NORTH/EAST CITIES COMMITTEE
REGIONAL JAIL STUDY

Site Evaluation Methodology

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Introduction

One of the most challenging aspects of developing a regional jail facility is the identification of a site that is acceptable to all participating jurisdictions. Various studies have been completed on a national scale that refute the oft quoted premise that correctional facilities reduce the land values of surrounding properties, but the challenge of finding a willing recipient of a correctional facility remains.

To assure that the process was as objective as possible, a set of variables were developed that define the predominant factors impacting the location of a regional jail facility. The North/East Cities Committee, NECC, the variables were assigned a "weight" that is intended to indicate the importance of this variable. For example, weighting asks the scorer whether access to public transportation is more or less important that site acquisition costs. As shown in Table 1, three possible weightings were assigned to each variable that is intended to reflect the relative importance of that variable.

Table 1
Recommended Weighting of Variables

Importance	Weight	Comments
Most Important	3	Contributes significantly to site viability.
Important	2	Is a factor, but viability decision is not significantly impacted.
Least Important	1	Has no measurable impact, but should be considered.

The assignment of the relative importance (weight) of a variable was completed by the NECC. The scoring of each variable per site includes assigning a value from 1 to 5 to each variable. A "1" indicates a low score meaning the site does not adequately meet the intent of a particular variable. Conversely, a score of "5" indicates the site meets and exceeds the intent of the variable. Scores of "3" indicate that the intent of the variable is met and would be a norm point. Table 2 depicts the evaluation criteria develop by the NECC and used by consultants for evaluation.

Table 2
Site Evaluation Variables and Weighting

Site Selection Variables	Weight
Site Specific Criteria	
1. Site Area	
Adequate site area to accommodate building footprint, public parking, secure parking, pedestrian and vehicular access, security setbacks and related site development.	*3*
2. Site Configuration and Orientation Potential	
Overall site configuration, geometry and orientation to accommodate the required building footprint, minimum dimensions, zoning setbacks, allowable building area, easements, security setbacks, topographic variation and other site considerations affecting the functional and operational layout of the facility.	*3*
3. Phasing and Expansion	
Adequate site area to accommodate building expansion post 2012, site access and related site development.	*3*
4. Site Compatibility	
Relationship of the site to the surrounding land use.	*3*
5. Zoning	
Current site zoning to allow the detention facility as a permitted use, building heights limitations and bonus height allowance, setbacks and floor area (FAR) limitations. The approval process to obtain variances to the site zoning and degree of difficulty favorable to the detention center without unnecessary delays.	*2*

Table 2 - Continued

Site Evaluation Variables and Weighting

Site Selection Variables	Weight
6. Utilities Infrastructure	
Location of existing utility services adjacent to the site to include electric, telephone, fiber optics, water sanitary sewer, storm sewer, gas, storm water detention/retention, etc. Capacity and redundancy to assure continuous operation.	*3*
7. Negative Site Characteristics	
Least amount of impacts that affect circulation to or operation of the detention center including railroad tracks, etc.	*1*
Functional Criteria	
8. Operational Infrastructure	
Ability of the site to accommodate operation of the building facilities such as trash removals, recycling, emergency vehicle movements.	*2*
9. Public Image & Visibility	
Considerations to include public image of the site as an appropriate setting for a detention facility, existing site features, visibility from adjacent buildings and districts, neighborhood character, topography, views from the facility, open space, etc.	*2*
10. Site Amenities & Adjacent Facilities	
Proximity of the site to adjacent amenities, existing parking facilities, shopping, restaurants, convenience establishments, etc.	*1*
11. External Site Security	
Includes crime rates relative to the proposed site; ability to provide required "stand-off" setbacks or barrier requirements, buildings on or near the site that could present fire hazards; emergency response times; presence of tunnels, tunnel interceptors, sanitary and storm sewers on or near the site; proximity to gas pipelines and other similar security concerns.	*1*
Site Accessibility & Parking Criteria	
12. Public and Pedestrian Access	
Relationship of the site to existing pedestrian systems, walking distances from parking facilities, related uses, etc.	*1*
13. Public Transportation Access	
Relationship of the site to public transportation facilities to include public bus routes and stops, shuttle systems and other public transportation systems.	*3*
14. Vehicular Accessibility	
Once in the general area, convenience of vehicular accessibility to the site from local roads, ease of wayfinding.	*3*
15. Regional Access	
Accessibility to the site from cities' and related justice facilities; minimizing driving distances.	*3*

Table 2 - Continued
Site Evaluation Variables and Weighting

Site Selection Variables	Weight
16. Parking	
Adequacy of the site to accommodate required parking for the proposed facilities, including adjacency of parking for staff and public within 600 feet of the detention facility. Is parking easily accessible without crossing streets? Is a covered connection possible?	*2*
Technical Criteria	
17. Soil and Subsurface Conditions	
Suitability of soils for construction of buildings and facilities, absence of rock, existing building foundations, contaminated soils, high water table, potential groundwater migration, etc.	*3*
18. Historic Considerations	
Locations within historic districts; presence of historic structures or archaeological features on the site and relative likelihood of obtaining approval to demolish the buildings or features.	*2*
19. Environmental Factors	
Sites which have complicated environmental reviews and approvals that cannot easily be amended; potential liabilities related to soil remediation and other environmental considerations.	*3*
Land Acquisition and Cost Criteria	
20. Site Ownership, Availability and Ease of Acquisition	
Consideration of sites with one owner, without existing development and without complicated acquisition problems such as vacation of easements and rights-of-ways, deed restrictions and covenants and lease termination. Acquisition includes estimated time to acquire the site and ease in dealing with private owners and regulatory agencies.	*3*
21. Acquisition Costs	
Site acquisition costs based on the assessed value of property from King County tax records.	*1*
22. Site Development Costs and Readiness	
Specific development costs and time to prepare include demolition of existing structures, site work allowance for utilities and roadway improvements, and misc. expenses such as utility relocations.	*2*
23. Parking Cost	
Cost to construct parking for public and staff.	*1*
24. Displacement Impact	
Costs of relocating existing tenants, facilities and open space.	*2*
Total Number of Variables Weighted 3	*11*
Total Number of Variables Weighted 2	*7*
Total Number of Variables Weighted 1	*6*

Source: Carter Goble Lee and NECC; September 2008

Consultants studied each site and base a rating for each variable on the "1 to 5" method previously noted. Site variables were multiplied by the weight assigned by the NECC providing an overall score for each criterion. Twelve sites were evaluated and broken into four tiers of three sites with comparable ratings. Evaluators included local consultants and design professionals with extensive jail design experience. Every effort was given to address evaluations objectively. The methodologies for evaluation of each criterion were as follows:

Site Specific Criteria

Criteria 1- Site Area; Adequate site area to accommodate building footprint, public parking, secure parking, pedestrian and vehicular access, security setbacks and related site development.

The directive required evaluation of sites to accommodate three different potential populations housed, 200, 440 and 640 misdemeanor inmates and associated support services. The NECC determined the 7 following assumptions as drivers.

1. Both a single and four-story configuration would be tested with the size of the support core the determinant of the building footprint.

2. In all instances, the housing units would be operated on a dayroom and mezzanine concept. This typically means that of the estimated size of a housing unit, approximately 15% of that size will be located at the mezzanine level.

3. Surface parking area was calculated at 500 SF per vehicle to allow for parking spaces, drives, sidewalks, and landscaped areas.

4. While surface parking was preferred by the NECC for cost purposes, the analysis also considered the site area requirements based upon a two-level parking structure with parking space based on 420 square feet per vehicle which includes ramps, circulation, and stairs.

5. Parking calculations assumed that at least a 30-45 minute overlap should be permitted for the 1st and 2nd shifts which employ the greatest percentage of the staff. The calculations also assumed that 15% of the 1st and 2nd shift staff would arrive at work by modes not requiring a parking space.

6. The calculation of official and family visitor spaces was based on 50% of the staff spaces provided. This assumption also provides a "cushion" for additional staff that may elect in the future to drive to work.

7. As noted, a 50 foot buffer zone was calculated around the building and parking areas for landscaping and a security zone. For calculation purposes, the site configuration was assumed to be rectilinear with a minimum dimension of 350 feet in one direction; the approximate dimension of a city block.

Programming in the Phase One Report determined a minimum and maximum site size for each housed population. A facility with a population of 200 requires between 3.0 to 4.7 acres. For 440 bed facility the site variable increased to the minimum of 3.8 to the maximum of 6.9 acres. While a population of 640 requires 4.5 to 9.2 acres. Considering the ranges with a base minimum of 3.0 acres and the highest maximum of 9.2 acres the norm was 6.1 acres.

Criteria 2 - Site Configuration and Orientation Potential; Overall site configuration, geometry and orientation to accommodate the required building footprint, minimum dimensions, zoning setbacks, allowable building area,

easements, security setbacks, topographic variation and other site considerations affecting the functional and operational layout of the facility.
The team visited, walked and photographed each site and surrounding areas. The Jail Consultant evaluated geometry to consider a potential building footprint and potential operational access and available site services. Zoning standards were reviewed to determine setbacks, lot coverage limitations and other applicable standards.

Criteria 3 – Phasing and Expansion; Adequate site area to accommodate building expansion post 2012, site access and related site development.

Scoring was based on available site area that is in excess of the area necessary to support the program needs. The ability of directly abutting parcels to accommodate program expansion was also considered. Information used included observations from site visits, review of current aerial photographs and local and county GIS data.

Criteria 4 - Site Compatibility; Relationship of the site to the surrounding land use

A high priority by the NECC, consideration was given for adjacency types and relative density of the adjacent land use. Norm was set for sites with surrounding areas of less pedestrian density and commercial in nature.

Criteria 5 - Zoning; Current site zoning to allow the detention facility as a permitted use, building heights limitations and bonus height allowance, setbacks and floor area (FAR) limitations. The approval process to obtain variances to the site zoning and degree of difficulty favorable to the detention center without unnecessary delays

Site zoning was determined by consulting city or county zoning maps and codes. Allowed uses were reviewed to determine if jails/correctional facilities were allowed and what process was necessary to obtain approval. Zoning standards for height, setback, FAR limitations or site coverage was reviewed to determine if assumed building scenarios required special exceptions.

Criteria 6- Utilities Infrastructure; Location of existing utility services adjacent to the site to include electric, telephone, fiber optics, water sanitary sewer, storm sewer, gas, storm water detention/retention, etc. Capacity and redundancy to assure continuous operation

Utility infrastructure will be necessary to support jail operations. Assumptions were made about utility availability based on development on the sites and surrounding areas and from agency utility maps when available. General conclusions were made about availability but detailed review of capacity and limitations were not within the scope of the review.

Criteria 7 - Negative Site Characteristics; Least amount of impacts that affect circulation to or operation of the detention center including railroad tracks, etc.

The team visited, walked and photographed each site and surrounding areas. In addition, aerial photos and maps were reviewed. The consultants evaluated the site and surrounding areas for characteristics that would affect normal and continuous jail operations.

Functional Criteria

Criteria 8- Operational Infrastructure; Ability *of the site to accommodate operation of the building facilities such as trash removals, recycling, emergency vehicle movements.*

Evaluation considers flow in and around the site for typical services and emergency needs. An appropriate norm considers adjacent major avenues of access and alternate routes of ingress and egress to determine the potential effects of daily facility operations.

Criteria 9 - Public Image & Visibility; Considerations to include public image of the site as an appropriate setting for a detention facility, existing site features, visibility from adjacent buildings and districts, neighborhood character, topography, views from the facility, open space, etc.

The Phase One Report supports common findings that jail facilities, despite common perception, improve the regional environments they locate. However, the norm for public image and visibility considers industrial and commercial sites higher potential for evaluation. Based on site visits and aerial photos the nature of the site and surrounding areas was considered including the visibility of the site from the surrounding areas.

Criteria 10- Site Amenities & Adjacent Facilities; Proximity of the site to adjacent amenities, existing parking facilities, shopping, restaurants, convenience establishments, etc.

Information obtained from site visits and aerial photos were assessed to determine if adjacent land uses were complimentary and supported jail visitors and staff. The presence of typical services such as restaurants and shopping in close proximity to the site scored higher than sites where adjacent land uses did contain such services.

Criteria 11- External Site Security; Includes crime rates relative to the proposed site; ability to provide required "stand-off" setbacks or barrier requirements, buildings on or near the site that could present fire hazards; emergency response times; presence of tunnels, tunnel interceptors, sanitary and storm sewers on or near the site; proximity to gas pipelines and other similar security concerns.

External site security considers public, staff, and occupant safety. Review looks at adjacencies, site services, potential services, existing right of way, and setbacks. Norm relates to area density and perimeter relations.

Site Accessibility & Parking Criteria

Criteria 12- Public and Pedestrian Access; *Relationship of the site to existing pedestrian systems, walking distances from parking facilities, related uses, etc.*

Information obtained from site visits and aerial photos were reviewed to determine if the site was connected to a complete pedestrian network that provided access to goods and services that were usable by jail visitors and staff. Sites without a complete pedestrian network scored lower.

Criteria 13- Public Transportation Access; *Relationship of the site to public transportation facilities to include public bus routes and stops, shuttle systems and other public transportation systems*

The sites were reviewed in the context of the established transit system. Sites that were served by multiple routes or high frequency services to regional destinations or connections scored higher. The norms were sites that were located within walking distance of a bus route but service was limited.

Criteria 14- Vehicular Accessibility; *Once in the general area, convenience of vehicular accessibility to the site from local roads, ease of way-finding.*

Vehicular accessibility considers the ease of vehicular access to the site. Review considered distance, number of turns, general levels of congestion and visibility of site from transportation routes. In addition, known high density traffic areas caused scores to be lowered.

Criteria 15- Regional Access; *Accessibility to the site from cities' and related justice facilities; minimizing driving distances*

Consultants considered the accessibility of the site from major highways (I-5, 1-90, SR 520, I-405) and the distance and ease of access of the site to the major population centers and potential jail users.

Criteria 16- Parking; *Adequacy of the site to accommodate required parking for the proposed facilities, including adjacency of parking for staff and public within 600 feet of the detention facility, Is parking easily accessible without crossing streets? Is a covered connection possible?*

The NECC recommendations directed planning for surface parking. Considering carpooling, local transit, shift changes and accessibility the norm considers site size and configuration.

Technical Criteria

Criteria 17- Soil and Subsurface Conditions; *Suitability of soils for construction of buildings and facilities, absence of rock, existing building foundations, contaminated soils, high water table, potential groundwater migration, etc.*

Local soils and critical area maps were reviewed to determine if site soils or geologic conditions (landslide, liquefaction areas, etc) would require special engineering or construction methods. Washington State records were reviewed to determine if sites were on the Hazardous Sites List.

Criteria 18- Historic Considerations; *Locations within historic districts; presence of historic structures or archaeological features on the site and relative likelihood of obtaining approval to demolish the buildings or features*

The Washington State WISAARD mapping program was accessed to determine if the candidate sites were recognized historic sites. The age and nature of the structures and history of disturbance was evaluated to determine the potential for historic resources.

Criteria 19- Environmental Factors; *Sites which have complicated environmental reviews and approvals that cannot easily be amended; potential liabilities related to soil remediation and other environmental considerations.*

Local critical areas maps and aerial photos were utilized to determine if any wetlands, wildlife habitat or geologic issues were present that would require special studies and permitting.

Land Acquisition and Cost Criteria

Criteria 20- Site Ownership; Availability and Ease of Acquisition, Consideration *of sites with one owner, without existing development and without complicated acquisition problems such as vacation of easements and rights-of-ways, deed restrictions and covenants and lease termination, Acquisition includes estimated time to acquire the site and ease in dealing with private owners and regulatory agencies*

NECC determination working with consultants directed that the norm would be for existing ownership by NECC participating member municipalities. In addition, norm would be extended for properties currently under purchase agreement with a member municipality. Reduced ratings would be given to sites of multiple, private or federal ownership.

Criteria 21- Acquisition Costs; *Site acquisition costs based on the assessed value of property from King County tax records.*

King County property assessments were used to determine per acre land values. Working with the NECC and local consultants, it was determined to use a 1.5 multiplier added to each site to develop a reasonable market value. The market value cost per acre ranged from $369,628 to $5,005,417. However, relative to all land values the low and high were extremes. The interpolated norm ranged from $1.3M to $1.7M per acres. Considering the average site size evaluation criteria of 6.1 acres, an adjusted average site value would be approximately $9,100,000.

Criteria 22- Site Development Costs and Readiness; *Specific development costs and time to prepare include demolition of existing structures, site work allowance for utilities and roadway improvements, and misc. expenses such as utility relocations.*

Ownership and occupancy varied for all sites. Some properties reviewed were vacant land; others had building and site improvements which were not occupied, while others were occupied and fully operational. Consideration was give for acquisition time, relocation of existing operations and site preparation for long term improvements. The norm was determined as vacant land. Sites with active operations or non-occupied structures were given lower scores. Also consideration was given for difficulty for demolition and relocation of existing construction types, existing services and density of the site improvements.

Criteria 23- Parking Cost; *Cost to construct parking for public and staff*

Initial direction by NECC considered site parking. However, after factoring preliminary land cost estimates of proposed sites, the NECC membership requested consideration for structured parking and smaller site sizing. Evaluation for structured parking includes enhanced understanding of site topography, access, area height limitations and site circulation for services. Typically the smaller sites were most expensive and located in high density developed areas. Structured parking frequently offered savings when valuated against land costs. The norm was established for sites large enough to facilitate surface parking.

Criteria 24- Displacement Impact; *Costs of relocating existing tenants, facilities and open space*

Most occupied properties were privately owned. Tenant relocation would impact both the construction and occupancy schedules. Norm was established for un-occupied properties.