II
Best Practices in Design

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HARTFORD ARENA: "National Best Practices In Urban Coliseum Design"

Arenas are large, complex buildings that host a variety of activities. They are also a part of a city's physical and cultural fabric. As such, development of a new arena requires careful analysis to ensure its success – defined both by the building's function as well as its impact on the downtown context.

Site Factors: Occupying several hundred thousand square feet of space, arenas are large buildings in any downtown setting. The unique relationship of the event floor, spectator seating, and related services dictate a building footprint that often covers several urban blocks. With these basic parameters in mind, any potential sites must first be able to accommodate the physical size and configuration of a contemporary arena building. Topographical features may present either advantages or disadvantages, particularly as it relates to access to the concourse and event floor levels. Utilities must also be evaluated with respect to capacity as well as location; in some cases, existing lines may have to be either upgraded or relocated to support a new arena.

Cost & Timing: Assuming an arena will physically fit on a site, a related issue is the relative land costs within the project budget. Certain sites may trigger construction cost premiums due to issues such as demolition requirements, environmental remediation, undesirable soil conditions, etc. Additionally, on-site and/or off-site improvements (such as relocation of existing businesses or utilities) may have significant impacts on the project's financial viability. Depending on unique site characteristics and/or land acquisition requirements, timing may or may not work to meet the needs of the building and its tenants; interim scenarios may be necessary to bridge the gap between available venues.

Transportation: A reality of arenas is that they are entertainment destinations that attract large numbers of visitors. How people get to and from the building is a critical factor in determining an appropriate site location. For many arenas, automobiles are the primary mode of transportation: roadway access and capacity, therefore, are important considerations. Traffic management plans aid in maximizing efficiency and safety, especially before and after events. Parking availability and location is a related factor, with a ½-mile walking radius considered an acceptable range; parking ratios vary upon location, but a basic average may be on the order of 3 seats per car. Ideally, mass transit options are part of the overall transportation strategy, with the effect of reducing the arena's impact on existing vehicular and parking systems.

Urban Design: By their very nature, arenas are highly visible buildings, with the ability to greatly affect the image of the city in which they are built. Determining the optimal building massing relative to its existing and anticipated context is a key design challenge to maximize the arena's visual presence and ability to act as a catalyst. Similarly, framing special views from the public lobby and plaza areas will help to distinguish the arena as truly unique to its particular city – a place that captures local traditions, personalities, and aspirations. Frequently featured as anchors to larger mixed-use/entertainment districts, urban arenas can also reinforce larger development initiatives through architectural decisions such as entry locations, building materials, environmental graphics, public spaces, etc.

III
Program Requirements for Potential Users

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Program Requirements for Potential Users

Programming is the process of establishing the functional requirements of a building and translating them into space requirements that define the layout, size, configuration and technical aspects of the space. This process requires collection and synthesis of the data throughout the design process. It is intended to document and communicate this information to the owner, design team and others.

Attached is a Concept-level Facility Program based on an NHL/NBA facility with a major collegiate tenant, which is intended to establish the primary program elements for the building and related support space and their square footages, which allows a preliminary summary of required total area of the facility. This program can then be used by the design team to begin site studies and developing design concepts.

The program described is a relatively brief concept-level document which will be expanded as the project advances through various stages of design development, to include more detail as appropriate to each stage.

The program is a fluid document that will continue to be revised and refined throughout the project.

Program Requirements for Potential Users at a New Downtown Hartford Arena

Space Type	Room Description	Recommended Units	SF	Total SF	Comments
CLASSIFICATION 1: SPECTATOR FACILITIES					
Seating Bowl	Seating: Hockey (Basketball 18,500)	17,500	7.0	122,500	
Premium Spaces	a. Luxury Suites	60	375	22,500	
	b. Bunker Suites	8	600	4,800	
	c. Bunker Lounge			2,100	
	d. Courtside Club			5,000	
	e. Club Lounge	1500	10	15,000	
Other Hospitality	a. Owner/Sponsors Rooms (includes support areas)	3	1,500	4,500	
Sponsorships	a. Sponsor Zones (off concourse)	4	2,000	8,000	
Amenities	a. Public/ Premium Toilet Rooms	330	60	19,800	units = number of toilet fixtures
	b. Guest Service Facilities (First Aid, other)			2,500	
SUB-TOTAL (NET AREA)				**206,700**	
CLASSIFICATION 2: FOOD and RETAIL FACILITIES					
Concessions	a. Concession stands (@ 1:120 spectators)	144	150	21,600	
	b. Vending Stations	8	200	1,600	
	c. Food Court	1	2,000	2,000	
Kitchens	a. Main Kitchen	1	6,000	6,000	
	b. Pantries	6	500	3,000	
Beer Distribution	a. Beer Pump Rooms	4	500	2,000	
Food Service	a. Commissary	1	6,000	6,000	
	b. Staff Facilities/ Office			5,000	
Restaurants	a. Restaurants	2	10,000	20,000	
Retail Sales	a. Team Store, Storage, and Novelty Sales Booths			6,000	
SUB-TOTAL (NET AREA)				**73,200**	
CLASSIFICATION 3: CIRCULATION					
Concourses	a. Main and Upper Concourses	17,500	5.2	91,000	
Lobbies	a. Lobbies (Main, Secondary, @ Elevators)			20,000	
Corridors	a. Service Corridor on Event Floor Level	1	20,000	20,000	*12' min. width*
	b. Suite Corridors on Suite Levels	2	12,000	24,000	*6' min. width*
Vertical Circulation	(included in net to gross factor below)			0	
SUB-TOTAL (NET AREA)				**155,000**	
CLASSIFICATION 4: EVENT FACILITIES					
Event Floor	a. Hockey Rink	1	17,000	17,000	
	b. Basketball Court (70' x 134' clear)		9,380	9,380	fits within above
	c. Hockey Benches, Other Off-floor Areas			600	
Event Support	a. Performer Dressing/ Mascot/ Green Rooms			4,000	
	b. Crew Facilities			1,200	
	c. Production Offices			1,000	
SUB-TOTAL (NET AREA)				**23,800**	
CLASSIFICATION 5: TEAM FACILITIES					
Home Lockers	a. Hockey (NHL)	1	15,000	15,000	*includes training facilities*
	b. Basketball (NCAA)	1	10,000	10,000	*includes training facilities*

Program Requirements for Potential Users at a New Downtown Hartford Arena

Visitor Lockers	a. Visiting NHL	1	3,500	3,500	
	b. Visiting NCAA	1	2,500	2,500	
	c. Auxiliary Lockers	2	2,000	4,000	
Other	a. Officials' Lockers	2	900	1,800	
	b. X-ray	1	400	400	
Practice Facility					
SUB-TOTAL (NET AREA)				**37,200**	
CLASSIFICATION 6: ADMINISTRATION					
Offices	a. Arena Management Office	1	5,000	5,000	
	b. Team Offices for NHL, NCAA	2	20,000	40,000	
	c. Box Office (includes 20 ticket windows)			2,500	
SUB-TOTAL (NET AREA)				**47,500**	

Program Requirements for Potential Users at a New Downtown Hartford Arena

CLASSIFICATION 7: MEDIA FACILITIES					
Press Facilities	a. Press Box - Hockey (writing, broadcast & other booths and support space)			25,000	
	b. Press Support @ Event Level			5,000	
	c. Interview Facilities (includes multi-purpose/ press conference room)	5		2,900	
Control Rooms	c. Control Rooms			1,400	@ press & event levels
Broadcast Trucks	a. TV Truck Parking (interior)			6,000	
SUB-TOTAL (NET AREA)				**40,300**	
CLASSIFICATION 8: OPERATIONS SUPPORT					
Staff Facilities	a. Building Staff Offices and Lockers			2,500	
	b. Event Staff Facilities			3,000	
Storage Loading Dock	a. Event Storage and General Building Storage			20,000	
	a. Dock/ Staging/ Marshalling/ Trash			24,000	
Maintenance	a. Maintenance Shops			6,000	
	b. Janitorial/Cleaning (storage, trash rooms, other)			3,000	
Security	a. Security Offices	1	1,000	1,000	
	b. Command Center	1	500	500	
Ice Support	a. Zamboni Parking/ Ice Support			3,200	
M/E/P	a. Mechanical/ Electrical/ Plumbing Space			40,000	
SUB-TOTAL (NET AREA)				**103,200**	
CLASSIFICATION 9: PARKING					
Parking	a. Players/Coaches/ Administrators (interior)	50	500	2,500	
SUB-TOTAL (NET AREA)				**2,500**	
BUILDING NET TOTAL				**689,400**	
+ net to gross multiplier (20%)				**113,380**	**excludes seating*
BASE PROGRAM - BUILDING GROSS TOTAL				**802,780**	

CLASSIFICATION 9: ADDITIONAL PROGRAM OPTIONS					
A. Practice Ice Rink	1. Ice Surface/ Support			20,000	
B. Community Ice Use Facilities	1. Check in/ Spectator Area/ Party Rooms/ Changing Rooms, other			15,000	
C. Business/ Conference Center	1. Meeting Rooms & Prefunction Space			18,000	
D. Kids' Fun Zone	1. Kids' Activity Area (off concourse)	1	6,000	6,000	
E. Museum	1. Hall of Fame Museum	1	5,000	5,000	
SUB-TOTAL (NET AREA)				**64,000**	
OPTIONAL PROGRAM NET TOTAL				**64,000**	
+ net to gross multiplier (20%)				**12,800**	
OPTIONAL PROGRAM - GROSS TOTAL				**76,800**	

IV
Review of Potential Sites

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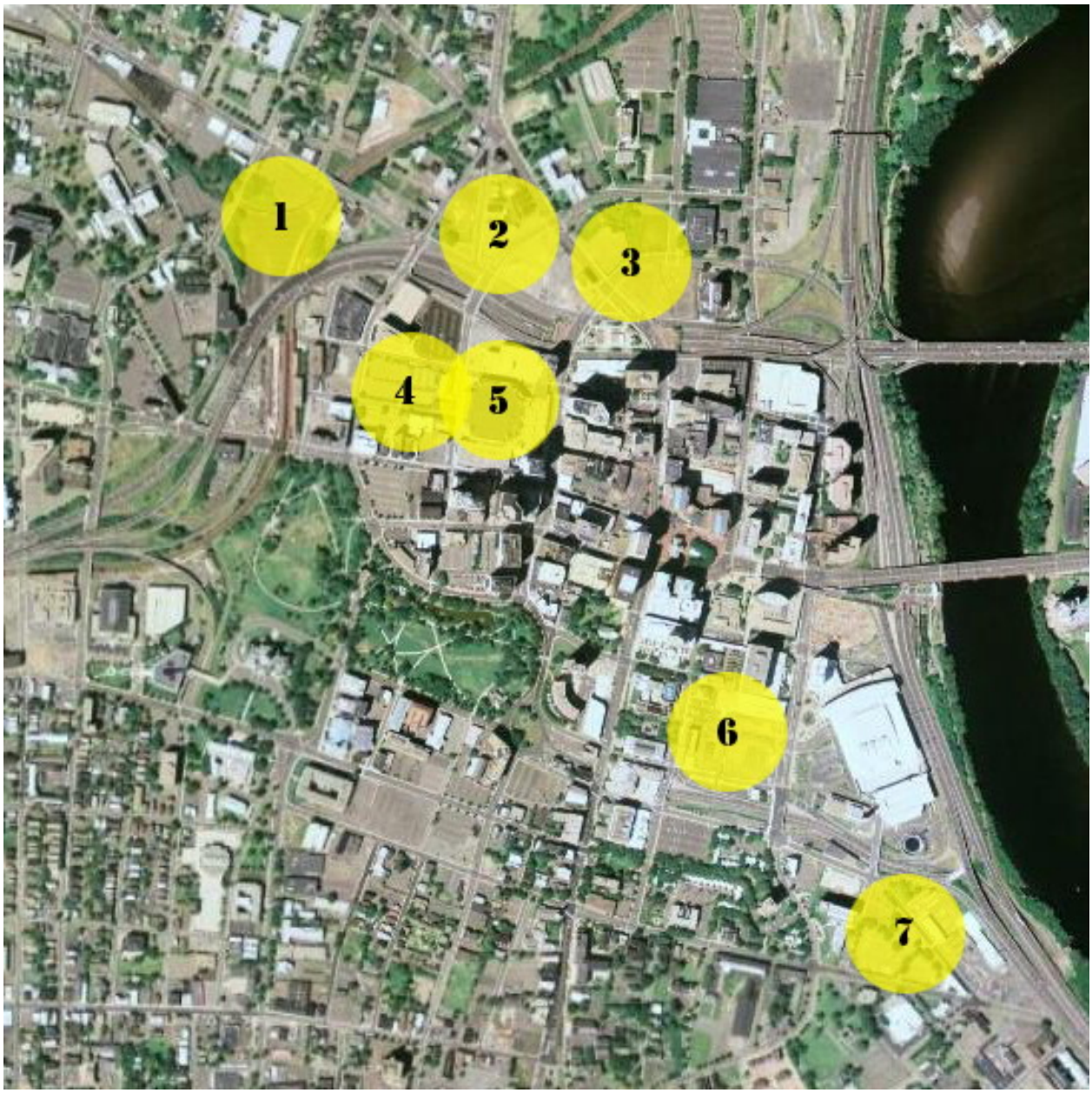
HARTFORD ARENA: Site Evaluation Process

Site Locations:



HARTFORD ARENA: Site Evaluation Process

"Where is the best place to put a new state-of-the-art arena in downtown Hartford?"

That is the question that we have focused on with this study, aided by previous work such as the *Hartford 2010* report, as well as by the input of City officials and business leaders. With the desire to build a new facility in the downtown core, we coordinated with the City of Hartford's Development Services, Economic Development, and Planning Departments to identify seven potential candidate sites to analyze according to "Phase One Threshold Criteria." For a site to be considered worth of further study, it had to meet these basic requirements:

1) The site's size and configuration needs to accommodate an arena building footprint.
2) Transportation features must allow people to safely get to and from the arena.
3) Existing or future parking must be sufficient to meet arena demands, typically within a ½-mile walking radius.
4) Impact on existing buildings must be considered in relation to their economic and cultural significance.