



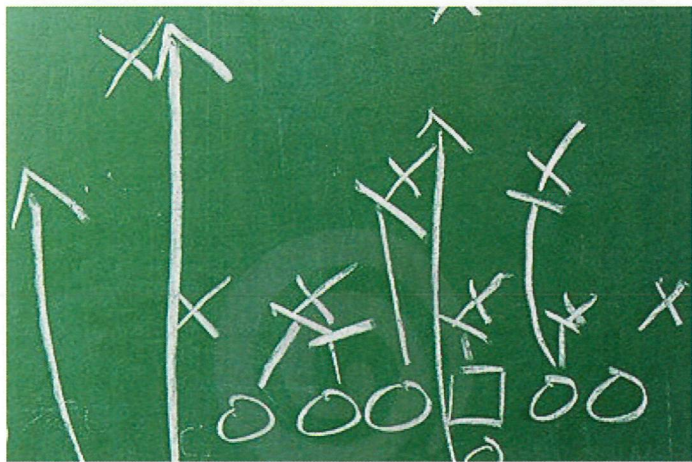
PLAYBOOK

McMahon Stadium Redevelopment Concepts Final Report

June, 2012

CANNONDESIGN®

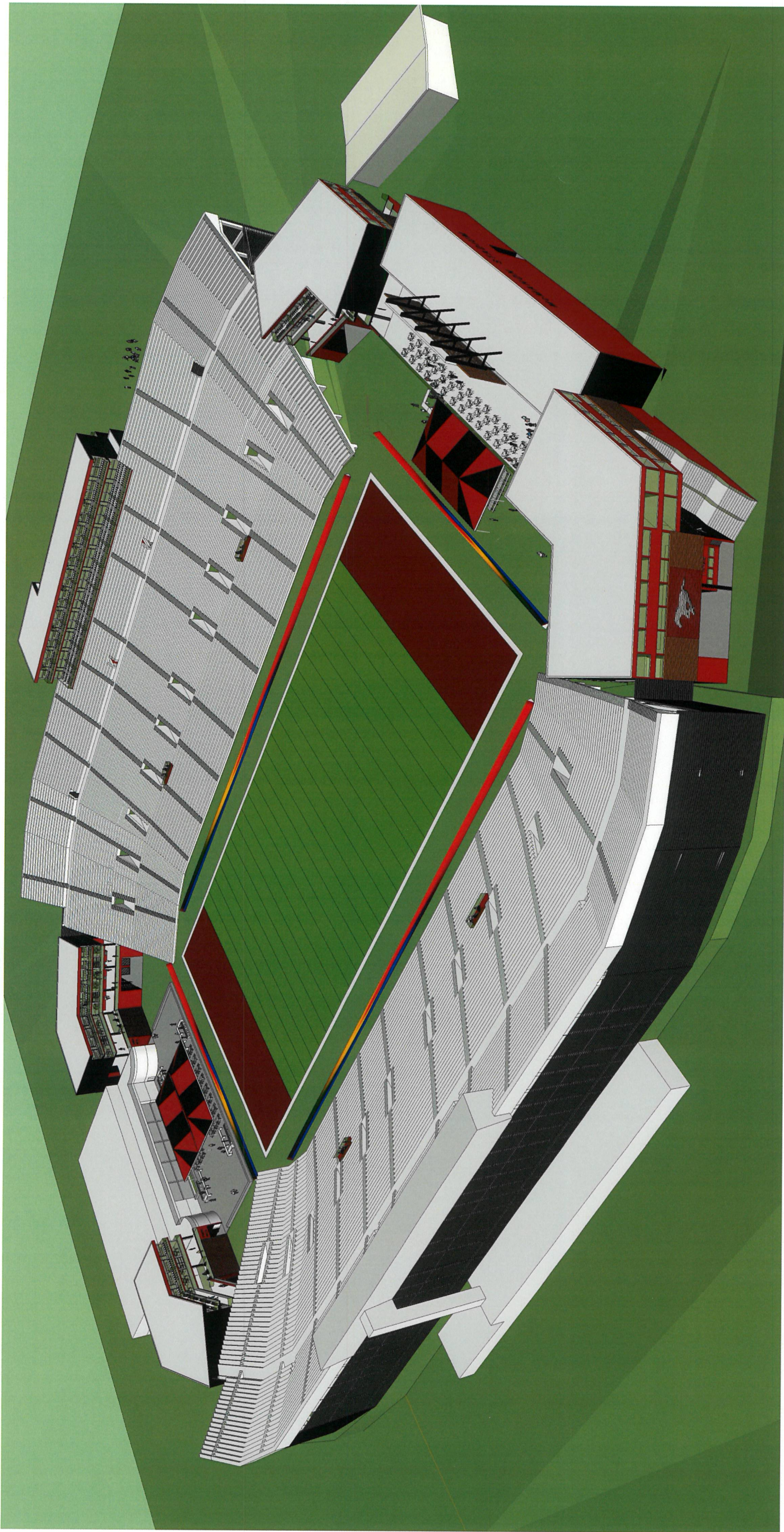
Table of Contents



1.0	Stadium Master Plan	Page 4
2.0	Phase 1– Existing Stadium Concourse Renovations (Immediate action)	Page 9
3.0	Phase 2A and Phase 2B - North Corner Infill Buildings (Short-term action)	Page 10
4.0	Phase 3 – Stadium New Main Entrance Addition (Medium-term action)	Page 18
5.0	Phase 4 –South End Zone Corner Infill Buildings and Annex (Long-term action)	Page 29
6.0	Provisions for Future Grey Cup Hosting	Page 39
7.0	Financials	Page 41

1.0 Stadium Master Plan

View from south



The overall built-out vision for McMahon Stadium would include the previously planned existing concourse renovation; new east-side entrance and completion of the concourse on all sides; and the addition of 30 corporate suites and four group party suites (plus eventually 10 more suites and 4 more group suites); the addition of facilities operations and football operations support spaces with scoreboard replacing the C-shaped end zone building.

Master Plan Overview

The concept for the redevelopment, modernization and revenue enhancement of McMahon Stadium worked to the parameters of retaining one of the CFL's best-laid out stadium grandstands and creating new footprint areas that extend outward from the facility perimeter as little as possible. McMahon Stadium was constructed in 1960 and added to on multiple occasions, including replacing all lower bowl seating within the goal lines with deeper rakers and individual seats. Current capacity for the stadium is 35,650, which is considered to be optimal for most CFL markets.

Problems Identified

Some of the key issues identified and rectified include replacement of the concrete block washrooms and concessions under the grandstand structure itself. Age, condition and capacity are issues. Creating new consolidated support functions including team merchandise retail along the outer apron of the concourse allows the underside of the bowl to be opened up for the first time into a +/- 40-foot wide concourse running the length of the grandstands on both sides. This width would enhance movement and create queuing area footprints in proximity to these services. This redevelopment project actually preceded this study and remains endorsed as the most urgent need to be addressed.

A second need is two-fold, the extension of the concourse eventually into a contiguous route on all sides from the current horseshoe configuration and second, to create underpass 'bridge' points at the four corners to allow increased spectator capacity at grade field level (access and egress) for concerts and similar type events. Currently, earth berms occupy the two northern corners connecting the concourse on both sides to the roof of the Olympic Volunteer Centre (OVC) to create the current horseshoe circuit which is dead-ended at the south end. The south end C-shaped facility operations / football operations single-storey wood-frame building is in good repair but in the long-term is an impediment to the closing of the concourse route.

Handicapped access and seating are an issue in the stadium. The only disabled access is via the NE and NW gates and the consolidated seating area is on the roof of the OVC which narrows circulation from about 30-foot width to about 12-foot width, creating congestion for all. Ideally, handicapped seating should be distributed in grandstand locations through-out the stadium. Approximately 70 wheel-chair patrons typically use the identified zone.

McMahon Stadium, like many older stadiums does not have a discernible 'front door' but instead has multiple nondescript access and egress 'gates'. There is no experience of transition, anticipation or excitement in the approach and entry to the facility. This is important in the sale of the total experience and entertainment package that contemporary professional sports has become. Approximately 70% of all spectators approach McMahon Stadium from the east, predominantly from the LRT station, making it the ideal and most visible point-of-entry from major through-fare Crowchild Trail.

Corporate suites and group party suites are needed both in terms of quantity and quality. Current suites exist atop the west grandstand immediately below the press box, with only one elevator serving both levels. The suites are shallow and each too low in capacity by current market expectations. Little can be done to change this situation due to structural limitations and unavailable footprint at grade on the west side. The east side Super Suite is also an issue due to differing engineering opinions as to the structural capacity of the east grandstand to accommodate the load of enclosed space. The existing east space is also too narrow and is only served by one elevator.

Other areas of attention identified in the facility include more facility and football game-day storage; space in a lobby for Hall of Fame, team merchandise store and main ticket sales; and the enhancement of electronic media including ribbon boards, new scoreboard(s) and multi-media audio-visual presentations in the Hall of Fame area.

Solutions Proposed

Cannon Design has developed a series of recommended interventions or incremental improvements for the fifty-two year old stadium. By organizing the proposed work into smaller potentially more attainable phases, improvements can occur over an extended period of time and as parts of the current facility reach the end of service life (i.e. the south-end C-shaped service building).

The proposed interventions can be organized into four phases:

Phase 1– Existing Stadium Concourse Renovations (Immediate action)

Phase 2A and Phase 2B - North End-Zone Corner Infill Buildings (Short-term action)

Phase 3 – Stadium New Main Entrance Addition (Medium-term action)

Phase 4 – Stadium South End Zone Infill Buildings (Long-term action)

Phase 1 - Existing Stadium Concourse Renovations

In 2007 working drawings were prepared for redeveloping the underside of the existing grandstand concourses. This would involve removing all of the different vintages of concrete block washroom and concession structures added as the grandstand was expanded. New consolidated washrooms, food and beverage concessions and points of sale for team merchandise would be constructed up to the outside perimeter of the grandstand overhang. The result of the consolidation would be an approximately 40-foot wide open concourse which should aid tremendously circulation, orientation and way-finding, queuing and service access.

This work was estimated to cost \$16 million in 2007-dollars. With soft costs this number would be in the range of \$20 million.

Phase 2A and Phase 2B – North End-Zone Corner Infill Buildings Additions

The new north end corner infill buildings are intended to solve a number of functional problems as well as add revenue producing amenities to the stadium. The new infill buildings would each be four-storey structures with a main entrance stair from grade to the concourse level as well as internal stairwells and an elevator.

The main or grade level of the corner infill would serve as a gateway entrance directly to the field for events such as concerts and would include internal spaces such as ticket office, field level spectator washrooms and most of the footprint dedicated to storage: facility operations storage in one corner unit and football game-day operations storage / food and beverage prep and storage on the other. The gateway addresses the current problem of limited field access / egress for events on the field and for end-zone beer garden-type event zones during games. Space between the field end-zone and the OVC would be developed to accommodate temporary structures for hosting these events.

The main level would be minimally 14-foot overhead clearance capable of accommodating the passage of tractor trailers. Overall height of the main level will depend on site conditions but based on available information, the grade difference in the north-west corner between the field and the concourse is 22-feet or 6.8 metres.

A grand stair moves spectators up from grade level to the second level, the concourse. The concourse creates a replacement link between the existing grandstand concourse and the rooftop walkway of the OVC to create the horseshoe configuration of

the stadium. The new corner infill structures will feature 30-foot wide circulation as well as additional washrooms and food concessions to serve the existing seating capacity and mitigate the current shortfall based on current standards.

Currently wheelchair seating is concentrated on the roof of the OVC which narrows available circulation to about 12-foot width, creating bottlenecks and congestion. As part of this phase, wheelchair seating will be redistributed to at least six separate locations in the stadium, most positions directly accessible from the grandstand vomitories (resulting in some loss of existing fixed seating). Each of the new corner infills will maintain a wheelchair viewing galleria.

By creating a structure that acts as a bridge over tunnels to the field, a foundation is created for supporting additional revenue-generating floor-plates above. The third and fourth levels of the new infill buildings could be designed as new larger corporate suites accommodating 20 persons and as group party suites with capacities of 60-80 persons. Each suite would be approximately 500 square feet in area and could include individual or common washrooms. Each floor-plate level could accommodate five corporate suites and office-type space across the corridor. Some suites could be constructed with movable party walls that could be opened to create larger suites or accommodate non-game day needs such as team meeting rooms or spaces that could be rented for small conferences and meetings. The group party suites are a response to a demand for rentals by larger groups or for club lounge space.

Architecturally, the corner infill buildings form the beginnings of a sense of identity, order and approach to the stadium. Gate entrances now are nondescript and lost amid the vast elevation of the back side of the grandstand. The new entrance points would ideally instill a sense of anticipation and 'place'. Movement directly to field level and up to the concourses becomes formalized and more logical.

In total about 52,500 square feet or 4,877 square metres would be added between the two buildings. The infill buildings would cost \$6-7 million each with a total phase project cost of about \$14-16 million in current dollars.

Phase 3 – Stadium New Main Entrance Addition

As with most stadiums in North America, McMahon Stadium has a uniform and unvaried metal-clad and concrete column exterior with few clues to entranceways or indication of what the venue holds. Cannon Design proposes the addition of a new main entrance building on the east elevation of the stadium where more than two-thirds of the spectators arrive from parking areas and rapid-transit. The building is borne out of functional necessity (creating a free-standing structure to support new suites replacing the existing Super Suite) and consequently would occur just outside the perimeter of the existing grandstand.

The main level of the new five-storey addition would include a new lobby featuring multi-media expressions of the storied history of theStampeders football club and the University of Calgary Dino football program. Key components would include a Hall of Fame attached to a new large team merchandise store (about 7,000 square feet combined) and, a new climate controlled open space acting as a transition space from the 'out-of-skin' outside to the 'in-skin' admissions zone and concourse. This new lobby could become the home of the relocated '88 Winter Olympics monument and other reminders of the stadiums past glories. A new main ticket sales area (with queuing possible in the lobby) and separate entrance and elevators for the suite levels would also be located on the main levels.

The second and third levels of the new addition would be designed with circulation, washrooms and a food and beverage concession to relieve some of the pressure on the main concourse below. These levels would be connected by bridges to the stairwells of the upper vomitories of the east grandstand. A stair from the lobby would also connect these concourses to the upper bowl. One of the two levels could be operated as an exclusive premium-seating lounge for lower-bowl patrons on the east grandstand.

The fourth and fifth levels of the new addition would contain up to 10 corporate suites per level, each with a capacity of 20 to 30 persons. The current Super Suite was built over an existing seating rake and there have been questions raised about the structural integrity of the enclosed space. By building a new structure outside the grandstand, at worst only the outdoor seating portion of the suites will be a load on the existing building. Each new suite will feature outdoor seating for 16 or 30 seats, indoor counter-height seating for eight along the glass, sofas, tables and chairs, a catering counter and an individual washroom per suite. Each floor level will include a common lounge area and a catering server kitchen. Level 4 suite-holders could potentially have access to a rooftop area over the main lobby for pre and post-function events. The two levels of suites would add between 400 and 600 premium seats to the stadium overall capacity.

The new main entrance building would be about 48,000 square feet or 4,460 square metres. The 15,000 square foot footprint would be about 60-deep (front to back) and extend almost 250-feet across the back elevation of the existing grandstand (almost one-third of the length). Construction of the addition would cost about \$17-18 million for an overall phase project cost of about \$21-22 million in current dollars.

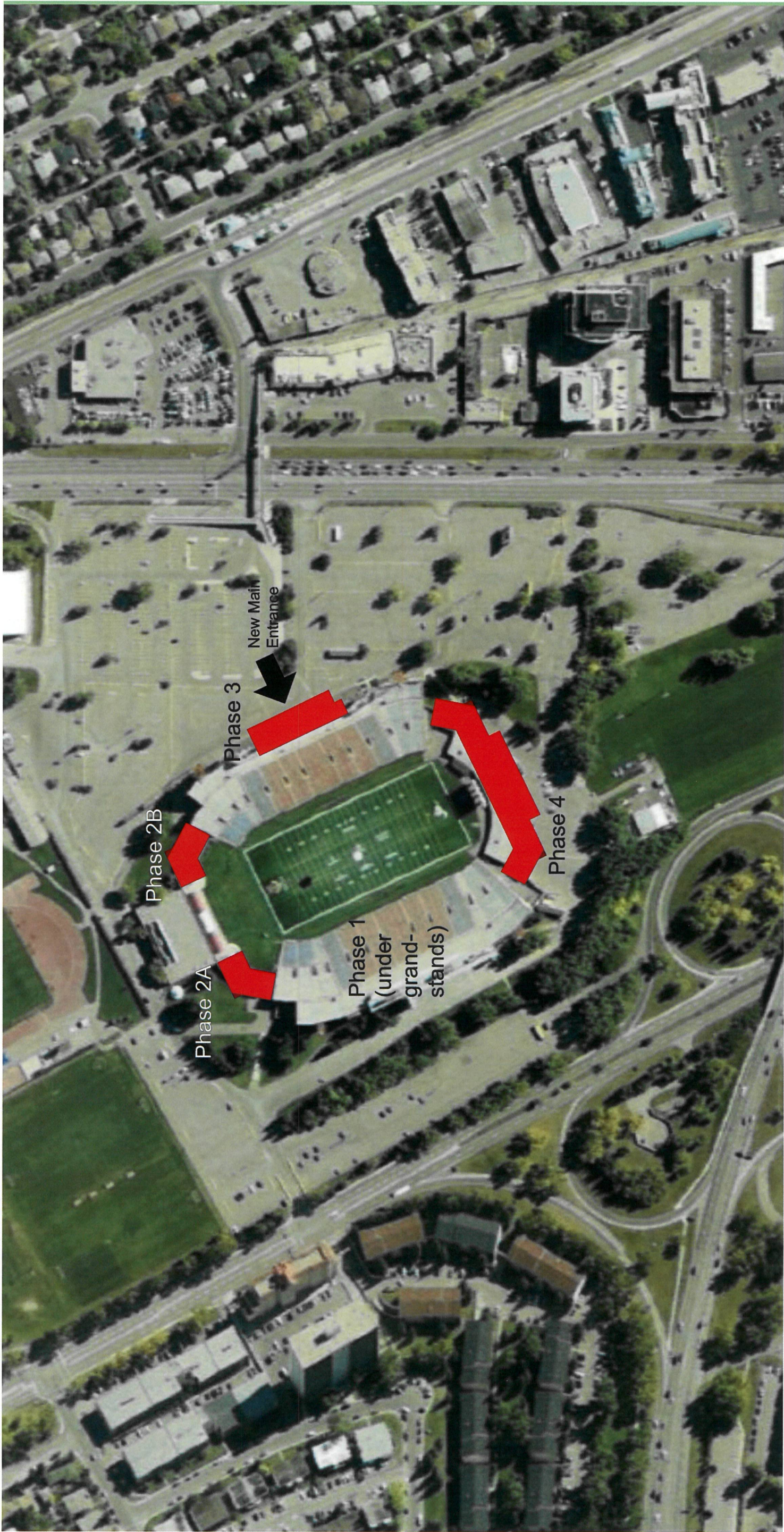
Phase 4 – Stadium South End Zone Infill Buildings and Annex

The final phase of the redevelopment is contingent on a number of factors. The first is the functional and building systems obsolescence of the C-shaped service building and the second factor is the need or capacity to absorb additional suites, group party spaces and other multi-purpose and assembly type spaces. The redevelopment of the south end would in any case have to account for spaces lost in the demolition of the C-shaped building including facilities operations offices and shop space, football operations including theStampeders locker room and support spaces, and added storage space required by all users.

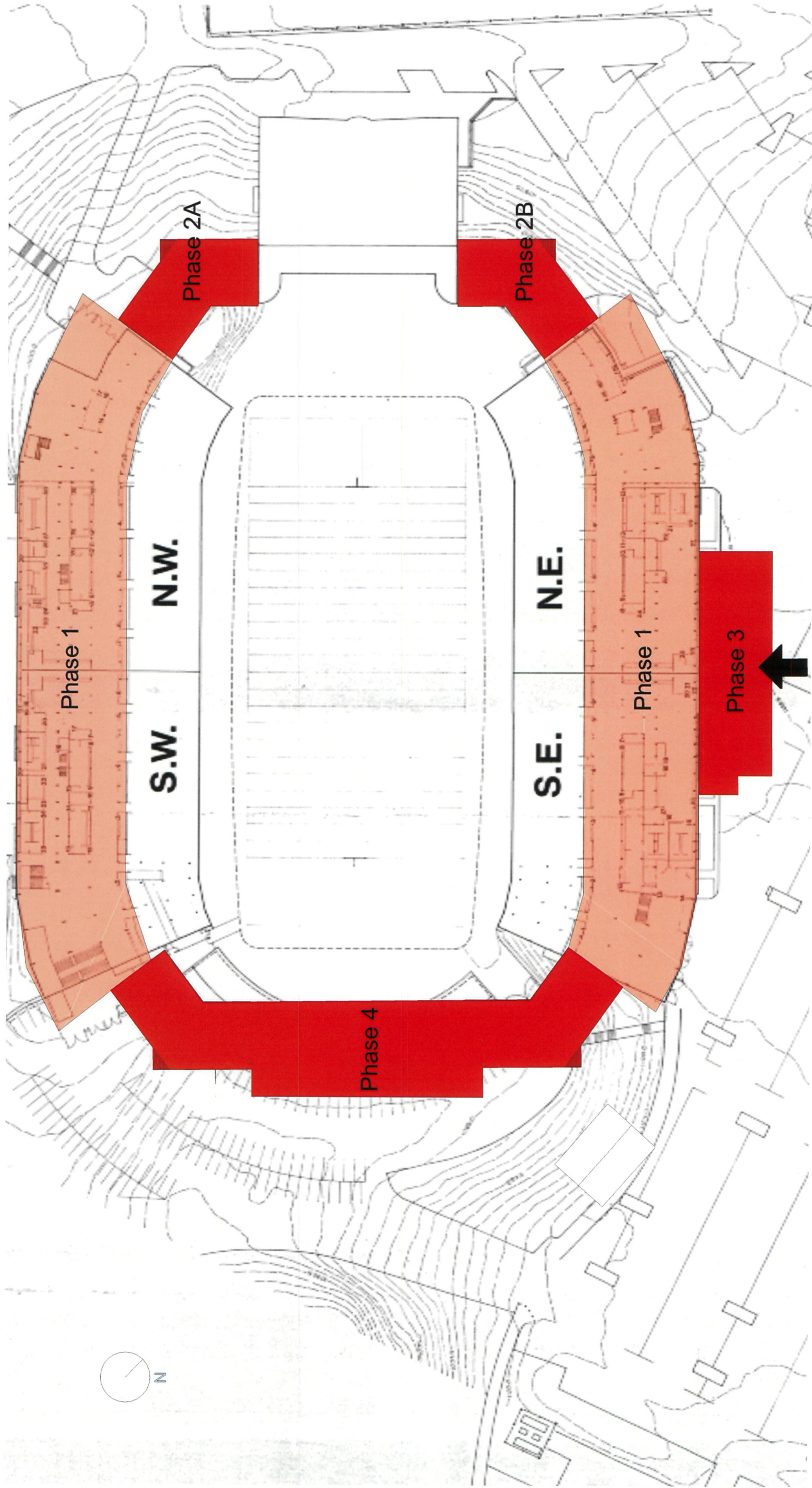
The greatest dividend or benefit of redevelopment of the south end of the facility would be the completion of the concourse into one contiguous, circuit as well as the completion of the modernized outward appearance of the stadium. The financial benefits accrued to the facility and the team would be the added sales revenues coming from the added concourse traffic plus the sales of suites and group party suites / club lounges (an additional 500 higher-yielding seats created).

The concept for the south end is built upon the further replicating of the corner infill buildings similar to those of the north end. The corner buildings create two more field entrance / exit access points for concerts and end zone areas as well as added food and beverage concessions, team merchandise sales and spectator washrooms and, two more levels each of suites. The four corners become pillars framing the field.

Beyond the south end zone and running the width of the field would be a two-level infill building with on the main level, expanded football operations spaces (adjacent to the existing free-standing coaches building). On the upper level, multi-purpose rooms would serve as game-day event spaces, banquet space or media space. On non-game days the spaces can be used for team meetings or rented out to outside users. Half of the roof area over the main level would be reserved for concourse circulation and open terrace type food and beverage sales. The new replacement main scoreboard would be constructed on the roof of this building perpendicular to the field of play.



Phase 1 renovation of the existing concourses (both sides) can proceed immediately. Phase 2A and Phase 2B as well as the terrace area in front of the OVC would be the next logical additions followed by Phase 3, the addition of the new Main Entrance Addition. In the long-run, when the existing C-shaped services building is obsolete, the south end of the stadium can be completed in Phase 4 to close the circulation loop and add further revenue producing and support space.



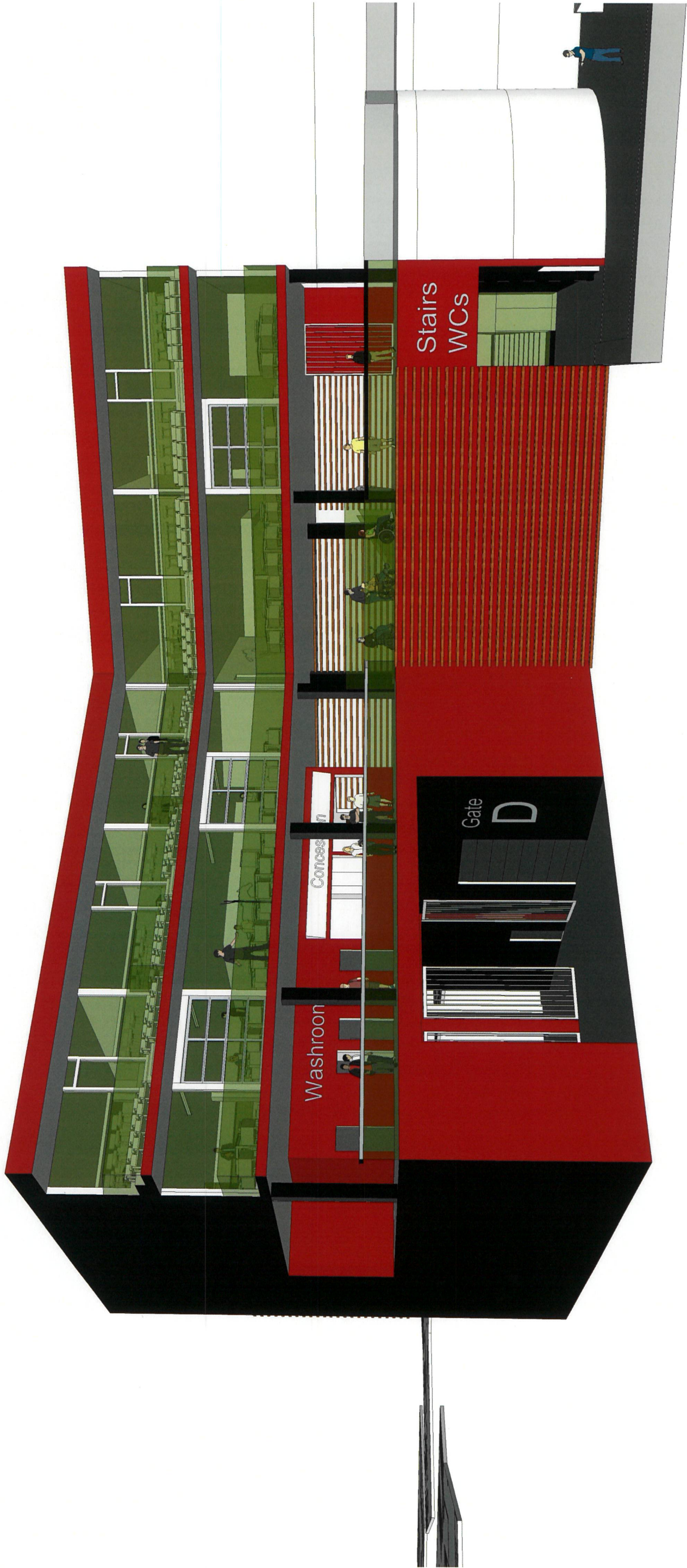
Site / concourse plan view with north rotated to the bottom right to orient the new main entrance. Phase 2 is located to the right, Phase 3 at the bottom and Phase 4 to the left both only partially encroaching into the parking lot. Phase 1 concourse renovation would occur under both existing grandstands consolidating food concessions and washrooms to create a new 40-foot wide concourse. Diagram also illustrates the full 360-degree continuous concourse.

2.0 Phase 1 – Existing Stadium Concourse Renovations

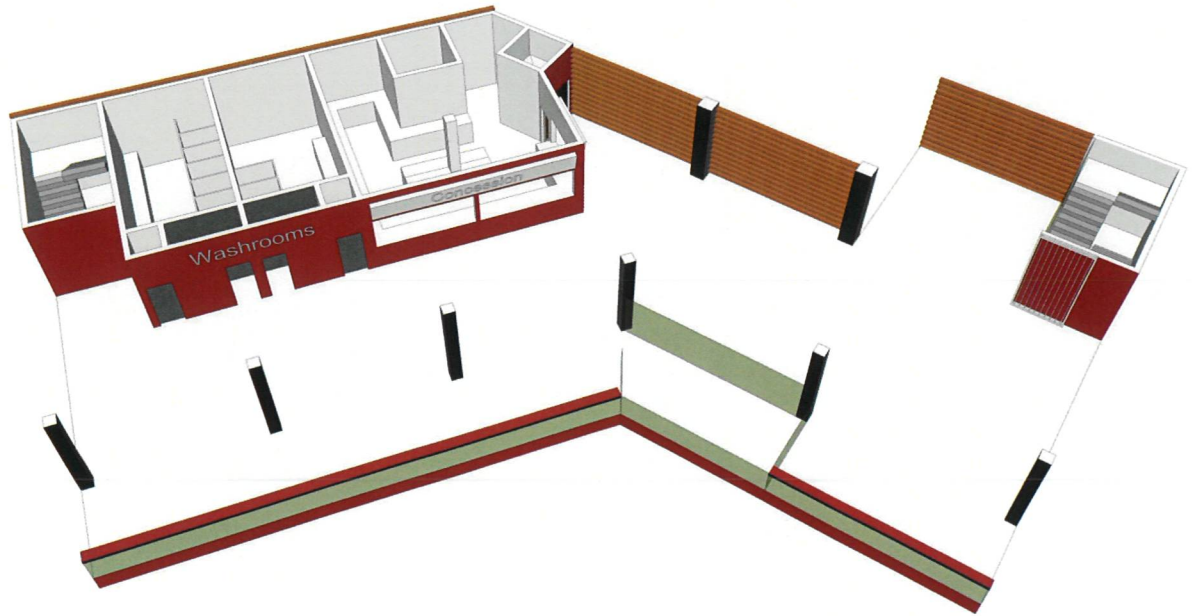


The existing site isometric view illustrates all existing building and structures in white and the new replacement washrooms, concessions and support spaces under both grandstands shown in bright red (exterior cladding removed for illustration). Owing to a series of additions and expansions to the stadium over the years, multiple ill-configured block structures exist creating a labyrinth of narrow corridors. The previous to this study developed \$16-million plan for Phase 1 would be the first phase of redevelopment creating new 40-foot-plus wide concourses with modern and efficient service points. A working drawings package has been completed for the redevelopment and stands ready for implementation. A second proposal to create upper concourses above the new service blocks is not carried over due to inherent impracticalities, lack of added circulation space and added structural complexity.

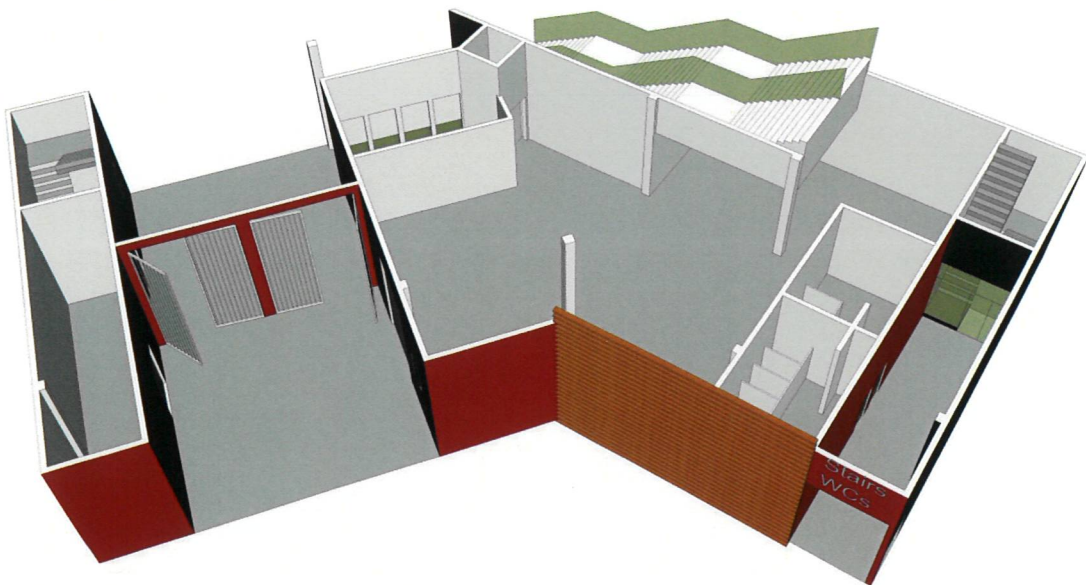
3.0 Phase 2A and 2B – North End-Zone Stadium Corner Infill Buildings



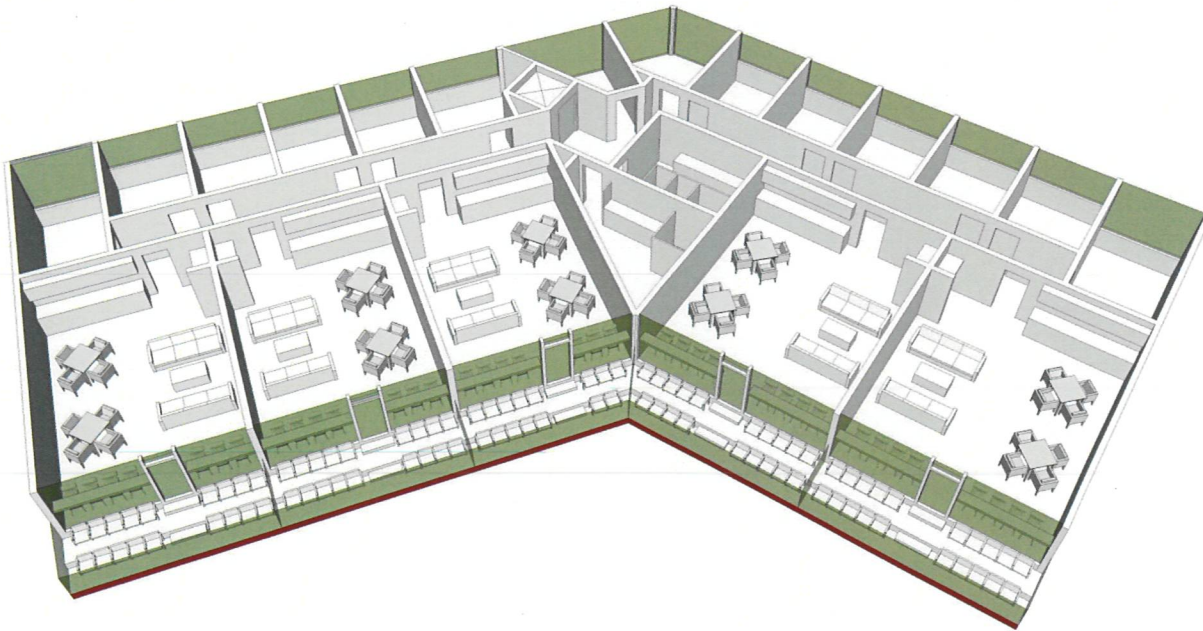
Constructed in the north-west and north-east corners of the stadium flanking the existing Olympic Volunteer Centre (OVC), the new infill buildings would each be about 26,400 square feet on four levels of roughly 6,600 sf each. The concourse level would be designed to meet the elevation of the existing grandstand concourse and roof of the OVC while acting as a 'bridge' allowing gated field level access / egress for concerts and events. Washrooms would be provided at the field level and concourse level. The upper two levels would feature corporate suites (5 x 20 persons per building) and group party suites (2 x 80 persons per building). The infill would replace the existing earth berms and asphalted tops.



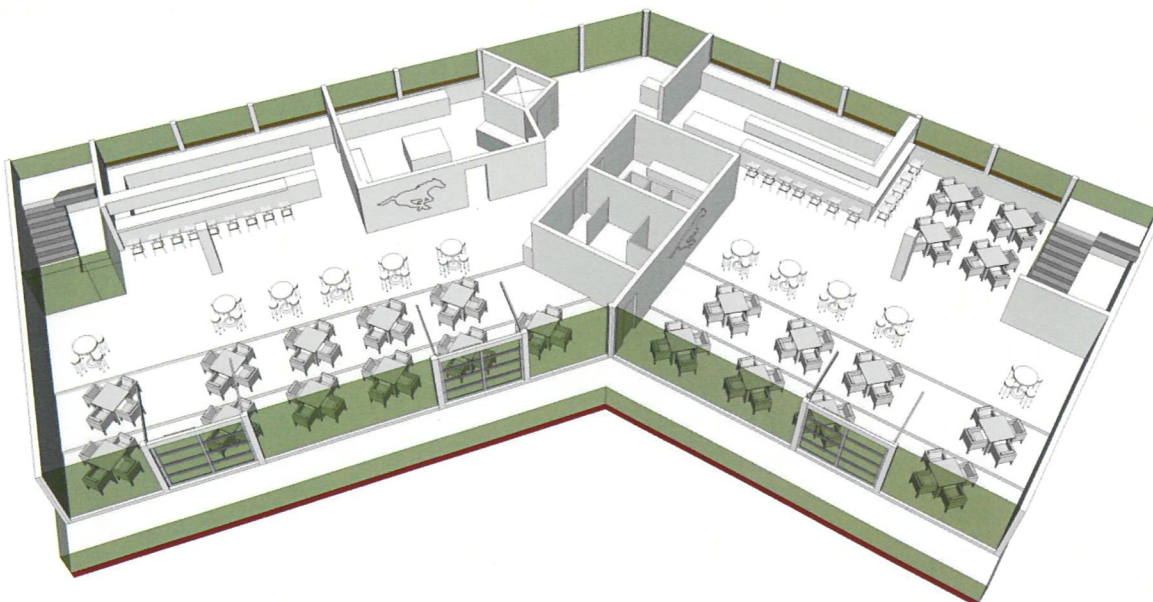
Level 2 – Concourse plan (from stadium to OVC roof) with services and access point



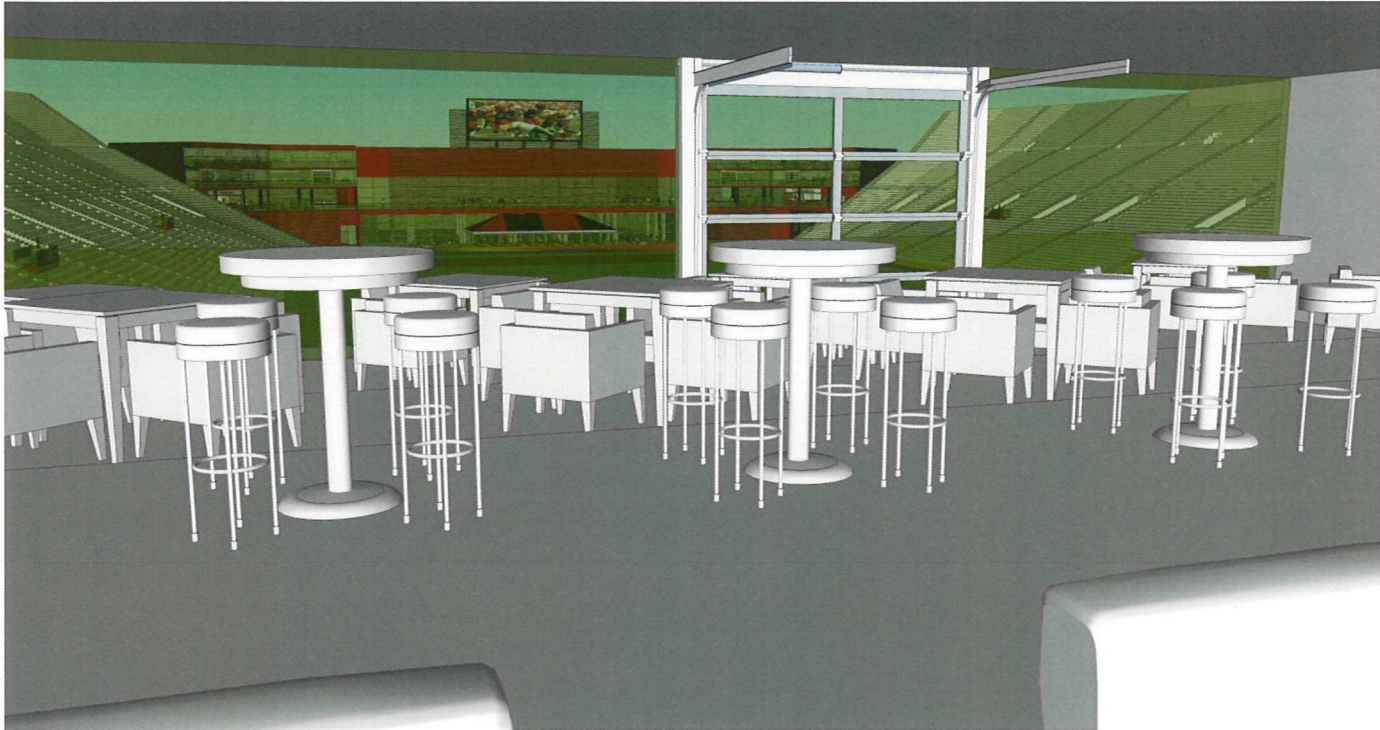
Level 1 – Field Level plan showing field access gateway and washrooms, and service space



Level 4 – Corporate suites level layouts showing five suites (capacity 20 each), offices and washrooms



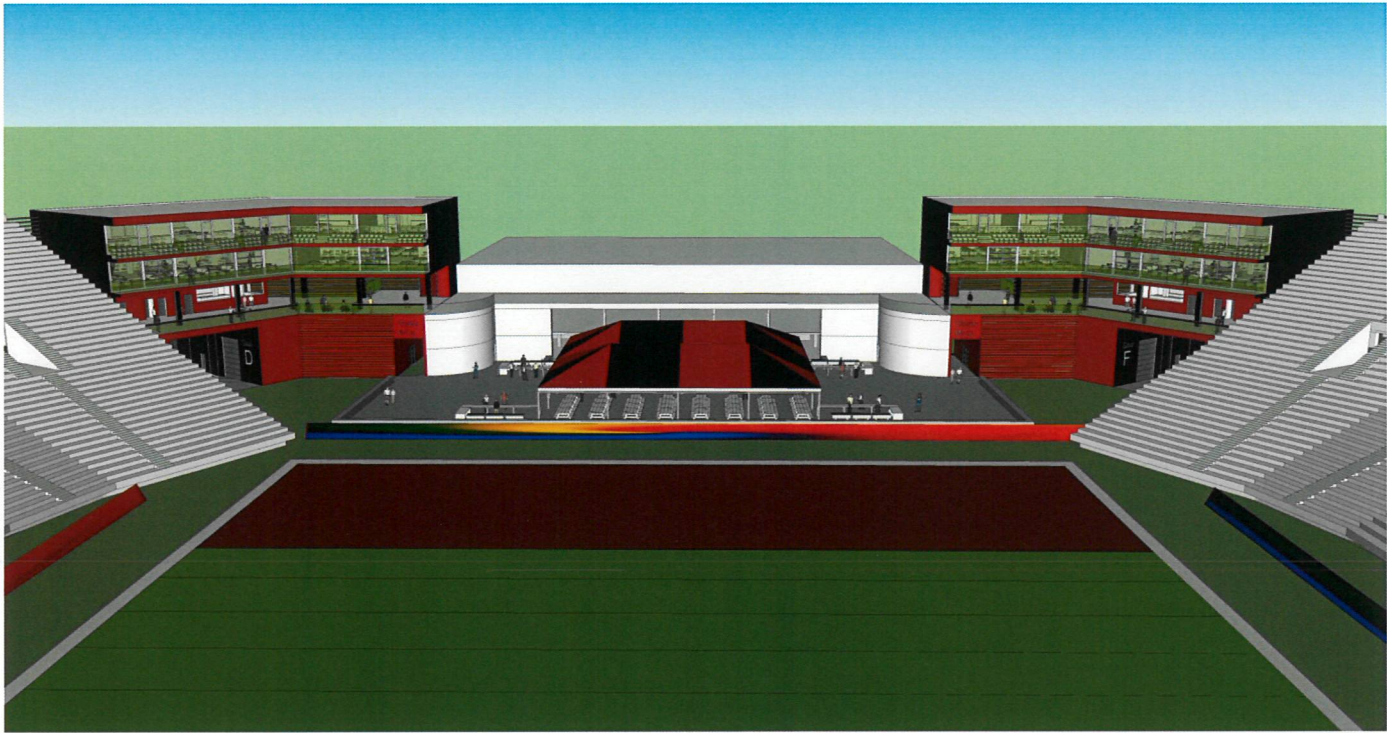
Level 3 – Group Party Suites with a capacity of up to 80 persons each, bars and common support space



View from a typical Group Party suite



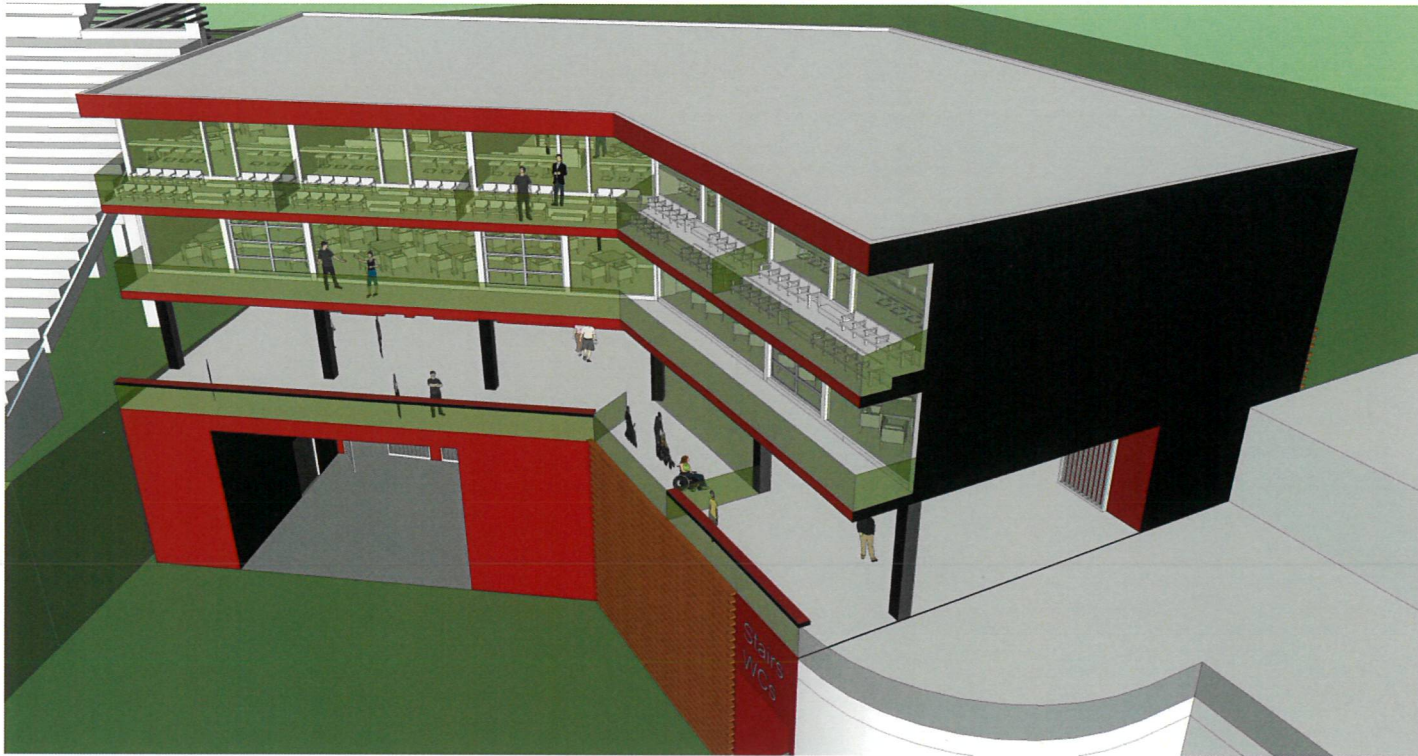
View from concourse showing added washrooms and concessions and link to roof-top passage on OVC



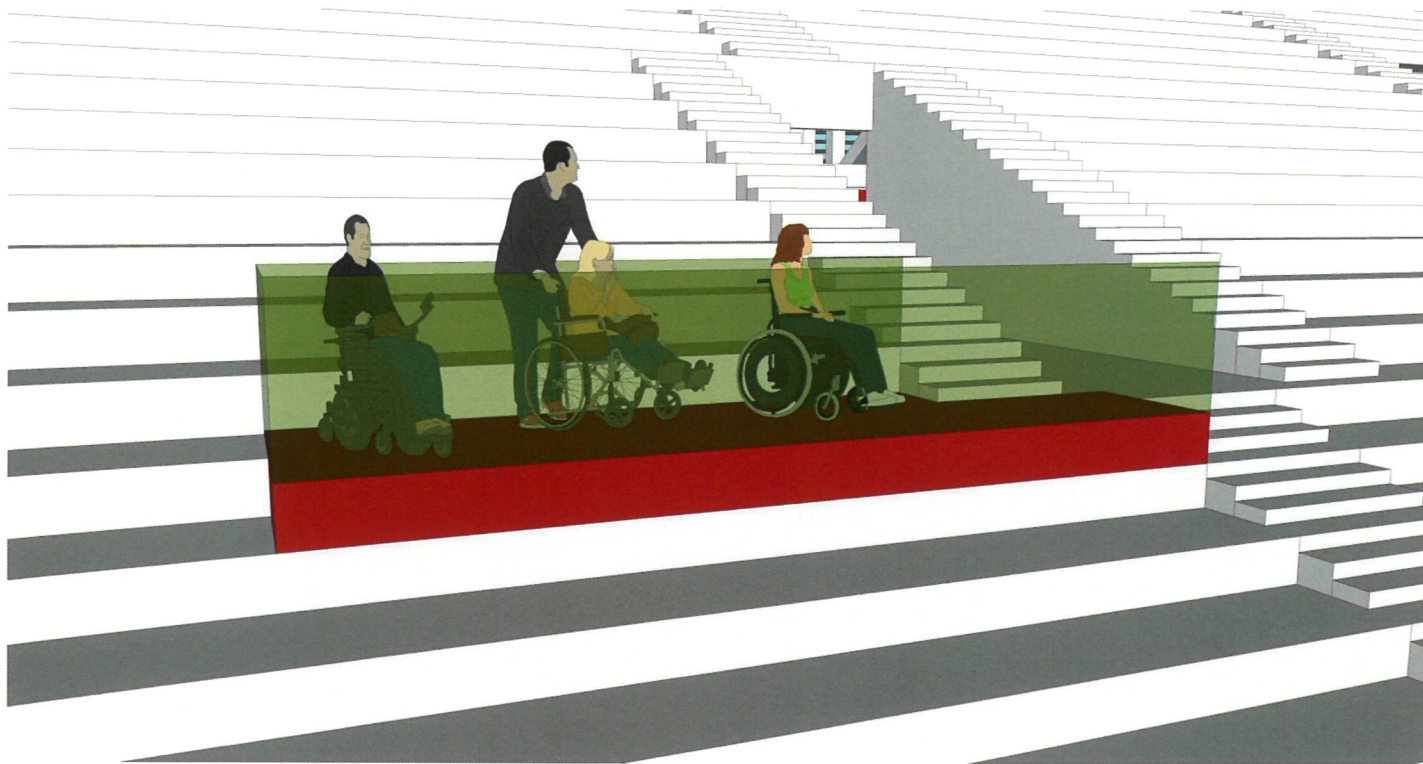
View of north end corner buildings, field-level ribbon boards and hard landscaped end zone terrace



Sample view from the corporate suites on the fourth level of the corner infill buildings



Bird's eye view of the new corner infill illustrating outdoor seating and decks and HC viewing at concourse level



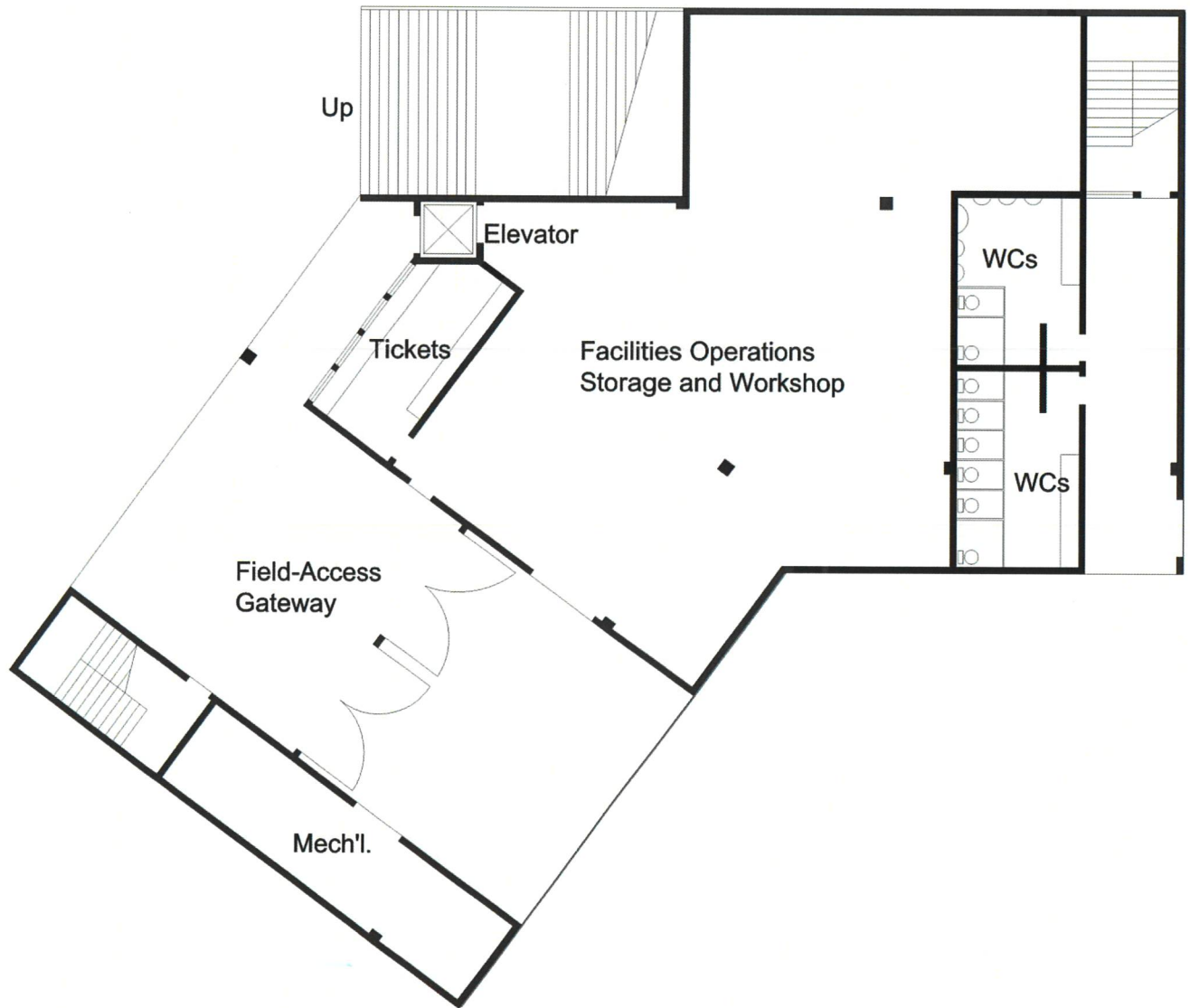
Displaced wheelchair viewing from the roof of the OVC would be partially relocated to the corners and to new platforms created by absorbing two rows of seats at vomitory level in various locations of the existing grandstands



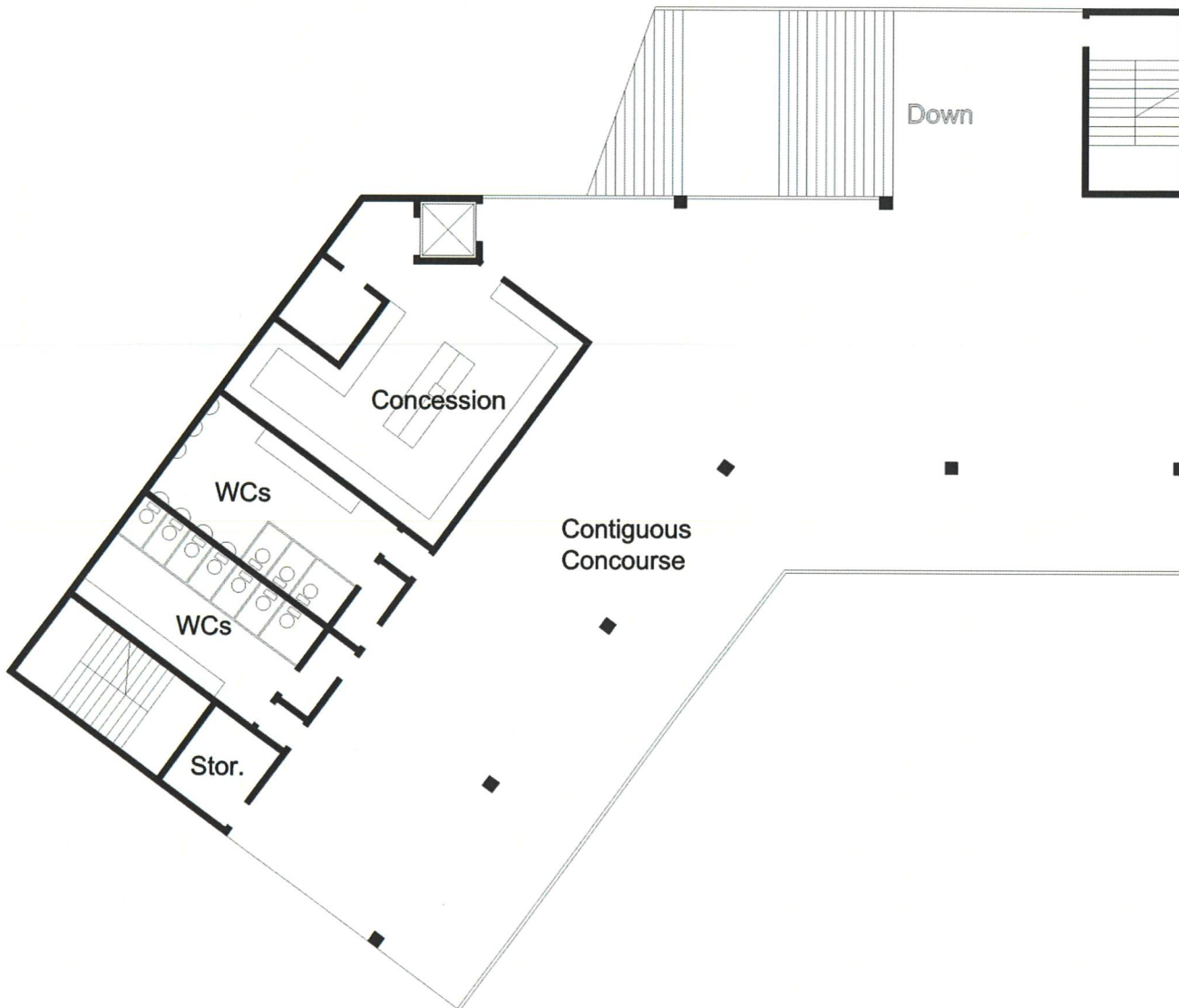
Field level view of new corner infill buildings showing field access and amenities



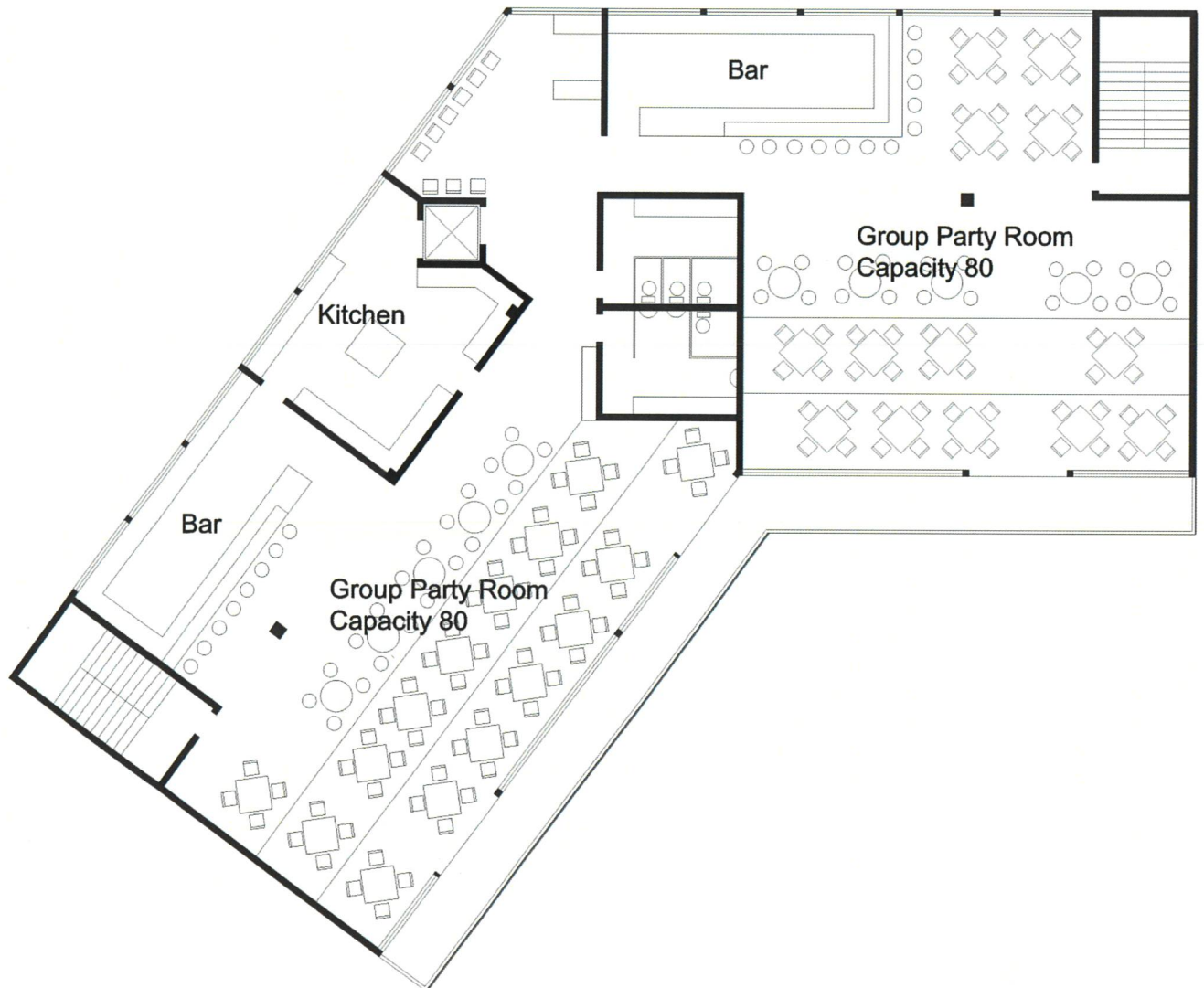
Seating created by absorbing two rows of seats at vomitory level in various locations of the existing grandstands



Level 1 – Field Level Plan View. Each floorplate area approximately 6,600 sf depending on site conditions



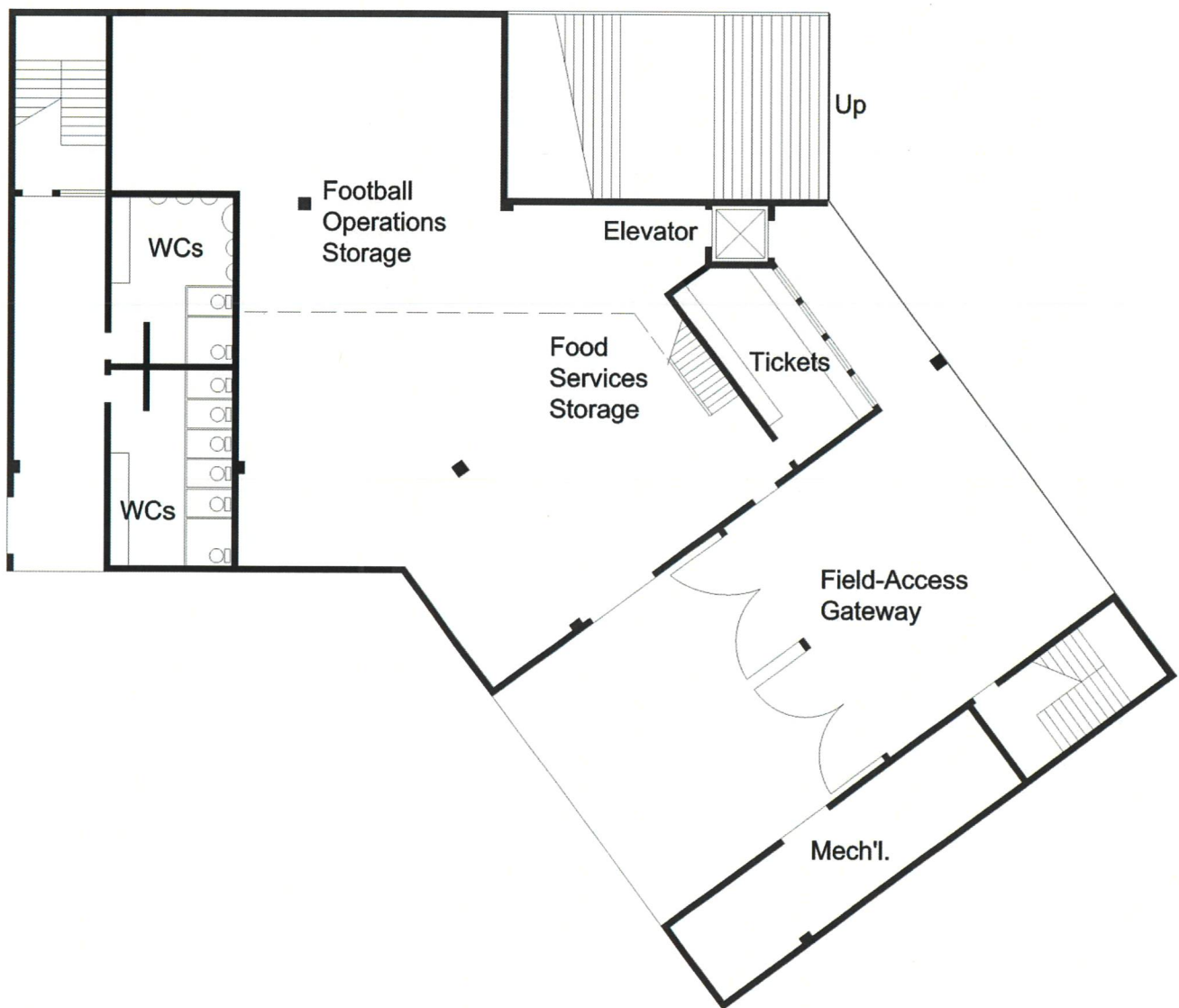
Level 2 – Concourse Level Plan View



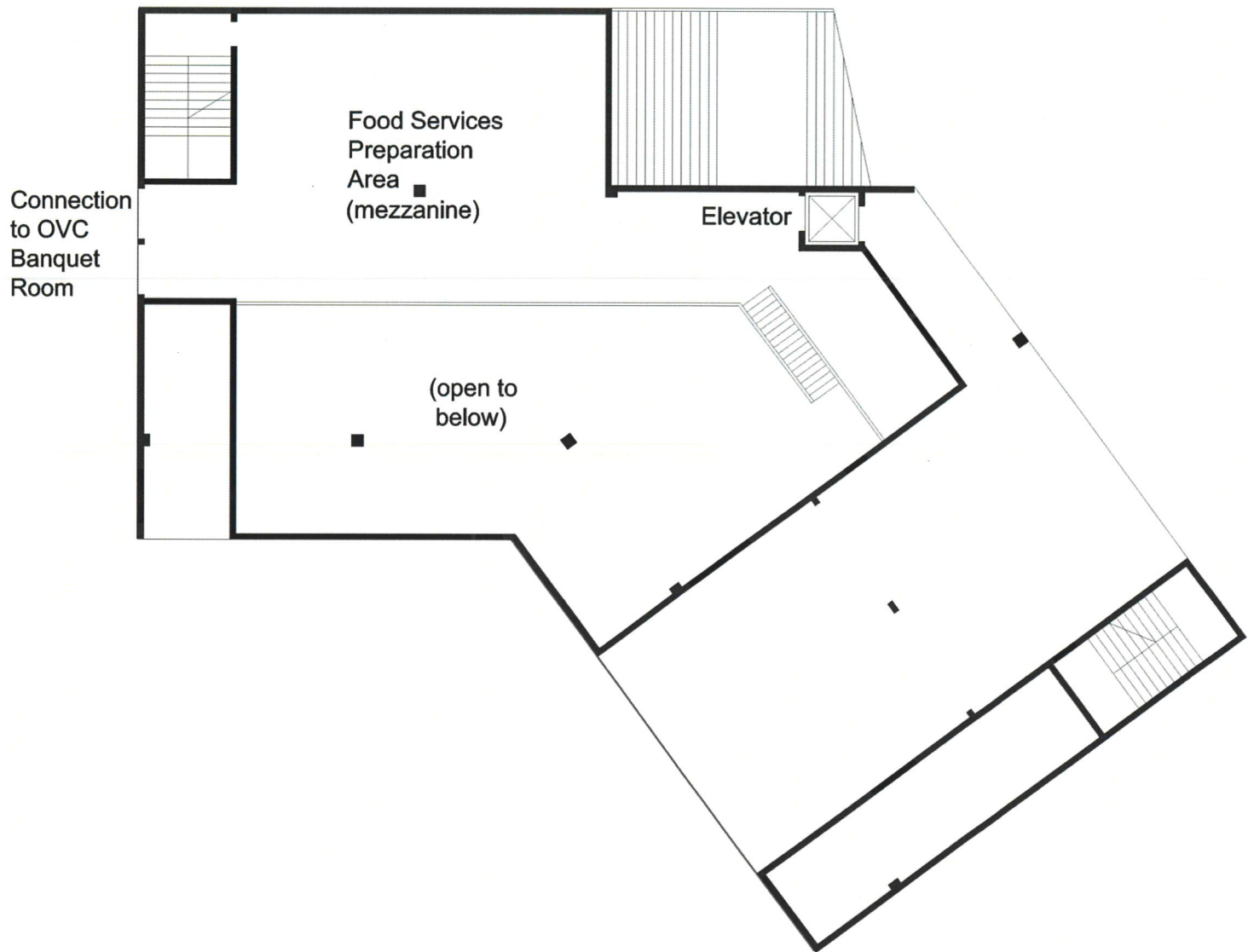
Level 3 – Group Party Rooms Plan View



Level 4 – Corporate Suites Level Plan View



Opposite Corner Level 1 – Field Level Plan View



Opposite Corner Level 1 Mezzanine –Connection to OVC Red and White Banquet Room Plan View

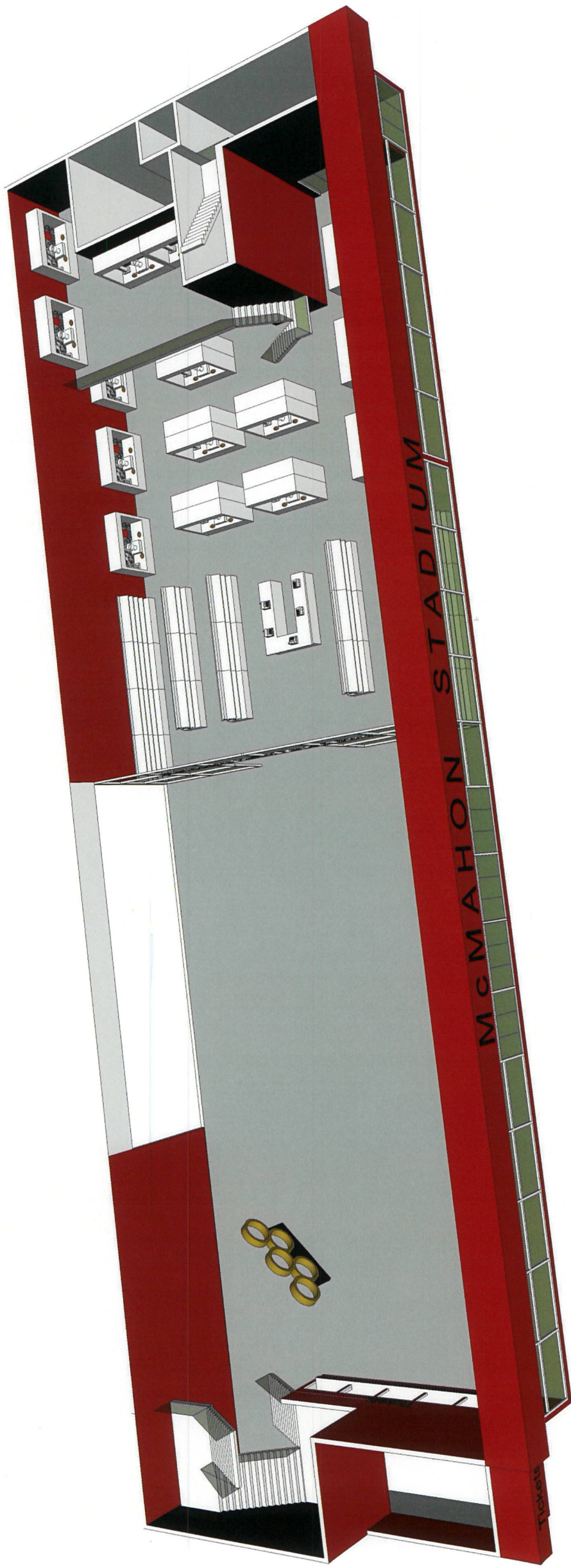


View of the Corner Infill Building from the outside of the stadium

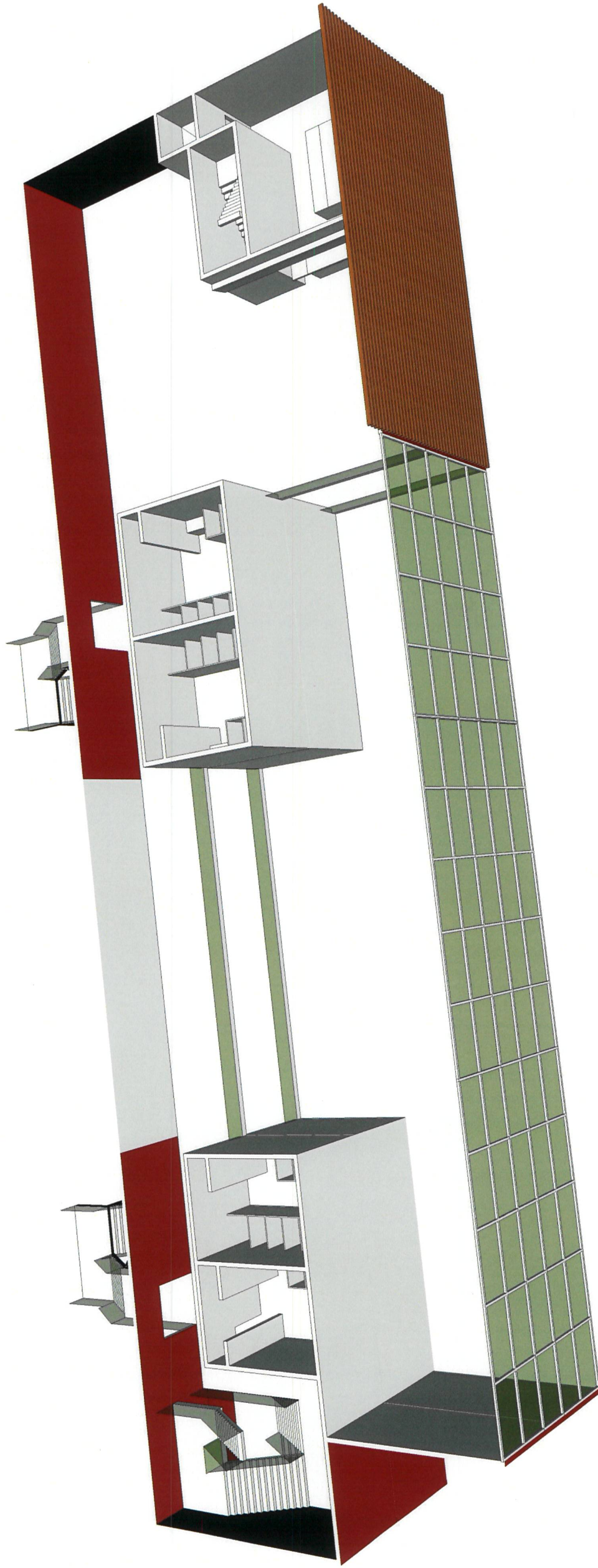
4.0 Phase 3 – Stadium New Main Entrance Addition



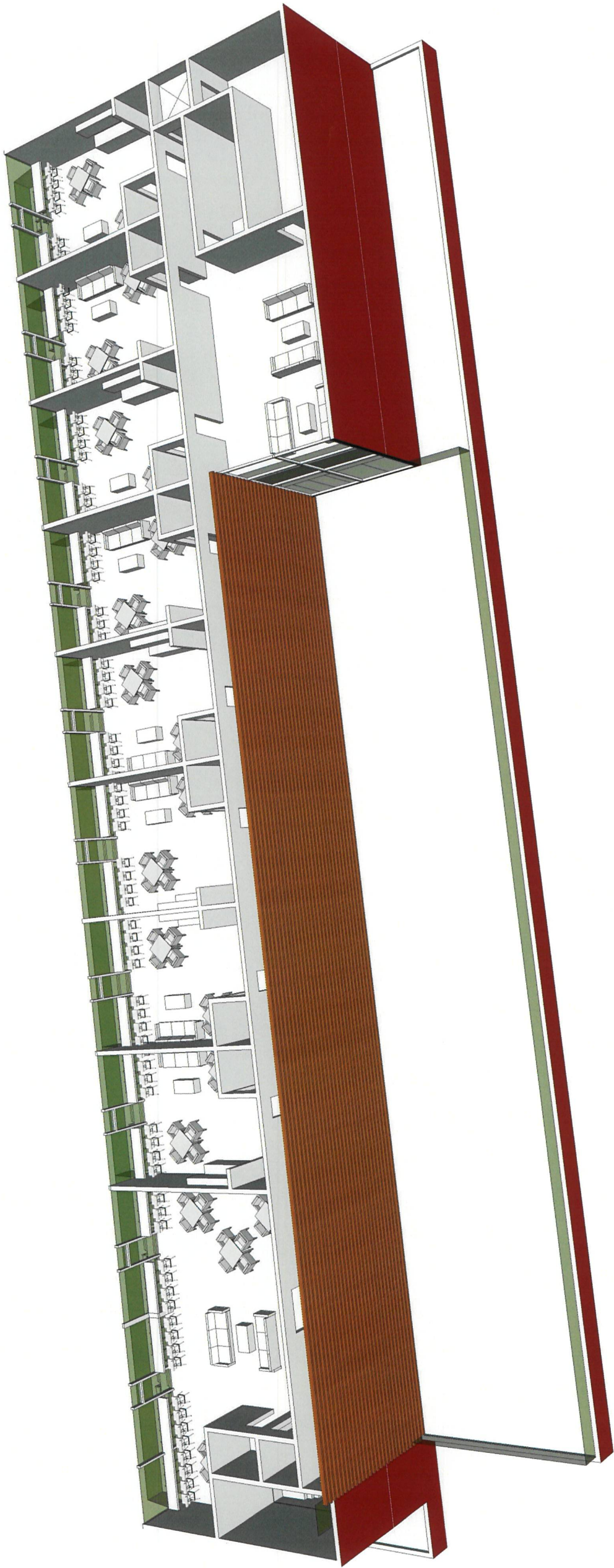
View of the new 48,000 square-foot Main Entrance pavilion as seen from the air from the east. The new addition features a new grand lobby, two upper concourse levels and two levels of corporate suites including an owner's suite



Level 1 isometric conceptual floor plans showing the main lobby area featuring the new Hall of Fame and team store, multi-media displays and the relocated Winter Olympics monument. To the right is a separate entrance for suite-holders and to the left under the grand stair is the main ticket office. Level 1 approximate area 15,000 sf.



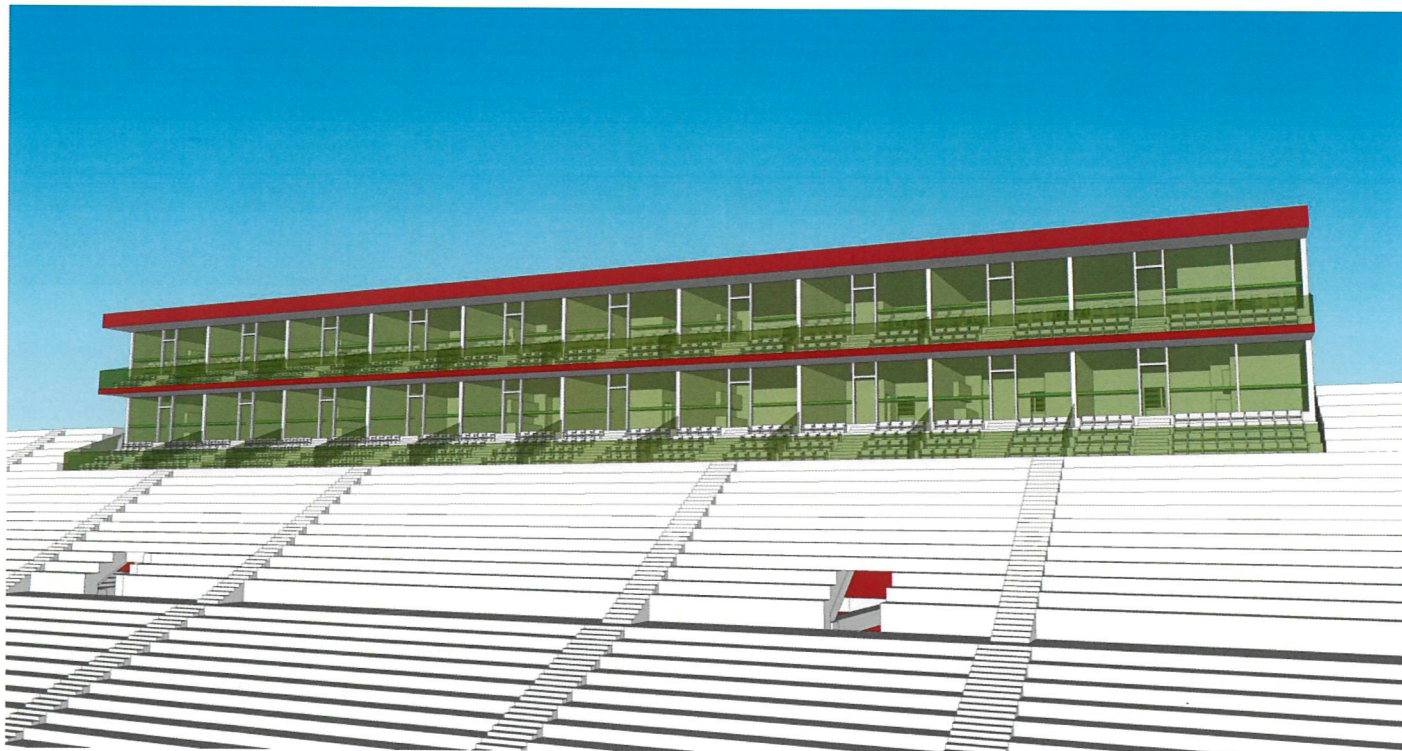
Level 2 and 3 stacked isometric conceptual floor plans illustrates the new upper concourse areas linked by bridges to the stair landings of the existing upper bowl vomitory exit stairs. The new upper concourses feature washrooms, a concession areas and abundant crush space. One or both of the levels could be made an exclusive premium seating benefit with a seat up-charge. Levels 2 and 3 floor area approximately 7,500 sf each.



Level 3 and 4 isometric conceptual floor plans illustrating the potential for up to ten suites per level, on two levels. Each suite shown with self-contained washroom and kitchenette. Common amenities include a lounge area, a catering room and on Level 3, access to a rooftop terrace area. Elevator access would be available to all levels of the building. The suites feature outdoor seating areas built on the area of the demolished Supersuite. Levels 4 and 5 floor area approximately 9,000 sf each. Level 3 rooftop terrace area about 3,800 sf.



View from the north



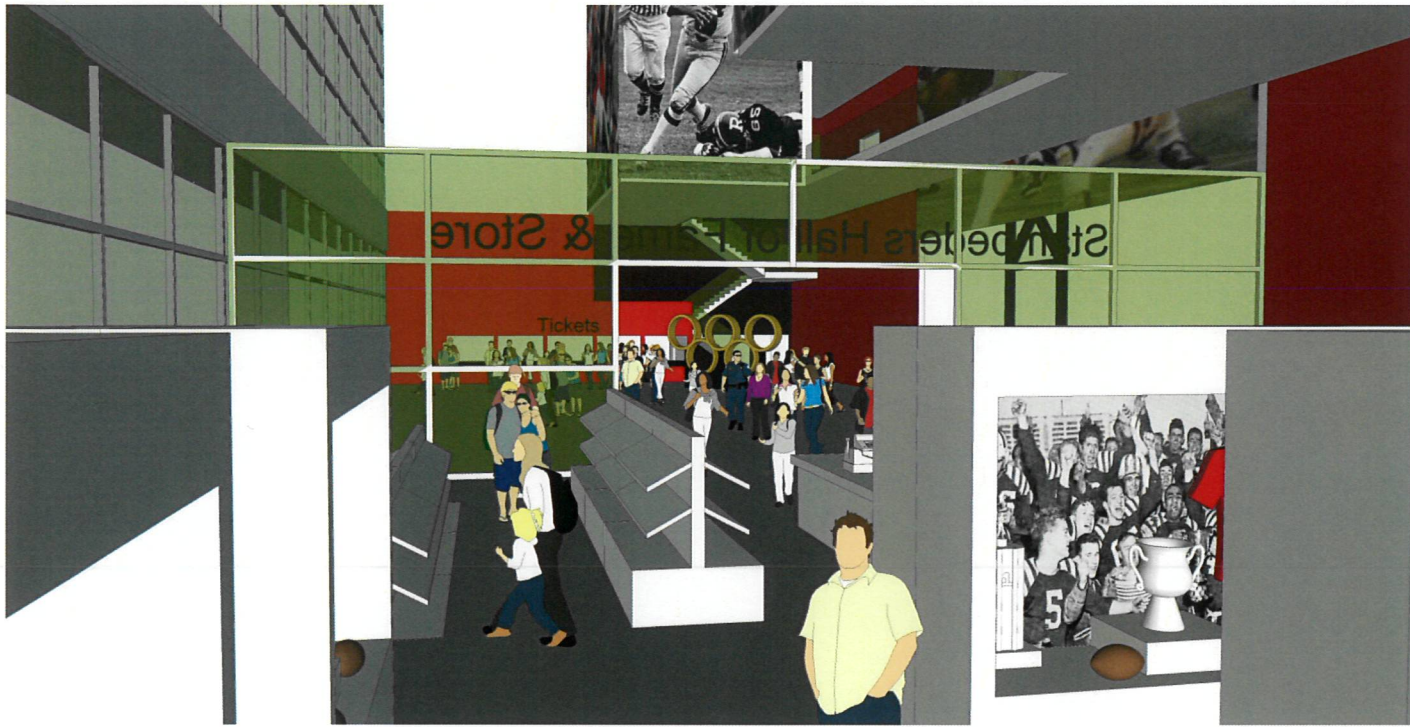
View of new suites level cantilevered over the area of the demolished Supersuites



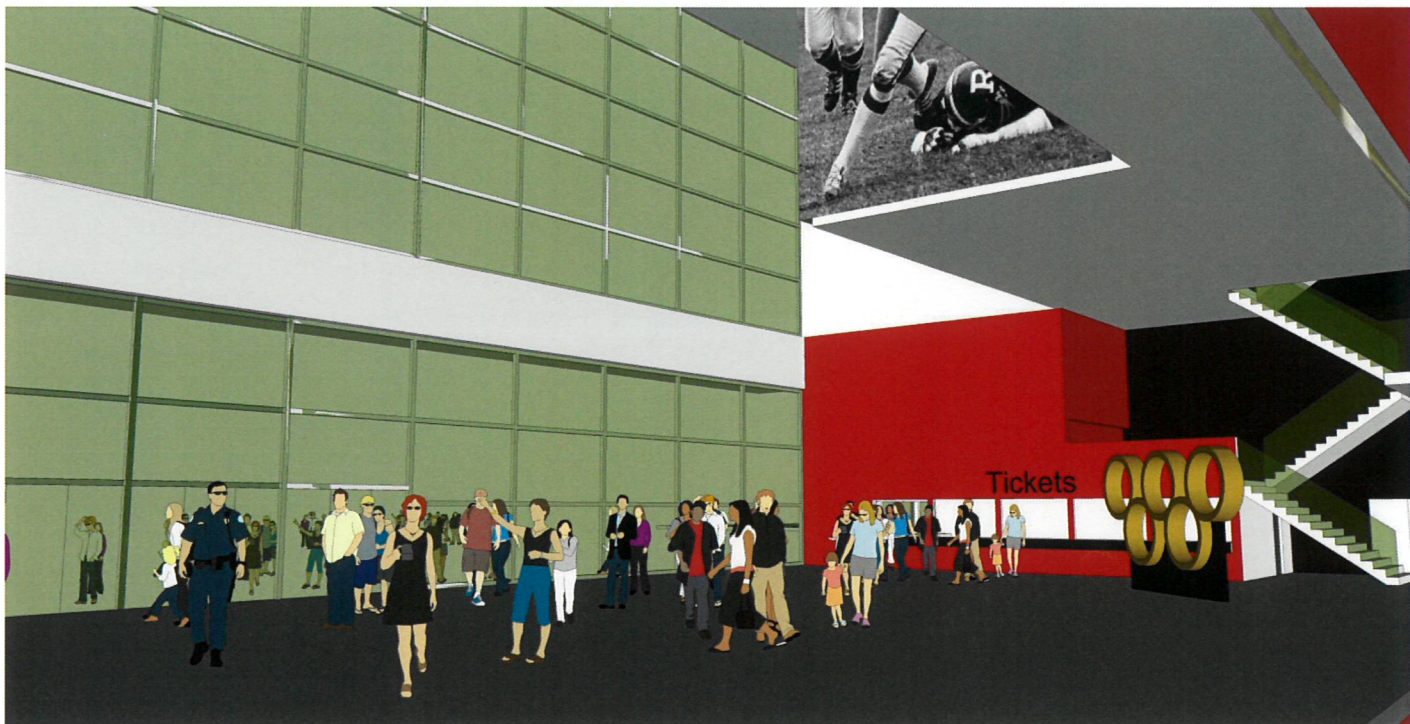
Lobby interior view



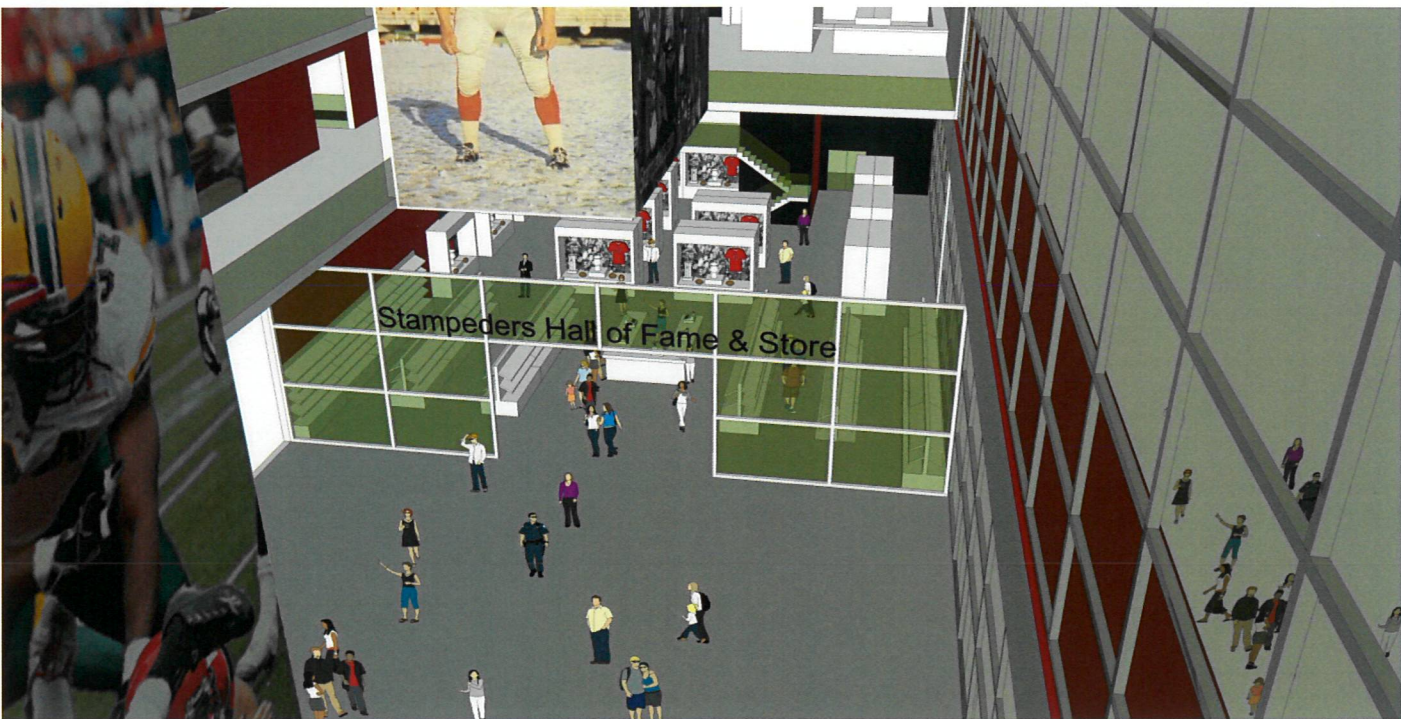
View of Main Entrance building from LRT station



Looking into the lobby from the store



Lobby as seen from threshold from existing grandstand (new washrooms on left)



Lobby as seen from ceiling showing multi-media wall surfaces



Eye level view of new main front entrance featuring multi-media and Wall of Fame in the interior



View of exterior from the east



View from outdoor seating of corporate suites



View of rooftop terrace area backing suites

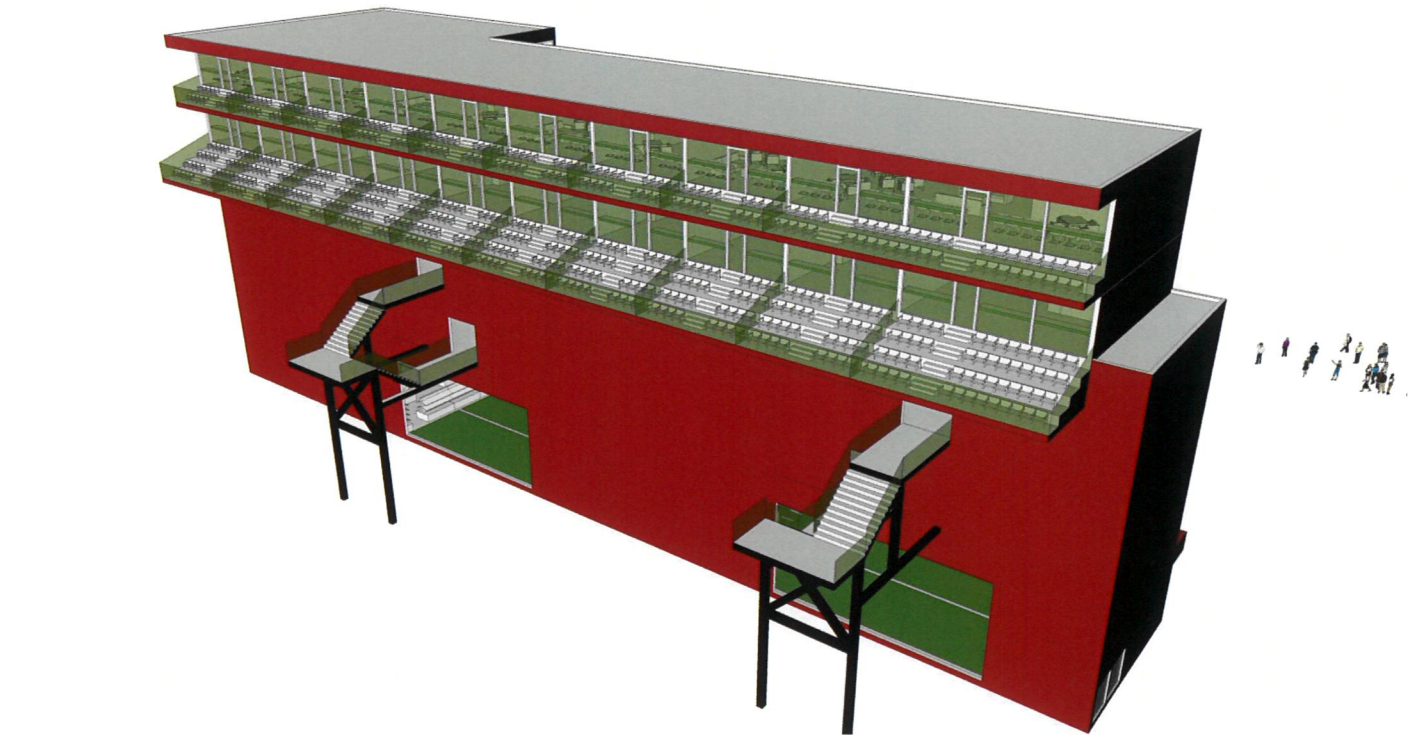
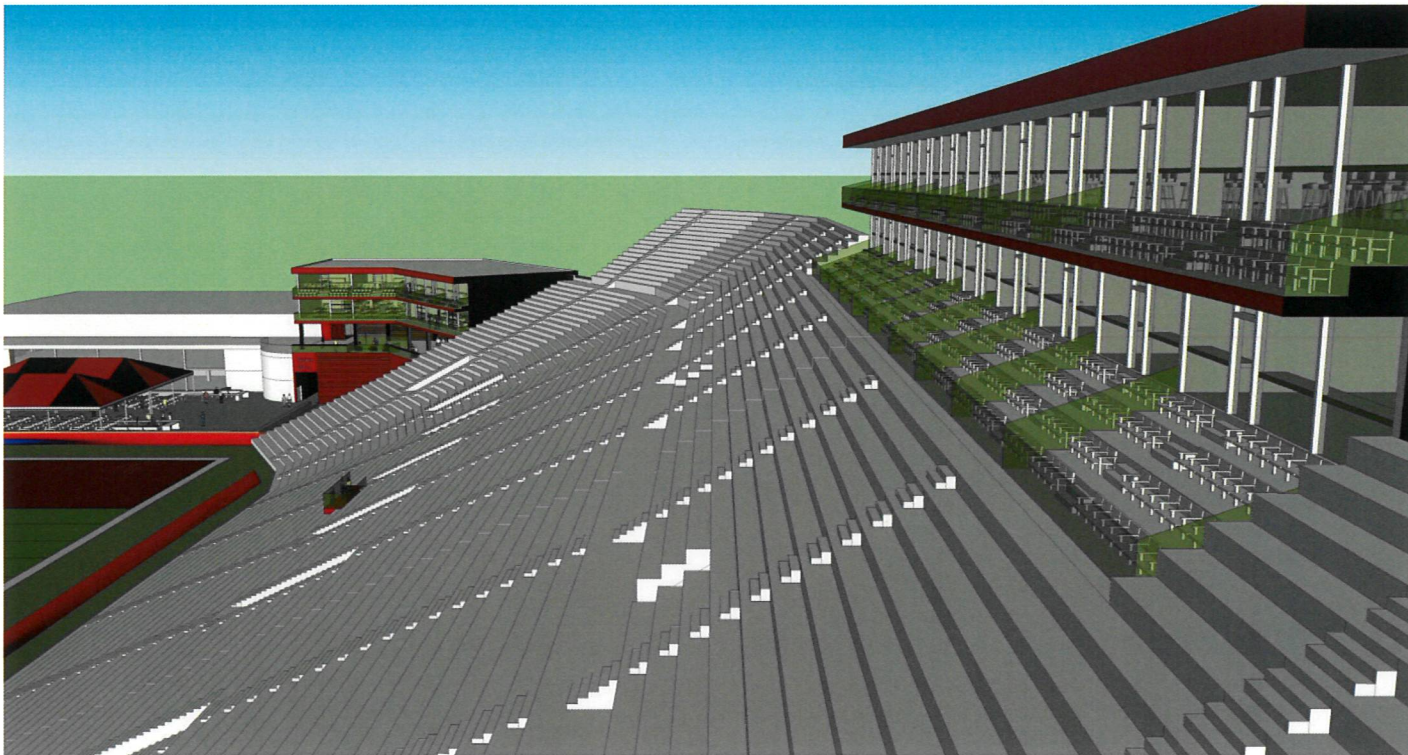


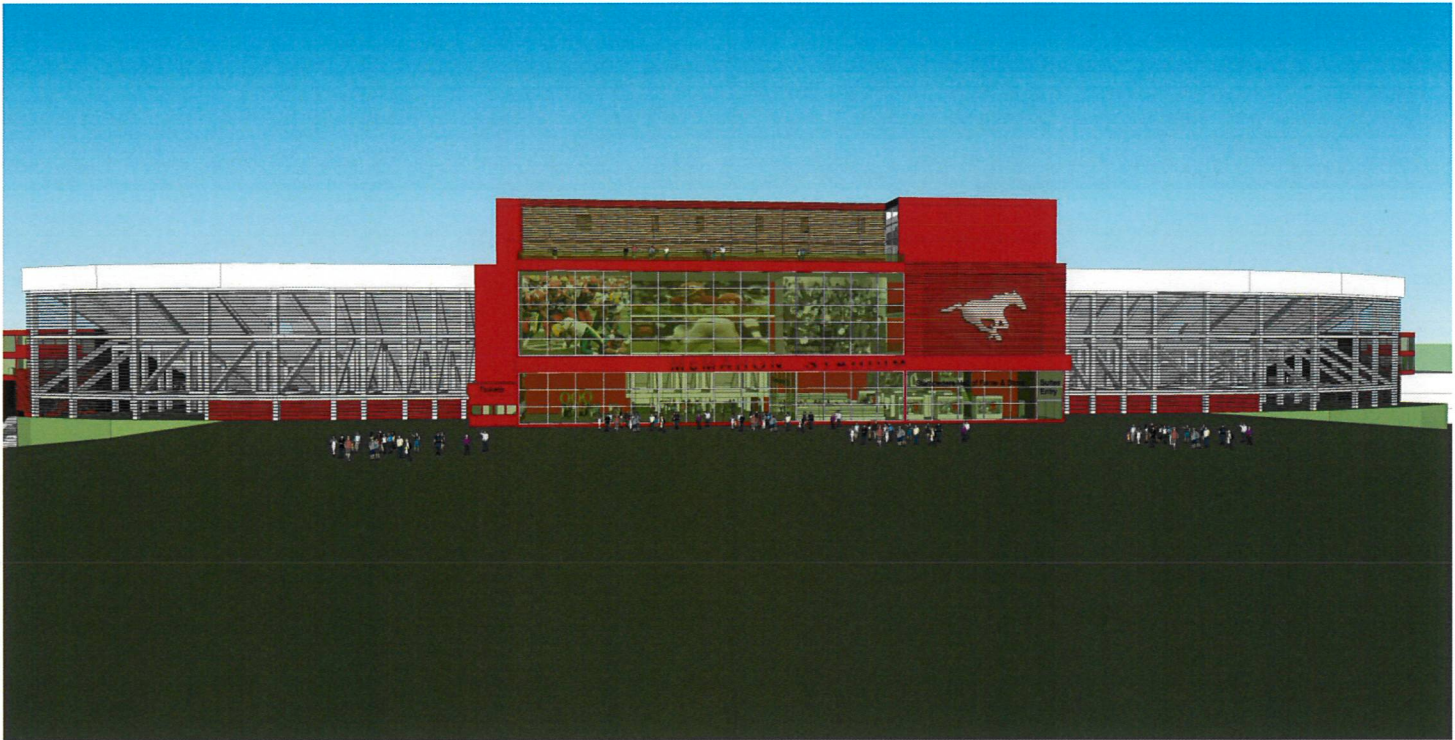
Diagram illustrating conceptual possibilities for connections to existing landings of upper bowl vomitory exits



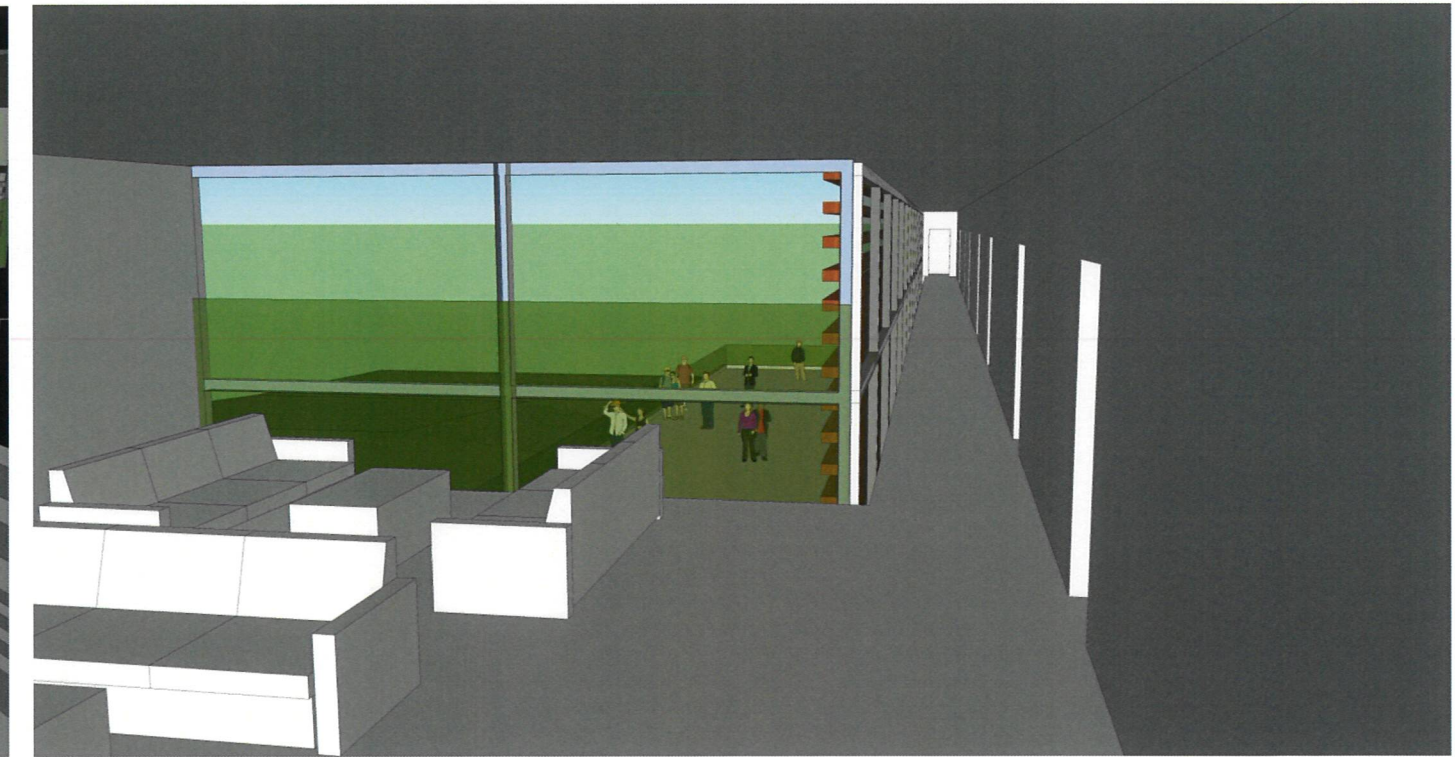
View from new Owner's Suite (capacity >50)



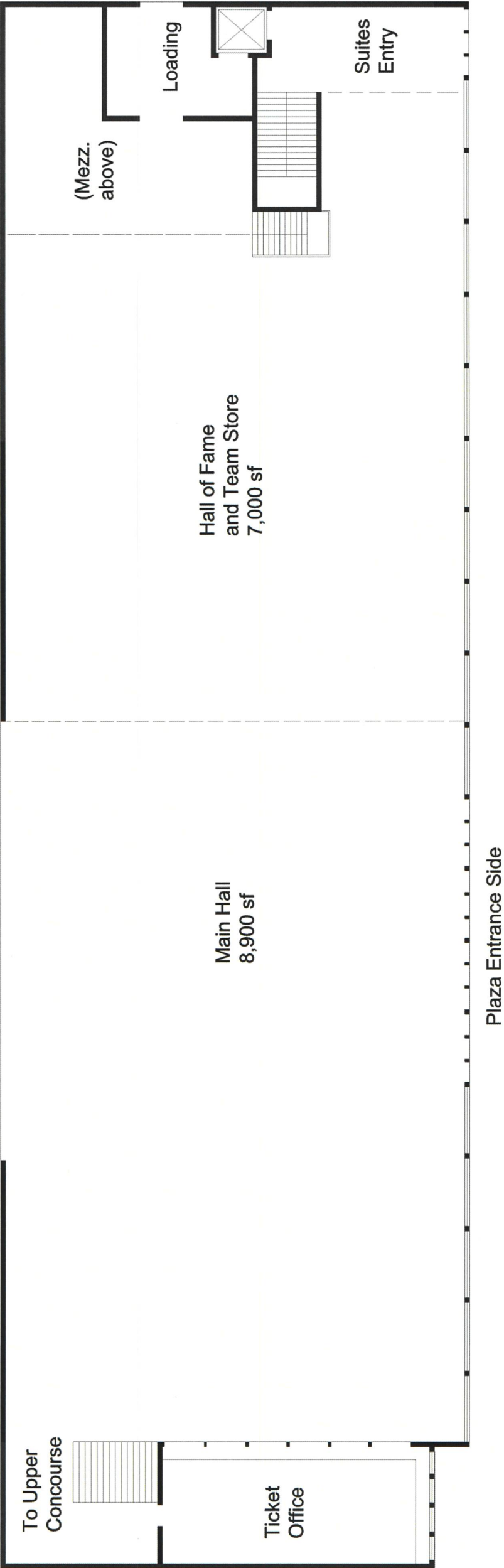
New suite outdoor seating cantilevered over demolished Super-suites area



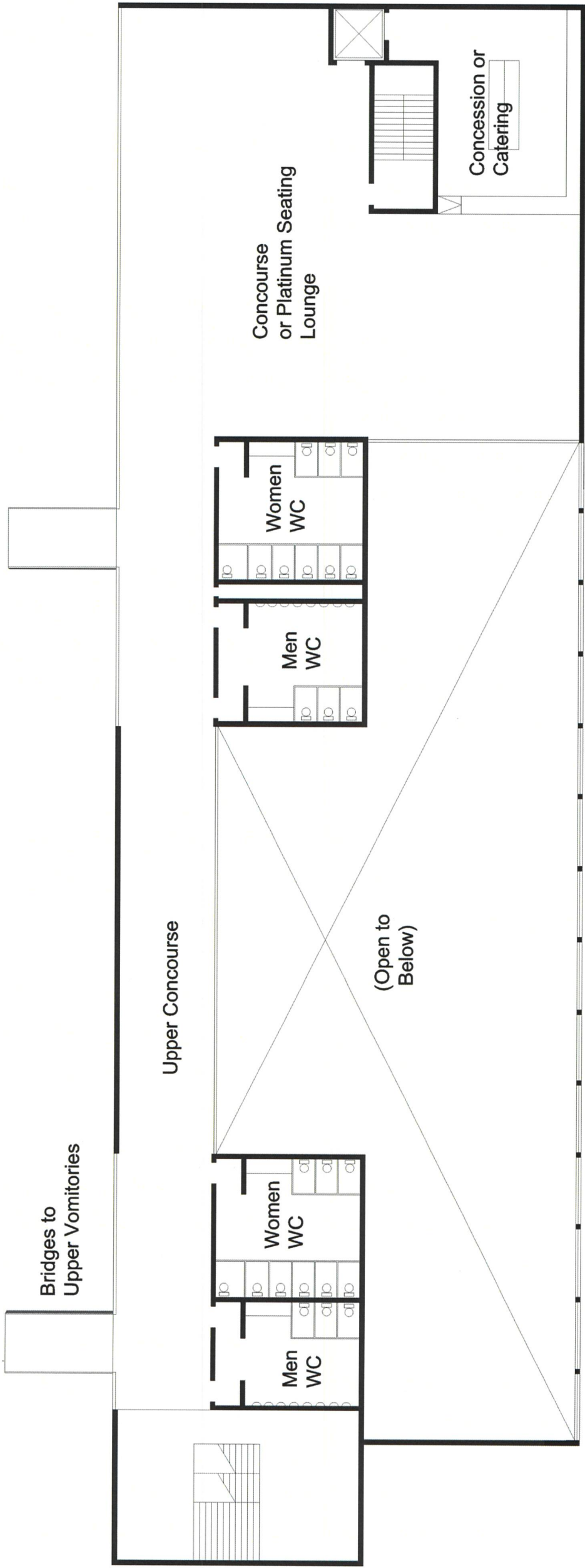
Eye level exterior view illustrating scale of the >200-foot wide, +/- 60-foot tall addition



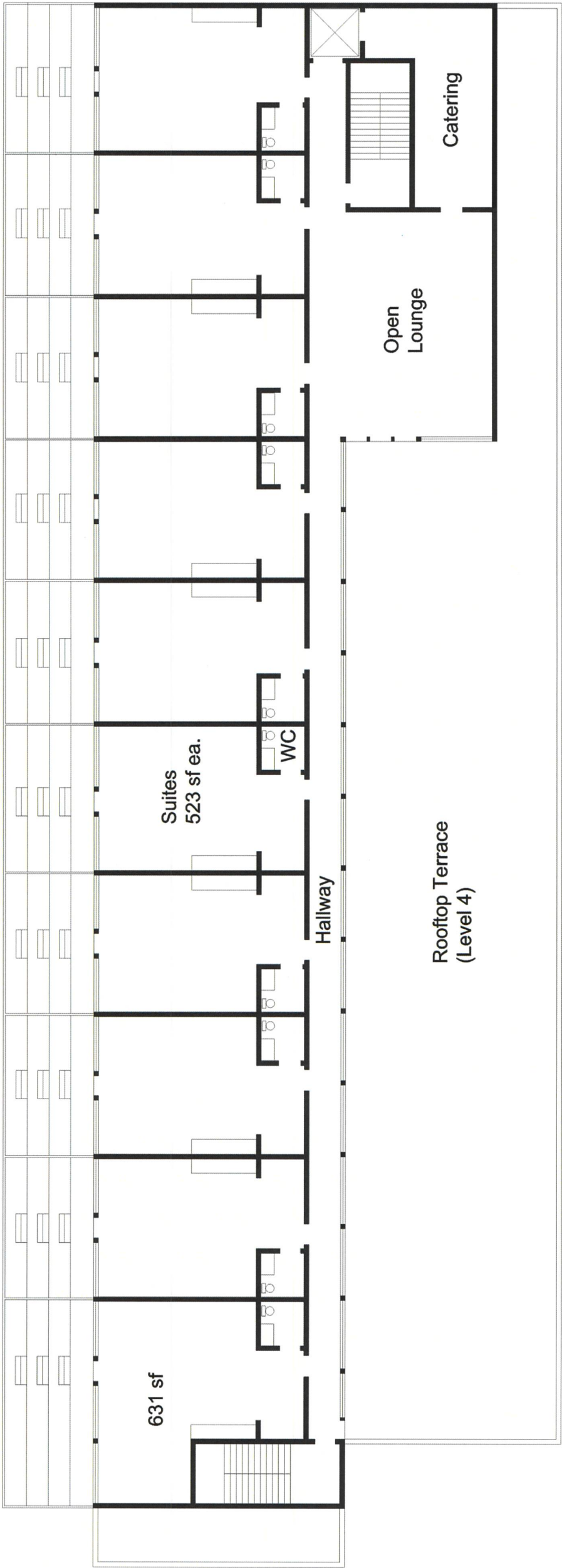
Suite levels common corridor and lounge area



Level 1 plan view of the new entrance addition. Footprint area of the +/-48,000 sf building would be about 205-feet wide x 60-foot depth. The main floor-plate would be about 15,000 sf.

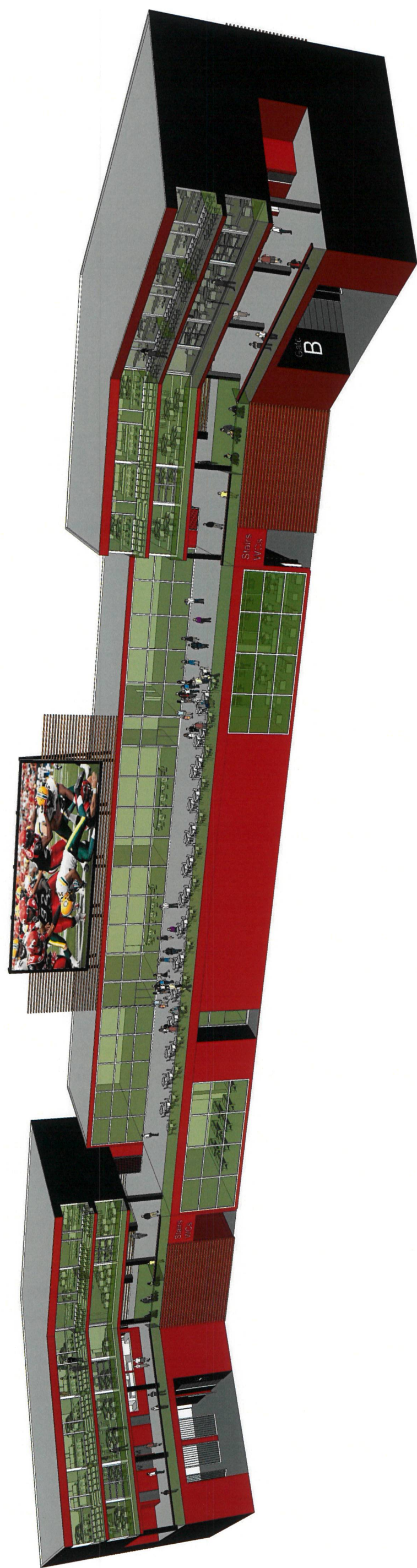


Level 2 and Level 3 floor plans would feature floorplates of about 7,500 sf each opening to the lobby below. The new concourses would link to the existing east grandstand upper bowl vomitory stairwells.



The Level 4 and 5 floor plans would feature two 9,000sf floorplates sub-dividable into up to 10 suites per level. Level 4 also features a 3,800 sf rooftop terrace (over the roof of the lobby).

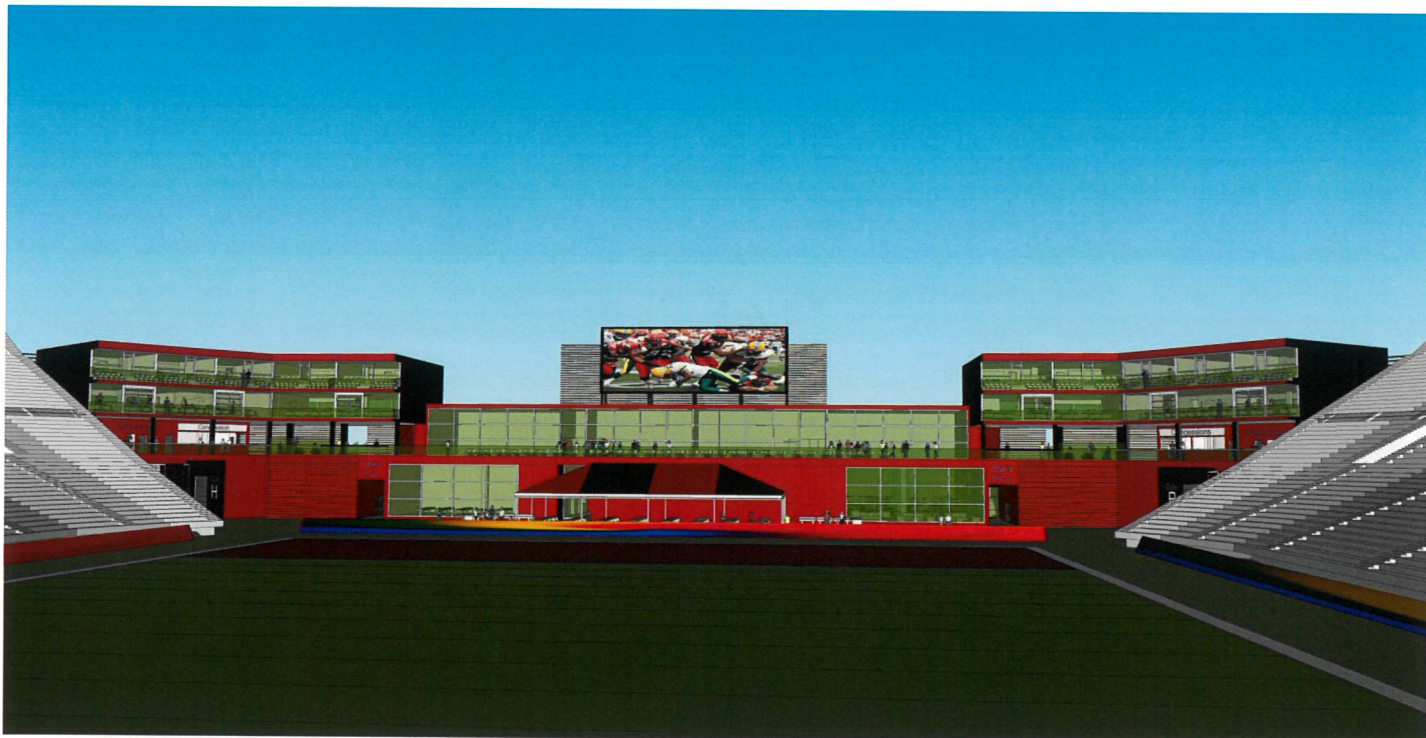
5.0 Phase 4 –South-End Zone Corner Infill Buildings and Annex



In the long-term when the C-shaped wood-framed service building nears the end of service life and the need to complete the concourse contiguous circuit arises, the redundant building could be replaced by two additional Corner Infill buildings as well football operations block with multi-purpose rooms above with a stepped lower portion on the field side to accommodate concourse and open terrace space for viewing the game.



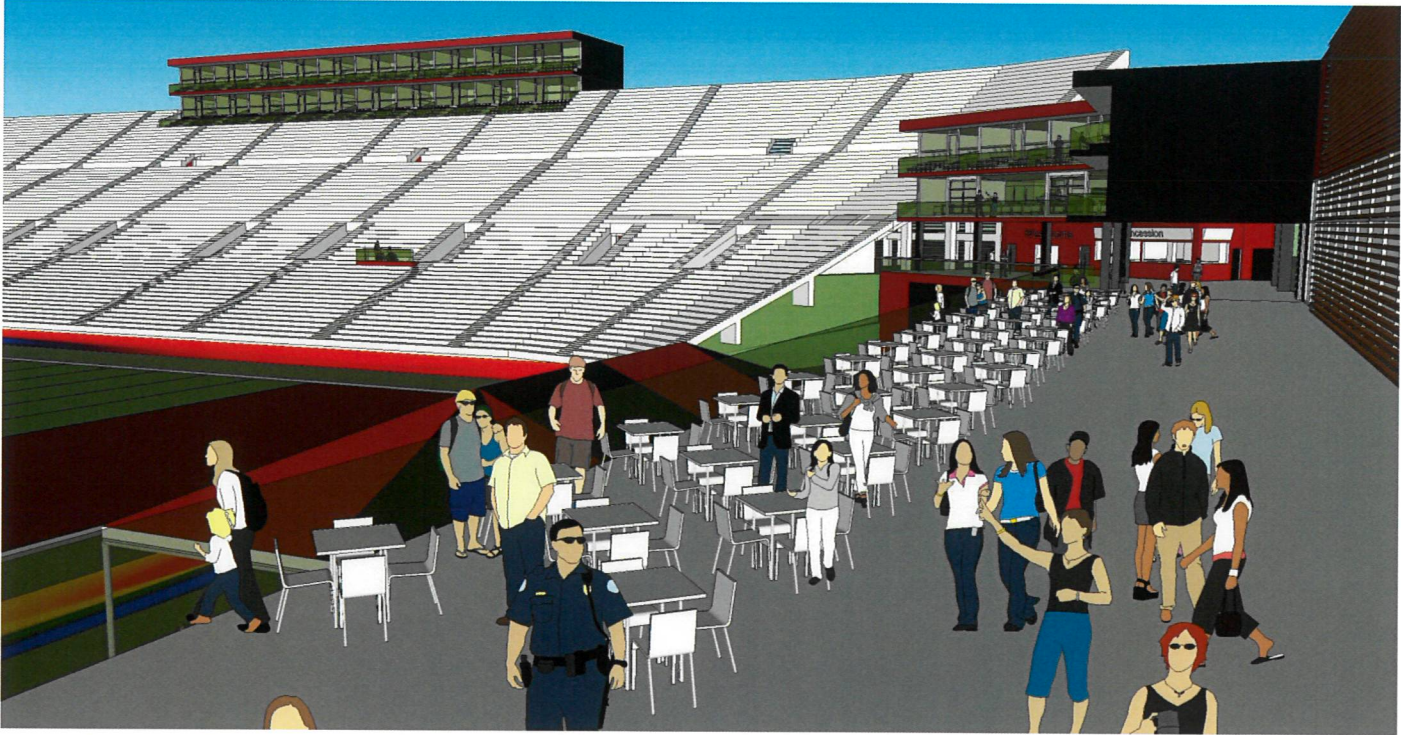
View of the south addition from the concourse level



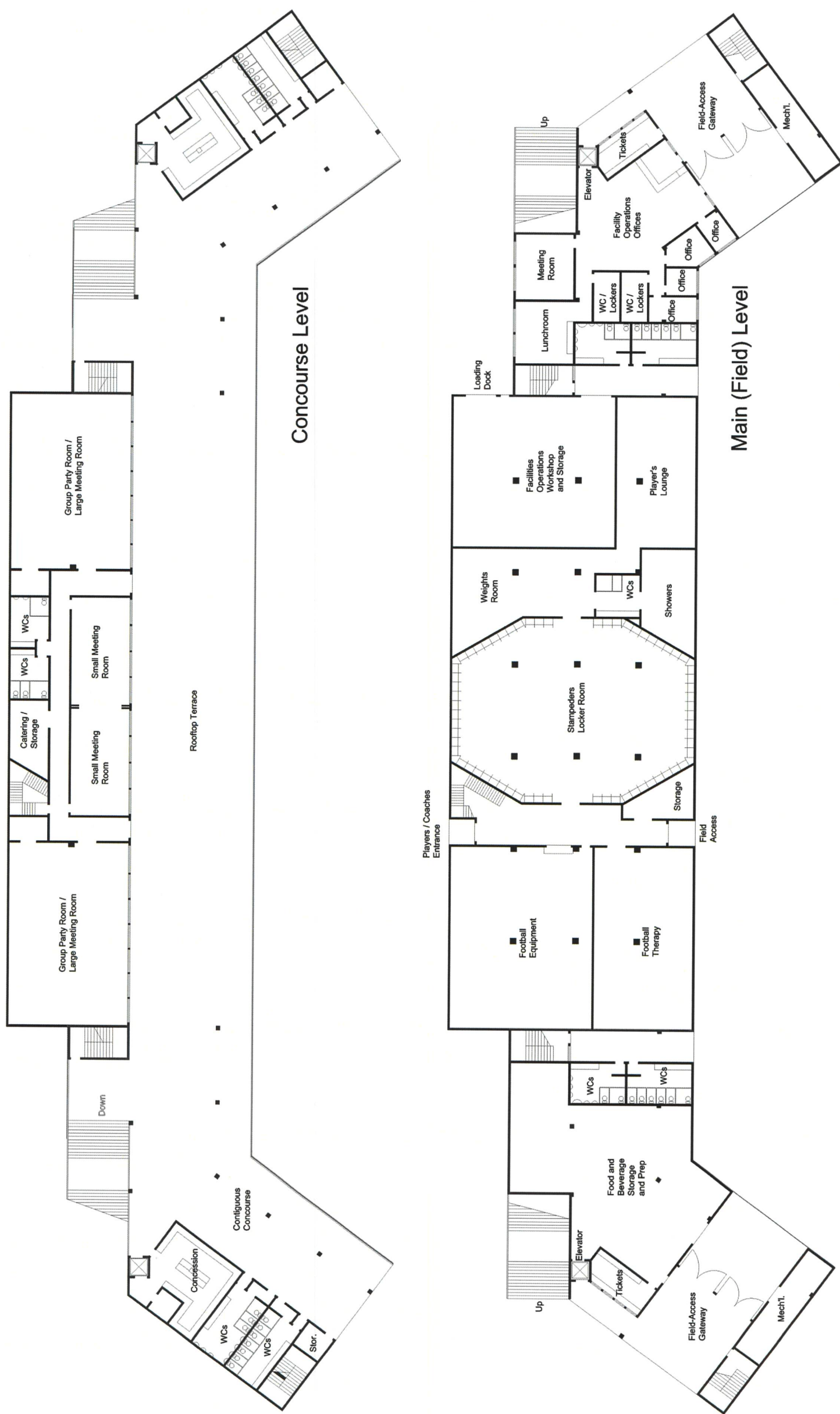
View of south annex from field level



View from upper level meetings rooms looking toward the stadium bowl

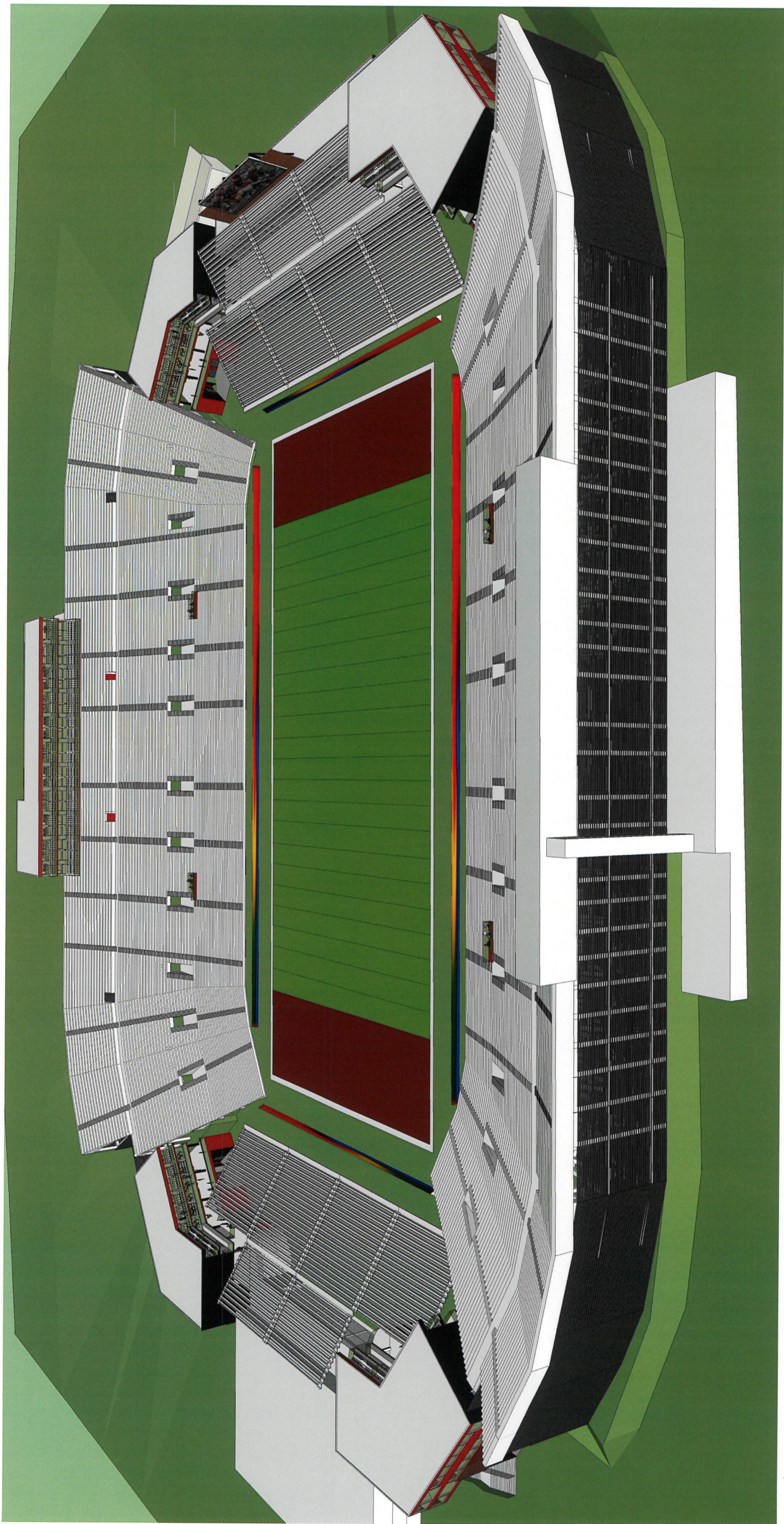


View of concourse terrace with elevated views to the field



Plan view of the 28,500 sf South End Zone Annex including the attached Corner Infill buildings. The main level (19,000 sf) would include football operations (excluding coaches offices housed in a separate existing building) and facility operations including offices. The annex basically replaces everything that was in the C-shaped wood-frame building plus features team meeting rooms / game day event suites on the upper level (9,500 sf). Structurally, the new centre portion of the addition would be capable of supporting the load of additional temporary seating, something the existing building is not capable of doing.

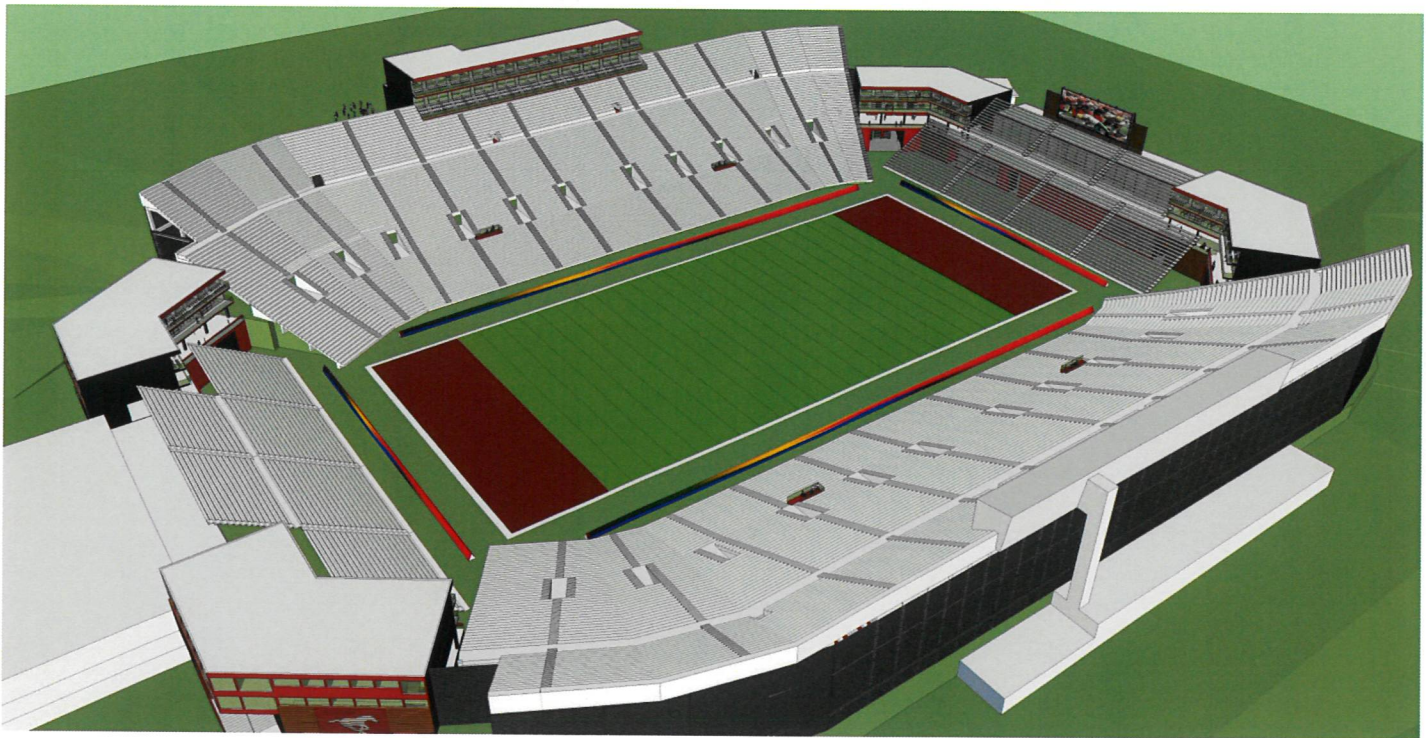
6.0 Provisions for Future Grey Cup Hosting



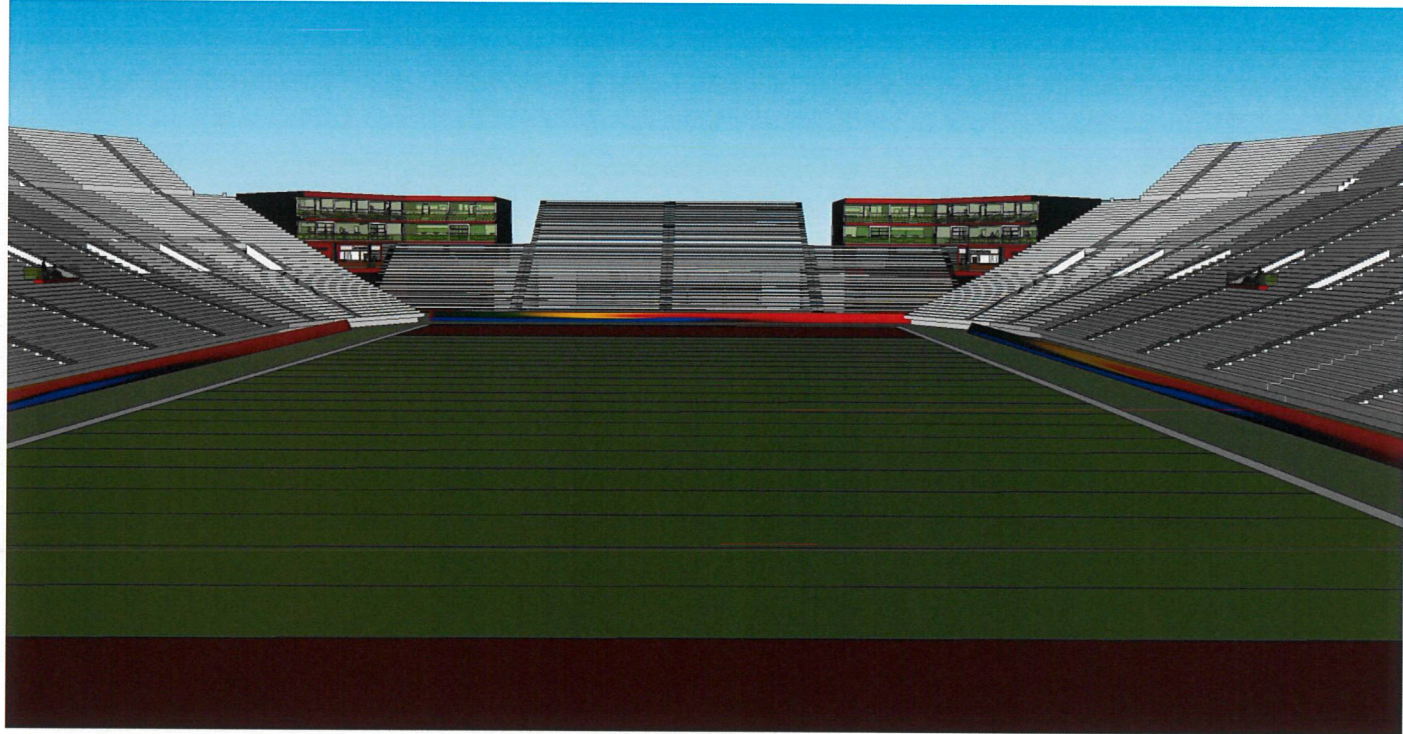
Future development strategies have taken into consideration the need to be able to add temporary seating to accommodate the occasional hosting of the Grey Cup championship game. With current seating capacity of about 35,650 and an additional 1,500 added in new higher revenue-yielding box, club and premium seating, space remains in both end zones to allow for the addition of 7,500 bleachers pushing the overall seating capacity to approximately 44,600.



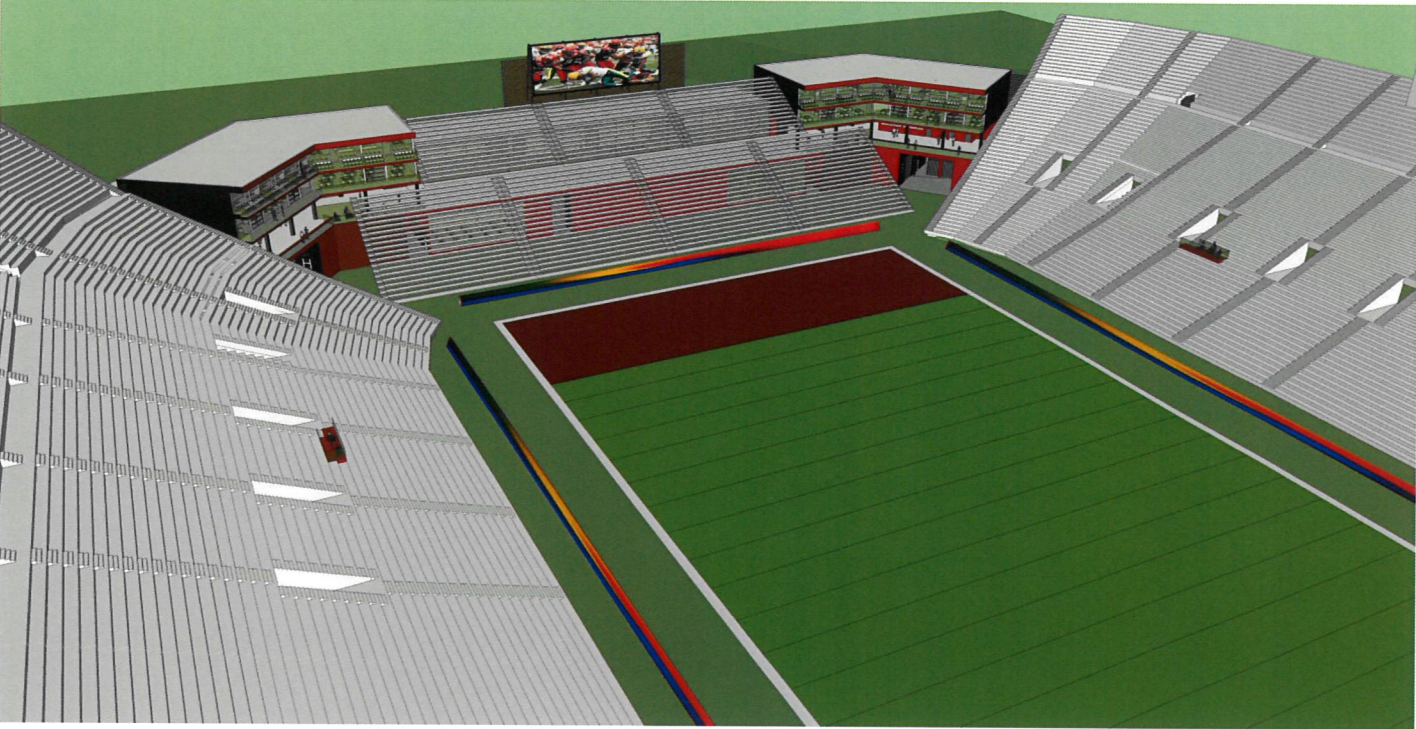
Plan view of stadium showing temporary bleachers beyond both end zones



View from upper grandstand toward the east



View from corner suites and group party suites would not be obstructed by the added bleachers



End zone bleachers would have access to field level washrooms and temporary concessions

7.0 Financials

Order-of magnitude capital dollars for budgeting purposes only. Actual costing may be higher or lower depending on quality of construction, materials and finishes, site conditions and delivery method. All numbers are expressed in current dollars and do not account for indexing over an extended period of years. Construction cost reflects estimated materials and labour. Project cost accounts for soft costs including professional fees,contractor overhead and profit,permits and licences and, modest contingency allowances.

Capital Cost

	New Area GSF	Constr. Cost	Project Cost	
Phase I previously proposed concession and washroom renovations	-	\$16 million*	\$20-21 million	* 2007 price without indexing
Phase 2A and 2B North-End Corner Buildings (26,400 SF each with FF&E)	52,500	\$12-14 million	\$14-16 million	
Phase 3 New Main Entrance Addition	48,000	\$17-18 million	\$21-22 million	
Phase 4 South End-Zone Infill Corner Buildings (26,400 each with FF&E)	52,500	\$12-14 million	\$14-16 million	
Phase 4 South End-Zone Annex	28,500	\$8-9 million	\$10-12 million	
Grey Cup 7,500 temporary bleacher end-zone seats			\$700,000 (not in total)	
Media Technology (through-out the stadium complex; production suite, etc.)			To be determined	
Video Screens / Scoreboards (2) / Field Level Ribbon Boards			<u>\$5-6 million</u>	
	Totals:	181,500	\$65-72 million	\$84-93 million

New Revenues and Operating Costs

Annual additional operating costs (predominantly enclosed space and assuming year-round use)		-\$700,000
Annual potential annual gross revenue from 40 new suites @ \$4,000 / suite / game		\$1.6 million
Annual potential annual net revenue from >500 persons in eight new group party suites @ \$200 / seat / game		\$1.0 million
One-time net rprojected evenues from hosting Grey Cup game with a capacity of 42,000		To be determined
Additional revenue from new media		<u>To be determined</u>
	Total:	Minimum \$1.9 million