

**Joint Meeting
Infrastructure Committee
and
Highway Committee**

AGENDA

Jefferson County Courthouse
320 S. Main Street, Rm 205
Jefferson, WI 53549

July 17, 2012

6:00 p.m.

Infrastructure Committee Members

Richard Jones, Rick Kuhlman, Russ Kutz, Donald Reese, Chair, Dick Schultz

Highway Committee Members

Glen Borland, Ron Buchanan, Chair, Al Counsell, George Jaeckel, Blane Poulson

1. Call to order
2. Roll call
3. Certification of compliance with the Open Meetings Law
4. Review of the Agenda
5. Public Comment
6. Approval of the May 30, 2012 Joint Highway & Infrastructure Committee Minutes
7. Communications
8. Review and discuss the Highway Department main facility site plan (including the buildings, building placements, grading plan, driveway/access, storm water, utilities, wetlands, and city approval process)
9. Review and discuss the Highway Department main facility building plans and preliminary cost estimates
10. Discuss the Lake Mills and Concord satellite shop design resolution
11. Set next joint meeting date and possible agenda items
12. Adjourn

A quorum of the Jefferson County Board of Supervisors may be in attendance at this joint meeting

The Committees may discuss and/or take action on any item specifically listed on the agenda

Individuals requiring special accommodations for attendance at the meeting should contact the County Administrator 24 hours prior to the meeting at 920-674-7101 so appropriate arrangements can be made

**JEFFERSON COUNTY
HIGHWAY COMMITTEE &
INFRASTRUCTURE COMMITTEE
JOINT MEETING MINUTES**

Thursday, May 30, 2013

The Jefferson County Highway Committee and Infrastructure Committee met on Thursday, May 30, 2013, at 8:30 A.M. for a joint meeting at the Jefferson County Courthouse, Room 202.

ROLL OF THE HIGHWAY & INFRASTRUCTURE COMMITTEES:

Members Present: Ron Buchanan; George Jaeckel; Al Counsell; Blane Poulson; Glen Borland; Donald Reese; Richard Jones; Russell Kutz; Dick Schultz

Members Absent: Rick Kuhlman

Also Present: William Kern, Highway Commissioner
John Molinaro, County Board Chairperson
Brian Udovich, Highway Department
Ann Jenswold, Highway Department
Erik Coonen, Highway Department
Greg Winter, Highway Department
Russ Cooper, Highway Department
Kathi Cauley, Interim County Administrator
Phil Ristow, Corporation Counsel
Walt Christensen, County Board Supervisor
Greg David, County Board Supervisor
James Braughler, County Board Supervisor
Ed Morse, County Board Supervisor
Pamela Rogers, County Board Supervisor
Jennifer Hanneman, County Board Supervisor
Jim Mode, County Board Supervisor
Matthew Foelker, County Board Supervisor
Paul Babcock, County Board Supervisor
Carlton Zentner, County Board Supervisor
Brian Lamers, Finance
Norman Barrientos & Staff, Barrientos Design
Lydia Statz, Daily Jefferson County Union

Purpose of the meeting was to discuss preliminary design development of the new Highway main facility with Barrientos Design

PUBLIC COMMENT

- County Board Supervisors Zentner and David shared concerns regarding the size and energy efficiencies of the new facility, as well as group meeting involvement.

HIGHWAY & INFRASTRUCTURE COMMITTEE MINUTES: The minutes from the May 1, 2013 Highway Committee/Infrastructure Committee joint meeting, having been distributed in advance, it was moved by Mr. Reese and seconded by Mr. Jones from the Infrastructure Committee to approve the minutes as printed. Motion Carried. It was moved by Mr. Poulson and seconded by Mr. Counsell from the Highway Committee to approve the minutes as printed. Motion Carried.

7. Communications

- NONE

8. Discuss preliminary design development of the new Highway main facility with Barrientos Design.

Norman Barrientos gave his first presentation of three regarding the new Highway main facility. This presentation revolved around the following facility areas: Repair Bay; Welding Bay; Parts Storage; Fleet Parking; Carpentry & Sign Area; and Truck Wash Area.

During his presentation, he used Manitowoc County Highway, Door County Highway, and Calumet County Highway departments for comparison.

There was discussion from the Committees and County Board Supervisors regarding the number of trucks to be stored in heated storage vs. cold storage, how to park the vehicles, protection of equipment investment, and whether to build a concrete vs. metal building, during the Fleet Parking portion of the presentation.

Discussion on different types of cranes, number of bays, and square footage was discussed during the Repair and Welding Bay portion. It was stated by Barrientos that the welding area by code, needs to be a totally separate area. He also addressed ventilation concerns for the area.

Square footage and regional sign work that Jefferson County does, was discussed during the Carpentry & Sign Area.

There was discussion on layout, security, vendor approach and delivery, and inventory access during the Parts Storage portion of the presentation.

The Truck Wash Area discussion revolved around the positive and negatives concerned with having a manual vs. automated wash system in place.

Commissioner Kern handed out a benchmark analysis of central highway facilities for comparison purposes. He stated that possibly the Committees, as well as interested County Board members, should tour some of the newer Highway facilities listed.

9. Set next joint meeting date and possible agenda items.

The next meeting will be held at the Jefferson County Courthouse, Room 202, on Wednesday, June 12, 2013 at 6:30 p.m. The following meeting is tentatively set for July 18, 2013.

It was moved by Mr. Buchanan and seconded by Mr. Borland to adjourn at 11:00 a.m.

Motion Carried.

Approval:

Jefferson County High Department Highway Maintenance Facility

Project Number: 50661

Preliminary Estimate of Probable Costs

7/17/13

Primary Building Functional Areas	Area Size (square feet)
Heated Vehicle Parking Garage	50,592
Vehicle Repair Garage	16,185
Welding and Fabrication Shop	5,976
Sign Shop and Carpentry Shop	1,984
Vehicle Wash Bay	3,175
Parts Department	8,619
Crew Support	5,058
Highway Division Offices	1,670
Commissioner's Office	3,661
Primary Circulation	1,905
Total Building Footprint	98,825

Site Work Division	Description	Quantity Unit	Cost	Total Cost
Division 2	Site Work - Clearing and Paving			
	Site Stripping	1,637,550 cy	\$0.10	\$163,755.00
	Earthwork	132,000 cy	\$2.00	\$264,000.00
	Water - 8" PVC	1,800 lf	\$120.00	\$216,000.00
	Sanitary Sewer	1,300 lf	\$60.00	\$78,000.00
	Storm Sewer	2,600 lf	\$70.00	\$182,000.00
	Base course - 8"	21,737 tons	\$9.50	\$206,501.50
	Asphalt Paving - 5"	16,303 tons	\$55.00	\$896,665.00
	Concrete Paving	1 allow	\$65,000.00	\$65,000.00
	Landscaping	1 allow	\$50,000.00	\$50,000.00
	subtotal			\$2,121,921.50
Division	Site Specialties			
	Vehicle scale (above grade)	1 ea	\$64,000.00	\$64,000.00
	Cold storage building No. 1	30,000 sf	\$52.00	\$1,560,000.00
	Fueling station	1 allow	\$185,000.00	\$185,000.00
	Fueling station canopy	2 ea	\$35,000.00	\$70,000.00
	Salt shed - gambrel 8,000 tons	1 ea	\$750,000.00	\$750,000.00
	Salt brine system	1 ea	\$150,000.00	\$150,000.00
	Fencing	4,150 lf	\$6.50	\$26,975.00
	subtotal			\$2,805,975.00
	Site Work and Site Specialties Total			\$4,927,896.50

General Construction Division	Description	Quantity Unit	Cost	Total Cost	Area Percent	Budget Percent
Division	Commissioner's Office and Highway Division Offices					
	General Construction	5,331 sf	\$96.00	\$511,776.00		
	Mechanical	5,331 sf	\$12.00	\$63,972.00		
	Electrical	5,331 sf	\$9.00	\$47,979.00		
	Plumbing	5,331 sf	\$6.00	\$31,986.00		
	subtotal		\$123.00	\$655,713.00	5.39%	7.51%
Division	Crew Services and Primary Circulation					
	General Construction	6,963 sf	\$75.00	\$522,225.00		
	Mechanical	6,963 sf	\$9.00	\$62,667.00		
	Electrical	6,963 sf	\$8.00	\$55,704.00		
	Plumbing	6,963 sf	\$8.00	\$55,704.00		
	subtotal		\$100.00	\$696,300.00	7.05%	7.97%
Division	Sign Shop and Parts Department					
	General Construction	10,603 sf	\$72.00	\$763,416.00		
	Mechanical	10,603 sf	\$7.00	\$74,221.00		
	Electrical	10,603 sf	\$5.00	\$53,015.00		
	Plumbing	10,603 sf	\$4.00	\$42,412.00		
	subtotal		\$88.00	\$933,064.00	10.73%	10.68%
Division	Vehicle Repair Garage and Welding / Fabrication Shop					

	General Construction	22,161 sf	\$74.00	\$1,639,914.00		
	Mechanical	22,161 sf	\$8.00	\$177,288.00		
	Electrical	22,161 sf	\$8.00	\$177,288.00		
	Plumbing	22,161 sf	\$5.00	\$110,805.00		
	subtotal		\$95.00	\$2,105,295.00	22.42%	24.11%
Division	Heated Vehicle Storage Garage					
	General Construction	50,592 sf	\$68.00	\$3,440,256.00		
	Mechanical	50,592 sf	\$5.00	\$252,960.00		
	Electrical	50,592 sf	\$5.00	\$252,960.00		
	Plumbing	50,592 sf	\$3.00	\$151,776.00		
	subtotal		\$81.00	\$4,097,952.00	51.19%	46.93%
Division	Vehicle Wash					
	General Construction	3,175 sf	\$68.00	\$215,900.00		
	Mechanical	3,175 sf	\$2.00	\$6,350.00		
	Electrical	3,175 sf	\$2.00	\$6,350.00		
	Plumbing	3,175 sf	\$5.00	\$15,875.00		
	subtotal		\$77.00	\$244,475.00	3.21%	2.80%
	General Building Construction Total	98,825 sf	\$94.00	\$8,732,799.00	100.00%	100.00%

Equipment	Description	Quantity	Unit	Cost	Total Cost
Division 11	Equipment				
	Air compressor	2	ea	\$12,600.00	\$25,200.00
	Bulk fluids system including reels	1	ea	\$76,000.00	\$76,000.00
	Tail pipe exhaust system	1	ea	\$62,000.00	\$62,000.00
	Emergency generator	1	ea	\$85,000.00	\$85,000.00
	subtotal				\$248,200.00
Division 14	Conveying Systems				
	7.5 ton bridge crane (welding shop)	3	ea	\$76,000.00	\$228,000.00
	75,000 lb parallelogram lift	1	ea	\$107,000.00	\$107,000.00
	12,000 lb 4-post lift	1	ea	\$11,450.00	\$11,450.00
	75,000 lb in-ground lift	1	ea	\$112,000.00	\$112,000.00
	subtotal				\$458,450.00
	Equipment Total				\$706,650.00

Summary				Percentage of Total Proj Cost
	Site Work and Site Specialties		\$4,927,896.50	33.02%
	Building Construction Cost Total	98,825 sf	\$94.00	\$8,732,799.00
	Shop Equipment		\$706,650.00	4.73%
	FF & E (furniture, shelving, equip)	1 allow	\$120,000.00	0.80%
	Construction Contingency (5%)		\$436,639.95	2.93%
	Total Project Costs		\$14,923,985.45	100.00%

Add Alternates				
	Automatic vehicle wash system	1	ea	\$170,000.00
	(Building costs include space for the system)			\$170,000.00

Jefferson County Highway Department Joint Committee Meeting

July 17, 2013

Barrientos Design & Consulting, Inc.

Norman Barrientos, AIA

Ryan Thacker, AIA

Programming Agenda

1. Recap of Recent Work & Last Meeting
2. Cost Estimate Review
3. Site Layout
4. Building Layout
 1. Admin, Staff Support
 2. Parts Storage
 3. Specialty Shops (Welding / Fabrication, Carpentry / Sign)
 4. Repair Garage
 5. Fleet Parking
 6. Truck Wash
 7. Metal Building vs. Precast Concrete
5. Sustainability
6. Moving Forward
 1. Schedule
7. Approvals

PROGRESS REPORT

- Worked with users to design spaces based on equipment requirements and clearances.
- Met with equipment representatives to determine equipment requirements.
 - Fueling System.
 - Salt Dome.
 - Salt Brine System.
 - Overhead Cranes.
 - Vehicle Exhaust.
 - Bulk Fluids System.
 - Vehicle Lifts.
 - Truck Scale.
- Reduced the building foot print while balancing operational requirements.
- Designed Site based on operational and storage requirements.
- Met with City of Jefferson engineering office to determine requirements for plan approval.

COST ESTIMATE OVERVIEW

Construction Costs

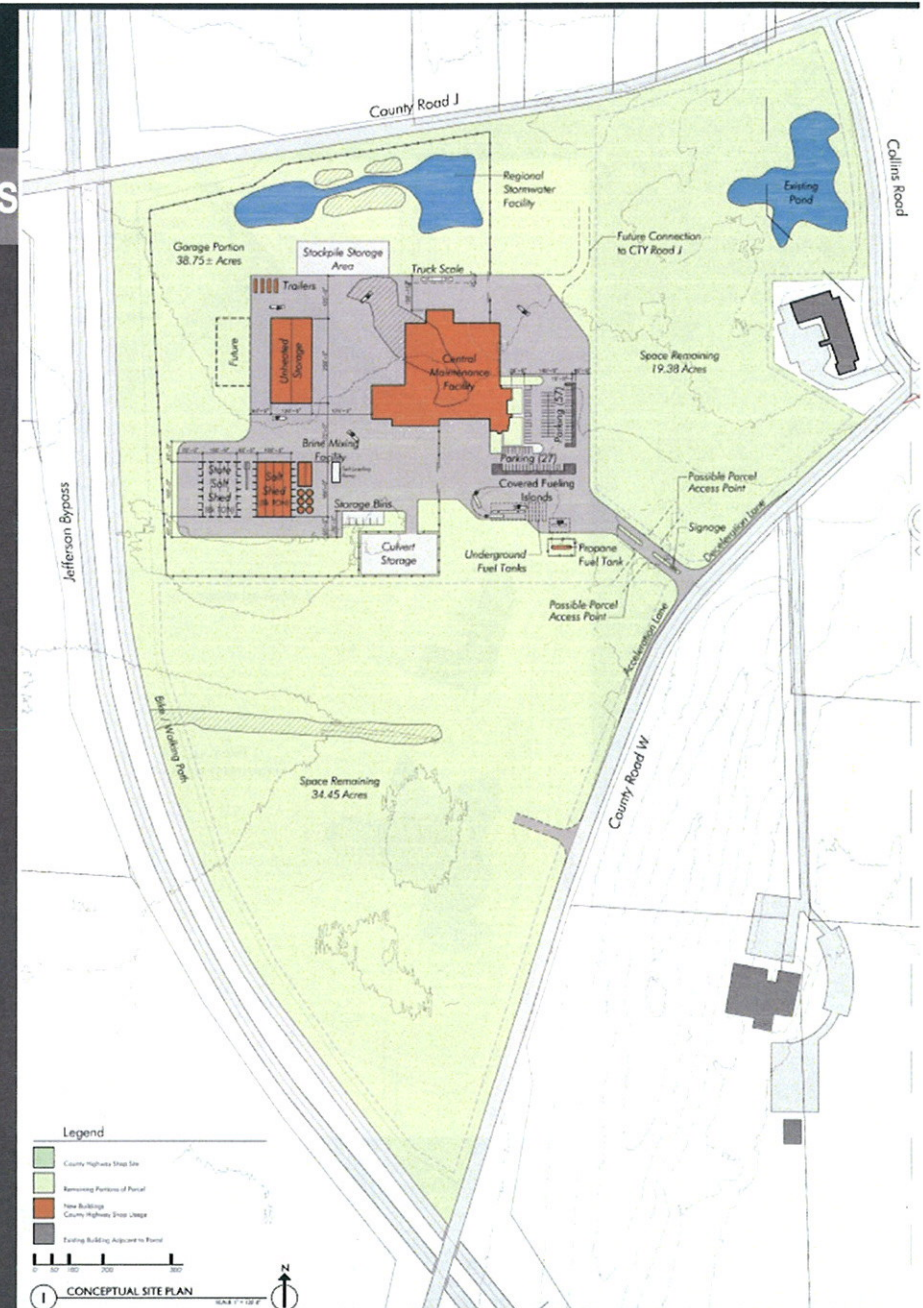
Site Work & Site Specialties	\$4,927,896.50	33.02%
Building	\$8,732,799.00	58.52%
Shop Equipment	\$706,650.00	4.73%
FF&E (furniture, furnishings & equip)	\$120,000.00	0.80%
Construction Contingency	\$436,639.95	2.93%
Total	\$14,923,985.45	



PLANNING ISSUES

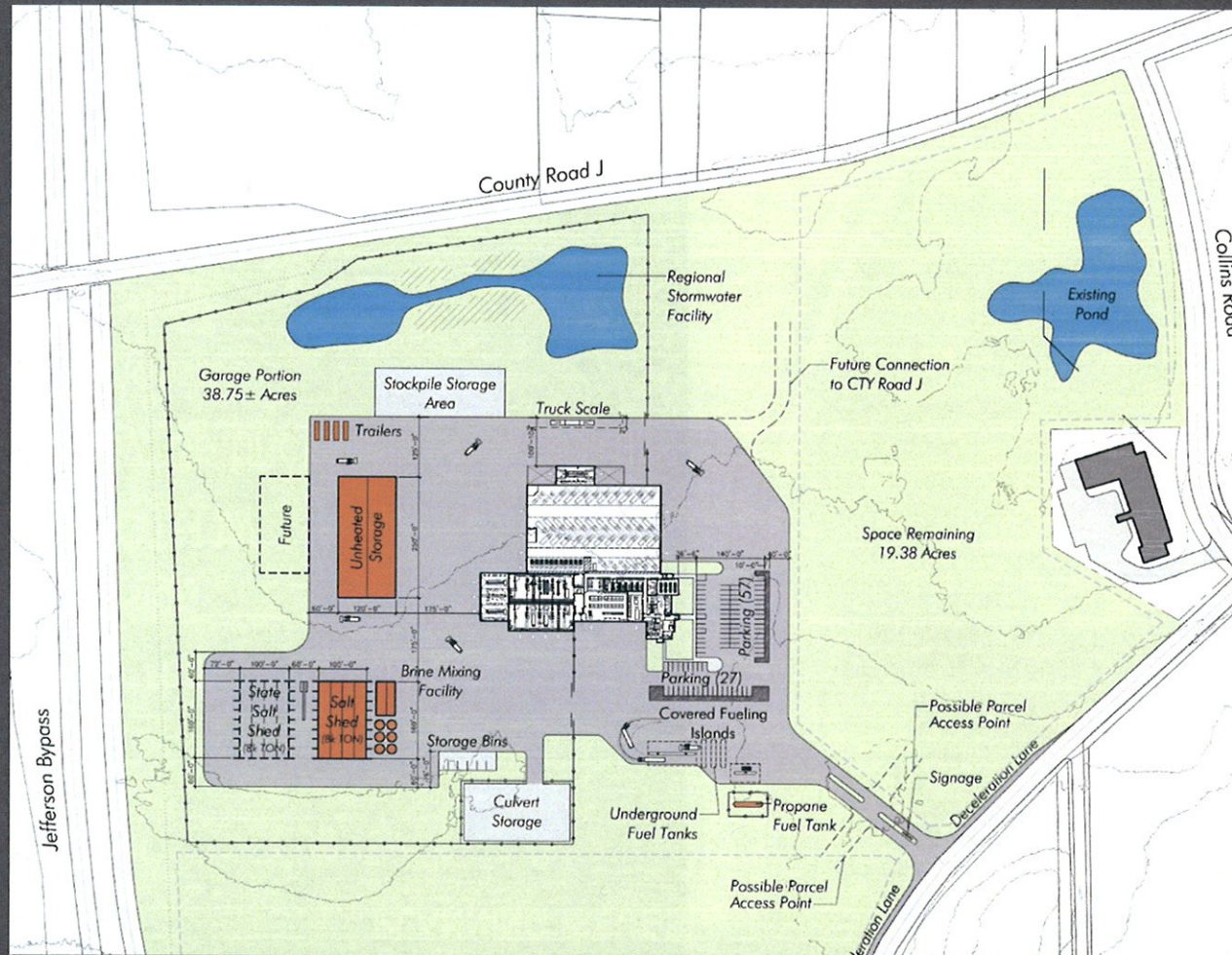
Planning Issues

- Future access for remaining parcels
- Access Road Design
- Traffic impact at CTH W
- Land use, Density, Setbacks
- Drainage, Wetlands
- Landscaping, Signage
- Architectural aesthetics



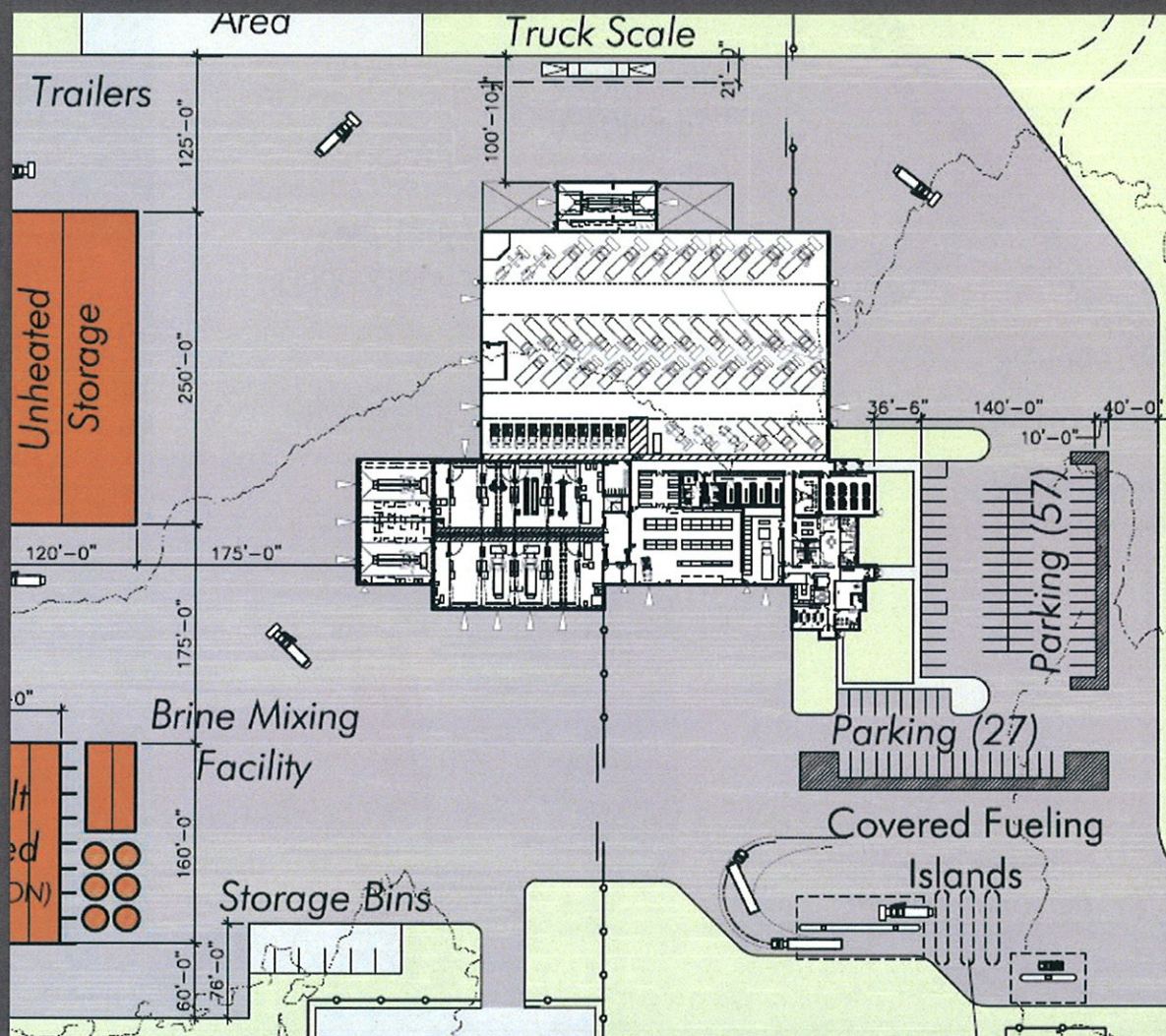
JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

SITE PLAN

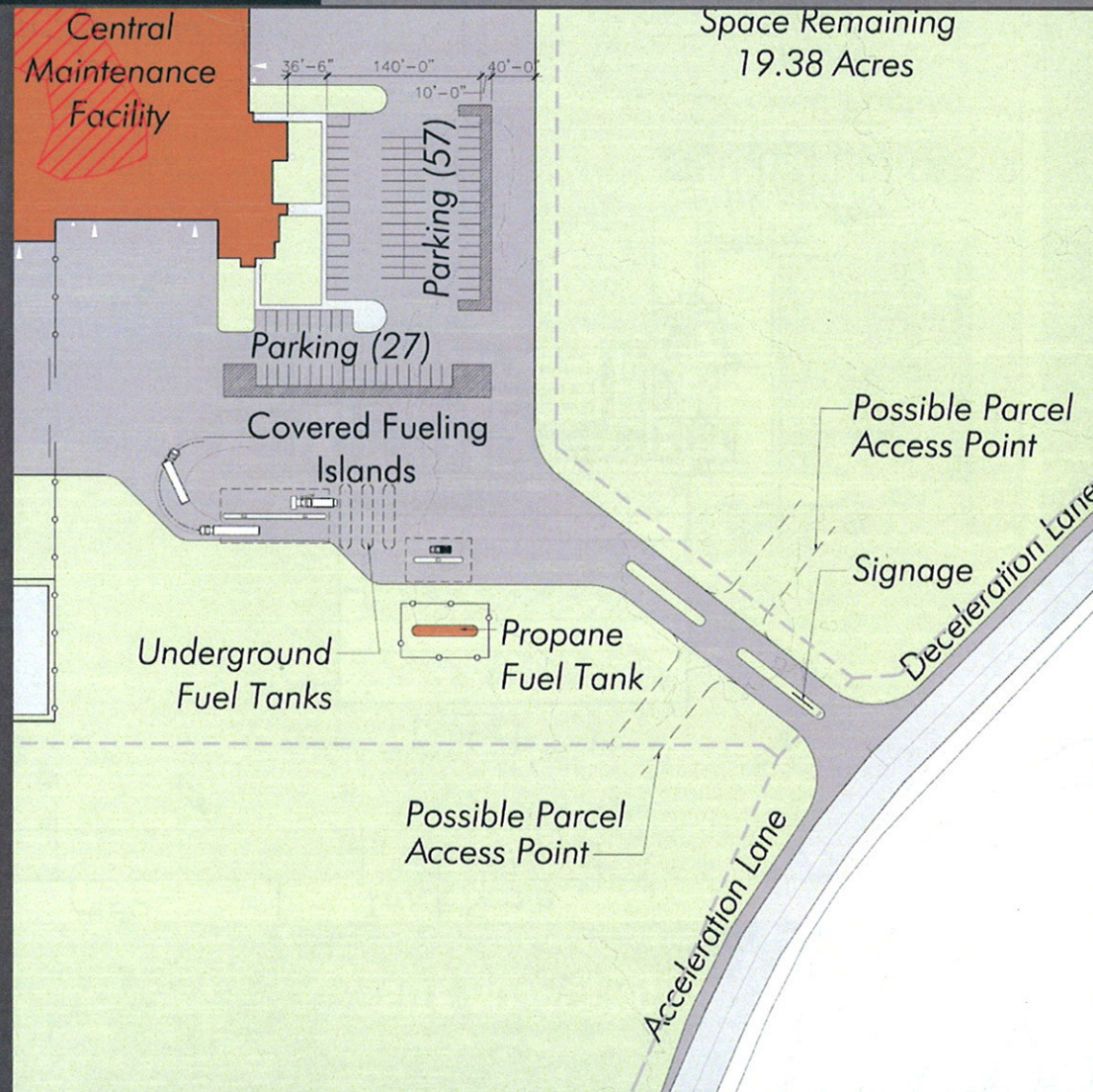


JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

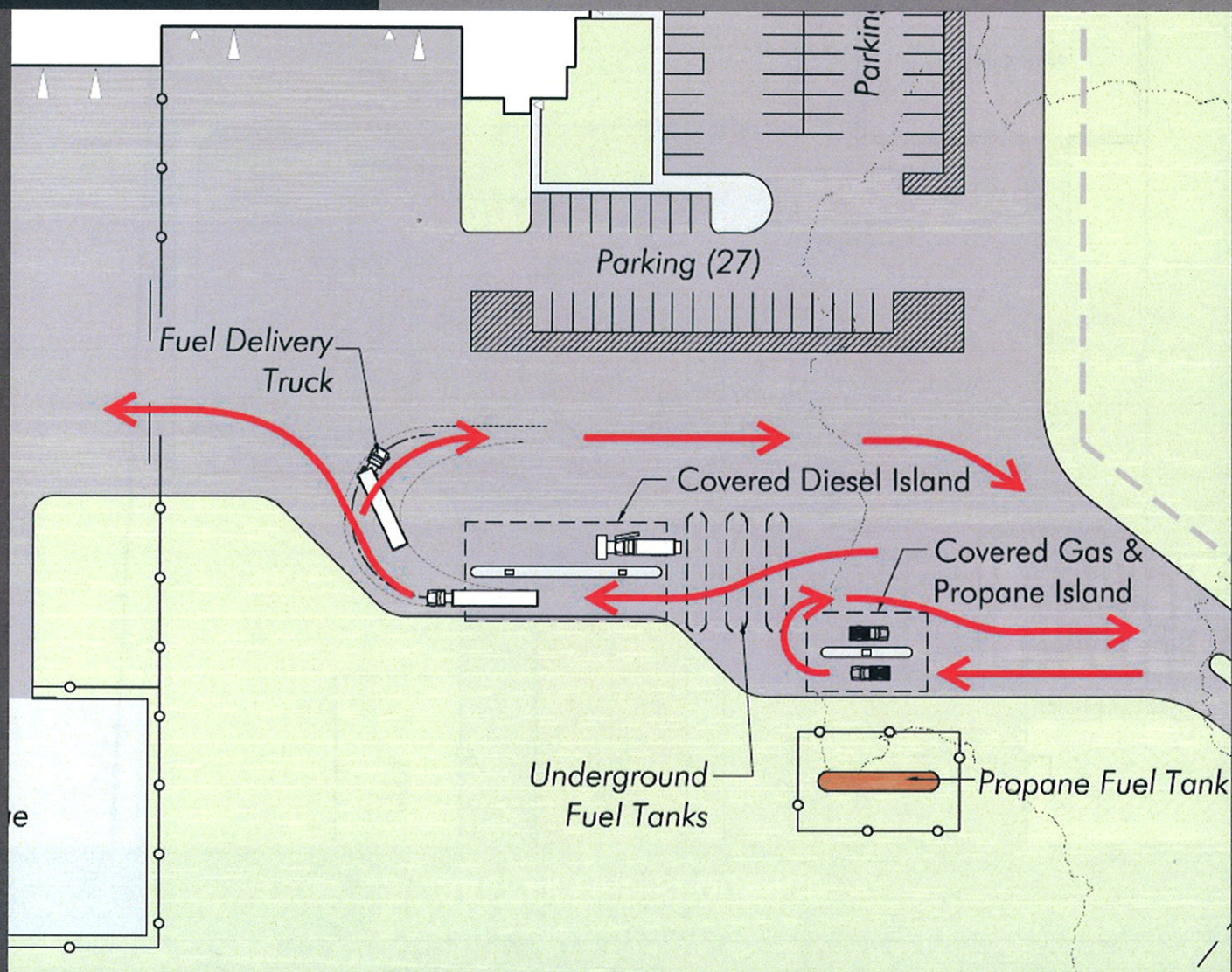
SITE ADJACENCIES



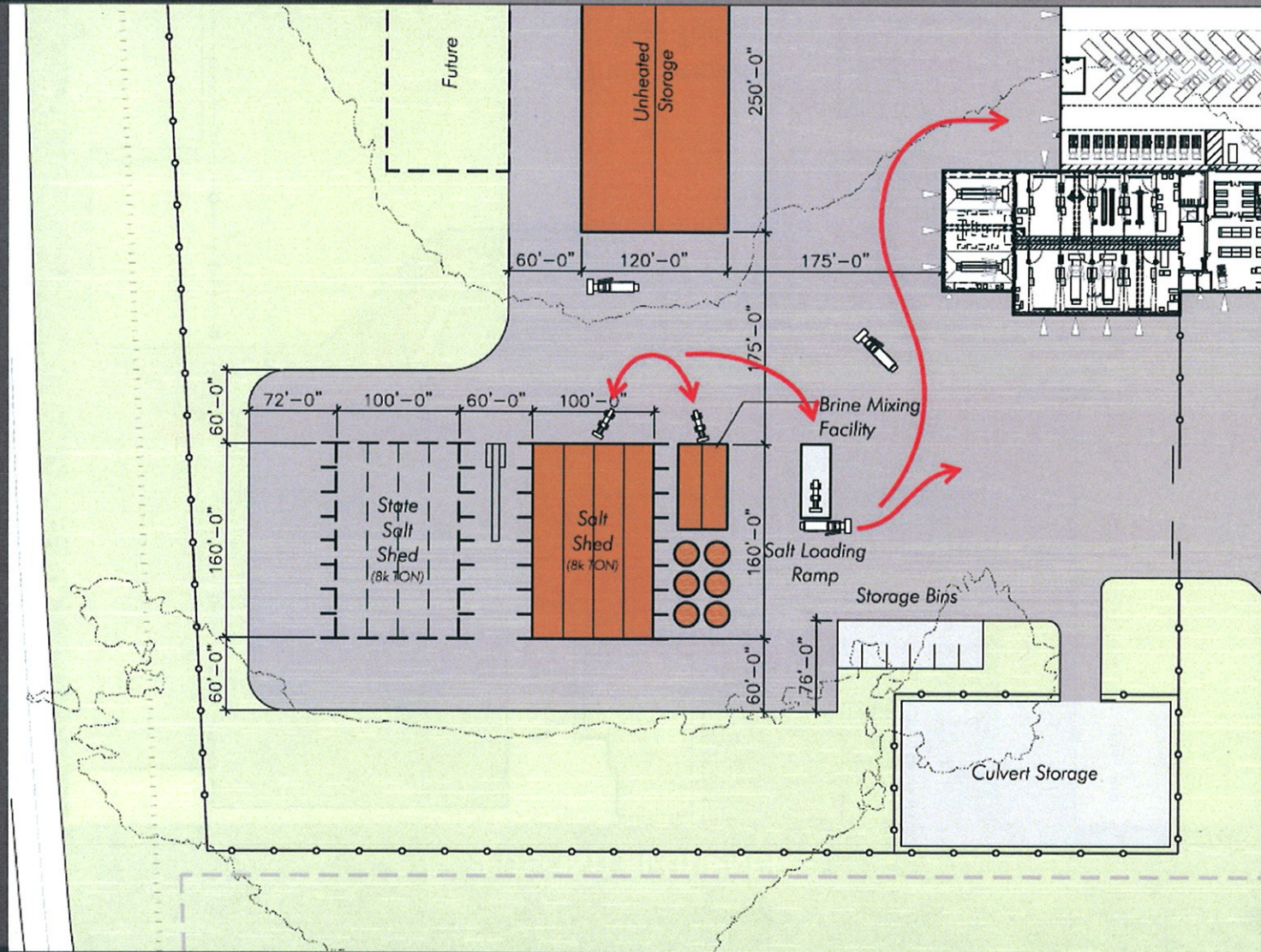
ENTRY



FUELING SEQUENCE

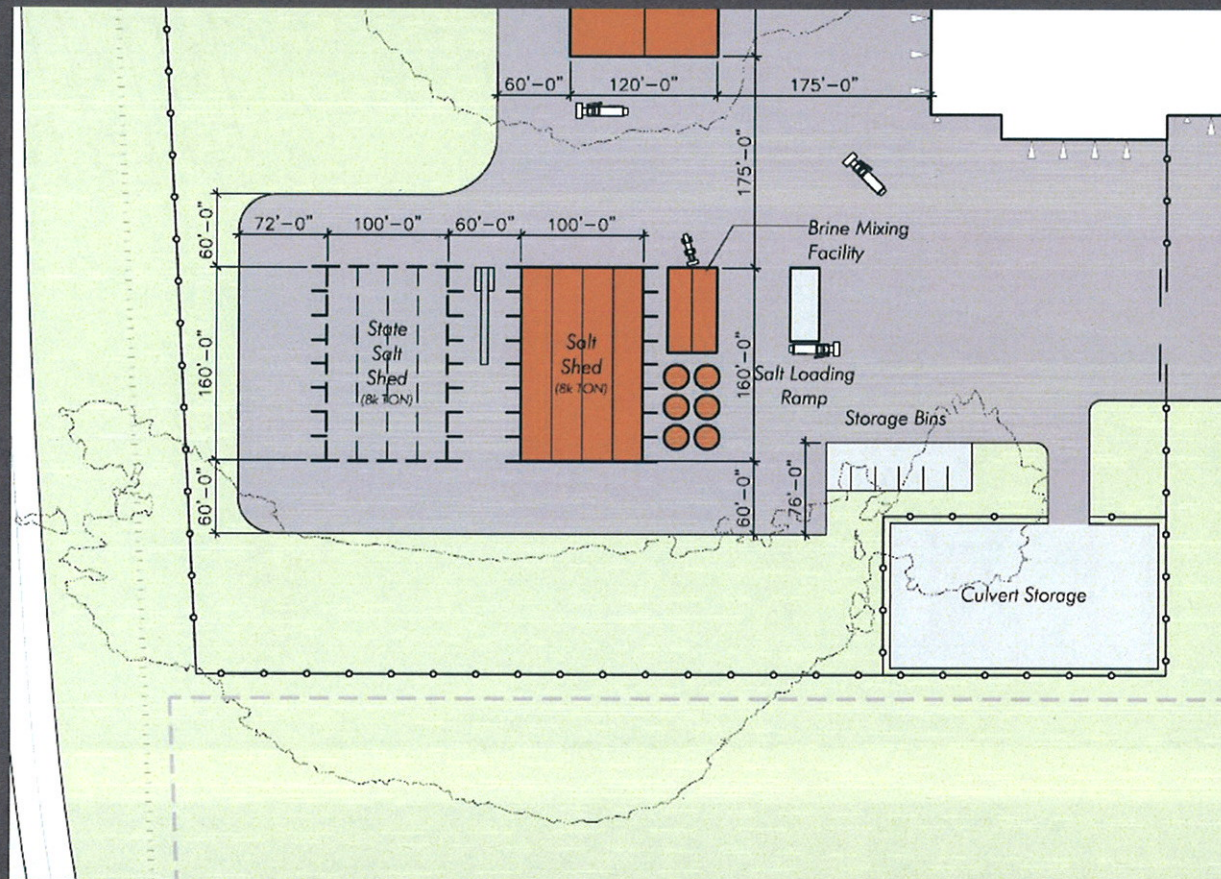


SALT FILLING SEQUENCE



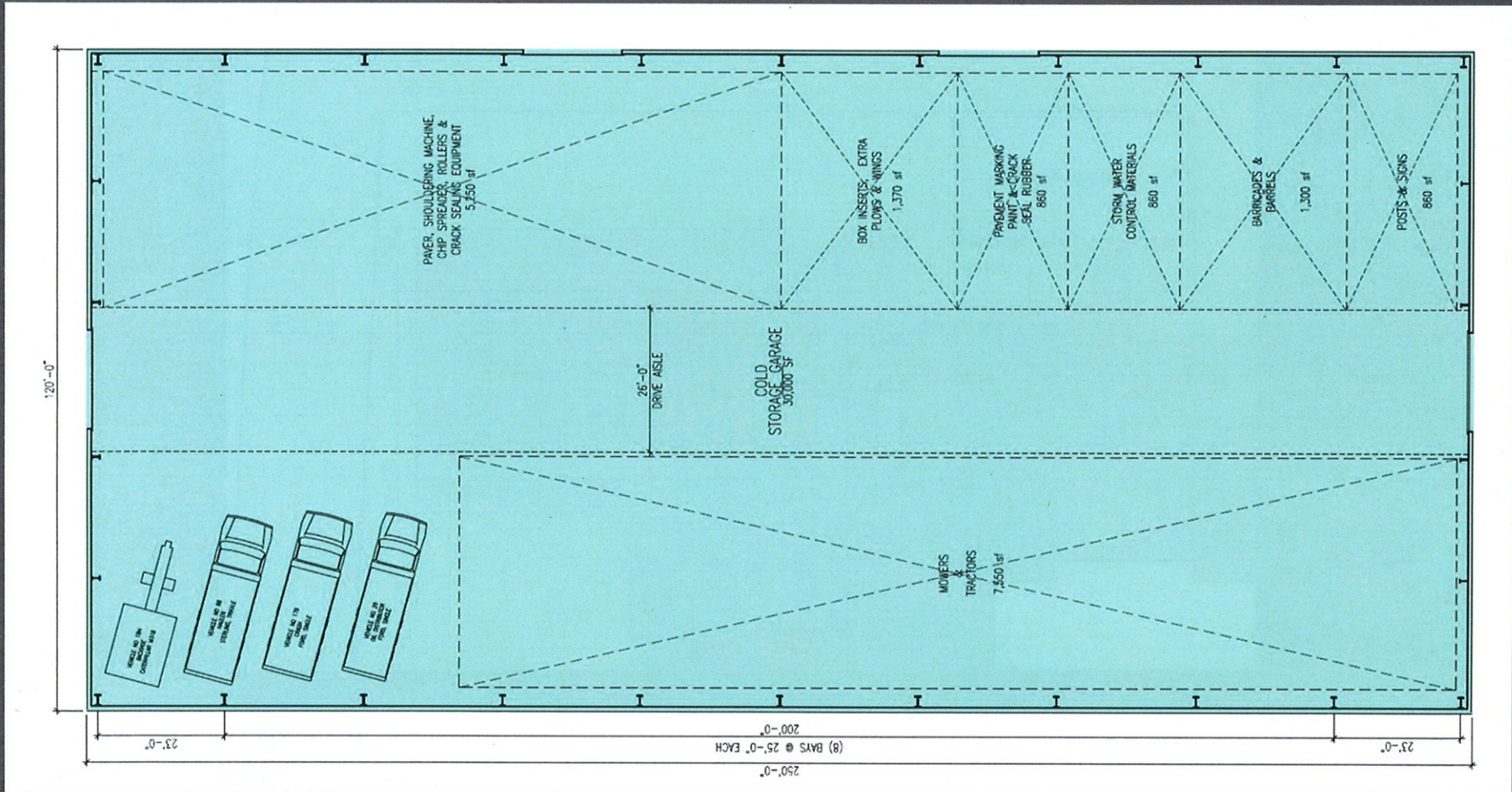
JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

SITE DETAILS



Salt Shed & Brine System Layout

COLD STORAGE



GRADING PLAN

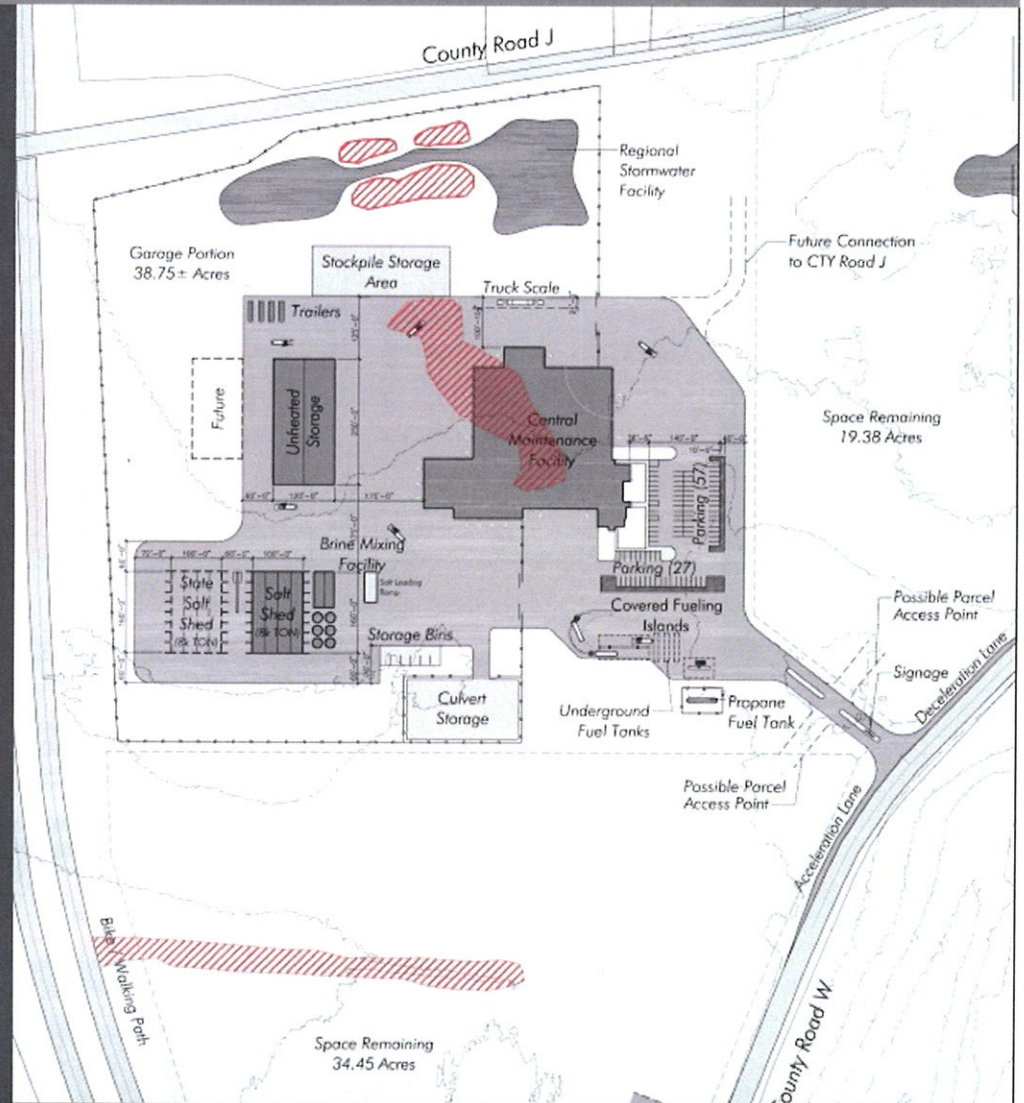


JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

WETLAND PLAN

Wetland

- Delineation completed.
- Permitting process has not begun.
- Main wetland under proposed building is approximately 1.06 acres.



JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

Summary of Site Functions

<u>Structure/Area</u>	<u>Area</u>
Salt / Sand Shed (gambrel style) 8,000 tons salt, Sand in stockpiles	16,000 sf
Cold Storage Building	30,000 sf
Fueling Station 10,000 gals diesel, 10,000 gals unleaded	
Propane Station 10,000 gal tank	
Truck Scale 100,000 lb capacity, above grade type	
Asphalt Paving Heavy duty 5" asphalt	11.24 acres

Summary of Building Program

<u>Functional Area</u>	<u>Area</u>	<u>%</u>
Heated Vehicle Garage	50,592 sf	46.9%
Vehicle Repair Garage	16,185 sf	16.4%
Welding & Fabrication Shop	5,976 sf	6.0%
Sign & Carpentry Shop	1,984 sf	2.0%
Vehicle Wash Bay	3,175 sf	2.8%
Parts Department	8,619 sf	8.7%
Crew Support	6,963 sf	7.1%
Highway Division Offices	1,670 sf	1.7%
Commissioner's Office Suite	3,661 sf	5.4%
Total Building Area	98,825 sf	100%

OVERALL BUILDING PLAN

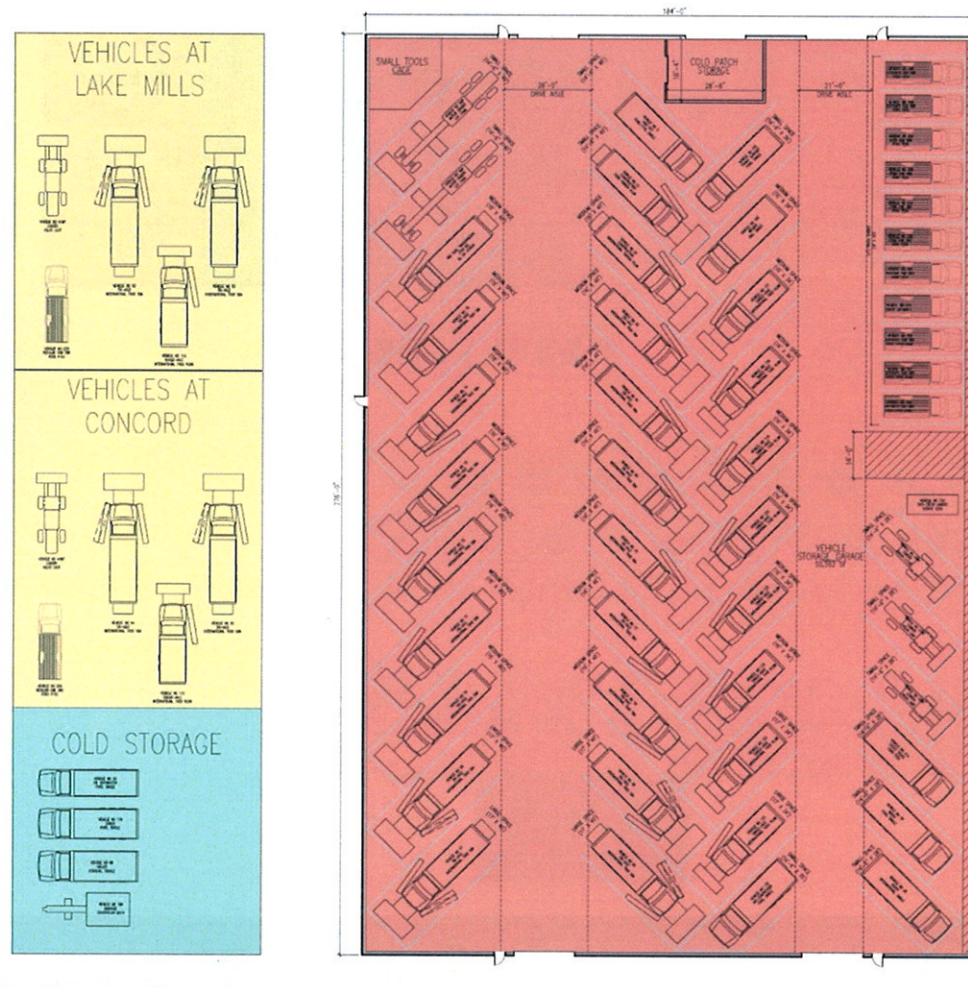
Conceptual Building Plan

- 98,825 sf



JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

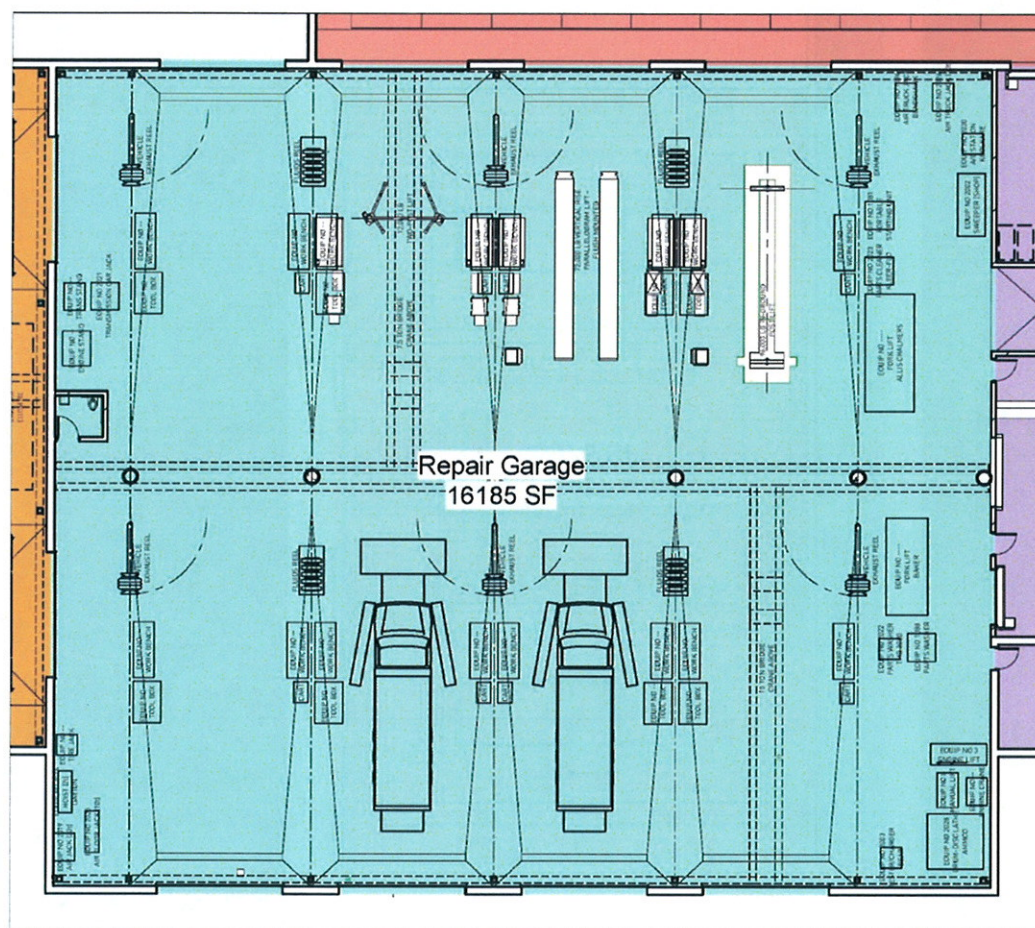
PARKING GARAGE



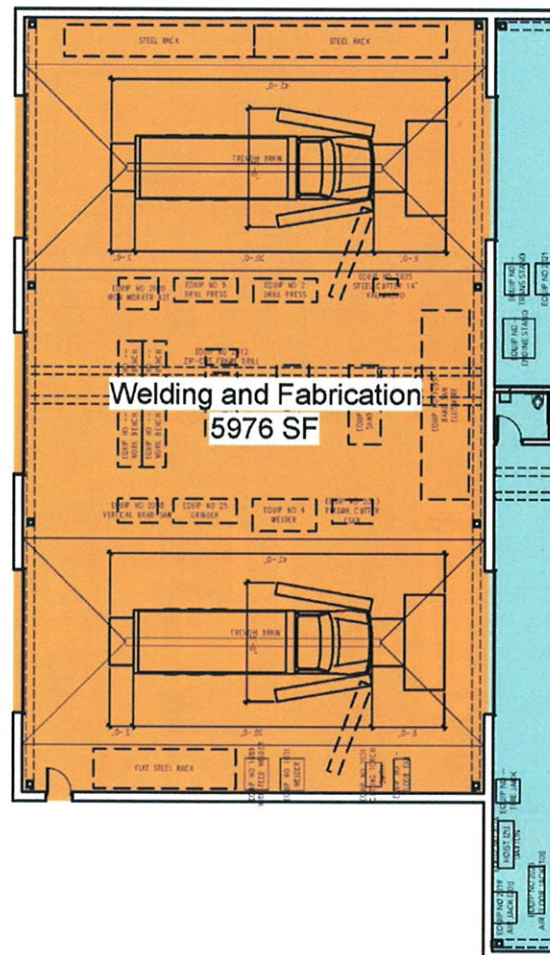
50,592 sf - 51.2% of area \$4,097,952 - 46.9% of cost

JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

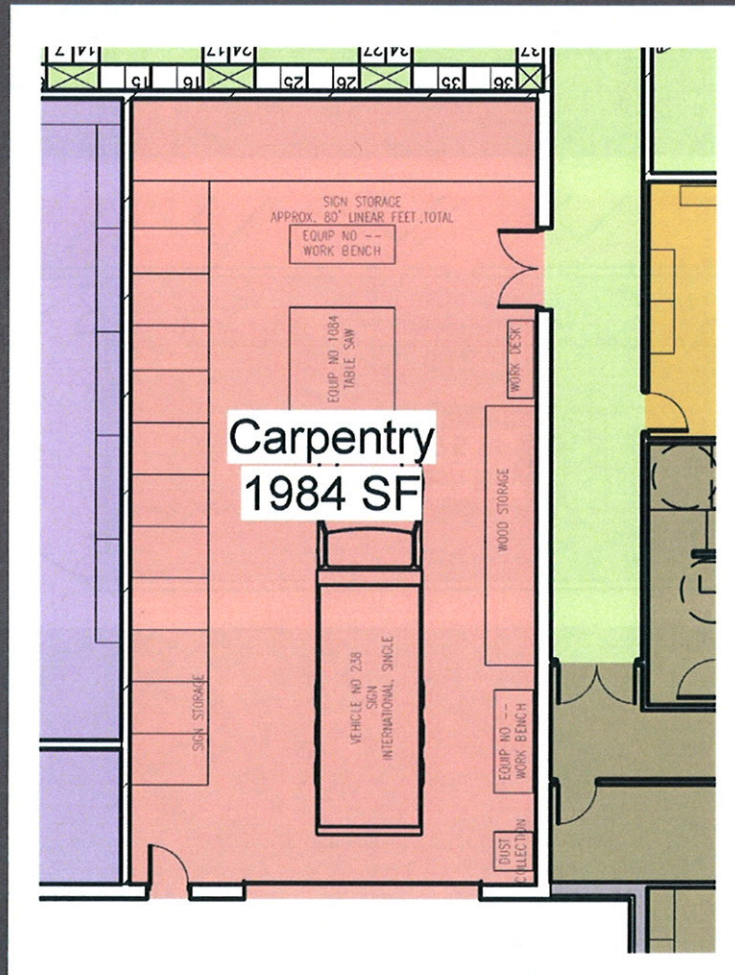
REPAIR GARAGE



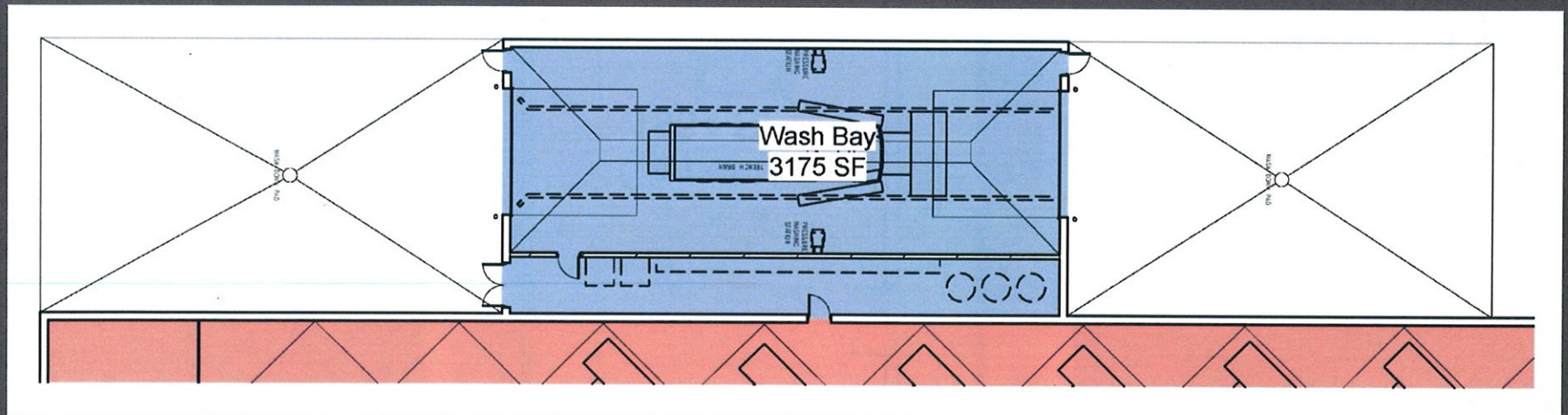
WELDING AND FABRICATION



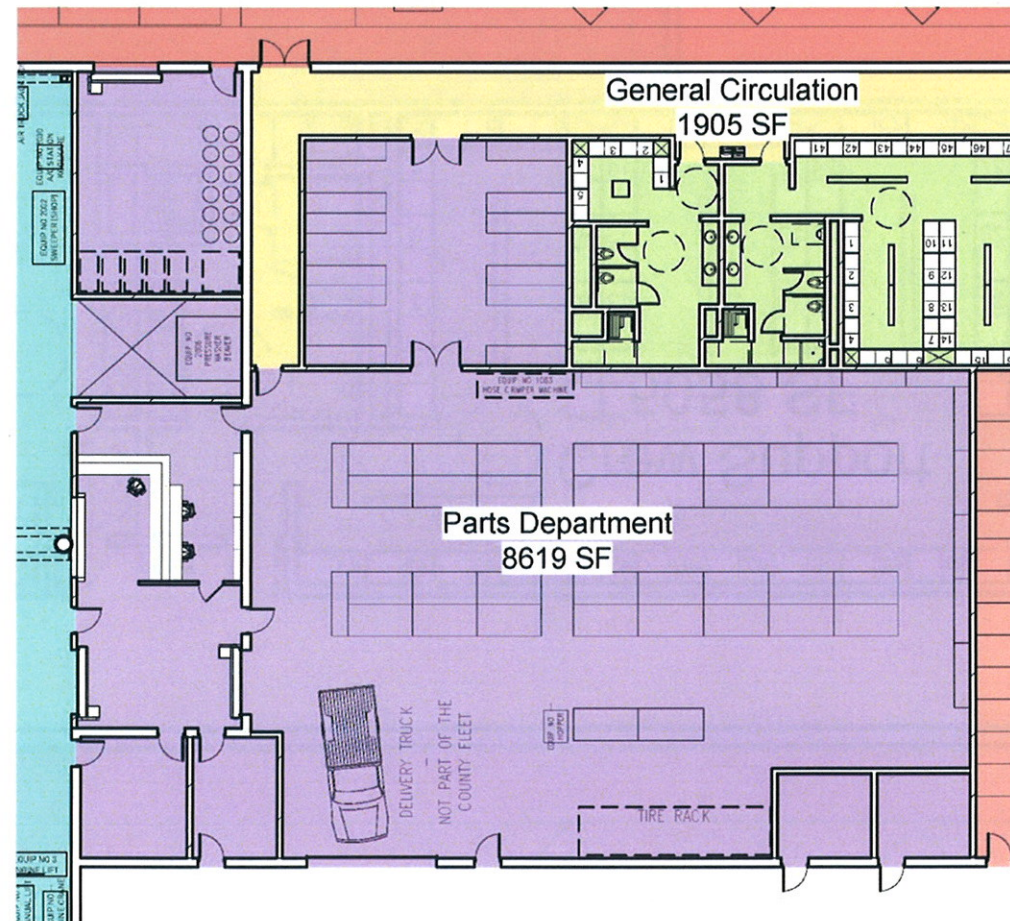
CARPENTRY



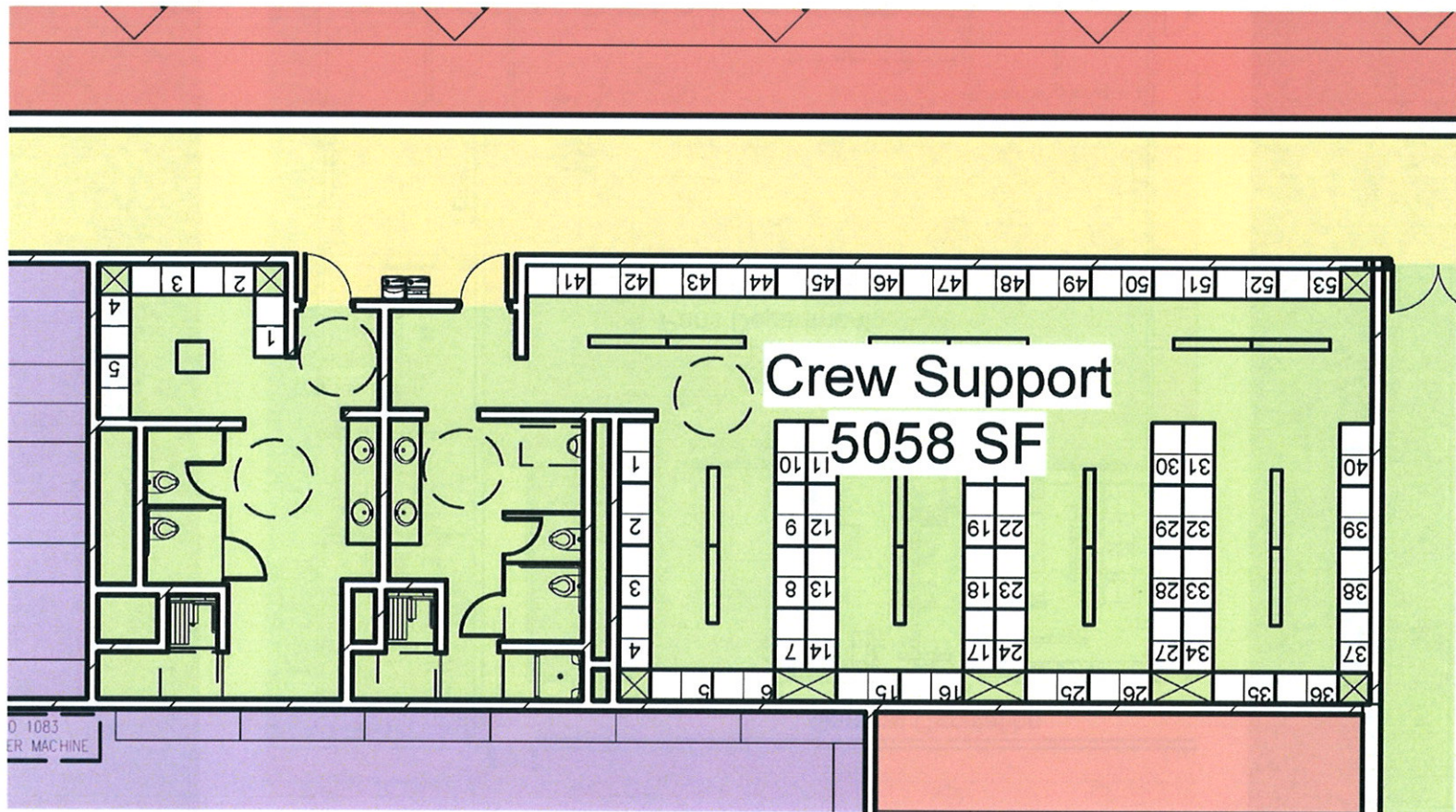
WASH BAY



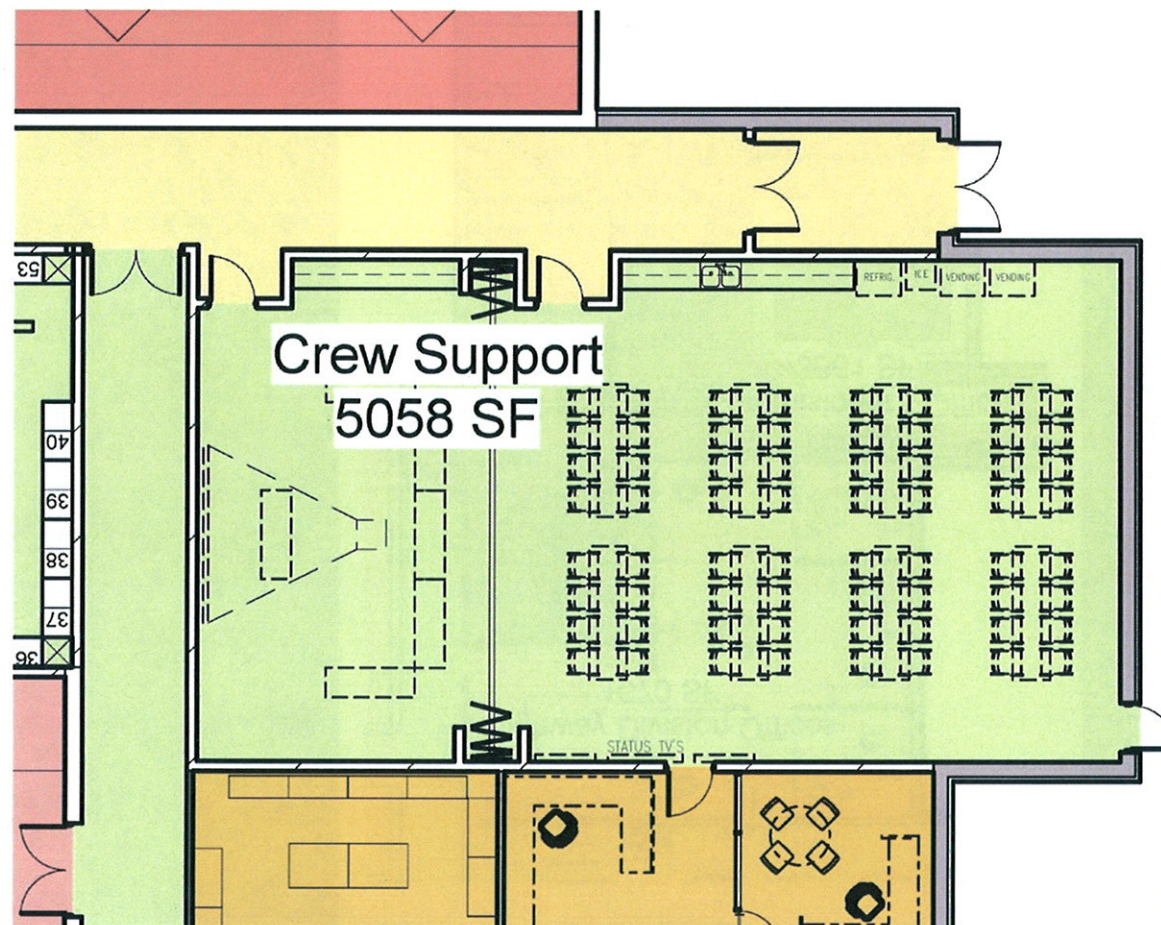
PARTS DEPARTMENT



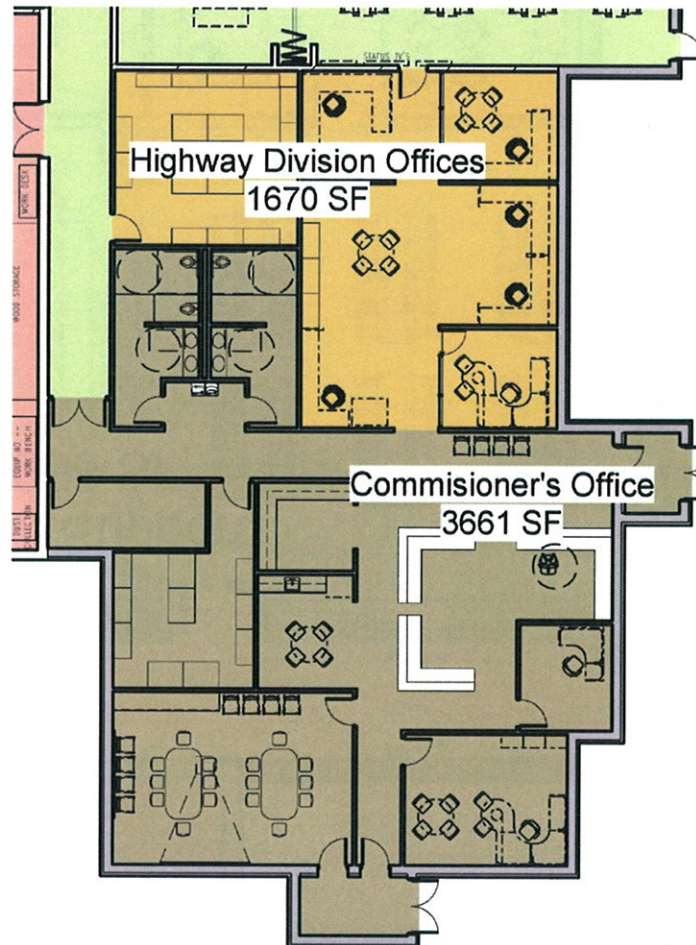
CREW SERVICES – LOCKER ROOMS



CREW SERVICES – READY ROOM



ADMINISTRATION OFFICES



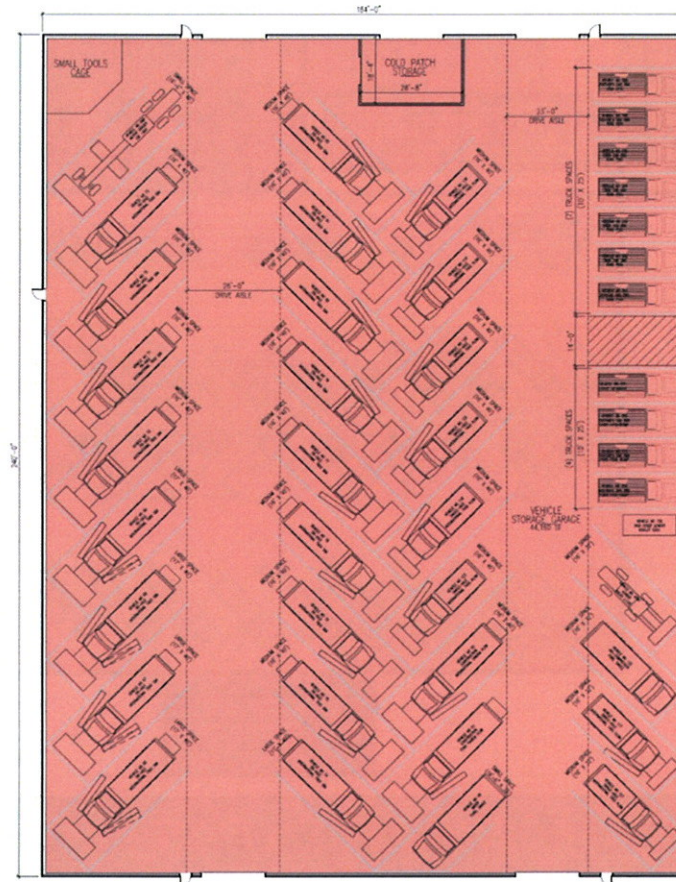
5,331 sf - 5.4% of area \$655,713 - 7.5% of cost

JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

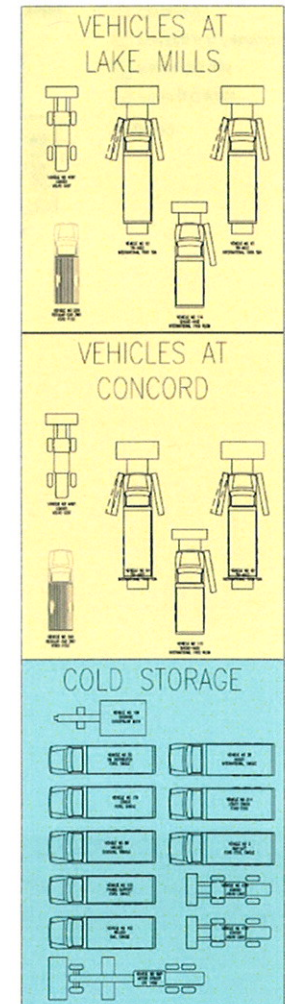
REDUCED PROGRAM PARKING LAYOUT

Reduced Program Parking Layout

- (8) Specialty trucks would be moved out to cold storage.
- Cold storage would increase 6,000 sf to accommodate extra trucks.
- Garage size would decrease by 6,432 sf (13%)
- Garage cost would decrease by \$520,992 (12.7%)
- Cold Storage would increase by \$312,000 (20%)
- Net Difference: \$208,992 savings



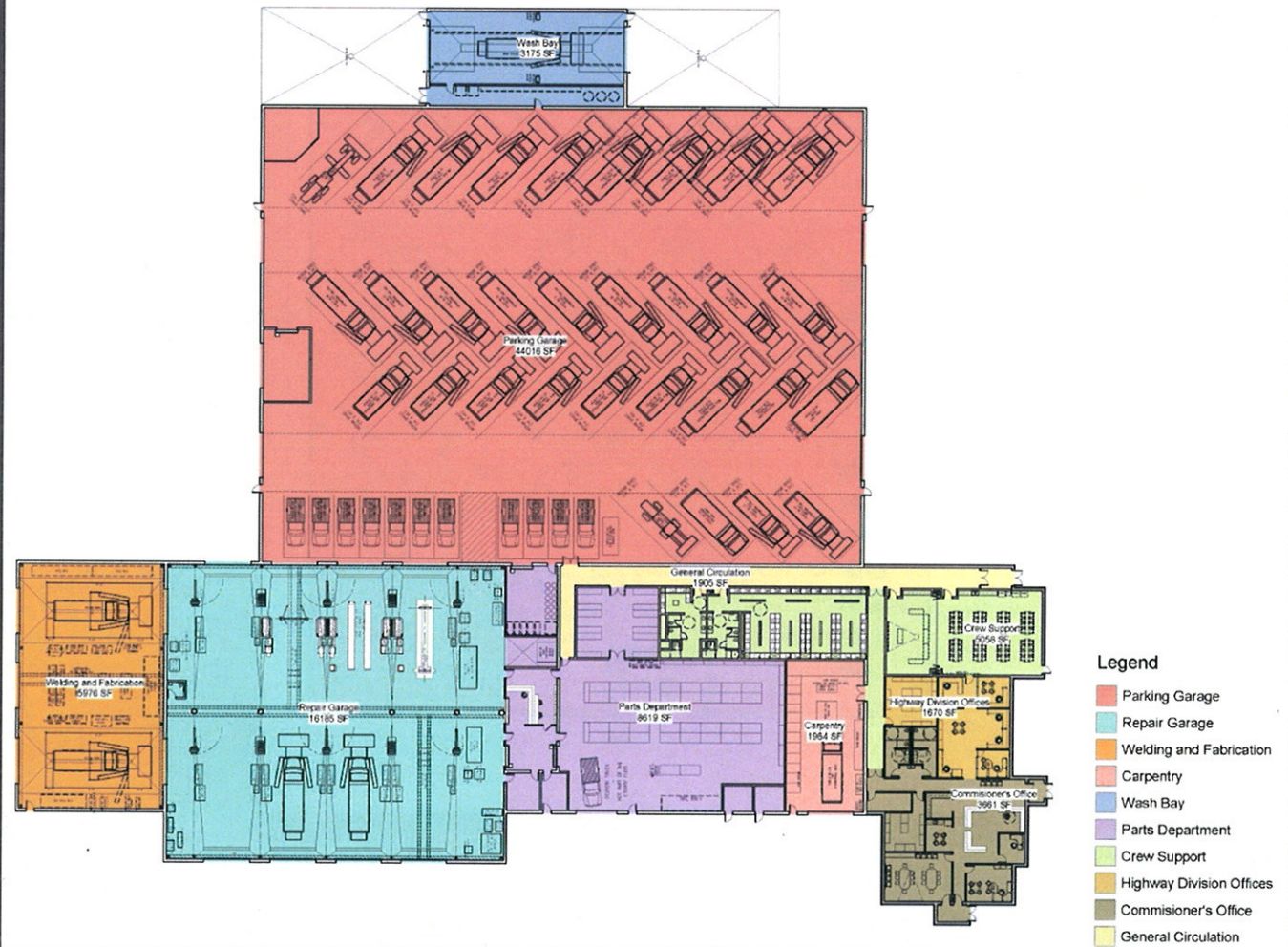
REDUCED PARKING
ALTERNATIVE
13.0% REDUCTION IN
SIZE



REDUCED PROGRAM PARKING LAYOUT

Reduced Program Parking Layout

- 92,393 sf



JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY

Precast Concrete Construction (Pros)

- Maintenance free for most of the serviceable life of the building.
- Highly durable interior and exterior for impact and corrosion.
- Rigid insulation is “sandwiched” and will not degrade or collapse.
- Roof insulation is typically higher with no thermal bridging.
- Low-slope roof allows for roof-top equipment.
- Walls are structural – No redundant structure where dissimilar building methods meet.
- Precast serves as a fire wall where occupancy separations are required.
- No diagonal bracing required.
- Factory controlled fabrication.
- Lower life-cycle costs.
- Strapping services to wall.

Precast Concrete Construction (Cons)

- More expensive up-front costs.
- Less flexibility for exterior openings.
- Requires center columns for long spans.

Pre-Engineered Metal Building (Pros)

- Lower up-front construction cost.
- Quick erection time.
- Clear span over reasonable spans.

Pre-Engineered Metal Building (Cons)

- More expensive up-front costs.
- Large columns at perimeter.
- Requires a concrete knee wall.
- Finishes and insulation degrade faster in corrosive environments.
- Column pads are exposed and can corrode.
- Lower insulation values and thermal bridging.
- Difficult to clean the exterior.
- Sloped roof structure is more difficult to put roof top equipment on.
- Less control over roof drainage.
- Dissimilar materials – Leakage.
- Much less durable to impact.
- Redundant structure.

Passive Technologies

- Building solar orientation and solar shading.
- Natural lighting (reduce artificial lighting).
- Energy-efficient building envelope.
- Material selection.
- Local materials and labor.
- Rainwater collection for vehicle washing.
- Waste-oil recovery.

Active Technologies

- Radiant in-floor heating.
- Solar hot-water heating.
- Geothermal heating.
- Photovoltaic arrays.

MOVING FORWARD

- Design Development Schedule
 - August 13 - Board Meeting Review of Design Development
 - September 10 - Board Meeting Review of Design Development
 - City of Jefferson Plan Commission Approval
- Committee Approvals Needed:
 - Site layout and facilities
 - Building program & size
 - Construction costs
- After County approvals, initiate the following:
 - City of Jefferson Site Development Approval Package
 - Building engineering (structural, mechanical, plumbing, electrical)
 - Site Engineering
 - Grading
 - Stormwater
 - Wetland permitting process
 - Soil borings

Thank You

JEFFERSON COUNTY HIGHWAY MAINTENANCE FACILITY