

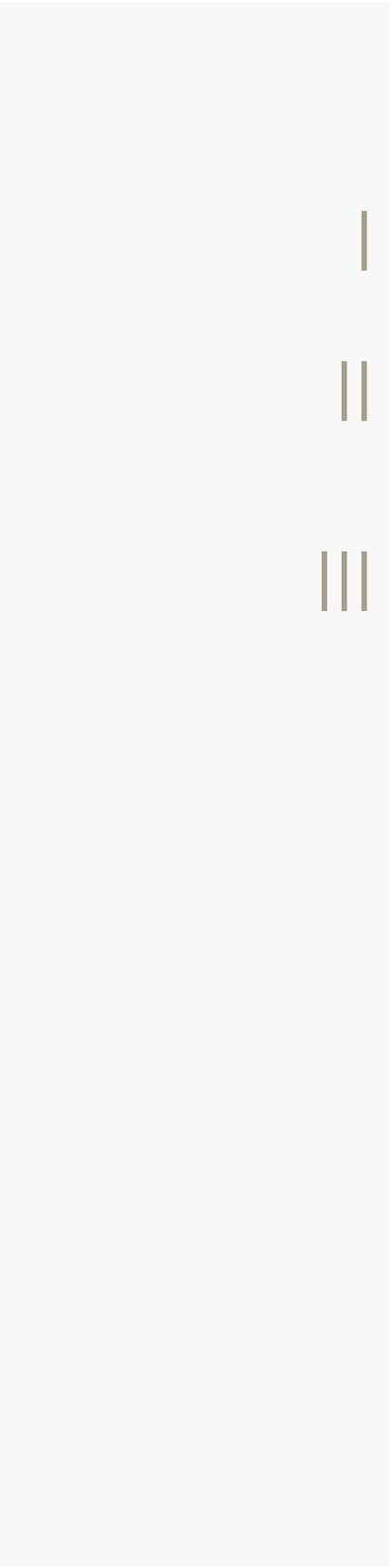


**RUNESTONE COMMUNITY CENTER**  
NEEDS ASSESSMENT - PHASE II PRE-DESIGN  
NOVEMBER 2014 | JLG 14043





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## DESIGN CHARRETTE

### WORKSHOP 2 - DESIGN CHARRETTE

On October 15th, 2014, JLG Architects hosted a design charrette at the Alexandria City Hall. In attendance for the charrette were a number of city council members, members of the Runestone Community Center Commission, and other members of the community with interest in the new facility. Facilitating the charrette were a number of JLG Architects designers and architects.

The Charrette began by dividing the participants into small groups which were asked to take a period of time and develop some spatial layouts and organization for the spaces involved in the new building. Some of the methods used for developing layouts including using building blocks that were the size and scale of the spaces required for the building program, and laying these blocks out in various ways. Also available to develop layouts were large printouts of the building site, tracing paper and large markers.

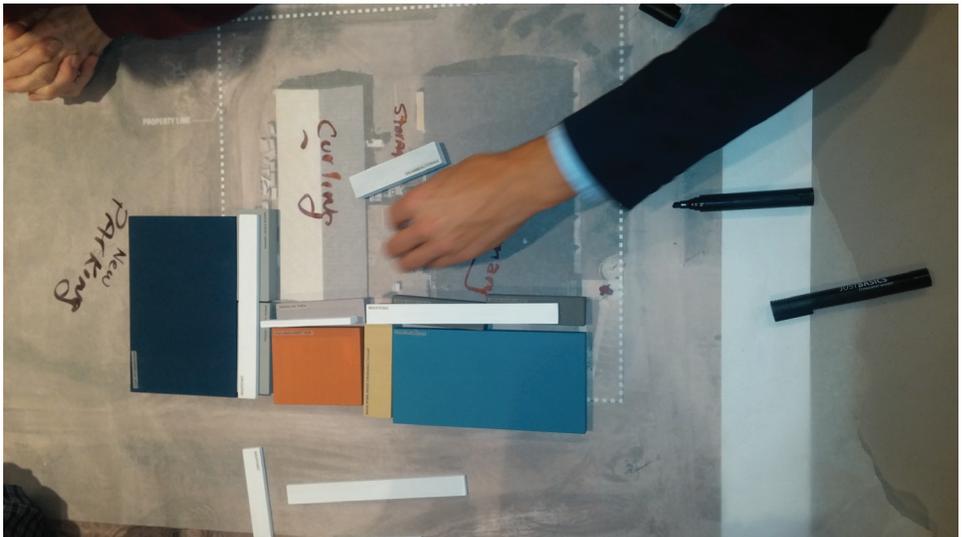
Once each of the four groups had developed their desired spatial layouts, they took turns presenting their concepts to the overall group where they discussed the reasoning for their desired layout. The summary of each of the four group layouts are presented on the following pages.

The last portion of the charrette included a review and rating of each groups design based on a number of categories. The categories used to rate the layouts were: Efficiency/Function, Circulation, Ease of Access, Site Efficiency, Best in Show, Ability to Phase, Best Parking Scheme, and Curb Appeal. Each participant was given dot stickers and were asked to place them on a board that listed each of these categories, and each groups layout. The result of this exercise was a listing of which group's layouts had the best idea for each category. The results are included following the group layout diagrams in this booklet.

Following the second workshop, JLG Architects was able to take the information gleaned from the groups at the design charrette and use that information to guide the overall concept plans and design for the project. The resulting concept plans are presented in section II of this booklet.



GROUP 4



LAYOUT BLOCKS

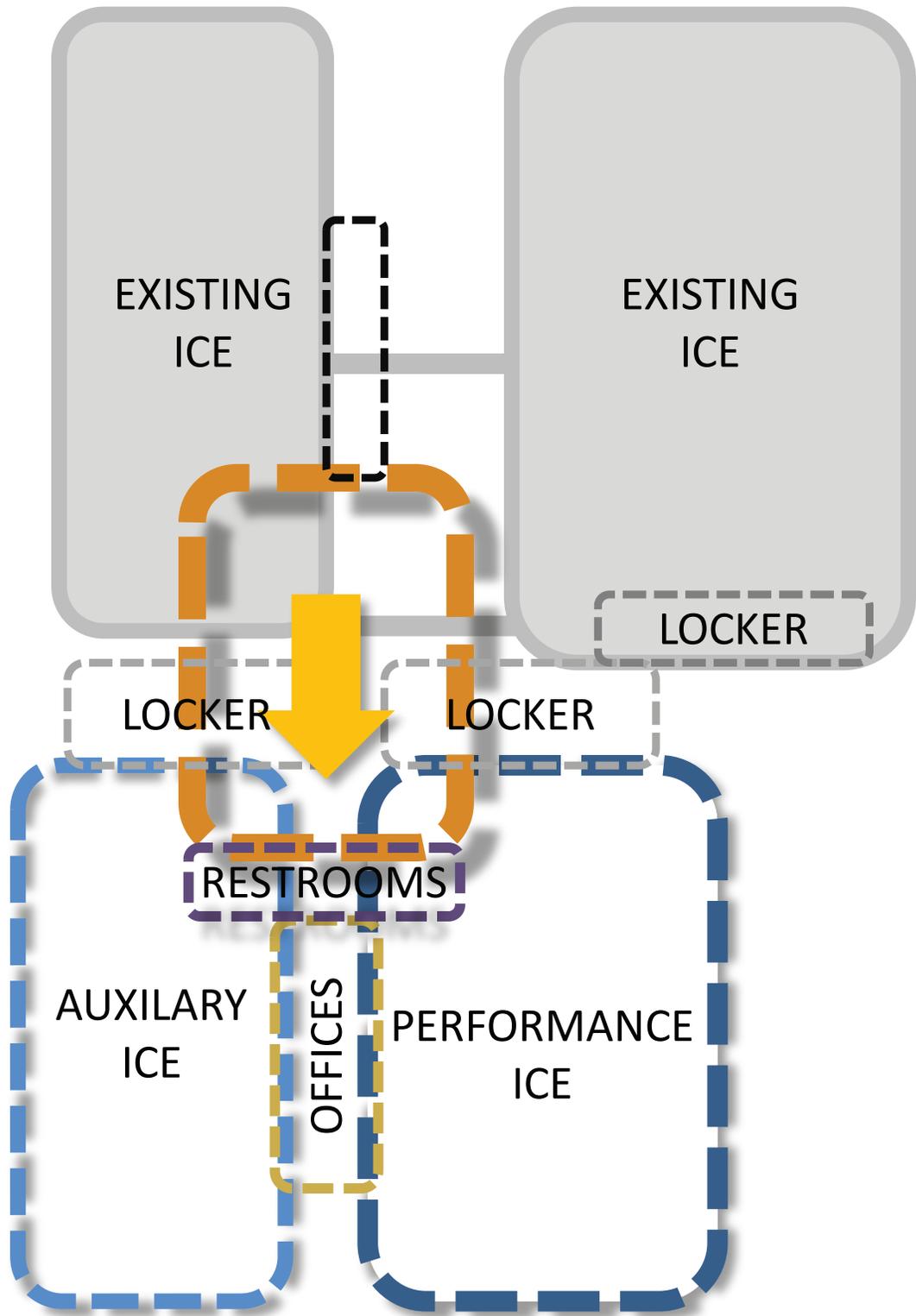


CONCEPT PRESENTATIONS

## GROUP 1 LAYOUT

The primary focus of the group one layout was to have a centralized public space or atrium, with each of the rinks organized around the space. The points that group one emphasized include:

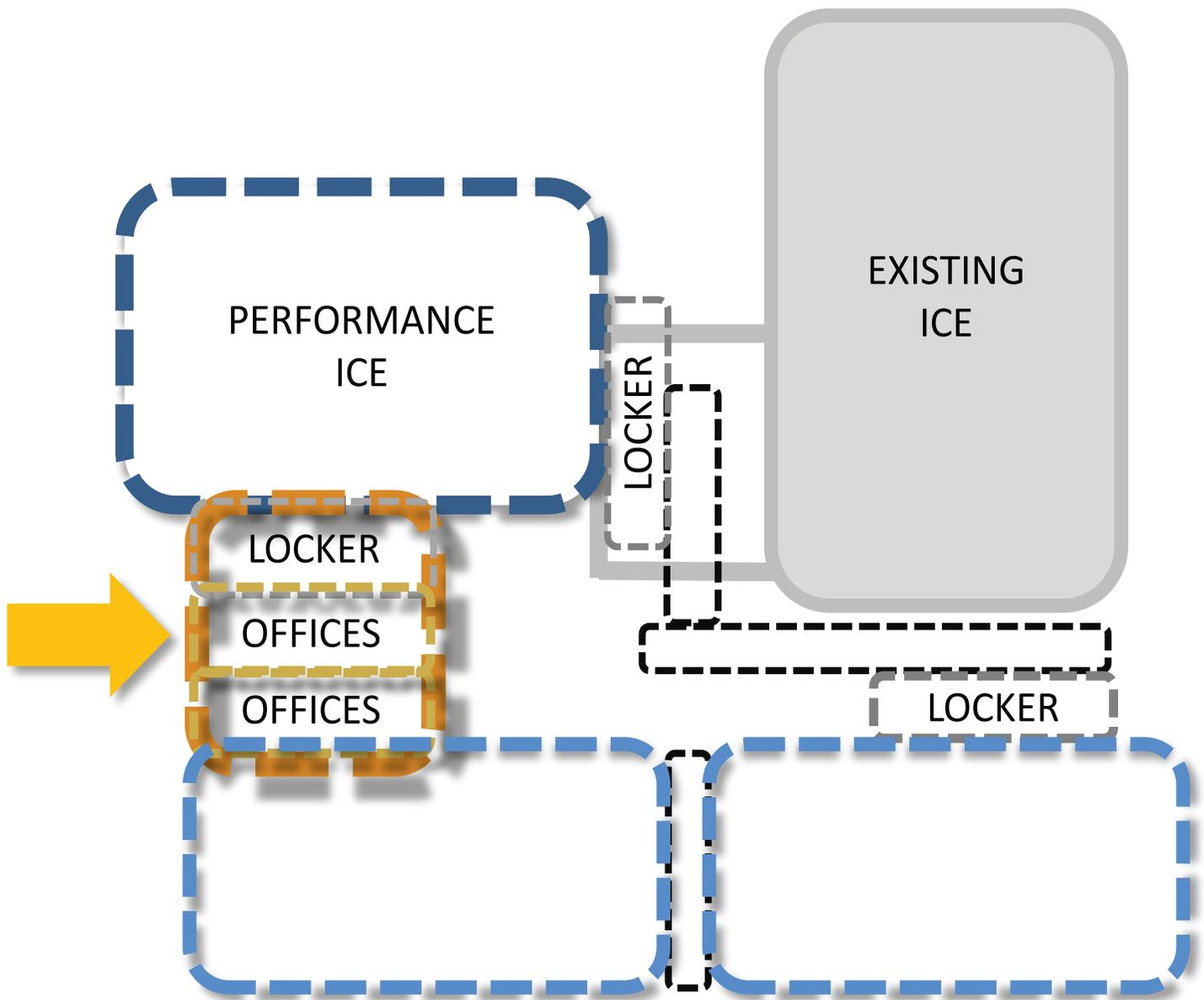
- Separation of people upon entering the building (players & spectators)
- Putting the main entry on the south (NOT the west) to work with climatic factors
- Adding one sheet of ice near the existing performance rink to take advantage of the existing compressor
- Having secondary parking/entrance for players/teams and curlers to avoid funneling all the users of the building through one spot
- Open viewing concourse on upper level that visual connects spectators to all the rinks.



## GROUP 2 LAYOUT

The primary focus of the group two layout was to demolish parts of the current facility and re-construct them to a higher quality. Other concepts from group two include:

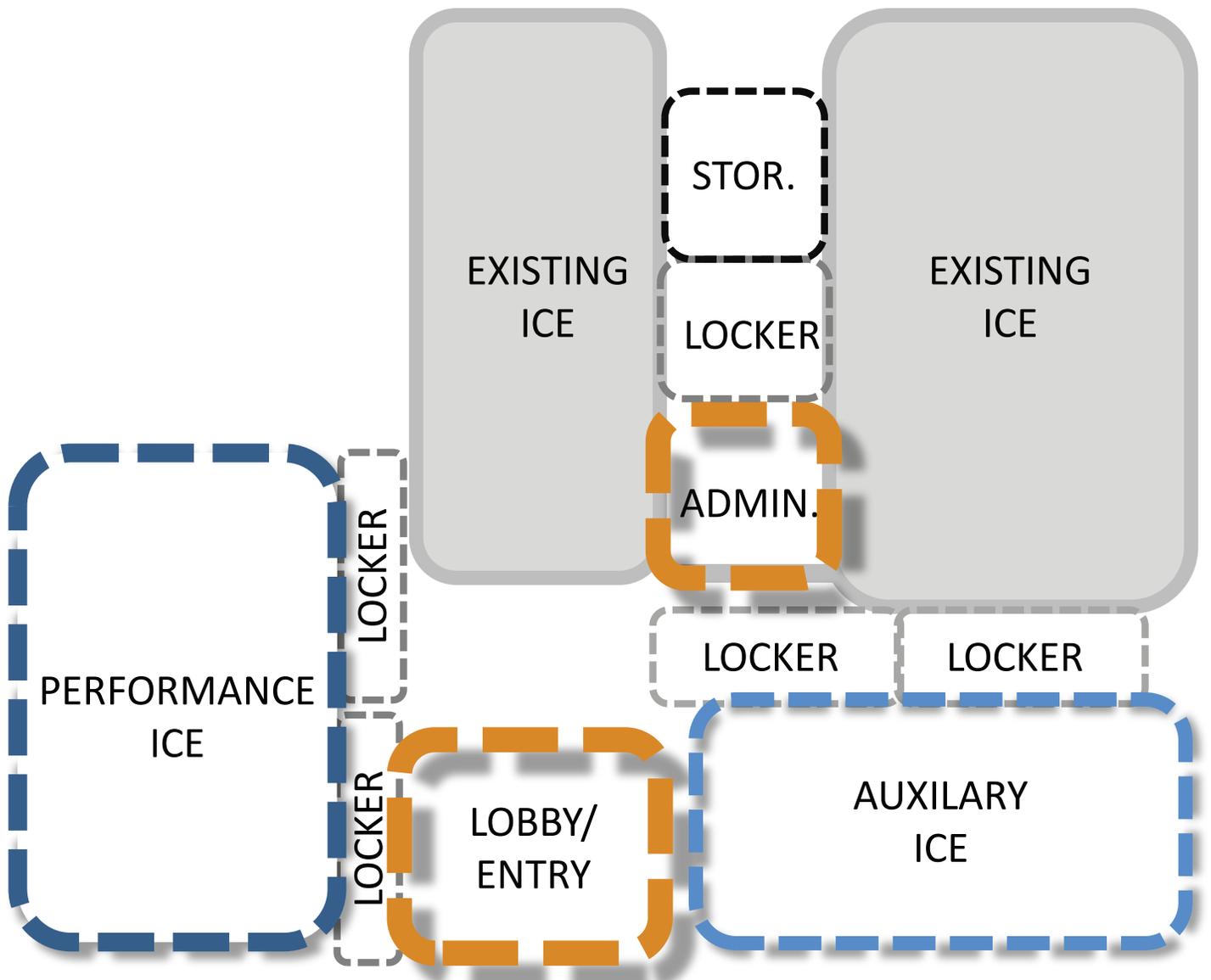
- Design aesthetic of the building was a primary concern.
- Group was concerned that spending money on the west rink, downsizing the rink for curling's needs and adding a second floor for viewing as well as upgrading lockers.
- With the thought above, group thought the best option was to tear down the west rink and start over with new construction.
- Again, with a member of the County Fair Board with our group, quality of building design moving forward was critical for image on the Fairgrounds.
- Eliminating one rink, we located two auxiliary rinks on the south allowing for second floor viewing/circulation with lockers below to the north.
- Mechanical, Zamboni access and secondary circulation ran north south between the two auxiliary rinks.
- Design concept for the two rinks was an arched roof sloping from one story on south side to two stories plus on north side with clerestory glass above the second floor viewing/circulation.
- Locker rooms, rink access would be on lower level connecting to all rinks.
- Second floor would be viewing/circulation along with offices, administration off of the entrance.
- The main entrance was located on the SW corner of the building for access to more parking on the south and west.
- The main entrance doors would be located to the south, west wall of the lobby would have a glass/façade protected from low sun and winter winds.
- The new main rink would be located where the west rink was torn down but running east/ west to add some protection to the south main entrance.
- Over the road and local truck deliveries will occur along the north side of the building group.



## GROUP 3 LAYOUT

The primary focus of the group one layout was to have a centralized public space or atrium, with each of the rinks organized around the space. The points that group one emphasized include:

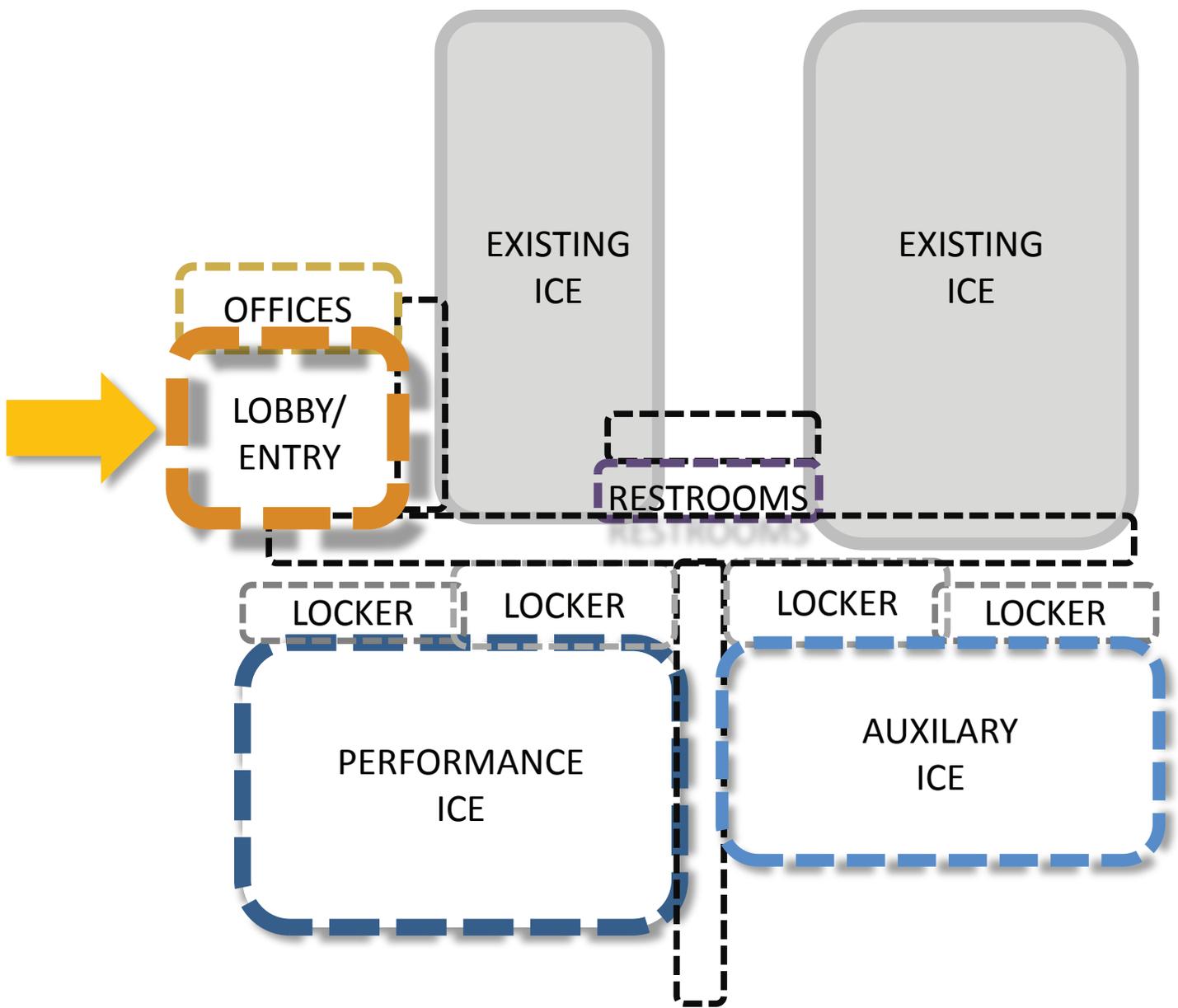
- Separation of the two primary performance rinks to avoid circulation issues with the two large groups of people
- Putting the main entry on the south (NOT the west) to work with climatic factors
- Having the main entry on the south to incorporate a visual connection to the track and fair grounds
- Having the auxiliary rink with 200-300 seats, but also having additional 100-200 seats on upper level viewing, allowing for one new rink that could seat 500 if the larger performance ice rink would need to be constructed in a future phase



## GROUP 4 LAYOUT

The primary focus of the group four layout was a clear, linear organization of spaces which translates into a clear and ordered circulation pattern for the users of the facility. Other ideas emphasized by group four include:

- Entrance to the West to maximize visibility from County Road 82
- Large upper concourse for viewing down into all rink spaces
- Separation of players and spectators upon their entry into the building, spectators would go to the upper viewing level and players stay on lower ice level to access locker rooms
- Clear organization of new locker room spaces and new ice sheets in a long, linear fashion



ISSUE/CATEGORY	GROUP 1	GROUP 2	GROUP 3	GROUP 4
<b>Efficiency-Function</b> Relationship of rinks to each other	7	0	0	7
<b>Circulation</b> Ease of access for people within building	2	0	1	8
<b>Ease of Access</b> to building entrance(s)	1	4	1	8
<b>Site Efficiency</b> Good use of site for building & functions	0	6	0	7
<b>Best in Show</b>	3	5	3	4
<b>Ability to Phase</b>	0	2	7	0
<b>Best Parking Scheme</b> (exterior circulation)	0	8	2	6
<b>Curb Appeal</b> (simple massing)	2	11	2	4
<b>OVERALL TOTAL</b>	<b>15</b>	<b>36</b>	<b>16</b>	<b>44</b>

## DOTMACRACY RESULTS

The results of the dotmacracy ranking system are shown above. The layouts proposed by Group 2 and Group 4 had the greatest number of overall dots which in general shows that those two layouts were favored by the overall group.



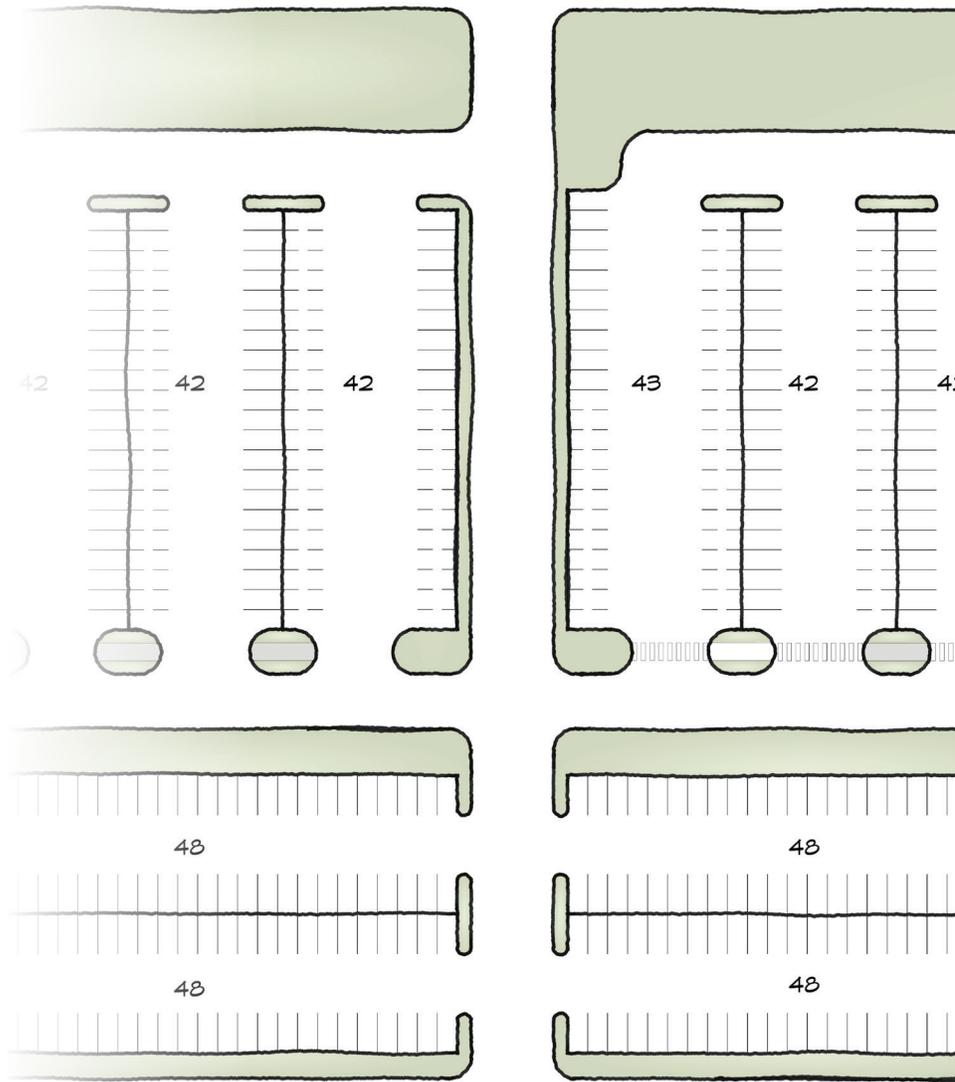
DESIGN  
CONCEPT

## CONCEPTUAL DESIGN

Following the completion of the design charrette, JLG Architects used the information gathered at the workshop to guide the preliminary layout and design of the addition to the Runestone Community Center. The design is represented on the following pages through site planning, floor plans, and conceptual 3-d images. The design is based on the response to its site, the responses of the stakeholders on the project, and the phase I feasibility study.

Throughout the development of the conceptual design, JLG Architects worked with the RCC Commission and project stakeholders to develop a design that best fit the needs of the facility, its program, and the desires of the stakeholders. The proposed design was developed to meet these needs in the most economical manner. The design could be further develop or modified to be constructed in phases as required to meet budget and timeline needs.

DESIGN  
CONCEPT



CONCEPT SITE  
PLAN

HWY 82

3RD AVE. WEST

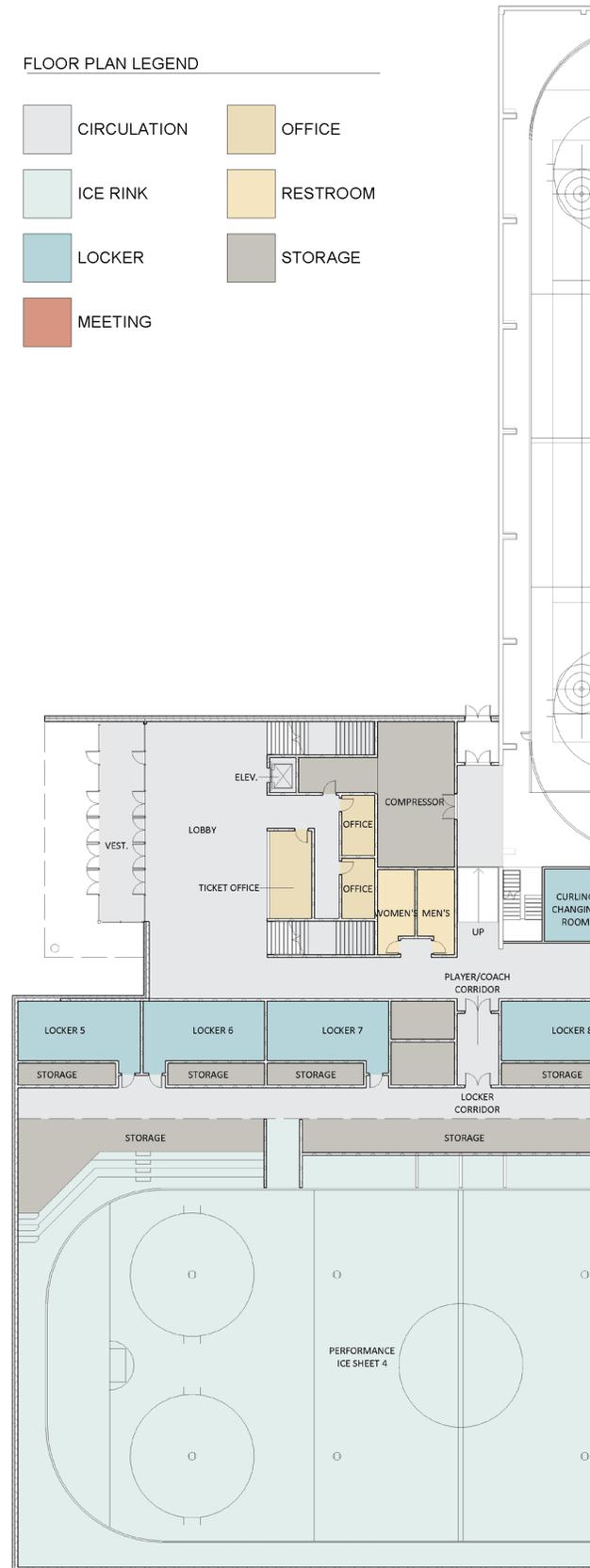


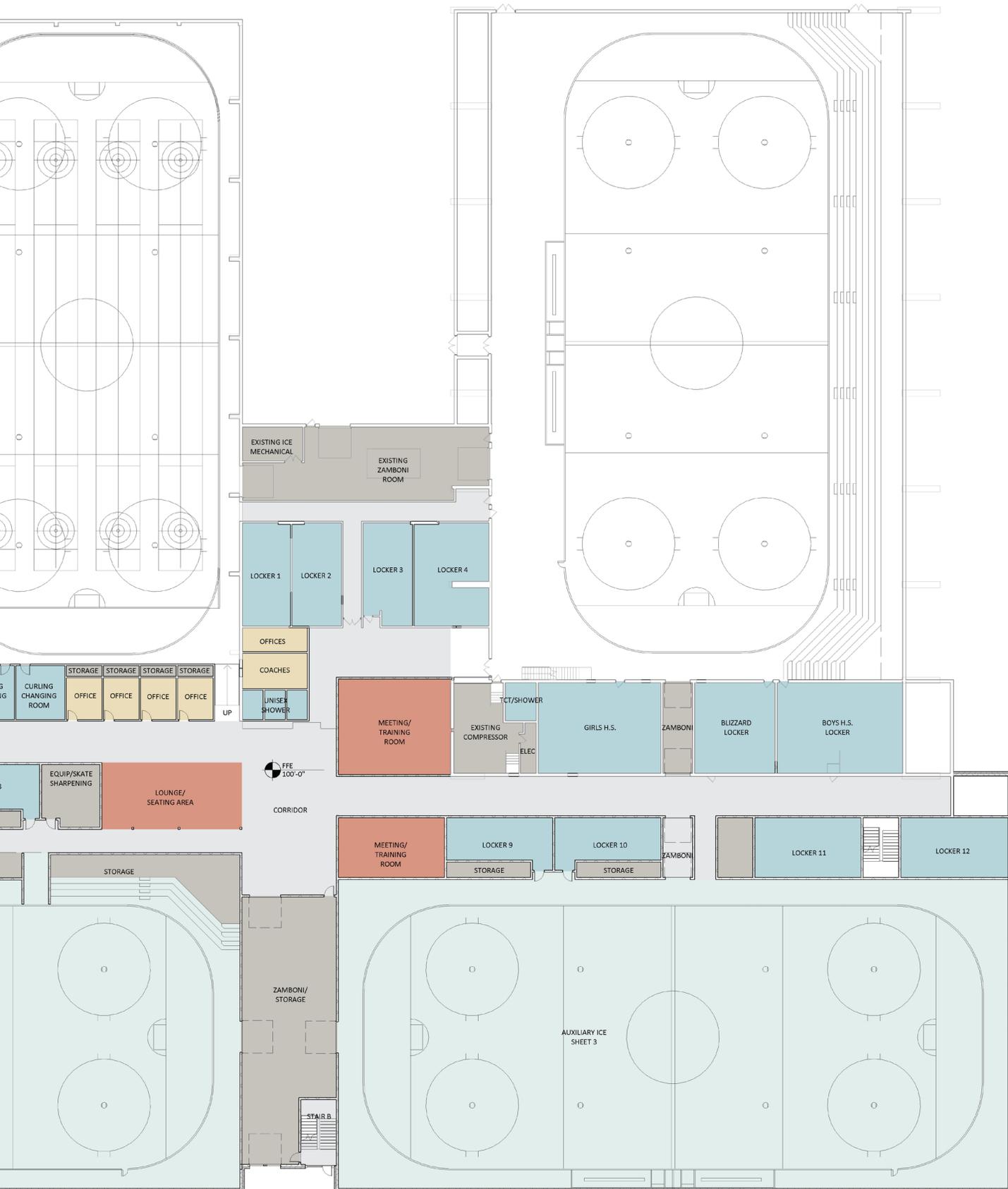
DESIGN  
CONCEPT

CONCEPT ICE  
LEVEL PLAN

FLOOR PLAN LEGEND

	CIRCULATION		OFFICE
	ICE RINK		RESTROOM
	LOCKER		STORAGE
	MEETING		





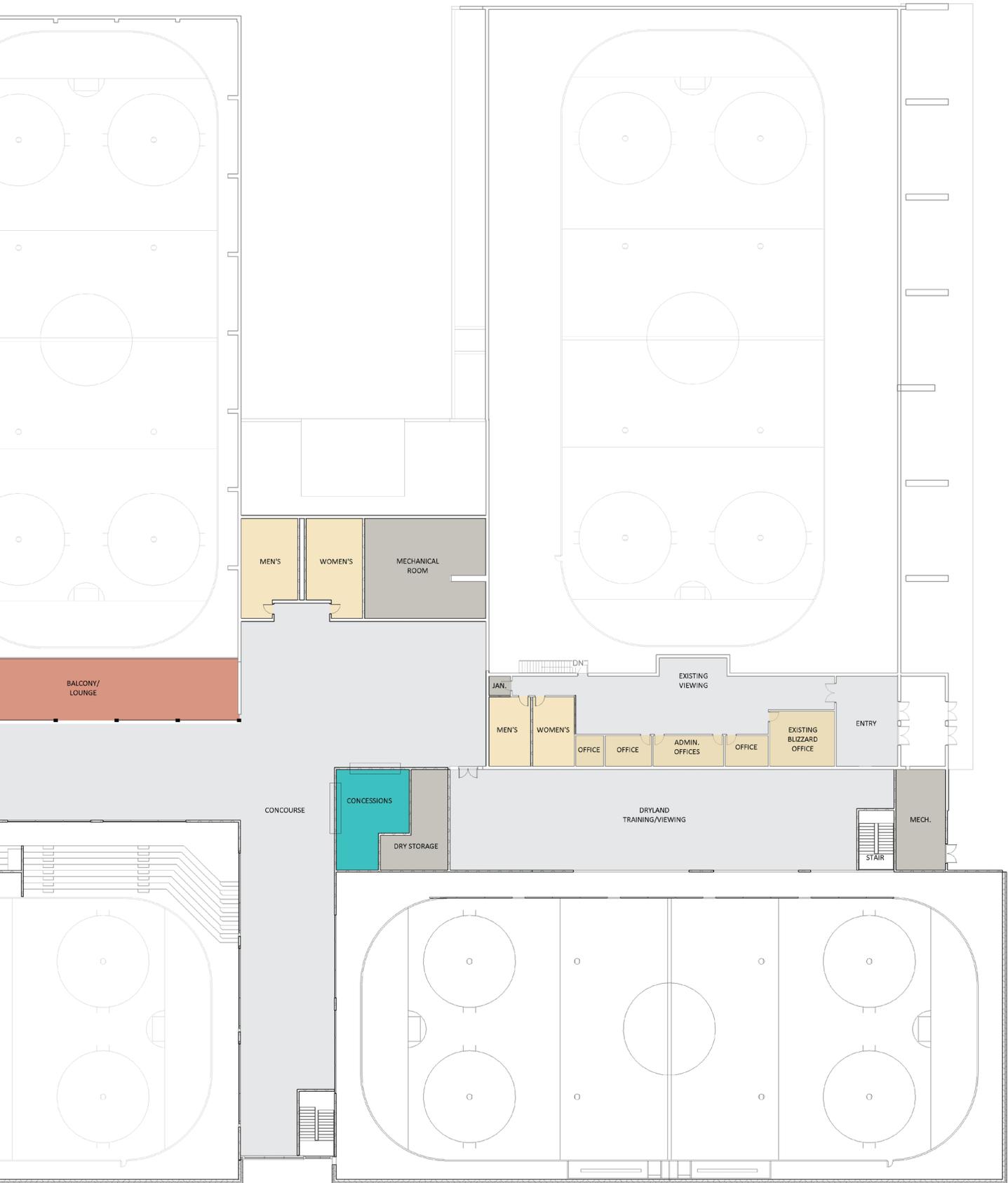
DESIGN  
CONCEPT

CONCEPT  
CONCOURSE  
LEVEL PLAN

FLOOR PLAN LEGEND

	CIRCULATION		OFFICE
	ICE RINK		RESTROOM
	LOCKER		STORAGE
	MEETING		





DESIGN  
CONCEPT

CONCEPTUAL  
RENDERING -  
ENTRANCE





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DESIGN  
CONCEPT



CONCEPTUAL  
RENDERING -  
AERIAL VIEW



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BUDGET  
ANALYSIS

## COST ANALYSIS SUMMARY

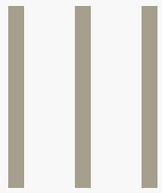
The preliminary budget for the Runestone Community Center Expansion has been studied in relation to what the optimal design and layout for the facility could be, as shown in the earlier defined concept plans. These concept planning relates to the Option 2 costs, which represent 2 new rinks that are combined with the existing rinks via shared concourse / public space and locker/support spaces.

Option 1 costs represent a phased version of Option 2, with the fourth rink and its related circulation / locker space not being initially built. This plan would allow for a straightforward expansion into option 2.

Option 3 would represent building the two new rinks shown in option 2, AND totally replacing the existing west rink with a new rink. Due to the extra cost that this option would represent, the concept planning did not focus on this solution. But if creating the optimal facility that would have the most longevity is the goal, than Option 3 ought to be discussed for consideration. The existing west rink would be the least quality rink of all rinks the facility would have. It is hampered by the quality of the rink floor as well as the condition of the building envelope and mechanical systems for efficiency.

There are variables that can be discussed to lower the costs of these options. For example, Option 2 has only \$11-\$12 million of its construction costs related directly to the rink spaces. Nearly \$6 million of construction cost is related to circulation space that is tying all of the rinks together such that it creates an optimal tournament venue. Over \$1 million is allocated for mechanical upgrades to the existing rinks. An adjacent freestanding facility could substantially reduce the square footage and costs by having the ability to be a more efficient layout, but then the operational efficiencies of not having the facility under one roof may need to be considered.

All of these cost models represent construction costs in current costs, presuming a hypothetical start to the project in 2015. Escalation costs of 3% to 4% per year may be expected.



BUDGET  
ANALYSIS

## PROJECT SIZE/SCOPE OPTIONS ANALYSIS

JLG Architects has identified 3 possible options for pursuing the project of constructing additional rink(s) space as an addition to the current Runestone Community Center facility. The three options and their approximate space and cost variations are shown below. Please refer to the page following option 3 for a detailed breakdown of project costs.

### OPTION 1

Option one considers constructing one new rink and required circulation and support space as initial construction. This option would allow an additional rink(s) to be phased through additional construction projects in the future. Areas for this option include:

Existing square footage	= 73,000 sf
New square footage	= 59,000 sf
Total facility square footage	=132,000 sf
<b>Budget Range for Option 1</b>	<b>\$16.5M - 19.5M</b>

### OPTION 2

Option two considers constructing two new rinks as the entire project. This would include a performance rink with seating for 1000, and auxiliary rink with seating for 300 and the required support and circulation space. Areas for this option include:

Existing square footage	= 73,000 sf
New square footage	= 95,000 sf
Total facility square footage	= 168,000 sf
<b>Budget Range for Option 2</b>	<b>\$24.5M - \$27.5M</b>

### OPTION 3

The concept floor plans shown in this booklet were developed based on Option 2. This was primarily done as Option 2 meets the overall needs of the facility and is the most economic option to do so. Should a more long-term solution be desirable which would result in a more cohesive, overall facility, Option 3 should be considered. Option 3 includes demolishing the existing auxiliary ice rink as its overall quality and performance would not match that of the new rinks that would be constructed. In place of the current auxiliary rink would be an additional new rink which would result in a total of 3 new ice rinks in addition to the existing performance rink. Option 3 provides the best long-term solution for the facility but is also the most expensive. The area and costs analyses are shown below, as well as a conceptual site plan for option 3.

Existing square footage	= 50,000 sf
New square footage	= 120,000 sf
Total facility square footage	= 170,000 sf
<b>Budget Range for Option 3</b>	<b>= \$29.5M - \$32.5M</b>





**RUNESTONE COMMUNITY CENTER - Preliminary Budget Study**

11/20/2014  
Project # 14043

**Hockey**

Space Name	Proposed	Cost/SF	Proposed Cost
Ice sheet 3	21,700 s.f.	\$215	\$4,665,500
Skate Sharpening	367 s.f.	\$170	\$62,390
Existing Zamboni	1,608 s.f.	\$160	\$257,280
Ice sheet 4	21,400 s.f.	\$205	\$4,387,000
Zamboni	2,856 s.f.	\$160	\$456,960
<b>SubTotal</b>	<b>47,931 s.f.</b>		<b>\$0</b>
Storage	3,420 s.f.	\$160	\$547,200
<b>TOTAL</b>	<b>51,351 s.f.</b>		<b>\$10,376,330</b>

**Mechanical**

Space Name	Proposed	Cost/SF	Cost
Compressor Room	821 s.f.	\$160	\$131,360
Elec.	78 s.f.	\$160	\$12,480
Elevator	54 s.f.	\$160	\$8,640
Existing Compressor Room	555 s.f.	\$0	\$0
Existing Ice Mech	215 s.f.	\$0	\$0
Toilets	2,046 s.f.	\$225	\$460,350
Upper mechanical	2,200 s.f.	\$160	\$352,000
<b>SubTotal</b>	<b>5,969 s.f.</b>		<b>\$0</b>
Mechanical	1,500 s.f.	\$160	\$240,000
<b>TOTAL</b>	<b>7,469 s.f.</b>		<b>\$1,204,830</b>

**Lockers**

Space Name	Proposed	Cost/SF	Cost
Blizzard Locker	763 s.f.	\$180	\$137,340
Boys HS	1,188 s.f.	\$180	\$213,840
Coaches	242 s.f.	\$225	\$54,450
Curling Changing	555 s.f.	\$185	\$102,675
Girls HS	1,164 s.f.	\$180	\$209,520
Lockers 1-12	6,504 s.f.	\$225	\$1,463,400
Showers	192 s.f.	\$225	\$43,200
<b>SubTotal</b>	<b>10,608 s.f.</b>		<b>\$0</b>
<b>TOTAL</b>	<b>10,608 s.f.</b>		<b>\$2,224,425</b>

**Training**

Space Name	Proposed	Cost/SF	Cost
Dryland training/viewing - new	4,500 s.f.	\$175	\$787,500
Existing dryland	3,550 s.f.	\$0	\$0
	s.f.	\$175	
<b>SubTotal</b>	<b>8,050 s.f.</b>		<b>\$0</b>
Storage	0 s.f.	\$160	\$0
<b>TOTAL</b>	<b>8,050 s.f.</b>		<b>\$787,500</b>

**Administration**

Space Name	Proposed	Cost/SF	Cost
Offices	1,029 s.f.	\$180	\$185,220
Ticket Office	216 s.f.	\$180	\$38,880
Upper admin	230 s.f.	\$180	\$41,400
Existing Offices	380 s.f.	\$180	\$68,400
Meeting	780 s.f.	\$180	\$140,400
Offices	380 s.f.	\$180	\$68,400
<b>SubTotal</b>	<b>3,015 s.f.</b>		<b>\$0</b>
Storage	300 s.f.	\$160	\$48,000
<b>TOTAL</b>	<b>3,315 s.f.</b>		<b>\$590,700</b>

Public Space				
Space Name	Proposed	Cost/SF	Cost	
Corridor - lower level	7,992 s.f.	\$160	\$1,278,720	
Lobby	3,154 s.f.	\$170	\$536,180	
Locker Corridor	1,725 s.f.	\$160	\$276,000	
Lounge Area	980 s.f.	\$170	\$166,600	
Meeting/Training	1,788 s.f.	\$160	\$286,080	
Player/coach corridor	174 s.f.	\$160	\$27,840	
vestibule	1,120 s.f.	\$185	\$207,200	
Upper balcony/lounge	1,990 s.f.	\$180	\$358,200	
Circulation	157 s.f.	\$170	\$26,690	
Concessions	655 s.f.	\$190	\$124,450	
Upper Concourse	14,990 s.f.	\$160	\$2,398,400	
			\$0	
<b>SubTotal</b>	<b>11,146 s.f.</b>	<b>\$0</b>	<b>\$0</b>	
Storage	506 s.f.	\$160	\$80,960	

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<b>TOTAL</b>	<b>11,652 s.f.</b>		<b>\$5,767,320</b>
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Site Design & Deferred Maintenance				
Item	Proposed	Cost/Unit	Cost	
Private Drive	1,200 l.f.	\$125	\$150,000	
Concrete Walks/Plaza	10,000 s.f.	\$5	\$50,000	
Marshalling / Staging area	0 s.f.	\$5	\$0	
Utilities	1 ls	\$250,000	\$250,000	
Site Elec	1 ls	\$200,000	\$200,000	
Landscaping	1 ls	\$100,000	\$100,000	
Parking \$/Stall	500 ea	\$2,500	\$1,250,000	
Curb and Gutter	4,000 l.f.	\$25	\$100,000	
Public Streets	l.f.	\$250	\$0	
New HVAC/Dehumidification upgrades	40,000 sf	\$24	\$960,000 in existing main rink and existing west rink	
replacement of partial roof at west rink	2,500 sf	\$40	\$100,000	
			<b>\$3,160,000</b>	

TOTALS				
Program Component	Proposed	Cost/SF	Cost	
Hockey	51,351 s.f.	\$202	\$10,376,330	
Mechanical	7,469 s.f.	\$161	\$1,204,830	
Lockers	10,608 s.f.	\$210	\$2,224,425	
Training	8,050 s.f.	\$98	\$787,500	
Administration	3,315 s.f.	\$178	\$590,700	
Public Space	11,652 s.f.	\$495	\$5,767,320	
<b>SubTotal</b>	<b>92,445 s.f.</b>	<b>\$227</b>	<b>\$20,951,105</b>	
<b>TOTAL</b>	<b>111,000 s.f.</b>	<b>\$189</b>	<b>\$20,951,105</b> Bldg Const. Cost	
Site Design & Deferred Maintenance			\$3,160,000 Site Const. Cost	
		<b>\$217</b>	<b>\$24,111,105</b> Total Const. Cost	
first floor	81,000 sf			
second floor	30,000 sf			
		14%	\$3,375,555 Soft Costs	
		0.0%	\$0.00 Escalation - const start of March 2015	
		<b>\$248</b>	<b>\$27,486,660</b> OPTION 2 - Total Project Cost	

Option 1 - Deduct the 4th Rink				
1 Deduct the 4th rink	21,400 s.f.	\$205	\$(4,387,000)	
less lower level lockers, circulation & misc spac	7,000 s.f.	\$192	\$(1,344,000)	
less upper level dryland and misc concourse	7,000 s.f.	\$192	\$(1,344,000)	
			\$(7,075,000) subtotal of changes	
		14%	\$(990,500.00) Soft Costs	
		0.0%	\$ - Escalation - const start of March 2015	
			<b>\$(8,065,500.00)</b>	
			<b>\$19,421,160</b> OPTION 1 - Total Project Cost	

Option 3 - Deduct the 4th Rink				
1 Add a replacement Rink for the West Rink	21,400 s.f.	\$205	4,387,000	
			4,387,000 subtotal of changes	
		14%	614,180.00 Soft Costs	
		0.0%	\$ - Escalation - const start of March 2015	
			<b>\$ 5,001,180.00</b>	
			<b>\$32,487,840</b> OPTION 3 - Total Project Cost	

