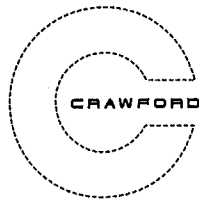


JOINT USE FOOTBALL STADIUM
ARCHITECTURAL REPORT



December 2002

TABLE OF CONTENTS

SITE	2
PROJECT COMPONENTS	4
DISTRICT	7
STADIUM	16
COST	30
SCHEDULE	32
COMMUNITY	34
APPENDICES	

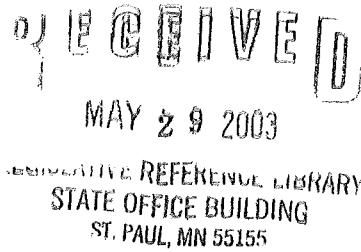


TABLE OF GRAPHICS

EXISTING SITE	3
DISTRICT PLAN – INITIAL	13
DISTRICT PLAN – FINAL	14
DISTRICT PLAN – CONCEPT RENDERING	15
STADIUM LEVELS I	23
STADIUM LEVELS II	24
SECTIONS I	25
SECTIONS II	26
STADIUM BAY	27
TRAVERSE	28
LONGITUDINAL	29
COST SUMMARY	31
SCHEDULE	33

SITE

The stadium site is located within the East Bank campus of the University of Minnesota bounded by University Avenue (south), 23rd Avenue (east), Oak Street (west) and 6th Street (north). This represents an area of approximately 32 acres, of which a little over 19 acres (60%) is occupied by the stadium.

This area was previously owned and occupied by the railway and used for a variety of industrial purposes, including an asphalt plant, a grain elevator, wood preservative treating operation, and fuel oil storage. These activities, which ceased in the early 60's, impacted both the soil and groundwater quality of the site. Although the majority of the site is now a paved surface parking lot, any development will require that the areas of contamination are removed and treated to make the site suitable for development.

Three underutilized and obsolete University buildings are located on the southern portion of the site. These facilities - Holman Building, Poucher Building, and University Press Building - will be demolished as part of the project. The project will also acquire and demolish the Ladder/Daily Building at University Avenue and 23rd Avenue.

Several additional parcels of land will be required for the construction of the Granary Parkway.

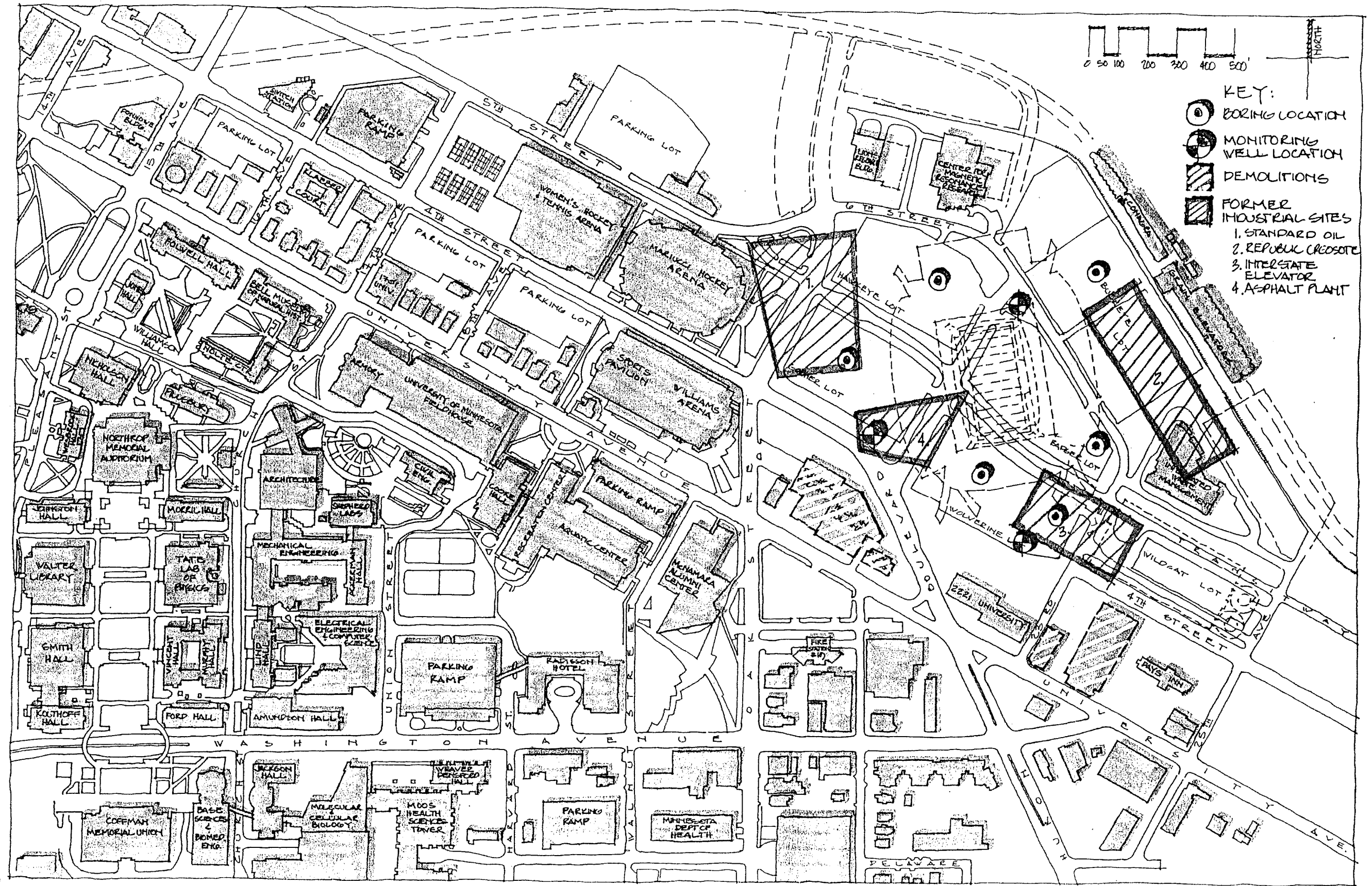


FIGURE: 1: Current Site

PROJECT COMPONENTS

The development of a football stadium on this site requires the successful integration of several major project components.

Stadium

The stadium will feature a combination of fixed and retractable roofing enabling full enclosure or a partial open-to-the-sky experience. The retractable roof, while ensuring complete weather protection, will expand the event calendar for the stadium allowing it to be used for more than just football games.

The stadium will accommodate seating for 68,500 fans, with the ability to expand to an ultimate capacity of 72,000, the minimum capacity required to host a Superbowl. There will be a house-reduction capability so that crowds of about 55,000 can be accommodated in a more intimate setting. This mechanism will be considered in more detail in the design stage.

The stadium will be equipped with all of the fan amenities typically found in modern stadiums. There will be a large number of food and beverage concessions, wide concourses, a sufficient toilet count, and comfortable seating with good sightlines in an array of locations throughout the stadium seating bowl. The premium seating inventory will include approximately 7,300 club seats, capacity for approximately 150 suites and the necessary ancillary facilities to provide appropriate premium seating services. A detailed market analysis will be required to determine the exact nature of these facilities.

Transit Center

The existing on-site surface parking will be replaced in a structured, multi-modal transit center. This facility will accommodate the requirements for public buses on the ground level (25 stops), have capacity for 2,000 cars on several upper levels, and include provisions for a future underground light rail transit (LRT) line within the building's foundation structure.

On game days the facility will provide a terminus for buses bringing spectators from the State Fairgrounds parking location. From the Transit Center, auto and bus passengers will be able to walk, free from vehicular conflict, onto the stadium plaza across a section of 23rd Avenue that will be closed on game days. Vehicular passengers parked on the levels above can ride elevators to the ground floor and also walk onto the plaza unhindered. The provision of a skyway connection will be considered in the final stadium design. In the future, when the LRT line is constructed, transit passengers will emerge within a short distance of the stadium plaza and enjoy similar ease of access onto the stadium plaza across a section of 4th Street that will be closed on game days.

It is expected that the bus portion of this facility will accommodate the arrival and departure of some 15,000 fans on game days.

On non-game days the transit center will benefit the University community in general. The transit center structure will straddle the University's transitway. The transit center will serve as the primary student parking reservoir and will serve students taking the bus between the University's St Paul and West Bank campuses.

Environmental Remediation

Previous industrial activity has resulted in a significant amount of soil and groundwater contamination on the site. This environmental contamination will be cleaned up as part of the project. Although initial studies have been conducted, the full extent of contamination is yet to be determined. Once the full extent of contamination is known, and prior to commencement of any remediation or construction work on site, an environmental remediation plan will be prepared and submitted to the Minnesota Pollution Control Agency (MPCA). This plan will detail the appropriate procedures to be followed in the site's remediation.

The site must be remediated before any development can occur. This will involve removal of the contaminated soil and treatment of the groundwater.

Roads

The orderly movement of people and traffic into the district and around the site, both before and after games is an essential requirement for the success of this project.

Roadway improvements are proposed to ensure that traffic flows smoothly and is modally separated so that buses and private vehicles avoid conflict as much as possible.

The MCDA's South East Minneapolis Industrial Area (SEMI) Master Plan calls for the creation of a network of roads to open up the underutilized industrial land to the north of the University's stadium site. Part of this network is a roadway to be known as Granary Parkway that will provide a dedicated route westward toward I-35W, connecting to 2nd Street. This project will construct the portion of the proposed road from a point just to the east of the University's MRI facility all the way to the 2nd Street junction. The stadium will be located so as to not interfere with the proposed alignment for the eastern section of the Granary Parkway. The eastern section of the road can not be completed as proposed in the SEMI Master Plan until the still active ConAgra's grain elevators are demolished.

This transportation plan calls for the extension of 4th Street through the site, making a connection between its current intersections at 23rd Avenue and Oak Street. The road extension facilitates non-game day traffic and creates a large future development parcel with street frontage on four sides. This parcel could easily accommodate three or four future academic buildings. On game days the 4th Street extension will closed, permitting unhindered pedestrian access across the plaza from University Avenue.

The University transitway currently runs through the middle of the site. This dedicated bus way will be re-routed to the north at the 23rd Avenue intersection, where it will merge into 6th Street before intersecting at Oak Street.

Oak Street will be relocated approximately 180 feet to the east of its current north/south alignment. The re-alignment allows for the road to be widened without impacting the historic Station 19 property. The re-alignment will also create expanded forecourt areas to Williams and Mariucci arenas and will create building sites for future academic buildings along both the east and west sides of Oak Street. The utility lines located in the current Oak Street alignment will not be relocated as a part of this project. The access to the utility corridor must be maintained until such time as the utilities are relocated. The utilities will need to be relocated before any buildings can be developed on these proposed sites.

On game days Oak Street will be closed, permitting unhindered pedestrian movement across the stadium plaza connecting the forecourts of Mariucci Arena and Williams Arena with the football stadium plaza.

Utilities

Upgrades to the University's own utility systems are necessary to meet the service requirements of the stadium. These involve extending the existing central steam system to the stadium through a new deep tunnel. The project will also require a new cooling plant that will be accommodated in the stadium and transit center structures. Electricity will be provided from the University's existing switching station located to the west of the stadium site on 4th Street between 15th and 16th Avenues. Data and telecom will be redirected through the proposed stadium site. Other utilities that serve the needs of campus will be extended to the stadium site including the provision of domestic water, storm sewer, sanitary sewer and natural gas.

DISTRICT

An important aim of this predesign study has been to determine how a joint-use football stadium would fit with the University campus. Although the stadium is large, the site proposed for its location can accommodate the proposed development.

Campus Context

Siting the stadium toward the southeast portion of the site creates significant opportunities for peripheral development of future academic buildings. These proximate buildings, as they develop over time, will provide the necessary scale transition between the current campus and the stadium. Until such time as these buildings are built, the stadium will be separated from the existing buildings by a generous plaza. The plaza will be designed to a human scale and include, well defined gathering areas, trees, soft landscaping, and other elements of appropriate, pedestrian-friendly urban design. The physical separation from existing buildings will mitigate some of the visual impact of the building.

Connections

The stadium does not exist in isolation. It must connect back to both the University and the broader region.

To the Region:

A primary consideration of the transportation plan involves the separation of vehicular traffic into a local and regional hierarchy. Vehicular movements into the stadium district before an event and out of the district after an event will be channeled along the regional road network. As much as possible, the local street system will be free from stadium traffic during events. Some proposed street improvements, such as the extension of 4th Street through the stadium site, will also enhance the local traffic flow on non-game days.

The stadium district plan supports the transportation goals of both the University's current master plan and the SEMI Master Plan. The stadium development will construct an initial phase of the Granary Parkway as outlined in the SEMI Plan. The realignment of Oak Street between University Avenue and 5th Street will be designed to accommodate a future bridge link to the Kasota Parkway outlined in the SEMI Plan. The plan makes additional provisions for the proposed Central Corridor LRT line.

To the Campus:

The stadium development will contribute more to the campus than simply the addition of another sports venue. The stadium will anchor the northeast boundary of the campus and the plaza in front of the football stadium will provide an open space connection with the University's existing athletic venues. The design of the stadium plaza will be done in a way that promotes a logical and orderly extension of the campus.

The campus currently contains a series of pedestrian-focused green spaces, among them, the Knoll, the Northrop Mall, and the Housing Super block. Each is very different in its history, configuration and use. The proposed stadium will create several new pedestrian-oriented landscapes of varying size and use. Capitalizing on the 1996 University Master Plan, Guiding Principle 3, to "Create a cohesive system of open spaces," the stadium district plan establishes a connective corridor and hierarchy for linking proposed campus open spaces to existing campus open spaces. The district plan diagrams illustrate potential campus landscapes

associated with the stadium district plan, incorporating the full range of campus open spaces, from paved plazas to green parks.

Preliminary design studies indicate that an opportunity exists to relate back to the McNamara Alumni Center from the stadium. Opening the southwest corner of the stadium's seating bowl would create an axial vista between McNamara and the stadium. This axial alignment, further defined by future buildings, is demonstrated in the district plan diagrams. As these buildings are developed, this connection will become stronger and more physically tangible. The recommendations for siting the stadium, the suggestions for future buildings, and the interstitial plaza spaces allude to this future prospect. The northeast forecourt to the McNamara Alumni Center should eventually be reconfigured to further reinforce its intended "gateway" status in the University.

Reinforce Collegiate Feel

Creating a collegiate environment requires more than simple architectural form. Colonnades, arches, pilasters and lintels while worthy architectural devices and common to a campus context, do not create the desired environment if they are simply applied, without thought, as 'window dressing' on bad design. Similarly, as much as brick, stone and cast iron help to promote the collegiate feel, they do not in isolation create the feel. The collegiate environment could be said to be more experiential. A well-designed campus feels connected and organic, evidenced by orderly growth that looks like accretion and not replication. Over time a campus evolves, gracefully making its way through the various representative architectural styles that come and go. Successful campuses don't remain stuck in time; they are demonstrative and reflective of time as a continuum.

This plan addresses the challenge of "creating campus" by recognizing the importance of maintaining a harmony and unity with the existing campus buildings and open spaces but accepting that the stadium needs to relate to its own special place in time. The stadium doesn't have to look like an old building to successfully portray a collegiate feel. A mixture of architectural styles can exist in accord if they tell a story about the evolution of a place with authenticity and clarity.

Open Space and Future Building Sites

The University's 1996 Master Plan defines and distinguishes characteristics of different Minneapolis campus open spaces and encourages a diversity of these spaces.

For the success of the stadium district plan, distinguishing between residual spaces and designed landscapes is important. The stadium plan envisions a common game day landscape to be shared by the stadium, Mariucci Arena, Williams Arena and the McNamara Alumni Center. The designed portion of the landscape envisions a diversity of public spaces within the context of a single plaza. Gathering spaces of different scales, articulated with paved surfaces, will facilitate pedestrian circulation and seasonal activities. Bands of vegetation integrated with the paved areas reinforce circulation patterns to establish a richly textured landscape, eliminating the perception of a windswept plaza devoid of life. Lines, bands and bosques of shade trees will shift across the overall plaza, configuring shady areas during the summer, and sun exposed zones during the cold winters.

Two "Gateway Parks," were proposed as part of the University's 1996 Master Plan, one at the intersection of Oak Street and University Avenue, and another at Washington Avenue and

University Avenue. In the context of a proposed stadium, the Oak and University park becomes a more important connective green space, linking the McNamara Alumni Center open space with the proposed stadium. This landscape would include paved areas for smaller events and activities, and provide for strengthening pedestrian access to and from the Stadium. This gateway park provides for a smaller venue for activities related to or independent of stadium events. The Washington and University Avenue gateway is less attractive as a pedestrian "park" because it is small and bordered on two sides by busy roads. The parcel can best be utilized as a visual gateway, articulated with either landforms or dense tree planting, to reinforce the arrival at the Minneapolis campus, but not as a pedestrian destination or program space.

Planning for future buildings and the creation of open space for the University must go hand in hand. The stadium has been located on the site with the aim of creating the maximum possibility for sites for future academic buildings. As a consequence the predesign has sought to suggest that with the possibility for these future buildings comes the corollary opportunity for the creation of open space between the future buildings. Both are important and should successfully co-exist.

Urban Fabric

The predesign demonstrates that the stadium can positively contribute to the restoration of some fundamental elements of the campus fabric. The continuation of 4th Street through the site creates a viable development parcel with four street frontages. This is a positive contribution to the area. The realignment of Oak Street permits the construction of future buildings on both sides of the new street alignment and creates valuable forecourt area, with a sense of enclosure, for both Mariucci and Williams arenas. Sufficient land is maintained on the stadium side of Oak Street for both future buildings and a generous plaza.

Game Day Experience

As the primary forecourt to the stadium, the plaza will be the focus for game day activities. The University band will have an area suitable for outdoor performances and a termination area for a parade through campus. The portion of Oak Street between 4th Street and 5th Street will be closed to vehicular traffic, as will the new section of 4th Street between Oak Street and 23rd Avenue. The entire plaza area surrounding the stadium will be a pedestrian only zone designed to accommodate game day activities, meeting areas, rally spots, merchandising, concessions, informal entertainment, and the general social and civic revelry that normally accompanies significant sporting events.

Plaza Experience on Non-Game Days

The stadium provides the impetus for transforming the northeast district of the Minneapolis campus by further consolidating parking and spurring development of currently underutilized parcels. The proposed stadium will be the first step in establishing positive pedestrian green spaces in an area of campus long dominated by vehicular surface parking.

The stadium can act as a catalyst for designing and building positive, inhabitable pedestrian space, rather than simply buffers between pedestrians and vehicles. The non-game day use of the proposed stadium plaza is of equal significance to its game day function. The plaza must accomplish a number of experiential objectives, among them:

- Maintain a collegiate atmosphere, populated by the day-to-day activities of students, faculty and visitors appropriate to an academic institution.

- Feel like a comfortable space to inhabit by smaller user groups.
- Extend the positive pedestrian landscape of the Minneapolis campus from the McNamara Alumni Center to the proposed stadium.
- Facilitate clear and safe passage of pedestrians between campus and the proposed Transit Center.

The initial phase of the stadium plaza construction will encompass a diverse matrix of paved and vegetated surfaces, and both are to be shielded by bands of shade trees. The landscape will be able to accommodate a broad mix of campus activities. With the incremental insertion of academic buildings into the plaza, the landscape fabric will change accordingly. At complete build out, the landscape fabric, or connective tissue, will remain intact, with new academic massing emerging from a common landscape of vegetation and paving.

In the end, the objective is to have a single, unified landscape stretching from the existing arenas to the proposed stadium, within which game day activity is hosted and everyday collegiate academic activity flourishes. The full build out massing of projected academic buildings will increasingly provide around-the-clock, ground-level activity and security for the common landscape area.

Relevance to Existing Campus Master Plan

The stadium district plan builds upon the 1996 Master Plan by updating the earlier call for building a structured deck over the existing Huron Avenue parking lots to provide "on site decks with sports and recreational fields one-half level above grade (p68)." This costly strategy will yield additional low intensity recreational fields, but will not maximize the use of the land to the extent that the proposed stadium will. The proposed stadium represents a more intensive redevelopment plan for the northeast district than was called for in the Master Plan. The stadium district plan also allows for more future academic development than the "fields-over-decks" strategy.

The stadium build-out plan further consolidates the campus and reinforces the street edge boundaries which is an important urban design outcome and is consistent with the both Master Plan and the 2001 Dinkydome Block Study.

The 1996 Master Plan elaborates on an organizational structure of policies, principles, and guidelines representing commonly held values applicable to the entire University campus. The 1996 document clearly anticipates that each precinct plan, "will ultimately be resolved to a greater level of detail in response to specific projects and initiatives." In this instance, the stadium district plan has focused increasing clarity on the sports and recreation precinct, in an effort to reinforce the livability of the northeast corner of the campus.

Master Plan Principles Applicable to the Stadium

The stadium district plan builds upon the Guiding Principles of the University's Master Plan, as follows:

Instill a real sense of community:

The return of Gopher football to campus provides a University-sanctioned collegiate event geared toward strengthening student and alumni interaction.

Identify, preserve and enhance natural features:

The proposed stadium provides a mechanism for forging appropriate pedestrian connections between the Minneapolis campus and the proposed Granary Park that parallels the existing rail lines, and as envisioned as a part of the SEMI Master Plan. Connections such as this are important.

Create a cohesive system of open spaces:

A livable campus is comprised not simply of buildings, but the pedestrian landscape that students, faculty and visitors interact within. The stadium district plan establishes an interconnected series of spaces of varying sizes and program to enrich the daily campus experience.

Achieve a balanced system for movement and access:

The stadium district plan reconfigures surface road connections while integrating rubber-tired transit vehicles with the proposed LRT system, consolidated in an inter-modal transit hub located within the district.

Promote optimization and rationalization of the campus facilities:

The stadium district plan rationalizes underutilized existing structures and allows for new mixed-use academic/commercial ventures that are integrated with parking and transit connections.

Increase the mix of uses on the campus, including housing:

Selective reconfigured development within the stadium district diversifies the type of use and hours of use to invigorate and enliven the district throughout all seasons.

Develop connections:

The proposed development fabric and associated public space effectively expands the Minneapolis campus activity to the northeast, strengthening ties to adjacent neighborhoods, and redefining this area of the campus as more than a surface car park.

Foster accessibility and a sense of safety and security:

The stadium district will emphasize universal access across the district and encourage vibrant street level uses that increase personal security through visual observation by district users at expanded hours.

Promote architectural integrity:

The stadium development will acknowledge adjacent built form, and work to reinforce existing corridors, accentuating the visibility of activity within structures.

Preserve historic buildings and landscapes:

The historic firehouse at the intersection of Oak and University will be preserved and hopefully activated with a use appropriate to a campus landscape of revitalized pedestrian use.

Facilitate and ensure healthy collaborative ventures:

There will be ample opportunities for the University and external partners to collaborate on joint venture development opportunities related to the provision of future buildings around the stadium site.

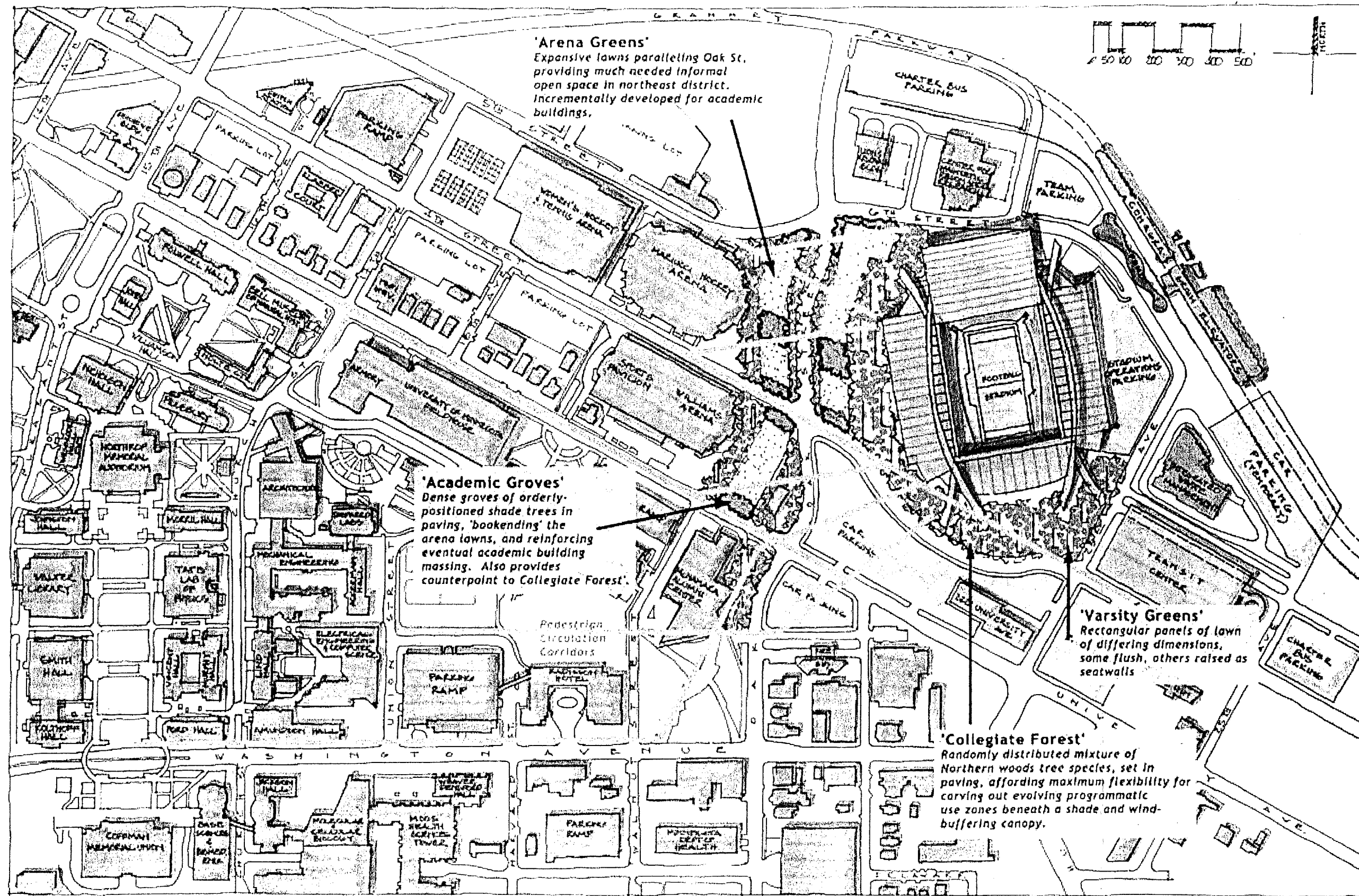
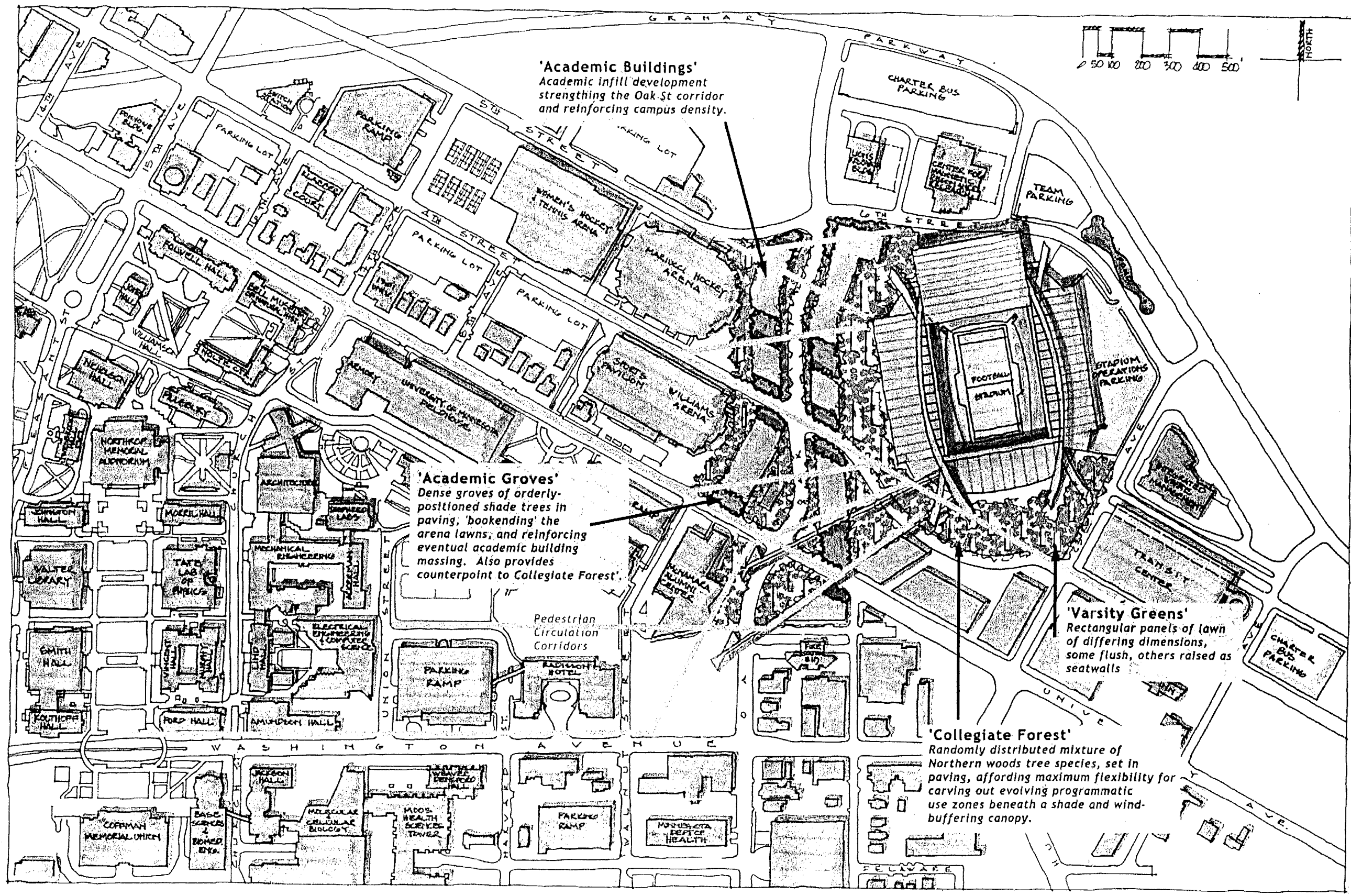


FIGURE 2: District Plan - Initial



'Academic Buildings'
 Academic infill development strengthening the Oak St corridor and reinforcing campus density.

'Academic Groves'
 Dense groves of orderly-positioned shade trees in paving; 'bookending' the arena lawns, and reinforcing eventual academic building massing. Also provides counterpoint to Collegiate Forest.

'Varsity Greens'
 Rectangular panels of lawn of differing dimensions, some flush, others raised as seatwalls

'Collegiate Forest'
 Randomly distributed mixture of Northern woods tree species, set in paving, affording maximum flexibility for carving out evolving programmatic use zones beneath a shade and wind-buffering canopy.

FIGURE 3: District Plan - Final

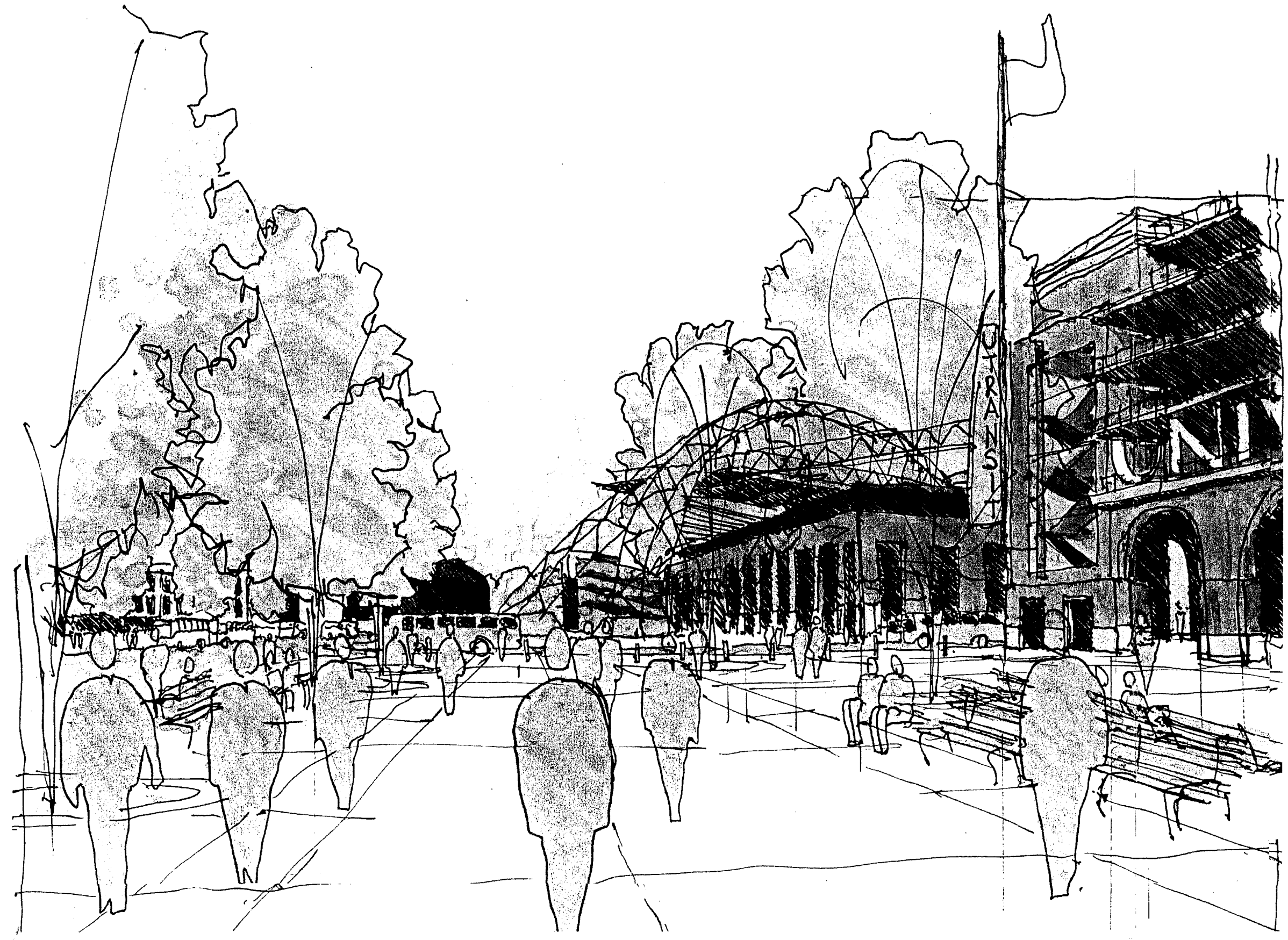


FIGURE 4: District Plan – Concept Rendering

STADIUM

The plan calls for a facility capable of meeting all of the revenue and fan amenity requirements of a modern NFL entertainment venue. As noted previously, the stadium will feature a combination of fixed and retractable roofing, accommodate a regular season crowd of up to 68,500, and include a substantial premium seating inventory.

Field Surface

The stadium will have an all-weather next generation artificial playing surface acceptable to both the University of Minnesota and the Minnesota Vikings. The retractable roof and joint-use nature of the stadium do not allow for natural grass.

Field Orientation

In the proposed plan, the long axis of the field is angled slightly to the west of north to ensure the best playing and broadcast conditions. There is some acceptable latitude with this factor, but it is prudent to select the optimum orientation at this stage, reserving any deviation to this rule for later and more detailed analysis.

Sight Lines & Tread Depth

The minimum sightline clearance for seating in the stadium will be no less than 2 ¼" with the focal point being the closest sideline boundary of the football playing surface. The minimum tread depth will be 33" for the general seating sections. The first row of seats will be a minimum of 48" above the field; and the riser heights will vary from a 6" minimum to 22" maximum.

Special Accommodations

Accessible wheelchair seating will be an integral part of the fixed seating plan and will provide patrons with physical disabilities a choice of admission prices and lines of sight comparable to those members of the general public.

Stadium Level Descriptions

There are six levels within the stadium. Three are principally accessible by the public and the others are the domain of private membership.

Field Level:

This is the primary public entrance to the facility accommodating the public concourse and circulation areas as well as sponsorship opportunities. There is provision for a Hall of Fame and a Sideline Field Club facility with premium offerings. Gophers and Vikings team stores will be located here. The stores will have direct access from the public plaza as well as the stadium concourse. The Gophers band facility will be accommodated at this level permitting the band direct access onto the field via a ramped connection with the stadium plaza.

Each football club has a unique stadium entry point, dedicated facilities for their use only, and direct field access from their locker rooms. The football clubs also share certain components promoting an efficiency of use.

This level is also composed of non-public spaces encompassing everything from stadium operations to team lockers. Truck docks are located adjacent to food service operations, that-in-turn, have direct vertical access to serve the different levels of the stadium above.

Main Concourse:

The Main Concourse is the primary public space serving the lower seat bowl. Access to this level is provided directly from the Field Level below via four large ramps located within the four quadrants of the stadium. Patrons are served by ample restrooms, concessions, novelty stands and fan accommodations. Fans will have vomitory access from the concourse to their seating sections within the lower seating bowl. An additional level to the Sideline Field Club is located here with direct access to dedicated seating within the bowl.

Super Suites:

The super suites are a unique offering with an exclusive location in the lower seating bowl. The suites will have a capacity for 32 seats. Patrons will have private access to this level from dedicated VIP entries from the stadium plaza at the Field Level adjacent to dedicated parking areas.

Club/Suite Level:

The Club Level serves not only the club seating deck, but is also the primary access level to the suites on this level and the suites at the Upper Suite Level. This level can accommodate 62 suites, each with a capacity for 16 guests. There is provision for future expansion available at the northern end zone. Exclusive amenities will include club bars and restaurants, a business center, concierge service, and upgraded finishes including the restroom appointments. The Club Level will have spectacular views back to campus. Special club areas will be provided for entertainment and sponsorship events.

Upper Suite Level:

The Upper Suite Level contains 52 suites of 16 guest capacity, with similar future expansion capabilities as the level below. The suites have visual access to the Club Level below, and views beyond to the campus. Club amenities located on the level below are shared with this level. Additional exclusive lounge areas and restrooms will also occur along the passageways.

This level also contains the primary press area on the west side of the stadium with direct access to the Field Level and interview rooms. From this level within the stadium the press will have a superior location from which to report on the events with excellent dedicated access to other facilities within the stadium.

Upper Concourse:

The Upper Concourse serves the amenity requirements of fans seated in the upper deck of the stadium. The upper seating deck is accessed from the lower levels via ramps, stairs, and elevators. The upper seating deck is primarily a lower price point, and particular attention will be paid to ensure that these patrons are not made to feel inferior to other stadium patrons. In support of this, special sponsorship and concession areas will be provided that can only be used by upper deck ticket holders. Glass will be provided to take advantage of the spectacular views back to campus and downtown Minneapolis. This level is served by ample restrooms, concessions and elements of fan amenities equal to the public areas in the rest of the stadium.

Design Principles

The University of Minnesota Exterior Design Standards states eight design guidelines that have been established as principles for guiding campus construction. These principles set some of the more general standards against which the University measures the success of a project.

- The standards provide consistency and uniformity to reaffirm a positive signature in the campus setting. At the same time, unique environments are recognized and flexibility utilized as necessary.
- Design creativity is key. Visual identity of the campus and its image to the community are reinforced at every juncture.
- The campus eclectic architectural character is complemented; respecting the varying architectural periods represented.
- Daily campus operations and logistical needs are realized.
- Ongoing maintenance requirements and the selection of durable materials (50-year design life) are built into the design standards. Maintenance requirements, replacement parts, availability of parts and maintenance access are considered essential elements.
- Campus security and safety for campus users is paramount.
- Way finding and establishing a sense of place for various campus precincts has been woven into the design standards.
- The campus is truly multi-modal, and the design standards reaffirm a healthy pedestrian environment while accommodating the motorized public.

Specific to this predesign study would be a consideration of the following principles in any ongoing design.

- Extension of the campus architectural and landscape principles from Northrop Mall via the Scholar's Walk to the new stadium district.
- Recognition that campuses develop over time and that the University is a forward-looking institution. Existing buildings should be respected and not slavishly replicated.
- There are buildings that seamlessly fit into the campus, and there are buildings that are discordant with the campus environment. This facility will be a signature architectural statement and will require skill to ensure that it is successfully integrated with the campus.
- The stadium's façade should demonstrate the vitruvian architectural principle of tripartite division with clearly delineated base, middle, and top as an effective means of breaking down an otherwise massively scaled wall into one of readable human proportions. These guidelines are evidenced in the successful historic buildings fronting Northrop Mall such as Morrill Hall or Walter Library. See the typical bay sketch dimensional guidelines.
- The vertical scale of the stadium will be modulated such that when viewed from a distance, it is in character with the other large sports facilities on campus, as well as the grain elevators beyond. From the heroic structural gestures on the high roof, the

architectural scale will transition down to a human scaled base in character with the pedestrian environment of campus.

- Horizontally, the scale of the stadium will be modulated by its programmatic elements including pedestrian ramps, arcades, entry portals, team and band access, service areas, retail modules, etc. Each of these components will incorporate the principle of tripartite division, and contribute to an integrated whole that embraces the existing campus.
- Public entries will be recognized as such with appropriate architectural visual cues such as towers, canopies, integrated environmental graphics and architectural lighting. These visual references will direct pedestrian traffic to entry locations.
- Materials should reflect the University's guideline of a minimum 50-year useful life. The stadium will use a natural stone masonry base with stone detailing around pedestrian use areas. The natural stone will transition to brick masonry of appropriate color and texture for the campus. Detailing will embrace a forward-looking aesthetic and celebrate leading-edge construction means and methods. This palette of materials should be used at the pedestrian levels to the greatest extent possible where people can "touch and feel" the building. However this will be achieved without extravagant detail, and will be contemporary in nature.
- As the building transitions upwards and away from pedestrians and in non-public areas, a shift in material selections to more economical products will be encouraged, such as insulated metal panel and colored precast concrete.
- Glass and metal storefronts will be incorporated as appropriate at high traffic retail and entryways that transition to pedestrian-scaled canopies for weather protection. Glass curtain walls systems will work to highlight key programmatic elements of the building, such as club and restaurant areas. These will be appropriately scaled horizontally and vertically with proportioning borrowed from the more successful existing buildings around campus.
- Exterior signage will meet University signage and graphic standards. Exterior lighting, including security lighting, must be designed to provide a safe environment while respecting the character of the surrounding environment and adjacent commercial and residential community environments.
- All interior building elements must be attractive, suitable for the intended program and northern climate, safe and durable, flexible, readily accommodate changes in technology, and easily maintained. Operational and public spaces must be safe, open and filled with natural light wherever possible.
- The stadium should consider environmentally "green" principles in all design decisions. These principles will include passive solar design features such sun shading elements to limit heat gain during the summer, and allow winter heat gain for storage in thermal storage walls and floors. Stadiums inherently provide large areas of roofing that could include solar collection via an array of collectors or photovoltaics. These arrays could

offset utility usage and provide long-term paybacks. These possibilities should be explored in the detail design stages to follow.

University Construction Standards

In consideration of all design decisions, reference to the relevant sections of the University's Construction Standards will be required. Contained in the Appendix is a letter from Project Time and Cost (PTC) attesting to the University's Construction Standards to this project.

Structural Engineering

The roof is composed of two sections. A fixed roof element that provides permanent shelter to 70% of the stadium seating located along the sides and at the stadium ends, and a retractable portion of roofing.

The retractable portion opens up a rectangular aperture 450 feet by 340 feet that is principally centered over the field. It consists of two panels 270 feet long. The roof panels stack one above the other when opened with the lower panel spanning 340 feet and the upper panel 370 feet. The retractable roof trusses will be constructed of steel pipe sections and the fixed roof will be fabricated from wide flanged members. All of the roof will be covered with PTFE (Teflon) coated fabric.

The retractable roof is carried on transporters that have double flanged, 36 inch diameter, steel wheels that roll on steel crane rails. The roof drive is a traction system and the drive wheels are activated by three phase 480 VAC electric motors. The speed of the drives will be controlled by variable frequency drives. The entire system will be monitored and controlled via a programmable logic controller with a remotely located PC based operator interface. The drive systems will be operable in wind speeds of up to 50 mph gusts but will be inoperable in higher winds and in snow or ice conditions. The operating time for the roof panels is about 25 minutes. The roof system will be provided with static seals to make the facility weather tight when the panels are in the closed position.

The most prominent feature of this stadium will be the main arches. They are to be constructed from large diameter pipe sections. When assembled the arches will span 900 feet, rise 275 feet above grade and are canted at a 22 ½ degree angle to vertical.

The arch cross-section is triangular in shape with a 24 foot width and a depth in the plane of the arch which tapers from 30 feet at the base to 15 feet at the apex. Each arch supports a rail truss that is approximately 700 feet long, including 200 feet of extension past the arch on the stacking end. At the elevation where the rail truss intersects the arch, the outward leg of each arch will splay outward.

A series of nearly vertical cables supported from the arch will be used to suspend the rail truss that in turn will support the retractable roof as well as the fixed roof over the seating areas. The rail trusses are 24 feet deep and the arches, constructed of large diameter pipes similar to the arches. The concrete bases at the end of the main arches will utilize vertical and battered large diameter caissons to resist the horizontal thrust and vertical loads. These caissons will bear on the Platteville limestone at a depth of approximately 50 feet below grade. With the water table approximately 15 feet below grade, temporary casing of the holes and dewatering techniques will be required.

The structural steel columns around the perimeter of the stadium seating bowl extend down to the main concourse level. All of the construction below the main concourse will be cast-in-place concrete columns, beams, and girders. All of the interior concrete columns and the concrete columns around the stadium perimeter will be supported on drilled caissons bearing on the Platteville limestone. The seating will be precast concrete treads and risers.

The proposed foundation type is based on a preliminary geotechnical analysis by Gale-Tec Engineering and further evaluation will occur as the design evolves and a more detailed geotechnical investigation is completed.

Services Engineering

The general assumptions for service capacities are all relative to a stadium seating capacity of 68,500 seats with the possibility for expansion to 72,000 seats. Outside air ventilation will be required to a volume of 620,000 cfm. Internal space will be maintained at an average temperature of 750F.

Cooling - There will be a need for approximately 8,000 tons of air conditioning capacity. Chiller plant will be incorporated within the stadium, while cooling towers will be located within the structure of the proposed Transit Center nearby.

Heating - The assumed design temperature is -150F, when the building is occupied and there will be a requirement for 80,000,000 Btu per hour output at peak load. The stadium will have PRV stations and steam to heating water heat exchangers. Heating water will be distributed through the building to remote air handlers and terminal equipment.

Domestic Water and Hot Water - Pressure booster pumps will be required. Peak domestic water demand (at half-time) will be 4,000 gallons per minute, while the average flow for the game will be 1,200 to 1,500 gallons per minute. Water service into the stadium will be 12" with a 10" meter. The plan assumes 5,000,000 Btu per hour demand for domestic hot water. Steam will be delivered to hot water heat exchangers.

Sanitary Sewer - There will be a requirement for two 12" sanitary sewer lines leaving the building from opposite sides and connecting into the existing sanitary sewer service.

Storm Water - There will be one 21" storm line draining each quadrant of the stadium and connecting into the existing storm sewer service..

Natural Gas - The stadium gas load will be 5,000,000 Btu per hour for cooking and laundry requirements.

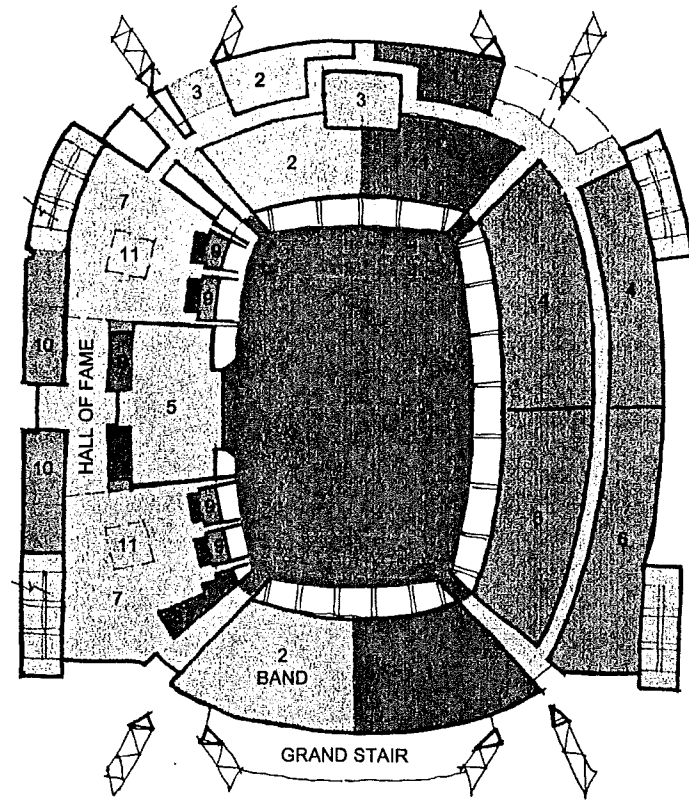
Fire Protection - The building will require a 10" fire service to an electric drive fire pump of 1,250 to 1,500 gallons per minute capacity.

Electrical Service - The service will consist of a 35 MVA connected load and 15 MVA of peak load. There will be four main risers in the stadium and one service to the chiller plant.

Emergency Power - There will be two 1,250 KVA diesel generators to serve the stadium. These will be located outside the stadium.

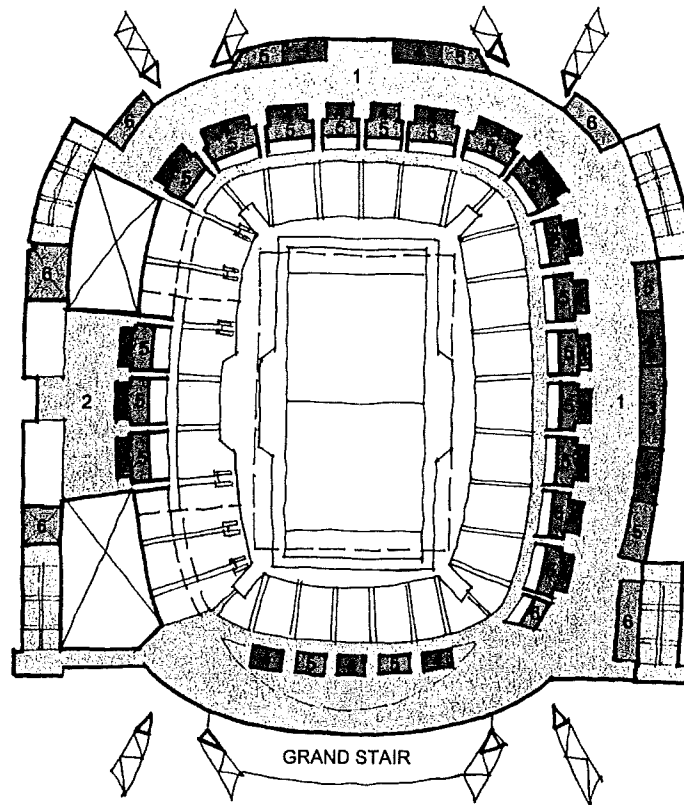
Telephone and Data - The stadium will be served by eight 4" conduits to handle all communication requirements.

Smoke Control - This will require opening the roof in the event of a fire. Other spaces will require smoke exhaust fans and make up fans as required.



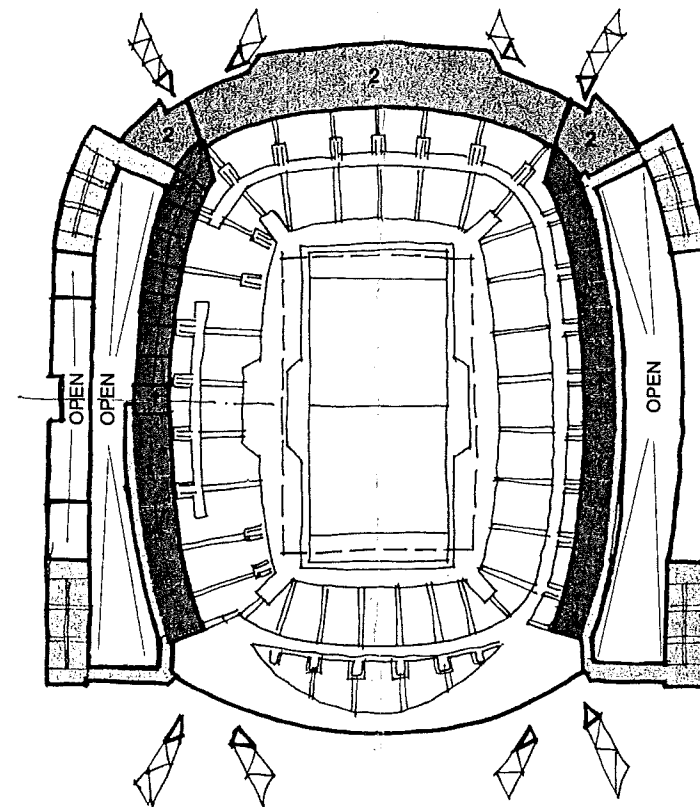
Field Level

- 1. Vikings
- 2. Gophers
- 3. Media
- 4. Food Service
- 5. Sideline Field Club
- 6. Back of House
- 7. Concourse/Circulation
- 8. Concessions
- 9. Toilets
- 10. Retail
- 11. Sponsorship Kiosk



Main Concourse

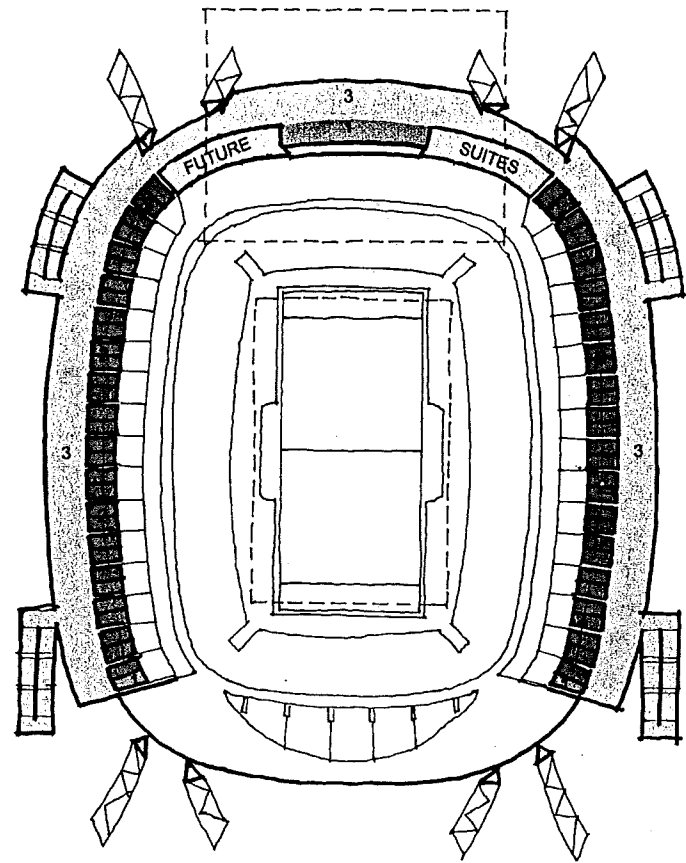
- 1. Concourse/Circulation
- 2. Sideline Field Club
- 3. Retail
- 4. Concessions
- 5. Toilets
- 6. Back of House



Super Suite Level

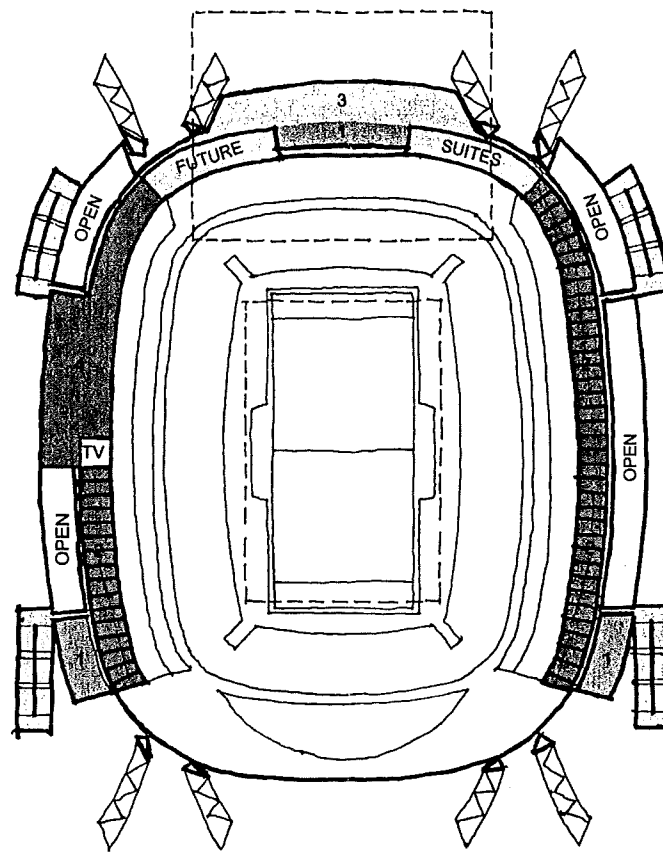
- 1. Super Suites
- 2. Back of House

FIGURE 5: Levels I



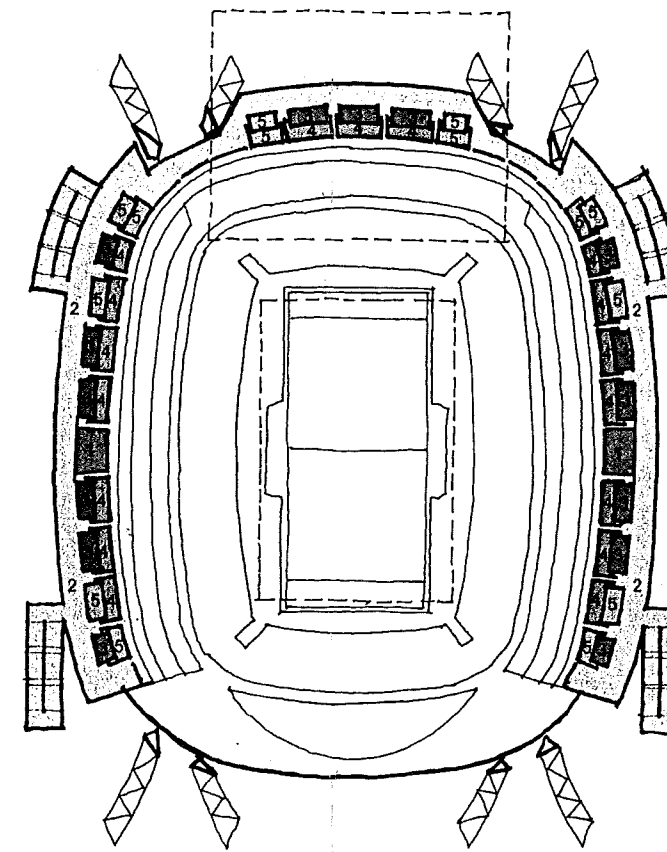
Club/Suite Level

1. Back of House
2. Suites
3. Club Concourse



Press/Upper Suite Level

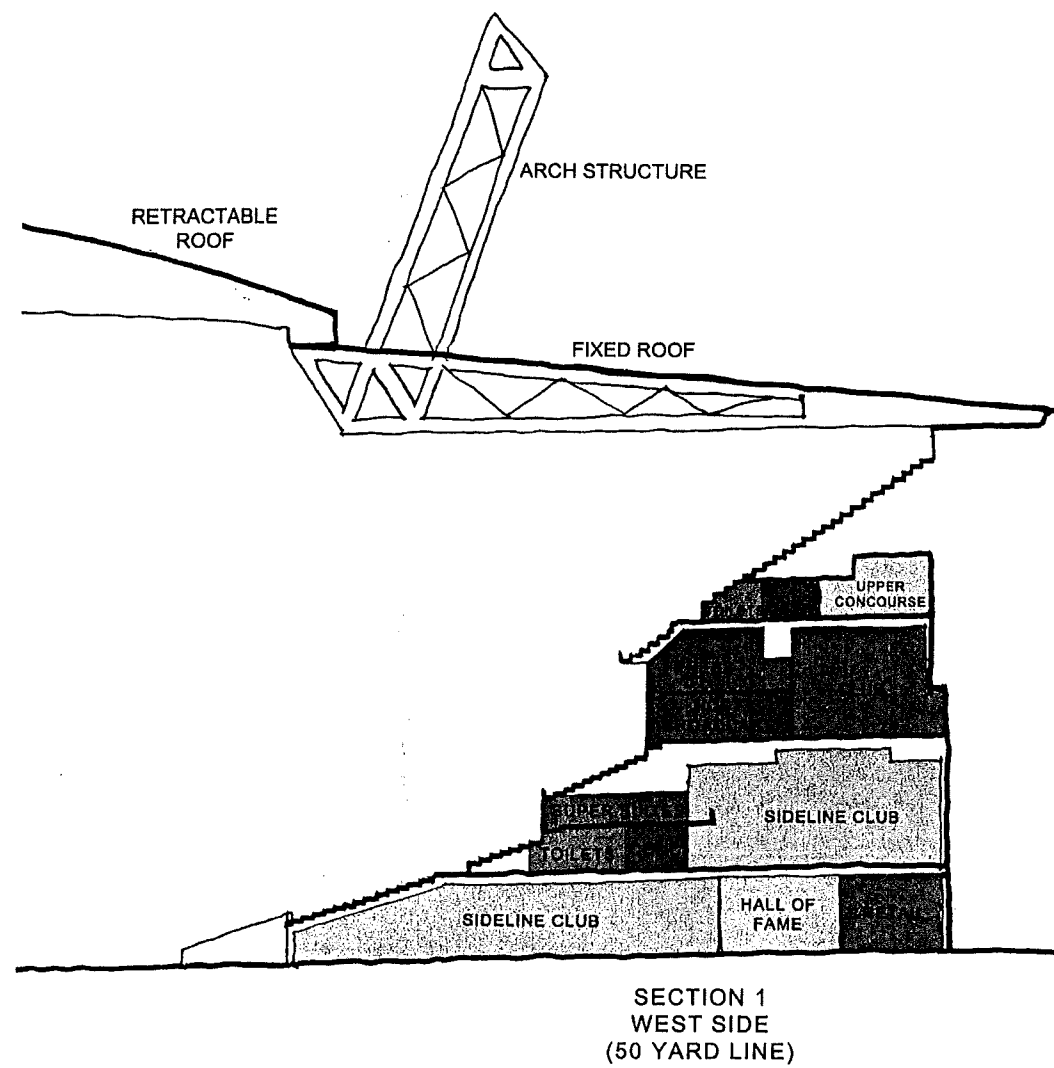
1. Back of House
2. Suites
3. Club Concourse
4. Press



Upper Concourse

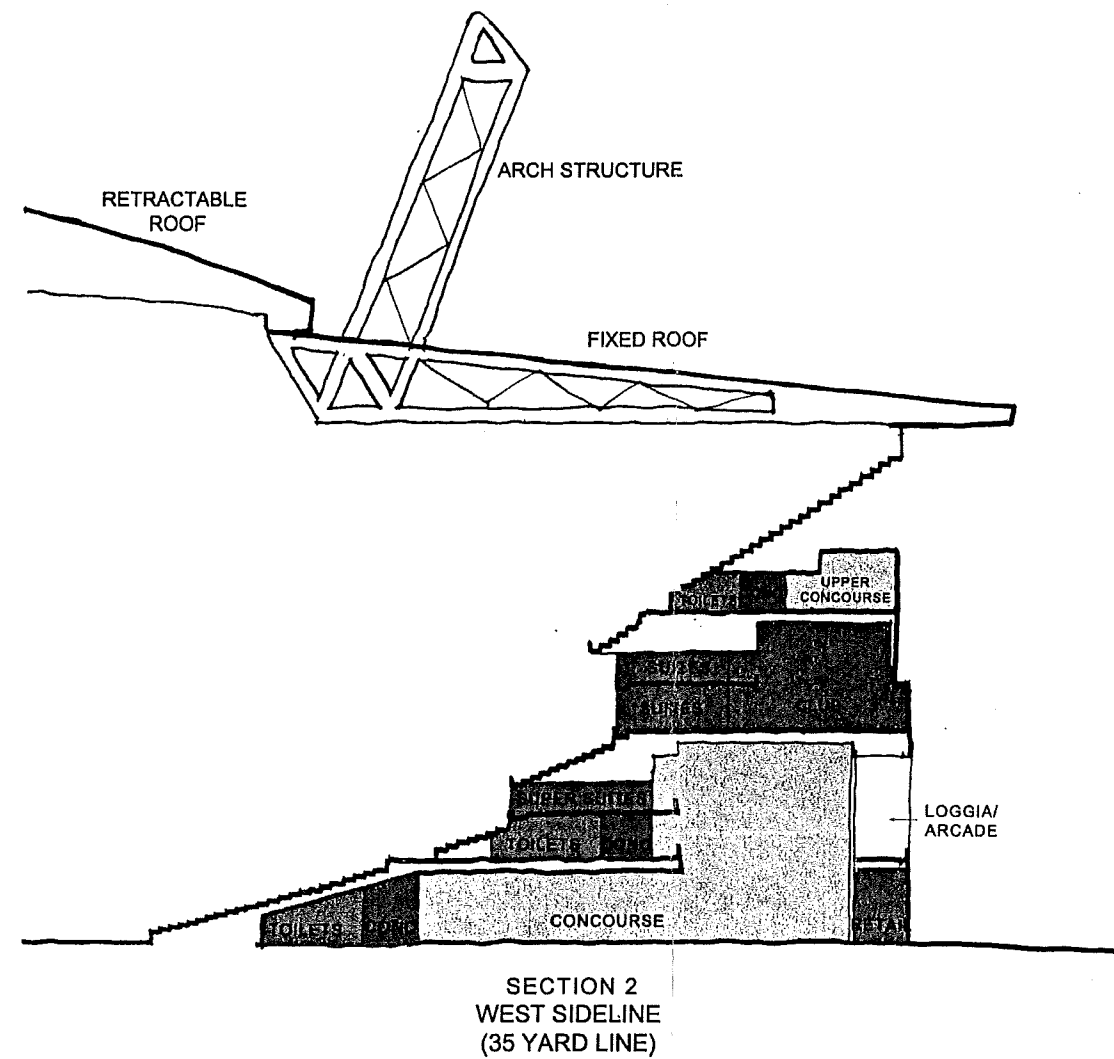
1. Retail
2. Concourse
3. Concessions
4. Toilets
5. Back of House

FIGURE 6: Levels II



West Sideline
50 Yard Line

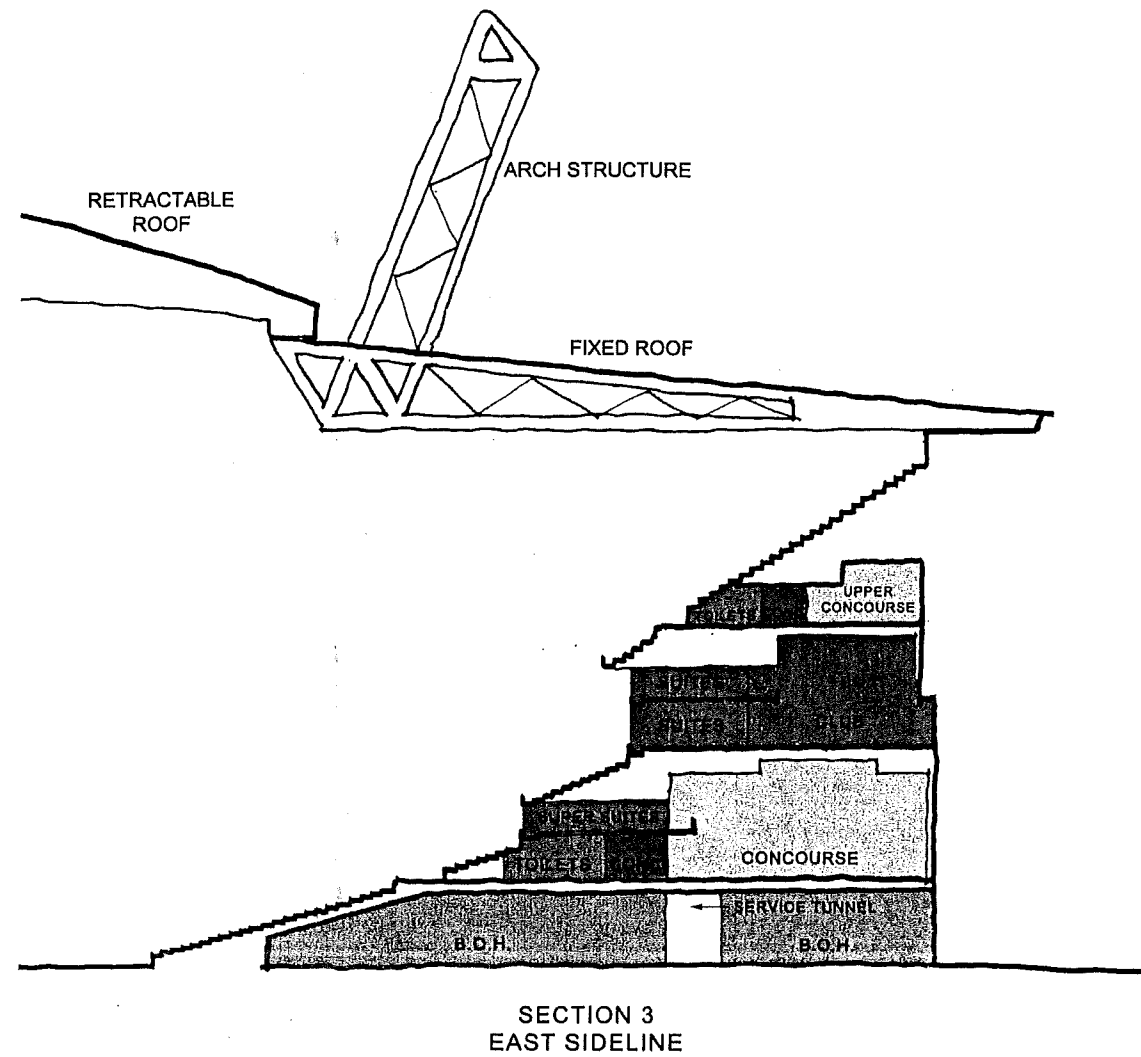
Section 1 illustrates the functional organization at midfield, west sideline. It is cut through the Sideline/Field Level Suite, Press and Media. Host broadcast facilities are centered on midfield with writing press facilities located to the north. The Sideline/Field club is a two level space with multiple access points to the seating bowl at two locations vertically. The front row immediately behind the home team bench is approximately nine (9) feet above the field. Views to the home team bench and the field is provided from the Club Lounge at the field.



West Sideline
35 Yard Line

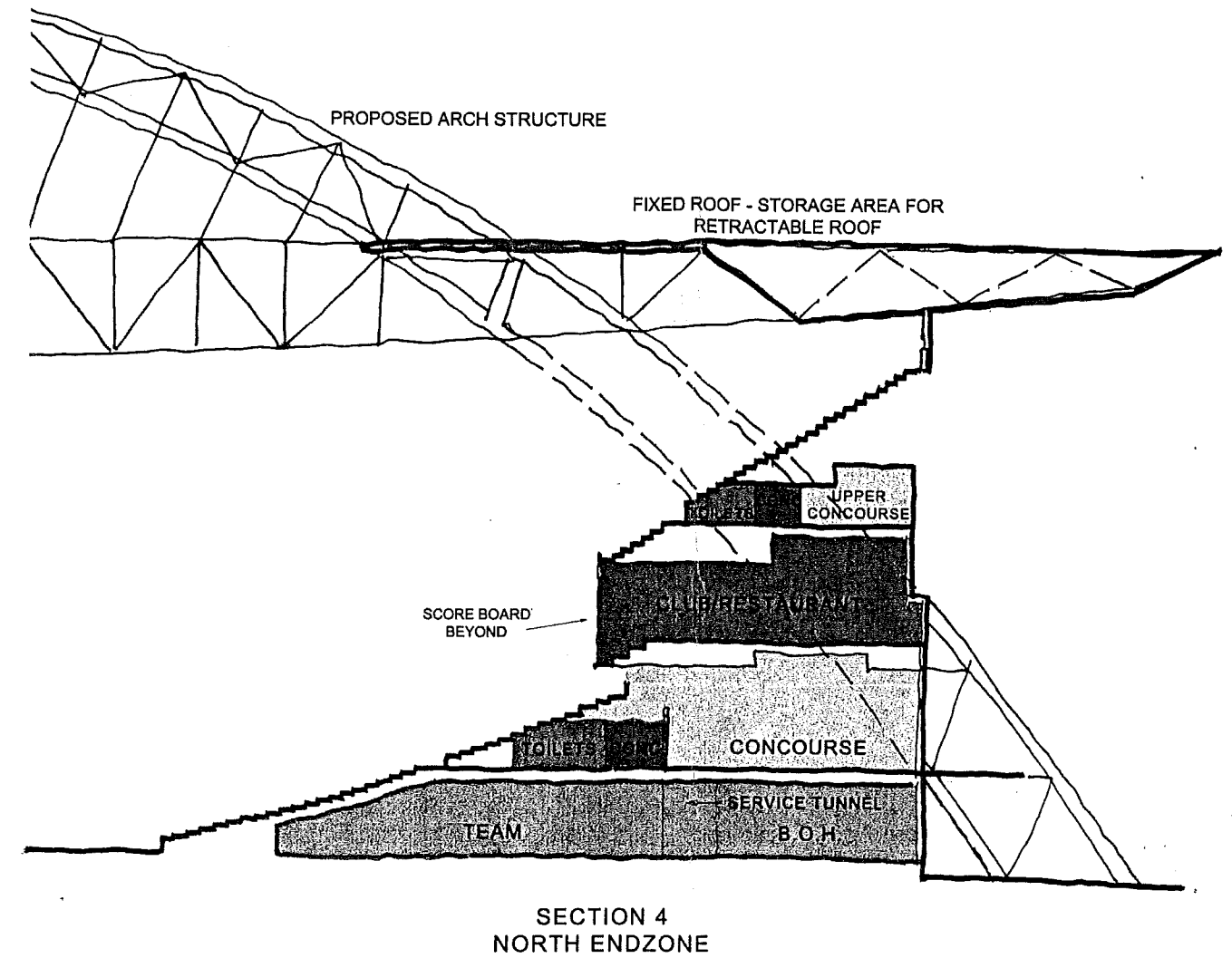
Section 2 illustrates the functional organization at the 35 yard line, south of midfield, west sideline. It is cut through the concourses, suites and club levels. Access is provided to the frontrow from the field level concourse. This facilities ADA wheel chair positions at the front as well convenient access to the stadium floor during concerts and other floor events. Other ADA wheel chair positions are distributed evenly throughout the seating bowl.

FIGURE 7: Sections I



East Sideline

Section 3 illustrates the functional organization of the typical section on the east sideline. It is cut through the concourses, suites and club levels. Back of house and service functions are located on the ground level. The Main Concourse is up one level from Section 2 and accesses a cross aisle in the lower bowl. This facilities ADA wheel chair positions at the cross-aisle. Other ADA wheel chair positions are distributed evenly throughout the seating bowl.



North End Zone

Section 4 illustrates the functional organization of the typical section at the north end zone. It is cut through the concourses, and club level. Views to the field will be provided where possible from the club. Scoreboard and Video Boards will be located here as well. Back of house and service functions are located on the ground level. The Main Concourse is up one level from Section 2 and accesses a cross aisle in the lower bowl. This facilities ADA wheel chair positions at the cross-aisle. Other ADA wheel chair positions are distributed evenly throughout the seating bowl.

FIGURE 8: Sections II

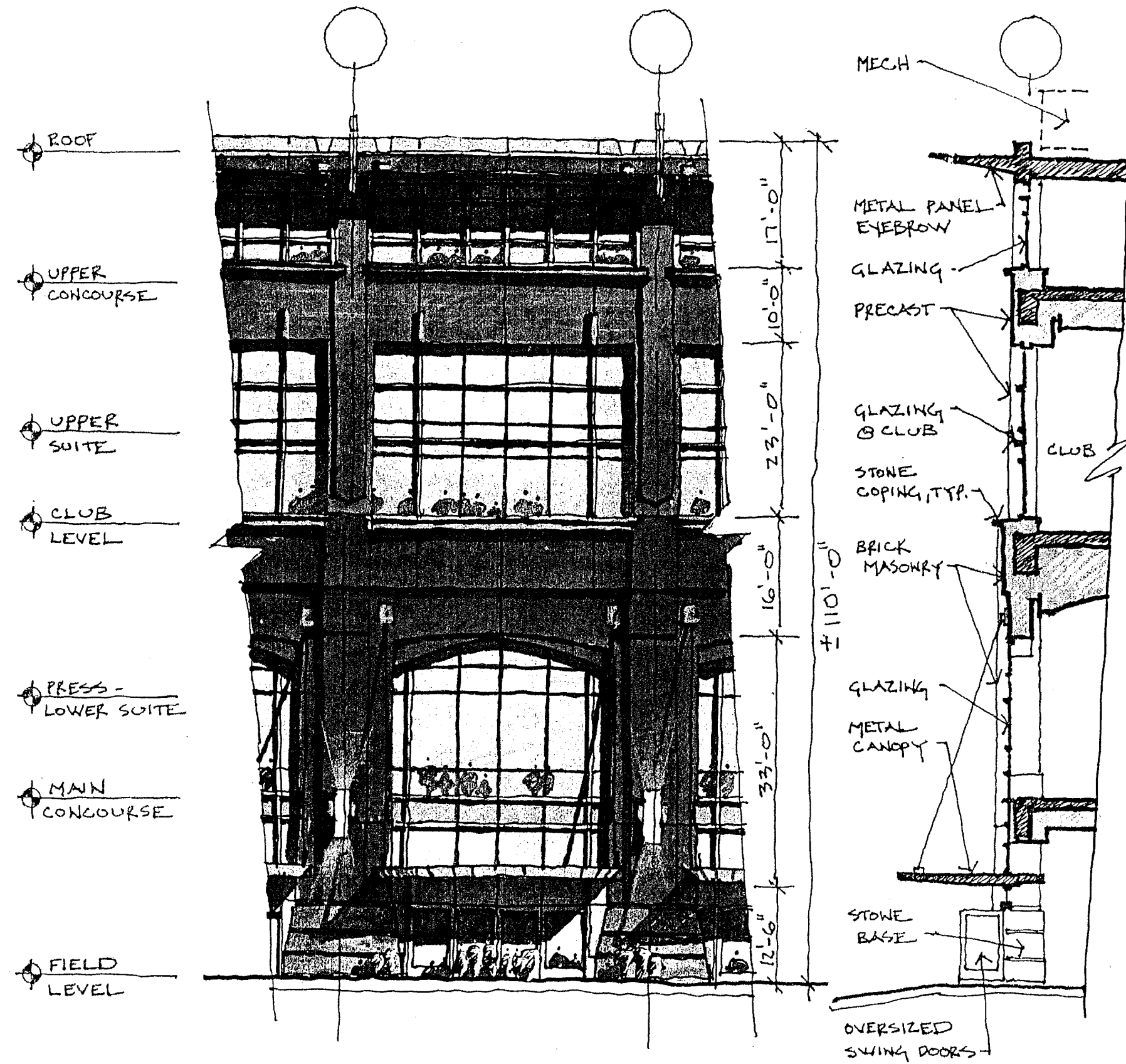


FIGURE 9: Stadium Bay

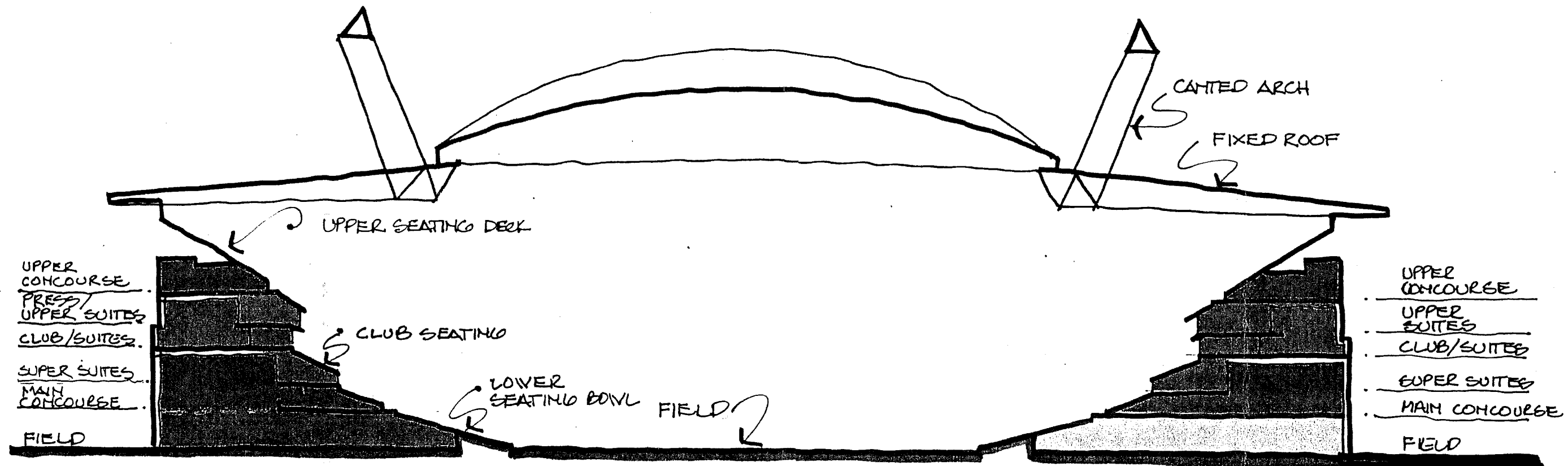


FIGURE 10: Transverse

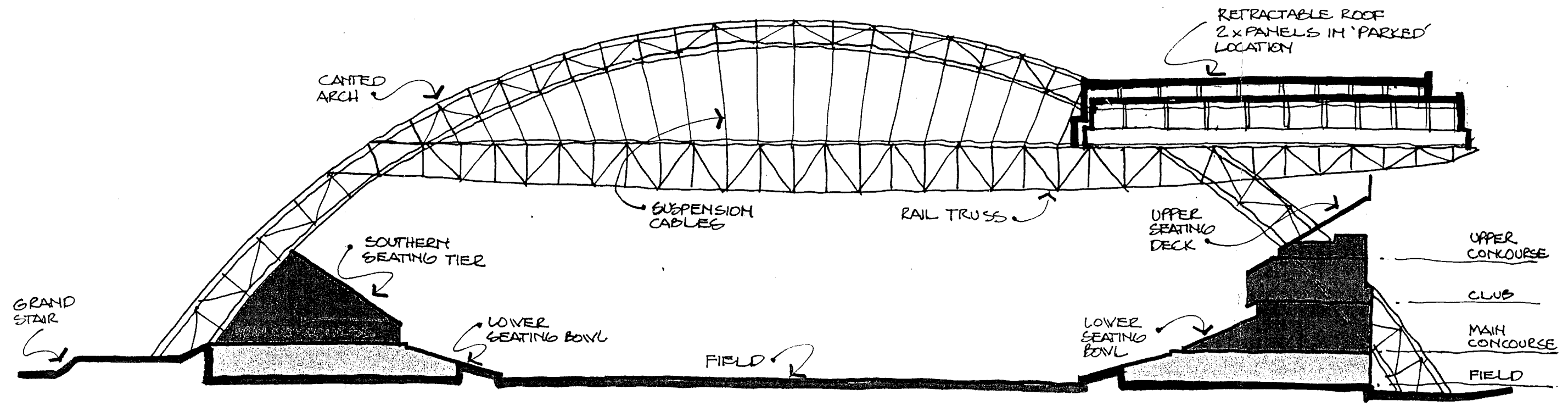


FIGURE 11: Longitudinal

COST

As previously described this project consists of three distinct components. The predesign study indicates that the total cost of these is \$598 million. The following amounts are assigned to each.

A more detailed breakdown of the project costs is shown in the accompanying table.

Costs were jointly developed by Hines / Turner, Crawford Architects and Project Time and Cost. Estimates are based on other recently completed comparable projects, adjusted for local conditions.

Site

\$21,514,000

Included in the site costs are:

- The remediation of existing soil and groundwater contamination. There are significant costs to remove this hazard and make the site fit for redevelopment and future occupation.
- Acquisition of additional land required for the construction of Granary Parkway, the 4th Street extension and the reconstruction of 23rd Avenue.
- Demolition of existing buildings.

District

\$85,563,000

Included in the district costs are:

- Transit Center
- Utility Infrastructure
- Realignment of Oak Street, 4th Street extension, and the reconstruction of 23rd Avenue.
- Construction of Granary Parkway.
- Surface parking replacement, and plaza construction including streetscape enhancements.

Facility

\$492,966,000

The facility cost is the cost to build the stadium.

	SITE	DISTRICT	FACILITY	TOTAL
PROPERTY ACQUISITION				
LAND	5,081,000	-	-	\$ 5,081,000
PREDESIGN				
PREDESIGN	-	-	-	-
DESIGN FEES				
ARCHITECTURE/ENGINEERING	370,000	6,550,000	31,189,000	\$ 38,100,000
PROJECT MANAGEMENT				
PROJECT MANAGEMENT G+A	500,000	3,365,000	9,560,000	\$ 13,425,000
CONSTRUCTION COSTS				
SITE PREP. & HAZARD ABATEMENT	14,276,000	-	-	\$ 14,276,000
INFRASTRUCTURE/ROADS/UTILITIES	-	65,702,000	-	\$ 65,702,000
CONSTRUCTION	-	-	425,298,000	\$ 425,298,000
PERMITS/INSURANCE/TAXES	107,000	452,000	2,045,000	\$ 2,604,000
ART				
INCLUDED ABOVE	-	-	-	-
OCCUPANCY				
INCLUDED ABOVE	-	-	-	-
OTHER				
TRANSACTION COSTS	117,000	640,000	525,000	\$ 1,282,000
NEIGHBORHOOD MITIGATION FUND	-	4,000,000	-	\$ 4,000,000
MARKETING COSTS	-	370,000	355,000	\$ 725,000
PROJECT CONTINGENCY	1,063,000	4,132,000	25,360,000	\$ 30,555,000
SALES TAX CREDIT	-	(1,648,000)	(11,357,000)	\$ (13,005,000)
FINANCING COSTS	-	-	-	-
TOTAL				
PROJECT COST	21,514,000	83,563,000	492,966,000	\$ 598,043,000
ADDITIONAL ITEMS PENDING FEDERAL FUNDS				
STATE FAIR TRANSIT HUB		6,000,000		\$ 6,000,000
INTELLIGENT TRANSPORTATION SYSTEM		8,500,000		\$ 8,500,000

FIGURE 12: Estimated Project Cost

SCHEDULE

The anticipated completion date for the project is the Fall of 2007. The project team will be directed to accelerate this schedule where possible.

A conceptual schedule showing the approximate duration and phasing of key components is shown on the following page.

This schedule is based on the legislative directive to assume the project is funded on March 1, 2003.

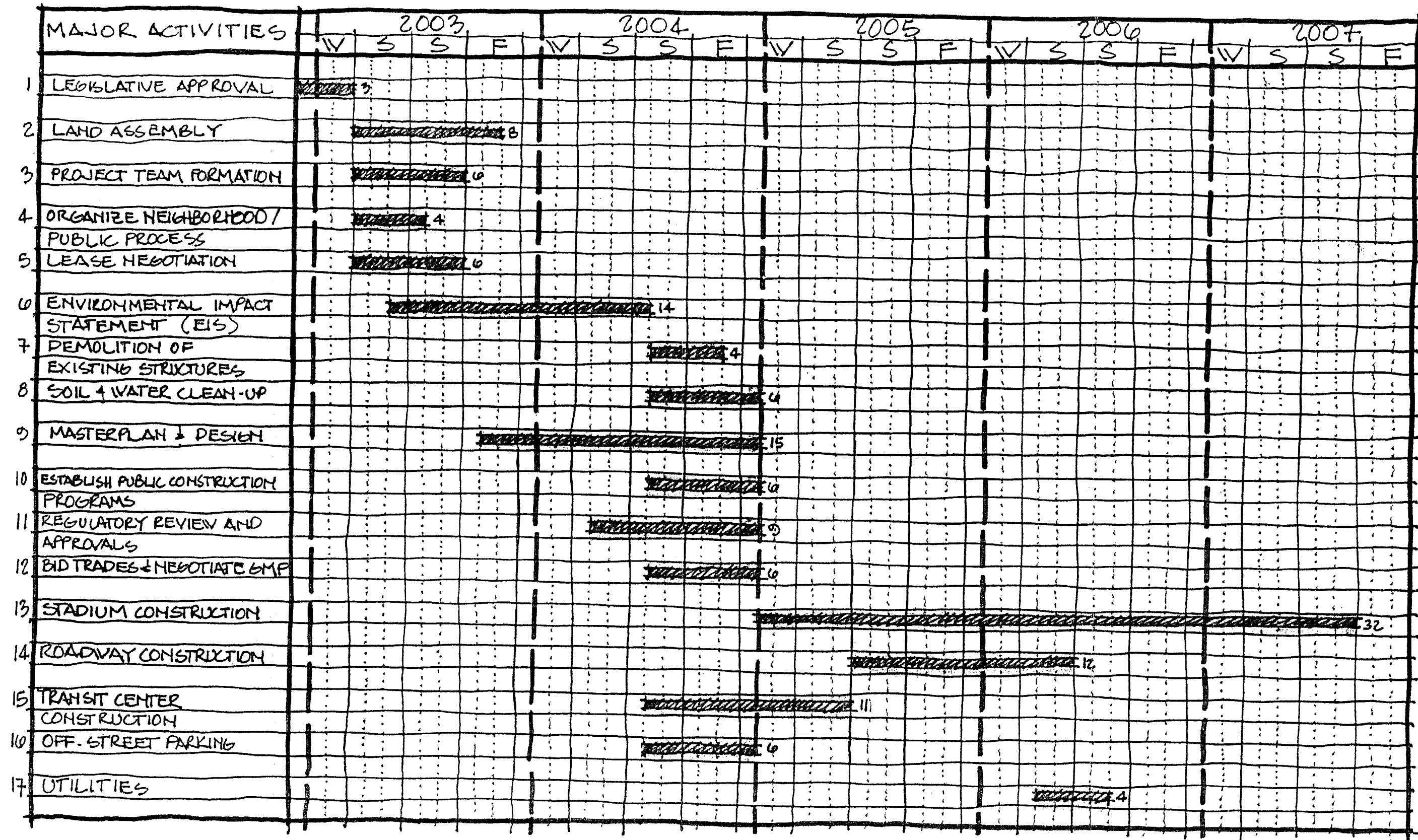


FIGURE 13: Schedule

COMMUNITY

As part of its commitment to an open and public planning process, the University engaged in an extensive dialog about the stadium project with adjacent neighborhoods, local businesses, the University community, and other public agencies. While each group had its unique concerns, eight broad themes emerged from these discussions. These issues, and how the predesign responds to these concerns, are outlined below.

Site Selection

Questions such as “How was this site chosen?” and “Were other sites considered?” were frequently asked. For purposes of the predesign study only one site was studied in detail. The University would like to bring Gopher football back on campus. There is a sentiment among supporters that the football program and the University in general, suffered when football moved off campus twenty years ago. In returning Gopher football to campus, the University hopes to integrate the ‘game day experience’ into the general University experience. This goal requires a relatively central campus location. The only central campus location large enough for a joint-use facility is the proposed site.

As part of the EIS process, the University will be required to review alternative locations in more detail.

Architectural Compatibility with Campus

The size of the stadium was a common concern among internal and external communities. The stadium will be very large, but with careful planning and good design it will be possible to successfully integrate the stadium into the campus context. The form of the stadium will be carefully studied to ensure that the size of the building does not overwhelm the immediate campus environment. The building will be divided into “readable” parts in the vertical dimension employing the architectural principle of tripartite division (base, middle and top). Horizontally, the programmatic elements of the building will ensure that the stadium massing is broken down into volumes of more human scale.

Parking and Traffic

A significant portion of the community concern focused on parking and traffic issues. Approximately 2,700 existing surface parking spaces will be removed to make way for the stadium and surrounding site improvements. These spaces will be replaced as part of the project. No increase in car parking to the area is proposed. Therefore, on game days there will be no more private vehicles coming into the area than are currently experienced on any other normal University day. Only fans with a pre-organized parking privilege (as part of their game day ticket arrangements) will be able to park in the stadium area. All other spectators will arrive to a game either by bus or on foot.

The ultimate stadium plan will also incorporate a game day traffic management system to assist the orderly egress of traffic from the stadium precinct and the surrounding area at the conclusion of sporting events at the stadium and other venues.

Objectionable Behavior

The possibility of rowdy, drunk or unruly fans traversing through adjacent neighborhoods was a commonly cited concern. While these activities can occur at any time and are not

exclusive to the domain of a sporting event, it is a responsibility of the venue to ensure that crowd behavior before, during and after a game is managed.

The stadium will be policed with security staff during an event. Additional staff, with responsibility for the stadium periphery, will be assigned to guard against errant behavior before and particularly after events. A large percentage of fans will be departing the stadium area by bus immediately at the conclusion of an event. These people will be express shuttled to their designated parking areas in downtown Minneapolis or the State Fair Grounds.

Urban Environment

It is a fear of some of the community that the overall quality of their living environment will be negatively impacted once the stadium is constructed. Other similar cities, both nationwide and international, have not found this to be true.

Some examples of successful stadium developments that have resulted in a net improvement to the local area are Baltimore, Seattle and Sydney (Australia). In Baltimore the stadium managed to successfully mediate between an industrial area, the downtown, and residential neighborhoods while making a significant contribution to the City's civic architecture.

The recently opened Seahawks' NFL stadium in Seattle is lauded as an urban success. The surrounding Pioneer Square is an urban entertainment and shopping district alive with vibrant pedestrian activity on all days with an especially festive atmosphere on game days. While the stadium is connected into the city's mass transit infrastructure, there is significant vehicular traffic in the area on game day. With traffic management procedures the traffic is cleared in orderly fashion at the conclusion of an event.

For the 2000 Olympic Games, Sydney constructed an entire sporting precinct on disused industrial land. The housing comprising the nearby athletes village has been converted into one of the City's newest residential suburbs. The housing stock was readily absorbed into the market at well above average prices. The residential community found the adjacency to major sporting facilities to be a positive factor.

Impact on Local Business

Local merchants and retailers inquired about how their businesses might be impacted during construction. Many of their concerns focused around the possibility of road closings, parking difficulties and traffic disruption.

While some inconvenience is inevitable, with good planning and frequent communication it is possible to minimize the disruption. The project management team will work closely with the surrounding communities throughout the project. The goal will be to keep construction traffic out of the neighborhoods, off Washington Avenue and out of the Dinkytown Business area. Large materials deliveries and equipment movement will be scheduled at off-peak hours where possible. If it is necessary to close a road or re-route traffic, the project management team will work with the impacted businesses, residents and the University to develop appropriate solutions.

Location of Future University Development

The existing Huron Avenue parking lots are viewed by the community as the last large site available for future University expansion. A frequently asked question was, "If this site is not available for future expansion, where will the University go next to provide sites for its additional buildings".

Constructing a stadium on the proposed site does not significantly limit the University's ability to expand over time within its existing boundaries for the following reasons.

- The stadium does not consume the entire site. The future building sites shown in the district plan can accommodate between 1.1 million and 1.7 million square feet of additional space within several new 4 to 6 story buildings.
- The University's long-term capital strategy emphasizes the renovation and replacement of existing facilities over the construction of new facilities. The actual amount of new construction likely to occur at the University is not as great as the public perception.
- The site of the proposed stadium is not a good location for core campus activities. Faculty and students need to be able to move quickly and frequently between classrooms, offices and labs throughout the day. A peripheral campus location makes this kind of movement more difficult.
- It is unlikely, without the stadium and the associated transit center, that the Huron Avenue parking lots would actually be used as building sites anytime in the near future. As long as the need for the parking lots exist, new development is more likely to occur outside the current University boundaries to ensure that parking remains close at hand for users.

Other Stadium Events

The community expressed a series of concerns about the kinds of events that might take place in the stadium, and the impact these events might have when combined with other campus events and the State Fair. The stadium will host approximately six regular season Gopher football games and ten regular season Vikings football games a year. The majority of these games will occur on weekends. A separate event management plan will be developed to handle any weeknight NFL games.

The University will need to, and has the ability to, schedule existing athletic, Northrop Auditorium and other large campus events on non-football days. The fact that the University will manage the stadium, and all major venues on campus, will facilitate scheduling and coordination. The stadium will be used on a regular basis for low intensity campus activities (e.g. recreational sports) and Vikings special events (e.g. annual fan appreciation day). These events should fit within the pattern of normal campus operations.

The University does not intend to actively promote the stadium as a venue for large commercial, non-football activities (e.g. motor cross or monster truck events). These kinds of events will be addressed on a case-by-case basis and permitted when they do not adversely interfere with current campus activities or the surrounding community. The stadium will be capable of hosting major regional events like the Superbowl, and the NCAA Final Four. The stadium will also be available for Minnesota State High School League and other amateur

sports events. The University and Vikings will not schedule home football games during the State Fair. The University will continue to make its campus parking available to the public during the State Fair.

Ongoing Consultation

Predesign is an exploratory process. The goal during predesign is to raise all of the issues associated with a particular project. Unfortunately, not all of these issues can be resolved at this stage of process. Many of the concerns raised during predesign can only be resolved during later phases of the design process. Additional issues will continue to arise as the project moves through design, into construction and, eventually, to game day event management.

Prior to the design and construction of the stadium, the project will undergo an extensive environmental review. As a part of the Environmental Impact Statement (EIS) process, the public will have further opportunities to voice concerns and to ensure that these concerns are adequately addressed during this period.

Public consultation and dialog will not end with the completion of the EIS. To facilitate the ongoing dialog, the University will create a stadium/neighborhood advisory group with representatives from the neighborhoods, University and Vikings. To assist this group in mitigating adverse impacts of the stadium on the neighborhoods, an endowment will be established and included within the stadium's development costs. The proceeds from the endowment will be managed by the stadium/neighborhood advisory group and could be spent on such things as, neighborhood marketing and economic development, public space improvement, public safety, neighborhood clean-up, transportation and parking, or housing.

APPENDICES

Appendix I

Architectural Program

PROGRAM OF REQUIREMENTS

I. General Stadium Requirements

A. Overview

The following Program of Requirements summarizes the requirements for the Minnesota Joint Stadium Project. The project consists of a 68,500 seat stadium for football and the development of adjacent land areas, parking, and infrastructure. Program Requirements for both the University of Minnesota and the Minnesota Vikings are included.

Expansion up to 72,000 seats shall be provided for events such as the Super Bowl and Bowl Games. It is anticipated that other events such as NCAA Soccer, MLS Soccer, high school football championships, the Final Four, FIFA/World Cup Soccer, concerts and occasional flat floor events such as home shows, boat shows, auto shows, etc. will also be accommodated in the facility.

The turf shall be an artificial surface comparable to the Field Turf product. Provisions to accommodate quick turnover of midfield and end zone graphics/logos on the field shall be made. This may include specialized equipment to quickly clean and paint the field surface and/or palletized sections for the end zones and midfield artwork. In any instance player safety and ease of maintenance must be fully considered and accommodated for – i.e. no tripping hazards or loose sections of turf can occur.

The stadium shall have a retractable roof that meets the following requirements:

- 1. In the roof's retracted position, the entire field (soccer configuration) is open to the sky with no obstructions above.*
- 2. The roof shall retract to a location that minimizes shade and shadow on the field.*
- 3. The design and massing of the roof structure shall be done in a manner that minimizes the scale of the stadium and negative impact on adjacent buildings.*
- 4. The roof shall be capable of fully retracting in 4 to 10 minutes.*
- 5. The roof shall not be opened when covered with snow.*

The NFL has established new security guidelines that mandate a 100 foot secure outer perimeter around the stadium to "the maximum extent possible." The intent is to limit public access to the facility in secure zones and to restrict access for vehicles and personnel without proper credentials and security clearances. Barriers that prohibit unauthorized access to this perimeter should be provided in areas where public right of ways and private/ secure roads and parking lots adjoin. Final security measures integrated in the design of the facility are subject to review and approval by the NFL and Minnesota Vikings.

B. Spectator Seating

1. General Requirements

- a. The Minimum Sightline Clearance for seating in the stadium should be no less than 2 ¼" with the focal point being the closest sideline boundary of the football playing surface.
- b. The minimum tread depth shall be 33" for general seating.

Joint Use Football Stadium

- c. The first row of seats shall be a minimum of 48" above the field; riser height shall vary from 6 inches minimum to 22 inches maximum; the maximum number of seats per row shall be as allowed by applicable codes, and minimum aisle width shall be 48 inches or higher if mandated by applicable codes.
- d. The Vikings have requested that the first row behind the sidelines be at a height above the field to allow patrons seated in this location to see over the players standing on the sidelines. This shall be studied further and evaluated in terms of its feasibility.
- e. Accommodate provisions for reduced seating capacities during Gopher Football Games. Currently, the University anticipates that minimum seating capacity requirements will be 55,000 seats total. The intent of the University is to reduce the apparent size of the stadium so that it does not appear empty and cavernous in low attendance situations.
- f. Views from all seats will be unobstructed with sightlines appropriate to an NFL/NCAA Collegiate Football and Major League Soccer (MLS) facility.
- g. Railings in seating areas shall be designed to present the narrowest profile between patrons seated directly behind them and the playing field.
- h. Treads and risers will be sealed, precast concrete units anchored to concrete and/or steel structural bents.

2. **General Admission/Reserved Seating**

- a. Standard seating shall be self rising chairs with arm rests spaced at 19 inches on center. *<Note reference to 18 inch bench seats have been deleted per the request of the Vikings.>*
- b. Provide "angled" seats in the seating sections on the sidelines, nearest to the end zone if necessary to improve fan comfort in viewing the field.
- c. Seats will be selected based on ease of cleaning, durability to withstand spectator abuse, and spectator comfort. Upholstered seats will meet fuel, flame and smoke code requirements.
- f. Provide an even number of seats in the straight sections and whenever possible in faceted sections. An average of 14 to 18 seats per row is preferred. *Exceeding 20 seats per row is not desirable.* The number of seats between aisles shall conform to applicable building codes such as NFPA 101.
- g. Seating shall be all plastic seat and back with cast iron standards. End standards shall have a logo or theme. Provide armrest or rear mounted cup holders for each seat.
- h. Provide a removable/retractable section of seating in the lower seating area, *at one (1) end zone*, to allow for the setup of a stage in this area. Removable seating sections will consist of approximately ten rows at the end zone.

The removable seating sections will consist of extruded aluminum deck, based on a multi-rise platform system. Provide the following accessories: self storing or removable side and end rails, detachable front step, intermediate aisle steps and aisle hand rails. Seating at the removable sections shall match the remainder of the seats within the lower seating sections.

Convenient service and tractor trailer access shall be provided to the "stage-end" of the stadium.

Joint Use Football Stadium

- i. *No retractable seating will be provided on the sides unless in corners of end zones to accommodate sightlines for corner-kicks in soccer configurations.*

3. Seating for the Disabled

- a. Accessible wheelchair seating shall be an integral part of the fixed seating plan and shall provide patrons with physical disabilities a choice of admission prices and lines of sight comparable to those members of the general public.
- b. Seating for the disabled shall be in accordance with the American Disabilities Act (ADAAG) and based on 1% of the total seating capacity plus one companion seat for every disabled position seat in each category of seating.
- c. An additional one (1) percent of the fixed seats shall be provided with removable armrests per the ADAAG.
- d. Seating accommodations may be a combination of permanent and convertible locations.
- e. Designated seating areas for disabled patrons and a companion shall be provided and evenly distributed around the facility at all levels. A flexible means of accommodating disabled spectators is desired in order to promote the potential for varied and changing uses within the stadium over time, as well as varying types of user groups which may be encountered. The total potential disabled seating capacity shall at a minimum be in compliance with the American with Disabilities Act (ADA).
- f. Enhanced sightlines shall be provided based on the guidelines for the design and configuration of wheelchair locations in arena, stadium or other public assembly seating bowls established by the Americans with Disabilities Accessibility Guidelines ("ADAAG"), the Department of Justice, Disability Rights Section Pamphlet on Accessible Stadiums, and the decision issued by the United States District Court for the District of Columbia in Paralyzed Veterans of America v. D.C. Arena L.P. These sightlines shall provide "**comparable**" lines of sight and are provided to patrons in wheelchairs in instances where spectators may stand during an event.
- g. Provide duplex receptacles for wheelchair charging at wheelchair locations.

4. Suites – General Requirements

The following quantity of suite modules is anticipated at this time.

- | | |
|---------------------------|-----|
| a. Type A Standard Suites | 121 |
| b. Type B Super Suites | 25 |
| c. Type C Party Suites | 4 |

TOTAL NUMBER OF SUITES 150

100 percent of the suites shall be located on the sidelines. Sideline shall be defined as the area from the back of the north end zone to the back of the south end zone. Suite seating shall be outside of the enclosed lounge areas with immediate and convenient access to suite lounge. Suite lounges shall have unobstructed views to the field.

Joint Use Football Stadium

Please refer to the detailed descriptions of each suite in the sections to follow. It should be noted that future market studies may indicate that the number and configuration (number of seats per suite) of suites, as well as the number of Club seats, be adjusted to fit with the current local market. The final number of suites and their configuration shall be mutually agreed to by the Vikings and the University of Minnesota before schematic design begins.

5. Type A Suites

- a. Provide **121 Type A Suites** consisting of 12 fixed seats and 4 moveable bar stools in each suite lounge.
- b. Provide upholstered stadium seat with backrest and armrests, 22" minimum seat width. Cup holders or drink rail shall be provided.
- c. Provide a minimum tread depth of 42 inches.
- d. Suites shall be heated and air conditioned. Provide operable glazing and/or screens. The enclosure system must not obstruct sightlines to the field.
- e. Provide a built-in bar counter with base and overhead cabinets with an under counter refrigerator and sink with hot and cold water service and ice bin storage.
- f. Toilets are not included in the Suite. Suites shall have centrally located, shared restrooms for suite patrons only.
- g. Elevator access from private entrance lobby at ground level directly into private lobby at suite level shall be provided. Suite access shall be separated from general ticket circulation areas.
- h. Provide a suite lobby on each level of suites including space for concierge desk.
- i. Provide closed-circuit television service as well as radio, press announcer and press box announcer sound options.
- j. Locate suite holder parking in close proximity to the suite entrance (s). *Provide 1 stall per every 4 seats in the suite.*
- k. Provide telephone hook-ups in each suite.
- l. Provide data and fax hook-ups. Provide future capabilities for fiber – optics and "smart seats."
- m. Provide a dedicated 'will-call' area for suite holders in close proximity to the suite holders' private entrance or in the lobby.
- n. There shall be flexibility in the suite layout to accommodate the potential ganging of two to three suites for one large party suite.
- o. It is intended that varying degrees of amenities be provided in order to provide for a tiered pricing structure in the suites.

6. Type B Super Suites

- a. Provide **25 Type B Suites** consisting of 24 fixed seats and 8 moveable bar stools in each suite.
- b. *Type B Suites shall be located in the most premium locations in the stadium including areas between the 35 yard lines and locations as close to the field as possible.*
- c. Provide upholstered Stadium seat with backrest and armrests, 22" minimum seat width. Cup holders or drink rail shall be provided.
- d. Provide a minimum tread depth of 42 inches.
- e. Suites shall be heated and air conditioned. Provide fully operable and retractable glazing/screen systems. The enclosure systems shall not obstruct sightlines to the field.

Joint Use Football Stadium

- f. Provide a built-in bar counter with base and overhead cabinets with an under counter refrigerator and sink with hot and cold water service and ice bin storage.
- g. Provide private toilet in each suite.
- h. Provide a higher level of interior finish compared Type A Suites.
- i. Elevator access from private entrance lobby at ground level directly into private lobby at suite level shall be provided. Suite access shall be separated from general ticket circulation areas.
- j. The suite lobby on each level of suites shall include space for concierge desk.
- k. Provide a closed-circuit television service as well as radio, press announcer and press box announcer sound options.
- l. Locate suite holder parking in close proximity to the suite entrance (s). Provide 1 stall per every 4 seats in the suite.
- m. Provide telephone hook-ups in each suite.
- n. Provide data and fax hook-ups. Provide future capabilities for fiber – optics and “smart seats.”
- o. Provide a dedicated ‘will-call’ area for suite holders in close proximity to the suite holders’ private entrance or in the lobby.

7. Type C Party Suites

- a. Provide **4 Type C Suites** consisting of 36 *fixed seats* and 12 moveable bar stools in each suite.
- b. Provide upholstered stadium seat with backrest and armrests, 22” minimum seat width. Cup holders or drink rail shall be provided.
- c. Provide a minimum tread depth of 42 inches.
- d. Suites shall be heated and air conditioned. Provide operable glazing and/or screens. The enclosure system must not obstruct sightlines to the field.
- e. Provide a built-in bar counter with base and overhead cabinets with an under counter refrigerator and sink with hot and cold water service and ice bin storage.
- f. Suites shall have centrally located, shared restrooms for suite patrons only.
- g. Elevator access from private entrance lobby at ground level directly into private lobby at suite level shall be provided. Suite access shall be separated from general ticket circulation areas.
- h. Provide a suite lobby on each level of suites including space for concierge desk.
- i. Provide closed-circuit television service as well as radio, press announcer and press box announcer sound options.
- j. Locate suite holder parking in close proximity to the suite entrance (s). *Provide 1 stall per every 4 seats in the suite.*
- k. Provide telephone hook-ups in each suite.
- l. Provide data and fax hook-ups. Provide future capabilities for fiber – optics and “smart seats.”
- m. Provide a dedicated ‘will-call’ area for suite holders in close proximity to the suite holders’ private entrance or in the lobby.
- n. There shall be flexibility in the suite layout to accommodate the potential ganging of two to three suites for one large party suite.
- o. It is intended that varying degrees of amenities be provided in order to provide for a tiered pricing structure in the suites.

8. Dedicated University Suites

Joint Use Football Stadium

- a. Of the suites identified above, the University has requested that 54 suites be dedicated for use during Gopher Football Games. *These suites shall be part of the 150 suite inventory and available for all events.*
- b. Provide an additional 6 suites similar to the typical suites for use by the Board of Regents, University President, Vice Presidents/Provosts, Athletic Director and Head Coach. *These suites shall be part of the 150 suite inventory and available for all events.*
- c. Finishes, size and accessories shall be similar to typical suites
- d. Three (3) suites shall be configured with operable walls to accommodate the combination of three (3) suites into one contiguous suite for marketing and sponsorship purposes. In this configuration, the suite shall provide forty (40) seats.

9. Suite Amenities

The suites are for lease to individuals or corporations and are used by small groups to view events in privacy and comfort. Provide high quality finishes and furnishings to allow leisurely enjoyment of events with food and liquor service. The menu, to be verified with food service operator, will include an appropriate variety of hot and cold hors d'oeuvres, finger food and cocktail service.

The following amenities shall be provided to suite patrons in each suite:

- Telephone/Fax service
- Fixed Seating in an interior tiered arrangement.
- Lounge Seating, buffet table and bar stools.
- Wet Bar with base and wall cabinet with *full-size* refrigerator and *ice storage bin*.
- Drink rail *at the back of fixed seating to accommodate barstools and wheelchair access per ADAAG.*
- Speaker system with volume control and selector, with full technical range of options including:
 - Closed circuit TV broadcast
 - Minimum of one radio broadcast
 - PA announcer
 - Music from stadium source or radio source
 - No sound
- ~~Full height~~ *Operable glazing and/or securable screening device shall be located at the back of tiered seating area. Components of the glazing and/or screen system shall not adversely obstruct sightlines to the field. Operable glazing and/or screen system shall be easy to operate and maintain by stadium personnel.*
- Two television monitors, one with VCR (play only)
- Parking spaces in the garage with the privilege of purchasing additional spaces.
- Exclusive entrance from parking garage and VIP entrance
- Program and game stats
- Name *and/or logo* on suite door.
- Wheelchair accessible
- Quality and low maintenance finishes
- Dimmable lighting and lighting master control
- Independent HVAC control
- *Provide lockable and secure entrance doors to each suite. Consider card reader access.*

Joint Use Football Stadium

- Internet access in each suite
- Two to four conference rooms with minor AV package on suite levels
- Data fiber lines to suites or future capability
- Touch screen terminal with receipt printing capability, with direct connection to food service, merchandising and game statistics
- Provide access to a small TV/VCR combination system for use with children in a suite.

10. Suite Support Areas

The following support areas shall be provided and located appropriately on suite levels.

- a. Housekeeping – Four (4) @ 100 g.s.f. each400 g.s.f.**
Facilities for housekeeping of suites shall be provided at both suite levels an appropriately distributed.
- b. Suite Pantry – Four (4) @ 800 g.s.f. each3,200 g.s.f.**
A suite pantry shall be provided and conveniently located, two (2) on the club level (1 per side) and two (2) on the Suite Level (1 per side).
- c. Suite Concierge – Five (5) at 150 g.s.f. each750 g.s.f.**
Provide space for an attendant/concierge to assist suite patrons on the suite levels
- d. Suite Lobby – Six (6) at 300 g.s.f each.....1,800 g.s.f**
Provide space for Lobbies to serve as entrance points onto each suite level.
- e. Suite/Club Services Office.....200 g.s.f.**
Provide a secure office/conference room on the Club Level with lockable storage cabinets, for use by suite and season ticket sales staff.

11. Club Seating

The club seating area shall feature wider, more comfortable seats than regular seats and will include the same basic amenities as suites, such as upscale food and beverage service.

Club seating shall be physically separated from regular seating in a way that clearly distinguishes the club seats as special. Club seating shall access their seats from a separate club level concourse.

The following classes of Club Seating shall be provided:

a. General Club Seating	5,000 seats
b. Super Club Seating	300 seats
c. Field Level Club Seating	1,700 seats
Total Club Seats	7,000 seats

Future expansion of Club Seating shall be accommodated as follows:

a. General Club Seating	6,000 seats
b. Super Club Seating	300 seats
c. Field Level Club Seating	2,100 seats
Total Club Seats	8,400 seats

Joint Use Football Stadium

100 percent of the Club Level Seats shall be located on the sidelines. Sideline shall be defined as the area from the back of the north end zone to the back of the south end zone.

Please refer to the detailed descriptions of club seating in the sections to follow. It should be noted that future market studies may indicate that the number and configuration of Club seating be adjusted to fit with the current local market. The final number of club seats and their configuration shall be mutually agreed to by the Vikings and the University of Minnesota before schematic design begins. In addition, final FF&E requirements for Club Facilities will be determined later in the project and shall be mutually agreed to by the Vikings and the University of Minnesota before schematic design begins.

12. Outdoor Club Seating.....5,000 seats

Requirements for Club Seating are:

- a. Provide 5,000 general club seats including club wheelchair and companion seating.
- b. Provide expansion capabilities up to 6,000 seats in the future.
- c. Of the total club seats above, the University of Minnesota has requested at least 2,000 club seats be dedicated for Gopher Football. Provide the ability to expand/ convert to 2,500 dedicated club seats for Gopher Football.
- d. Tread depth: 34 inches to 36 inches minimum.
- e. Self-rising chair with double armrests and cup holders or drink rail.
- f. Minimum seat width: 24 inches in the initial phase – 21 inches in future expansion phases.
- g. Provide access to a private stadium club for club seat patrons only. Provide views to the field from the Club Lounge where possible.
- h. Provide private access to the club lounges and seating.
- i. Provide three (3) will-call window positions dedicated to club patrons in the private lobby for club and suite holders only.
- h. Provide club patron parking in close proximity to the stadium – 1 parking space per four (4) seats.

13. Super Club Seating.....300 seats

- a. Provide 250-300 club seats located in a conditioned environment with a view to the field.
- b. Consider locating the Super Club in an end zone location immediately adjacent to General Club Lounge Space and Club Restaurant.
- c. Minimum tread depth: 36 inches
- d. Provide self-rising chair with armrests and a drink rail in front.
- e. Minimum seat width: 21 inches
- f. Provide pantry for catered food, a lounge area, coat room and private restrooms immediately adjacent to Indoor Club Seating.
- g. Closed-circuit television service shall be provided as well as radio and PA sound options.
- h. Telephone hook-ups shall be provided.
- i. Provide data and fax hook-ups. Provide future capabilities for fiber – optics.
- j. Provide Super Club patron parking in close proximity - 1 parking space per four (4) seats.

Joint Use Football Stadium

14. Field Level Club Seating.....1,700 seats

Requirements for Club Seating are:

- a. Provide 1,700 general club seats including club wheelchair and companion seating.
- b. *Provide expansion capabilities up to 2,100 seats in the future.*
- c. Tread depth: 33 inches minimum.
- d. Self-rising chair with double armrests and cup holders or drink rail.
- e. Minimum seat width: 24 inches in the initial phase – 21 inches in future expansion phases.
- f. *Locate the Field Level Club at the Lower Deck between the 35 yard lines.*
- g. *Provide access to a private stadium club for Field Level Club seat patrons only. Provide views to the field and the Home Team Bench from the Club Lounge where possible.*
- h. Provide private access to the club lounges and seating.
- i. Provide three (3) will-call window positions dedicated to club patrons in the private lobby for club and suite holders only.
- j. Provide club patron parking in close proximity to the stadium – 1 parking space per four (4) seats.

15. General Club Lounge.....81,000 g.s.f.

- a. Provide lounge area to accommodate 13.5 square feet per person net area (based on ultimate build out of 6,000 seats) plus other club support space including club concessions, restrooms, buffet, food preparation, storage and circulation.
- b. The club area shall be immediately adjacent to club seats and preferably with an expansive view to the playing field.
- c. Elevator access from private entrance lobby at ground level directly onto private club lobby shall be provided. Club access shall be separated from general ticket circulation areas.
- d. The club lobby shall include space for concierge desk.
- e. Provide pay telephones near restrooms or concierge desk.
- f. *Provide CATV and CCTV service.*
- g. *Disperse televisions and/or video display systems throughout the Club that are based on the most recent technology available.*
- h. Provide restrooms for club patrons only.
- i. A janitor's closet shall be located near private restrooms.
- j. Heat, air conditioning and ventilation shall be provided.
- k. The minimum width of primary circulation shall be 12-15 feet.
- l. Final FF&E requirements will be determined later in the project and mutually agreed upon by the Vikings and University.

16. Field Level Club Lounge.....28,350 g.s.f.

- a. Provide lounge area to accommodate 13.5 square feet per person net area (based on ultimate build out of 2,100 seats) plus other club support space including club concessions, restrooms, buffet, food preparation, storage and circulation.
- b. The club area shall be immediately adjacent to club seats and preferably with an expansive view to the home team bench and field.
- c. Elevator access from private entrance lobby at ground level directly onto private club lobby shall be provided. Club access shall be separated from general ticket circulation areas.
- d. The club lobby shall include space for concierge desk.
- e. Provide pay telephones near restrooms or concierge desk.

Joint Use Football Stadium

- f. Provide CATV and CCTV service.
- g. Disperse televisions and/or video display systems throughout the Club that are based on the most recent technology available.
- h. Provide restrooms for club patrons only.
- i. A janitor's closet shall be located near private restrooms.
- j. Heat, air conditioning and ventilation shall be provided.
- k. Final FF&E requirements will be determined later in the project and mutually agreed upon by the Vikings and University.

17. Other Club Seating Amenities

In addition to the requirements above, the following amenities shall be provided to club patrons.

- a. Dedicated toilet rooms
- b. Fixed and moveable lounge seating in Club Lounges.
- c. Option to purchase parking space in the VIP parking lot
- d. Exclusive entrance from parking garage and main concourse VIP entrance (s)
- e. Wheelchair accessible
- f. Internet access in dedicated lounge areas.
- g. Final FF&E requirements will be determined later in the project and mutually agreed upon by the Vikings and University.

18. Multi Purpose Meeting Rooms.....15,000 g.s.f.

- a. Provide operable, acoustically treated walls to divide the meeting room into 3 rooms of 5,000 g.s.f. each.
- b. Provide dedicated, secure access to finishing kitchen *and Club Restaurant*.
- c. Provide black out capabilities.
- d. Provide provisions for lectern and multi media presentations.
- e. Provide CCTV and CATV service plus telephone, data and fiber.
- f. Locate immediately adjacent to elevator lobbies so that patrons may enter directly into meeting rooms without circulating through club lounge facilities.
- g. Heat, air conditioning and ventilation will be provided.
- h. Final FF&E requirements will be determined later in the project and mutually agreed upon by the Vikings and University.

19. Concourses (main & upper concourses)..... Area to be verified

- a. Provide open, barrier free circulation on the concourse for entering and exiting.
- b. Construction materials will be of durable quality and enhance the design through the use of color, *texture and lighting*.
- c. Provide general and emergency lighting.
- d. Provide floor drains and proper slope to facilitate storm water removal and wash-down. Properly seal concrete and waterproof expose concourse areas.
- e. Provide space for 10 ATMs (Automated Teller Machines). Distribute ATMs evenly per category of seating.
- f. Provide space and *conduit for public telephones – evenly distributed on each level of the stadium. Please refer to Item 30 for more detail.*
- g. Provide eight (8) feet queuing areas (minimum) at toilet rooms and concession stands.
- h. The minimum width of a concourse shall be 32 feet excluding queuing areas.

Joint Use Football Stadium

- i. Concourses shall have power and telephone outlets for portable concession, novelty stands and exhibit use. Concourses may represent future sponsorship area (s). *Consider integrating multi-media and video systems in this area to support sponsorship and overall stadium theme.*
- j. The scope for any future "sponsorship" installations will be developed as the project proceeds and will be provided as a separate scope of work.
- k. Concourses shall be pre-wired for an adequate number of television/video screens appropriately placed throughout the concourse areas. *Assume a minimum of 400 locations.*
- l. *Concourses shall be pre-wired for future sponsorship and signage. Locations and configuration shall be mutually agreed upon by the Vikings and the University of Minnesota*
- m. Locate concessions, merchandising, public toilets, guest services and other spectator amenities and distribute conveniently around each public concourse. *When possible and appropriate, locate concessions in-board from the exterior wall as much as possible.*
- l. Provide designated smoking terraces on each concourse. The Stadium will be a smoke free building. Provide signage to indicate designated smoking areas.
- m. Provide two private concourses with direct access to Suites and Club level seats and Party Suites.
- n. All amenities and installations shall be vandal resistant
- o. Provide TV monitors positioned around the concourse for viewing while waiting for concessions.
- p. ATM (by Vendor) - Distribute throughout the stadium (10 required)
- q. Trash enclosures shall be distributed throughout the stadium

20. Great Hall.....15,000 g.s.f.

- a. The Great Hall should be located at grade and *developed as part of the Main Concourse to provide covered loggia and main entrance.*
- b. *The Great Hall shall be immediately adjacent to major plaza (s) used for pre and post game functions.*
- c. Retail and ticket facilities should be located immediately adjacent to the Great Hall.
- d. Provide open, barrier free circulation on the concourse for entering and exiting.
- e. Construction materials will be of durable quality and enhance the design through the use of color, *texture and lighting.*
- f. The Great Hall should be heavily themed and represents a potential sponsorship area. *Consider integrating multi-media and video systems in this area to support sponsorship and overall stadium theme.*
- g. Provide general and emergency lighting.

21. Ticketing/Spectator Entrances.....72 turnstiles

- a. Portable, reversible, registering turnstiles and space for ticket takers shall be provided.
- b. Provide 1 turnstile location per 1,000 seats.
- c. Turnstiles to accommodate the disabled shall be provided at each entrance location.
- d. Provide a minimum of four (4) general admission gate areas, two (2) dedicated general club seating gate areas, two (2) dedicated corporate club seating gate areas, one (1) dedicated super suite gate/lobby and two (2) dedicated suite gate/lobby areas.

Joint Use Football Stadium

- e. Storage space for checking or confiscation of items not permitted in the stadium and day of game promotional materials shall be provided.
- f. Provide adequate roof cover to protect spectators entering/queuing at "gated" areas during security checks.
- g. Provide future capacity to accommodate "smart" turnstiles.
- h. An exit turnstile shall be provided at each major entrance.
- i. Spectator queuing at the turnstiles shall not obstruct spectators at ticket windows.

22. Public Toilets.....area to be verified

Toilets shall be calculated based on the 2000 International Building Code or local building codes if more stringent. The toilet design should strive to be efficient and adequate to handle peak demands between quarters.

Toilet rooms for men and women will be conveniently distributed along each public concourse. The ratio of spectator to fixtures shall be based on a 50% male and 50% female attendance (100%). Fixtures will be provided based on the following approximations unless otherwise required by local code. All toilet rooms will have wheelchair accessible facilities for disabled patrons.

- a. The plumbing fixture count will be based on a 50% male and 50% female ratios respectively.
- b. Women's toilets will be provided containing mirrors with shelves, wall or ceiling mounted solid polymer toilet partitions, wall-mounted fixtures, soap dispensers, diaper changing facility, sanitary napkin equipment, sealed concrete floors, painted CMU block walls, general lighting, heat and ventilation.
- c. Men's toilets will be provided containing mirrors with shelves, wall or ceiling mounted toilet partitions (at water closets only), wall mounted fixtures, soap dispensers, diaper changing facility, sealed concrete floors, painted CMU block walls, general lighting, heat and ventilation.
- d. Each new toilet room will be fully accessible and compliant with applicable codes and regulations.
- e. Janitor(s) closets will generally be equally distributed on the public concourses and will provide a mop sink and general supply storage.
- f. All toilet rooms shall be equipped with heat to maintain a minimum 55°F temperature, general lighting and exhaust. Cold water service shall be provided for all concourse public toilet rooms.
- g. Provide hose bib and floor drain in each toilet room.
- h. An attendant's closet containing a service sink with hot and cold water, and storage shall be provided in each public toilet room.
- i. The following plumbing counts are preferred:

Lavatories:

Men	1 per 200 patrons
Women	1 per 150 patrons

Water closets:

Men	1 per 350 patrons
Women	1 per 60 patrons

Urinals:

Men	1 per 100 patrons
-----	-------------------

23. Club Seating Toilet Rooms.....area to be verified

- a. The plumbing fixture count will be based on a 50% male and 50% female ratios respectively.

Joint Use Football Stadium

- b. Women's toilets will be provided containing mirrors with shelves, wall or ceiling mounted solid polymer toilet partitions, wall mounted fixtures, soap dispensers, diaper changing facility, sanitary napkin equipment, ceramic tile floors, ceramic tile walls, upgraded lighting, heat and ventilation.
- c. Men's toilets will be provided containing mirrors with shelves, wall or ceiling mounted solid polymer toilet partitions, wall mounted fixtures, soap dispensers, diaper changing facility, ceramic tile floors, ceramic tile walls, upgraded lighting, heat and ventilation.
- d. Each new toilet room will be fully accessible and compliant with applicable codes and regulations.
- e. Janitor(s) closets will generally be equally distributed on the public concourses and will provide a mop sink and general supply storage.
- f. Provide 55 degree water minimum with system shutoff and drain capabilities.
- g. Provide hose bib and floor drains in each toilet room.
- h. The following plumbing counts are preferred:

Lavatories:

Men	1 per 130 patrons
Women	1 per 100 patrons

Water closets:

Men	1 per 230 patrons
Women	1 per 50 patrons

Urinals:

Men	1 per 65 patrons
-----	------------------

24. Suite Seating Toilet Rooms.....area to be verified

- a. The plumbing fixture count will be based on a 50% male and 50% female ratios respectively.
- b. Women's toilets will be provided containing mirrors with shelves, wall or ceiling mounted solid polymer toilet partitions, wall mounted fixtures, soap dispensers, diaper changing facility, sanitary napkin equipment, ceramic tile floors, ceramic tile walls, upgraded lighting, heat and ventilation.
- c. Men's toilets will be provided containing mirrors with shelves, wall or ceiling mounted solid polymer toilet partitions (at water closets only), wall mounted fixtures, soap dispensers, diaper changing facility, ceramic tile floors (minimum), ceramic tile walls (minimum), upgraded lighting, heat and ventilation.
- d. Each new toilet room will be fully accessible and compliant with applicable codes and regulations.
- e. Janitor(s) closets will generally be equally distributed on the public concourses and will provide a mop sink and general supply storage.
- f. Provide 55 degree water minimum with system shutoff and drain capabilities.
- g. Provide hose bib and floor drains in each toilet room.
- h. The following plumbing counts are preferred:

Lavatories:

Men	1 per 60 patrons
Women	1 per 40 patrons

Water closets:

Men	1 per 60 patrons
Women	1 per 20 patrons

Urinals:

Men	1 per 30 patrons
-----	------------------

Joint Use Football Stadium

- 25. Family Toilets 16 @ 70 g.s.f.....1,120 g.s.f.**
- a. Provide four (4) family accessible toilets (70 g.s.f. each) dispersed evenly on each public concourse(s) (upper and lower) level - 8 total
 - b. Provide four (4) family accessible toilets (70 g.s.f. each) dispersed evenly on each club and suite concourse(s) level – 8 total
- 26. First Aid Facilities**
- a. Main First Aid Room.....**1,000 g.s.f.**
Provide one (1) main first aid room at the Service/Arena Level. Locate the Main First Aid Room immediately adjacent to X Ray Facilities, main freight elevators, field access tunnel and service access to the stadium. The Main First Aid Room should be easily accessible to emergency vehicles at the service tunnel and loading dock areas.
 - b. First Aid Stations – 4 @ 600 g.s.f. each.....**2,400 g.s.f.**
Provide two (2) permanent first aid stations (600 g.s.f. each) centrally located on each public concourse level (upper and lower – 4 total) of the stadium. Each first aid stations should be easily accessible to emergency vehicles off of the concourse.
 - c. The first aid rooms should each have a *reception area to seat 5 people*, a unisex toilet, three (3) emergency room beds, privacy curtains around each bed, space for one (1) gurney, hand sink and lockable upper and lower cabinets.
 - d. Provide heat, air conditioning, ventilation and a telephone.
 - e. An entry/waiting room should be provided with a desk and chairs at each First Aid Room.
 - f. Club/ Suite Level First Aid Room.....**150 g.s.f.**
Provide a room with space for minimal equipment and space for 1 EMT plus one assistant. Locate in close proximity to elevator service.
 - g. *The first aid facilities represent a potential sponsorship opportunity. Future graphics, power and telecommunications/data systems may be required.*
- 27. Guest Services Offices – two (2) @ 300 g.s.f.....600 g.s.f.**
- a. Provide guest service offices located off of the main concourse and the club level accessible by the public in a visible location.
 - b. Locate immediately adjacent to the main ticket office.
- 28. Business Center Office.....600 g.s.f.**
- a. Provide Business Center Office located off of the club level accessible by the public in a visible location.
 - b. Locate immediately adjacent to the Guest Services office.
- 29. Drinking Fountains.....82 total**
- a. Provide 1 drinking fountain per 1,000 seats and distribute proportionately per category of seating.
 - b. Frost proof, non-refrigerated drinking fountains (bubbler type) shall be provided at the field.
 - c. *Frost proof, non-refrigerated drinking fountains (bubbler type) shall be provided at general concourse levels in the amount of one for every two toilet rooms.*
 - d. Refrigerated drinking fountains will be provided at the club level, locker rooms, press and administrative offices.

30. Fan Information – Eight (8) @ 100 g.s.f.....800 g.s.f.
Accommodation booths on the main and upper concourse shall be included to provide information and general assistance to spectators. Space for two staff members shall be included. Appropriate counter, casework, and pull down shutter shall be provided.

31. Public Telephones

- a. Provide banks of public telephones (coin operated) on both the main and upper concourses; three phones per bank, one bank per quadrant.
- b. One bank of three (3) telephones per side on the club Level, and one telephone in each elevator lobby on the suite lobby.
- c. *Assume 60 telephones total distributed proportionately to seating classification population.*
- d. Provide wheelchair accessible and TDD telephones.

32. Sound Systems

- a. Provide a complete sound system providing clear voice, music, paging and broadcasting to each seat in the stadium.
- b. Sound system loudspeaker system shall be appropriately distributed for even sound levels, auxiliary speakers for concourse, lockers, offices, toilet rooms, etc., shall be included.
- c. *Provide provisions for the hearing impaired.*
- d. *All sound systems shall comply with NFL Standards as determined by recently opened facilities that are comparable to this project.*

33. Lighting of Public Areas

- a. Adequate general illumination, as well as required emergency lighting, shall be provided throughout the stadium for concourses, ramps, portals, toilet rooms, etc.

II. AREAS DEDICATED TO THE UNIVERSITY OF MINNESOTA

1. Team Locker Room Facilities

The dedicated team facilities are for game day use only and shall have direct and convenient access to the playing field. Access shall also be provided between the Press Box and Team Facilities. Locker rooms shall be completely finished and furnished.

A service tunnel for access by truck or bus (minimum 16'-0" clear width) shall be provided to the team locker facilities.

- a. Home Team Entry.....400 g.s.f.
 - Provide access direct to the locker room facility to/from the service tunnel.
 - Provide space for Minnesota Gopher Football images and memorabilia.
 - Configure doors and vestibule to screen visual access into the locker room from the corridor.
- b. Home Team Locker Room.....8,250 g.s.f.
 - The locker room should accommodate 110 lockers for players at 42" W x 36" D.

Joint Use Football Stadium

- The design of the locker room should allow for the offense and defense to divide for half time.
 - Provide a digital game clock.
 - The locker room shall be dedicated to the University of Minnesota only, and is not available for any other use.
 - Provide cleat proof carpet.
 - Locate the locker room immediately adjacent to and connected with a loading dock, truck access, and field access.
 - Provide convenient and immediate access to the field.
- c. Team Toilets/Showers.....1,600 g.s.f.
- Provide toilet/shower facilities adjacent to the locker room.
 - Provide 10 lavatories, 7 water closets and 7 urinals.
 - Provide 24 showerheads.
- d. Team Drying Areas.....200 g.s.f.
- Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects.
 - Provide stainless steel towel racks.
- e. Head Coaches Locker Room/ Office.....400 g.s.f.
- Provide office space
 - Provide private dressing area, toilet room and shower
 - Provide cleat proof carpet.
 - Provide direct access to the team locker room and media interview room.
- f. Coaches Locker Room.....800 g.s.f.
- Provide 20 lockers (24" x 24") for coaches and graduate assistants.
 - Provide direct access to the team locker room and wet areas
 - Provide cleat proof carpet.
- g. Coaches Toilets/Showers.....300 g.s.f.
- Provide toilet/shower facilities adjacent to the locker room.
 - Provide 4 lavatories, 2 water closets and 2 urinals.
 - Provide 4 showerheads.
- h. Coaches Drying Areas..... 80 g.s.f.
- Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects. Locate appropriately.
 - Provide stainless steel towel racks. Locate appropriately.
- i. Warm-Up and Stretching Area.....1,000 g.s.f.
- Provide area for warm up and stretching conveniently located to locker rooms and field access
 - Provide closed-circuit television service as well as radio, press announcer and press box announcer sound options.
 - Provide game clock.
 - Provide telephone, data and fax hook-ups.

Joint Use Football Stadium

- j. Staff Locker Room.....800 g.s.f.
 - Provide 20 lockers (24" x 24") for coaches and graduate assistants.
 - Provide direct access to the team locker room and wet areas
 - Provide an adjacent restroom and shower facility including 1 urinal, 1 water closet, 1 lavatory and 2 showerheads.
- k. Staff Locker Toilets/Showers.....300 g.s.f.
 - Provide toilet/shower facilities adjacent to the locker room.
 - Provide 4 lavatories, 2 water closets and 2 urinals.
 - Provide 4 showerheads.
- l. Staff Locker Drying Areas..... 80 g.s.f.
 - Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects. Locate appropriately.
 - Provide stainless steel towel racks. Locate appropriately.
- m. Coaches Meeting Room320 g.s.f.
 - Provide meeting rooms for 20 coaches
 - Locate immediately adjacent to coaches locker rooms and team locker rooms.
 - Provide A/V capabilities

2. Equipment Areas

- a. Equipment Distribution and Storage.....1,000 g.s.f.
 - Provide a securable room for storage and equipment distribution.
 - Walls to extend to structure above.
 - Provide a six (6) foot wide door to accommodate equipment transfer.
 - Provide an equipment transfer window 8 feet wide.
 - Locate immediately adjacent to loading docks
- b. Managers Office..... 120 g.s.f.
- c. Shoe Room..... 250 g.s.f.
- d. Trunk Storage..... 1,000 g.s.f.
- e. Coaches Clothes..... 200 g.s.f.
- f. Janitorial.....240 g.s.f.
- g. Equipment Staff Locker Room/Break Room.....240 g.s.f.
- h. Ball Boy Room.....120 g.s.f.
- i. Ball Storage.....200 g.s.f.

3. Training Areas

- a. Training Room.....1,500 g.s.f.
 - Provide an area to accommodate eight (8) 7'-0" treatment tables.
 - Provide securable base and upper cabinets.
 - Provide counter sink and electrical outlets.
 - Provide durable, washable floor finish.
 - Provide direct access from locker room.
 - Provide direct access to the training room separate from the locker room.
 - The training room should be easily accessible to emergency vehicles.
 - Provide direct access to the physician's exam room.

Joint Use Football Stadium

- Provide one 7' x 3' taping station with padded back and securable base cabinets or four 4' taping tables.
- b. Training Staff Locker Room.....240 g.s.f.
 - Provide 2 staff locker rooms with eight (5) lockers approximately 18" x 18" in each room. Each room to be approximately 120 g.s.f..
 - The locker room should be adjacent to training room.
 - The rooms will double as a meeting room for the offensive and defensive coaching staff at half-time.
 - Provide 2 shower heads, 1 toilet, 1 urinal and 2 lavatories in each room.
- c. Wet Areas.....300 g.s.f.
 - Provide a "wet area" with space for an ice machine and three (3) stainless steel whirlpools
- d. Physicians Exam Room – two (2) rooms at 300 g.s.f. each ...600 g.s.f.
 - Provide a secured room to accommodate on 7'-0" treatment table and securable base cabinets.
 - Provide direct access to the training room and not adjacent to the team locker room.
 - Provide counter sink with securable base and upper cabinets with electrical outlets.
 - Provide one 4' x 2' X-Ray view box.
 - Provide toilet in each room.
- e. Unisex Shower Facilities.....240 g.s.f.
 - Provide two unisex shower/toilet facilities adjacent to the training room. Each room should have one water closet, one urinal and one shower approximately 3' x 4'. Each room to be 120 square feet.
- f. Storage/Work Room.....500 g.s.f.
 - Provide lockable storage/work room with convenient access to loading dock areas and field.
 - Primary storage for trunks and field carts.

5. Ancillary Facilities

- a. Training Table (WISH LIST).....7,000 g.s.f.
 - The training table will serve approximately 1,200 students and athletes total; 300 seating at one time.
 - The kitchen and serving area is included in approximate space allocation.
 - The training table shall be accessible year round with private access from the exterior of the stadium.
 - Consider making this space flexible for other uses such as the field photographer and press dining.
- b. University Marching Band.....22,450 g.s.f.
 - The 300 plus member Marching Band should have adequate staging pre-game that is separate from vehicles and is out of the way of the football teams. The band should have a clear path to the field.
 - Provide access to the band facility from the exterior of the stadium; 24 hours a day, year round.

Joint Use Football Stadium

- Locate the Band Facility entrance on a side close and convenient to campus.
 - Provide dedicated elevator access if at a different elevation than at grade.
 - Detailed program will be developed. Spaces to be included are the following:
 - Rehearsal Room for 350 members, entrance lobby, instrument storage, uniform storage, general storage, offices, library, office filing, percussion practice, trumpet practice, general practice, men and women restrooms, men and women locker and shower rooms, instrument repair room, instrument wash room, alumni room and training room.
 - Rehearsal room to have ceiling height of 15' or higher.
 - All rehearsal rooms acoustically approved by Band Director.
 - Provide the following spaces:

- Band Locker Room	2400 g.s.f.
- Band Equipment Storage	10,000 g.s.f.
- Band Uniform Storage	2,000 g.s.f.
- Band Rehearsal Room	5,250 g.s.f.
- Band – Private Rehearsal Rooms	2,000 g.s.f.
- Band Offices	800 g.s.f.
- c. Recruiting Room.....1,500 g.s.f.
- Provide a room to accommodate 30-50 recruits plus families and Minnesota coaches for a total capacity of 75-100.
 - Provide additional space for restrooms adjacent to the room.
 - Provide additional space for a pantry adjacent to the room.
 - Locate room in close proximity to the home team locker room.
 - Consider making this space flexible for other uses such as the family room for the Vikings.

5. Room Equipment and Furnishings Requirements.

Typical All Rooms: 12'-0" ceiling height minimum
3'-6" minimum door width and 8'-0" door height.

Locker Room: Lockers shall be three sided custom wood lockers with shelves, hooks and lockable cabinet. Provide custom player's name plate.

Locker Finishes: Cherry or Maple Hardwood with Plastic Laminate inside drawer.

Special Needs: provide built-in video equipment with cabinet. Provide counter space adjacent to marker board location. Provide game review boards

Equipment: Team to provide 35 inch (minimum) television and VCR. Event Clock hooked up to main scoreboard.

Shower Room Mounting Height: 8'-0" for shower heads, 4'-6" for shower controls, 2'-9" between shower heads

Joint Use Football Stadium

- Drying Room** Locate stainless steel shelf/container for towel distribution.
Flooring: Give special consideration to flooring. Players will be applying oil in this area.
- Toilet Room:** Mounting Height: 3'0" for lavatory, 1'-7" to rim of water closet, 2'-2" to rim of urinal.
- Training Room:** Casework: Provide lockable cabinets
Flooring: Provide separate floor area around hydrotherapy to control water. Team to provide training equipment.
- Head Coach's Office:** Casework: Provide game review boards (marker board with permanent team diagrams).

Provide built-in television and VCR cabinets.

Equipment: Team to provide 35 inch (minimum) television & VCR.
- Other Requirements:** Independent HVAC temperature controls.

Paging system within locker area.

Television cable feeds and closed circuit television.

Game clock in locker area.

Cabling for radio/TV interviews

Ring down phone system for radio/TV announce positions.

Team's option to provide pre-wired satellite reception capability into football and Head Coach's office.

Illumination shall maintain a uniform light level, 35 foot-candles maintained at 3 feet above the floor. To control heat build-up, watts per sq. ft. shall be minimized.

III. AREAS DEDICATED TO THE MINNESOTA VIKINGS

1. Team Locker Room Facilities

The dedicated team facilities are for game day use only and shall have direct and convenient access to the playing field. Access shall also be provided between the Press Box and Team Facilities. Locker rooms shall be completely finished and furnished.

Joint Use Football Stadium

A service tunnel for access by truck or bus (minimum 16'-0" clear width) shall be provided to the team locker facilities.

- a. Home Team Entry.....400 g.s.f.
 - Provide direct and secure access to the locker room facility from the service corridor.
 - Provide space for Minnesota Vikings Football images and memorabilia.
 - Configure doors and vestibule to screen visual access into the locker room from the corridor.

- b. Main - Home Team Locker Room.....4,500 g.s.f.
 - The locker room should accommodate 60 lockers for players at 42" W x 36" D.
 - The locker room should allow for the offense and defense to divide for half time.
 - Provide a digital game clock.
 - The locker room shall be used by the Minnesota Vikings only, and is not available for any other use.
 - Provide cleat proof carpet.
 - Locate Immediately adjacent to and connected with a loading dock and truck access.
 - Provide convenient and immediate access to the field.
 - Provide large area for coaching staff to address entire team pre-game and at half time before the team leaves the locker room for the field.
 - Team facilities shall have direct access to the playing field. Access shall be provided between the Press Box and Team Facilities, with the Home Team Bench located on the west side. Locker Rooms shall be completely finished and furnished.
 - The Home Team is to have direct exterior access for loading and unloading equipment. Separate circulation paths for home team, visiting team and officials is required.
 - A service tunnel for access by truck or bus (minimum 16'-0" clear width) shall be provided to the team locker facilities.
 - The Locker Room shall have two marker boards at opposite ends that are wall mounted and can be covered and secure. There shall be portable marker boards, and TV monitors.

- c. Auxiliary - Home Team Locker Room.....1,800 g.s.f.
 - The locker room should accommodate 30 lockers for players at 42" W x 36" D.
 - Provide a digital game clock.
 - The locker room shall be used by the Minnesota Vikings only, and is not available for any other use.
 - Provide cleat proof carpet.
 - Locate immediately adjacent to and connected with main Home Team locker room.
 - Provide convenient and immediate access to the field.
 - Provide large area for coaching staff to address entire team pre-game and at half time before the team leaves the locker room for the field.
 - Consider making this space flexible for other uses such as star dressing rooms, etc.

Joint Use Football Stadium

- d. Team Toilets/Showers.....1,500 g.s.f.
 - Provide toilet/shower facilities adjacent to the locker room.
 - Provide 8 lavatories, 5 water closets (wall mounted) and 8 urinals (wall mounted).
 - Provide 20 showerheads.

- e. Team Drying Areas.....200 g.s.f.
 - Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects.
 - Provide stainless steel towel racks.

- f. Head Coaches Locker Room/ Office.....400 g.s.f.
 - Provide office space
 - Provide Private dressing area, toilet room and shower
 - Provide cleat proof carpet.
 - Provide direct access to the team locker room and media interview room.
 - Provide phone and data.

- g. Coaches Locker Room.....960 g.s.f.
 - Provide 24 lockers (24" x 24") for coaches and graduate assistants.
 - Provide direct access to the team locker room and wet areas
 - Provide cleat proof carpet.

- h. Coaches Toilets/Showers.....300 g.s.f.
 - Provide toilet/shower facilities adjacent to the locker room.
 - Provide 4 lavatories, 2 water closets and 2 urinals.
 - Provide 4 showerheads.

- i. Coaches Drying Areas..... 80 g.s.f.
 - Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects.
 - Provide stainless steel towel racks.

- k. Warm-Up and Stretching Area.....1,000 g.s.f.
 - Provide area for warm up and stretching conveniently located to locker rooms and field access
 - Provide closed-circuit television service as well as radio, press announcer and press box announcer sound options.
 - Provide game clock.
 - Provide telephone, data and fax hook-ups.

- l. Positions Rooms – three (3) at 320 g.s.f. each960 g.s.f.
 - Provide meeting rooms for position players
 - Operable Walls, acoustically treated to create one (1) room for 60 players at 16 g.s.f. each shall be provided.
 - Provide A/V capabilities

- m. Coaches Meeting Room320 g.s.f.
 - Provide meeting rooms for 20 coaches

Joint Use Football Stadium

- Locate immediately adjacent to coaches locker rooms and team locker rooms.
 - Provide A/V capabilities
- n. Staff Locker Room.....960 g.s.f.
- Provide 24 lockers (24" x 24") for Vikings Staff.
 - Provide direct access to the team locker room and wet areas
 - Provide cleat proof carpet.
- o. Staff Locker Toilets/Showers.....300 g.s.f.
- Provide toilet/shower facilities adjacent to the locker room.
 - Provide 4 lavatories, 2 water closets and 2 urinals.
 - Provide 4 showerheads.
- p. Staff Locker Drying Areas..... 80 g.s.f.
- Provide drying area immediately shower areas
 - Provide stainless steel shelves in drying area for personal affects. Locate appropriately.
 - Provide stainless steel towel racks. Locate appropriately.

2. Equipment Areas

Provide space for an Equipment Issue Room with counter, and storage, with direct access to the Equipment Room and Laundry through a vestibule space.

- a. Equipment Distribution and Storage.....2,500 g.s.f.
- Provide a securable room for storage and equipment distribution.
 - Walls shall extend to structure above.
 - Provide a six (6) foot wide door to accommodate equipment transfer.
 - Provide an equipment transfer window 8 feet wide.
 - Locate immediately adjacent to loading docks and service corridor.
 - Provide pair of 3'-0" doors to service drive.
- b. Managers Office..... 120 g.s.f.
- c. Shoe Room..... 250 g.s.f.
- d. Trunk Storage..... 1,000 g.s.f.
- e. Coaches Clothes..... 200 g.s.f.
- f. Janitorial..... 240 g.s.f.
- g. Equipment Staff Locker Room/Break Room.....240 g.s.f.
- h. Ball Boy Room.....120 g.s.f.
- i. Ball Storage.....200 g.s.f.

3. Training Areas

Locate training room adjacent to locker area. The Training Room shall include training and taping tables and storage, as well as a separate exam room and trainer's office.

Provide a Cardiovascular/weight training room with locations pre-wired for electronic exercise equipment, i.e. treadmills, stair climbers etc.

Locate the Exam Room and Laundry Room with private access into Team Facilities and public access for other teams from corridor.

Joint Use Football Stadium

Provide a secondary entrance/exit from the locker room or exam room to exterior. This entrance is important when exiting an injured player

Locate Exercise Room adjacent to training room. Provide viewing from training into weight room.

Locate Whirlpool, Sauna and Steam Room adjacent to Training Room with glass for observation.

Provide GFI Electrical Outlets @ 40" above the finished floor elevation throughout the Training Room and Ancillary areas.

- a. Training Room.....2,500 g.s.f.
 - Provide an area to accommodate ten (10) 7'-0" treatment tables.
 - Provide securable base and upper cabinets.
 - Provide counter sink and electrical outlets.
 - Provide durable, washable floor finish.
 - Provide direct access from locker room.
 - Provide direct access to the training room separate from the locker room.
 - The training room should be easily accessible to emergency vehicles and X-Ray room.
 - Provide direct access to the physician's exam room.
 - Provide two (2) 7' x 3' taping station with padded back and securable base cabinets or four 4' taping tables.

- b. Head Trainers Office.....150 g.s.f.
 - Provide a securable office with views of the Training Room and Hydrotherapy areas.
 - Provide phone and data.

- d. Training Staff Locker Room.....240 g.s.f.
 - Provide 2 staff locker rooms with eight (5) lockers approximately 18" x 18" in each room. Each room to be approximately 120 g.s.f..
 - The locker room should be adjacent to training room.
 - Provide 2 shower heads, 1 toilet, 1 urinal and 2 lavatories in each room.

- e. Wet Areas/ Hydro Therapy.....300 g.s.f.
 - Provide a "wet area" with space for an ice machine and three (3) stainless steel whirlpools
 - Water inlets (both hot and cold)
 - Large warm whirlpool – with automatic chlorine/chemical feeder/tester (permanent)
 - Utility Sink – with hot and cold water inlets
 - Bright lighting
 - Outlets (40 inches off ground)
 - Floor drains
 - Ice Machine with water inlet

- f. Physicians Exam Room300 g.s.f.

Joint Use Football Stadium

- Provide a secured room to accommodate on 7'-0" treatment table and securable base cabinets.
 - Provide direct access to the training room and not adjacent to the team locker room.
 - Provide counter sink with securable base and upper cabinets with electrical outlets.
 - Provide one 4' x 2' X-Ray view box.
 - Provide phone and high-speed data.
 - Bright lighting with dimmer switch (blu-spot light)
 - Outlets (40 inches off floor) – (GFI protected)
- g. Doping Room300 g.s.f.
- Provide a secured room to accommodate on 7'-0" treatment table and securable base cabinets.
 - Provide direct access to the training room and not adjacent to the team locker room.
 - Provide counter sink with securable base and upper cabinets with electrical outlets.
 - Provide one 4' x 2' X-Ray view box.
 - Provide Secure Access – remote from locker rooms, coaches offices, etc.
- h. Storage/Work Room.....500 g.s.f.
- Provide lockable storage/work room with convenient access to loading dock areas and field.
 - This room will serve as the primary storage for trunks and field carts.
- i. Auxilliary Storage Rooms – two (2) at 500 g.s.f.....1,000 g.s.f.
- Provide lockable storage/work room with convenient access to loading dock areas and field.
 - Primary storage for trunks and field carts.
- j. Auxilliary Storage Rooms250 g.s.f.
- Provide lockable storage/work room with convenient access to loading dock areas and field.
 - Primary storage for trunks and field carts.

4. Ancillary Facilities

- a. Mascot Storage.....200 g.s.f
- Lockable storage for motorcycle and snow mobiles
- b. Pregame Storage.....400 g.s.f
- Lockable storage for inflatables and Viking/Norsman Props

5. Room Equipment and Furnishings Requirements.

Typical All Rooms: 12'-0" ceiling height minimum
3'-6" minimum door width and 8'-0" door height.

Joint Use Football Stadium

- Locker Room:** Lockers shall be three sided custom wood lockers with shelves, hooks and lockable cabinet. Provide custom player's name plate.
- Locker Finishes: Cherry or Maple Hardwood with Plastic Laminate inside drawer.
- Special Needs: provide built-in video equipment with cabinet. Provide counter space adjacent to marker board location. Provide game review boards
- Equipment: Team to provide 35 inch (minimum) television and VCR. Event Clock hooked up to main scoreboard.
- Shower Room** Mounting Height: 8'-0" for shower heads, 4'-6" for shower controls, 2'-9" between shower heads
- Drying Room** Locate stainless steel shelf/container for towel distribution.
Flooring: Give special consideration to flooring. Players will be applying oil in this area.
- Toilet Room:** Mounting Height: 3'0" for lavatory, 1'-7" to rim of water closet, 2'-2" to rim of urinal
- Training Room:** Casework: Provide lockable cabinets
- Flooring: Provide separate floor area around hydrotherapy to control water. Team will provide training equipment. Carpeted treatment area
 - Tiled taping and wound care area
 - Bright lighting
 - Carpeted floor
- Head Coach's Office:** Casework: Provide game review boards (marker board with permanent team diagrams).
- Provide built-in television and VCR cabinets.
- Equipment: Team to provide 35 inch (minimum) television & VCR.
- Provide phone and data.
- Other Requirements:** Independent HVAC temperature controls.
- Paging system within locker area.
- Television cable feeds and closed circuit television.
- Game clock in locker area.

Joint Use Football Stadium

Cabling for radio/TV interviews

Ring down phone system for radio/TV announce positions.

Team's has the option to provide pre-wired satellite reception capability into football and Head Coach's office.

Illumination shall maintain a uniform light level, 35 foot-candles maintained at 3 feet above the floor. To control heat build-up, watts per sq. ft. shall be minimized.

**6. Vikings Sales & Marketing and Suite/Club Offices..... 10,520 g.s.f.
(Not including internal circulation) – (WISH LIST)**

Administrative space for the game day home team use and event operation shall provide for reception, general office, ticket office and sales, vault, counting rooms, meeting rooms, switchboard, storage and equipment space.

The entrance to the administrative offices and the ticket office shall be located at the ground level and shall be accessible to the public. Parking for visitors and staff shall be provided.

Finished administrative space, complete with finished walls, floors, ceilings, general lighting, heating and air conditional shall be provided.

Space shall also be available for future expansion.

Allocation of administrative office space is as follows:

a. Lobby and Reception	1,000 g.s.f.
b. Director of Sales and Marketing	240 g.s.f.
c. Assistant Director of Sales and Marketing	180 g.s.f.
d. Club Manager	180 g.s.f.
e. Assistant Club Manager	120 g.s.f.
f. Suite Manager	180 g.s.f.
g. Assistant Suite Manager	120 g.s.f.
h. General Offices – eight (8) at 120 g.s.f. each	960 g.s.f.
i. Open Office Areas – fifteen (15) at 100 g.s.f. each	1,500 g.s.f.
j. Board Room, Main Conference Area	600 g.s.f.
k. General Conference Rooms – two (2) at 240 g.s.f. each	480 g.s.f.
l. Visitor Toilets – two (2) at 80 g.s.f. each	160 g.s.f.
m. Copy Room	240 g.s.f.
n. Secure File Room	1,000 g.s.f.
o. Storage Rooms – two (2) at 240 g.s.f. each	480 g.s.f.
p. Break Room	120 g.s.f.
q. Men's Toilet	200 g.s.f.
r. Women's Toilet	200 g.s.f.
s. Work Rooms (2 @ 180 g.s.f.)	360 g.s.f.
t. Expansion (Unfinished in Base Building)	2,000 g.s.f.
u. Circulation – assume 15% of above area.	

Joint Use Football Stadium

Provide AV and video conferencing capabilities in conference rooms and board room. The expansion areas shall be unfinished in "base building."

7. Vikings Ticket Sales/Will Call Work Area.....4,100 g.s.f.

The Ticket Office is open Monday through Friday, event days and during events. The Ticket Office controls all ticket operations including advance and day-of-event sales. They also handle will-call tickets and guest services involving tickets.

Allow 2 feet for each bullet proof Ticket Window and a minimum of 3 feet between each window (5 foot module). Provide a 5 foot wide aisle behind each seller with a minimum 2 foot counter on the back wall.

Provide a minimum of 10' overhang to provide rain protection at exterior windows. Incorporate speakers tied to the P/A system, in the overhang above ticket lines for announcements.

Ticket windows shall be provided and conveniently located for event ticket sales. These ticket windows shall be in addition to ticket windows associated with the main ticket office. Counters, cash drawers, deal trays with closures, changeable letter panels, heat, lighting and electrical outlets shall be provided. Handrails for crowd control shall be provided. Four windows for advanced ticket sales shall be conveniently located and accessible from within the stadium at the plaza concourse level. A press entrance will be provided as well as four windows for ticket exchange and will-call windows. If feasible, the advanced sale windows shall be adjacent to the main ticket office.

Provide electronic/LED reader boards over each window, tied to central PC address system (wish list).

Provide remote ticket windows for "will-call" at the Press Entrance.

Provide remote advanced ticket sales windows on the Main and Upper Concourse, and the Club Level, with ticket terminals (computer) and printer(s) and appropriate cooling/heating, power, data and lighting.

Provide space for ticket telemarketing and season ticket sales with an open office area for up to 10 sales staff

Consider a drive-up ticket window.

Locate the Ticket Windows with close proximity to primary entries.

Spectator queuing at the ticket windows shall not obstruct spectators entering the building.

Locate Ticket Offices adjacent to, and with easy access to the stadium Administrative Offices.

The Ticket Sales Windows shall be designed so that they may be partitioned off in a variety of window groupings.

Joint Use Football Stadium

The vault should be masonry construction with a vault door with a combination lock.

Provide sound absorbing partitions between each ticket window to cut down on the transmission of sound between patrons and ticket sellers adjacent to each other (wish list).

Telemarketing/Season ticket sales area should be directly adjacent to the ticket office with direct access to public parking. The reception area could be shared with the main ticket office.

Provide independent HVAC temperature control

Provide telephone paging system.

Provide for security alarms as determined by the security consultant.

Provide closed circuit television.

Provide for four possible ticket systems

Provide for exterior speaker system for announcements and communications

Provide for message centers above ticket windows.

Provide the following:

- a. Twelve (12) ticket windows directly accessible from the exterior of the stadium, for general ticket sales and will-call. Provide approximately 1,200 g.s.f. This space will be SHARED with the Gophers.
- b. Ticket windows shall be provided and conveniently located for event ticket sales. Counters, cash drawers, changeable letter panels, heat, lighting and electrical outlets shall be provided. Handrails for crowd control shall be provided.
- c. Four (4) windows for advanced ticket sales shall be conveniently located and accessible from within the stadium at the plaza concourse level.
- d. A press entrance will be provided as well as four (4) windows for ticket exchange and will-call windows. If feasible, the advanced sale windows shall be adjacent to the main ticket office.
- e. Provide an additional four (4) windows for home and visitors team families and H.S. coaches/recruits or provide a larger area with a counter with 4-5 personnel behind the counter. Allow approximately 300 g.s.f.. The families, recruits and coaches must be in the stadium once assigned a seat. They may not exit this area and re-enter the stadium. The space shall be separate from general ticket windows. This space will be SHARED with the Gophers.
- f. Provide two (2) dedicated ticket windows accessible from the inside of the stadium for future game ticket sales. Provide approximately 100 g.s.f..
- g. *Provide three (3) will-call window positions dedicated to club patrons in the private lobby for club and suite holders only.*
- h. Ticket window spacing to be 5'-0" wide per window.
- i. Ticket Manager Office – 240 g.s.f.
- j. Assistant Ticket Manager Office – 120 g.s.f.

Joint Use Football Stadium

- k. General Offices – provide four (4) offices at 120 g.s.f. each – 480 g.s.f. total
- l. Open Offices – provide ten (10) work stations at 80 g.s.f. each – 800 g.s.f. total.
- m. General Ticket Work Area: Area to include ticket windows, counters, cash drawers, space for ticket computer equipment, changeable letter sign panels at each window, heat and air conditioning, general lighting, electrical outlets and data lines. CCTV provided for security and card key access.
- n. Telephone Room: Provide a room for approximately 6 telephones and computer equipment for each telephone location. The room shall be adjacent to the main ticket windows and approximately 250 g.s.f. in size. CCTV provided for security and card key access.
- o. Ticket Work Room: Provide a work room to consolidate and store money during each game. Provide approximately 400 g.s.f. of area and 240 g.s.f. of vault. Provide CCTV for security and card key access.

IV. GAME DAY MEDIA FACILITIES

Press facilities accommodating the news media shall be provided and appropriately located and oriented within the stadium for football and soccer. Television monitors shall be provided throughout. Two areas shall be provided: one for the working press and one for the broadcast media.

1998 NFL Resolution BC-2, passed unanimously by member clubs states that new/renovated stadiums should provide the following minimum broadcasting requirements, including, but not limited to:

- Locating the TV Booth at 50-yard line location between 40 and 80 feet above the field with minimum width of 24 feet (not including space for 50-yard line cameras).
- Positioning primary elevated covered cameras on TV Booth side between 19 and 25 degrees (to near sideline) with standing positions and unobstructed views.
- Locating high end zone camera positions between 24 degrees and 34 degrees to back of each end zone.
- Having available at least five radio/preseason TV booths.
- Guaranteeing NFL Films two elevated camera locations at approximately the 50-yard line.

The requirements also comply with the requirements for the broadcast of NCAA Football. The following general requirements shall be provided:

1. General Requirements

- a. Team video camera locations shall be provided at the 50 yard line and in the south end zone, both located as high as possible. Each camera location shall have cabling to the pressbox area and the bench locations on the field. These camera locations shall have easy access for equipment and videographers.
- b. Provide enclosed space for instant replay officials and equipment similar in configuration to the coaches' booth.
- c. Adequate space for sound system, telephone, electrical and television equipment shall be provided.
- d. Consider locating Working Press at the back of the Upper Deck seating, with dedicated elevator and stair access.

Joint Use Football Stadium

- e. Provide a Satellite Dish "Farm", and all associated wiring and cable, for up-link and down-link capability.
- f. Make provisions for Digital Television Broadcast systems
- g. Provide Fiber Optic system throughout the Press areas
- h. Provide a secondary video/camera cabling system through the Stadium
- i. Open-tray conduit for television cables shall be provided from all television camera and broadcasting booth locations to television van parking locations.
- j. Provide dedicated elevators from the press box level to the team facility level. At minimum, one elevator should be sized to accommodate network cameras and other large equipment.
- k. Locate press Facilities on Plaza/Field Level and on the Press Level in close proximity to the service/freight elevators and/or press elevator.
- l. Consider sharing home team interview room if Gophers and Vikings interview rooms are located in close proximity to each other.

The following areas are required:

- 2. Press Entrance and Check In.....900 g.s.f.**
 - a. Provide a separate entrance for the press to check in, receive press credentials and access the press box – 500 g.s.f.
 - b. Provide Coat Room immediately adjacent to Press Entrance – 400 g.s.f.
- 3. Press Box – Writing Press.....5,500 g.s.f.**
 - a. Provide appropriate space to accommodate approximately 250 members of the print media.
 - b. Provide expansion for 50 members of the print media on bar stool positions.
 - c. A built in writing counter should be 18" deep with power, data and telephone connections at each workstation. Each workstation to be approximately 30" wide, minimum.
 - d. Provide storage for coats and personal belongings behind the press counter in the tiered row.
 - e. Provide PA system plus adequate plenum/ceiling space with HVAC, general illumination and conduit for CCTV.
 - f. Provide space for two (2) to four (4) public wall phones.
- 4. Television HOST Broadcast600 g.s.f.**
 - a. Provide one (1) network television booth at the 50 yard line with operable windows. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for three (3) announcers, one (1) spotter and one (1) statistician plus space for one (1) to two (2) cameras and lighting and sound equipment
 - b. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
- 5. Auxiliary TV Broadcast Booth.....200 g.s.f.**
 - a. Provide one (1) network television booth adjacent to HOST Broadcast Booth with operable windows. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - b. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
- 6. National Radio Broadcast Booth.....200 g.s.f.**

Joint Use Football Stadium

- a. Provide one (1) booth adjacent to HOST Broadcast Booth with operable windows.
 - b. Hard wire broadcast cable from booth to terminal head in gear and Media Truck parking.
 - c. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - d. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
- 7. Home Radio Broadcast Booth.....200 g.s.f.**
- e. Provide one (1) one booth adjacent to National Radio Broadcast Booth with operable windows.
 - f. Hard wire broadcast cable from booth to terminal head in gear and Media Truck parking.
 - g. Provide room for two (2) announcers, one (1) spotter, one (1) statistician and two (2) support staff.
 - h. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
- 8. Auxiliary Radio Broadcast Booths – six (6) at 160 g.s.f. each.....960 g.s.f.**
- a. Each booth should have a minimum of four (4) seats across the front.
 - b. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - c. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling plus operable glazing at the field side.
- 9. Coaches Booths – two (2) at 200 g.s.f. each.....400 g.s.f.**
- a. Provide one (1) booth each for home and visiting team coaches.
 - b. The booths must be the same size and at equal distance from the 50 yard line.
 - c. Provide for five (5) coaches at the window in each plus four (4) assistants at a second counter. Provide space for the coaches of both teams (equal facilities).
 - d. There should be built-in counters at each seating tier, with five (5) spaces at the front row and telephone, power and data at each seating space.
 - e. There should also be space for TV monitors at the front of the booth that are visible to both tiers of seating without obstructing the view of the field.
- 10. Officials Booth160 g.s.f.**
- a. The booth should have a minimum of four (4) seats across the front. Each booth should have a minimum of four (4) seats across the front.
 - b. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - c. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling plus operable glazing at the field side.
- 11. Instant Replay160 g.s.f.**
- a. The booth should have a minimum of four (4) seats across the front. Each booth should have a minimum of four (4) seats across the front.
 - b. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - c. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling plus operable glazing at the field side.
- 12. Internet/Auxiliary Booth160 g.s.f.**
- a. The booth should have a minimum of four (4) seats across the front.

Joint Use Football Stadium

- b. Hard wire broadcast cable from booth to media/TV truck parking. Provide room for two (2) announcers, one (1) spotter and one (1) statistician.
 - c. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling plus operable glazing at the field side.
 - d. Provide telephone, data and CCTV.
- 13. Team Video – three (3) at 160 g.s.f. each480 g.s.f.**
- a. Each booth should have a minimum of four (4) seats across the front.
 - b. Hard wire broadcast cable from booth to media/TV truck parking.
 - c. Provide a booth with built-in counter, special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
 - d. Provide telephone, data and CCTV.
- 14. Team Operations200 g.s.f.**
- a. The booth should have a minimum of five (5) seats across the front. Up to ten (10) staff will occupy this booth.
 - b. Provide telephone, data, CCTV and PBX
 - c. Provide a booth with built-in counter and operable glazing at the field side.
- 15. Security Booth... ..200 g.s.f.**
- a. Each booth should have a minimum of five (5) seats across the front. Up to ten (10) staff will occupy this booth.
 - b. Provide telephone, data, CCTV
 - c. Provide a booth with built-in counter plus operable glazing at the field side.
 - d. Consider linking to a Team Operations Booth
- 16. Statisticians..... ..400 g.s.f.**
- a. Each booth should have a minimum of five (5) seats across the front
 - b. Provide one (1) booth (oversized) to accommodate ten (10) statisticians, and one (1) press box announcer.
 - c. A Work Room space adjacent to the working areas shall be provided for statisticians, document reproduction, and fax equipment. Space shall be prewired with TV cable, data and phone lines.
 - d. Provide telephone, data and CCTV.
- 17. PA and Sound Control..... ..160 g.s.f.**
- a. Provide one (1) booth for Sound Control and PA Announcer.
 - b. Provide for six (6) staff minimum.
 - c. This space for announcer and assistants with built-in counter will contain all controls required for a public address system serving the entire stadium.
 - d. Public address booth shall have operable sash windows.
- 18. Scoreboard Operator..... ..850 g.s.f.**
- a. This space shall be provided with built-in writing counters.
 - b. All wiring, control panels, and other equipment required for operation of the scoreboard equipment and instant replay boards.
 - c. Provide a computer type access floor in the Scoreboard Control Room.
 - d. An in-house TV distribution system shall be prewired from this control room distributed throughout the Stadium. The in-house distribution system shall have the capability to pick up and distribute outside signals from local, cable and satellite feeds.
- 19. Visiting Athletic Director's Booth..... 400 g.s.f.**

Joint Use Football Stadium

- a. Provide space for a minimum of eight (8) seats, four (4) to six (6) across the front.
- b. Provide FF&E similar to suites.

20. Photographer Platforms.....700 g.s.f.

- a. Provide space at the 50 yard line for 15 cameras at a minimum of 3'-0" on center
- b. Provide space for 4 cameras at each end zone. 150 g.s.f. each.
- c. Provide three wall enclosure and roof structure with power outlets.

21. Broadcast Camera Locations

Television camera platforms shall be located at the 50 yard line, the 25 yard lines, each end zone and reverse angle. Two camera positions shall be located at field level; one in each end zone aligned with each hash mark. The broadcast media will be consulted regarding all aspects including booth, platforms, conduit and electrical requirements.

22. Press Dining/Lounge..... 3,000 g.s.f.

- a. Provide a Press Club/Dining Area, for press personnel, that contains dining facilities seating for approximately 200 persons and provisions for buffet food and beverage service. This space shall be adjacent to the working press area in the press box.
- b. Food will be prepared elsewhere and served buffet style in this club area
- c. Provide for HVAC and general illumination.
- d. Provide space for press catering/service adjacent to the Working Press, used as storage and an ice machine.
- e. Provide secure storage adjacent to the Working Press area for storage of computers, etc.
- f. Provide media wall for 12 television sets that show other NFL games broadcast simultaneously. This system should also be connected to closed circuit television.

23. Work/Copy Room..... 400 g.s.f.

- a. Provide space adjacent to the working press for document reproduction including copy machines, fax machine and counter space.
- b. Room should include electrical outlets and small amount of storage space for basic supplies.
- c. Locate the room immediately adjacent to Statisticians.

24. Storage.....500 g.s.f.

- a. Provide secured storage room for supplies, media guides, football programs, etc.

25. Restrooms.....40 g.s.f.

- 1. Provide men's and women's restrooms at broadcast and writing press levels.
- 2. The following ratio will be used:
 - a. Lavatories:
 - Men: 4 fixtures@ 1 per 50 (200 seats)
 - Women: 4 fixtures@ 1 per 50 (200 seats)

Joint Use Football Stadium

- b. Waterclosets:
 - Men: 5 fixtures@ 1 per 40 (200 seats)
 - Women: 4 fixtures@ 1 per 40 (200 seats)

- c. Urinals:
 - Men: 50% of the waterclosets to be urinals
= 2 fixtures

Field Level Media Facilities

The following spaces shall be located on the Service level with access to the field, and the exterior of the stadium.

26. Home Team Interview Room (Vikings & NCAA Visitors).....2,000 g.s.f.

- a. Provide a media interview room to accommodate approximately 80 media, players and coaches.
- b. The interview room should be in close proximity to the home team facility and easily accessible for both the media and the team.
- c. Pre-wire room for local and national broadcast media.
- d. Locate immediately adjacent to Viking's Locker Room. Athletes and Head Coach should have direct access to interview room from respective locker rooms.
- e. Provide dedicated access for the press from a secure area. The press should not enter the interview room from locker room facilities
- f. Provide dedicated and controllable access to Locker Room from Interview Room for media/ press. Provide three entrances into the Interview Room(s) on opposite sides of the room to accommodate athletes, coaches & media separately.
- g. Provide provisions to secure locker room if deemed necessary by coaching staff under special circumstances. One entrance will be for players, one for head coach and the other entrance will be for press.
- h. This room shall be accessible by television cable tray.
- i. Electrical requirements shall be provided, but with pre-wiring for TV cable, data and phone lines.
- j. A ceiling pipe grid for lighting shall be provided in each interview room.
- k. Television networks and local affiliates shall be consulted in the final design of the Interview Room.

27. Home Team Interview Room (Gophers & NFL Visitors).....2,000 g.s.f.

- a. Provide a media interview room to accommodate approximately 80 media, players and coaches.
- b. The interview room should be in close proximity to the home team facility and easily accessible for both the media and the team.
- c. Pre-wire room for local and national broadcast media.
- d. Locate immediately adjacent to Gopher's Locker Room. Athletes and Head Coach should have direct access to interview room from respective locker rooms.
- e. Provide dedicated access for the press from a secure area. The press should not enter the interview room from locker room facilities
- f. Provide dedicated and controllable access to Locker Room from Interview Room for media/ press. Provide three entrances into the Interview Room(s) on opposite sides of the room to accommodate athletes, coaches & media separately.

Joint Use Football Stadium

- g. Provide provisions to secure locker room if deemed necessary by coaching staff under special circumstances. One entrance will be for players, one for head coach and the other entrance will be for press.
 - h. This room shall be accessible by television cable tray.
 - i. Electrical requirements shall be provided, but with pre-wiring for TV cable, data and phone lines.
 - j. A ceiling pipe grid for lighting shall be provided in each interview room.
 - k. Television networks and local affiliates shall be consulted in the final design of the Interview Room.
- 28. Darkrooms – 3 @ 200 g.s.f.....600 g.s.f.**
- a. Two darkrooms located at the playing field level with counter and sink for developing film.
 - b. Darkrooms for use by Associated Press, UPI and Reuters.
 - c. Each dark room will have a sink, running water, 40 inch high counters, approximately 24 inches deep along two of the four walls and 6 to 8 electrical outlets.
 - d. Additional equipment shall be provided by others.
- 29. Field Photographers Room.....1,000 g.s.f.**
- a. Provide secure space for photographer/videographer staging for both pre- and post-game activities including dining, and meetings.
 - b. Provide Work Room for up to 100 Field Photographers.
 - c. Provide 50 linear feet of 40 inch high counters. Provide power and data hook ups at 25 locations
 - d. Provide two (2) unisex toilets immediately adjacent to Work Room and Dining/Lounge.
- 31. Field Photographers Dining/Lounge..... 1,500 g.s.f.**
- a. A Press Club/Dining Area, for press personnel, shall contain dining facilities seating for approximately 100 persons and provisions for buffet food and beverage service.
 - b. Food will be prepared elsewhere and served buffet style in this club area
 - c. Should be in close proximity to field access/ tunnel
 - d. Provide for HVAC and general illumination.
 - e. Provide space for press catering/service adjacent to the Dining/Lounge used as storage and an ice machine.
 - f. Provide secure storage adjacent to the photographer area for storage.
- 32. TV Truck Parking – Main Area..... TBD**
- a. Provide parking for television vans/ tractor/ trailers, 4 local and 4 network shall be provided within the stadium as close to the press box facilities at feasible.
 - b. Parking area shall be secure.
 - c. Provide adequate area for Monday Night Football Equipment.
 - d. Adjacent electrical and telephone equipment rooms shall be provided, with dedicated risers up to the Press Level.
 - e. Pre-wired bulkheads shall be provided with connection to broadcast camera locations.
 - f. Directly adjacent to the TV truck parking area, provide a Terminal Gear Room for the equipment required to connect these trucks to the house broadcast/video/ audio cable systems.

- g. Provide a toilet room adjacent to the truck parking area for use by the media personnel.
- h. A general purpose area shall be provided with minimal finishes for broadcast personnel near the TV truck parking area for day of game use. Provide a men's and women's toilet room adjacent to this space.
- i. All Press Facilities shall be connected through a system of open cable trays and/or raceways to allow pre-wiring and the addition of wire and cable for TV and other audio/video systems.
- j. Consult networks and local affiliates in the design of TV Truck Parking Areas.

33. TV Truck Parking – Secondary Area..... TBD

- a. Provide Secondary parking for 4 network television tractor/trailers and vans shall be provided adjacent to or within the stadium as close to the press box facilities at feasible. This area will be used in instances when back to back televised games occur such as a College Game on Saturday and a NFL Game on Sunday.
- b. Adjacent electrical and telephone equipment rooms shall be provided, with dedicated risers up to the Press Level.
- c. Pre-wired bulkheads shall be provided with connection to broadcast camera locations.
- d. Directly adjacent to the TV truck parking area, provide a second Terminal Gear Room for the equipment required to connect these trucks to the house broadcast/video/ audio cable systems.
- e. Provide a toilet room adjacent to the truck parking area for use by the media personnel.
- f. A general purpose area shall be provided with minimal finishes for broadcast personnel near the TV truck parking area for day of game use. Provide a men's and women's toilet room adjacent to this space.
- g. All Press Facilities shall be connected through a system of open cable trays and/or raceways to allow pre-wiring and the addition of wire and cable for TV and other audio/video systems.
- h. Consult networks and local affiliates in the design of TV Truck Parking Areas.

34. TV Production Studio/ Video Editing (WISH LIST).....2,500 g.s.f.

- a. TV Production Studio/Video Editing provides pre- and post-game interviews that can be done by the broadcaster(s) covering the game and by the local TV crews after the game broadcaster goes off the air.
- b. Provide Studio Space including special acoustical treatment on walls and ceiling, pipe grid for lighting on ceiling, and operable glazing at the field side.
- c. TV Production Studio requires high ceiling and adequate air conditioning and power.
- d. Hard wire broadcast cable from booth to terminal head in gear and Media Truck parking.
- e. Provide Control Room and Video Editing Suite
- f. Provide adequate storage for set, props and supplies.
- g. This room will be shared by the Vikings and the Gophers

35. Fixed Camera Locations

- a. Television camera platforms shall be located and prewired. Prewiring shall be included from camera location back to broadcast truck area, as well as to scoreboard control room. The broadcast media will be consulted regarding all

Joint Use Football Stadium

- aspects including booth, platforms, conduit, and electrical requirements. All fixed camera locations are to be verified with networks and in-house personnel.
- b. Provide mid-level 50 yard line camera position. Locate space for a minimum of six (6) cameras at the fifty yard line within the press area for use by network TV (4) and NFL Films (2). This camera location shall be adjacent to the broadcast media booth(s).
 - c. Provide high 50 yard line (Team) camera position. Locate space for a minimum of two (2) cameras at the top of the Upper Deck seating area on the fifty yard line for use primarily by the team videographer. *Provide elevator access to this camera location.*
 - d. Provide high End Zone Center (Team) camera position. Locate space for a minimum of (2) cameras at the top of the Upper Deck seating area, between the hash marks on the field, for use primarily by the team videographer. *Provide elevator access to this camera location if possible.*
 - e. Provide low End Zone camera position. Locate space for two cameras in each end zone, one centered on each hash mark of the field, in the end zone. Vertical distance from the field to these cameras should be between 8 feet and 10 feet to allow still photographers to move and kneel in front of these cameras. These cameras should not interfere with the spectators' view of the game.
 - f. Provide mid level 25 yard line camera position. Locate space for two cameras at each twenty-five yard line, on the same side of the field as the press.
 - g. Provide reverse angle camera position. Locate space for two cameras each at the fifty and each twenty-five yard lines, at the front of the Upper Deck seating, on the opposite side of the field from the press area.
 - h. Provide unmanned fixed cameras as follows:
 - Attached to each goal post, in the center between the up-rights.
 - Aimed at the 30 second clock.
 - Aimed at the game clock.
 - *An off-site camera to view the project, at a location to be determined (not in the Project scope)*
 - Ideally these are on an isolated feed not subject to fan interference.
 - i. Handheld/Camera Truck Locations
 - Allow for eight (8) hand held cameras, four (4) each sideline, and two (2) truck mounted cameras, on the home team sideline.
 - These camera locations shall have connections to the facility network systems via outlets located in the field wall.

V. RETAIL AND MERCHANDISING

1. **Hall of Fame.....2,000 g.s.f.**
 - a. Provide shell space for a future Minnesota Football Hall of Fame display area, and storage.
 - b. Locate Team Store and the Hall of Fame adjacent to the main entrance, on grade.
 - c. Accessibility should be from both outside and inside the stadium. These spaces will be stocked from the loading docks.
 - d. Provide 500 g.s.f. of storage
 - e. Consider sponsorship opportunities.
 - f. Consider large format video board to show other games, stadium information and in house video feed.

Joint Use Football Stadium

- 2. Permanent Novelty Stands.....5,600 g.s.f.**
 - a. Permanent novelty stands shall be appropriately distributed throughout the facility offering a traditional range of sale items.
 - b. Locate novelty stands on the Upper and Main Concourses, Suite Levels, and on the Club level, across or adjacent to major entry points and next to high traffic areas such as ramps and/or entrances.
 - c. Allow space 400 g.s.f. each.
 - 4 @ Main Concourse
 - 2 @ Club Level
 - 2 @ Suite level
 - 4 @ Upper Concourse
 - e. Provide Novelty Distribution/Storage Room (2 @ 200 g.s.f. each)
 - f. Provide Team Merchandising Offices (2 @ 200 g.s.f. each)
 - g. Locate Novelty Distribution/Storage Rooms on the Main and Upper Concourses with easy access to a freight elevator and loading dock.

- 3. Main Retail Store.....8,000 g.s.f.**
 - a. Locate the store with public access from the outside of the stadium as well as from the stadium side (or interior). The store should be easily accessible from the exterior located near major pedestrian traffic way with parking in close proximity. The store may operate year-round.
 - b. Space to consist of four (4) wall enclosure, roof, general illumination and HVAC.
 - c. Provide Merchandise Storage Area with easy access to loading dock.

- 4. Day of Game Team Store.....2,000 g.s.f.**
 - a. Day of game use only.
 - b. Provide a prominent location of the main concourse, opposite of the main Vikings and Gophers stores.
 - c. The store should be easily accessible from the exterior located near major pedestrian traffic way with parking in close proximity. The store may operate year-round
 - d. Space to consist of four (4) wall enclosure, roof, general illumination and HVAC.
 - e. Provide Merchandise Storage Area

- 5. Retail Store Storage..... 4,000 g.s.f.**
 - a. Provide bulk storage for general merchandise.
 - b. Provide space for shelving units.
 - c. Provide general lighting.
 - d. Storage room must be dry.
 - e. Extend walls to structure above.

- 5. Novelty Storage..... 2,000 g.s.f.**
 - a. Provide bulk storage for general merchandise.
 - b. Provide space for shelving units.
 - c. Provide general lighting.
 - d. Storage room must be dry.
 - e. Extend walls to structure above.

VI. GENERAL STADIUM – SHARED FACILITIES

Joint Use Football Stadium

1. Collegiate Visiting Team Facilities

Locate in close proximity to Gophers'/Collegiate Facilities. Provide direct, and convenient access to the field – opposite side of the field from the Gophers field access.

- a. Visiting Team Entry.....250 g.s.f.**
 - 1. Provide direct and secure access to the locker room facility from service tunnel.
 - 2. Configure door and vestibule to screen visual access into the locker room from the corridor.

- b. Visiting Team Locker Room.....5,400 g.s.f.**
 - 1. The locker room should accommodate 75 lockers for players approx. 24"W x18" D.
 - 2. Optimize wall space with 4'x8' marker boards.
 - 3. Provide a digital game clock.

- c. Coaches Locker Room.....720 g.s.f.**
 - 1. Provide 16 lockers (18" x 18").
 - 2. Provide an adjacent restroom and shower facility. Approx. 250 g.s.f..
 - 3. Provide cleat proof carpet.

- d. Training Room.....800 g.s.f.**
 - 1. Provide four (4) 4' taping tables.
 - 2. Provide four (4) 7' treatment tables.
 - 3. Provide a hand sink, counter top and base cabinets.
 - 4. Provide 10 metal lockers 12" wide x 18" deep.

- e. Physicians Exam Room.....150 g.s.f.**
 - 1. Provide a secured room to accommodate one 7'-0" treatment table and securable base cabinets.
 - 2. Provide direct access to the training room.

- f. Equipment Storage Room.....500 g.s.f.**
 - 1. Provide a dry securable room for year round storage.
 - 2. Walls shall extend to structure above.
 - 3. Provide a four (4) foot wide door to accommodate equipment transfer.
 - 4. Provide an equipment transfer window 4'-6' wide.

- g. Team Toilets/Showers.....1,500 g.s.f.**
 - 1. Provide a minimum of 7 lavatories, 5 waterclosets and 7 urinals.
 - 2. Provide a minimum of 15 showerheads.
 - 3. Provide floor drains.
 - 4. Partitions shall be ceiling hung.
 - 5. Provide mirrors with shelf below.

- h. Unisex Shower Facilities.....240 g.s.f.**

Joint Use Football Stadium

1. Provide a unisex toilet for male and female training and equipment staff.

3. NFL Visiting Team Facilities

Locate in close proximity to NFL/Vikings Facilities. Provide direct, and convenient access to the field – opposite side of field from Vikings field access.

- a. Visiting Team Entry.....250 g.s.f.**
 1. Provide direct and secure access to the locker room facility from the service tunnel.
 2. Configure door and vestibule to screen visual access into the locker room from the corridor.
 - b. Visiting Team Locker Room..... 3,600 g.s.f.**
 1. The locker room should accommodate 60 lockers for players approx. 24"W x 18" D.
 2. Optimize wall space with 4'x8' marker boards.
 3. Provide a digital game clock.
 - c. Coaches Locker Room.....720 g.s.f.**
 1. Provide 24 lockers (18" x 18").
 2. Provide an adjacent restroom and shower facility - Approximately 250 g.s.f..
 3. Provide cleat proof carpet.
 - d. Training Room.....800 g.s.f.**
 1. Provide four (7) 4' taping tables.
 2. Provide four (7) 7' treatment tables.
 3. Provide a hand sink, counter top and base cabinets.
 4. Provide 10 metal lockers 12" wide x 18" deep.
 - e. Physicians Exam Room.....150 g.s.f.**
 1. Provide a secured room to accommodate one 7'-0" treatment table and securable base cabinets.
 2. Provide direct access to the training room.
 - f. Equipment Storage Room.....500 g.s.f.**
 1. Provide a dry securable room for year round storage.
 2. Walls shall extend to structure above.
 3. Provide a four (4) foot wide door to accommodate equipment transfer.
 4. Provide an equipment transfer window 4'-6' wide.
 - g. Team Toilets/Showers.....1,000 g.s.f.**
 1. Provide a minimum of 7 lavatories, 5 water closets and 7 urinals.
 2. Provide a minimum of 15 showerheads.
 3. Provide floor drains.
 4. Partitions to be ceiling hung.
 5. Provide mirrors with shelf below.
- 4. Auxiliary Visiting Team Locker Room Facilities – 2 @ 4,100 g.s.f....8,200.g.s.f.**
Provide two (2) auxiliary visiting team locker room facilities with direct and convenient access to the field including:

Joint Use Football Stadium

- a. **Visiting Team Locker Room.....2,000 g.s.f.**
 - 1. The locker room should accommodate **50 lockers** for players approx. 24"W x 18" D.
 - 2. Optimize wall space with 4'x8' marker boards.
 - 3. Provide a digital game clock.

- b. **Coaches Locker Room.....360 g.s.f.**
 - 1. Provide 12 lockers (18" x 18").
 - 2. Provide an adjacent restroom and shower facility
 - 3. Provide cleat proof carpet.

- e. **Training Room.....400 g.s.f.**
 - 1. Provide four (4) 4' taping tables.
 - 2. Provide four (4) 7' treatment tables.
 - 3. Provide a hand sink, counter top and base cabinets.
 - 4. Provide 10 metal lockers 12" wide x 18" deep.

- f. **Physicians Exam Room.....150 g.s.f.**
 - 1. Provide a secured room to accommodate one 7'-0" treatment table and securable base cabinets.
 - 2. Provide direct access to the training room.

- g. **Equipment Storage Room.....250 g.s.f.**
 - 1. Provide a dry securable room for year round storage.
 - 2. Walls shall extend to structure above.
 - 3. Provide a four (4) foot wide door to accommodate equipment transfer.
 - 4. Provide an equipment transfer window 4'-6' wide.

- h. **Team Toilets/Showers.....800 g.s.f.**
 - 1. Provide a minimum of 5 lavatories, 4 water closets and 5 urinals.
 - 2. Provide a minimum of 15 showerheads.
 - 3. Provide floor drains.
 - 4. Partitions to be ceiling hung.
 - 5. Provide mirrors with shelf below.

- 5. **Officials' Locker Room - 2 @ 600 g.s.f.....1,200 g.s.f.**

Provide two Officials' Locker Rooms. Each locker room shall be a total of 600 s.f. These locker rooms shall have a TV monitor, counter space with under counter refrigerator, and two telephones.

 - a. Locker room shall include 10 lockers
 - b. Provide shower and toilet room including 3 showers and 1 water closet, 1 urinal, and 2 lavatories with mirror and shelf shall be provided.
 - c. Provide metal lockers 36" wide by 30" deep in each locker room.
 - d. For Officials' Locker room follow the Home Football Team Team's Locker Room requirements except provide a minimum door height of 8'-0".
 - e. Provide independent HVAC temperature controls.
 - f. Paging system within locker area shall be provided.
 - g. Television cable feeds and closed circuit television shall be provided.
 - h. Provide game clock in locker area.
 - i. Cabling for radio/TV interviews shall be provided.
 - j. Provide ring down phone system for radio/TV announce positions.

Joint Use Football Stadium

- k. Provide cleat proof carpet.
 - l. Locate the Officials' Locker Room with direct access to the field through a non-public vomitory.
- 6. Officials/Chain Crew.....600 g.s.f.**
- a. Provide 10 full height metal lockers (18"W x 18" D)
 - b. Provide adjacent unisex restrooms.
 - c. Provide cleat-proof carpet.
 - d. Provide a digital game clock.
- 7. X-Ray Room/Darkroom.....300 g.s.f.**
- An X-Ray Room shall be provided adjacent to both the home and visiting team facilities, with direct access to the field. The required provisions shall be made for X-Ray equipment that can be used by all teams.
- a. Room to be accessible to home and visiting teams.
 - b. Provide space for minimal x-ray equipment.
 - c. Provide a counter sink approximately 18" x 24" in the darkroom.
 - d. Provide lockable base cabinet with countertop for film bin and other equipment storage.
 - e. Consider sponsorship opportunities for the X-Ray Room and Equipment.
 - f. Provide phone and data capabilities.
- 8. Player Relatives' Waiting and VIP Room.....1,500 g.s.f..**
- a. Locate the Relatives' Waiting Lounge in the player's access path to the locker room. Separate the Relatives' Waiting Lounge from the locker room area. Locate along players' entering or exiting paths. Provide access to elevators to allow circulation to seats.
 - b. Post game waiting room for 75 people with toilet facilities for men and women.
 - c. Provide two (2) toilets @ 100 s.f. each
 - d. Provide CCTV, telephone, data
 - e. Provide small kitchen and serving area.
- 9. Stadium Personnel Lockers.....2,000 g.s.f.**
- a. Provide adequate toilet facilities and space for dressing and uniform storage for approximately 500 male and female employees.
 - b. Double tier lockers shall be provided.
 - c. Include the following areas:
 - Men's Locker Room (80 lockers) 825
 - Men's Toilet 175
 - Women's Locker Room (80 lockers) 825
 - Women's Toilet 175
- 10. General Use Lockers – 3 @ 1,000 g.s.f.....3,000 g.s.f.**
- a. Provide three adjacent locker rooms for general use and star/VIPs.
 - b. The Locker Rooms shall be divisible by the use of operable partitions, connecting doors, or similar means, based on the needs of the using group.
 - c. Provide toilet and shower facilities including 5 showerheads, 3 water closets and 3 lavatories in each locker room.
 - d. Provide securable storage in each locker room

11. Security Control Room.....2,100 g.s.f.

Security personnel controls and monitors the security of the Stadium. The security personnel are responsible for security during events and controlling daily stadium operations 7 days a week, 52 weeks a year.

The Control Room shall have direct visual control over the loading dock and employee entry. Within the Security Control area there shall be a Command Post with all video surveillance monitors and emergency monitoring systems, a Security Office, a work room with space for work stations with telephone, power and data, for non-stadium agencies (police and fire department etc), two interview/holding rooms for two people each, and two toilet rooms (men's and women's). The interview/holding rooms shall be adjacent to, but physically separated from the security work room to minimize sound transmission between the two spaces. A small lost and found storage room shall also be provided. Provide the following areas:

- a. The Security Control Post controls and monitors all non-public entrances to the stadium to allow passage of authorized persons and visitors. The Engineering Control area monitors all stadium operations and functions, including mechanical and electrical. The main security and engineering control locations shall have computer systems and monitors for all electronic surveillance equipment, fire alarms and elevator control, security alarms, and other building management and safety systems.
- b. The Fire Command Center will be the primary command post for the Fire Department in the event of a fire or emergency. Building systems and fire protection systems monitors should be located with the ability to operate and override systems as needed by the Fire Department. The Fire Command Center should be a part of the Security Control Post and have exterior access.
- c. Provide Office facilities for the permanent security force as well as a command post for the event day security force shall be provided.
- d. This space shall be equipped with two small temporary detention rooms and a toilet room.
- e. Locate immediately adjacent to loading dock and employee entrance facilities.
- f. Security Control Room shall have a view of Freight Elevators and entrances to Commissary areas.
- g. Provide the following areas:
 - Main Security Control Room 620
 - Security Manager's Office 120
 - Security Open Office 480
 - Lost and Found Storage 100
 - Interview rooms (2 @ 60 sq. ft. each) 120
 - Toilet (2 @ 50 sq. ft. each) 100
 - Conference Room – Crisis Control 560

12. Building Operations Offices.....3,950 g.s.f.

Building Operations Personnel are responsible for managing day to day operations of the building. Building Operations Personnel manage stadium maintenance, cleaning, ushers during an event, deliveries, general stadium maintenance and various other operational activities. Building Operations shall monitor and control all mechanical and electrical systems through a Building Management System (BMS). Consider one (1) system for all building controls.

Joint Use Football Stadium

- a. Locate Building Operations near the security entry to the Service/Field Level. Building Operations Personnel often have meetings with outside people.
- b. The enclosed offices should be groups together to facilitate ease of communication between managers.
- c. Locate the Engineering office/Plan Room adjacent to the Operations Offices.
- d. Security Control Post
- e. Locate the Security Control Post in order to monitor the stadium employee entrance, staging areas, freight/service elevators and dock area.
- f. Locate the Security Control Post adjacent to Building Operations Facilities and First Aid, on the Field/Plaza level.
- g. Locate in close proximity to Employee Locker Rooms and Central Commissary.
- h. Provide the following offices:

• Reception/Waiting/Secretary	400
• Operations Manager	180
• Assistant Operations Manager	120
• Operations Offices (2 @ 150)	300
• Modular/Open Office (4 workstations)	320
• Conference Room	300
• Event Planning Offices (5@120 g.s.f. each)	600
• Break Room	120
• Storage (2 @ 240 g.s.f. each)	480
• Secure Storage	250
• Toilets (2 @ 200 g.s.f. each)	400

13. Ushers, Security and Ticket Takers Meeting Room.....400 g.s.f.

The ushers and ticket takers are responsible for the turnstiles, ticket counts, directing spectators to their seats and providing general information during an event. The ushers will arrive through the employees' entrance, clock in and report to their designated work area.

- a. Provide a check in meeting room for the ushers and ticket takers.
- d. The room is not intended to provide a space for everyone at one time.
- e. The entire staff can be addressed on the concourse or service level.
- f. The ushers, ticket takers, and other event staff are part-time employees.
- g. Most of the security personnel are part-time. Security provides crowd control and aids ushers.
- h. Break Areas should be provided for Usher/Security employee orientations, work assignments and ticket drop counting.
- i. Provide the following spaces:

• Senior Usher Office	120
• Storage	100
• Break/Briefing Room (2 @ 200 s.f)	400

14. Uniform Storage.....250 g.s.f.

Locate adjacent to employee entry and stadium personnel locker room.

15. Promotional Storage Room.....1,000 g.s.f.

Provide dry storage area for athletics game day marketing merchandise such as tee shirts, posters, programs etc.

- 16. Entrances.....800 g.s.f.**
- a. Provide separate entrances for the Employees and Building Operations, Press, Players and Team Administrative offices.
 - b. Entrances shall be secured non-public entrances that are controlled/monitored by the Security Control Post or remote Security Post.
 - c. The team entrances shall allow visiting team bus drop-off and home team parking access to the entrance, through a secured parking/drive area. This team entrance shall provide for equipment delivery through the same secured area.
 - d. Locate the Administrative office entrance near the office staff parking area.
 - e. Locate the Employee Entrance adjacent to the Security Control Post and provide direct access to horizontal and vertical non-public employee circulation elements.
 - f. Press Entrance - Locate the Press Entrance near press parking and press working areas and away from public entrances. Provide access to horizontal and vertical press circulation elements, parking, workrooms, etc.
 - g. Team Entrance - Locate the football/soccer team entrance adjacent to the Locker Room areas, and provide secured direct exterior access to and from the secured parking area and the locker facility.
 - h. Provide the following entry vestibules:
 - Employee Entrance 400
 - Press Entrance 200
 - Team Entrance (including VIP Entry) 200

17. Vertical Circulation and Exit Widths

- a. General
 - 1. Follow local building codes where appropriate, as well as a timed-egress analysis to determine the minimum exit width for stairs, ramps, concourses, vomitories, etc. for appropriate egress.
- b. Ramps
 - 1. Pedestrian ramps will have a maximum average slope per building code and ADA.
 - 2. Ramps and stairs shall be the primary method of moving spectators vertically. Pedestrian ramps shall have a maximum 1:12 slope and adequate widths (20 ft. minimum) to provide easy accessibility to and from all concourse levels.
 - 3. All ramps shall be designed to accommodate small vehicles commonly used for stadium maintenance and concession operations.
- c. Stairs
 - 1. Provide generous, easy and direct access to all levels and functions.
 - 2. Exit stairs shall provide access to and egress from all levels of the stadium. All major stairs shall be utilized in the event of emergency evacuation. Exit stairs shall be sized and located based on time exit analysis.
 - 3. 4 exit stairs serving all levels (minimum)
 - 4. 4 exit stairs between the Suite and Club Levels.
 - 5. Other exit stairs as required by the time exit analysis
- d. Elevators
 - 1. Provide passenger elevators to service general seating areas, club and suite levels.
 - 2. Passenger elevators that accommodate suite and club patrons, physically disabled patrons and first-aid stretchers should be provided.
 - 3. Freight elevators shall accommodate small forklifts or pallet jacks and mechanical equipment.

Joint Use Football Stadium

4. Kitchen service elevator shall accommodate food shuttle service between those areas being supplied from the Event Commissary.
 5. Ten (10) Passenger Elevators, 4,500lb capacity (5'-4" wide by 8'-5" deep platform size) all with 350 f.p.m. speed – two per quadrant located in pairs. At least one elevator shall provide dedicated access to the Press Box, Host Network Broadcast Booth and Owner's Suite.
 6. Two (2) Freight Elevators, one at 15,000lb. capacity (8'-4" wide by 12'-0" deep platform size) all with 150 f.p.m. speed.
 7. One (1) Kitchen service elevator at 10,000 lb capacity (8'-4" wide by 12'-0" deep platform size), 150 f.p.m. traveling from the Field Level to the Suite level. This elevator shall have access to the Commissary on the Field/Plaza level, the Main Concourse, the Central Kitchen on the Club Level, the Suite Level, and the Upper Concourse (wish list).
 8. It is desired that one (1) elevator shall provide access to the top of the seating area, camera locations etc.
 9. Locate the Suite and Club passenger elevators adjacent to the stadium suite entrance lobbies.
 10. Locate freight elevators adjacent to loading docks and commissary, and distribute throughout the quadrants to facilitate the proper function of the facility. These elevators shall service all levels.
 11. Locate the kitchen service elevator to provide service between appropriate levels. Locate near the commissary, if possible.
- e. Escalators
1. Provide space for 4 escalators to the Club Level and 4 escalators to the upper concourse – 8 total.
 2. Escalators shall be exterior grade/transit grade unless enclosed. Provide a sump pump and oil separator.

18. Interior Lighting

- a. Provide adequate general illumination for safe navigation of concourses, toilets, stairs, ramps and vomitories.
- b. Provide adequate general illumination throughout the stadium for maintenance and clean up.
- c. Provide multiple points of central control including the Security Control room and Grounds Crew Office. Other control panels will be determined as the project proceeds.

19. Sound System/CCTV

- a. A distributed sound system is required.

20. Fire Protection

- a. Fire protection shall be provided in enclosed areas where required by applicable building and safety codes.

21. HVAC/Mechanical

- a. Heating, ventilating and air conditioning will be provided at areas such as lobbies, clubs and suites.
- b. Public restrooms and concessions will be provided with heating and ventilating.
- c. Provide hose bibs for misters at field – both sidelines – home team and visiting team sidelines.

22. Mechanical/Electrical

Joint Use Football Stadium

Space for mechanical, electrical, sound, score board, and telephone equipment shall be provided as required throughout the stadium. Hose bibs and electrical outlets for cleaning stadium seating, ramps and concourses shall be provided. Drains and downspouts shall be provided for removal of water from cleaning or precipitation in open-air concourses, ramps and stadium seating bowl.

- a. Mechanical and electrical rooms to be verified once the building size and location is determined.
- b. Systems should meet University standards and approval.
- c. Fire Protection Room - Fire protection equipment such as sprinklers, standpipes, etc., shall be provided as required by applicable building and safety codes. Provide the following Fire Protection Rooms
 - Main Concourse 400
 - Upper Concourse 400
- d. Mechanical Rooms
 - Four (4) @ 8,000 32,000
- e. Electrical Transformer Room
 - One @ Field/Plaza Level 5,000
- f. Electrical Rooms
 - Four (4) on each Level, one per quadrant @ 250 s.f. each 5,000
- g. Pump Rooms
 - Four (4) @ 500 s.f. each 2,000
- h. Telephone Closets
 - Four (4) on each level, one per quadrant @ 100 s.f. each 2,000
- i. Computer (Server) Room
 - Provide four (4) rooms – one on each level @ 150 s.f. 600
 - Locate one room adjacent to Press with power and data
 - Provide adequate HVAC
- j. Provide power on sidelines near team benches for home team and visiting team's use during the game. The Vikings have suggested 5 to 8 outlets.

23. Trash Room/Trash Chutes

- a. Trash rooms to be located on each level including suite and club levels. Provide 1 room per side of stadium. Final size and configuration will be determined.
- b. Trash rooms to have chutes to central location on service level. Trash compactor to be located immediately adjacent to trash chutes. Compactor shall be located immediately adjacent to loading dock facilities with convenient truck access.

24. General Storage.....5,000 g.s.f.

- a. Locate the General Storage adjacent to access to the field and the service corridor, with easy access to the loading docks.

25. Scoreboard/Ad Panels

Provide complete, electrically operated, remote controlled, illuminated scoreboard system with instant replay capability shall be located in each end zone. The scoreboard system includes all remote control equipment located in the Press Box, control wiring conduit from the Press Box to scoreboards, the scoreboards' electrical service and supporting structures and enclosures.

- a. 3 color video screens at 3 locations

Joint Use Football Stadium

- b. 2 black & white matrix scoreboard
- c. 3 auxiliary scoreboards
- d. 4 time of day boards
- e. 2-45 second clocks
- f. Provide up to 16 illuminated ad panels at seating bowl.
- g. Provide optimal opportunities for advertising and sponsorship zones at concourses and major circulation areas. Consider future potential power requirements for these elements.

A complete, electrically operated, remote controlled, illuminated scoreboard system with instant replay capability shall be located in each end zone. The scoreboard system includes all remote control equipment located in a Control Booth adjacent to the Press Box, control wiring conduit from the Control Booth to the scoreboards, electrical service and supporting structures and enclosures.

Due to rapid changes in technology, it is recommended that this component of the project be designed and specified in later stages of design. LED or better technology should be provided and/or accommodated for.

26. Graphics

Provide a coordinated, consistent system of quality graphics throughout the entire stadium. Signage will conform to the Americans with Disabilities Act. At a minimum, directional graphics shall be provided for the entire project. The following signs shall be provided, but not limited to:

- a. Identification of stadium entrances including ticket booths, turnstiles and special entrances.
- b. Signage within the stadium to indicate concourse levels, seating sections, aisles, rows and seat numbers.
- c. Identification of toilet rooms, first aid, exists, and other public facilities
- d. Concession stand signage shall be coordinated with the total graphics program
- e. Site signs as required by site requirements
- f. Interactive media/electronic marquee(s) at escalators (by sponsors)
- g. Media Totems (by sponsors – quantity and scope to be determined)
- h. Theme oriented Concourse graphics and ad panels (by sponsors – quantity and scope to be determined)
- i. Interactive way-finding and information kiosks

27. Custodial Services.....2,000 g.s.f.

The cleaning staff clean all areas of the stadium after and between events. They also clean spills during events that might create a hazard. The cleaning staff work out of cleaning equipment storage (janitors) rooms located on each level, throughout the stadium.

- a. Provide a central space for general cleaning supplies and meeting rooms.
- b. Provide one unisex rest room
- c. Provide a locker room with 18" x 18" x 30"H lockers for 10 staff... 600
- d. Provide Janitor closets (4@100sq ft. each).....400
- e. Provide housekeeping storage with office.....1,000

28. Field Equipment Storage.....5,000 g.s.f.

- a. A dedicated area for the numerous items in the stadium that need to be stored on a seasonal or even basis and may or may not be utilized on a daily basis.

Joint Use Football Stadium

Open storage area within the Service level is used as transitional storage to accommodate items that should be kept accessible.

- b. The main storage area shall be lockable and separate, with direct access to the Service Tunnel. Provide minimum 15' head room. It may be compartmentalized with chain-link fencing or by providing bins located on a storage rack system.
- c. Locate Forklift (propane preferred) and Electric Cart Storage within view of the Control Booth or a security camera. Carts require a fixed storage position for charging. Provide power for charging batteries of carts.
- d. Locate Storage Rooms (2 @ 150 sq. ft.) adjacent to service/freight elevators on the concourses.
- e. Provide for storage of equipment and materials required for maintenance of the playing field. General lighting and security fence shall be provided. This area must be within the stadium and adjacent to the playing field.
- f. Provide ventilated storage space throughout the stadium with easy access to the service corridor.

29. Maintenance Shop..... 3,650 g.s.f.

- a. General storage for the entire stadium. Locate with access to the service tunnel and the truck dock.
- b. There shall be dedicated space within the Maintenance Shop for the facility electrician, carpenter, and plumber, as well as an office for the building engineer.
- c. Enclose facilities for general maintenance of the stadium.
- d. Heating, ventilating and general lighting shall be provided.
- e. Provide the following areas within the Maintenance Shop:
 - General Shop/Storage 2,000
 - Carpenter 500
 - Engineer's Office 150
 - Electrician 500
 - Plumbing/Mechanical 500

30. Maintenance Lockers.....1,000 g.s.f.

- a. Twenty lockers plus toilet and shower facilities for male and female stadium maintenance personnel and field maintenance personnel.
- b. Finished space including heat, air conditioning and lighting shall be provided.
- c. Locate Stadium Personnel and Maintenance Locker Rooms adjacent to the Maintenance Shop and close to the employee entrance.
- d. Provide the following spaces in the Maintenance Locker Room:
 - Men's Locker Room (40 lockers) 350
 - Men's Toilet 150
 - Women's Locker Room (40 lockers) 350
 - Women's Toilet 150

31. Field Maintenance Office/Break Room.....900 g.s.f.

- a. Provide a heated and ventilated space for the grounds supervisor and staff.
- b. Allow adequate space for desks and minimal equipment.
- c. Provide parking for approximately 40 University officials. Number subject to change.
- d. Field Maintenance Office – 250 sq. ft. Office for field maintenance supervisor with adjacent toilet facilities. The space shall be enclosed, finished,

Joint Use Football Stadium

heated, air conditioned, and lighted. A janitor closet with service sink shall be adjacent to the office.

- 32. Loading Dock.....3,000 g.s.f.**
 - a. The Loading Dock will accommodate all deliveries to the stadium on a day to day basis. It is anticipated that deliveries and loading dock activities will be restricted during event days.
 - b. Provide three (3) truck dock stalls with hydraulic dock levelers for simultaneous unloading of trucks and building operations commissary deliveries.
 - c. Provide one (1) truck access door off of the marshaling area for direct access to the field.
 - d. Provide 4'-0" high docks with high speed electric overhead doors (12' high) with dock sealers. Truck parking areas must be level at the dock.
 - e. Provide truck dock lights.
 - f. Provide dock stalls for 65 foot trailers.
 - g. Provide maximum vertical clearance at the track compactor area.
 - h. Provide a refrigerated trash room @ 400 g.s.f.
 - i. Locate three (3) loading docks (one for recycling and two for trash compactor – see below) adjacent to the central commissary. These should be adjacent to the Loading Docks also. Trucks should be able to unload and check goods into the commissary with one trip of the forklift.
 - j. Provide loading bay at ground level for concession/beverage trucks and field access.
 - k. Locate all loading docks, trash and recycling compactors in close proximity and easily accessible to the service/freight elevator.
 - l. Locate the truck dock(s) in visual proximity to the Security Control Post.

- 33. Trash Compactors.....1,000 g.s.f.**

Provide two mechanical, self-loading trash compactors, one wet and one dry, permanently located at the exterior of the stadium near the loading dock to process all refuse.

- 34. Central Ice Making.....TBD**

Provide enclosed space for development of ice making plant for use by concessions and locker rooms. Size as determined by concessionaire.

- 35. Field Toilet – two (2) @ 80 g.s.f. each.....160 g.s.f.**
 - a. Provide space for an ADA accessible men's and women's toilet room with direct access to the field.
 - b. Each toilet room shall have one WC, and one lavatory.
 - c. A refrigerated drinking fountain shall be adjacent to both toilet rooms.

- 36. Playing Field**
 - a. Provide an artificial turf with synthetic grass (i.e. Field Turf), gravity drained playing surface shall be provided. Provide an enclosed space with a view of the field for the irrigation/drainage control room. The selection of the turf shall be mutually agreed upon and compatible with an NFL facility.
 - b. The playing field area shall be designed for an international soccer field 70 yards wide by 110 yards in length and a football field 53.3 yards wide by 120 yards in length.
 - c. A 48 foot minimum distance of the football playing field sideline from the stadium seating shall be provided at the 50 yard line.

Joint Use Football Stadium

- d. A minimum distance of 20 feet shall be provided as clearance between the end line and field walls at the end zone.

37. Game Equipment

Football goal posts and pads (professional and collegiate), ball nets, sideline markers, end zone pylons, personnel vests, coaches' intercom and referee mikes shall be provided.

38. Field Entrance

- a. An opening under the end zone stands shall provide access to the playing field from within the stadium. The entrance shall be adequate for large trucks with minimum 16 foot height clearance. The opening shall be secured an overhead door. An adjacent pedestrian door shall be provided.
- b. Additional entrances to the field for players shall be provided if required.

39. Field Lighting

A complete field lighting system, providing adequate illumination for color television coverage shall be provided. The television networks shall be consulted prior to final design.

40. Catwalk and Catwalk Platforms

- a. Provide a catwalk system below roof level for access to sports lighting platforms, speaker clusters, etc. Flooring shall be checkered plate steel with 4" toe kick plate.
- b. Catwalks should have convenience electrical outlets located throughout.
- c. Provide separate electrical panels for auxiliary lighting, lasers, and other show equipment at catwalk level.
- d. Do not provide bus ducts at catwalk level. Provide convenience outlets and cable hangers throughout
- e. Provide covered outlets adjacent to each seating section for housekeeping and maintenance.
- f. Provide dedicated circuits in end zone for game operations, play clock etc.
- g. Two (2) electrical utility boxes will be recessed in the vertical surface of the field wall for TV network connections. The boxes shall be located at the 50 yard line on each side of the field.
- h. Provide access to cable tray. Provisions for electrical power and telephone connections shall be included. The cable tray will be in a full loop configuration around the service level corridor system and will feed into each vomitory. The cable tray shall connect to Television Trucks and communication risers which feed Media Facilities. Provide one power/communications riser space per quadrant.
- i. Provide telephone outlets at two (2) field access vomitories.
- j. Install fiber optic pathway throughout
- k. Provide ¾" hose bibs with 80 psi and drain for lasers. Provide at two locations – one of each side.

41. Bowl Lighting

The following shall be provided within the Stadium Seating Bowl:

- a. Metal halide sport/event lighting to provide illumination for television broadcasting, sports and special events. The metal halide fixtures shall be generally 100 to 1000 watt fixtures.

Joint Use Football Stadium

- b. Shutter or instant re-strike system which requires additional components for the standard metal halide system, allowing the fixtures to return quickly to full output. (Investigate multi level ballast option).
- c. Additional quartz fixtures to supplement the standard metal halide during the warm-up period, general house lighting, emergency lighting, and special effects.
- d. Illumination in the Stadium Bowl should be designed primarily for television broadcasting. The amount of illumination required to achieve a quality television picture may exceed all illumination levels for normal play.
- e. Plan for High Definition Television (HDTV). An additional truck, antennas and special lighting may be required.

42. Lighting Main Stadium

- a. Sports lighting fixtures with safety straps should be mounted on framework racks adjacent to catwalks, allowing easy access for maintenance and focusing. Catwalks should be located so that fixtures can be aimed to achieve illumination criteria for Television Illumination.
- b. Fixtures should be spaced to minimize glare (consider all camera locations) and achieve illumination uniformity on the playing surface. Event lighting fixtures should allow easy aiming and focusing and should have an integral device for recording and locking the fixed aiming position of the fixture.
- c. Relamping of the fixture should not require moving the fixture from its aimed position. At the completion of the project, the sports lighting contractor should provide an accurate aiming diagram to the facility operator. An instant re-strike lighting system shall be incorporated into the stadium lighting for emergency use.
- d. The perimeter of the Stadium should be perceptible to the spectators. This may be accomplished through the use of accent lighting. A sense of brightness at the back of the seating should be apparent to define the Stadium bowl. Audience participation and reaction is critical to the ambiance of the Stadium; therefore, the seating areas should be visible.
- e. Accent lighting may be used to highlight the exterior, and portions of the interior of the facility, as the design may indicate.

43. Special Mechanical, Electrical, Plumbing Requirements

- a. Building Management Systems (BMS) to provide master control for suites and telephones, sports lighting control (this function also occurs at Sound/Lighting Control Booth), building systems monitoring and televisions.
- b. Combine Lighting, Energy, and HVAC into the BMS.
- c. Provide card readers for employee identification and verification.
- d. Special Mechanical, Electrical, Plumbing Requirements
- e. Provide an empty cable tray/conduit for TV cables, etc., for all camera and broadcasting locations to TV van parking locations. Provide the cable tray in a loop configuration. The cable tray is to run down corridors typically and provide branches into each vomitory. Stack cable trays to separate communications and high voltage.
- f. Pre-cable stadium for simple plug-in set up, or provide permanent, open-sided trays for cable runs.
- g. Provide two (2) rebroadcast transmitters (for different languages) to permit reception of local radio broadcasts by fans within the stadium is suggested.
- h. Provide infrared hearing impaired equipment.

44. Laundry.....550 g.s.f.

Joint Use Football Stadium

- a. Provide a dry securable room with 4 washers and 4 dryers
- b. Walls to extend to structure above.
- c. Locate immediately adjacent to Equipment Distribution and Storage Room.
- d. Provide space for folding and sorting.

45. Dance Squad/Cheerleaders' Room.....1,200 g.s.f.

- a. Provide a room for the home and visiting cheerleaders and dance squad for pre-game and half-time use.
- b. Provide two (2) unisex restrooms adjacent to the Cheerleaders' Room.
- c. Provide a digital game clock.
- d. A ceiling height of 16' minimum is desired.
- e. Provide full height mirrors along the walls.

46. Mascot Room.....200 g.s.f.

- a. Provide a room for mascot uniform storage, dressing and lounge during pre-game and half-time.
- b. Provide two (2) unisex restrooms adjacent to mascot room.
- c. Provide a digital game clock.
- d. A ceiling height of 16' minimum is desired.
- e. Provide full height mirrors along the walls.

47. Gatorade Room.....300 g.s.f.

- a. Provide lockable work room with convenient access to the field @ 50 yard line behind home bench.
- b. Primary counter space, industrial size sinks and refrigeration facilities to support preparation of fluids for athletes during competition.
- c. Locate conveniently to Wet Areas for access to ice machines.

VII. FOOD SERVICE

A. Concessions

1. General

- a. The following shall be subject to the recommendations and/or reasonable requests of the concessionaire.
- b. Concession stands shall be located at all concourse levels and appropriately distributed.
- c. Space for one serving station of approximately 5 linear feet shall be provided for each 200 spectators.
- d. Spaces shall be provided in each stand for ice machines, walk-in coolers and exhaust systems where required.
- e. Appropriate space shall be available within the facility for specialty food stands, and upscale service related to club and V.I.P. spaces.
- f. Each concession stand will be provided with general lighting, sanitary drains, cold water, electrical service and unit heater.
- g. Provide proper ventilation in each stand.
- h. Concourse countertops and overhead rolling doors or grilles shall be provided.
- i. Non-permanent equipment such as hot water heaters, cookers, warmers, beverage dispensers, vent hoods, pizza ovens, freezers, coolers and other equipment as necessary to provide a workable operation will be the responsibility of the Concessionaire.
- j. Assume that ½ of the permanent concession stands are cooking – grill type concessions and equipped with grease duct ventilation.

Joint Use Football Stadium

- k. Concession storage to be located at the rear of each concession or in close proximity at each concession stand.
- l. Concourses will be provided with power outlets distributed to accommodate portable concession stands.

2. General Seating Concession Stands.....30,900 g.s.f.

Note: The following points of sale will be based upon the general seating capacity of approximately 61,800 seats. The seating capacity is subject to change and in turn affects the number of optimum points of sale. All permanent points of sale are preferred.

- a. Points of sale: $61,800/200 = 309$ POS
- b. Lineal Feet (LF) Serving Counter: 309×5 LF = 1,545 LF
- c. Space Allocation: (Assuming approximately 20'-0" stand depth) $1,545$ LF x 20 FT = 30,900 g.s.f. plus circulation.
- d. Concessions will be provided by a combination of fixed and portable food and beverage stands. A variety of food items will be served at the concession stands. Final food preparation will occur at point of sale to the extent possible.
- e. Video menu screens will be used at all concession locations. Wiring and space for video menu screens will be provided at all concession locations. An intercom telephone system linking all concession, vendor and warehouse locations related to the concession location.
- f. A centralized beer and soft drink delivery system shall be provided
- g. Provide twenty (20) portable concession carts on both the concourses and exterior plaza (as permitted by local authorities)
- h. Provide a children's' concession area sized for a child in close proximity to an interactive play area.
- i. Locate concession stands requiring kitchen exhaust on the stadium perimeter wherever possible.
- j. Concession queuing shall not impede the flow of traffic on the concourse.
- k. Provide miscellaneous concession storage areas on the public concourses for storage of portable concession stands and miscellaneous equipment.
- l. Permanent stands will carry closed circuit television broadcasts. Two television monitors per stand.
- m. Provide power and telephone/data connections at regular intervals around concourse perimeters, for portable food and beverage carts. Flexibility in location of these is important.
- n. Equipment in the Concession Stands will be provided in the total project budget. Items to be provided include:
 - Plumbing fixtures and equipment, plumbing/electrical/mechanical hook ups.
 - Extension and completion of mechanical, plumbing and electrical services.
 - General lighting
 - Floor drains
 - Exhaust hoods and risers
 - Counter and security door.

3. Club Seating Concession Stands.....5,600 g.s.f.

Joint Use Football Stadium

Note: The following points of sale will be based upon the club seating capacity of approximately 8,400 seats. The seating capacity is subject to change and in turn affects the number of optimum points of sale. All permanent points of sale are preferred.

- a. Points of Sale: $8,400/150 = 56$ POS
- b. Lineal Feet (LF) Serving Counter: $56 \text{ POS} \times 5 \text{ LF} = 280 \text{ LF}$
- c. Space Allocation: $50 \text{ LF} \times 20 \text{ FT} = 5,600 \text{ g.s.f.}$

- 4. **Club Bar – Four (4) at 400 g.s.f.....1,600 g.s.f.**
 - a. Provide a minimum of two bar locations on the club level. Approximate space required:
 - b. Space is in addition to the club space.

- 5. **Club Restaurant.....19,400 g.s.f.**
 - a. Lobby 500
 - b. Restaurant (400 people) 6,000
 - c. Bar (400 people) 4,800
 - d. Finishing Kitchen and Support Spaces 6,350
 - Restaurant preparation, finishing & assembly.
 - Banquet/Buffer preparation, finishing & assembly
 - Catering preparation, finishing & assembly
 - Cart Staging/storage
 - Storage
 - Dish washing (Restaurant only)
 - Chef's Office
 - General Manager's office
 - Club/Suite Manager's office
 - Employee toilet room(s)
 - Time Clock
 - e. Public Toilet Rooms (2 @ 250 s.f. each) 500
 - f. Private Room – Adjacent to Meeting Room 750
 - g. Public Toilet rooms at Club Lounges are in addition to those required for the patrons seated in the Club Seating
 - h. Locate the kitchen adjacent to the restaurant, with access to the lounges and a food service freight elevator to other levels and the commissary.
 - i. Investigate location for lounges and restaurant with possible views to stadium bowl.
 - j. Each exhaust hood shall have its own exhaust fan to guarantee proper exhaust and balancing. Provide make-up air at source.
 - k. Provide a looped gas pipe system to guarantee even gas pressure.
 - l. Equipment in the Restaurants will be provided in the total project budget. Items to be provided include:
 - Plumbing fixtures and equipment, plumbing/electrical/mechanical hook ups.
 - Extension and completion of mechanical, plumbing and electrical services
 - General lighting
 - Floor drains
 - Exhaust hoods and risers
 - Counter and security door

- 6. **Suite Pantries – Four (4) at 800 g.s.f.....3,200 g.s.f.**

Joint Use Football Stadium

- a. Provide a kitchen pantry for holding and serving food to the club patrons in the club lounge.
- b. A hand wash sink and three (3) compartment sink will be provided.
- c. If required: refrigeration, warming ovens and other equipment necessary for a complete working installation will be the responsibility of the Concessionaire.
- d. The pantry should be in close proximity to a service elevator.
- e. Equipment shall meet Health Department Standards.
- f. Heating, cooling and ventilation will be provided.
- g. Space Allocation will be subject to the recommendation of the Concessionaire
- h. The club/suite pantries are final assembly and distribution locations for food and drink service to the club seats and suites.
- i. No food cooking will occur in the pantries. Cooked food will be brought to the club and suite level from the Central Kitchen adjacent to the restaurant/club on Club Level.
- j. Club Pantries shall be located adjacent to the Club Lounges (two total) on the Club Level, and a Suite Pantry shall be located on each side (total of 2) on the Suite Level with close access to a freight elevator where possible.
- k. Equipment Requirements - Items to be provided include:
 - Plumbing fixtures and equipment, plumbing/electrical/mechanical hook ups.
 - Extension and completion of mechanical, plumbing and electrical services including warming cart power connections.
 - General lighting
 - Floor drains
 - Counters

7. Vendor's Commissary.....6,400 g.s.f.

- a. Provide rooms equally distributed on the public concourses. At a minimum provide four locations on each public concourse. Space allocation: 800 g.s.f. x 8 locations = 4,800 g.s.f.
- b. Provide four (4) wall enclosure for each room, including general lighting, cold water service, electrical service panel and floor drains.
- c. Equipment such as cookers, warmers, beverage storage, freezers and coolers if required will be the responsibility of the Concessionaire.
- d. Main items to be distributed include hot dogs, soda and beer.
- e. These facilities for food handling and storage shall be located on all concourse levels and appropriately distributed (approximately one per quadrant).
- f. The commissaries shall be designed to provide service based on one vendor per 200 spectators and a minimum of 15 square feet per vendor.
- g. Vendors' commissaries shall be complete with finishes and all equipment necessary for operation.
- h. These facilities for food handling and storage shall be located on both the Main and Upper Concourse levels and appropriately distributed (approximately one per quadrant). The commissaries shall be designed to provide service based on one vendor per 200 spectators and a minimum of 20 square feet per vendor. Vendor commissaries shall be complete with finishes and all equipment necessary for operation. A minimum of 50% of all vendor commissaries shall be equipped with grease duct ventilation, to allow in-stand food preparation.

Joint Use Football Stadium

- i. Locate for easy access to spectator seating areas.
 - j. Equipment in the Vendor Commissaries will be provided in the total project budget. Items to be provided include:
 - Plumbing fixtures and equipment, plumbing/electrical/mechanical hook ups.
 - Extension and completion of mechanical, plumbing and electrical services including warming cart power connections.
 - General lighting
 - Floor drains
 - Food service equipment
- 8. Main Commissary Storage/Receiving.....5,000 g.s.f.**
- a. Provide space for general concession storage and food preparation.
 - b. The space is not intended to accommodate a full service kitchen.
 - c. Additional space and programming may be required after further consultation with the University and Concessionaire.
 - d. Provide space for receiving of food and equipment.
 - e. Provide space for the preparation of concession food.
 - f. Provide space for two (2) walk-in freezers (15' x 20') and two (2) walk-in refrigerators (15' x 20'). Freezers and refrigerators to be provided by Concessionaire.
 - g. Provide overhead rolling doors. The Commissary handles receiving, storing, preparation and distribution of dry and perishable food items for the Main Kitchen, Press Room, Restaurant/Bar, Club, Suites, Pantries and Exhibition Center. Food stuffs will arrive via the loading dock. All receivables coming into the stadium will be monitored by the buyer/receiving clerk. The staples are then stored in either the Freezer, Refrigerator, Beer Cooler, Dry Storage, Liquor Storage.
- 9. Central Production Kitchen.....5,000 g.s.f.**
- a. The preparation kitchen will have preparation and assembly, cart staging, cooking, soiled dish/dish washing and pot washing areas.
 - b. The preparation kitchen will prepare food to be distributed to the pantries, Club Lounges, Press Club, the Restaurant/bar, and Suite catering via carts and/or through use of the food service (freight) elevator.
 - c. The carts are covered, stainless steel, and require power to maintain temperature.
 - d. Central Kitchen shall be located adjacent to the Stadium restaurant/bar and the dedicated food service (freight) elevator.
 - e. Central Kitchen shall be located adjacent to the Stadium restaurant/bar and the dedicated food service (freight) elevator, with access to Club Lounges, pantries Central Commissary and the Exhibition Center.
 - f. Locate Central Ice Room adjacent to the Central Commissary and a freight elevator.
 - g. Equipment Requirements
 - Plumbing fixtures and equipment, plumbing/electrical/mechanical hook ups.
 - Extension and completion of mechanical, plumbing and electrical services
 - General Lighting
 - Floor drains
 - Ice machines and storage freezer

Joint Use Football Stadium

- Kitchen equipment, distribution carts.

10. Concession Operation/Storage.....15,000 g.s.f.

- a. Enclosed space for development of offices, food handling, preparation, and storage facilities.
- b. Basic electrical and plumbing rough-in for kitchen equipment, freezers, coolers etc., shall be included. Finishes and equipment for this space and equipment hook-up shall be provided by separate contract.
- c. Provide the following:
 - Walk-in Refrigerator
 - Walk-in Freezer
 - Liquor Storage Room (secured)
 - Cart Staging
 - Receiving
 - Receiving Manager's Office
 - Dry Storage

11. Portable Stand Storage4,000 g.s.f.

12. Concession Lockers.....4,000 g.s.f.

- a. Adequate toilet facilities and space for dressing and uniform storage for approximately 500 male and female employees.
- b. Double tier lockers shall be provided
- c. The food service employees are responsible for all food items within the stadium including concession stands, vending and suites.
- d. Employees who work on an event basis will report to the stadium ready for work, check in at Security Control Booth, check in at the Food Service Uniform Room where they will be issued a uniform (if appropriate), proceed to the locker room and then report to their work station. Showers are not required.
- e. Locate adjacent to Central Commissary.
- f. Locate close to the employee's entrance and to the check-in area for all employees.
- g. Provide architectural finishes, furnishings and equipment rough-in.
- h. 400 total lockers to be composed of half-height lockers (12" x 12" x 36")
- i. Provide the following spaces:
 - Women's Locker Room (200 lockers) 1,200
 - Women's Toilet 400
 - Men's Locker Room (200 lockers) 1,200
 - Men's Toilet 400
 - Uniform Storage/Issue & return 250
 - Laundry (one washer, two dryers) 150

13. CO2 Storage.....200 g.s.f.

- a. Provide bulk storage room for approximately CO2 tanks.
- b. Double door access from major access corridor.
- c. Provide distribution line from truck dock to tanks.

14. Beer Distribution Rooms.....6,800 g.s.f.

Joint Use Football Stadium

Beer and Soda distribution shall be investigated with concessionaire: Have beer and soda supplied at each stand in lieu of a central distribution system for both beer and soda. Primary beer cooler(s) will be located in the Central Commissary. Kegs will be stored in these coolers and distributed to all permanent concession stands.

- a. Provide a total of 8 distribution rooms. Four dispersed on the event level and four dispersed on the upper concourse. It is anticipated that more bottles will be served in lieu of draft beer.
- b. The event level distribution rooms to be 1,000 g.s.f. each for a total of 4,000 g.s.f. Forklift access preferred. Provide 10' x 10' overhead rolling doors.
- c. The upper concourse distribution rooms shall be 700 g.s.f. each for a total of 2,800 g.s.f.. Pallet jack access required. Provide double door access.
- d. Provide space for a cooler in each room.
- e. Provide vertical chases approximately 4' x 4' to distributed stands. Tubing to be distributed to each point of sale.
- f. Locate Beer Coolers and soda syrup tracks within the distribution spaces to ensure easy access via a forklift.
- g. Locate distribution spaces adjacent to service/freight elevators.

15. Press Pantry 2 @ 400 g.s.f.....400 g.s.f.

- a. Provide a pantry for holding and serving food to the press. A hand wash sink and three (3) compartment sink will be provided.
- b. If required: refrigeration, warming ovens and other equipment necessary for a complete working installation will be the responsibility of the Concessionaire.
- c. The pantry should be adjacent to the press dining areas on the field level and press box.
- d. The Press Club Area will serve food and beverages to members of the Press, and include dining space with tables and chairs.
- e. No cooking will occur in the press catering/serving area. Cooked food will be brought to this area from the Central Kitchen. (Disposable plates and cutlery to be utilized here).
- f. Locate in close proximity to the Press Area and Workroom.
- g. Equipment in the Press Club will be provided in the total project budget. Items to be provided include:

16. Concessionaire Office.....600 g.s.f.

- a. Provide a game day office for the concessionaire staff to check-in and be stationed during the game.
- b. The room should be adjacent to the money distribution room.

17. Money Distribution/Consolidation Room.....400 g.s.f.

- a. Provide counter for cash counting and verification for food service personnel and stand captains.
- b. Provide area behind the counter for cash consolidating and floor safe.
- c. The room should be secure and out of visible access from the public.
- d. Provide CCTV for security.
- e. Provide card key access.

18. Administrative Offices – Food Service.....2,600 g.s.f.

The following requirements for Administrative Offices are preliminary and subject to input from the operator, and Client.

Joint Use Football Stadium

- a. Locate the Food Service Administrative Office on the Service Level adjacent to the Central Commissary and Kitchen.
- b. Money room to have direct access to an armored truck and should be close to a vertical access point common throughout the Stadium.
- c. Provide architectural finishes, furnishings and equipment rough-in.
- d. All concessions to have computer link to the Food Service Administrative Office.
- e. Provide the following offices:
 - Food Service Office Work Stations (4@100) 400
 - Receptionist 175
 - Food Service Manager 175
 - Money Room with Safe & 3 Deal Windows 1,000
 - Four (4) Private Offices @ 150 600
 - Conference Room 240

19. Central Ice Room.....2,000 g.s.f.

- a. Locate the Central Commissary accessible via forklift to the Loading Dock.
- b. Locate in close proximity to the dedicated food service (freight) elevator.

VII. Site Requirements

- a. Adequate access and egress to and from a peripheral road system shall be provided.
- b. An easily understandable circulation, parking, and pedestrian movement system focusing on the facility entrances shall be strongly delineated and allow maximum flexibility, efficient movement and freedom of choice of entrance at the perimeter. Provide clearly defined parking areas and pedestrian walks leading to the stadium shall be provided.
- c. Emergency vehicles shall have access to all entrances and the entire perimeter of the stadium.
- d. The number of parking spaces provided on site will be dependent on the size of the site. Appropriate lighting for all parking areas shall be provided.
- e. Appropriate graphics, safety and control devices, and equipment to aid vehicular and pedestrian movement shall be provided.
- f. All storm drainage and utilities shall be provided in accordance with applicable codes and ordinances.
- g. Appropriate security against illegal entry to or improper access within the stadium to include fencing, walls, gates and doors, shall be provided.
- h. Provide 100 feet separation (minimum) between the stadium and any public parking facility.
- i. *The NFL has established new security guidelines that mandate a 100 foot secure outer perimeter around the stadium to "the maximum extent possible." The intent is to limit public access to the facility in secure zones and to restrict access for vehicles and personnel without proper credentials and security clearances. Barriers that prohibit unauthorized access to this perimeter should be provided in areas where public right of ways and private/ secure roads and parking lots adjoin. Final security measures integrated in the design of the facility are subject to review and approval by the NFL and Minnesota Vikings.*
- j. *Please review to Table 1 for site requirements in tabular form.*

VIII. Preliminary Project Finishes Classifications

Joint Use Football Stadium

For the purposes of programming and conceptual pricing exercises, the following identifies finish classifications to be used for the spaces designated within the program documents. This is not intended to serve as a finish schedule or specification of materials.

Classification A – Public Areas (Prefunction Areas, Restaurants and Retail Stores)

- Combination gypsum drywall and wood veneer wainscots construction
- Latex enamel paints over primer coats with multi-colored interior coating (polymix, etc.) over approximately 50% of the wall space
- Commercial grade carpets with custom patterns built up of other carpets
- Ceilings are a combination of 50% gypsum and 50% 2x2 tegular ceiling tile system
- Millwork if provided, is wood veneer over plywood; countertops are plastic laminate over plywood substrate
- Wood veneer doors are set in metal frames

Classification B – Office Grade (Administrative Offices, Conference Rooms, Concession Offices, Business Center)

- Gypsum drywall construction over metal studs
- Latex enamel paint over primer coats
- Commercial grade carpet direct glue down over sealed concrete floors with vinyl base
- 2x2 rectangular ceiling tile system (white)
- Millwork if provided, is wood veneer over plywood; countertops are plastic laminate over fibrous backerboard
- Wood veneer doors set in hollow metal frames

Classification B1 – Office Upgrade (Lobbies and Vestibules)

- Same as Classification B above except:
- Substitute commercial grade carpet for floor tile (high finish) such as stone, terrazo and/or porcelin tiles)
- Add storefront system

Classification B2 – Office Upgrade (Meeting/Breakout Rooms and Ballroom)

- Same as Classification B above except:
- Accommodate multi-media and projection
- Separate temperature control
- Dimmers for lighting
- Vinyl Wall Covering
- Acoustic Treatment
- Provide 6'-0" doors (2 @3'-0")
- Drywall ceilings with soffits and cove lighting

Classification B3 – Office Upgrade (Board Rooms, if any)

- Same as Classification B above except:
- Substitute are plastic laminate countertops with stone laid over plywood
- Add concealed A/V systems with custom millwork

Joint Use Football Stadium

Classification C – Basic Grade (Operation Offices, Event Level and Security)

- Basic masonry construction
- Block filler with epoxy paint
- Commercial grade carpet direct glue down to sealed concrete floors with vinyl base
- 2x4 non tegular ceiling tile system (white)
- Millwork if provided, is plastic laminate over fibrous backer board
- Hollow metal doors with welded steel frames
- Recessed 2x4 fluorescent light fixtures

Classification D – Utility Grade (Concourses, Concession Stands, Toilets and Operation Spaces)

- Basic masonry construction with sealed concrete floors
- Block filler with epoxy paint
- Hollow metal doors with welded steel frames
- Ceilings are open to structure or mylar faced ceiling tile (concession stands and production kitchen)
- Tile Floor / non slip surface (kitchens, pantries and serving areas)
- Ceramic tile walls @ wet areas and food prep (kitchens, pantries and serving areas)
- Millwork if provided, is plastic laminate over marine grade plywood
- Open fluorescent light fixtures

Classification W1 – Wet Area (Toilet Rooms)

- Ceramic Tile Floor and Walls
- Hollow metal doors with welded steel frames
- 2x2 rectangular ceiling tile system (white)
- Millwork if provided, is plastic laminate over marine grade plywood
- Floor Mounted Partitions
- Wall mounted WCs and Urinals – re: Plumbing Narrative
- Wall mounted “changing stations”
- Mirrors above each lavatory

IX General Assumptions for MEPF

The following assumptions were made by M+E Engineers for cost/budgeting purposes. As design proceeds, these assumptions must be tested and verified against program requirements above. General assumptions include: Building will seat 68,500 with a temporary capacity of 72,000 people. Outside air ventilation air is assumed to be 620,000 cfm. Occupied space will be kept at an average temperature of 75F

1) Cooling requirements

Assume 8000 tons required
Chiller plant is in the building and the cooling towers are outside near the building

2) Heating requirements

Assume design temperature of -15F when the building is occupied
Assume 80,000,000 Btu per hour output peak load

Table 1 - Summary of Areas

Revisions are in Italics

Area	Unit	Total Area (g.s.f.)	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
General Stadium		878054	0	17740	Concourse Area to be Verified
Dedicated University Areas		45230	14520	-109030	Does not include circulation
Dedicated Vikings Areas		29070	13020	670	Does not include circulation
Game Day Media		26830	2500	-5100	Does not include circulation
Retail & Merchandising		24800	0	0	Does not include circulation
Shared Facilities		315860	0	9740	Does not include circulation
Food Service		113500	19400	-9400	Does not include circulation
Circulation Assumption/Contingency		110656		-116462	To be Verified
Field Area		96000			
Site Requirements					
National TV Trucks	4				
Local Affiliate Truck Parking	11				
Network Parking	50				
Game Day Staff	150				
Team Parking	100				
Grounds Crew Parking	20				
Concessionaire Staff Parking	30				
Limousine Parking	10				
Visiting Team Parking	6				Buses
Visitor Owner Parking	2				Limousines/Vans
Taxi Queuing - Off Site	20				
Charter Bus Parking	240				
Shuttle Bus Parking & Staging	80				
Drop Off Areas	2				
Emergency Vehicle Parking	8				
Suite Parking (2 cars per suite)	242				
Super Suite Parking (4 cars per suite)	96				
Party Suite Parking (6 cars per suite)	24				
Club Seating Parking (1 car per 4 seats)	2100				<i>Includes Future Expansion</i>
General Parking	5038				
TOTALS	8233	164000	49440	-211842	<i>Concourse & Circulation Area to be Verified</i>

Crawford/Hargreaves
Copyright 11/27/2002

Table 2 - General Stadium Requirements
Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
General Seating	57934	5.0	289670	S		7540	19" wide seats
Seating for Disabled	685	7.5	5138	S			1% of seating
Seating for Companions	685	5.0	3425	S			1 companion per disabled position
<i>Expansion Seating</i>	3500	5.0	NIC				<i>Future Expansion - 19" wide seats</i>
<i>Type A Suites - 121 @ 12 seats</i>	1452	50.0	72600	A		3600	Toilet NIC
<i>Type B Super Suites - 25 @ 24 seats</i>	600	55.0	33000	A1		6600	Includes Toilet
<i>Party Suites - 4 @ 36 seats</i>	144	50.0	7200	A			Toilet NIC
Dedicated University Suites	60	0.0	0				<i>Area and suite count is included in above</i>
Suite Housekeeping	4	400.0	1600	D			
Suite Pantry	4	0.0	0	D			Area included in Section VII. Food Service
Suite Concierge	5	150.0	750	A			
Suite Lobby (ies)	6	300.0	1800	A			
Suite/Club Services Office (Game Day)	1	200.0	200	B			
Outdoor Club Seating	5000	6.5	32500	S			<i>Reduction in Club Seating on 10/23/2002</i>
Super Club Seating	300	75.0	22500	S			
General Club Lounge	6000	13.5	81000	A			<i>Includes future expansion</i>
<i>Field Level Club Seating</i>	1700	6.5	11050	S			<i>Locate in the lower bowl - mid field behind home bench</i>
<i>Field Level Club Lounge</i>	2100	13.5	28350	A			
<i>Club Seating Expansion</i>	1400	6.5	9100				<i>Future Expansion via Seating Retrofit - Build in Stadium</i>
Multi Purpose Meeting Rooms	3	5000	15000	A			
Main Concourse	1	120500	120500	D			Area to be verified based on Bldg Section
Great Hall - Arcade on West Side	1	15000	15000	D			Area to be verified based on Bldg Section
Upper Concourse	1	75000	75000	D			Area to be verified based on Bldg Section
Ticketing/Turnstiles	72	8.0	576	D			Area in Concourse - Exterior Plaza NIC
General Concourse Toilets (men)	372	45.0	16759	W1			
General Concourse Toilets (women)	417	45.0	18771	W1			
<i>Club Seating Toilet Rooms (men)</i>	66	45.0	2977	W2			
<i>Club Seating Toilet Rooms (women)</i>	72	45.0	3256	W2			
Suite Seating Toilet Rooms (men)	38	45.0	1724	W2			
Suite Seating Toilet Rooms (women)	43	45.0	1939	W2			
Family Toilets	16	70.0	1120	W1			
Main First Aid Room	1	1000.0	1000	D			
Main Concourse First Aid	2	600.0	1200	D			
Upper Concourse First Aid	2	600.0	1200	D			
Club/Suite Level First Aid	1	150.0	150	D			
Guest Services Offices	1	600.0	600	B			
Business Center Office - Club Level	1	600.0	600	B1			
Drinking Fountains	NIC		NIC	D			Area included in Concourse
Fan Accommodation/Information	8	100.0	800	D			
TOTALS			878054		0	17740	Does not include concourses

Table 2 - General Stadium Requirements

Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks

Table 3 - Dedicated Areas for University
Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Home Team Entry Lobby	1	400	400	C			
Home Team Locker Room	110	75	8250	C		1650	<i>Increased based on comments - 10/23/2002</i>
Team Toilets/Showers	1	1600	1600	W2			
Team Shower Drying Areas	1	200	200	W2			Toilet NIC
<i>Sauna</i>	<i>0</i>	<i>200</i>	<i>0</i>	W2		-200	<i>DELETED - 10/23/2002</i>
<i>Steam Room</i>	<i>0</i>	<i>200</i>	<i>0</i>	W2		-200	<i>DELETED - 10/23/2002</i>
Head Coaches Locker Room/Office	1	400	400	C			Area is included in above
Coaches Locker Room	20	40	800	C			
Coaches Toilets/Shower	1	300	300	W2			
Coaches Shower Drying Area	1	80	80	W2			
<i>Coaches Meeting Room</i>	<i>1</i>	<i>320</i>	<i>320</i>	C		320	<i>ADDED - 10/23/2002</i>
<i>Warm Up/Stretching Area/Lounge</i>	<i>1</i>	<i>1000</i>	<i>1000</i>	C			
Staff Locker Room	20	40	800	C			
Staff Locker Toilets/Shower	1	300	300	W2			
Staff Shower Drying Area	1	80	80	W2			
Equipment Distribution & Storage	1	1000	1000	D			
<i>Laundry</i>	<i>0</i>	<i>550</i>	<i>0</i>	D		-550	<i>Relocated to General Stadium Shared</i>
Equipment Managers Office	1	120	120	D			
Shoe Room	1	250	250	D			
Trunk Storage	1	1000	1000	D			
Coaches Clothes Storage	1	200	200	D			
Janitorial	1	240	240	D			
Equipment Staff Locker/Break Room	1	240	240	C			
Ball Boy Room	1	120	120	C			
Ball Storage	1	200	200	C			
Training Room	1	1500	1500	C			
Training Staff Locker Room	1	240	240	C			
Wet Areas @ Training Room	1	300	300	W2			
Physicians Exam Rooms	2	300	600	C			Include toilet in each room
Unisex Shower Facilities	2	120	240	W2			Part of Main Concourse - West Side
Training Storage and Work Room	1	500	500	D			Area in Concourse - Exterior Plaza NIC
<i>Training Table</i>	<i>0</i>	<i>7000</i>	<i>0</i>	C	7000	-7000	<i>DELETED - 10/23/2002 - Use Dining Facilities @ Club</i>
<i>Dance Squad/Cheerleaders Room</i>	<i>0</i>	<i>1200</i>	<i>0</i>	C		-1200	<i>Relocated to General Stadium Shared</i>
<i>Mascot Room</i>	<i>0</i>	<i>200</i>	<i>0</i>	C		-200	<i>Relocated to General Stadium Shared</i>
Band Locker Room	2	1200	2400	C			
Band Equipment Storage	1	10000	10000	D			
Band Uniform Storage	1	2000	2000	D			
Band Rehearsal Room	350	15	5250	C			Acoustical Requirements
Band - Private Rehearsal Rooms	8	250	2000	C			Acoustical Requirements
Band Offices	1	800	800	C			

Table 3 - Dedicated Areas for University

Revisions are in *Italics*

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Recruiting Room	1	1500	1500	C			<i>Locate immediately adjacent to Home Locker Room</i>
Classrooms	0	100000	0	C		-100000	<i>DELETED - 10/23/2002</i>
<i>Advance Ticket Windows</i>	4	100		B	400		<i>ADDED 10/23/2002</i>
<i>Ticket Managers Office</i>	1	240		B	240		<i>ADDED 10/23/2002</i>
<i>Assistant Ticket Managers Office</i>	1	120		B	120		<i>ADDED 10/23/2002</i>
<i>General Ticket Offices</i>	4	120		B	480		<i>ADDED 10/23/2002</i>
<i>Open Office Space - Ticket Office</i>	10	80		B	800		<i>ADDED 10/23/2002</i>
<i>Conference Rooms - Ticket Offices</i>	2	240		B	480		<i>ADDED 10/23/2002</i>
<i>Expansion</i>	1	5000			5000		<i>ADDED 10/23/2002</i>
TOTALS			45230		14520	-109030	Does not include circulation

Table 4 - Dedicated Areas for Vikings - Game Day

Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Home Team Entry Lobby	1	400	400	C			
Main-Home Team Locker Room	60	75	4500	C			
Auxiliary-Home Team Locker Room	30	60	1800	C			
Team Toilets/Showers	1	1600	1500	W2			
Team Shower Drying Areas	1	200	200	W2			Toilet NIC
Sauna	0	200	0	W2		-200	<i>DELETED - 10/23/2002</i>
Steam Room	0	200	0	W2		-200	<i>DELETED - 10/23/2002</i>
Head Coaches Locker Room/Office	1	400	400	C			Area is included in above
Coaches Locker Room	24	40	960	C			
Coaches Toilets/Shower	1	300	300	W2			Area included in Section VII. Food Service
Coaches Shower Drying Area	1	80	80	W2			
<i>Warm Up/Stretching Area/Lounge</i>	<i>1</i>	<i>1000</i>	<i>1000</i>	C		-300	<i>Reduced - 10/23/2002</i>
Position Meeting Rooms	3	320	960	C			
Coaches Meeting Room	1	320	320	C			
Staff Locker Room	24	40	960	C			
Staff Locker Toilets/Shower	1	300	300	W2			
Staff Shower Drying Area	1	80	80	W2			
Equipment Distribution & Storage	1	2500	2500	D			
<i>Laundry</i>	<i>0</i>	<i>550</i>	<i>0</i>	D		-550	<i>Relocated to General Stadium Shared</i>
Equipment Managers Office	1	120	120	D			
Shoe Room	1	250	250	D			
Trunk Storage	1	1000	1000	D			
Coaches Clothes Storage	1	200	200	D			
Janitorial	1	240	240	D			
Equipment Staff Locker/Break Room	1	240	240	C			
Ball Boy Room	1	120	120	D			
Ball Storage	1	200	200	D			
Training Room	1	2500	2500	C			
Head Trainers Office	1	150	150	C			
<i>Assistant Trainers Offices</i>	<i>0</i>	<i>120</i>	<i>0</i>	C		-240	<i>DELETED - 10/23/2002</i>
Training Staff Locker Room	1	240	240	C			
Wet Areas @ Training Room	1	300	300	W2			
Physicians Exam Rooms	1	300	300	C			Include toilet in each room
Doping Room	1	300	300	C			Include toilet in each room
Training Storage and Work Room	1	500	500	D			Area in Concourse - Exterior Plaza NIC
Auxiliary Storage Rooms	2	500	1000	D			
Auxiliary Storage Rooms	1	250	250	D			

Table 4 - Dedicated Areas for Vikings - Game Day

Revisions are in *Italics*

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
<i>Dance Squad/Cheerleaders Room</i>	0	800	0	C		-800	<i>Relocated to General Stadium Shared</i>
<i>Mascot Room</i>	0	200	0	C		-200	<i>Relocated to General Stadium Shared</i>
Mascot Storage	1	200	200	D			Lockable storage for Harley and Snow'biles
Mascot Storage	1	400	400	D			For inflatables and Norsman Props
Advance Ticket Windows	4	100	400	B		400	ADDED 10/23/2002
Club Will Call Windows	3	100	300	B			
Inside Stadium Windows	2	100	200	B			
Press Will Call	4	100	400	B			
Ticket Managers Office	1	240	240	B		240	ADDED 10/23/2002
Assistant Ticket Managers Office	1	120	120	B		120	ADDED 10/23/2002
General Ticket Offices	4	120	480	B		480	ADDED 10/23/2002
Open Office Space - Ticket Office	10	80	800	B		800	ADDED 10/23/2002
Conference Rooms - Ticket Offices	2	240	480	B		480	ADDED 10/23/2002
Ticket Office Work Room	1	400	400	B		400	
Vault	1	200	240	B		240	
Telephone Room	1	250	240	B			
Lobby and Reception	1	1000		B	1000		
Director of Sales & Marketing	1	240		B	240		ADDED 10/23/2002
Assistant Direct of Sales & Marketing	1	180		B	180		ADDED 10/23/2002
Club Manager	1	180		B	180		
Club Assistant Manager	1	120		B	120		
Suite Manager	1	180		B	180		
Suite Assistant Manager	1	120		B	120		
Sales and Marketing Offices	8	120		B	960		ADDED 10/23/2002
Open Office - Sales & Marketing	15	80		B	1200		ADDED 10/23/2002
Board Room - Sales & Marketing	1	600		B	600		ADDED 10/23/2002
Conference Rooms - Sales & Mktg	2	240		B	480		ADDED 10/23/2002
Visitor Toilets	2	80		W2	160		
Copy Room	1	240		B	240		
Secure File Room	1	1000		B	1000		ADDED 10/23/2002
Storage	2	240		B	480		ADDED 10/23/2002
Break Area	1	120		B	120		ADDED 10/23/2002
Work Room/Copy Area - S&M	2	180		B	360		ADDED 10/23/2002
Toilets - Sales & Marketing	2	200		W2	400		ADDED 10/23/2002
<i>Expansion</i>	1	5000		D	5000		ADDED 10/23/2002
TOTALS			29070		13020	670	Does not include circulation

Table 4 - Dedicated Areas for Vikings - Game Day

Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks

Table 5 - Game Day Media
Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Press Entrance and Check In	1	900	900	B		0	
Press Box - Writing Press	250	22	5500	B			
Writing Press Expansion	50	12	600	B		600	Locate at the back of seating tier - bar stools
Television Host Broadcast Booth	1	600	600	C			Press Box
Auxiliary TV Broadcast Booth	1	200	200	C			Press Box
National Radio Broadcast Booth	1	200	200	C			Press Box
Home Radio Broadcast Booth	1	200	200	C			
Auxiliary Radio Broadcast Booths	6	160	960	C			Press Box
Coaches Booths	2	200	400	C			Press Box
Officials Booth	1	160	160	C			Press Box
Instant Replay	1	160	160	C			Press Box
Internet/Auxiliary Booth	1	160	160	C			Press Box
Team Video	3	160	480	C			Press Box
Team Operations Booth	1	200	200	C			Press Box
Security Booth	1	200	200	C			Press Box
Statisticians	1	400	400	C			Press Box
PA and Sound Control	1	160	160	C			Press Box
Scoreboard Operator	1	850	850	C			Press Box
Visiting Athletic Directors Booth	8	50	400	A			University Request
Marketing/Sponsorship Booth	40	50	0	A			<i>In existing suite inventory</i>
Photographer Platforms	1	400	400	C			15 photographers
Endzone Photographer Platform	2	150	300	C			Press Box
Press Dining/Lounge	200	15	3000	B			<i>Press Box - 200 at one setting</i>
Work/Copy Room	1	400	400	B			Press Box
Storage	1	500	500	D			Press Box
Restrooms	2	400	800	W2			Press Box
Vikings - Home Team Interview Room	200	10	2000	C			Field
Gophers - Home Team Interview Room	200	10	2000	C			Field
<i>Visiting Team Interview Rooms</i>	0	1600	0	C		-3200	<i>Field - Deleted 10/23/2002</i>
Darkrooms	3	200	600	D			Field
<i>Field Photographers Work Room</i>	1	1000	1000	C		0	<i>Field - REDUCED 10/23/2002</i>
<i>Field Photographers Dining/Lounge</i>	100	15	1500	C		0	<i>Field - 50 photographers at one setting - 10/23/2002</i>
Truck Parking - Main Area	NIC	NIC	NIC	D			Field - Area to be Determined
Truck Parking - Auxiliary Area	NIC	NIC	NIC	D			Field - Area to be Determined
TV Production Studio/Editing Suite	0	2500	0	B	2500	-2500	<i>WISH LIST - 10/23/2002</i>
Fixed - Camera Locations	16	100	1600	S			
TOTALS			26830		2500	-5100	Does not include circulation

Table 6 - Retail and Merchandising
Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Hall of Fame	1	1500	1500	A			
Hall of Fame Storage	1	500	500	D			
Permanent Novelty Stands	12	400	4800	A			
Portable Novelty Stands	8	150	1200				Locate on Concourse
Novelty Distribution/Storage	2	200	400	D			
Team Merchandising Offices	2	200	400	B			
Main Retail Store	1	8000	8000	A			
Retail Store Storage	1	4000	4000	D			
Day of Game Store	1	2000	2000	A			
Novelty Storage	1	2000	2000	D			
TOTALS			24800		0	0	Does not include circulation

Table 7 - General Stadium - Shared Facilities

Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Game of Day Ticket Windows	12	100	1200	B			Shared - Gophers and Vikings
Gophers - HS Coaches/Recruits Tick	4	100	400	B		400	
Visiting Team Locker Room Entry	1	250	250	C			Collegiate Visitors
Visiting Team Locker Room	90	60	5400	C		2400	<i>Collegiate Visitors - INCREASED 10/23/2002</i>
Coaches Locker Room	24	30	720	C			Collegiate Visitors
Training Room	1	800	800	C		200	<i>Collegiate Visitors - INCREASED 10/23/2002</i>
Physicians Exam Room	1	150	150	C			Collegiate Visitors
Equipment Storage Room	1	500	500	D			Collegiate Visitors
Team Toilets/Showers	1	1500	1500	W2		500	<i>Collegiate Visitors - INCREASED 10/23/2002</i>
Unisex Shower Facilities	1	240	240	W2			Collegiate Visitors
Visiting Team Locker Room Entry	1	250	250	C			NFL Visitors
Visiting Team Locker Room	60	60	3600	C		1200	<i>NFL Visitors - INCREASED 10/23/2002</i>
Coaches Locker Room	24	30	720	C		240	<i>NFL Visitors - INCREASED 10/23/2002</i>
Training Room	1	800	800	C			NFL Visitors
Physicians Exam Room	1	150	150	C			NFL Visitors
Equipment Storage Room	1	500	500	D			NFL Visitors
Team Toilets/Showers	1	1000	1000	W2			NFL Visitors
Auxiliary Visiting Team Locker Rms (2)	100	40	4000	C			Auxiliary Locker Room
<i>Coaches Locker Room</i>	24	30	720	C		0	<i>Auxiliary Locker Room - REDUCED 10/23/2002</i>
Training Room	2	400	800	C			Auxiliary Locker Room
Physicians Exam Room	2	150	300	C			Auxiliary Locker Room
Equipment Storage Room	2	250	500	D			Auxiliary Locker Room
Team Toilets/Showers	2	800	1600	W2			Auxiliary Locker Room
Officials Locker Rooms	2	600	1200	C			
Officials Chain Crew	1	600	600	C			
Xray/Darkroom	1	300	300	C			
Players Relatives Waiting Area	1	1500	1500	C		500	<i>INCREASED 10/23/2002</i>
Stadium Personnel Lockers	2	1000	2000	D			
General Use Lockers	3	1000	3000	D			
Security Control Room	1	2100	2100	B			
Building Operations Office Lobby	1	400	400	B1		2350	<i>Building Operations</i>
Stadium Manager Office	1	180	180	B			<i>Building Operations</i>
General Offices - Bldg Operations	3	150	450	B			<i>Building Operations</i>
Open Offices	4	80	320				
General Conference Rooms	1	300	300	B			<i>Building Operations</i>
Event Organizers Offices	5	150	750	B			
Visitor Toilets	2	80	160	W2			<i>Building Operations</i>
Copy/Work Room	1	240	240	B			<i>Building Operations</i>
Secure File Room - Bldg Operations	1	250	250	D			<i>Building Operations</i>
Storage Rooms - Building Operations	2	240	480	D			<i>Building Operations</i>
Break Room - Building Operations	1	120	120	B			<i>Building Operations</i>

Table 7 - General Stadium - Shared Facilities

Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
Men's Toilet - Building Operations	1	200	200	W2			<i>Building Operations</i>
Women's Toilet - Building Operations	1	200	200	W2			<i>Building Operations</i>
<i>Dance Squad/Cheerleaders Room</i>	1	1200	1200	C		1200	
<i>Mascot Room</i>	1	200	200	C		200	
<i>Laundry</i>	1	550	550	D		550	
Ushers, Security & Ticket Taker Mtg	1	400	400	C			
Uniform Storage	1	250	250	D			
Promotional Storage	1	1000	1000	D			
Employee Entrance	1	400	400	B			
Press Entrance	1	200	200	B1			
Team/VIP Entrance	1	200	200	B1			
Vertical Circulation - Ramps	6	32000	176000	D			
Fire Room	2	400	800	D			
Mechanical Rooms	4	8000	32000	D			
Electrical Transformer Rooms	1	5000	5000	D			
Electrical Rooms	20	250	5000	D			
Pump Rooms	4	500	2000	D			
Telephone Closets	20	100	2000	D			
Computer Server Rooms	4	150	600	D			
General Storage	1	5000	5000	D			
Custodial Services	1	2000	2000	D			
Field Equipment Storage	1	5000	5000	D			
Maintenance Shop	1	3650	3650	D			
Maintenance Lockers	1	1000	1000	D			
Field Maintenance Offices/Break Rm	1	900	900	B			
Loading Dock	1	3000	3000	D			
Trash Compactors	1	1000	1000	D			
Central Ice Making	1	1000	1000	D			
Service Tunnel - Circulation	1	24000	24000	D			24 feet wide x 20 feet high minimum - Area to be verified
Field Toilets	2	80	160	D			
Video Rooms at Team Sidelines	2	100	200	D			
Gatorade Room	1	300	300	D			Locate at mid field - close to home bench
TOTALS			315860		0	9740	Does not include circulation

Table 8 - Food Service Facilities
Revisions are in Italics

Area	Unit	Unit Area (g.s.f.)	Total Area (g.s.f.)	Finish Classification	Wish List (g.s.f.)	Area Revisions (g.s.f.) as of 11/27/2002	Remarks
General Concessions	309	100.00	30900	D			
Club Seating Concessions	56	100.00	5600	D			
Club Lounge Bars	4	400.00	1600	A			
<i>Club Restaurant Dining</i>	<i>400</i>	<i>14.00</i>	<i>5600</i>	<i>A</i>		<i>-9400</i>	<i>REDUCED 10/23/2002</i>
Club Restaurant Bar	400	12.00	4800	A			Toilet NIC
Waiter/Waitress Stands	4	100.00	400	A			Includes Toilet
Buffet Serving Area	2	800.00	1600	A	19400		Toilet NIC
Restaurant Lobby Area	2	250.00	500	A			Area is included in above
Club Restaurant Kitchen	1	5000.00	5000	D			
Club Restaurant Private Room	50	15.00	750	B			Area included in Section VII. Food Service
Public Toilets	2	250.00	500	W2			
Club Restaurant Office	1	250.00	250	B			
Suite Pantries	4	800.00	3200	D			
Vendors Commissary	8	800.00	6400	D			
Main Commissary Storage/Receiving	1	5000.00	5000	D			
Central Production Kitchen	1	5000.00	5000	D			
Concession Operations/Storage	1	15000.00	15000	D			
Portable Cart Storage	1	4000.00	4000	D			
Concession Locker Room	2	2000.00	4000	D			
CO2 Storage	1	200.00	200	D			
Beer Distribution Rooms (Lower)	4	1000.00	4000	D			
Beer Distribution Rooms (Upper)	4	700.00	2800	D			
Press Pantry	2	400.00	800	D			
Concessionaire Office	1	600.00	600	B			Locate in the Commissary
Money Distribution/Consolidation	1	400.00	400	B			
Food Service Administration Offices	1	2600.00	2600	B			
Central Ice Room	1	2000.00	2000	D			
TOTALS			113500		19400	-9400	Does not include circulation

Appendix II

Design Guidelines

JOINT USE FOOTBALL STADIUM

MASTER PLAN GUIDELINES

Every individual project is expected to contribute to the advancement of the essential elements (built form, landscape, circulation) of the campus. These guidelines apply to all university facilities regardless of the reporting structure of the unit affected.

Efficient Utilization of Lands and Facilities:

The University's Master Plan (1996) suggests that the area east of Oak and north of University Avenue (the existing Transitway parking lots) be transformed into a "park like setting" with playing fields built over "one level of parking". A new location or locations for outdoor rec. sports fields and facilities should be identified and developed as soon as possible.

The Master Plan also identifies the area east of Oak north of 5th Street S.E. as being suitable for development of a "research park." This concept was predicated on the existence of one research building (Lions Lab) having already been built and the anticipation that other facilities were soon to come. The Center for Magnetic Resonance Imaging (CMRI) was added in 1998, and the Translational Research Center (TRC) is in schematic design. The existing and proposed research facilities not be isolated by the development of a stadium.

While the Master Plan did not specifically address the possibility of a football stadium on campus, the Guiding Principles are clear when it comes to the efficient utilization of land and facilities. Multiple use of any facility of this type should be a requirement.

Image/Architectural Character:

The image and architectural character of a stadium for professional football is typically different than that for college football. General location, scale and the desire for "commercial appeal" are three of the principal reasons why the image and architectural character of a stand alone professional football stadium is different than the traditional collegiate facility on campus.

The placement and design of a joint Gophers/Vikings stadium on campus must address the issues of scale and architectural character; and the solution must enhance the overall image and appearance of a campus as functionally well organized and aesthetically "integrated."

The pallet of materials is important, but the design need not be limited by an image of a facility that existed in the past. There are many examples of new buildings on university campuses all across the country (including the U of M – Basic Sciences) that express the traditional values and image of the institution in a contemporary way. It is imperative that this facility do that in a very high quality manner.

Open Space/Landscape:

Open space is something that can be used to both organize a campus and provide opportunities for outdoor social engagement. Open space is also the essential "void" that serves as a "foil" to the mass of any building. The appropriation of open space (locations and amount) and the design of that space, in context with its immediate surroundings and the remainder of the campus will be a significant determinant in the perceived success or failure of this potential project.

Three issues are paramount: (1) the scale of the facility, (2) the relationship of this facility, including the open space, to the remainder of the campus, and three the essential "all season" quality of the open space environment (particularly in Minnesota). Open space must, therefore, be recognized as being as valuable as the facility; should be able to functionally accommodate a range of activities (quiet personal to very active large group); and have an aesthetic attractiveness that welcomes people year round.

Access, Circulation and Parking:

The Master Plan encourages a balanced multi-modal approach to transportation planning. Implicit in this pronouncement is the recognition that there is a limit to the number of parking spaces that should be built on campus for three significant reasons: the loss of valuable land that might be

JOINT USE FOOTBALL STADIUM

used for a higher purpose, the cost to patrons required to amortize ramp or garage spaces, and the infrastructure requirements/congestion associated with large concentrations of parking.

This project will not be permitted to alter service via the University Transitway in such a manner as to lengthen the time of the trip between the Minneapolis East Bank and the Saint Paul campuses. Any transit terminals (bus, LRT, CR) built as a part of this project must be designed to serve the University community / campus, in an optimum fashion, on a daily basis.

It is imperative that any changes to and improvements in the transportation system contemplate the continued growth of the institution, including the need for the development of a public-private research park adjacent to the campus. It is also essential that these improvements facilitate the redevelopment potential, and thereby value to the central city, of the large amount of under utilized land northeast of the campus.

SITE GUIDELINES

Orientation/Focus:

The orientation/focus ("the front door") should be oriented in the direction of the existing campus. If, however, it is assumed that the University is likely to grow in a northeasterly direction (already some campus development in this area, and underutilized land beyond its present boundaries), then a stadium on this site does not have a "back door."

The proposed site might, more correctly, be viewed as a "knuckle" beyond which development, that is in some way associated with the University, is likely to occur. Therefore, the architectural expression of the facility and the open space surrounding the stadium must help connect this potential future development area to the existing campus. It cannot be allowed to become a barrier between the two.

Setback/Landscape Treatment:

The stadium should have a sufficient amount of open space around it to help mitigate its tremendous size (creating a "human" scale environment at the street / plaza level. The setback provided must also be seen as an opportunity to provide a forecourt for adjacent facilities (Williams Arena, Mariucci Arena, Lions Lab, CMRI, and the proposed Translational Research Center).

The landscape treatment must be such that large numbers of people can be accommodated while engaged in a variety of activities. The difficulty of balancing this accommodation against the stark reality of what large expanses of hard surface areas look and feel like over the long Minnesota winter months cannot be understated. It is preferable to make the landscape treatment as "soft" as possible, and therewith expand the concept of a "University Park" (see *Sports Fields and Facilities District Plan – University Park Phase 1, Fall 2002*).

Access, Circulation:

While the Master Plan section of these guidelines focused on vehicular access, this section is focused on pedestrian access and circulation. The integration of this proposed facility with the rest of the campus is essential. This means that this project must help facilitate good pedestrian movement between both the campus and the stadium, and the campus and the land beyond the stadium (recreational sports fields, other future University facilities, and a future public / private research park is essential.

It means that the day to day activities of the University community, e.g. arriving for class or work, or commuting between facilities on campus and facilities in this areas, or going between future facilities in the immediate vicinity of the proposed stadium, should be enhanced rather than impaired by development of this project.

JOINT USE FOOTBALL STADIUM

Service Requirements:

The service requirements of should be met with facilities that are totally within the stadium. In providing access to and designing these facilities, the service requirements of adjacent University buildings need to be recognized and respected. Whenever possible service to the stadium must be provided at a time and in a manner so as not to disrupt or in any way interfere with the ongoing daily activities of the institution in accordance with its mission.

Utilities:

All of the utility infrastructure improvements needed for both this project and those required for possible future development (as defined by the University Planning staff) must be appropriately sized and put in place (to the greatest extent possible) in concert with this project. This includes but may not be limited to steam, chilled water, domestic water, fire protection, sanitary sewer, storm sewer, electrical service, and telecommunications.

JOINT USE FOOTBALL STADIUM

Architectural Design Guidelines

Architectural Program:

The construction of this new facility is intended to provide athletic facilities for combined seasonal and other on-going education use by University of Minnesota collegiate teams, as well as, the Minnesota Vikings professional sports teams. In addition to spectator/audience requirements, team functional equipment, utility, education, training, and media spaces, the building must appropriately accommodate spaces for satellite transmission services, public ticket offices, adequate restrooms, janitor rooms, equipment and general storage, chemical storage, conference and meeting rooms, and a utility workshop.

Due to the early predesign nature of this phase of the project, the University Architect will continue to provide additional information and guidance to the appropriate Architect of Record during all future programming, predesign confirmation, and project schematic design phases. Also, the University Architect will provide consistent design guidelines intent interpretation throughout all subsequent design development, construction document preparation, and implementation phases.

Architectural Style:

Architectural style chosen by the Architect of Record must exhibit sensitivity to the existing surrounding University athletic buildings, as well as, adjacent and future medical research and clinical buildings. The chosen architectural style should be contemporary in nature, while reflecting a strong sensitivity to the history of Minnesota Athletics and the former University memorial Stadium. The new stadium must be in harmony with the massing, materials, color, texture, and overall aesthetic character of adjacent University buildings, and exhibit a sense of stability and permanence. The Architect of Record must consider the image and comportment of the new structure as one of many elements within the greater intended landscape environment.

Building Facades:

Despite anticipated considerable site setbacks, and a somewhat remote location from the academic core campus, the new facades of the stadium building will still be very highly visible from adjacent University, commercial, and residential communities, the inter-campus transitway, and many city streets. Careful consideration must be given to the appropriate visual treatment of these facades while accommodating the building's programmatic needs. Overall scale must not create a hostile physical environment, nor overwhelm the pedestrian experience. Exterior signage must meet University Signage and Graphic Standards. Exterior lighting, including security lighting, must be designed to provide a safe environment while respecting the character of the surrounding environment and adjacent commercial and residential community environments.

Building Structural Systems:

Thorough vibration and sound control engineering is important to the success of the new stadium due to the specific nature of the use intended and the proximity to vibration sensitive medical research, medical clinics, commercial and student housing communities. Therefore, a structural system that is engineered to provide a high stiffness to mass ratio beyond that required by present building codes is advantageous. Historic evidence of the potential for flooding near this location will require additional site and soils investigation with appropriate remediation incorporated into the design of the stadium and its site amenities.

Building Fenestration (exterior openings):

To the extent programmatically possible, incorporate fenestration and other glazing to provide controllable natural lighting to the interior. New glazing must consider overall appearance in pattern, profile, texture, color, and other defining elements, while incorporating energy efficient technology and enhanced sound attenuation to mitigate disruptive noise – especially noise that could migrate to the adjacent medical and residential communities.

JOINT USE FOOTBALL STADIUM

Roof System:

All rooftop access, rooftop mechanical and electrical equipment and penetrations must be minimized and organized as aesthetic elements including screening with appropriate materials. All rooftop penthouses and equipment must be included in the composition of the facades and roofscape. Rooftop construction such as mechanical spaces, as well as, exhaust stacks and louvers must be in harmony with the massing, materials, color and texture of the overall aesthetic concept for the building and required site structures. Access to rooftop equipment for preventative maintenance and repair work must comply with the Occupational Safety and Health Act requirements.

Detail and Ornament:

New construction must be designed without extravagant detail, and should be contemporary in nature. Building air intakes must be appropriately located away from sources of pollution, especially loading/service/drop-off areas, adjacent roadways, and adjacent building exhausts. Building systems (mechanical, Electrical, technology) are to be creatively integrated so as to have minimal impact on the integrity of space, character, or detail. Mechanical, electrical, and technology equipment and distribution in public and semi-public areas are to be discretely located out of normal sight or in unobtrusive places.

Interior Elements:

ADA (Americans with Disabilities Act) accessibility, building interior circulation, safety and Wayfinding signage must be included. Interior signage must meet University Signage and Graphic Standards. All interior building elements must be attractive, suitable for the intended program and northern climate, safe and durable, flexible, readily accommodate changes in technology, and yet easily maintained. Operational and public spaces must be safe, open and filled with natural light.

Building Services:

Consideration should be given to installing an on-site uninterrupted power supply or emergency power generator. Also, a new lightning protection system should be considered. Fiber optic networking distribution must also be considered for the building. Installation of a fire alarm system and connection to the University Building Systems Automation Center is required. Installation of a new fire suppression sprinkler system is required. Additional specialized fire suppression systems for computer rooms and other special programmed locations must be provided.

Environmental Issues:

Project designers are to integrate environmentally sensitive building and maintenance practices into all phases of this new construction and site enhancement project to ensure the integrity of existing and future ecosystems in the immediate area. Anticipated in 2003, new State of Minnesota Sustainable Design Guidelines may apply to this project. Phase I and Phase II environmental site assessments will be undertaken. The University will complete all hazardous materials abatement work prior to the time a contractor starts construction.

Appendix III
Construction Standards Memo

Project Time & Cost

PROJECT TIME & COST, INC.
2727 Paces Ferry Road
Suite 1-1200
Atlanta, GA 30339
(770) 444-9799
Fax (770) 444-9808
www.ptcinc.com

September 6, 2002

Mr. Stacey Jones
Crawford Architects LLC
1901 Main Street, Suite 200
Kansas City, MO 64108

Dear Stacey:

**Re: Minnesota Football – New Stadium Study
Construction Standards 2000**

As per the request in your email received on August 23, we have reviewed the University of Minnesota, (U of M), Construction Standards 2002 as viewed on the U of M web site and provide the following comments herein.

GENERAL INFORMATION

Item	Comment	Cost Premium
Purpose	No comments	Nil
Administration	No comments	Nil
Procedures for Construction	No comments	Nil
Program Information Requirements	Design Life of Building – 50 years may have a cost implication depending on life cycle costing analysis including selections of materials and equipment. Review further when study is complete.	To be determined
Bidding Requirements, Contract Forms, Conditions of Contract	No comments	Nil

Mr. Stacey Jones
September 6, 2002
Page 2 of 4

DIVISIONS

Item	Comment	Cost Premium
General Requirements	Adjustments to the roles and responsibilities of the A/E and the General Contractor are required if the project proceeds under a Design Build contract	Nil
Sitework	No comments	Nil
Concrete	No comments	Nil
Masonry	No comments	Nil
Metals	Discussion on painting in lieu of galvanizing handrails to seating bowl	To be determined
Wood and Plastic	No comments	Nil
Thermal & Moisture Protection	Waterproofing minimum performance of 15 years in lieu of 5 years as stated	Nil
Doors & Windows	No comments	Nil
Finishes	No comments	Nil
Specialties	No comments	Nil
Equipment	No comments	Nil
Furnishings	No comments	Nil
Special Construction	No comments	Nil
Conveying Systems	10. Car enclosure - the standard of finish defined for passenger cabs may need to be upgraded for more prominent areas of the proposed stadium	\$10,000 per car

Mechanical	The basic mechanical requirements are quite detailed. While nothing stands out as being either excessive or inadequate, we recommend these standards be reviewed again when the preliminary design phase is completed and there is an opportunity to review in detail the design parameters, energy conservation measures, equipment choice, (particularly if the project proceeds under a design build contract), and any variances to U of M standards.	To be determined
------------	---	------------------

Electrical	No comments	Nil
------------	-------------	-----

As a general comment, the Specialties, Equipment, Furnishings and part of the Electrical, (including Sound System, Distributed TV, Broadcast Media and Video Replay System) Divisions could represent up to \$50M of the Construction Cost. The current U of M standards, which refer to these elements, will need to be expanded to achieve "normal stadium construction standards". These building elements, which are peculiar to stadium construction, can be addressed by the A/E when documentation commences.

APPENDICES (comments to applicable items only)

Item	Comment	Cost Premium
Appendix C - Preconstruction Meeting Agenda	Adjustments to the roles and responsibilities of the A/E and the General Contractor are required if the project proceeds under a Design Build contract	Nil
	Insurance – is the policy to be supplied by the University or the General Contractor	to be determined
	Performance Bond – is this required	less than 1%
Appendix X – Distribution of Drawings	Up to 20 sets of DD and Pre Bid Drawings are required to be issued. This could be reviewed to minimize documentation costs.	\$0.2M



Mr. Stacey Jones
September 6, 2002
Page 4 of 4

As requested in your email, we are available to meet with the University Standards Exception Committee should you require, however, as our report indicates, there are minimal items to be reviewed and we believe the U of M Construction Standards 2002 are generally adequate as basic minimal requirements for the proposed stadium.

Please feel free to contact the undersigned to discuss and of the above stated matter.

Yours truly,
PROJECT TIME & COST, INC.

Tim L. Roberts