

Courthouse Cost Reduction Subcommittee 100 Percent Design Development Review Report

NEW SANTA ROSA CRIMINAL
COURTHOUSE
SUPERIOR COURT OF CALIFORNIA
COUNTY OF SONOMA

March 30, 2017

JUDICIAL COUNCIL OF CALIFORNIA
OPERATIONS AND PROGRAMS DIVISION
CAPITAL PROGRAM

SENIOR PROJECT MANAGER
DEEPIKA PADAM

1. Executive Summary of Project Status at 100% Design Development

At the completion of Design Development, the project status is as follows:

- 1.1 Scope – the project is within the approved scope, as described below.
- 1.2 Budget – the project is within budget. This project has reduced the hard construction cost by 15.61 percent to meet both Judicial Council-mandated reductions of 14 percent and additional reductions directed by the CCRS.
- 1.3 Schedule – the project schedule is delayed due to State budget challenges. If the project is authorized to begin Working Drawings phase in fiscal year 2017–18, construction is expected to start in the first quarter of 2019.

2. Background

2.1. Budget Year 2009-2010 – initial project authorization:

- Project first submitted for SB 1407 funding authorization.
- Acquisition phase funding transferred in August 2009.
- Original Approved FY 2009-2010 Building Gross Square Feet (BGSF): 173,500 SF

2.2. Budget Year 2010-2011:

- Project delivery method changed from Design Build to Construction Manager at Risk which resulted in budget adjustments to each phase.
- Original Acquisition phase funding requested was reduced by \$5.663 million due to Judicial Council negotiation with the County of Sonoma to acquire parcel of land at one-half the appraised value.
- Hard Construction Cost subtotal in FY 2010-2011 reduced in response to Judicial Council mandated reductions.

2.3. Budget Year 2012-2013:

- Project was delayed due to a redirection of resources from the Immediate and Critical Needs Account (ICNA).
- Hard Construction Cost subtotal: \$99,057,863

2.4. Budget Year 2014-2015:

- Project restarted once Preliminary Plans Phase appropriation was approved in the FY 2014-2015 Budget Act.
- New building size: 169,342 BGSF
- New Hard Construction Cost subtotal is \$83,591,843.

- 2.5. Budget Year 2015-2016:
 - Working Drawings funding appropriated in FY 2015-2016 Budget Act.
- 2.6. Budget Year 2016-2017:
 - Working Drawings funding re-appropriated in FY 2016-2017 Budget Act.
- 2.7. Summary of changes to Hard Construction Cost Subtotal:
 - FY 2012-2013 Budget Year: \$ 99,057,863
 - Current (2016-2017 Budget Year): \$ 83,591,843
 - Reduction from FY 2012-2013 budget: \$ 15,466,020 or 15.61%
- 2.8. Summary of changes to BGSF:
 - FY 2012-2013 Budget Year: 173,500 BGSF
 - Current (2016-2017 Budget Year): 169,342 BGSF
 - Reduction from Original to Current: 4,158 BGSF, or approximately 2.4% decrease.

3. CCRS Review and Directives

The CCRS has reviewed this project's scope, budget, and schedule at three meetings, covering three key milestones as follows:

- 3.1. January 10, 2014: Pre-Design Review: The CCRS approved the site, directed the project team to make changes to some of the building program elements, and approved the start of Preliminary Plans phase.
- 3.2. October 22, 2015: 100% Schematic Design Review: The CCRS directed staff to report back on funds within the project's soft costs that may be used for construction of rooftop enclosure. The CCRS approved the 100% Schematic Design and approved the start of Design Development.
- 3.3. March 3, 2016: 50% Design Development Review: The CCRS directed staff to report back on funds within the project's soft costs that may be used for construction of rooftop enclosure. The CCRS approved the 50% Design Development and approved the start of 100% Design Development with the requirement of eliminating the estimated budget deficit of approximately \$3.01 million.

4. Project Update

The project is submitted for 100% Design Development approval. During this period the approved plans have been further developed and include appropriate detail for completion of the design development phase and outline the entire building scope.

Since the completion of 50% Design Development, Peer Review was conducted at the completion of 100% Design Development. The Judicial Council's planning, facilities, security and architectural/project management staff and outside consultants for architectural peer review were engaged in the process.

The project has also undergone constructability and value engineering reviews with the requirement of eliminating the budget deficit of \$3.01 million reported to CCRS at 50% Design Development. Several value engineering strategies were used to reduce the overall cost of the project and bring it on budget. Costs were reduced primarily by relocating some mechanical equipment to reduce duct lengths, improving the overall efficiency of the building envelope, reducing the quality of architectural finishes in building exterior and interior, reducing the height of the administrative level, reducing glazing, reducing cast in place concrete, and reducing the number of trees in the landscape.

Additionally, the project was peer reviewed by an independent geotechnical engineering firm and a structural firm to determine the most effective structural foundation design due to poor soil conditions. Based on the recommendations, the foundation design has been changed to mat foundations instead of bored piles to achieve additional cost savings.

At the 100% Schematic Design presentation to CCRS held on October 22, 2015, the project team had reported that the project could not afford the rooftop enclosure for mechanical equipment within its hard construction budget, estimated to be approximately \$600,000. The CCRS had directed the team to find funds within the project soft costs for the construction of the rooftop mechanical equipment enclosure. During the Design Development phase, the project team met with State Fire Marshall (SFM) for the initial review of drawings. Because the rooftop enclosure covers more than one-third of the roof, the code requires the same construction type as the rest of the building, thus, designating it as a penthouse in lieu of a simpler rooftop enclosure. Consequently, the design was updated to incorporate a penthouse, estimated to be approximately \$1.5 million in construction cost.

The project team reported at the CCRS 50% Design Development presentation held on March 3, 2016 that savings in soft costs to fund the construction of the penthouse should be identified by the end of 100% Design Development. At the completion of 100% Design Development, the soft cost savings is available for the construction of the penthouse; however, because of additional value engineering, the partial penthouse can be funded with hard construction funds. By reducing the size of the penthouse, the project was able to save some costs in the penthouse construction. The mechanical air handling units will be of exterior grade and not enclosed within the penthouse. A vertical screen

will be provided around the equipment for screening from view and wind. Due to the mild climate of the Santa Rosa region, the exterior grade air-handling units have been deemed appropriate for this project by the JCC Facilities Management Unit. This project will not require any funds to be transferred from soft costs for the construction of the partial penthouse.

5. Schedule

The project is ready to proceed to Working Drawings phase and the target completion date for Working Drawings Phase is December 2019.

a Phase	b Current Authorized Schedule FY 16/17		d Current Schedule		f Percent Complete
	c Start Date	c Finish Date	e Start Date	e Finish Date	
Site Selection	7/28/09	2/16/10	7/28/09	2/16/10	100%
Site Acquisition	2/17/10	4/13/12	2/17/10	4/11/12	100%
				(Old Jail Site) 4/1/12	
				(parking sites)	
Preliminary Plans.....	2/1/15	6/10/16	3/02/15	5/23/17	100%
Working Drawings & Approval to Bid.	6/11/16	5/18/17	7/2/18	6/7/19	—
Bid and Contract Award	5/19/17	1/12/18	6/10/19	11/29/19	—
Construction.....	1/13/18	11/20/20	1/13/20	8/19/22	—
Move-in	11/21/20	12/21/20	8/22/22	9/16/22	—

6. Status of Hard Construction Cost Budget and 100% Design Development Estimate

Below is a summary of the hard construction reductions based on the council direction of December 2011, CFAC direction in October 2012 and additional reductions accepted by the CCRS in December 2013, the current design-to-budget, and a comparison of the current hard construction cost budget to the 100% Design Development estimate.

6.1. Calculation of Hard Construction Cost Budget with Judicial Council Directed and CCRS Accepted Reductions

FY 12-13 Hard Construction Cost Subtotal	\$ 99,057,863
FY 12-13: JC mandated 4% reduction	\$ (3,829,152)
FY 13-14: CFAC mandated 10% reduction	\$ (9,778,822)
FY14-15 CCRS mandated BGSF reduction.....	(1,858,046)
<i>Revised Hard Construction Cost Subtotal</i>	<i>\$ 83,591,843</i>
Cost Reduction Achieved	\$ 15,466,020
Cost Reduction as percent of Construction Cost Subtotal	% 15.61

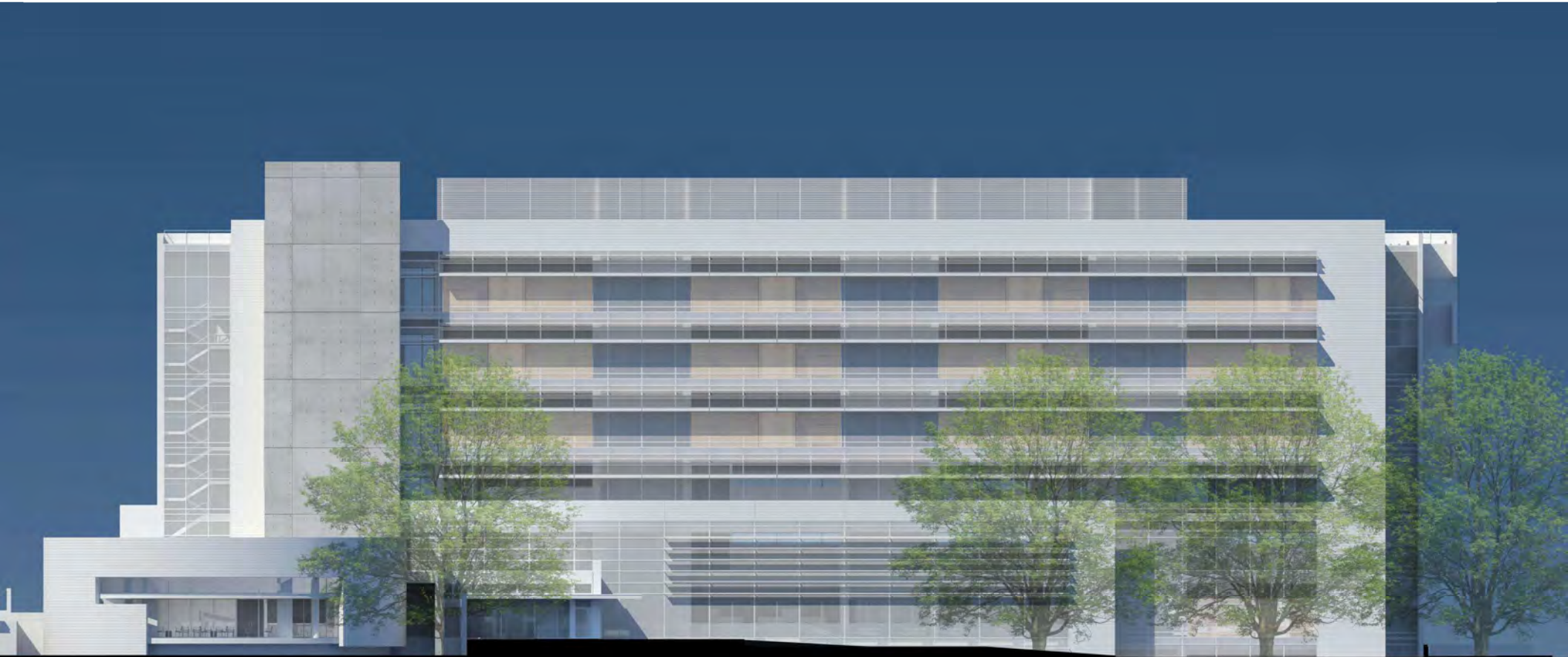
6.2. Design-to-Budget Calculation

Hard Construction cost subtotal.....	\$ 83,591,843
Data, Communication and Security	\$ 2,878,814
CCCI Adjustment 5264 to 6106 (Sep 2009 to Jan 2016).....	\$ 13,831,362
Current Design-to-Budget	\$ 100,302,019

6.3. Summary of Design-to-Budget in Comparison to 100% Design Development Estimate

The consolidated Design Development cost estimate prepared by Construction Management Agency (AECOM), Construction Manager at Risk (Rudolph & Sletten) and design team's estimator (MGAC), shows the project to be within budget.

RENDERINGS



RENDERINGS



BUILDING SECTION



BUILDING SECTION



LEED UPDATE

- JCC requirement to achieve **LEED Silver** level certification
- Project is registered with USGBC (LEED # 1000065460) under LEED 2009
- Tracking 60 Yes / 22 Maybe / 28 No points – goal is 50 points for LEED Silver

LEED 2009 for New Construction and Major Renovations				Santa Rosa Courthouse			
Project Checklist							
18 6 2 Sustainable Sites		Possible Points: 26		Materials and Resources, Continued			
Y	Prereq 1	Construction Activity Pollution Prevention		Y	Prereq 4	Recycled Content	1 to 2
1	Credit 1	Site Selection	1	2	Credit 5	Regional Materials	1 to 2
5	Credit 2	Development Density and Community Connectivity	5	1	Credit 6	Rapidly Renewable Materials	1
1	Credit 3	Brownfield Redevelopment	1	1	Credit 7	Certified Wood	1
6	Credit 4.1	Alternative Transportation—Public Transportation Access	6				
1	Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1				
3	Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3				
2	Credit 4.4	Alternative Transportation—Parking Capacity	2				
1	Credit 5.1	Site Development—Protect or Restore Habitat	1				
1	Credit 5.2	Site Development—Maximize Open Space	1				
1	Credit 6.1	Stormwater Design—Quantity Control	1				
1	Credit 6.2	Stormwater Design—Quality Control	1				
1	Credit 7.1	Heat Island Effect—Non-roof	1				
1	Credit 7.2	Heat Island Effect—Roof	1				
1	Credit 8	Light Pollution Reduction	1				
4 3 3 Water Efficiency		Possible Points: 10		11 3 1 Indoor Environmental Quality		Possible Points: 15	
Y	Prereq 1	Water Use Reduction—20% Reduction		Y	Prereq 1	Minimum Indoor Air Quality Performance	
2	Credit 1	Water Efficient Landscaping	2 to 4	1	Prereq 2	Environmental Tobacco Smoke (ETS) Control	
2	Credit 2	Innovative Wastewater Technologies	2	1	Credit 1	Outdoor Air Delivery Monitoring	1
1	Credit 3	Water Use Reduction	2 to 4	1	Credit 2	Increased Ventilation	1
				1	Credit 3.1	Construction IAQ Management Plan—During Construction	1
				1	Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
				1	Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
				1	Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
				1	Credit 4.3	Low-Emitting Materials—Flooring Systems	1
				1	Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
				1	Credit 5	Indoor Chemical and Pollutant Source Control	1
				1	Credit 6.1	Controllability of Systems—Lighting	1
				1	Credit 6.2	Controllability of Systems—Thermal Comfort	1
				1	Credit 7.1	Thermal Comfort—Design	1
				1	Credit 7.2	Thermal Comfort—Verification	1
				1	Credit 8.1	Daylight and Views—Daylight	1
				1	Credit 8.2	Daylight and Views—Views	1
13 6 16 Energy and Atmosphere		Possible Points: 35		6 Innovation and Design Process		Possible Points: 6	
Y	Prereq 1	Fundamental Commissioning of Building Energy Systems		1	Credit 1.1	Innovation: Historical Trees Preservation	1
Y	Prereq 2	Minimum Energy Performance		1	Credit 1.2	Innovation: Controllability of small power shut-off	1
Y	Prereq 3	Fundamental Refrigerant Management		1	Credit 1.3	Innovation: Integrated Pest Control	1
6	Credit 1	Optimize Energy Performance	1 to 19	1	Credit 1.4	Innovation: Green Cleaning	1
7	Credit 2	On-Site Renewable Energy	1 to 7	1	Credit 1.5	Exemplary Performance: Construction Waste Management	1
2	Credit 3	Enhanced Commissioning	2	1	Credit 2	LEED Accredited Professional	1
2	Credit 4	Enhanced Refrigerant Management	2				
3	Credit 5	Measurement and Verification	3				
2	Credit 6	Green Power	2				
6 2 6 Materials and Resources		Possible Points: 14		2 2 2 Regional Priority Credits		Possible Points: 4	
Y	Prereq 1	Storage and Collection of Recyclables		1	Credit 1.1	Regional Priority: SSC4.1- Public Transportation	1
3	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3	1	Credit 1.2	Regional Priority: WE3-3-Water Use Reduction (40% Required)	1
1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1	1	Credit 1.3	Regional Priority: IEQc8.1 (Daylight)	1
2	Credit 2	Construction Waste Management	1 to 2	1	Credit 1.4	Regional Priority: EAc2 - On-site Renewable Energy	1
2	Credit 3	Materials Reuse	1 to 2				
60 22 28 Total		Possible Points: 110					