# Lighting Proposal Memo

Susquehanna Center Renovations & Expansions

Brad Gaugh September 13, 2010

Dr. Kevin Houser

#### **Proposal**

For the lighting requirements outlined in Tech Report #1, I am proposing to study the following spaces:

•	Large Work Space	Auxiliary Gym
•	Special Purpose Space	Fitness and Weight Room
•	Circulation Space	Main Lobby Entrance to Gym
•	Outdoor Space	Exterior Façade of Main Entry

For the Auxiliary Gym, I will develop three schematic design concepts, which will incorporate the mixed use of the space.

For the main lobby, which provides entry into the main arena by means of the upper concourse and walk-ways, I will establish a psychological impression of festive. This space can be used as a transition space to enact the emotions encountered when watching a sports game or event. The emotion that we encounter most in sporting events is a festive and joyous state, since the event will be providing entertainment and at times celebration.

## **Auxiliary Gym**

The auxiliary gym can be used as a mixed use space that allows for a variety of sporting events and occupancies at a given time. The gym totals 6290 SF and can hold 420 occupants. The space is a square with overall dimensions of 66'-0" x 95'-0" with a ceiling height of 26'-0" to exposed roof deck. The ceiling is quite unique within itself, since there is an exposed truss structure and supporting systems for the 6 different basketball hoops. Also within the ceiling is a suspended batting cage net, hanging length wise of the north side of gym at 22'-0" A.F.F. The materials of this space are typical of most multi-use gym, such as concrete block, athletic padding, wood flooring, glazing on the hoops, and exposed metal decking and truss structure. The materials in the ceiling are painted a matte white to help give appeasing finish to ceiling.

Being that this space will be used for the majority of sporting events, the visual tasks associated with this space are those, which are associated with sporting events. This includes depth perception of objects, vertical and horizontal reading of scoreboards, cards and line-ups.

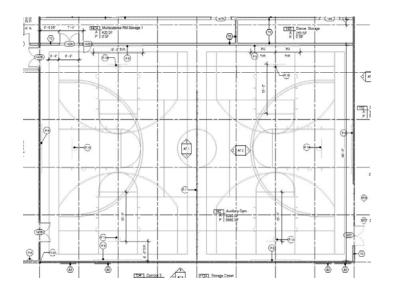


Figure 1. Auxiliary Gym Floor Plan

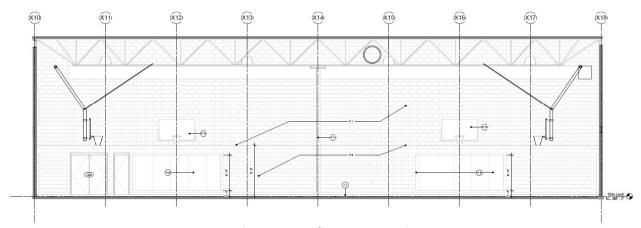


Figure 2. Auxiliary Gym Section

## **Fitness and Weight Room**

The fitness and weight room is a unique space due to its functionality to organize large specialized training equipment. The space is 5560 SF and can hold 110 occupants. The room takes on an interesting shape, with a curved wall feature with a radius of 227'-0". The room is 135'-0" long and the width changes due the curved wall feature. The smallest width of the room is 35'-0" and stretches to a final distance of 58'-0". There are numerous amounts of mirrors placed around the space, which can need to be noted when looking at design concepts since glare

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in the mirror could cause a potential issue when an individual is lifting weights. Other materials include a rubber base, painted gypsum board, and painted metal finishes on lockers as well as on the workout equipment. The ceiling heights differ amongst the finishes. Upon entering the space there is a gypsum board ceiling at 8'-0" and then under the main equipment area there is acoustical 2'-0" x 2'-0" ceiling tile. Finally when the ceiling reaches the curved wall the ceiling bumps up to 16'-0". In this space there is exposed ceiling, and once again the structure and metal decking is exposed and painted a matte white.

The visual tasks in this space include vertical and horizontal reading of white boards, locker information, and equipment warnings. Also modeling of objects is important design principle since there is an injury risk associated with lifting weights.

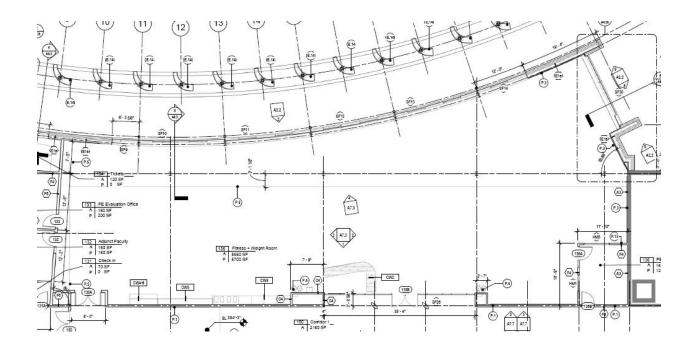


Figure 3. Fitness and Weight Room Floor Plan

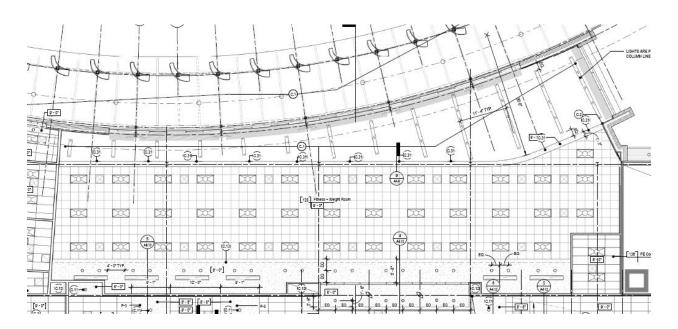


Figure 4. Fitness and Weight Room Reflected Ceiling Plan

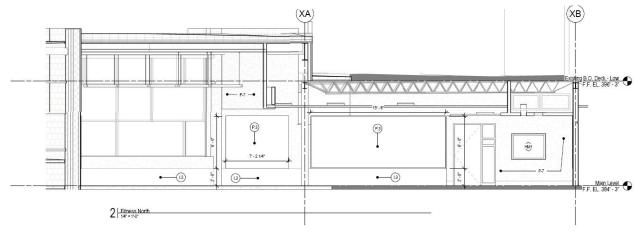


Figure 5. Fitness and Weight Room Section

## Lobby

The lobby to the main entrance to arena is an interesting space because it is the quintessential space that transitions you from your normal state to a state of excitement and celebration. The entry way is 850 SF and is shaped in a funneling pattern that filters the crowd onto the concourse. Since the space is shaped in a v, the larger dimensions are 56'-0" x 28'-0" and near the narrow end the width is 16'-0". The ceiling has a unique element in which it uses an alternating wavy pattern to develop an ornate entry. The bottom of the wave allows for a ceiling height of 12'-0", and in between the wave pattern the ceiling is 13'-6". The materials used in the

space range from brick, concrete block, concrete flooring, gypsum board, and painted wavy paneling.

The visual tasks in this space are quite simple in nature. Those include vertical and horizontal reading, and walking.

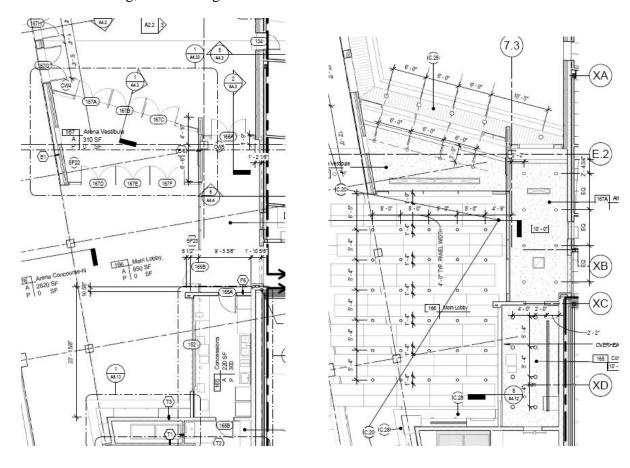
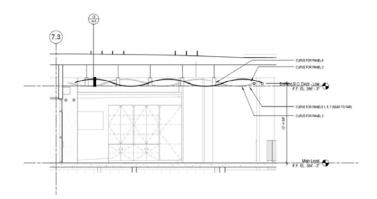


Figure 6. Main Lobby Floor Plan

Figure 7. Main Lobby Floor Reflected Ceiling Plan



**Figure 8. Main Lobby Floor Section** 

## **Façade**

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The main entry façade is a compelling feature, to study as my last design consideration because it is the first impression, a visitor will receive upon arriving at this multi-use athletic facility. The materials used on the façade for the majority is glazing, and brick. There is also a sign over top the entry doors, which identify the facility as Susquehanna Center.

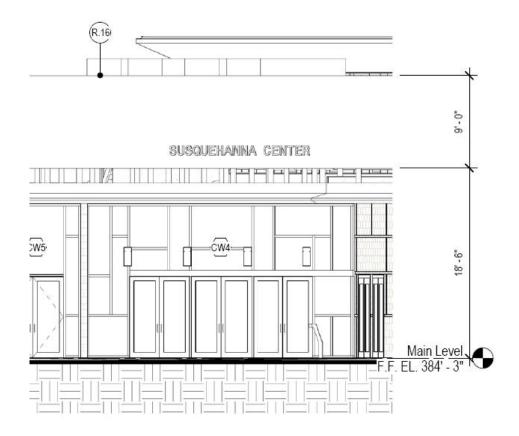


Figure 9. Building Façade Entry Elevation