the existing units that will remain.
- 8 .07 A view window with one-way glass has not been included at the Interview Room, as it does not appear to be required based upon the current layout.
- 8 .08 A 48" x 48" satin anodized aluminum frame pass-thru has been included at the Evidence Room. It includes a speak-thru device, an 18" stainless steel shelf and deal tray and ¼" tempered glass.
- 8 .09 A 48" x 48" Level 2 Resistant prime painted voice transaction window w/speaker has been included at the wall between the Lobby and Asst Room.
- 8 .10 Two (2), 8' high x 11' wide insulated overhead doors without vision panels have been included at the Sallyport. Doors are 2" thick, 17.5 R-Value, pre-finished white. ½ HP motor operators are included with each door. A 7' high x 8' wide manual-op overhead door has been included at the Pump House.

- 8 .11** Door hardware material has been included at \$365/leaf.

Division 9 – Finishes

- 9 .01** The finishes for each room have been included per the schedule that follows:

Room	Flooring	Base	Ceiling
First Floor:			
Vestibule – Police	Entry Mat/VCT	Vinyl	ACT
Stair	Unfinished	Unfinished	Drywall (not painted)
Lobby	VCT	Vinyl	ACT
Single Toilet	VCT	Vinyl	ACT
Conference	VCT	Vinyl	ACT
Storage (below Stair)	VCT	Vinyl	Drywall (not painted)
Janitor	VCT	Vinyl	ACT
Single Toilet	VCT	Vinyl	ACT
Assistant	Carpet	Vinyl	ACT
Supply	VCT	Vinyl	ACT
Chief	Carpet	Vinyl	ACT
Sergeants	Carpet	Vinyl	ACT
Detective	Carpet	Vinyl	ACT
Squad	VCT	Vinyl	ACT
Records	VCT	Vinyl	ACT
Storage	VCT	Vinyl	ACT
Corridors	VCT	Vinyl	ACT
I.T.	VCT	Vinyl	ACT
Evidence	VCT	Vinyl	ACT
Break	VCT	Vinyl	ACT
Men's Locker	VCT	Vinyl	Drywall
Women's Locker	VCT	Vinyl	Drywall
Interview	VCT	Vinyl	See Item 9.11
AV	VCT	Vinyl	ACT
Arms	VCT	Vinyl	ACT
Stair	Unfinished	Unfinished	Drywall
Exercise	VCT	Vinyl	ACT
Booking	Epoxy	Epoxy (4")	See Item 9.11
Holding Cells 1-3	Epoxy	Epoxy (4")	See Item 9.11
Cage	Epoxy	Epoxy (4")	See Item 9.11
Sallyport	Sealed Concrete	None	Drywall
Second Floor:			
Entire Floor	Unfinished	Unfinished	Drywall (not painted)

- 9 .02** Vinyl composition tile has been included as Armstrong "Standard Excelon" or equal.
- 9 .03** Carpet will be included as a \$20 per square yard allowance including the pad and installation. This will allow for a quality commercial grade carpet.
- 9 .04** All ceilings designated with ACT in the Finish Schedule have been included as Armstrong "Fine Fissured" 2x4 (#1729) and standard 15/16" grid. This is a not fire rated ceiling system.

- 9 .05 Standard partitions will consist of wood framed partitions with one layer of 5/8" drywall on each side of the partition.
- 9 .06 One layer of 5/8" type X drywall has been applied to the existing exterior wall where the new addition abuts the existing building. It has been assumed that the wall that separates the existing from the proposed addition will not be required to be a fire separation wall.
- 9 .07 An additional layer of drywall has been applied to the existing boiler room side of the wall (which was previously the exterior wall of the building) for fire rating purposes.
- 9 .08 Two hour rated partitions (2-layers 5/8" Type-X GWB each side) are included at the elevator machine room.
- 9 .09 Resilient channel and 5/8" Type X drywall has been applied to the underside of wood floor and roof trusses for fire rating between the 1st and second floors.
- 9 .10 Two-hour fire rated drywall ceilings are included at elevator and elevator machine rooms.
- 9 .11 Booking, Cage, Holding Cells 1-3 and Interview Room will have a dropped metal framed ceiling, ½" Plywood and 5/8" sheetrock.
- 9 .12 The Second Floor unfinished space walls are sheathed with 5/8" drywall and the ceilings will receive resilient channel with 5/8" drywall. These surfaces will not be painted.
- 9 .13 Pump house walls include 5/8 drywall and the ceiling includes drywall on resilient channels attached to the wood trusses.
- 9 .14 A total of 1,040 sf of ballistic resistant fiberglass panels (Level II) as manufactured by ArmorCo or equal has been included to protect sensitive areas of the building. These panels have been included at interior and exterior walls to protect the following locations:

Room # / Name	North	South	East	West
Chief	Yes	No	No	Yes
Assistant	Yes	No	Yes	No
Vestibule	No	Yes	Yes	No
Lobby	Yes	Yes	Yes	Yes partial
Toilets (2)	No	No	Yes	No

- 9 .15 Painting at the new addition is included as follows:
 Masonry partitions and secure ceilings will receive a 3-coat water based epoxy paint system. All other rooms will receive a 3-coat egg-shell latex paint system. A two - (2) coat alkyd enamel system is included for the factory primed exposed steel doors, and frames. It has been assumed that painting will not be required at any exterior surfaces.

Division 10 – Specialties

- 10 .01 Thirty - (30) single tier, (12"x15"x72') all welded lockers are included at the Men's and Women's locker rooms. Two 4' and one 7' bench at Men's and a 4' and a 5' bench at Women's have been included.
- 10 .02 Five (5) 4'x4' marker and five (5) 4'x4'tack boards have been included.
- 10 .03 Floor mounted overhead braced, plastic (std colors) toilet partitions have been included as manufactured by Scranton or equal.
- 10 .04 An allowance of \$350 has been included for the seal indicated at the new entrance canopy.
- 10 .05 An allowance of \$500 has been included to amend or add on to the existing project

- sign.
- 10 .06** Thirty-five (35) interior ADA compliant 1/8" thick acrylic in standard colors, adhesive applied, plastic room identification signs have been included.
- 10 .07** Five (5) FE10C ABC fire extinguishers and two (2) 1516F25, non-rated, semi-recessed fire extinguisher cabinets. All items based on JL Industries fire equipment or equal.
- 10 .08** Toilet accessories are included as follows:
1. One surface toilet paper holder (2 roll) at each toilet room and locker room toilet.
 2. One semi-recessed towel dispenser/disposal combinations at each toilet and locker room.
 3. A surface horizontal soap dispenser at each toilet room and locker room lavatories
 4. One 36" and 42" grab bar at each toilet room and locker room toilet.
 5. A surface napkin disposal has been included at each toilet room and at the Women's Shower toilet stall.
 6. One 24" x 30" angle frame mirror at each toilet room and locker room lavatories
 7. Shower rod and curtains are included at the locker rooms. Two at each shower stall.
 8. A 36" mop strip has been included at the Janitor's Closet.
 9. A single robe hook has been included at each toilet room. Two units have been included at each locker room.

Toilet accessories as manufactured by ASI accessories or equal.

Division 11 – Equipment

- 11 .01** An 18 cu.ft. refrigerator (Frigidaire FFHT1814LW or equal) and a microwave (1.8 cu.ft. capacity) are the only appliance included at the Break Room.
- 11 .02** The three (3) holding cell doors have been included as a 12 gauge steel frame and door with a 10"x10" L-SG100 security vision panel. Doors shall have a continuous hinge and a deadbolt with a cylinder outboard and a blank plate inboard.
- 11 .03** The following jail accessories as manufactured by PSI, LLC or equal have been included for three cells:
1. Recessed TP Holders (TPH-600)
 2. Detention Mirror (M-621)
 3. Safety Hook (RS-515)
 4. Free standing single bunks (FSB-300)

Division 12 – Furnishings

- 12 .01** Window treatment has been included at all new window units exclusive of the window units at the tower. 1" aluminum mini blinds have been included with larger multiple window units being split into multiple blind units.
- 12 .02** Recessed entrance mat 4'x6' has been included at the Vestibule as a carpet insert into a clear aluminum angle frame.

Division 13 – Special Construction

- 13 .01** None offered.

Division 14 – Conveying Systems

- 14 .01** The passenger elevator has not been included in this phase of construction.

Division 15 – Mechanical

- 15 .01** The fire protection system includes complete working plans of the sprinkler system and hydraulic calculations per NFPA 13. Design is based upon Light and Ordinary Hazard use. This system includes the following elements
1. A wet sprinkler system is included to cover the entire First Floor.
 2. A dry sprinkler system is included to cover the Second Floor and attic spaces.
 3. Zoning is to be done by floor.
 4. Exposed sprinkler piping will be run in the Sallyport.
 5. Areas without ceilings will have exposed piping with brass upright heads while areas with ceilings shall have concealed piping with white recessed pendent sprinkler heads. The Second floor will have dry pendent heads.
 6. A 20,000 gallon underground fire cistern and diesel powered fire pump has been included to supply water to the fire protection systems of the new addition and existing building.
 7. The underground fire cisterns location in elevation will not allow the fire pump to be placed in the existing boiler room. The fire pump will need to be located directly above the underground tank. A 12'x12' fire pump house has been included to protect the fire pump, controls, etc.
- 15 .02** As the Mechanical Engineer's memo is uncertain about the capacity of existing equipment, the following has been assumed:
1. The existing propane piping is adequate.
 2. An additional 1,000-gallon propane tank has been included. The initial filling of the propane tank is typically done by the Owner and thus has not been included in this estimate.
 3. An additional domestic water heater has been included (50 gallon).
 4. The existing well is adequate to handle the additional domestic water load.
- 15 .03** Air conditioning with gas heat ducted split system has been included for with separates air handling units in the following zones:
1. Zone #1 includes Vestibule, Lobby, Conference, Bathrooms, Records, Storage, Asst, Supply Chief and Sgts. Four (4) tons of AC and will provide 320 cfms of outside air.
 2. Zone #2 includes Detective, Squad, Break Room, Arms, AV and Corridor. Two and a half (2.5) tons of AC and will provide 200 cfms of outside air.
 3. Zone #3 includes Corridor, Evidence, Locker Rooms and Exercise. Three and a half (3.5) tons of AC and will provide 280 cfms of outside air.
 4. Zone #4 includes Booking, Interview, Holding and the Cage. Three (3) tons of AC and will provide 240 cfms of outside air.
- This system would be different from the heating system that is currently installed in the existing building. This system relies on propane fired air handling units in lieu of a independent boiler that feeds the air handling units with heat piping
- 15 .04** An energy recovery ventilation system has been included for the Conference Room and Exercise Room.
- 15 .05** One (1) ton AC ductless split system and controls for IT Room.

- 15 .06 Exhaust systems (75 cfms/each) have been included for bathrooms, locker rooms, cells and Janitor's Closet.
- 15 .07 Gas fired unit heaters with controls are included at the Sallyport (50 mbh) and the Unfinished Second floor (75 mbh).
- 15 .08 Electric wall heaters with controls are included for vestibule and side entries.
- 15 .09 An evacuation system interlocked with carbon monoxide alarm system has been included at the Sallyport. A vehicle exhaust system has not been included at the Sallyport area.
- 15 .10 Although not indicated on the schematic floor plans, a stainless steel sink with faucet has been included at Booking.
- 15 .11 Penal combination toilets/sinks with faucets are included at each of the cells.
- 15 .12 A 10' trench drain (Polydrain 512 grate and frame or equal) has been included at each bay of the Sallyport.
- 15 .13 Radiant heating system in the concrete floor of the Sallyport has not been included in this estimate. It can be added for an additional \$6,500.

Division 16 – Electrical

- 16 .01 Base upon the electrical engineer's memo, the following has been assumed:
 - 1. The main distribution panel is adequately sized to handle the electrical loads of the addition from the standpoint of available capacity and breaker spaces.
 - 2. The existing fire alarm system has the capacity to accept the requirements of this addition.
- 16 .02 Additional distribution panels have been included as required for the power wiring of the addition.
- 16 .03 Total of (22) telephone and data drops have been included in different locations of the Addition.
- 16 .04 The following has been included for the second floor unfinished space:
 - 1. General storage lighting on one set of switches and one outlet.
 - 2. Fire alarm as per code for unoccupied space and two exit lights.
- 16 .05 Six (6) 20' parking lot pole lights have been included at the proposed parking areas.
- 16 .06 Any relocation of the secondary power lines from the pad-mounted transformer to the existing building has not been included in this estimate. If the underground lines on the proposed site plan are correct, this work is not anticipated to be a problem with the new addition