



Children and Family Justice Center Project Briefing

September 23, 2015



Today's Briefing

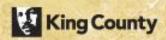


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Children and Family Justice Center

- Design Update
- ☐ 120 Day Design Verification Report
- Alternative Energy Report





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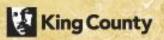


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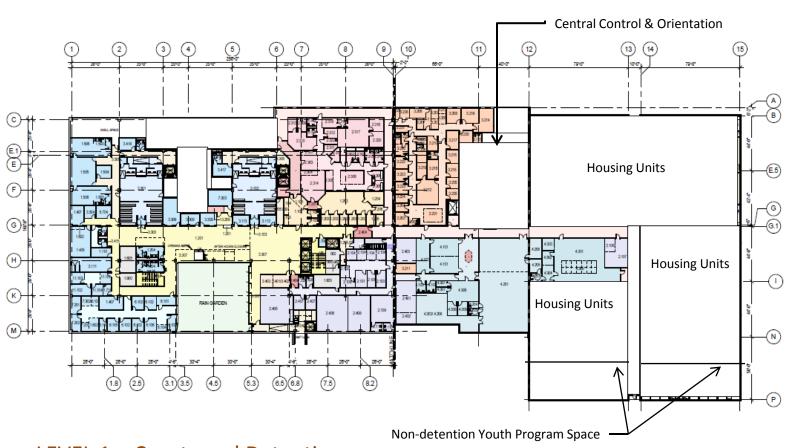
2012 - Concept Diagram

2015 - Final Schematic Design



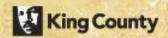


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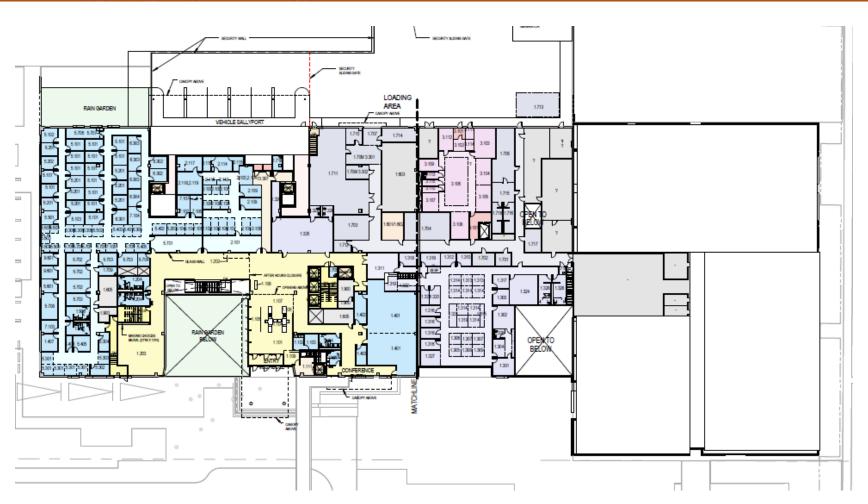


LEVEL 1 – Courts and Detention





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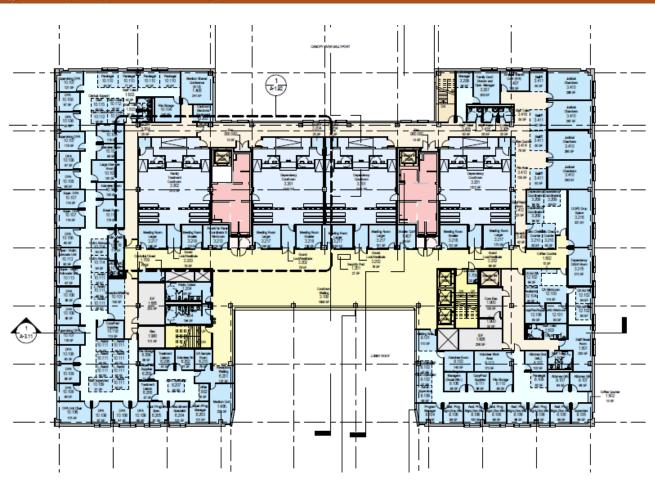


LEVEL 2 – Courts and Detention



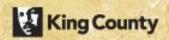


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Design



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View of the Lobby



View into Rain Garden

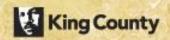




Courtroom Waiting Area



Design



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12th Avenue Elevation



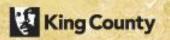
COURTHOUSE

ALDER SCHOOL

HOUSING



Design



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120 day Design Report



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Results of Design Meetings

- Current design accepted by project stakeholders
- Incorporated feedback from Neighborhood Advisory Committee
 - Included representatives from Seattle Design Commission
- On track to achieve LEED Gold

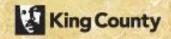
Contract Modifications

- Accepted Alternate 1: Expanded court areas (12,000 sf): \$100
- Accepted Alternate 2: Expanded detention area (4,000 sf): \$100
- Approved Change to include Alder School in the Master Use Permit: \$15,000

Scope Issues

No scope issues claimed by the Design Build team at this time



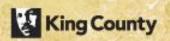


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Methodology

- 1. Define the strategy
 - a. Reduce/Reuse/Recycle Energy
- 2. Develop Alternatives within the overall strategy
 - a. 26% less energy use than a LEED Baseline building
 - b. 20% less energy use than a building complying with the Seattle Energy Code
- 3. Model Alternative Systems
- 4. Life Cycle Cost Analysis and Green House Gas Emissions
- 5. Summary of Findings and Recommendation





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Strategy: Reduce/Reuse/Recycle

Reduce

 Identify opportunities to reduce inherent need of the building to use energy

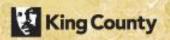
Reuse

 Identify opportunities to transfer energy from one part of the building to another while simultaneously working

Recycle

Identify opportunities to recover energy





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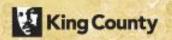
Develop Alternatives within the Strategy

<u>Base system</u>: Central Plant with Geothermal Wells and Heat Recovery Chiller sized for 50% heating and cooling capacity

Alternatives:

- 1. Base system + Standard Chillers and Boilers for Peak Loads
- 2. Base System + High Efficiency Water Cooled Chillers for peak loads
- 3. Base System + High Efficiency Boilers for peak loads
- 4. Base System + Active Chilled Beam System (Court areas only)
- 5. Base System + Passive Chilled Beam and Perimeter Radiant Heating (Court areas only)
- 6. Central Plant with Geothermal Wells and Heat Recovery Chiller 100% capacity
- 7. Base System + Steam Peak Heating



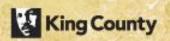


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Analysis of Systems

- Life Cycle Cost
 - First Cost
 - Energy Cost
 - Operating Costs
 - Equipment Replacement
- Site Energy Use Intensity (EUI)
- Energy Cost Index (ECI)
- Green House Gas Emissions





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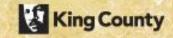
Recommended System

<u>Central Plant with Geothermal Wells and Heat Recovery Chiller sized</u> <u>for 50% heating and cooling capacity + Standard Chillers and Boilers</u>

- Meets the Energy Goals of the project
 - 26% less energy than LEED Baseline building
 - 20% less energy than a building complying with Seattle Energy Codes
- Lowest Life Cycle Cost
- Site EUI 71% more efficient than a comparable existing building
- 97.5% less emissions than median building of this size
 - Equivalent to removing 397 passenger cars from the road
- Complies with Seattle 2030 District



Upcoming Milestones



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September 2015

50% Design Development submittal

November 2015

100% Design Development submittal

December 2015

Agencies relocated from Alder Wing to Alder Tower to allow for demolition of Alder Wing

January 2015

Begin Parking Incentive Program with Metro to reduce onsite parking demand during construction



Questions