



COMMITTEE OF THE WHOLE

Cornerstone Update

11 JULY 2023

Agenda

- » WHAT WE'VE HEARD Q/A (since 5/30 COW)
- » TASK 1: IDENTIFY RECAP
- » FINANCIAL / COST BREAKDOWN
 - Review project costs
- » WRAP-UP
 - Next Steps

What we've heard

» How big are the existing facilities.

Facility	Own/Lease	Area (gsf)
L.K. Roos	Own	197,487
Police Headquarters	Own	149,746
TPW (1050 N. Lindbergh)	Own	29,590
NW Crossings	Lease	140,082
NW Crossing Gov't Center (8 th Floor)	Lease	15,193
South Satellite	Lease	19,800
West Satellite	Lease	9,855
South Health Clinic	Own	25,430
S. Watson Assessor	Lease	14,920
Property Control (not in scope)		
10		602,094

What we've heard

» Why are we considering a 20-year cost?

- A 20-year cost projection accomplishes a few things:
 - Identifies a more accurate reflection of what the project will cost over time instead of just its initial value.
 - Allows the county to better understand budget impacts over time.
 - Allows the county to more accurately budget for on-going maintenance and operational costs.
 - Helps identify the best value project that provides an indication of both cost and operational value over time.

What we've heard

- » Why are we considering other factors than just sprinklers?
 - When it became apparent the cost of providing the sprinkler system was as high as it is due to adjacent impacts, the County decided to take an opportunity to identify opportunities to make other improvements.
 - “Why spend money on something you rarely see and hope to never use?”
Stephanie Leon Streeter, Director of Transportation and Public Works

What we've heard

» Why can't we just renovate the L.K. Roos building?

- The L.K. Roos administration building is 50+ years old. The project team has studied renovation options and compared them to new options over the same 20-year planning horizon. The renovation options overall best-value scores were lower than new construction reasons for a few reasons.
 - Renovating the L.K. Roos building is riskier financially.
 - Renovating the L.K. Roos provides minimal improvement to customer service.
 - Renovating the L.K. Roos will require scheduling and mobilization impacts to the construction partner, county staff, and public.
 - Renovating the L.K. Roos will require two additional capital maintenance projects 5 to 10 years after the first sprinkler project is complete.

What we've heard

» Is the L.K. Roos building “that bad”?

- County staff had documented a few areas of significant concern regarding the long-term viability of this facility.
 - Asbestos
 - Water Intrusion
 - Structural Issues
 - Water Piping
 - Equipment
 - Exterior Conditions

ASBESTOS

» Prevalent throughout L.K.R and PHQ.

- Asbestos was used as a spray applied fire proofing on all steel and adhesives.

» When is it a problem?

- When it becomes loose (friable) it has the potential to become air borne and breathable
- When it gets wet, it becomes friable.
- Air borne asbestos is a known carcinogen health risk



ASBESTOS

» Why is it expensive?

- Asbestos must be removed in a highly controlled environment by specialty licensed contractors.
- Materials removed during abatement must be disposed of in a special land-fill to account for hazardous material.
- Abatement must also be monitored during the process.



WATER

- » Prevalent at exterior windows, especially upper floors
- » Water intrusion occurs often enough that staff employs drip containment to minimize impacts when possible



WATER

» Why is this a problem?

- Water from 9th floor impacts lower floors.
- Water intrusion impacts finish materials
- Water intrusion impacts asbestos materials
- Water intrusion deteriorates substrates and generates mold
 - Brick ties at building envelope
 - Metal studs within partitions
 - Structural members and anchors
 - Drywall paper backing materials encourages mold growth



WATER

- » Infiltrates lower levels through foundation and foundation penetrations.
 - Adjacent to and surrounding high-voltage electrical equipment
 - At pipe penetrations providing incoming service and serving other facilities.
 - Degrades building materials



WATER

» Impacts of failure

- Significant water infiltration could damage primary infrastructure requiring building shut-down
 - Electrical Service
 - IT Service
 - Structural systems
- May eventually result in additional environmental contamination due to mold growth.



STRUCTURAL SYSTEM

- » Bracing installed to minimize future impacts
 - Cracking still occurring



WATER PIPING

- » End of Design Life:
 - Water Piping
 - Sewer Drain Piping
- » Potential Impacts of failure
 - Sewer gas release
 - Water release (Sewer and Potable)
 - Likely impact floor of failure and those below.
 - Asbestos becomes loose
 - Potential for mold growth
 - May require building closure during repair



WATER PIPING

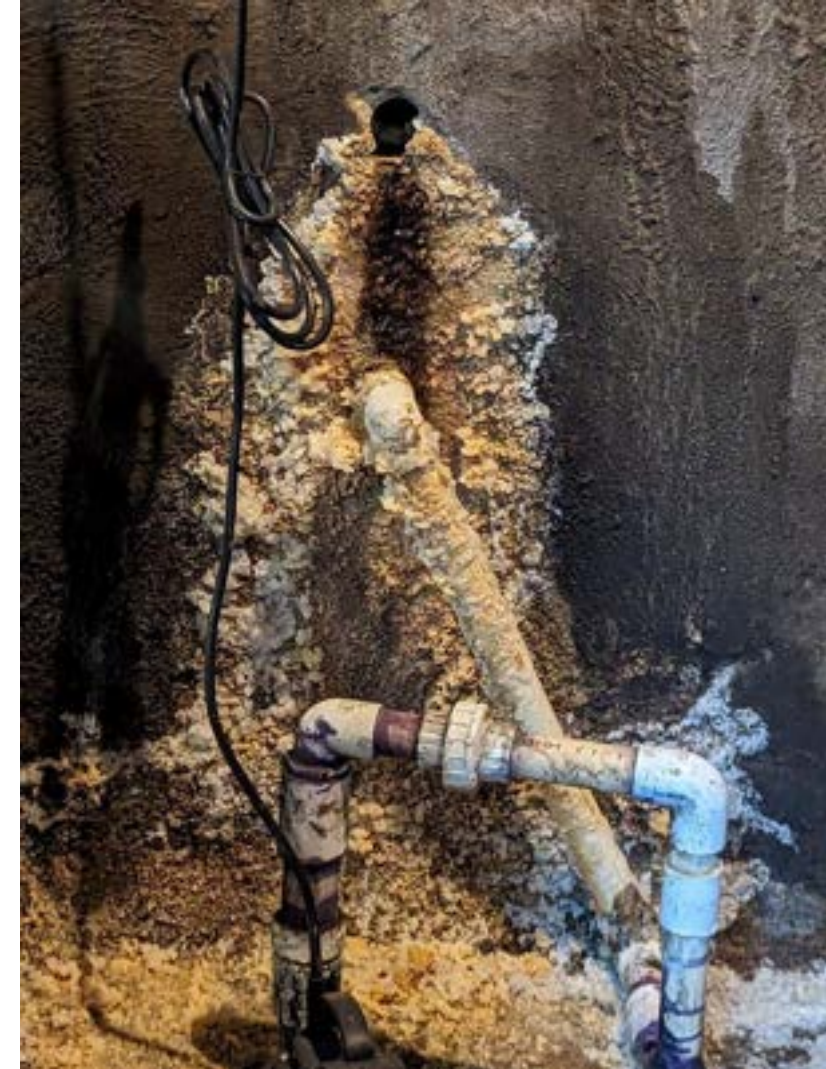
- » Potential impacts of replacement
 - May require building closure
 - Will require significant adjacent renovation; restrooms, shaft walls, etc.



EQUIPMENT

» End of Design Life

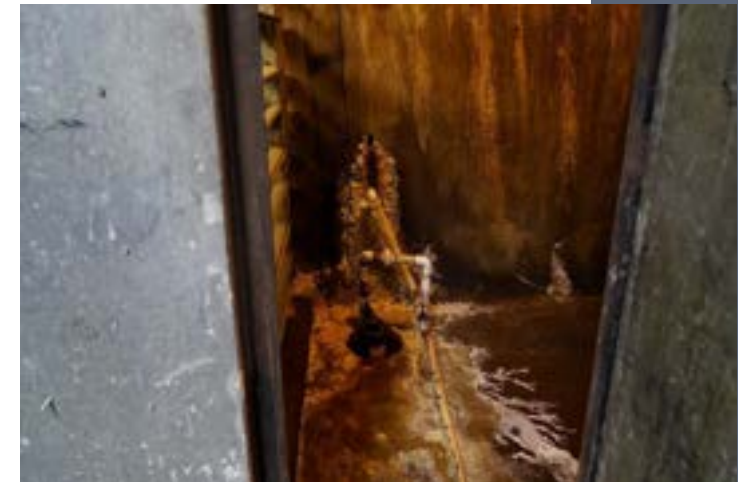
- Air Handlers
- Fan Coil Units
- L.K. Roos
- Police Headquarters



EQUIPMENT

» Potential Impacts of failure

- Reduction in heating and cooling capacity
- One unit down will put more load on other units.
- Depending on season, may result in temporary staff relocation or building shut-down.
 - Temporary heating/cooling may be available at a cost
- Units may have long-lead time for replacement.
- Replacing due to failure limits ability to design and account for potential efficiency gains



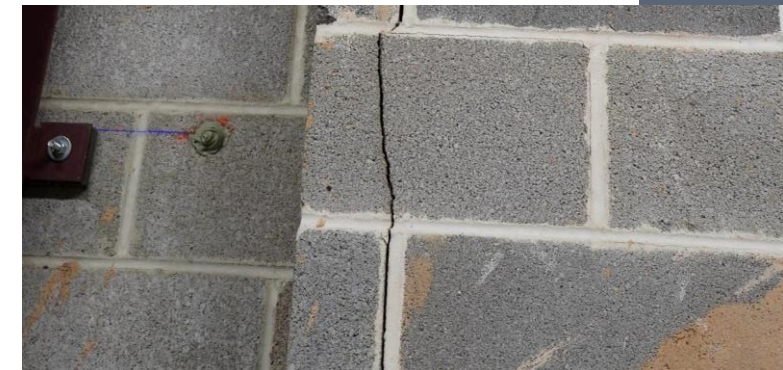
EXTERIOR FAÇADE / WALKS

- » L.K. Roos is being monitored for brick delamination
 - Assume brick ties are becoming weak due to corrosion by water infiltration
- » PHQ stone / brick façade failures
- » Potential Impacts of failures
 - Closing of egress routes
 - Trip/fall hazards on walks
 - Failing façades
 - Increased water intrusion and future corrosion



WHY THIS MATTERS?

- » Public health
- » Employee attendance/effectiveness/morale
- » Environmental impacts
- » Temporary or permanent building closure
- » Higher repair costs for emergencies
- » Accountability
- » Public and political controversy



What we've heard

» Why is the LKR in this condition?

- Many of these items can be attributed to lack or minimal preventative maintenance and generally insufficiently funded maintenance budgets.
- The presence of asbestos and its required abatement for virtually any work required above ceiling or below floor finish makes maintenance and repair costly and time consuming.
- These conditions reflect some of the background into why Project Cornerstone employs the **Best Value** strategy.

Recap

Task 1: IDENTIFY

- » **PROJECT CORNERSTONE:** Modernize and consolidate the central Administration building and satellite sites to improve customer service and maximize efficiency while meeting the fire sprinkler mandate.
 - We have no choice to do nothing.
- » Identify the **BEST VALUE** outcome for the County capitalizing on opportunities for improvement considering:
 - Fully sprinklered by January 1, 2028 as mandated by City of Clayton building and fire codes
 - Serve citizens more effectively where they live and work
 - Create modern, hybrid work environment to function more effectively
 - Address outstanding capital and maintenance budgets
 - Opportunities to consolidate County real estate portfolio and drive economic development.
 - Consider alternatives to L.K. Roos

Scoring Methodology

» Utilize a scoring criteria familiar to the County to determine **BEST VALUE**

STAGE 1 - TECHNICAL:

How does each strategy score on technical merit to meet project goals and objectives.

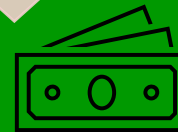


100 points



STAGE 2 - FINANCIAL:

How does each strategy score on cost over a 20-year period for both capital and operations/maintenance.



100 points

Lowest 20yr cost gets 100 points.

Formula: low \$\$\$ divided by strategy \$\$\$ x 100



STAGE 3 - BEST VALUE:

Add Stage 1 and 2 scores to determine which strategy provides best overall solution that balances quality and price.



200 points TOTAL

Technical + Financial = best value

Add technical to financial to determine strategy providing highest overall value

Technical Scoring

LEGEND

LKR-07: New consolidated admin and PHQ facility and new MC satellite

LKR-06: New core admin facility, renovated PHQ, and new MC satellite

LKR-04: Existing LKR houses core Admin and PHQ functions; new MC satellite

LKR-01: Sprinkler mandate

STRATEGY			
EXISTING		NEW LKR	CONSOLIDATED LKR/PHQ
1	4	6	7
LKR: FIRE SUPPRESSION ONLY	LKR Int + Ext w/ PHQ and MC Sat	Clayton Admin + MidCounty Sat (PHQ Reno)	Clayton Consolidated + MidCounty Sat
\$ \$	\$ \$ \$ \$	\$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$

assign 1-5 for each goal in raw score column

SCORING - PROJECT GOALS	Min. Score Req'd for Consideration		Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE
TOTAL (out of 100)	12.50	41.5	9.00	24.33	23.00	65.67	28.67	86.33	34.00	99.00
TECHNICAL Score Rank			8	5	2	1				

Project Goals	Points	Minimum Score Required
Improved customer service at locations they live/work	25	12.5
Modern, right sized, flexible work space	25	12.5
Well-maintained facilities and life-cycle optimization	20	8.0
Flexible and future-proof facility	10	3.0
Facility design maximizing civic pride and government perception	10	3.0
Leverage Underutilized assets to defray public cost and provide additional amenities	5	1.3
Accessible by various transportation modes with sufficient parking	5	1.3
Total	100	

Financial Scoring

LEGEND

LKR-07: New consolidated admin and PHQ facility and new MC satellite

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LKR-01: Sprinkler mandate

STRATEGY			
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TECHNICAL Score Rank			8	5	2	1				
scoring weights calculated by (lowest cost/proposed cost) x 100 points										
Anticipated 20yr life cycle cost (millions)			\$ 249.8	\$ 437.3	\$ 612.1	\$ 560.2				
SCORING - COSTS			WEIGHTED SCORE		WEIGHTED SCORE		WEIGHTED SCORE		WEIGHTED SCORE	
Lowest Capital Cost and Cost Certainty while ensuring quality and value			100.00	57.12	40.81	44.59				
FINANCIAL Score Rank			1	2	4	3				

Total 20-year Cost (NPV): Inclusive of

- Construction costs to build the facility
- Capital Improvements during the 20yr period (if applicable)
- Debt Service costs
- Revenue
- Annual Operations and Maintenance costs
- Lease costs for Mid-County satellite (if applicable)

NOTE:

- Identified in 2023 \$\$\$'s for reference purposes. Values are subject to fluctuation based on variables:
 - Construction capacity and schedule
 - Inflationary changes
 - Interest Rates
 - Market conditions

Best Value Scoring

LEGEND

LKR-07: New consolidated admin and PHQ facility and new MC satellite

LKR-06: New core admin facility, renovated PHQ, and new MC satellite

LKR-04: Existing LKR houses core Admin and PHQ functions; new MC satellite

LKR-01: Sprinkler mandate

STRATEGY			
EXISTING		NEW LKR	CONSOLIDATED LKR/PHQ
1	4	6	7
LKR: FIRE SUPPRESSION ONLY	LKR Int + Ext w/ PHQ and MC Sat	Clayton Admin + MidCounty Sat (PHQ Reno)	Clayton Consolidated + MidCounty Sat
\$\$	\$\$\$\$	\$\$\$\$\$\$	\$\$\$\$\$

assign 1-5 for each goal in raw score column

SCORING - PROJECT GOALS	Min. Score Req'd for Consideration		Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE	Raw Score	WEIGHTED SCORE
TOTAL (out of 100)	12.50	41.5	9.00	24.33	23.00	65.67	28.67	86.33	34.00	99.00
TECHNICAL Score Rank			8	5	2	1				
scoring weights calculated by (lowest cost/proposed cost) x 100 points										
Anticipated 20yr life cycle cost in 2023 (millions)			\$ 249.8	\$ 437.3	\$ 612.1	\$ 560.2				
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SCORING - COSTS			WEIGHTED SCORE	WEIGHTED SCORE	WEIGHTED SCORE	WEIGHTED SCORE				
Lowest Capital Cost and Cost Certainty while ensuring quality and value			100.00	57.12	40.81	44.59				
FINANCIAL Score Rank			1	2	4	3				

BEST VALUE SCORE - TOTAL	124.33	122.79	127.14	143.59
	3	4	2	1



Conclusion

RECOMMENDATIONS

- » PROJECT: LKR-07 identified as overall **BEST VALUE** consisting of:
 - New consolidated Administration and Police core function facility
 - New Mid-County satellite facility

LEGEND

LKR-07:
New consolidated admin and PHQ facility and new MC satellite

LKR-06:
New core admin facility, renovated PHQ, and new MC satellite

LKR-04:
Existing LKR houses core Admin and PHQ functions; new MC satellite

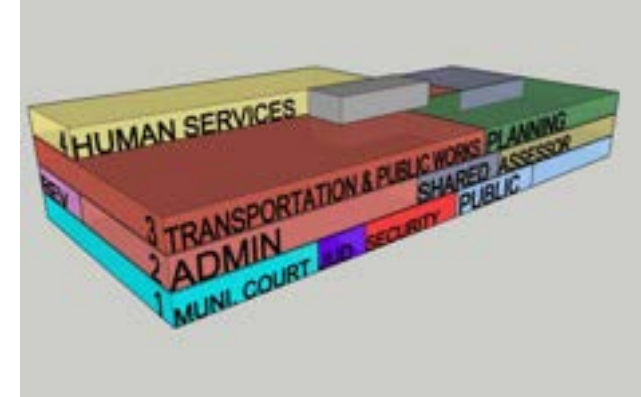
LKR-01:
Sprinkler mandate

BENEFITS

- » Provides the overall **BEST VALUE** to position the County for the future
 - Provides improved customer service where the public lives and works
 - Maximizes and consolidates real estate
 - Integrates 20-year maintenance and operational costs to mitigate continued deferred maintenance needs



LKR-07 stacking diagram



Mid-County Satellite diagram

Financial

Financial Model: Structure and Format

Financial data provided is based off industry market outreach, experience from similar projects, and the County's own data from other buildings. It is intentionally conservative, but market conditions that could impact the numbers can fluctuate, and it is expected that a competitive procurement could result in more precise cost estimates.

<i>All amounts in 2023 \$</i>		LKR-7
Revenue		####
Capital Expenses		
Construction Cost		(\$### M)
Annual Expenses -- Year 1 Snapshot		
Operations and Maintenance		(\$### M)
Satellite Lease		(\$### M)
Bond Debt Service		(\$### M)
Total 20-year Cost		(\$### M)
Monthly Tax Required for Average Home		(\$### M)

REVENUE:

- Potential \$\$\$ generated from land sale, retail lease, etc.

Construction Cost:

- Cost paid to contractor(s) to build the building
- Owner's costs to facilitate the project; design fees, move management, contingency, oversight, testing

Operations and Maintenance

- Annual operations and maintenance cost, including janitorial, routine maintenance, and utilities

Leasing:

- Potential lease cost for a new Mid-County satellite campus

Bond Debt Service:

- Repayment of principal and interest for general obligation bond used for capital expenses.

Total 20-year Cost:

- Total capital, operating, and financing cost for 20 years. Net Present Value (NPV)

Monthly Tax:

- Property tax required for the average home on a monthly basis

Financial Model: Results

All amounts in 2023 \$	LKR-7
Revenue	\$10.2 M

Clayton Property (assumed sale for planning purposes)

- A. 41 S. Central (LKR)
- B. 7900 Forsyth (PHQ)
- G. TPW (N. Lindbergh)

Revenue is driven by current market conditions and subject to change. Alternative strategies may be available beyond sale to provide revenue streams. Conservative estimates have been used to avoid shortfalls and more accurate estimates will be developed in any competitive procurement process.



Financial Model: Results

All amounts in 2023 \$		LKR-7
Revenue		\$10.2 M
Capital Expenses		
Construction Cost		(\$386.7 M)

Design Soft Cost:

- Architecture and Engineering Design Fees
- Owner management
- Planning and preconstruction

Construction Soft Cost:

- A/E Construction Administration Services
- Construction Manager
- Construction Testing

Project Contingency:

- Construction contingency to cover unforeseen conditions
- Project contingency to cover project changes through design and construction

		LKR-07
Construction Costs (PSC)		
Clayton	L.K. Roos Demolition	\$ 22,990,800
	L.K. Roos Renovation	
	L.K. Roos Addition	
	Central Plant	\$ 20,345,800
	PHQ Demolition	\$ 8,460,550
	PHQ Renovation	
	Crime Lab (Precinct ##)	\$ 30,026,500
	Mid-County Satellite (new construction)	
	New Clayton Construction (building)	\$ 172,321,750
	New Clayton Construction (parking garage - 250)	\$ 14,375,000
	Sub-Total	\$ 268,520,400
Owner Soft Costs (PSC)		
	DESIGN SOFT COSTS	\$ 39,112,250
	CONSTRUCTION SOFT COSTS	\$ 25,374,750
	PROJECT CONTINGENCY	\$ 53,705,000
	Sub-Total	\$ 118,192,000
OPINION OF TOTAL PROJECT COST		\$ 386,712,400

Financial Model: Results

All amounts in 2023 \$		LKR-7
Revenue		\$10.2 M
Capital Expenses		
Construction Cost		(\$386.7 M)
Annual Expenses -- Year 1 Snapshot		
Operations and Maintenance		(\$3.4 M)

OPERATIONS AND MAINTENANCE (O & M)

- O&M Costs include:

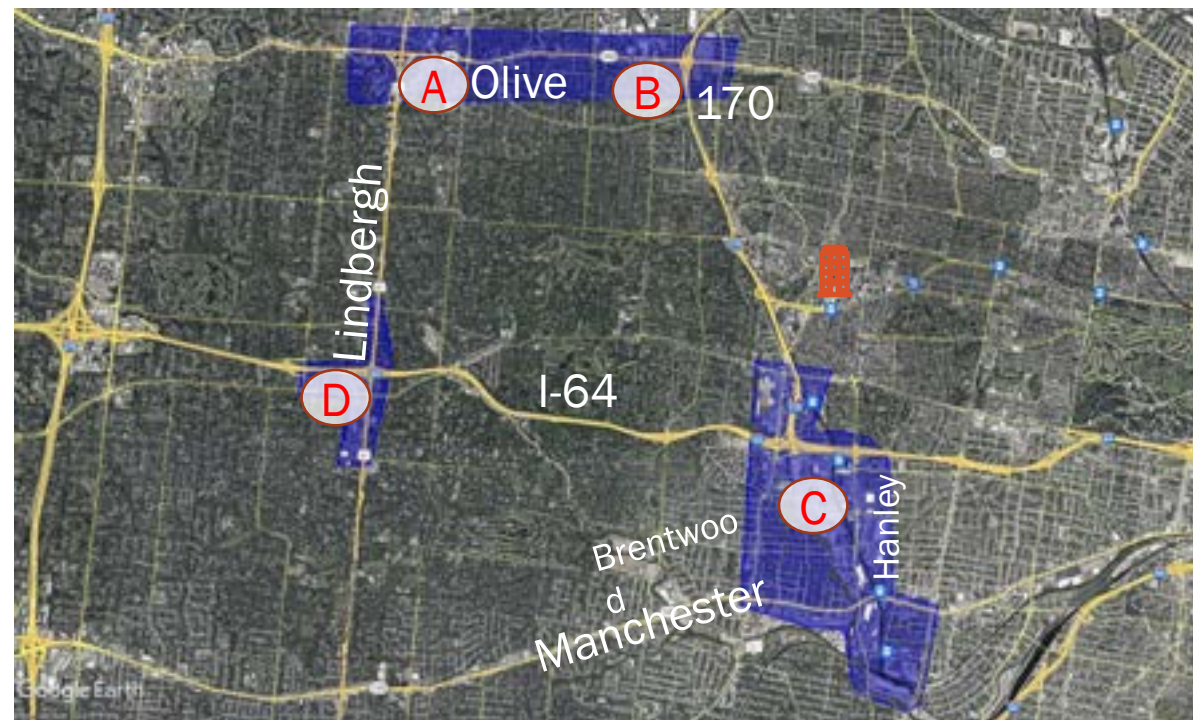
Item	LKR-7	
	New LKR Consolidated (183,206 SF, sell PHQ)	New MC Sat (173,214 SF)
Janitorial	\$ 326,978	\$ 309,008
Groundskeeping	\$ 35,435	\$ 33,488
Network/Telecom	\$ 123,464	\$ 123,464
Elec	\$ 163,209	\$ 154,240
Gas	\$ 60,312	\$ 56,997
Water	\$ 8,694	\$ 8,216
Sewer	\$ 14,898	\$ 14,079
Mechanics/Carpenters direct labor	\$ 209,693	\$ 198,169
M&R parts/contracted repairs	\$ 144,591	\$ 136,645
Security Personnel	\$ 428,769	\$ 428,769
Building Risk Insurance	\$ 195,609	\$ 184,859
Subtotals	\$ 1,711,652	\$ 1,647,934
Scenario Totals	\$	3,359,585

Financial Model: Results

All amounts in 2023 \$		LKR-7
Revenue		\$10.2 M
Capital Expenses		
Construction Cost		(\$386.7 M)
Annual Expenses -- Year 1 Snapshot		
Operations and Maintenance		(\$3.4 M)
Satellite Lease		(\$5.0 M)

MID-COUNTY SATELLITE

- For planning purposes, we've assumed a leased facility at current average market rates.
 - Specific location not yet identified.



Financial Model: Results

<i>All amounts in 2023 \$</i>	LKR-7
Revenue	\$10.2 M
Capital Expenses	
Construction Cost	(\$386.7 M)
Annual Expenses -- Year 1 Snapshot	
Operations and Maintenance	(\$3.4 M)
Satellite Lease	(\$5.0 M)
Bond Debt Service	(\$30.3 M)

Debt service is illustrated as an average value over the 20-year debt term in 2023 dollars.



Financial Model: Results

<i>All amounts in 2023 \$</i>	LKR-7
Revenue	\$10.2 M
Capital Expenses	
Construction Cost	(\$386.7 M)
Annual Expenses -- Year 1 Snapshot	
Operations and Maintenance	(\$3.4 M)
Satellite Lease	(\$5.0 M)
Bond Debt Service	(\$30.3 M)
Total 20-year Cost	\$560.2 M
Monthly Tax Required for Average Home	\$5.76

Total 20-Year Cost net present value (NPV) denotes the total 20-year county payments discounted to the present value (\$2023) at a 5% discount rate.

Monthly Tax Required for Average Home is calculated based on the assumption from SLC that a 1-cent tax levy on all properties (including residential, agricultural and commercial real estate, as well as personal property) will yield approximately \$2.9 M in tax revenue. Average property value is assumed to escalate by 2% every 2 years.

The necessary cent increase in tax levy is calculated to make sure that the 20-year period costs are sufficiently covered by tax levy. Then, the tax increased for an average house (approximately \$254,800 in value) is derived on a monthly basis.

Financial Model: comparison

All amounts in 2023 \$	LKR-7	LKR-1
Revenue	\$10.2 M	- N/A -
Capital Expenses		
Construction Cost	(\$386.7 M)	(\$201.3M) (\$88.4 M) Fire Sprinkler (\$80.1 M) Interior (\$32.8 M) Exterior
Annual Expenses -- Year 1 Snapshot		
Operations and Maintenance	(\$3.4 M)	(\$3.1 M)
Satellite Lease	(\$5.0 M)	- N/A -
Bond Debt Service	(\$30.3 M)	(\$16.0 M)
Total 20-year Cost	\$560.2 M	\$249.8 M
Monthly Tax Required for Average Home	\$5.76	\$2.74

LKR-1

- For financial planning purposes, we've assumed:
 - An initial funding source identified in year 1 and secured for the full scope of the project.
 - Fire sprinkler, Interior renovation, and exterior renovation will be constructed simultaneously.

Wrap - Up

Next Steps

- » Concluded the **TASK 1: IDENTIFY** stage
- » County has DBB and DB authority; will seek legislative approval on CMAR and P3 delivery methods to create additional delivery tools for county projects.
 - Provides County procurement options whenever needed and applicable
- » Moving directly into **PROCUREMENT** phase
 - Industry Day/Market Sounding
 - Develop procurement documents and technical specifications
 - Preliminary design
- » Secure funding



For updates, please visit
St. Louis County's
Project Cornerstone page at:

Thank you!

Questions?

