

June 17, 2005

Mr. Greg Dill, CFM
Director
Washtenaw County – Support Services
Facilities Management Division
110 North Fourth Avenue
Ann Arbor, MI 48107-8645

Re: Review of Washtenaw County Jail Expansion Concept

Dear Mr. Dill;

Per your request, Meneghini & Associates, LLC (M&A) and Process Results, Inc. (PRI) have performed a pre-architecture/engineering evaluation of the Washtenaw County Adult Corrections Facility Expansion Project proposal as submitted by the Washtenaw County Sheriff's Department. The architectural and engineering evaluation was to focus on:

- Construction Feasibility
- Construction Cost
- Regulatory Compliance
- Existing Infrastructure Impact/Options

The following is a summary of our review and findings.

BACKGROUND INFORMATION

Meneghini & Associates LLC/Process Results, Inc. understands that the current Washtenaw County Adult Corrections Facility (WCCF) experiences overcrowding and that two (2) proposals exist that attempt to address the overcrowding issue; (1) one proposal authored by the Washtenaw County Administrator's office and (1) one proposal authored by the Washtenaw County Sheriff's Department.

M&A and PRI met with Washtenaw County, Facilities Management Division to gather information required to perform the evaluation work. The meetings included the following Washtenaw County personnel:

- Mr. Greg Dill – Director
- Mr. Scott Patton – Business Improvement Coordinator
- Ms. Kerry Sheldon – Management Analyst
- Mr. Matt Higgins – Facilities Engineer
- Mr. Jason Fee – Project Manager

From the meetings, the following documents were provided for review and evaluation:

- *Needs Assessment Study/Adult Correctional Center Expansion Project for the Adult Corrections Facility, Washtenaw, Michigan* – Healy, Snyder, Bender & Associates, Inc. (HSBA), dated December 2, 2003.
- *Preliminary Proposal Jail Space Expansion* Powerpoint Presentation - Washtenaw County Office of the Sheriff, date unknown.
- *Public Safety & Justice Recommendation* Letter – County Administrator, dated April 6, 2005.
- *Response to Public Safety & Justice Proposal Questions* Letter – County Administrator, dated April 21, 2005.
- *Preliminary - Administrator's Response to the Sheriff's Memorandum on Jail Expansion* – County Administrator, dated June 7, 2005.
- *Preliminary - Corrections Center Current System and Concerns Regarding Proposal* – unknown author, dated May 2005.
- *Corrections/Law Enforcement Center, Washtenaw County, MI, Construction Drawings (architectural, structural, mechanical and electrical blue prints)* – Ayers & Hayakawa, dated August 25, 1975.

The initial kickoff meeting was held on June 3, 2005 and all available information was gathered. Mr. Dill requested that the final report and evaluation be completed by June 17, 2005 to provide time to complete the final documentation for the Board of Commissioners.

RESULTS OF INVESTIGATION

Based on a review of the above-noted documents, M&A and PRI have completed a comparison of the building and related elements and has summarized our findings in Attachment A – Comparison of Elements. While there were many issues to evaluate, due to time constraints, we focused on major issues impacting construction feasibility, construction cost, code compliance and infrastructure impact/cost. Attachment A summarizes our evaluation by elements of the proposed facility. The following is an overview of the major issues identified and summarized in one or many of the elements:

1. The Sheriff's concept complicates construction of the addition by trying to infill the existing B-C and C-D courtyards. Major areas of concern related to construction include:
 - Execution of the project requires all demolished materials, spoils, new materials, equipment and prefabricated structures to be lifted in and/or out of the courtyard areas by crane. Because of the topography of the site and height of the existing building, the crane will require a very long boom.
 - The lifting of materials by the crane over the existing beds in B, C or D blocks will require some of those areas to be shutdown during construction. The Sheriff's concept would

require the temporary loss of some beds if any areas that have overhead crane work occurring during the construction period.

- Construction of the building shell next to an existing structure complicates design and construction. Building components impacted by the proposed concept include existing building foundations, existing building structure due to increased snow loading and possibly underground utilities.
 - All major utilities do not have adequate capacity at the point of the new construction. The majority of utilities are available and have adequate capacity in the mechanical room which is approximately 500 ft. away. Extension of these utilities will require temporary shutdown of areas in the facility.
 - Security planning is required for moving construction personnel in and out of the construction area.
2. The Sheriff's concept has not fully been developed and has many areas in the scope of work that will impact final project costs. Those areas specifically include the following:
- Construction execution outlined above.
 - The additional beds proposed will substantially increase the electrical requirements for the facility. Expansion of the existing primary electrical room will be required to support the new switchgear required. Electrical demand will exceed DTE allowances and could require a new service entrance or additional fees to upgrade the service.
 - All major utilities do not have adequate capacity at the point of the new construction. The majority of utilities are available and have adequate capacity in the mechanical room which is approximately 500 ft. away. Routing new utilities or modifying existing mains will be required to support the concept.
 - Adequate costs have not been included for expansion of the support facilities required to support the additional beds being added in the Sheriff's concept. Additional facilities include laundry, kitchen, booking, holding cells, inmate medical and record storage.
 - Concept does not include any upgrade of the outdated security system in the existing facility or integration of the existing system with the proposed system being added.
3. The Sheriff's concept impacts several code requirements that may or may not be able to be resolved. Major code compliance issues include:
- The existing courtyards are designed as a means of egress from A, B, C and D blocks. The infill will restrict the egress pathway and offers no solution to provide for an alternative path.
 - The Sheriff's concept, due to the height configuration of the modular cells, will not have floor elevations that match existing floor elevations in the adjacent spaces (other than the first floor). This will substantially impact egress for the upper floors.
 - Elevators may be required in the multilevel building addition to provide complete access to all floors.
 - Conceptual plans do not provide for correctional officers control room on each floor.

4. The Sheriff's concept considers short term planning for the addition only. It does not consider the impact on the existing facility infrastructure. The existing infrastructure (boilers, chillers, etc.) is approaching the end of its useful life. The Administrator's plan considers infrastructure upgrades required and incorporates infrastructure upgrades in the plan with the addition of the facility.
5. The Sheriff's concept will result in higher maintenance costs for the facility. Maintenance cost increases will result from the number of additional mechanical components added (stand alone rooftop air conditioners) and the fact that the concept does not address the aging equipment that is part of the infrastructure.
6. The projected requirements today for year 2010 are estimated at 428 beds for a net increase of 96 beds. The Sheriff's concept to construct 225 beds utilizes capital resources immediately that could be postponed and refined at a later date for future expansions or infrastructure upgrades. It is our opinion that the surplus of beds will result in utilization by the correctional system resulting in an immediate need for support spaces, infrastructure, and capital requirements.

CONCLUSIONS

It is our opinion based on the information available at the time of our review, that the Administrator's plan provides a better overall strategy than the Sheriff's plan for the facility. Our opinion is based on consideration of cost, short/long term strategy and the ability to construct the facility expansion. The additional costs not considered in the Sheriff's concept using industry standard rates is estimated between 4 and 5 million to cover the items summarized in Attachment A – Comparison of Elements.

The Sheriff's concept proposes a technology (modular construction) that can be very cost effective in many applications, but in this application, the technology does not fit the concept. We believe that to execute the modular construction into the courtyard area will result in increased capital costs because of the interface required with the existing facility, complication of construction and logistical issues.

Emergency Egress from the addition in B-C and C-D courtyards as well as existing adjacent blocks cannot meet current building codes and life safety requirements as defined in the proposed conceptual design.

An additional major safety concern is the operation of cranes to lift construction materials and modular components over occupied spaces within the current facility. The sheriff's concept does not provide for the reduced number of beds that overhead construction would require due to the necessary vacating of inmate areas.

In consideration of the two plans evaluated, we would recommend that the design process for the jail expansion include value engineering for critical decision on the infrastructure expansion and renovation. Decision early in the design process can substantially impact the capital, maintenance and operating costs of the facility.

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The information contained in this report, and the conclusions, are based on information that was provided or available at the time the report was prepared. If additional information is discovered, it should be forwarded to our office for further review and comment. Meneghini & Associates, LLC and Process Results, Inc. reserves the right to amend and/or modify this report if new and significant data becomes available that impacts the situation and parameters of this evaluation.

If you have any questions, or need additional information, please feel free to contact us.

Very truly yours,
Meneghini & Associates, LLC

Jim Meneghini, AIA
Principal

DKB/sre

Enclosure: Attachment A – Comparison of Elements

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