



NSW GOVERNMENT  
Department of Planning

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**MAJOR PROJECT ASSESSMENT:**  
***Erection of a Replacement Grandstand at***  
***Sydney Cricket Ground (SCG) Moore Park***



Source: BBC Consulting Planners

Director-General's  
Environmental Assessment (EA) Report  
Section 75I of the *Environmental Planning and*  
*Assessment Act 1979*

December 2006

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# 1 EXECUTIVE SUMMARY

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- 1.1 The Sydney Cricket and Sports Ground Trust (SC&SGT) intend to redevelop the Yabba's Hill area of the Sydney Cricket Ground ("SCG") in order to provide upgraded facilities for spectators of major sporting events at the ground. The capital investment value of the project is \$63 million.
- 1.2 The application generally proposes the demolition of the existing structures and the development of a new grandstand on the site to accommodate approximately 12,400 spectators. The resultant development will increase the maximum seating capacity at the SCG from about 44,000 to 46,764.
- 1.3 The SCG is located within the Moore Park Precinct some 3 kilometres from Sydney CBD. The SCG dates back to the mid 1850's. It has gradually emerged as one of a number of internationally recognised stadia in Australia that regularly hosts major sporting events, including the Ashes Cricket Test.
- 1.4 The development site is located between the Bill O'Reilly and Clive Churchill Stands. It lies on the corner of John Hargreaves Avenue and Lottie Lyell Avenue which form the site's southern and eastern boundary. The existing scoreboard is to be relocated to the top of the Dally Messenger Stand.
- 1.5 A number of dilapidated, out of date structures are present on the site that were primarily developed in 1980's and are in need of upgrading. This area of the ground has traditionally provided reduced price viewing events and is the last predominantly open area remaining within the ground.
- 1.6 On 8 May 2006, the Director General, as delegate for the Minister, formed the opinion that the project is a development to which Part 3A applies and the Minister is the approval authority. The project was placed on formal exhibition from 16 August 2006 until 15 September 2006.
- 1.7 The Department received 18 submissions from Government agencies, adjoining landowners and other key stakeholders. A summary of issues raised was forwarded to the proponent on 4 October 2006. The proponent lodged a response to issues, a preferred project report and a revised statement of commitments on 27 October 2006.
- 1.8 A number of issues were raised during the exhibition including conservation, heritage and archaeology, excavation, demolition and construction impacts, urban design, visual impact and built form, height and overshadowing, vehicular and pedestrian accessibility, lighting emission and illumination, environmental management and operational issues.
- 1.9 The Department has reviewed the environmental assessment and the preferred project report and duly considered advice from public authorities as well as issues raised in general submissions in accordance with Section 75(2) of the Act. The most significant of those were raised in relation to excavation, demolition and construction management and conservation, heritage and archaeology.
- 1.10 Following detailed discussions and negotiations between the proponent, adjoining landowners, other key stakeholders, the Department is of the view that the combination of statements of commitment made by the proponent together with supplementary conditions of approval that are recommended be imposed by the Minister, will effectively mitigate and manage this issue within acceptable environmental limits.
- 1.11 The Department is aware that both the SCG and Fox Studios are valuable assets to the State of New South Wales in economic and cultural terms and the Department has sought to manage their short term aspirations in a balanced, yet comprehensive manner, in order to achieve an acceptable outcome to both parties whilst the excavation, demolition and construction activities take place over the next two years.
- 1.12 The Department recommends that the project application be approved subject to the imposition of conditions set out in Appendix A.



## 2 BACKGROUND

### 2.1 Site Context

- 2.1.1 The SCG site comprises approximately 7.53 hectares and is located in the eastern suburbs of Sydney approximately three kilometres to the south east of Sydney CBD. The site is located within the Moore Park Precinct which is bounded by Moore Park Road to the north, Cook Road (and Poate Road) to the east, Lang Road to the south and Driver Avenue to the west. Centennial Park and Moore Park lie adjacent to the Precinct to the east and west (respectively).



Figure 1 Site Context (Source: BBC Consulting Planners)

- 2.1.2 The SCG is one of a number of major venues within the Moore Park Precinct together with Aussie Stadium, Fox Entertainment Precinct, Hordern Pavilion and the Royal Hall of Industries. These venues host a number of State wide and international sporting events and musical performances as well as providing ancillary shopping and leisure facilities. The SCG and Aussie Stadium are home to a number of high profile teams such as Sydney Swans ALF Team and Sydney Football Club.
- 2.1.3 Centennial Park and Moore Park Trust ("CPMPT") owns land adjoining the SCG including land to the south and east that it has leased to Fox Studios Australia Pty Ltd ("Fox Studios"). CPMPT owns other land in the surrounding area. Some is leased to Colonial First State Property Management ("CFSPM") who operates the Entertainment Quarter and some is leased to Playbill Venue Management ("PVM") who operates the Royal Hall of Industries, the Hordern Pavilion and the Byron Kennedy Hall.
- 2.1.4 To the north of the SCG are tennis courts, indoor and outdoor cricket practice facilities, a fitness centre with a swimming pool, and Aussie Stadium. Beyond this are residential properties along the northern side of Moore Park Road. To the north west is the Gold Members swimming pool, bounded by Moore Park Road to the north and Driver Avenue to the west. The SCG is surrounded to the south and east by Fox Studios (see Section 2.2).
- 2.1.5 To the west is Driver Avenue which links Moore Park Road to Lane Road. On the western side of Driver Avenue is a bus terminal that provides public transport access to the precinct during major events. Beyond this is an area of Moore Park known as Moore Park East. The northern and southern areas of Moore Park East are used for car parking during large sporting events at the SCG and Aussie Stadium.



## 2.2 Fox Studios

- 2.2.1 Fox Studios is located immediately adjacent the development site and provides professional production facilities and services to the local and international film and television industry. The site features eight stages, production offices and workshops and sixty independent businesses that provide supporting casting, travel and freight, equipment rental and special effects. There are postproduction specialists in film editing, sound re-recording and mixing.

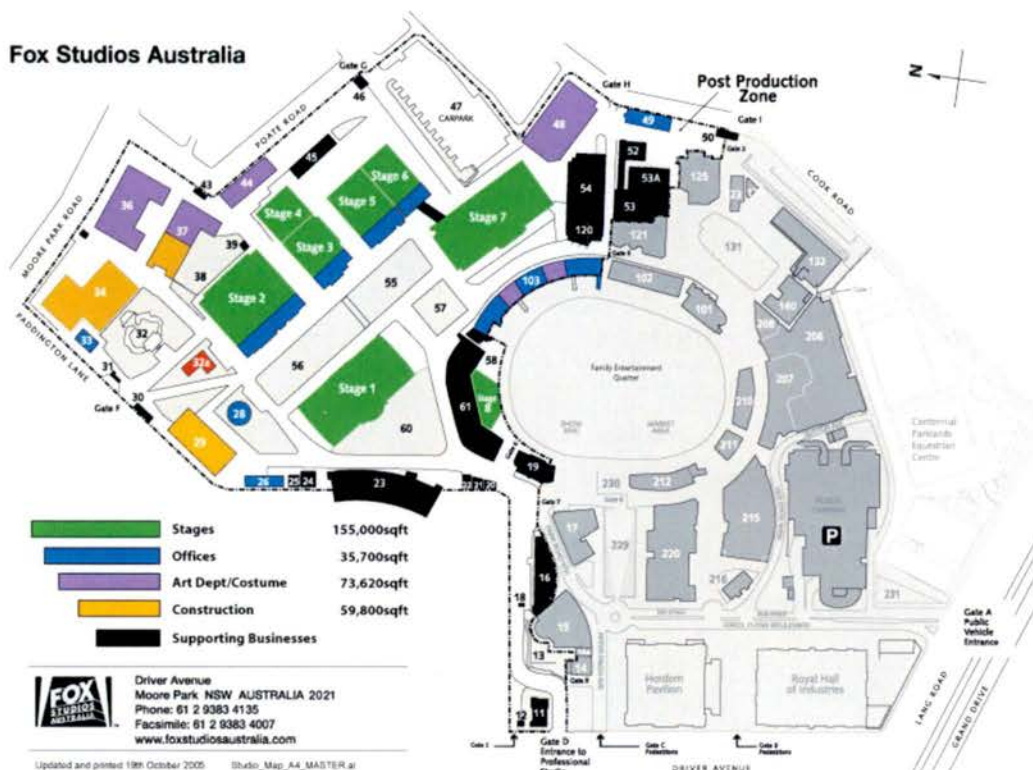


Figure 2 Fox Studios (Source: Fox Studios)

- 2.2.2 Since opening in May 1998, Fox Studios has hosted productions which have generated in excess of \$1.5 billion in New South Wales. Productions shot at the studio typically employ 400 to 1000 employees. High profile productions include the new Star Wars Trilogy, the Matrix Trilogy, Moulin Rouge, Mission Impossible II and Superman Returns.
- 2.2.3 Several hundred freelance film industry professionals rely on production activity within Fox Studios. Internationally renowned, Fox Studios is one of the premier facilities of its kind in Australia and a showcase for the State. It houses over 80 tenants a number of which are sound and/or vibration sensitive. Film and television businesses generally work business hours Monday to Friday although many work outside those hours. Combined, these tenants employ about 1500 people.
- ## 2.3 Site History
- 2.3.1 The cricket ground dates back to circa 1851 when a grant of land south of the Victoria Barracks was given to the British Army for use as a soldier's cricket ground. This area soon became the primary location for cricket matches in Sydney and, in 1894, received its modern name, the SCG. Four grandstands were originally built of which only the Members Pavilion and the Ladies Stand have survived.
- 2.3.2 The SCG and the Sydney Sports Ground were brought under the operation of the Sydney Cricket Ground Trust in 1951. The SCG continued to be improved with the Bradman Stand being constructed in 1973, modern floodlights in 1978, the Brewongle Stand in 1980, and the first electronic video scoreboard in 1983. The Pat Hills Stand (later renamed the Bill O'Reilly Stand) was constructed in



1984 and the Sheridan Stand was replaced with the new Clive Churchill Stand in 1986.

- 2.3.3 Rugby league and rugby union matches were removed from the SCG in 1988 with the opening of the Sydney Football Stadium (now known as "Aussie Stadium") on the site of the former Sydney Sports Ground. The SCG is now utilised to host cricket matches, Australian Rules Football, rugby league and occasional concert performances. It has a capacity for just over 44,000 spectators.

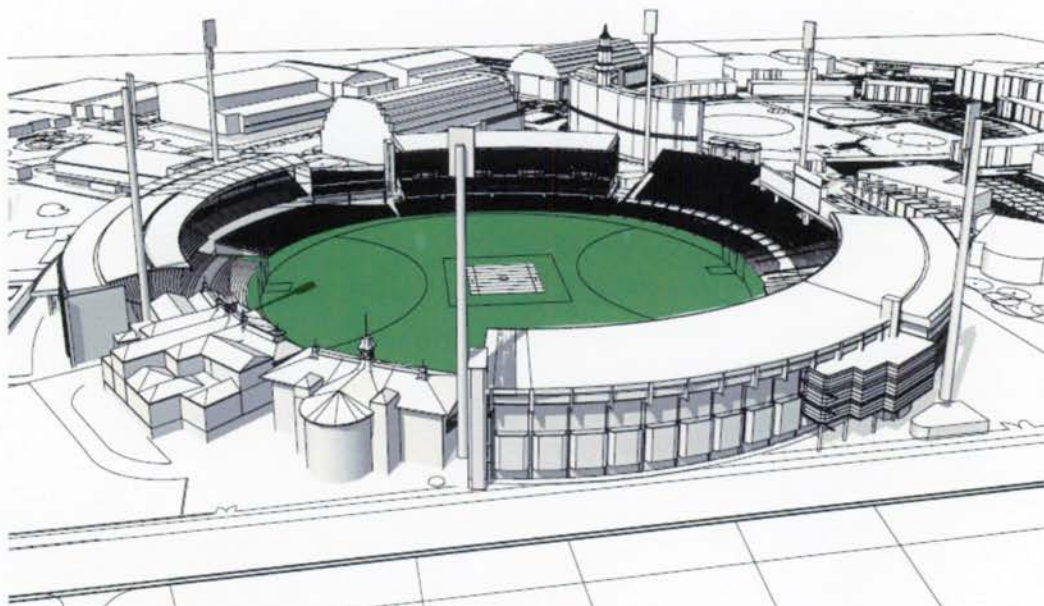


Figure 3 Axonometric Plan – Existing SCG (Source: BBC Consulting Planners)

## 2.4 Heritage Listings

- 2.4.1 The SCG is not listed on the State Heritage Register (SHR) as an item of State significance but falls within the Sydney Cricket Ground Conservation Area in the South Sydney Local Environmental Plan 1988.
- 2.4.2 The Members Stand and Lady Members Stand are listed on the State Heritage Register. These two grandstands are also listed on the Register of the National Estate (RNE) for their heritage values and classified by the National Trust.

## 2.5 Existing Grandstands

- 2.5.1 The SCG comprises an oval playing field surrounded by a number of separate grandstands and concourse seating areas as set out below (from the northern end clockwise) and currently has a maximum seating capacity slightly in excess of 44,000 spectators (see Figure 2 below):

Grandstand	Primary Function	Seating Capacity
M.A. Noble Stand	Members seating	6,210 spectators
Bradman Stand	Corporate suites and public seating	4,261 spectators
Dally Messenger Stand	Public seating	1,029 spectators
Bill O'Reilly Stand	Corporate suites and public seating	5,707 spectators
Doug Walters Stand	Public seating	1,574 spectators
Yabba's Hill Stand	Public seating	8,059 spectators
Clive Churchill Stand	Corporate suites and public seating	5,781 spectators
Brewongle Stand	Corporate suites and public seating	6,934 spectators
Ladies Stand	Members seating	2,228 spectators
Members Pavilion	Members seating	2,219 spectators
<b>Total Seating Capacity</b>		<b>44,002 spectators</b>



## 2.6 Yabba's Hill Stand

- 2.6.1 Yabba's Hill ("The Hill") comprises the southern and south eastern part of the SCG and for almost a century has comprised a large, sloping, grassed open area. The Hill has traditionally provided reduced-price viewing of events and has been the typical location for the SCG's scoreboard.
- 2.6.2 The electronic video scoreboard was added to the Hill in 1983 and concrete terraces were added in 1991, removing the last of the Hill's grassed areas. Tri-vision advertising panels are housed either side of and above the electronic video scoreboard.

## 2.7 Robertson and Marks Scoreboard

- 2.7.1 The old scoreboard was built in 1924 to a design by Robertson and Marks Architects and lies to the south of the Bill O'Reilly Stand. It is a painted, rendered masonry structure three stories in height and is used to serve refreshments at ground level with a police muster room at the top level. This is not the original scoreboard and is in fact the fourth scoreboard to occupy this area of the ground.

## 2.8 Doug Walters Stand

- 2.8.1 The Doug Walters Stand was constructed in 1985 and comprises an open deck single storey structure with access to the upper deck via reinforced concrete stairs located to the east and west and largely obscures the old scoreboard.

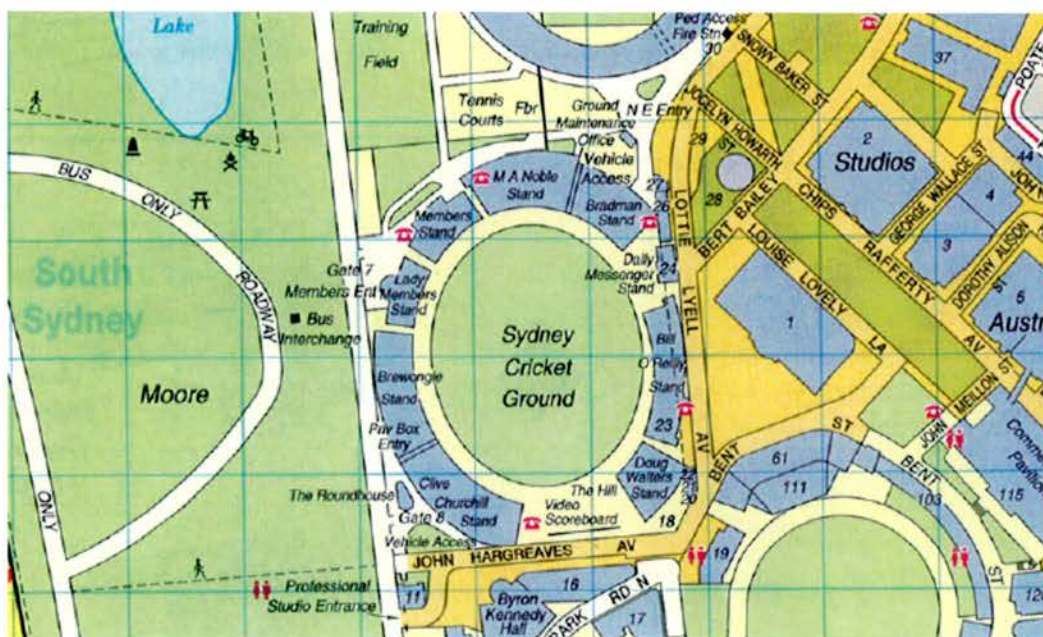


Figure 4 – Existing SCG Grandstands (Source: BBC Consulting Planners)

## 2.9 Floodlighting

- 2.9.1 There are two existing floodlighting towers within the development site boundary one positioned between the Doug Walters Stand and Bill O'Reilly Stand the other located immediately behind the electronic scoreboard. A further four floodlighting towers are positioned elsewhere within the SCG.

## 2.10 Boundary Wall

- 2.10.1 The southern edge of the site and the boundary between the SCG and Fox Studios is defined by a high boundary wall along John Hargreaves Avenue. It was erected during the 1920's and extends from Driver Avenue to the rear of the old scoreboard. It is located around 60 metres east of Driver Avenue and is secured by a roller door, which is the only penetration currently in the boundary wall.



2.10.2 The height of the boundary wall increases overall from west to east, with irregular stepping. At its western end adjacent to Driver Avenue, the wall has a height of 2.64 metres, whilst its eastern end has a height of 7.49 metres. At its highest point (just to the east of the electronic scoreboard), the wall height is approximately 9.7 metres.

2.10.3 The boundary wall is identified as an item of considerable significance within the submitted Heritage Impact Statement ("HIS") prepared by Gordon Mackay Logan ("GML").

## **2.11 Ficus Pumila (Creeping Fig)**

2.11.1 Growing on the southern face of the southern boundary wall over almost its entire length and height is a *Ficus pumila* (Creeping Fig). This extends almost the whole length of John Hargreaves Avenue, around the corner splay and onto the southern face of the Simmental Building. The fig has also colonised the eastern face of the eastern boundary wall.

2.11.2 The *Ficus pumila* has attached itself to the mix of wire netting, steel reinforcing mesh and wires anchored to the wall and can grow on coarse vertical surfaces without supports. The fig is identified as a landscape item of exceptional significance in the 1995 Moore Park Showground Conservation Strategy prepared by Godden Mackay Logan.

## **2.12 Vehicular Access**

2.12.1 The ground level at the rear of the Clive Churchill Stand along with the public concourse extending around to the Bill O'Reilly Stand is accessible to authorised vehicles (entering from and leaving via Driver Avenue). Similarly, restricted vehicular access is available beneath the Bill O'Reilly Stand, using the existing tunnel. On event days, all vehicular servicing is completed prior to access being made available to the general public.

## **2.13 Pedestrian Access**

2.13.1 Pedestrian access to the Hill and the Doug Walters Stand is via the public concourse beneath the Bill O'Reilly Stand to/from the north-east, and via the two public concourses beneath. Access can also be gained via the rear of the Clive Churchill Stand. Egress from the Hill at close of play during major events can be highly constrained if there is a large crowd, as spectators exit either north-east through the tunnel concourse beneath the Bill O'Reilly Stand, or west via the rear of the Clive Churchill Stand.

## **2.14 Car Parking**

2.14.1 SCG spectators who drive to events primarily rely on off-street parking resources in the surrounding area including the 500 spaces in the grounds of Sydney Boy's High School and the 2,000 space car park in the Entertainment Quarter. An additional 3,000 spaces are made available in Moore Park East during major events and 750 spaces are available in the Gold Members car park located to the north-west of Aussie Stadium between Driver Avenue and Moore Park Road.

### 3 PROPOSED DEVELOPMENT

#### 3.1 Approval Originally Sought

##### 3.1.1 Approval was originally sought for the following works:

- a) Construction activities on adjoining lands owned by CPMPT and occupied by Fox Studios including the erection of an ivy wall support in John Hargreaves Avenue, safety fencing, roof protection and the erection of a hoarding over John Hargreaves Avenue.
- b) Relocation of the video scoreboard and tri-vision advertising panels to the top of the Dally Messenger Stand (will partly project over adjoining lands owned by CPMPT and occupied by Fox Studios).
- c) Demolition and removal of Yabba's Hill, the Doug Walters stand and other miscellaneous structures, including those located at the rear of the Clive Churchill Stand adjacent the boundary wall and the old scoreboard and preparatory excavation activities.
- d) Construction of a new grandstand to provide seating for approximately 12,400 spectators including ancillary facilities and provision of associated ingress and egress including penetrations to the ivy wall adjacent John Hargreaves Avenue (will partly project over adjoining lands owned by CPMPT and occupied by Fox Studios).
- e) Carrying out of associated grandstand construction activities on adjoining lands owned by CPMPT and occupied by Fox Studios.
- f) Relocation of two existing floodlighting towers (Nos. 2 and 3) to the top of the proposed new lift shafts within the new grandstand and upgrading of all 6 existing floodlighting tower luminaries.

#### 3.2 The New Grandstand

- 3.2.1 The SCG comprises Lot 1530 in DP 752011 and is owned and operated by Sydney Cricket and Sports Ground Trust ("SC&SGT"). The new grandstand is to be erected within the south eastern segment of the SCG on the corner of John Hargreaves Avenue and Lottie Lyell Avenue.

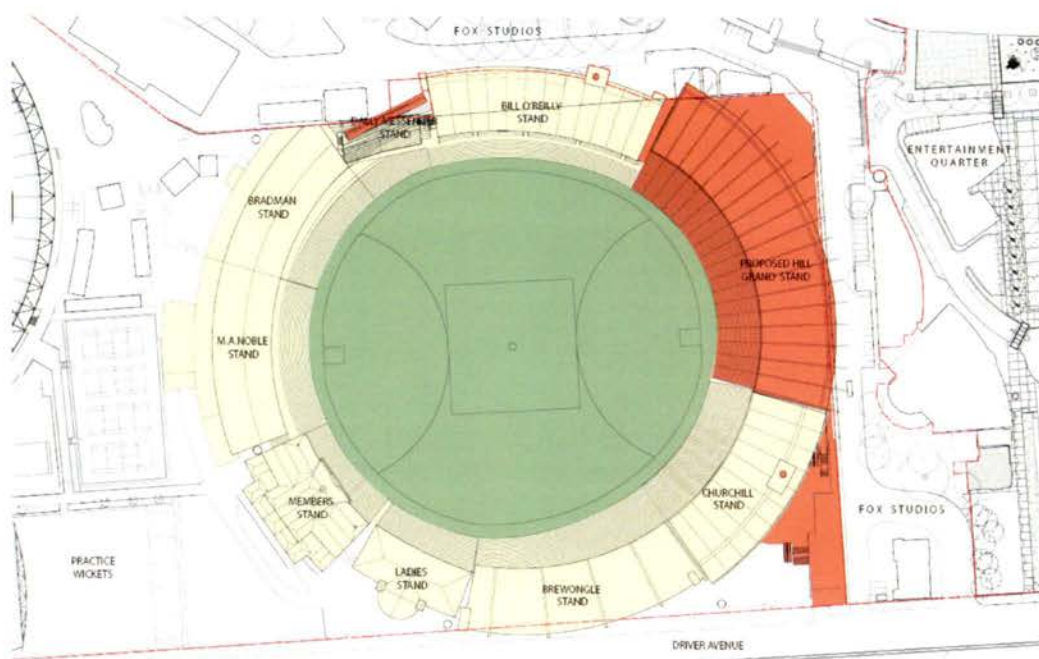


Figure 5 Existing and Proposed Grandstand (Source: BBC Consulting Planners)



- 3.2.2 It is proposed to demolish all existing structures (including the old scoreboard) and erect a new grandstand with an overall seating capacity for approximately 12,395 spectators (including 56 disabled seats). Ancillary facilities will be provided including corporate suites, dining rooms, police and first aid rooms, spectator amenities and waste management and storage areas.
- 3.2.3 The construction of the new grandstand necessitates the relocation of the electronic scoreboard and tri-vision advertising panels to the top of the Dally Messenger Stand. Similarly, existing floodlighting towers 2 and 3 will be dismantled and rebuilt on top of lift shafts proposed within the new grandstand to the east of their current location.
- 3.2.4 The development of the grandstand will represent an increase of 2,762 seats following removal of 9,633 seats currently provided in the area to be occupied by the new structure. As a result of the project, the total capacity of the SCG will increase from 44,002 to 46,764. This total capacity is only likely to be reached during a few major events each year.
- 3.2.5 It is worthy of note at this stage that the "Redevelopment of an Existing Competitive Stadium" section of the Stadium Australia Project Agreement Amendment Deed as agreed by the NSW State Government effectively caps the maximum capacity of 48,000 seats at the SCG and the former Olympic Stadium (now Telstra Stadium).
- 3.2.6 The new grandstand will accommodate the following:

Level	Activity	Seating Capacity
Level 2 (ground level)	New entry forecourt Kitchen, loading area and staff facilities Waste management and storage areas Egress tunnel from O'Reilly Stand Police and First Aid rooms	Nil
Level 3 (lower concourse)	New entry forecourt, merchandising Escalators to Level 4 5,900-seat viewing deck 10-metre wide concourse Outdoor forecourt at rear of new grandstand Food, beverage outlets and toilets	5,900 spectators
Level 4 (corporate deck)	6 corporate suites 250-seat club/function room and bar 500-seat function room, bars and kitchen 886 corporate seats on external deck External balcony to function room Escalator access	886 spectators
Level 5 (public seating deck)	Public concourse and external balcony Escalator access east end Food and beverage outlets and toilets Access to upper seating deck 5,609 seats Link to Churchill Stand	5,609 spectators
<b>Total Seating Capacity</b>		<b>12,395 spectators</b>

### 3.3 Grandstand Design

- 3.3.1 The existing SCG grandstands that encircle the playing field have been constructed with similar materials and finishes (aside from the State Heritage Listed Members Stand and Lady Members Stand). The new grandstand has been designed so as to reflect the design of the existing SCG grandstands through the use of neutral building colours and similar building materials such as galvanised steel, masonry and glazing.



- 3.3.2 The uppermost tier of seating in the new grandstand will be at RL 58.86 metres AHD. The uppermost rear edge of the roof structure will be at RL 64.92 metres AHD and will project approximately 3.5 metres above the maximum roof levels of the Clive Churchill grandstand and the Bill O'Reilly grandstand.

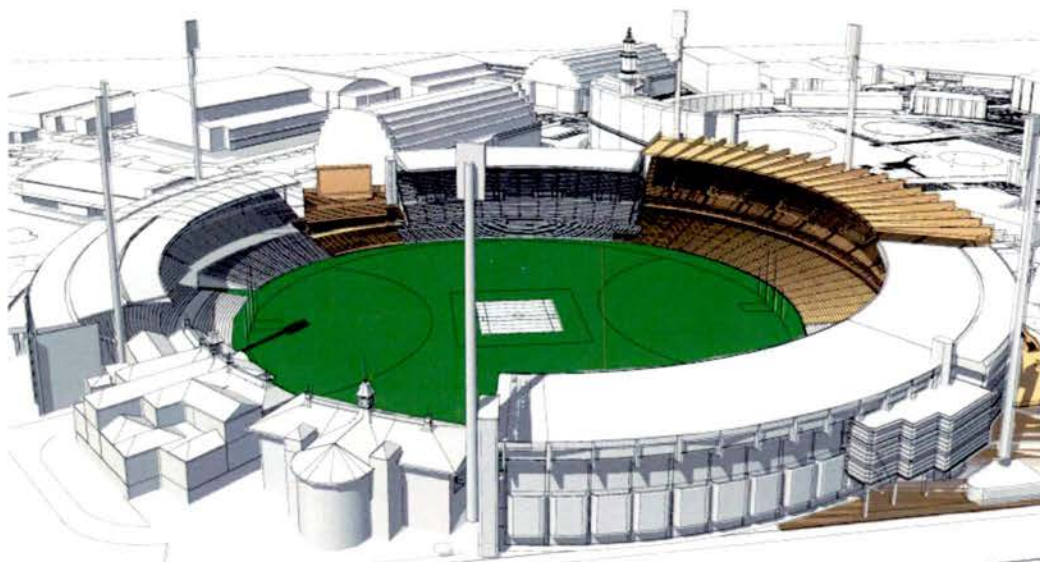


Figure 6 Axonometric Plan (Source BBC Consulting Planners)

- 3.3.3 Balconies off Level 4 and terraces of Level 5 at the rear of the new grandstand are proposed to provide upper outdoor areas for spectators. Views will be available into the adjacent areas of Fox Studios including the retained heritage façade and clock tower of the Frank Hurley Grandstand and of the former RAS Council offices and beyond into the Entertainment Quarter.
- 3.3.4 The walls along the southern and eastern boundaries of the SCG adjacent to Fox Studios are to be retained. They will be stabilised during the construction and tied into the structure of the new grandstand to ensure their long-term stability. New penetrations are to be made in the wall to provide emergency egress.
- 3.3.5 The roof will comprise a plane that is cantilevered from the rear of the upper stand level so that no supporting columns obstruct view lines onto the playing field from the spectator seating areas. This is similar to the adjacent Bill O'Reilly, Brewongle and Clive Churchill Stands and other contemporary stadia.
- 3.4 Spectator Ingress and Egress**
- 3.4.1 Spectator access will primarily remain from Driver Avenue. New turnstiles will be provided in the current location together with new stairs and escalators, leading to the main lower seating concourse and floors above. The new Level 3 public concourse at the rear of the lower seating deck will also provide public access to the Bill O'Reilly Stand as an alternative access to Paddington Lane.
- 3.4.2 The covered pedestrian access arrangements (as shown on Levels 2 and 3) within the new grandstand will provide improved circulation for spectator access and egress for the Hill and the Bill O'Reilly Stand, compared to the current narrow, open cross-over spanning the Hill. Levels 2 to 5 will be serviced by two passenger lifts, a goods lift and two escalators.
- 3.4.3 During construction, spectator access to the Bill O'Reilly Stand from Driver Avenue will cease and all access will be from Moore Park Road and Paddington Lane. Access to the Clive Churchill and Brewongle Stands will remain unchanged except for some minor restrictions for safety hoardings and the like, required for construction access from Driver Avenue.
- 3.4.4 The development area will be a secure construction zone with no spectators accessing the Bill



O'Reilly, Dally Messenger or Bradman Stands. All access to those stands will be via Paddington Lane. The site will remain secured from the public until early 2008 when the lower tier of the new grandstand is completed in readiness for the 2007/2008 cricket season.

- 3.4.5 Emergency pedestrian egress is proposed to be obtained from the rear of the new grandstand onto Fox Studios via new penetrations in the southern wall, one in the corner splay wall and two in the eastern wall, immediately north of Fox Building 22. Similar emergency egress from the Bill O'Reilly Stand already exists.

### **3.5 Vehicular Access**

- 3.5.1 The new grandstand will include loading facilities located on Level 2 to allow for the servicing needs of the new grandstand including loading and unloading of food, beverages and merchandise for sports events and equipment for music performances and waste removal and collection.
- 3.5.2 Service vehicular access will remain as existing from the Driver Avenue entry point and from Gate 1 in Moore Park Road via Paddington Lane and the Bill O'Reilly Stand tunnel. Parking spaces have been allocated at the lower ground level (Level 2) for police, ambulance and service vehicles only, with no public parking.

### **3.6 Development Staging**

- 3.6.1 The staged development of the new grandstand will begin with an early works package generally involving the removal and relocation of the electronic scoreboard, dismantling of lighting tower Nos. 2 and 3 and the erection of a hoarding and support for the boundary wall on John Hargreaves Avenue. Much of these early works will take place on land owned by CPMP but occupied by Fox Studios.
- 3.6.2 Stage one will involve the development of approximately 6,000 lower tier seats in the new grandstand available for occupation during the new international cricket season between December 2007 and January 2008. The upper level of the new grandstand will be constructed following completion of the one-day cricket internationals in early 2008 and will be completed by mid-2008.

### **3.7 Construction Management**

- 3.7.1 Following the canvassing of three potential construction management scenarios with key stakeholders including Fox Studios, CFSPM and PVM, the proponent Option 3 emerged as the preferred option.
- 3.7.2 This generally involves the following activities:
- Erection of an overhead hoarding structure over John Hargreaves Avenue.
  - Use of the SCG grounds for construction activity access.
  - Construction zone on Driver Avenue adjacent the Churchill Stand.
  - Concrete pumping operations from within the SCG (behind Churchill Stand and from Paddington Lane).
  - Installation of two large tower cranes.

### **3.8 Amendments to the Proposal**

- 3.8.1 The proponent lodged a response to the issues raised in submissions during the exhibition period, a preferred project report outlining proposed changes to the proposal to minimise its environmental impact and a revised statement of commitments (see Appendices B, C and D) pursuant to Section 75H(6) of the Act.



3.8.2 The amendments to the proposal set out within the preferred project report are set out as follows:

- a) Retention in situ (rather than relocating) Floodlighting Tower No. 2.
- b) Reduction in the number of penetrations to the ivy wall adjacent John Hargreaves Avenue and their repositioning to the south-eastern corner splay of the SCG.
- c) Realignment of the relocated scoreboard and tri-advertising panels above the Dally Messenger Stand (will further project over land owned by CPMPT and occupied by Fox Studios).
- d) Finalisation of the roof form and design and building materials to reflect structural engineering input into the design process.
- e) Modifications to ingress/egress areas to the new grandstand from Driver Avenue to reflect movement strategies and achieve required performance and safety levels.



Figure 7 Artists Impression of SCG following redevelopment of the new grandstand (Source: BBC Consulting Planners)

### 3.9 Construction Management Plan (CMP)

- 3.9.1 The most significant amendment to the proposal is the formulation of a detailed Construction Management Plan (CMP) to mitigate the environmental impacts of the project primarily to address concerns raised by adjacent landowners. Option 3 has been refined to Option 3A which sets out the timetable for the demolition and construction works in detail together with measures that will be undertaken to mitigate any effects on adjoining landowners such as noise, traffic, vibration, dust and stormwater runoff arising from demolition and construction activities.
- 3.9.2 The early works will be undertaken in two stages. Firstly, the preliminary enabling works will take place including archival recording of heritage significance of the old scoreboard, preparatory works to the Dally Messenger Stand (with a view to accommodating the relocated video scoreboard) and the dismantling of floodlighting tower no. 3. Secondly, the necessary demolition and excavation activities will occur following which the development site will be in a suitable condition for the main construction activities to commence. It is envisaged that all early works will be completed by June 2007.



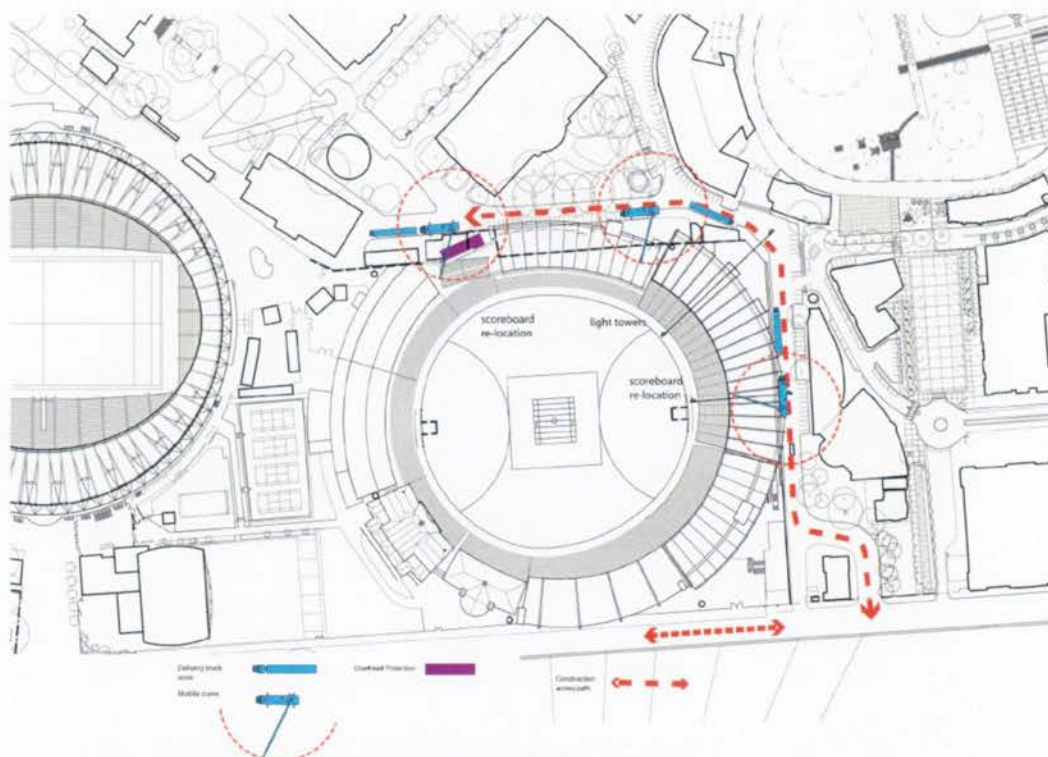


Figure 8 Early Works Demolition and Excavation (Source BBC Consulting Planners)

### 3.9.3

The main construction works will be undertaken in two stages. The first phase is scheduled to begin following completion of the early works package in June 2007. This will involve the development of the lower tier of the new grandstand to accommodate 6,000 new seats and will be available for occupation by spectators in January 2008. It is envisaged that the second phase of construction works for the remaining development of the new grandstand will take place for the rest of that year and be operational by November 2008.

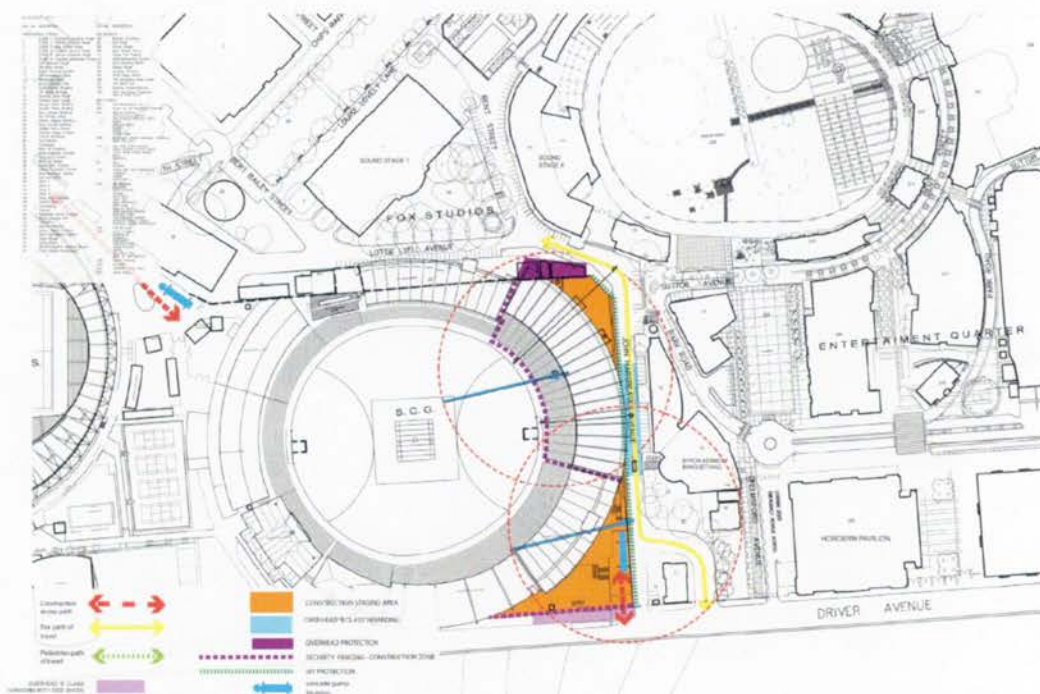


Figure 9 Main Contract Works Construction (Source BBC Consulting Planners)



## 4 STATUTORY CONTEXT

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### 4.1 The Environmental Planning and Assessment Act 1979

- 4.1.1 Part 3A of the Environmental Planning and Assessment Act 1979 (the Act) commenced operation on 1 August 2005. Part 3A consolidates the assessment and approval regime of all Major Projects previously considered under Part 4 (Development Assessment) or Part 5 (Environmental Assessment) of the EP&A Act.
- 4.1.2 Under the provisions of Section 75B of the Act development may be declared to be a Major Project by virtue of a State Environmental Planning Policy or by order of the Minister published in the Government Gazette.

### 4.2 State Environmental Planning Policy (Major Projects) 2005

- 4.2.1 State Environmental Planning Policy (Major Projects) 2005 (Major Projects SEPP) outlines the types of development declared a project for the purposes of Part 3A of the Act.
- 4.2.2 For the purposes of the Major Projects SEPP certain forms of development may be considered a Major Project if the Minister (or his delegate) forms the opinion that the development meets criteria within it.
- 4.2.3 On 8 May 2006, the Director General, as delegate for the Minister, formed the opinion that the project is a development which meets the criteria of Clause 9, Schedule 2 of the SEPP, namely:

*Sydney—Fox Studios, Moore Park Showground and Sydney Cricket Grounds*

*Development within the area identified on Map 8 to this Schedule that:*

- a) is the subdivision of land (not including strata subdivision or boundary adjustments), or*
  - b) has a capital investment value of more than \$5 million.*
- 4.2.4 As the site is located within the area identified on Map 8 to Schedule 2 and the Capital Investment Value (CIV) of the project exceeds the \$5 million threshold the development is considered to be a Major Project and the Minister is the approval authority. The CIV of the project is \$63 million.
- ### 4.3 Permissibility
- 4.3.1 The site is zoned 6(b) Regional Recreation under South Sydney Local Environmental Plan 1998 (South Sydney LEP).
- 4.3.2 The objectives of the zone are:
- a) to define areas used for regional recreation, and major sporting and recreational facilities, which serve the needs of the local population and of the wider Sydney region, and*
  - b) to provide opportunities for new regional sporting, recreational, and entertainment-related development on appropriate sites, and*
  - c) to ensure that future development does not unreasonably detract from the amenity enjoyed by nearby residents, or the quality of the surrounding environment, by reason of the impact of things such as noise and light emission, traffic generation, the hours of operation, pedestrian traffic or any other nuisance generated.*
- 4.3.3 Whilst the proposal is generally permissible with development consent, Clause 10 of South Sydney LEP provides that development consent must not be granted unless the proposed development is consistent with the objectives of this zone. It is considered that the development proposal accords with these objectives for the reasons set out in Appendix G.

- 4.3.4 The three projections onto the land owned by CPMPT (as referred to Section 5.4) fall within the diagonally hatched zoned area within State Environmental Planning Policy No. 47 Moore Park Showground (SEPP 47) and are not permissible with development consent under these provisions.
- 4.3.5 Notwithstanding this, Section 75J(3) of the Act provides that the Minister cannot approve the carrying out of a project that would be wholly prohibited under an environmental planning instrument. However, Section 75J(3) does not apply in this instance as the development proposal is permissible on the site due to its 6(b) Regional Recreation zoning under South Sydney LEP.
- 4.4 Minister's power to approve**
  - 4.4.1 Section 75J of the Act provides the Minister with the power to approve the project application as the proposal is not wholly prohibited.
- 4.5 Other relevant legislation and environmental planning instruments**
  - 4.5.1 Appendix G sets out the relevant consideration of legislation (including other Acts) and environmental planning instruments as required under Part 3A of the Act.



## 5 CONSULTATION AND ISSUES RAISED

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### 5.1 Public Exhibition

- 5.1.1 Section 75H(3) of the EP&A Act requires that once the Environmental Assessment ("EA") has been accepted by the Director General, the Director General must, in accordance with any guidelines published in the Gazette, make the EA publicly available for at least 30 days.
- 5.1.2 The Director General has not published any specific guidelines in relation to the public exhibition of the Project Application.
- 5.1.3 A "test of adequacy" was undertaken by the Department which determined that the matters contained in the Environmental Assessment Requirements were adequately addressed in the EA prior to public exhibition.
- 5.1.4 Broadly the process followed in terms of the public exhibition was as follows:
- The application was placed on public exhibition from 16 August 2006 until 15 September 2006.
  - Copies of the EA were available for inspection at the City of Sydney Council offices and the Department of Planning's offices in Sydney during the exhibition period.
  - Details of the application were published in the Sydney Morning Herald and Wentworth Courier and made available on the Department of Planning's website.
  - Copies of the EA were forwarded to relevant Government agencies, key stakeholders and adjoining businesses.
  - All landowners in the vicinity of the site were notified and invited to make submissions.
- 5.1.5 In response, the Department received 18 written submissions from a number of agencies and key stakeholders who raised a number of issues.
- 5.1.6 Copies of submissions received for the project application are provided at Appendix E together with a summary table setting out all issues raised during the exhibition period.
- 5.1.7 The Department forwarded these responses to the proponent on 4 October 2006. The Department subsequently received further submissions following this period and forwarded them to the proponent.
- 5.1.8 The relevant planning issues raised during the exhibition period can be summarised as follows and are addressed in detail in Section 6 below:
- Conservation, Heritage and Archaeology
  - Excavation, Demolition and Construction Impacts
  - Urban Design, Visual Impact and Built Form
  - Height and Overshadowing
  - Vehicular and Pedestrian Accessibility
  - Lighting Emission and Illumination
  - Environmental Management and Utility Provision
  - Operational Issues
- 5.1.9 Upon expiration of the exhibition period, several meetings between the Department, the proponent and adjoining landowners took place both on and off site to discuss the issues raised. The proponent has been involved in ongoing discussions and negotiations with adjoining landowners to address the effects of the proposal therein.

5.1.10 The proponent lodged a response to the issues raised in those submissions together with a preferred project report and a revised statement of commitments pursuant to Section 75H(6) of the Act. This is provided at Appendices B, C and D.

5.1.11 No panel was constituted for the purposes of Section 75G.

## 5.2 Independent Hearing and Assessment Panel

5.2.1 Section 75G of the Environmental Planning and Assessment Act provides that the Minister may constitute an independent panel to assess any aspect of a project. No panel was constituted for the purposes of Section 75G.

## 5.3 Other Issues

5.3.1 Two additional issues were raised during the exhibition periods which are not strictly material planning considerations within the scope of the Environmental Planning and Assessment Act 1979 ("The Act"). Nevertheless, the Department is obliged to consider them accordance with Clause 8B of the Environmental Planning and Assessment Regulations 2000 ("The Regulations").

- Landowners Consent Requirements
- Maximum Seating Capacity

The Department's consideration of these issues is set out below.

## 5.4 Landowners Consent Requirements

### Issue Summary

5.4.1 The SCG comprises Lot 1530 in DP 752011 and is owned and operated by SC&SGT. Two tiers of seating will project beyond that title boundary into Lot 51 in DP 1041134 which is owned by CPMPPT and occupied by Fox Studios.

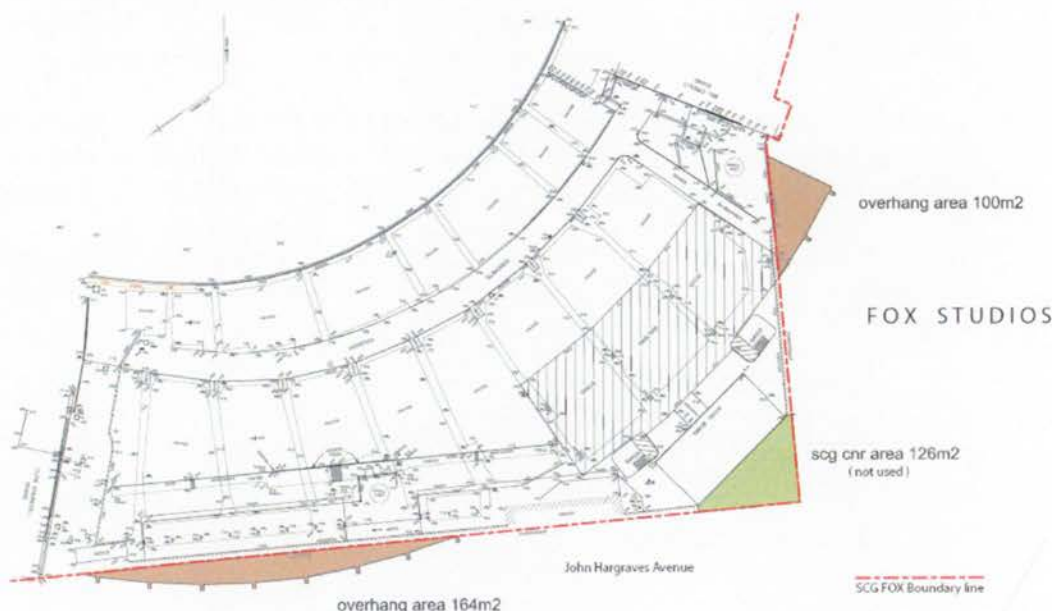


Figure 10 Areas of Encroachment (Source BBC Consulting Planners)

5.4.2 Part of the relocated electronic video scoreboard (on the Dally Messenger Stand) will project over a parcel of land occupied by Fox Studios (Building 24 – the Simmental Building) and a parcel of land leased to the SC&SGT for the purposes of a substation. Both are owned by CPMPPT.



Raised By

- 5.4.3 Centennial Park and Moore Park Trust (CPMPT); Fox Studios

Consideration

- 5.4.4 The SC&SGT sought the consent of the CPMPT for these encroachments. On 18 August 2006, the Minister for Tourism, Sport and Recreation issued a landowner's consent for this on behalf of the CPMPT, subject to the following conditions:
- Fox Studios, as lessee of the affected land, also consents to the encroachments on terms not adverse to the interests of the CPMPT.
  - An easement for the overhang is registered on the CPMPT's land, promptly after completion of the proposed development.
  - A right of carriageway is registered over the site of the existing road on the south east corner of the SC&SGT's title to a height of 10 metres in favour of CPMPT promptly after receipt of planning approval of the proposed development and that the road be kept open and not interfered with until the right of carriageway is registered.
  - SC&SGT, CPMPT, Fox Studios, PVM and CFSPM continue their discussions on the proposed pedestrian link from the proposed development to the Entertainment Quarter.
  - No advertising will be attached to the encroachments which would be visible from outside the SCG.
- 5.4.5 In issuing the consent, the Minister emphasised that, should the plans be amended, the consent would no longer apply. It was made clear that the consent was not an approval for any encroachment by the proposed scoreboard relocation further to the north of the ground or for any construction impacts on Fox Studios, PVM, CFSPM or CPMPT.
- 5.4.6 Amendments were made to the submitted plans and documentation following the exhibition period which culminated in the submission of the preferred project report documentation. Consequently, the SC&SGT required the further consent of the CPMPT for the proposed encroachments.
- 5.4.7 The SC&SGT prepared a further detailed submission to be lodged to CPMPT. In addition to the preferred project report documentation (see Section 3.8) further detailed plans and documentation (e.g. photomontages and shadow diagrams, details of emergency egress, plant etc) were lodged.
- 5.4.8 The CPMPT gave further consideration to the project during its meeting of 27 October 2006 and has since advised the Department that, with the exceptions of the proposed development on the CPMPT's land:
- Has no objection to the amended grandstand plans;
  - Agrees that the EA and subsequent correspondence is sufficient to address the CPMPT's submissions; and
  - Acknowledges that the revised Construction Management Plan (CMP) is an improvement over what was previously advised to the CPMPT.
- 5.4.9 Notwithstanding this, the Trust emphasised that its resolution does not constitute landowners consent for the final construction plans and the encroachments. The Trust also stated that it cannot issue landowners consent until it is satisfied that its tenant, Fox Studios, who occupies the land, has given its approval. At the time of writing, this consensus has not been reached.





Figure 11 Photomontages – Encroachment by New Grandstand over John Hargreaves Avenue – Fox Studios' Access Road (Source BBC Consulting Planners)



Figure 12 Photomontages – Encroachment by New Grandstand over John Hargreaves Avenue – Fox Studios' Security Office (Source BBC Consulting Planners)



Figure 13 Photomontages – Encroachment by Relocated Electronic Video Scoreboard over Fox Studios' Building 24 – The Simmental Building (Source BBC Consulting Planners)

#### Department's Position

- 5.4.10 Clause 8F(1)(a) of the Regulations provides that the consent of the owner of land on which a project is to be carried out is required for an application for approval under Part 3A of the Act unless the application is made by a public authority. The Department is of the view that the Minister can approve the project as landowners consent is not required given that the proponent is a public authority.
- 5.4.11 In the event that the consent of the owner is not required under Clause 8F(1)(a), the proponent is required to give notice of the application to the owner of the land at any time before the application is made pursuant to Clause 8F(3)(d) of the Regulations. It is understood that CPMPT were consulted by SC&SGT on several occasions and met at Board level between May 2006 and July 2006.



## 5.5 Maximum Seating Capacity

### Issue Summary

- 5.5.1 The status of the project in the light of the Stadium Australia Project Agreement as amended on 20 December 1999 by the Stadium Australia Project Agreement Amendment Deed.

### Raised By

- 5.5.2 Telstra Stadium; Sydney Olympic Park Authority (SOPA)

### Consideration

- 5.5.3 There are commercial and contractual arrangements that exist between NSW State Government and the Stadium Australia Trust as set out within the Stadium Australia Project Agreement as amended on 20 December 1999 by the Stadium Australia Project Agreement Amendment Deed. This agreement is applicable to redevelopment of major stadia in NSW including the SCG.
- 5.5.4 The "Redevelopment of an Existing Competitive Stadium" section of the Deed places restrictions and notification obligations upon the NSW Government in situations where it assists in the redevelopment of new and existing competitive venues. The rationale for this is to ensure that the private sector could plan for its business needs over the duration of the 30 year lease.
- 5.5.5 The term "redevelopment" within this section of the Deed refers to an increase in the maximum seating capacity to in excess of 48,000 seats. The development proposal will increase the maximum seating capacity of the SCG from 44,000 to 46,746 seats. This increase in seating capacity at the SCG will not therefore contravene the provisions of the Deed.
- 5.5.6 Whilst it is acknowledged that there is reference within the EA to future redevelopment at the SCG this falls outside the scope of the current application and does not form part of the current development proposal. The Department's assessment of the application has been carried out on the basis of an overall increase in seating capacity from 44,002 to 46,746 seats.

### Department's Position

- 5.5.7 The Department considers it appropriate to recommend that the Minister impose a condition upon his approval limiting the maximum seating capacity to the number of seats proposed (with limited contingency) (Condition A2). This limit is based upon the outcomes of the Department's merit assessment of the environmental impacts associated with the proposal as set out in Section 6.

## 6 ASSESSMENT

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### 6.1 Director General's Environmental Assessment Requirements (DGEAR's)

6.1.1 Section 75F of the Act provides that the Director General is to prepare Environmental Assessment Requirements for each project (DGEAR's). The EA outlines the matters that the Director General considers should be considered as part of the assessment process.

6.1.2 On 23 July 2006, the Director General issued DGEAR's in respect of the project application which related to:

- *Design, Visual Impact and Design Quality Principles*
- *Conservation and Heritage*
- *Transportation, Access and Car Parking*
- *Impacts on Adjoining Landowners*
- *Lighting Emission*
- *Acoustics & Noise*
- *Waste Management*
- *Environmental Management*
- *Utilities Management*
- *Construction Management*

6.1.3 In addition to these key issues, the proponent was also required to address:

- *the suitability of the site*
- *the likely environmental, social and economic impacts of the proposal*
- *justification for undertaking the project*
- *the public interest*
- *planning provisions applying to the site including permissibility and the provisions of all plans and policies*
- *consideration of alternatives to the proposal*
- *nature and extent of any non compliance with specified EPI's*
- *proposed mitigation and management of residual impacts*
- *a draft statement of commitments detailing measures for environmental management and mitigation measures for monitoring the project*
- *the possible scope of a planning agreement and/or developer contributions*

6.1.4 The EA and subsequent submissions by the proponent forms the basis for consideration of the significant issues associated with the development.

### 6.2 Director General's Environmental Assessment Report

6.2.1 The purpose of this submission is for the Director General to provide a report on the project to the Minister for the purposes of deciding whether or not to grant approval to the project pursuant to Section 75J of the Act.



6.2.2 Section 75I(2) sets out the scope of the Director General's report to the Minister. Each of the criteria set out therein have been addressed below, as follows:

- (a) a copy of the proponent's environmental assessment and any preferred project report; and

The proponent's EA is included at Appendix F whilst the preferred project report is set out for the Ministers consideration at Appendix C.

- (b) any advice provided by public authorities on the project; and

All advice provided by public authorities on the project for the Minister's consideration is set out at Appendix E.

- (c) a copy of any report of a panel constituted under Section 75G in respect of the project; and

No independent hearing and assessment panel was undertaken in respect of this project.

- (d) a copy of or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project; and

A brief assessment of each relevant State Environmental Planning Policies that substantially govern the carrying out of the project is set in Appendix G.

- (e) except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division; and

An assessment of the development relative to the prevailing EPI's is provided in Appendix G.

- (f) any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.

The environmental assessment of the project is this report in its entirety.

### 6.3 Summary of Significant Issues

6.3.1 Clause 8B of the Regulations sets out the matters for environmental assessment and Ministerial consideration. It states that the Director General's report is to include an assessment of the environmental impact of the project, any aspect of the public interest that the Director General considers relevant to the project, the suitability of the site for the project and copies of public submissions received by the Director General.

6.3.2 The Department, in consultation with the City of Sydney Council, relevant Government Agencies and key stakeholders identified a number of issues that were incorporated into the DGEAR's (see Section 6.1) which were subsequently addressed in the proponent's EA. Following the exhibition period there are a number of outstanding issues which require further consideration and resolution under Clause 8B of the Regulations as set out below.

### 6.4 Conservation, Heritage and Archaeology

#### Issue Summary

6.4.1 Conservation, heritage and archaeological impacts arising from the development and the adequacy and appropriateness of the measures proposed to mitigate them.

#### Raised By

6.4.2 Department of Planning; Brian O'Dowd Planning and Design; City of Sydney Council; Centennial Park and Moore Park Trust (CPMPT); NSW Heritage Office; Fox Studios



Consideration

- 6.4.3 The establishment of the SCG dates from 1854 when matches were played at the ground by members of the Military from Victoria Barracks. From 1876 all major cricket matches were played at the ground. The earliest grandstands date from around the turn of the century when four grandstands were constructed. Of these, only the Members Stand and the Lady Members Stand now survive.
- 6.4.4 The Members Stand is a large two level grandstand built circa 1900 and designed by architect, J. Kirkpatrick. This grandstand incorporates an earlier three storey stuccoed brick club room at the rear. Like the Members Stand, the Lady Members Stand is an elegant two level grandstand constructed of cast iron and with an extensive three storey members' room at the rear (Heritage Branch Report 1984).
- 6.4.5 The Members Stand and Lady Members Stand are listed on the State Heritage Register (SHR) as items of State significance. They are also listed on the Register of the National Estate (RNE) for their heritage values and are classified by the National Trust. The SCG falls within the Sydney Cricket Ground Conservation Area in the South Sydney Local Environmental Plan 1988.
- 6.4.6 The proponent commissioned Godden Mackay Logan (GML) to undertake a Heritage Impact Statement (HIS) (who incidentally carried out the 1995 Moore Park Showground Conservation Strategy). The HIS identifies and evaluates all heritage impacts resulting from the development proposal in accordance with Heritage Office Guidelines and includes a detailed analysis of all individual heritage items in the surrounding area.
- 6.4.7 It is acknowledged that the views from the Members, Ladies or MA Noble Stands to the old scoreboard and the Fox Studios buildings beyond (including the RAS Members grandstand and clock tower) will be lost as a result of the introduction of infill development between the existing Bill O'Reilly and Clive Churchill Stands. However, this is not considered to be a significant heritage impact given that the view is already partially impeded by existing structures.
- 6.4.8 The HIS concludes that there will be a negligible impact upon the setting of the State Heritage Listed Members Stand, Ladies Stand or MA Noble Stand given that they are located on the opposite side of the SCG and no physical works to them are proposed. Opportunities to view these historic grandstands will be enhanced by the introduction of additional seating at an elevated level, and by more spectators, as a result of the increased seating capacity.
- 6.4.9 Yabba's Hill ("The Hill") comprises the southern and south eastern part of the SCG and for nearly a century has comprised a large, sloping, grassed open area providing reduced-price viewing of events. The Hill developed over a number of years as sand and other inert waste material was increasingly stockpiled. It has been raised, reshaped and divided by the development of new grandstands. It has become a significant feature at the SCG due to its openness, colourful history and egalitarian character.
- 6.4.10 The development of the new grandstand in this area will result in the loss of an open area which, to the most extent, has been lost through the installation of the electronic video scoreboard in 1983, development of the Doug Walters Stand in 1985 and the introduction of concrete terraces in 1991 removing the last of the Hill's grassed areas. The introduction of this development during the late 1980's and early 1990's was the point at which the Hill primarily lost its heritage significance.
- 6.4.11 The Doug Walters grandstand was constructed in 1985 and comprises an open deck two single storey structure with access to an upper deck via reinforced concrete stairs. The HIS acknowledges that neither this structure, nor the terrace seating on the Hill, meets the criteria for State or local heritage significance. The Department is satisfied that the demolition of this area of the SCG will have no undue heritage impacts in this regard.
- 6.4.12 Overall, it is considered that this heritage impact is relatively limited and can be effectively mitigated by site interpretation of the Hill's history and heritage values within the new grandstand and indeed elsewhere within the SCG. The Department sees limited benefit in stymieing the development of the



new grandstand on this basis particularly given the vast improvements that will occur as a result of the development.

- 6.4.13 The Hill area has been the typical location for the main scoreboard at the SCG, with photographs as early as 1887 showing a small scoreboard in this location. In 1896, a much larger, more permanent scoreboard was constructed and, in 1904, was rebuilt further to the south and higher up the grassed hill area. White ant damage necessitated its demolition and the construction of a new scoreboard in 1924 to a design by Robertson and Marks Architects.
- 6.4.14 The current scoreboard lies to the south of the Bill O'Reilly Stand. It is a painted, rendered three storey masonry structure used to serve refreshments at ground level with a police muster room at the top level. The Department received a number of submissions during the exhibition period regarding the demolition of this structure including those lodged by NSW Heritage Office and the City of Sydney Council (see below).
- 6.4.15 It is the Department's view that whilst it clearly has historic value, its visual presence within the SCG has been compromised by the Doug Walters Stand which, since its development in 1985, has partially obscured it. Several options were investigated by the proponent to retain the old scoreboard in situ but none were considered feasible for engineering reasons and it is questionable as to the extent of the benefits that will result.
- 6.4.16 The City of Sydney Council recommends that the scoreboard building itself be conserved through its reconstruction or replication in another publicly accessible area of the SCG. Demolition of the scoreboard has been carefully assessed within the HIS in accordance with NSW Heritage Office guidelines. In particular, a number of options were considered for its retention and adaptive re-use but none were considered feasible. The recommendations set out within the HIS to mitigate the loss of the old scoreboard will be wholly adopted.
- 6.4.17 This is not the original scoreboard and is in fact the fourth scoreboard to occupy this area of the ground. Whilst demolition of the structure is not an ideal outcome, it is an integral part of the development proposal. It is considered that the loss of the old scoreboard will be mitigated to some extent by archival recording, an assessment of salvageable heritage fabric by heritage professionals. An interpretation strategy will consider, amongst other things, the possibility of constructing an interpretative scoreboard elsewhere within the SCG.
- 6.4.18 Located behind the old scoreboard structure is the boundary wall adjacent to John Hargreaves Avenue which is identified as an item of being of considerable significance within the submitted HIS prepared by GML. The wall will be retained, conserved and made a feature of in the new courtyards adjacent the new grandstand. New penetrations in the wall will remove some limited original fabric but generally its overall appearance will remain on its southern elevation and will be enhanced on its north elevation.
- 6.4.19 The *Ficus pumila* (Creeping Fig) is identified as a landscape item of exceptional significance in the 1995 Moore Park Showground Conservation Strategy prepared by GML. It will be retained and measures will be taken to ensure that damage to its health is minimised particularly during demolition and construction works. No other adverse impact on the heritage trees and plantings on the Fox Studios site provided the recommendations within the aborist report are implemented.
- 6.4.20 The proposed works may disturb archaeological relics present within this area of the SCG. However, these have been assessed as having limited significance and whether they indeed exist, can only be ascertained during the excavation process. Should such relics become apparent, their research potential will be realised and appropriately managed through a programme of archaeological monitoring and evaluation in accordance with current good practice techniques.
- 6.4.21 Fox Studios falls within the Royal Agricultural Society Showground Conservation Area which is listed on the Register of the National Estate. The citation identifies numerous individual buildings that contribute to the heritage values of the site in their own right. However, neither the former showground, nor individual buildings within it, are listed on the SHR.



- 6.4.22 The development of the new grandstand will result in an increase of built form adjacent the heritage items within Fox Studios such as the RAS Council Offices and Members Grandstand and Clock Tower. The new grandstand will overhang John Hargreaves Avenue (see Figures 11 and 12 in Section 5.4) which will alter its setting as well as views along it.
- 6.4.23 There are a number of existing large scale structures already present within this area such as the Bill O'Reilly and Clive Churchill Stands and Fox Studios' Sound Studio One. It is considered that the effect of the proposed development upon the heritage significance, curtilage and setting of the nearby heritage items and streetscape will not significantly deteriorate as a result of the development of the new grandstand.
- 6.4.24 The HIS recommends that the design of the new grandstand, in particular its articulation, materials and colour of the façade elements at its rear are designed so as to be sympathetic to existing heritage items within Fox Studios adjacent. Consequently, the final design details of the proposed external finishes for above ground works shall be subject to further approval by the Department and visible light reflectivity from building materials used on the facades of the buildings shall be limited.
- 6.4.25 It is worthy of note that the new grandstand has been designed so as to reflect the design of the existing SCG grandstands through the use of neutral building colours and similar building materials such as galvanised steel, masonry and glazing. The design philosophy is to provide state of the art, modern facilities with a view to creating a more enclosed viewing area to provide for an enhanced viewing experience for spectators.
- 6.4.26 The Department recognises that there are heritage impacts arising as a result of the development proposal not least the demolition of the old scoreboard structure and the effect of new built form upon several of the nearby items of significance within Fox Studios. Conversely, there are some benefits arising from the proposal including enhanced views over Fox Studios (and the significant items thereto) to the south east and towards the Members, Ladies or MA Noble Stands within the SCG to the north west. The appearance of the northern elevation of the significant boundary wall will also be improved.
- 6.4.27 The Heritage Office has been consulted during the Department's assessment of the proposal and raised no formal objection to the proposal. Whilst it is preferable that the heritage impacts associated with the development proposal did not occur, it is their view that the implementation of the recommendations set out within the HIS will reduce the impacts to some extent and should be incorporated within the conditions of approval accordingly, including those relating to the old scoreboard.
- 6.4.28 On balance, the Department is generally satisfied that the heritage impacts arising as a result of the development proposal can be adequately compensated for by implementing the recommendations set out within the HIS and through provision of mitigation measures in the unlikely event that any archaeological items are uncovered during excavation. Furthermore, it is recommended that the final design details of the proposed external materials and finishes be subject to further approval by the Department.

#### Resolution

- 6.4.29 The proponent has made several statements of commitment that effectively ensure the implementation of all the recommendations made in the HIS. It is recommended that a condition be imposed to ensure that these recommendations are implemented at an appropriate time. The Heritage Office considers this point in time to be prior to commencement of use of the new grandstand. The Department is satisfied with this approach and a suitable condition has been framed on this basis accordingly.
- 6.4.30 Extensive statements of commitment have been made to address built heritage elements within the SCG. They include provision of a site interpretation strategy, preparation of a conservation management plan, archival recording prior to and following development, sensitive design consideration and enforcement of protective measures to ensure significant built elements are not



damaged during works (SOC 5.6.1).

- 6.4.31 Heritage impacts on landscape elements will be mitigated through a further statement of commitment. This includes policies for the management of actions and works that may affect the *Ficus pumila* (creeping fig), potential conflicts between new penetrations in the wall on John Hargreaves Avenue and significant landscape elements that should be identified and resolved as well as protective measures to ensure that damage to significant landscape elements are minimised during works (SOC 5.6.2).
- 6.4.32 Statements of commitment have been made to ensure that the conservation management plan referred to above includes consideration of items of movable heritage (such as salvageable elements of the old scoreboard such as the scoring mechanism) to help guide the future conservation management of identified items of potential movable heritage (SOC 5.6.3).
- 6.4.33 Site interpretation measures will be carried out including interpretation methods, locations of interpretative information and installations and ongoing maintenance of interpretation material. In naming the new grandstand, consideration will be given to inclusion of the words "The Hill" in the new name in recognition of the former character of this part of the SCG (SOC 5.6.4).
- 6.4.34 Finally, statements of commitment have been made to deal with potential archaeological resources (SOC 5.6.5). Firstly, suitable clauses will be inserted into all contractor and subcontractor contracts to ensure on-site personnel are aware of their obligations and requirements in relation to potential relics and all will be required to attend a site induction to ensure awareness of relevant heritage issues within the site. Secondly, in the event that unexpected historical archaeological remains are exposed at the site, they will be appropriately documented according to established methods and procedures.
- 6.4.35 Three additional conditions of approval are recommended to be imposed by the Minister. The first requires approval of the final design details of the proposed external materials and finishes for above ground works by the Director of Strategic Assessments within six months of the Minister approving the project application (Condition B3). Secondly, the visible light reflectivity from building materials used on the facades of the buildings shall not exceed 20% and shall be designed so as not to result in glare that causes any nuisance or interference to any person or place (Condition B4). Thirdly, no works shall commence until an archival record of the old scoreboard has been prepared and submitted to the Heritage Office, prior to commencement of works, in accordance with the NSW Heritage Council guidelines (Condition C10).

## 6.5 Excavation, Demolition and Construction Impacts

### Issue Summary

- 6.5.1 Mitigation of impacts arising from excavation, demolition and construction impacts activities upon adjoining landowners in particular Fox Studios Australia and their tenants.

### Raised By

- 6.5.2 Department of Planning; RTA; Fox Studios; Centennial Park and Moore Park Trust (CPMPT); Colonial First State Property Management (CFSPM); Playbill Venue Management (PVM); NSW Film and Television Office (FTO); Breckenbridge; NSW Film Makers Group; The Media, Entertainment and Arts Alliance, Ausfilm; Visionbytes\_

### Consideration

- 6.5.3 The majority of submissions received by the Department during the exhibition period cited impacts from excavation, demolition and construction activities as being the primary issue associated with the development of the new grandstand. Submissions were received from the RTA, PVM (who operate the adjacent Royal Hall of Industries, the Hordern Pavilion and the Byron Kennedy Hall), CFSPM (who operate the Entertainment Quarter in Moore Park) and Fox Studios. The remainder of submissions



received were lodged by Fox Studios' tenants.

- 6.5.4 Fox Studios features eight stages, production offices and workshops providing professional production facilities and services to the local and international film and television industry. CPMPT leases part of its landholding in this area to Fox Studios who, in turn, let a number of the buildings to sixty independent businesses. These subsidiary businesses provide supporting casting, travel and freight, equipment rental and special effects and postproduction specialists in film editing, sound re-recording and mixing.
- 6.5.5 The issue primarily stems from the sensitive nature of the film and television related operations being carried on in close proximity to the development site and the potential impacts from noise, dust and vibration that may occur during the excavation, demolition and construction works. There is significant concern that this will have a detrimental effect on film and television shoots that are planned by Fox Studios and the specialist professional media operators within the precinct the majority of which rely upon minimal noise and disturbance (e.g. casting companies) and use of highly sensitive machinery and devices.
- 6.5.6 Several submitters queried the effect these activities will have upon the ability of Fox Studios (and indeed the NSW State and Australian television and filmmaking industry as a whole) to effectively market itself to major filmmakers who, by the global nature of the business, are inherently footloose. There is concern that the sight of major construction activities taking place in close proximity to Fox Studios may deter potential filmmakers from using the studios. Several submitters made this point in the context of the current film and television industry in NSW which has seen a downtrend in recent years and dwindling employment levels in comparison to other Australian States such as Queensland and Victoria.
- 6.5.7 The tenants in Buildings 20, 21 and 22 will require relocation for the duration of the excavation, demolition and construction works given their close proximity to the development site. This has been acknowledged as a necessary measure from the outset by the proponent. Other buildings that will be primarily affected by the excavation, demolition and construction works include Buildings 11, 16, 19, 21, 22, 23, 24, 30, 33, 44, 53 and 61 and Stages 1, 7 and 8. Submitters have raised a number of related issues arising as a result of these works, such as dust, noise, vibration, access and traffic impacts.
- 6.5.8 Three demolition and construction management options were canvassed during the exhibition period by the proponent all of which, to varying degrees, involve access to Fox Studios for construction activities. During the exhibition period it has become clear that Option 3 is the preferred option for Fox Studios and its tenants given that this option requires the least interference to the activities taking place therein. Option 3 has since been refined and a hybrid proposal (Option 3A) has been formalised in a detailed Construction Management Plan (CMP) following engineering design detailing and consultation with CPMPT and Fox Studios.
- 6.5.9 The early works will be undertaken in two stages. Initially, the preliminary enabling works will take place including archival recording of the heritage significance of the old scoreboard, preparatory works to the Dally Messenger Stand with a view to accommodating the relocated video scoreboard and the dismantling of floodlighting tower no. 3. Secondly, the necessary demolition and excavation activities will occur in order for the development site to be in a suitable condition for the main construction activities to commence. It is envisaged that the early works will be completed by June 2007.
- 6.5.10 The main contract works will be undertaken in two stages. The first phase of construction works are scheduled to begin following completion of the early works package. This will involve the development of the lower tier of the new grandstand to accommodate 6,000 new seats and will be available for occupation by spectators in January 2008. It is envisaged that the second phase of construction works for the remaining development of the new grandstand will take place for the remainder of that year. The new grandstand will be operational by November 2008.
- 6.5.11 The CMP sets out a methodology for the management of the process, including safety aspects, traffic



management, site establishment, waste and materials handling as well as demolition, excavation, foundations and structural development. It addresses roof, upper seating structure and roof cladding, light towers, services and access options. Measures will be undertaken to mitigate any effects on adjoining landowners such noise, traffic, vibration, dust and stormwater runoff from demolition and construction activities.

- 6.5.12 In addition to formalising Option 3A as the basis of the detailed CMP, the document makes specific changes to the project following consultation with adjoining landowners. The major crane has been relocated further to the north east to reduce oversail over Fox Studios. Hoardings will be localised (for OHS purposes only) and will not be present in John Hargreaves Avenue for approximately one year after construction commences. Major rock breaking of bases will be avoided by using high intensity explosives and the use of Fox Studios premises will be limited to the early works stage only.
- 6.5.13 Fox Studios has provided a detailed response to the proponent's preferred project report, on behalf of itself and its tenants, which encompasses detailed comments regarding the finalised CMP. Whilst it is concluded that the organisation accepts that the development of the SCG must proceed, it is considered essential that adequate mandatory mechanisms and procedures are in place to protect the interests of Fox Studios and its tenant and productions to the highest degree possible. Fox Studios, in particular, is of the view that a number of matters have not been satisfactorily addressed.
- 6.5.14 The Department is of the view that the operation of multimillion dollar specialist businesses in close proximity is a unique scenario and it has considered the issue in this context. Detailed refinements made to the CMP reflect that the proponent has sought to address this issue as far as possible at this stage. It appears that the CMP can only be developed to a prescribed level of detail prior to contracts being awarded for the early works package and main construction works scheduled to take place in January 2006 in order to ensure that sufficient flexibility is provided as part of the tender process.
- 6.5.15 It is considered that the CMP is of insufficient detail to demonstrate that excavation, demolition and construction activities will not have an unacceptable effect on specialist businesses in the vicinity of the site particularly Fox Studios, the Royal Hall of Industries, Hordern Pavilion and the Byron Kennedy Hall as well as the wider adjoining community. Once the early works and main contracts are awarded the detailed measures proposed by the appointed contractors will be better known and can be assessed further by the Department, in consultation with adjoining landowners where appropriate.
- 6.5.16 Notwithstanding this, the Department is comfortable that the CMP is comprehensive enough to warrant a positive recommendation to the Minister so as to satisfy the proponent's tight timeframe provided suitable conditions are imposed (see below).
- 6.5.17 It is considered that further CMP's be submitted to the Department prior to the commencement of each of the applicable works or tasks. The matters that will need to be addressed are those that the Department considers to be inadequately addressed at this stage. This solution retains the Department with absolute control of this issue through its final approval role as well as ensuring that this issue is satisfactorily addressed in an expedient manner. Sufficient flexibility has been built into the condition to ensure staged lodgement of CMP's can occur to as not to effect implementation of the early works.
- 6.5.18 Resolution
- 6.5.19 The proponent has made extensive statements of commitment in relation to this issue which have been separated into six distinct sections namely general controls, demolition management, dismantling of electronic scoreboard, dismantling of light towers, excavation management and construction management.
- 6.5.20 Dealing firstly with general controls, all demolition, excavation and construction works will be undertaken generally in accordance with the CMP in accordance with Option 3A. Environmental controls will be put in place to mitigate the effects of noise, dust and stormwater, the building contractor will establish a safety plan in accordance with OH&S requirements, sensitive items will be stabilised and protected and hours of work will be restricted unless further acoustic analysis is



undertaken (SOC 5.4.1).

- 6.5.21 The contractor will be required to maximise recycling of waste materials, hazardous materials will be disposed off in accordance with statutory requirements, close consultation will occur with all stakeholders during the demolition works, heavy rock breakers will not be used to remove the light tower base, splitting and crushing will be considered on site to minimise noise emissions and the recommendations in the acoustic report will be implemented (SOC 5.4.2).
- 6.5.22 Any activities relating to the dismantling of the electronic scoreboard as identified in the CMP occurring within Fox Studios will be detailed in an early works management plan to be agreed with Fox Studios (SOC 5.43).
- 6.5.23 Any activities relating to the dismantling of the light tower which are identified in the CMP as occurring within Fox Studios will be detailed in an early works management plan to be agreed with Fox Studios (SOC 5.44).
- 6.5.24 A detailed assessment of existing foundations including retaining walls and potential effects on excavation stability will be carried out, where existing foundations are located in close proximity to the proposed excavation and detailed mapping of the rock face will be carried out and stabilisation methods, such as rock bolts and anchors will be identified. The sandstone boundary wall and creeping fig thereon will be protected during excavation (SOC 5.4.5).
- 6.5.25 Construction activities will be carried out in accordance with the CMP and the mitigation measures identified therein, noise mitigation measures contained within the acoustic report will be implemented and tree protection measures and recommendations contained within the submitted aborist's report will be adjusted where relevant for Option 3A (SOC 5.4.6). The hoarding will be treated along John Hargreaves Avenue when erected to reduce its visual impact (SOC 5.26).
- 6.5.26 The Department recommends that a number of conditions be imposed so as to satisfactorily mitigate impacts arising from excavation, demolition and construction impacts.
- 6.5.27 A number of generic conditions require actions to be undertaken prior to commencement of works. In particular, protection of public way (by use of a bank guarantee) (Condition C1), submission of a pre-construction dilapidation report of all existing and adjoining buildings, infrastructure and roads (Condition C2), land remediation (Conditions C3, C11 and C12), notice to be given prior to excavation (Condition C5), specific specifications to be made in relation to the erection of hoarding and scaffolding (Conditions C6 and C7) and construction contract obligations (Condition C9).
- 6.5.28 The most significant condition relates to excavation, demolition and construction impacts (Condition C8). The condition requires that the development be undertaken generally in accordance with the submitted CMP prepared by McLachlan Lister Pty Ltd October 2006. Additional CMP's shall be submitted to and approved by the Director General (or his delegate) prior to commencement of those related works on the site. Nothing precludes the preparation and submission of individual CMP's for any development action within any phase of the redevelopment so as to allow the staged submission of CMP's by the proponent or any person acting upon the Minister's approval. The CMP's will address particular matters that the Department has identified as being deficient within the submitted CMP only insofar as they relate to that particular development action or phase of development.
- 6.5.29 A number of conditions are recommended to be imposed during construction of the new grandstand, a number of which are standardised conditions, namely Conditions D3 (Setting out Structures), D4 (Approved Plans to be On-site), D5 (Site Notice), D6 (Contact Telephone Number), D7 (Protection of Trees – Street Trees), D8 (Protection of Trees – On site Trees), and D9 (Dust Control Measures). The wording of Condition D10 deals with permissible hours of work and has been agreed between CPMP, Fox Studios and the Proponent. D12 (Vibration Criteria), D13 (Heritage Superintendent) D14 (Impact of Below Surface Works – Non Aboriginal Relics), D15 (Impact of Below Surface Works – Aboriginal Relics) and D16 (Recycling of Concrete).



- 6.5.30 Condition D11 (Construction Noise Objectives) is a unique condition that has been developed between acoustic consultants appointed by the proponent and Fox Studios to address noise issues during construction given the particular noise sensitivities that exist there. The Construction Noise Objective is to manage noise from construction activities to agreed levels. Values are set for the demolition phase (estimated to be 8 weeks) and for the remainder of the construction. The demolition phase is of a short duration and higher levels of noise intrusion are acceptable.
- 6.5.31 The tables above are based upon allowing the existing  $L_{A10}$  (average maximum noise level) not to be exceeded by more than 10dB(A) during the demolition phase and reduced to 3 - 5dB(A) dependent upon the location by construction activities. This is considered a reasonable outcome that allows construction to proceed with minimal intrusion. The builder shall implement all feasible noise mitigation and management measures with the aim of achieving the construction noise objectives.
- 6.5.32 A sophisticated array of data logging and alarm systems will be incorporated into an agreed acoustic plan between the two parties which will provide contingency plans in the event that agreed noise levels are breached. The condition also sets out specific noise mitigation measures that will be installed to Elsa Chauvel House and Sound Stage 1.
- 6.5.33 Two conditions are recommended prior to commencement of use of the new grandstand to ensure that any damage to the public way is restored (by use of the bank guarantee referred to in Condition C1) (Condition E6) and the submission of a post-construction dilapidation report (following on from Condition C2 as referred to above) to ascertain whether the construction works has created any structural damage to adjoining buildings, infrastructure and roads (Condition E7). A number of more general matters have been set out within the advisory notes such as construction inspections and use of mobile cranes.

## 6.6 Urban Design, Visual Impact and Built Form

### Issue Summary

- 6.6.1 External urban design of the new grandstand in the context of the SCG and surrounding environs and potential visual impacts arising from the increase in built form.

### Raised By

- 6.6.2 Department of Planning; Centennial Park and Moore Park Trust (CPMPT)

### Consideration

- 6.6.3 The contemporary grandstands that encircle the playing field have been constructed with similar materials and finishes (aside from the State Heritage Listed Members Stand and Lady Members Stand). The new grandstand has been designed so as to reflect the existing SCG grandstand through neutral building colours and building materials such as galvanised steel, masonry and glazing.
- 6.6.4 The final design details of the proposed external materials and finishes for above ground works will be subject to further assessment and review prior to approval by the Department. This is primarily in response to heritage issues raised during the Department's assessment of the proposal (see Section 6.4).
- 6.6.5 The roof form has been formalised as part of the preferred project submission and will comprise a plane that is cantilevered from the rear of the upper stand level. Consequently, no supporting columns will obstruct view lines onto the playing field from the spectator seating areas. This is similar to the adjacent Bill O'Reilly, Brewongle and Clive Churchill grandstands and other contemporary stadia.
- 6.6.6 The construction of the new grandstand necessitates the relocation of the video scoreboard to the top of the Dally Messenger Stand together with the two existing tri-vision advertising panels either side of the video screen. The preferred project submission has been used as an opportunity to realign them



which will result in further overhanging of Fox Studios' Building 24 and a parcel of land leased to SC&SGT for the purposes of a substation.

- 6.6.7 The proponent has submitted detailed information in support of the project application including plans, elevations and sections, photomontages and artist's impressions. View analysis has been undertaken from a number of key vantage points including John Hargreaves Avenue and the Entertainment Quarter. A scale model of the site in the context of the entertainment precinct has also been produced.
- 6.6.8 Given the characteristics of the existing structures and lack of substantial redevelopment thus far in this part of the ground (as opposed to the development of adjacent grandstands primarily in the 1980's) it is acknowledged that the bulk and scale of development will increase particularly from overhanging into John Hargreaves Avenue and Lottie Lyell Avenue to the east and south, as discussed in Section 6.4.
- 6.6.9 The design specification of the new grandstand has been subject to detailed architectural and engineering input to ensure harmonious integration with its receiving environment. The new grandstand will operate independently as a stand alone autonomous facility albeit with linkages into the service access on the basement level of the Bill O'Reilly grandstand.
- 6.6.10 The existing structures within the Hill area (including the Doug Walters grandstand and ancillary structures) are clearly dilapidated, out of date and in need of upgrading. The redevelopment of this area of the ground to accommodate the new grandstand will significantly improve the appearance of the SCG as well as providing superior facilities for spectators.
- 6.6.11 The proponent has worked closely with CPMPT during the course of the Department's assessment of the development proposal as part of the landowner's consent process. Detailed plans and information has been lodged in support of the (landowners consent) application in relation to the proposed encroachments and emergency egress required onto land owned by CPMPT leased to Fox Studios (see Section 5.4).
- 6.6.12 Implementation of the development proposal will result in the south eastern quadrant of the SCG (i.e. the Brewongle and Clive Churchill Stands and the new grandstand) becoming circumferential. A similar arrangement has occurred between the MA Noble and Bradman Stands opposite. This will provide a number of benefits often associated with this type of stadium such as better enclosure, maximisation of spectator visibility and provision of a more intimate atmosphere during major events.
- 6.6.13 The SC&SGT has identified a number of construction projects to be undertaken over the next 10 to 15 years through its comprehensive master plan of the site. The apparent intention is to develop the MA Noble, Bradman, Dally Messenger and Bill O'Reilly grandstands so as to ultimately create more of an "arena" type stadium arrangement. However, there are currently no formal plans to proceed in this manner.
- 6.6.14 It is evident that the new grandstand has been designed so as to conform to the long term redevelopment plans for the SCG whilst ensuring that it is capable of operating in perpetuity until such time as the site wide master plan for the SCG is realised. The Department is satisfied that this can occur prior to the implementation of future construction projects if and when they are contemplated.
- 6.6.15 Notwithstanding this, it is worthy of note that some areas of seating on Level 6 of the new grandstand will have obscured views of an eastern portion of the playing field. Similarly, spectators in the back corners of the Bill O'Reilly and Bradman Stands adjacent the Dally Messenger Stand will have obfuscated views to the north and east of the ground as a result of the relocated electronic scoreboard albeit to a lesser extent.
- 6.6.16 The Department is of the view that the design of the new grandstand satisfactorily takes into account the existing environs both within the context of the SCG and the surrounding area. Clearly, from an operational perspective, the new grandstand is a vast improvement on the existing situation in this area of the SCG. It is considered that the resultant development will be superior in terms of safety,



efficiency and design and can operate in perpetuity until such time as future redevelopment occurs.

#### Resolution

- 6.6.17 The proponent has committed to the carrying out of the development in accordance with the approved plans and documentation (including finishes and materials) "while allowing reasonable design development to occur". Should the roof form significantly change as a result of further design development a further project application or modification application will be required under the provisions of the Act.
- 6.6.18 The Department recognises that it is premature to completely finalise the roof form prior to essential engineering design detailing and is satisfied with the approach adopted by the proponent in this regard (SOC 5.2) given that any significant deviation from the approved plans and documentation will require a further application for development in any event.
- 6.6.19 Notwithstanding this, it is recommended that a condition be imposed requiring the proponent, or any party acting upon the approval, to submit a three monthly report addressing compliance with all relevant conditions of this approval (Condition A8). In addition, and as noted in Paragraph 6.4.34 above, the Department recommends that it retains an approval role for final design details of the proposed external materials and finishes for above ground works (Condition B3) and the visible light reflectivity from building materials will be limited on the facades of the buildings (Condition B4).

### **6.7 Height and Overshadowing**

#### Issue Summary

- 6.7.1 Overshadowing impacts upon adjoining landowners as a result of additional height, bulk and scale generated by the new grandstand.

#### Raised By

- 6.7.2 The Department of Planning; Fox Studios; Centennial Park and Moore Park Trust (CPMPT)

#### Consideration

- 6.7.3 The SCG is one of a number of major entertainment venues within the Moore Park Precinct together with Aussie Stadium, Fox Entertainment Precinct, Hordern Pavilion and the Royal Hall of Industries. Fox Studios lies adjacent the development site and accommodates a number of fairly prominent structures.
- 6.7.4 The uppermost tier of seating in the new grandstand will be at RL 58.86 metres AHD whilst the uppermost rear edge of the roof structure will be at RL 64.92 metres AHD. The height of the new grandstand will project approximately 3.5 metres above the maximum roof levels of the adjacent Bill O'Reilly and Clive Churchill grandstands (approximately 61.60 AHD).
- 6.7.5 The proponent has produced detailed shadow diagrams at 9am, 12pm and 3pm for Winter and Summer Solstice and Equinox periods. The diagrams show the extent of existing overshadowing in the immediate area and the maximum extent of overshadowing to adjoining landowners following the development of the new grandstand.
- 6.7.6 It is evident that the existing buildings within this part of Moore Park Precinct, by their large scale and nature, currently overshadow one another quite significantly at certain times in the year particularly shadows cast by the SCG, Fox Studios' Building 61 and Stage 1 and Aussie Stadium. The shadow diagrams show that some additional overshadowing will occur as a result of the new grandstand.
- 6.7.7 Additional overshadowing will generally increase the footprint cast over the areas east, south, west of the proposed grandstand. In particular Stage 1, Buildings 11, 15, 16, 19 and 61 and the Fox



Entertainment Precinct will be affected by increased overshadowing. However, in the context of the amount of existing overshadowing presently occurring, this is not considered to be significant.

- 6.7.8 Detailed information was submitted by the SC&SGT to CPMPT as part of its landowner's consent submission (see Section 5.4) including provision of shadow diagrams to articulate the likely effects of overshadowing on Buildings 16 and 19; an issue CPMPT raised in its original submission.
- 6.7.9 CPMPT has acknowledged that the EA (including subsequent preferred project documentation) and the further plans and documentation lodged in support of the application for landowner's consent is sufficient to address its concerns. The Department is satisfied that this issue has been satisfactorily addressed.

#### Resolution

- 6.7.10 The proponent has committed to reassess the shadow impacts onto the adjoining buildings should the roof form be subject to change during the engineering design detailed scheme (SOC 5.16).
- 6.7.11 It is recommended that no further action be taken by the Minister in relation to his issue.

### **6.8 Vehicular and Pedestrian Accessibility**

#### Issue Summary

- 6.8.1 Potential vehicular traffic impacts, vehicular and pedestrian accessibility to the new grandstand, internal circulation and servicing arrangements and emergency egress.

#### Raised By

- 6.8.2 Department of Planning; RTA; Playbill Venue Management; Centennial Park and Moore Park Trust (CPMPT); Fox Studios

#### Consideration

- 6.8.3 No car parking is proposed on-site nor will there be any vehicular access into the new grandstand aside from emergency vehicles and servicing vehicles for the delivery and picking up of food, beverages and merchandise and equipment associated with concerts and performances.
- 6.8.4 Average crowd attendances for major events at the SCG, including test cricket, are well within the existing capacity of the SCG. Average crowd attendances in 2003 and 2004 were 23,704 and 30,146 respectively. Capacity crowds occur infrequently for major events such as the first day of the cricket test, one-day cricket internationals involving Australia and major AFL games. In 2004, the highest average crowd attendance of 37,998 spectators over the course of 5 events was reached during test cricket games.
- 6.8.5 The Moore Park Major Events Co-ordinating Unit encompasses representatives from the Department of Transport, Fox Studios, CPMPT, City of Sydney Council, SC&SGT, STA, RTA and the Taxi Council. This provides coordination and strategies for events in the Moore Park Precinct. It is able to arrange for supplementary parking to be provided and for special traffic management arrangements to be made to facilitate access to and from the area prior to and following major events.
- 6.8.6 A Moore Park Precinct Events Operation Plan is in place which seeks to coordinate impacts during events, allocating roles and responsibilities. Events are categorised (A, B and C), with Category A events being those which typically draw crowds of 25,000 spectators or more. For Category A events, all available parking resources in the precinct are activated (6,250 spaces in total). Nevertheless, the majority of spectators for major events arrive by means other than private motor vehicle.
- 6.8.7 The SCG currently provides maximum seating capacity for 44,002 spectators of which the Hill provides



for 8,059 spectators and the Doug Walters Stand provides for 1,574 spectators. The development of the new grandstand will provide for 12,395 spectators. Once the structures are removed, the overall maximum seating capacity at the SCG will increase from 44,002 to 46,764 seats; an increase of approximately 6%. As noted above, it is rare that the current maximum seating capacity of 44,002 is reached except for during major sporting events.

- 6.8.8 The new grandstand itself has been designed as a safe, modern, state of the art grandstand with efficient internal spectator circulation being achieved. Access for disabled visitors has been provided through the use of a removable balustrade and seating area adjacent the Clive Churchill Stand and provision of escalators and lifts. New convenience food and drink outlets are to be provided for usage by all spectators within via the basement level link to the Bill O'Reilly Stand. Pedestrian ingress and egress to the SCG will remain primarily from Driver Avenue.
- 6.8.9 Safety is one of a number of issues that have been foremost in the evolution of the new grandstand design as engineering and design outcomes have evolved. Emergency egress will be obtained from the rear of the new grandstand by creating penetrations in the boundary wall and the corner splay of the listed wall next to John Hargreaves Avenue. The barriers at the front of the new grandstand adjacent the playing field are removable in emergency situations allowing spectators to egress. The Department is generally satisfied provided that an emergency egress management plan is provided.
- 6.8.10 Systems are in place to contend with such events through the existing Moore Park Major Events Co-ordinating Unit and Moore Park Precinct Events Operation Plan. These contingency operations are set to continue in perpetuity. The Department, in consultation with the RTA, is generally satisfied that the relatively minor increase in the number of seats in the context of the maximum seating capacity at the SCG is not a significant issue.

#### Resolution

- 6.8.11 The proponent has committed to informing the Ministry of Transport of any development that will impact upon bus servicing (SOC 5.22) and that no service vehicles will access the SCG at times when the SCG is open to the public (SOC 5.24).
- 6.8.12 The Department recommends that two conditions be imposed by the Minister. Firstly, an Emergency Egress Management Plan shall be submitted to and approved by the Director, in consultation with the CPMPT and other key stakeholders, prior to the commencement of use of the new grandstand (Condition E5). Secondly, access and facilities for people with disabilities shall be provided in accordance with relevant Australian Standards (Condition B6).

### **6.9 Lighting Emission and Illumination**

#### Issue Summary

- 6.9.1 Potential lighting emission and illumination effects as a result of upgrading existing lighting luminaries at the SCG.

#### Raised By

- 6.9.2 Department of Planning

#### Consideration

- 6.9.3 There are two existing floodlighting towers within the development site boundary, one positioned between the Doug Walters Stand and Bill O'Reilly Stand, the other located immediately behind the electronic scoreboard. It was originally proposed to dismantle both floodlighting towers (Nos. 2 and 3) and rebuild them above the top of the new lift shaft within the new grandstand.
- 6.9.4 Each was to be relocated an additional ten metres away from the playing field than their current



position. Following further engineering design detailing the scheme has been amended so as to retain floodlighting tower no. 2 in situ. Floodlighting tower no. 3 only will be relocated in the manner described above. Existing floodlighting towers 1, 4, 5 and 6 are to remain in their current positions.

- 6.9.5 The opportunity has also been taken as part of the development proposal to comprehensively upgrade all floodlighting tower luminaries within the SCG to modern day contemporary international standards. The new luminaries will be enclosed and mounted on poles within the new headframes. The overall height of the poles and appearance of the headframes will match the existing arrangements.
- 6.9.6 The proponent has lodged a sports lighting environmental impact report in support of the project application. The report states that the new sport lighting arrangements will significantly improve the spill lighting emanating from the SCG, improve the luminous intensity requirements for each luminaire and the threshold increment criteria on the adjacent trafficable roads.
- 6.9.7 The new lighting arrangements have been calculated and demonstrate that the lighting arrangements for non-televised training matches at 250 lux mode to televised matches at 1,400 lux mode is within relevant Australian Standards. The luminous intensity of the luminaire within the new installations has been calculated to comply with Level 2 Control set out within Table 2.2 of AS 4282 and is acceptable.
- 6.9.8 The Australian Standards provides criteria covering the illumination of the sports field area and relating to player comfort. This indicates criteria for a Glare Index of 50. The sports lighting at the SCG has been calculated to comply with the glare rating that provides an indication of improvement in illumination system being provided and its effects on adjacent developments.
- 6.9.9 Sky glow and light spill has been assessed based on an area extending 500 metres from the centre of the pitch in each direction. 200/250 training lux modes and 1,400 lux TV mode for Upwards Waste Light Ratio (UWLR) is 1% and 1.5% respectively. These values are direct from the floodlight with no contribution from inter-reflection.
- 6.9.10 Light wastage is minimal due to the precisely controlled distribution of the floodlights. Although there are 5 beam widths luminaries used they are all symmetric type distributions. The use of an internal baffle within the floodlight adjusts the symmetric distribution slightly, reduces the direct component skyward and increases the utilisation factor by directing more light towards the field of play.
- 6.9.11 In summary, the sports lighting environmental impact report lodged in support of the project application demonstrates that the new lighting arrangements (i.e. relocation of floodlighting tower No. 3 and upgrading of 6 luminaries) will not contravene relevant Australian Standards, in particular AS 4282-1997 "Control of Obtrusive Effects of Outdoor Lighting".

#### Resolution

- 6.9.12 The proponent has made a statement of commitment confirming that the new sports lighting will not result in any increase in sky glow or light spillage when compared to the existing situation and will generally be in accordance with that described and assessed within the sports lighting environmental impact report prepared in support of the project application (SOC 5.8).
- 6.9.13 The Department is satisfied with the findings of the sports lighting environmental impact report and has imposed a condition to ensure that all outdoor lighting shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting (Condition B5).

### **6.10 Environmental Management and Utility Provision**

#### Issue Summary

- 6.10.1 Environmental management and utility provision.



Raised By

- 6.10.2 Department of Planning; Department of Environment and Conservation (DEC)

Consideration

- 6.10.3 A number of environmental issues were raised in relation to the development by DEC. These primarily relate to noise and vibration impacts and management, stormwater management as well as dust, waste and wastewater management. In addition, it was requested that two broader environmental and conservation issues are addressed namely stormwater segregation and development of a comprehensive water avoidance recycling and reuse strategy.
- 6.10.4 The Department needs to be satisfied that there will be no undue environmental impacts that may arise as a result of the development and that the new grandstand can be satisfactorily serviced by essential utilities and services. DEC recommended that the proponent's statement of commitments be amended so as to address these issues and offered suggested wording to achieve this.

Resolution

- 6.10.5 The proponent has wholly incorporated DEC's recommendations within its revised statement of commitments. Furthermore, a Draft Waste Management Strategy has been prepared at this stage to address waste management issues. An additional statement of commitment has been made requiring compliance with the requirements of relevant public authorities in regard to the connection to, relocation and/or adjustment of services affected by the construction of the proposed development.
- 6.10.6 Whilst the Department is generally satisfied with the approach taken by the proponent in relation to this issue, it is recommended that a condition of approval be imposed which ensures compliance with the Draft Waste Management Strategy in perpetuity during the operation of the new grandstand. The condition requires that the proponent shall submit to the Department an audit demonstrating the waste management practices being undertaken in the new grandstand no sooner than two years from the date of the Minister's approval (Condition B10).

**6.11 Operational Issues**Issue Summary

- 6.11.1 Potential operational impacts arising once the new grandstand is completed.

Raised By

- 6.11.2 Department of Planning; Centennial Park and Moore Park Trust (CPMPT) Fox Studios; RTA

Consideration

- 6.11.3 During the exhibition process, a number of issues have arisen that may come into fruition once the grandstand is completed and is operational. These issues include operation noise, traffic management and wind impacts. The Department, in consultation with other government agencies, considers that it is appropriate that these issues be addressed prior to commencement of use of the new grandstand.
- 6.11.4 As noted in Section 6.8 above systems are in place to manage traffic generation through the existing Moore Park Major Events Co-ordinating Unit and Moore Park Precinct Events Operation Plan. These contingency operations are set to continue in perpetuity. The Department, in consultation with the RTA, is generally satisfied that the relatively minor increase in the number of seats in the context of the maximum seating capacity at the SCG is not a significant issue and further traffic impact studies are not required.

- 6.11.5 Wind impacts.



Resolution

- 6.11.6 The Department recommends that the Minister impose one condition to address the issues raised during the exhibition period.
- 6.11.7 An Operational Noise Management Plan shall be submitted to and approved by the Director, in consultation with CPMP. Fox Studios and other key stakeholders, prior to commencement of use of the completed grandstand. The Plan shall address the potential for noise to reflect from the ceiling through the openings at the rear of the new grandstand and any gaps between the new grandstand and the adjacent Bill O'Reilly and Clive Churchill Grandstands and any mitigation measures such as use of sound absorption materials (Condition E4).



## 7 CONCLUSION

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- 7.1 The Department has reviewed the environmental assessment and the preferred project report and duly considered advice from public authorities as well as issues raised in general submissions in accordance with Section 75(2) of the Act.
- 7.2 All the relevant environmental issues associated with the development proposal have been extensively assessed. These issues primarily focus upon conservation, heritage and archaeology, excavation, demolition and construction impacts, urban design, visual impact and built form, height and overshadowing, vehicular and pedestrian accessibility, lighting emission and illumination, environmental management and operational issues.
- 7.3 The most significant issue that has arisen is acknowledged dust, noise, vibration, access and traffic impacts that will arise as a result of excavation, demolition and construction works. This issue is of particular significance in the context of this project given the close proximity of sensitive film and television related operations which, by the nature of their business, rely upon limited noise and disturbance to carry out their activities.
- 7.4 The Department is of the view that the combination of statements of commitment made by the proponent together with supplementary conditions of approval that are recommended be imposed by the Minister, should effectively mitigate and manage this issue within acceptable environmental limits. Such measures include relocation of tenants, detailed noise monitoring and management and submission of supplementary and detailed Construction Management Plans to address outstanding matters.
- 7.5 The provisions made within the approval as a whole have been developed in concurrence with the proponent, CPMPT – as part of the landowners consent process, as well as Fox Studios, who will primarily be affected by the development. The Department is satisfied that these impacts will not have a detrimental impact on major filmmaking activities that are currently planned for next year, including the filming and production of Baz Luhrmann's new film "Australia".
- 7.1.1 The development of the new grandstand in the Hill area will result in the loss of an open area which, to the most extent, has been lost through the installation of the electronic video scoreboard in 1983, development of the Doug Walters Stand in 1985 and the introduction of concrete terraces in 1991 removing the last of the Hill's grassed areas. The introduction of this development during the late 1980's and early 1990's was the point at which the Hill primarily lost its heritage significance.
- 7.1.2 This is not the original scoreboard and is in fact the fourth scoreboard to occupy this area of the ground. Whilst demolition of the structure is not an ideal outcome, it is an integral part of the development proposal. It is considered that the loss of the old scoreboard will be mitigated to some extent by archival recording, an assessment of salvageable heritage fabric by heritage professionals and an effective interpretation strategy, such as the possibility of constructing an interpretative scoreboard elsewhere within the SCG.
- 7.1.3 The Department is generally satisfied that the heritage impacts arising as a result of the development proposal can be adequately compensated for by implementing the recommendations set out within the HIS and through provision of mitigation measures in the unlikely event that any archaeological items are uncovered during excavation. Furthermore, it is recommended that the final design details of the proposed external materials and finishes be subject to further approval by the Department.
- 7.6 The proponent has worked closely with the Department, adjoining landowners, Government agencies and other key stakeholders so as to ensure that the development outcome is the optimum solution in the light of the operational and other requirements that need to be satisfied at the SCG over the course of the coming years.
- 7.7 Indeed, both the SCG and Fox Studios are both valuable assets to the State of New South Wales in



economic and cultural terms and the Department has sought to manage their short term aspirations in a balanced, yet comprehensive manner, in order to achieve an acceptable outcome to both parties whilst the excavation, demolition and construction activities take place over the next two years.

- 7.8 The Department recommends that the project application be approved subject to the imposition of conditions set out in Appendix A.



## **APPENDIX A. CONDITIONS OF APPROVAL**

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ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

APPROVAL OF MAJOR PROJECT NO. MP 06\_0136

(FILE NO. 9042785)

I, the Minister for Planning, pursuant to Section 75J of the Environmental Planning and Assessment Act 1979, approve Major Project No. 06\_0136 referred to in the attached Schedule 1, by granting approval subject to the conditions of approval in the attached Schedule 2.

The reasons for the imposition of conditions are:

- (1) To encourage good urban design and a high standard of architecture.
- (2) To ensure the maximum spectator capacity at the SCG does not exceed 48,000 seats.
- (3) To adequately mitigate the environmental impact of the development.
- (4) To satisfactorily protect adjoining landowners from adverse demolition and construction impacts.
- (5) To protect and enhance the heritage and archaeological features in and around the SCG.
- (6) To maintain the amenity of the surrounding area and existing environs.

Frank Sartor MP  
Minister for Planning

Sydney,

2006



## SCHEDULE 1

### CONDITIONS OF APPROVAL

#### MAJOR PROJECT APPLICATION NO. MP 06\_0136

#### PART A – TABLE

Application made by:	Sydney Cricket and Sports Ground Trust (SC&SGT)
Application made to:	Minister for Planning
Major Project Number:	06_0136
On land comprising:	Sydney Cricket Ground (SCG) – Lot 1530 in DP 752011 with projections of uppermost tiers of seating and video scoreboard onto Lot 51 in DP 1041134 and with construction activity on Lots 51 and 52 in DP 1041134.
Local Government Area	City of Sydney Council
For the carrying out of:	A detailed description of the development approved is described in Condition A1 of Schedule 2
Capital Investment Value	\$63 million
Type of development:	Project Approval under Part 3A of the EP&A Act
Section 119 Public Inquiry Held:	No
Section 75G Independent Hearing and Assessment Panel:	No
Approval made on:	
Approval:	Project Approval is granted subject to the conditions in the attached Schedule 2.
Date of commencement of approval:	This approval commences on the date of the Minister's approval.
Date approval is liable to lapse	5 years from the date of approval unless specified action has been taken in accordance with Section 75Y of the Act.

#### PART B – DEFINITIONS

In this approval the following definitions apply:

**Act** means the *Environmental Planning and Assessment Act, 1979* (as amended).

**Advisory Notes** means advisory information relating to the approved development but do not form a part of this approval.

**BCA** means the Building Code of Australia.

**CMP** means Construction Management Plan.

**Council** means the City of Sydney Council.

**CPMPT** means the Centennial Park and Moore Park Trust

**Department** means the Department of Planning or its successors.

**Director** means the Director of Strategic Assessments (or successor)

**Director-General** means the Director-General of the Department.

**Fox Studios** means Fox Studios Australia Pty Ltd.

**Major Project No 06\_0136** means the project described in Condition A1 of Schedule 2 and the accompanying plans and documentation described in Condition A2 of Schedule 2.

**Minister** means the Minister for Planning.

**Project** means development that is declared under Section 75B of the Act to be a project to which Part 3A applies.

**Proponent** means Sydney Cricket and Sports Ground Trust (SC&SGT) or the person proposing the carrying out of development comprising all or any part of the project and includes persons certified by the Minister to be the Proponent.

**Regulation** means the *Environmental Planning and Assessment Regulations, 2000* (as amended).

**RTA** means the Roads and Traffic Authority

**Site** has the same meaning as the land identified in Part A of this Schedule.



## SCHEDULE 2

### CONDITIONS OF APPROVAL

#### MAJOR PROJECT APPLICATION NO. MP 06\_0136

#### PART A – ADMINISTRATIVE CONDITIONS

##### A1 *Development Description*

Project Approval is granted only to the carrying out of the following development:

- (1) Construction activities on adjoining lands owned by CPMPT and occupied by Fox Studios including the erection of an ivy wall support in John Hargreaves Avenue, safety fencing, roof protection and the erection of a hoarding over John Hargreaves Avenue.
- (2) Relocation of the video scoreboard and tri-vision advertising panels to the top of the Dally Messenger Stand (will partly project over adjoining lands owned by CPMPT and occupied by Fox Studios).
- (3) Demolition and removal of Yabba's Hill, the Doug Walters stand and other miscellaneous structures, including those located at the rear of the Clive Churchill Stand adjacent the boundary wall and the old scoreboard and preparatory excavation activities.
- (4) Construction of a new grandstand to provide seating for approximately 12,400 spectators including ancillary facilities and provision of associated ingress and egress including penetrations to the ivy wall adjacent John Hargreaves Avenue (will partly project over adjoining lands owned by CPMPT and occupied by Fox Studios).
- (5) Carrying out of associated grandstand construction activities on adjoining lands owned by CPMPT and occupied by Fox Studios).
- (6) Relocation of existing floodlighting tower (No. 3) to the top of the proposed new lift shafts within the new grandstand and upgrading of all 6 existing floodlighting tower luminaries.

##### A2 *Maximum Stadium Capacity (see also Condition E1)*

The maximum permanent seating capacity of the Sydney Cricket Ground (SCG) following the carrying out of the development described in Condition A1, Part A, Schedule 2 of this Project Approval shall not exceed 48,000 seats.

##### A3 *Development in Accordance with Plans and Documentation*

The development shall be generally in accordance with the following plans and documentation and recommendations made therein:

Erection of Replacement Hill Seating and Grandstand Area at the Sydney Cricket Ground Moore Park Part 3A Environmental Assessment Report Prepared for Sydney Cricket and Sports Ground Trust by BBC Consulting Planners Job No. 06049 – EA Report Final August 2006
Sydney Cricket Ground Grandstand Redevelopment Heritage Impact Statement prepared for Sydney Cricket and Sports Ground Trust by Godden Mackay Logan Heritage Consultants July 2006
Sydney Cricket & Sports Ground Trust Hill Grandstand Project Sports Lighting Environmental Impact Report prepared by Webb Australia Group (NSW) Pty Ltd 18 July 2006
Aborist's Report for Proposed Hill Grandstand Development at Sydney Cricket Ground Sydney NSW prepared for Sydney Cricket & Sports Ground Trust Ref 1715 by Tree Wise Men Australia Pty Ltd July 2006
SCG Hill Grandstand Construction Plan prepared by Leighton Contractors Pty Ltd on behalf of the SCG Trust July 2006
Acoustic Report Hill Grandstand Sydney Cricket Ground Project 206 056 prepared for Sydney Cricket & Sports Ground Trust by Peter Knowland & Associates Pty Ltd August 2006



<b>Waste Management Strategy – Operations prepared by Sydney Cricket Ground &amp; Sports Ground Trust August 2006</b>			
<b>Building Code of Australia Capability Statement prepared for Sydney Cricket Ground &amp; Sports Ground Trust by Davis Langdon 31 July 2006</b>			
<b>DG EAR Compliance Checklist prepared by BBC Consulting Planners on behalf of Sydney Cricket Ground &amp; Sports Ground Trust August 2006</b>			
<b>Survey Diagrams of Lot 1 in DP 634807</b>			
<b>Survey Drawings prepared by Rygate &amp; Company Pty Ltd</b>			
<b>Drawing No.</b>	<b>Revision</b>	<b>Name of Plan</b>	<b>Date</b>
71943.DGN	1 of 3	Plan Showing Detail and Levels The Hill Sydney Cricket Ground (1 of 3)	24.03.06
71943.DGN	2 of 3	Plan Showing Detail and Levels The Hill Sydney Cricket Ground (2 of 3)	24.03.06
71943.DGN	3 of 3	Plan Showing Detail and Levels The Hill Sydney Cricket Ground (3 of 3)	24.03.06
<b>Architectural (or Design) Drawings prepared by Cox Richardson Pty Ltd</b>			
<b>Drawing No.</b>	<b>Revision</b>	<b>Name of Plan</b>	<b>Date</b>
A.001.00	C	Hill Grandstand Roof Plan	01.08.06
A.115.2.1	H	Hill Grandstand Floor Plan Basement Part 1 (L2)	01.08.06
A.115.2.2	H	Hill Grandstand Floor Plan Basement Part 2 (L2)	01.08.06
A.115.3.1	H	Hill Grandstand Public Concourse Level 3 Plan (Part 1/2)	01.08.06
A.115.3.2	H	Hill Grandstand Public Concourse Level 3 Plan (Part 2/2)	01.08.06
A.215.4.1	H	Corporate Suites Level 4 Plan	01.08.06
A.215.5.1	H	Public Concourse Level 5 Plan	01.08.06
A.215.6.1	H	Upper Seating Bowl Level 6 Plan	01.08.06
A.215.9.1	D	Roof Plan	01.08.06
A.030.0.1	B	SCG & Aussie Stadium Elevations July 2006	01.08.06
A.030.0.2	B	SCG & Aussie Stadium Elevations July 2006	01.08.06
A.0400.1	H	Hill Grandstand Cross Section 1	01.08.06
A.0400.2	H	Hill Grandstand Cross Section 2	01.08.06
A.0400.3	H	Hill Grandstand Cross Section 3	01.08.06
A.090.0.1	B	SCG & Aussie Stadium Montages Hargreaves Avenue	01.08.06
A.090.0.2	B	SCG & Aussie Stadium Montages Entertainment Quarter	01.08.06
A.090.0.3	B	SCG & Aussie Stadium Montages Entertainment Quarter Show Ring	01.08.06
A.090.0.4	B	Axonometric: SCG Existing_44 002 Seats	01.08.06
A.090.0.5	B	Axonometric: SCG Extruded Stage 1_46 764 Seats	01.08.06
A.090.0.6	B	Artist's Impression: Aerial, Field and Corporate Dining	01.08.06
A.090.0.7	B	Artist's Impression: Corporate Dining – Internal View	01.08.06
A.090.0.8	B	Artist's Impression: View from Playing Ground	01.08.06
A.090.0.9	B	SCG Proposed Shadow Diagrams Hill Grandstand Winter 9am	01.08.06
A.090.0.10	B	SCG Proposed Shadow Diagrams Hill Grandstand Winter 12pm	01.08.06
A.090.0.11	B	SCG Proposed Shadow Diagrams Hill Grandstand Summer 9am	01.08.06
A.090.9.1	B	SCG Proposed Shadow Diagrams Hill Grandstand Summer 12am	01.08.06
A.090.9.2	B	SCG Proposed Shadow Diagrams Hill Grandstand Summer 3pm	01.08.06
A.090.9.3	B	SCG Proposed Shadow Diagrams Hill Grandstand Summer 6pm	01.08.06
A.090.9.4	B	SCG Proposed Shadow Diagrams Hill Grandstand Equinox 6pm	01.08.06
A.090.9.5	B	SCG Proposed Shadow Diagrams Hill Grandstand Equinox 9am	01.08.06
A.090.9.6	B	SCG Proposed Shadow Diagrams Hill Grandstand Equinox 12pm	01.08.06
A.090.9.7	B	SCG Proposed Shadow Diagrams Hill Grandstand Equinox 3pm	01.08.06
A.090.9.8	B	SCG Proposed Shadow Diagrams Hill Grandstand Equinox 6pm	01.08.06
A.490.0.1	B	SCG Relocated Video Board and Tri Vision Panels	01.08.06
A.015.0.1	B	SCG Hill Grandstand – Fox Overhangs	01.08.06
A.040.0.4	B	SCG Proposed Hill Grandstand Section Comparison	01.08.06



Except for where amended by the following plans and documentation:

Erection of Replacement Hill Seating and Grandstand at the Sydney Cricket Ground Moore Park Part 3A Major Project Preferred Project Report Prepared for Sydney Cricket & Sports Ground Trust by BBC Consulting Planners with input from McLachlan Lister Job No. 06049 – Final October 2006			
SCG Hill Grandstand Construction Plan prepared on behalf of Sydney Cricket & Sports Ground Trust by McLachlan Lister Pty Ltd October 2006			
Acoustic Report Hill Grandstand Sydney Cricket Ground Project 206 056 prepared for Sydney Cricket & Sports Ground Trust by Peter Knowland & Associates Pty Ltd October 2006			
Architectural (or Design) Drawings prepared by Cox Richardson Pty Ltd			
Drawing No.	Revision	Name of Plan	Date
A.115.2.1	J	Hill Grandstand Floor Plan Basement Part 1 (L2)	16.10.06
A.115.2.2	J	Hill Grandstand Floor Plan Basement Part 2 (L2)	16.10.06
A.115.3.1	J	Hill Grandstand Public Concourse Level 3 Plan (Part 1/2)	16.10.06
A.115.3.2	J	Hill Grandstand Public Concourse Level 3 Plan (Part 2/2)	16.10.06
A.215.4.1	J	Corporate Suites Level 4 Plan	16.10.06
A.215.5.1	J	Public Concourse Level 5 Plan	16.10.06
A.215.6.1	J	Upper Seating Bowl Level 6 Plan	16.10.06
A.215.9.1	E	Roof Plan	19.10.06
A.030.0.1	C	SCG Hill Grandstand South Elevation Part 1	16.10.06
A.030.0.11	C	SCG Hill Grandstand South Elevation Part 2	16.10.06
A.030.0.02	C	SCG Hill Grandstand East Elevation	16.10.06
A.0400.1	J	Hill Grandstand Cross Section 1	16.10.06
A.0400.2	J	Hill Grandstand Cross Section 2	16.10.06
A.0400.3	J	Hill Grandstand Cross Section 3	16.10.06
D-003	C	New Dally Messenger Stand Proposed Plan Upper Deck	16.10.06
D-007X	C	New Dally Messenger Stand New Video Screen Section	16.10.06
A.090.0.12	A	SCG Montages Dally Messenger Scoreboard	16.10.06
Schedule	B	SCG Hill Grandstand – Modifications and Impact	16.10.06

#### **A4 Inconsistency between plans and documentation**

In the event of any inconsistency between conditions of this Project Approval and the plans and documentation referred to above, the conditions of this Project Approval prevail.

#### **A5 Lapsing of Approval**

The Project Approval will lapse 5 years after the approval date in Part A of Schedule 1 of this Project Approval unless specified action has been taken in accordance with Section 75Y of the Act.

#### **A6 Prescribed Conditions**

The Proponent shall comply with the prescribed conditions of Project Approval under Section 75J(4) of the Act.

#### **A7 Compliance with Relevant Legislation and Australian Standards**

The Proponent shall comply with all relevant Australian Standards and Codes (including Building Code of Australia) and obtain all necessary approvals required by State and Commonwealth legislation in undertaking the project described in Condition A1, Part A, Schedule 2 of this Project Approval.

#### **A8 Compliance Report**

The Proponent, or any party acting upon this approval, shall submit to the Department a three monthly report, or upon its request, addressing compliance with all relevant conditions of this approval.



## PART B – GENERAL CONDITIONS

### Public Safety

#### **B1 Grandstand Safety**

The site will be made safe and secure for spectators using the lower tier of the new grandstand prior to commencement of use of the completed grandstand irrespective of whether or not construction activities are taking place to develop the upper tiers.

### Relocated Video Scoreboard

#### **B2 Terms of Removal**

The projection of part of the relocated video scoreboard and tri-advertising panels onto adjoining land owned by CPMPT and occupied by Fox Studios shall be removed following a period of not less than nine months after notice is given to that effect to the Proponent by CPMPT and Fox Studios.

### Design Details and Changes

#### **B3 Details of Materials, Colours and Finishes**

Final design details of the proposed external materials and finishes, including schedules and a sample board of materials and colours for above ground works, shall be submitted to and approved by the Director within six months of the Minister approving Major Project 06\_0136.

#### **B4 Reflectivity**

The visible light reflectivity from building materials used on the facades of the new grandstand shall not exceed 20% and shall be designed so as not to result in glare that causes any nuisance or interference to any person or place.

#### **B5 Outdoor Lighting**

All outdoor lighting shall comply with, where relevant, AS/NZ1158.3: 1999 *Pedestrian Area (Category P) Lighting* and AS4282: 1997 *Control of the Obtrusive Effects of Outdoor Lighting*.

#### **B6 Disabled Access**

Access and facilities for people with disabilities shall be provided in accordance with Part D3 of the BCA's Access Policy.

### Erosion Management

#### **B7 Erosion and Sedimentation Control**

An Erosion and Sediment Control Plan (ESCP) or a Stormwater Management Plan (SMP or SWMP) as appropriate shall be prepared and implemented in accordance with the requirements of *Managing Urban Stormwater-Soils & Construction Volume 1 (2004)* by Landcom and other relevant guidance.

### Health

#### **B8 Mechanical Ventilation**

All mechanical ventilation systems shall be installed in accordance with Part F4.5 of the Building Code of Australia and shall comply with Australian Standards AS1668.2 and AS3666 *Microbial Control of Air Handling and Water Systems of Building*, to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection.

#### **B9 Design of Food Premises**

The fitout of the food premises shall be carried out in accordance with *The National Code for the Construction and Fitout of Food Premises*.



## **Waste Management**

### ***B10 Storage and Handling of Waste***

The commitments made within the Draft Waste Management Strategy will be complied with in perpetuity during the operation of the new grandstand.

The Proponent shall submit to the Department an audit demonstrating the waste management practices being undertaken in the new grandstand no sooner than two years from the date of the Minister's approval. The audit must demonstrate that the waste management practices are in accordance with relevant best practice techniques and occupational health and safety requirements.

In the event that the Draft Waste Management Strategy has been superseded by the time the audit is lodged new waste management practices will need to be articulated within the audit submitted to the Department.

## **Stormwater and Drainage**

### ***B11 Stormwater and Drainage Works Design***

Final design plans of the stormwater drainage systems shall be prepared by a qualified practicing Civil Engineer and in accordance with the requirements of Council's relevant Policies and Guidance. The hydrology and hydraulic calculations shall be based on models described in the current edition of Australian Rainfall and Runoff.

### ***B12 Plan stamping by Sydney Water for new development***

The relevant approved plan, which shows the development footprint, must be submitted to a Sydney Water Quick Check agent or Customer Centre to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

For Quick Check agent details please refer to the website [www.sydneywater.com.au](http://www.sydneywater.com.au), see Your Business then Building & Developing then Building & Renovating or Telephone 13 20 92.

## **PART C – PRIOR TO COMMENCEMENT OF WORKS**

### **Security Bond**

#### **C1 Protection of Public Way**

Prior to the commencement of works, the owner of the site must provide a bank guarantee for the sum to be determined based on the City of Sydney's Schedule of Fees and Charges to the Department as security for rectification of any damage to the public way in particular damage to infrastructure within the road reserve arising during the construction of the proposed development.

Evidence is to be provided to the Department indicating the pre-development condition of the surrounding public infrastructure.

### **Dilapidation Report**

#### **C2 Pre-Construction Dilapidation Reports**

The Proponent is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all existing and adjoining buildings, infrastructure and roads. A copy of the report is to be prepared and submitted to the Department prior to commencement of works.

### **Remediation Works**

#### **C3 Remediation of Land**

Prior to commencement of works, the Proponent shall prepare a Remedial Action Plan and a Hazardous Materials Survey. The Remedial Action Plan must be accompanied by a statement from a site auditor accredited by the Environmental Protection Agency to issue site audit statements.

### **Demolition Works**

#### **C4 Statement of Compliance with Australian Standards**

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 *The Demolition of Structures*. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard.

### **Excavation Works**

#### **C5 Notice to be Given Prior to Excavation**

Council, CPMPT and Fox Studios shall be given written notice, at least 48 hours prior to the commencement of excavation, shoring or underpinning works on the site.

### **Hoarding and Scaffolding**

#### **C6 Application for Approval**

Any application for hoarding shall be constructed in accordance with Council's *Policy for the Design and Construction of Hoarding* (September 1997) and the *Guidelines for Temporary Protective Structures* (April 2001).

Approval shall be obtained prior to commencement of works.

#### **C7 Hoarding Specifications**

The location and footing of any hoarding or scaffolding erected on land owned by CPMPT and occupied by Fox Studios must be designed in consultation with CPMPT and Fox Studios to ensure there is two-lane access into lands owned by CPMPT and occupied by Fox Studios at the security gate and one lane egress from the Studio. The hoarding height must be sufficiently high to permit semi-trailers carrying a boom lift to drive down John Hargreaves Avenue. The external design and appearance of the hoarding shall be agreed in consultation with

C2



CPMPT and Fox Studios.

## **Excavation, Demolition and Construction Management**

### **C8 Excavation, Demolition and Construction Impacts**

Condition A3, Part A, Schedule 2 requires the development to be undertaken generally in accordance with the submitted plans and documentation including the submitted CMP prepared by McLachlan Lister Pty Ltd October 2006.

Additional CMP's shall be submitted to and approved by the Director-General (or his delegate) prior to commencement of those related works on the site.

Nothing within this condition precludes the preparation and submission of individual CMP's for any development action within any phase of the redevelopment.

The CMP's shall be prepared in consultation where appropriate with the CPMPT, Fox Studios, the RTA and other key stakeholders, and will address, but not be limited to, the following matters where appropriate:

#### **C8.1 Construction Management**

- (1) Descriptive schedules setting out the extent of each works phase and definitions of each term used (i.e. "early works", "grandstand works" etc).
- (2) Early works methodologies and assessment of impacts on the property and activities of adjoining landowners.
- (3) Requirements identified in Conditions D1 to D19, Part D, Schedule 2 of this Project Approval for activities proposed during the works.
- (4) Noise mitigation equipment and/or means of noise attenuation to be fitted to all works equipment such as tower cranes, concrete pumps, drilling rigs and rock excavator.
- (5) Areas of adjoining land required to be accessed during the works including timing and frequency and potential (currently) unscheduled possession times.
- (6) Timing of each works phase in the context of scheduled filming activities by Fox Studios Australia Pty Ltd and adoption of contingencies where appropriate (e.g. flexible hours of operation).
- (7) Disposal of construction waste and waste water management measures.
- (8) Implementation of the recommendations of the Aborist's Report prepared by Tree Wise Men Australia Pty Ltd July 2006 (Ref 1715) (to be updated where appropriate).
- (9) Protection and stabilisation of the listed ivy wall and creeping fig adjacent John Hargreaves Avenue.
- (10) Methodology for demolition of the floodlighting tower and upgrading all floodlighting tower luminaries.
- (11) Existing utilities and servicing diversion arrangements within the site and adjoining land.
- (12) Consultation and notification arrangements and relevant interactions with all adjoining landowners and other key stakeholders during the works.
- (13) Non-compliance/complaints handling procedures and contingency measures for issues arising during the works.

#### **C8.2 Construction Traffic and Pedestrian Management**

- (1) Ingress and egress of vehicles to the site.
- (2) Loading and unloading, including construction zones.
- (3) Predicted traffic volumes, types and routes.
- (4) Pedestrian and traffic management methods.
- (5) Construction traffic on the local road network.

C8  
\*



- (6) Minimisation of heavy goods vehicle movements past Fox Studios' Building 11.

### **C8.3 Construction Noise and Vibration Management**

- (1) The construction noise objective specified in Condition D11 of this approval.
- (2) The construction vibration criteria specified in Condition D12 of this approval.
- (3) Determination of appropriate vibration objectives for each identified vibration noise sensitive receiver.
- (4) Vibration monitoring, reporting and response procedures.
- (5) Assessment of potential noise and vibration from the construction activities including noise from construction vehicles and any traffic diversions.
- (6) Description of specific mitigation treatments, management methods and procedures that will be implemented to control noise and vibration during construction.
- (7) Justification of any proposed activities outside the construction hours specified in the conditions of this approval.
- (8) Agreed mechanisms, timings, actions and contingencies formulated during ongoing liaison and negotiation between the Proponent, CPMPT, Fox Studios and other key stakeholders.

### **C9 Construction Contract Obligations**

The procedures for the handling of complaints, the stakeholder consultation process, the specific controls implemented in relation to construction risks and mitigation methods must be clearly embodied within the conditions of contract between the Proponent and the appointed contractor.

The Proponent shall submit a copy of the approved CMP's to CPMPT, Fox Studios and other key stakeholders where appropriate.

### **Heritage**

#### **C10 Archival Record**

No works shall commence until an archival record of the old scoreboard has been prepared and submitted to the Heritage Office. This shall include measured drawings and an archival photographic record before any work commences. This archival record shall be prepared in accordance with the NSW Heritage Council guidelines.

### **Hazardous Materials**

#### **C11 Removal of Hazardous Materials**

All hazardous materials shall be removed from the site and disposed of at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, in accordance with the Remedial Action Plan and a Hazardous Materials Survey, prior to the commencement of any building works, excluding demolition and excavation works.

#### **C12 Site Audit**

Upon completion of the remediation works on the site, the Proponent shall prepare a detailed Site Audit Summary Report and Site Audit Statement and Validation Report. The site audit must be prepared in accordance with the *Contaminated Land Management Act 1997* and completed by a site auditor accredited by the Environmental Protection Authority to issue site audit statements prior to commencement of any building works, excluding demolition and excavation works. The site audit must verify that the land is suitable for the proposed uses.



## **PART D – DURING CONSTRUCTION**

### **Site Maintenance**

#### **D1 Erosion and Sediment Control**

All erosion and sediment control measures, as designed in accordance with Condition B6, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

#### **D2 Disposal of Seepage and Stormwater**

Any seepage or rainwater collected on-site during construction shall not be pumped to the street stormwater system unless separate prior approval is given in writing by CPMPT.

### **Structural Works**

#### **D3 Setting Out of Structures**

The buildings shall be set out by a registered surveyor to verify the correct position of each structure in relation to property boundaries and the approved alignment levels.

### **Construction Management**

#### **D4 Approved Plans to be On-site**

A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification shall be kept on the site at all times and shall be readily available for perusal by any officer of the Department.

#### **D5 Site Notice**

A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to the details of the Proponent, Builder and Structural Engineer. The notice(s) is to satisfy all but not be limited to, the following requirements:

- (1) Minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size;
- (2) The notice is to be durable and weatherproof and is to be displayed throughout the works period;
- (3) The approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice; and
- (4) The notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.

#### **D6 Contact Telephone Number**

The Proponent shall ensure that the 24 hour contact telephone number is continually attended by a person with authority over the works for the duration of the development. The telephone number will be made available to the Department, CPMPT, Fox Studios and all other key stakeholders.

#### **D7 Protection of Trees – Street Trees**

All street trees shall be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction, shall be replaced.

#### **D8 Protection of Trees – On-site Trees**

All trees on the site that are not approved for removal are to be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during

D4-  
D10



construction.

#### **D9 Dust Control Measures**

Adequate measures shall be taken to prevent dust from affecting the amenity of the surrounding area during construction. In particular, the following measures must be adopted:

- (1) Physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust emissions,
- (2) Earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed,
- (3) All materials shall be stored or stockpiled at the best locations,
- (4) The surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs,
- (5) All vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust or other material,
- (6) All equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays,
- (7) Gates shall be closed between vehicle movements and shall be fitted with shade cloth, and
- (8) Cleaning of footpaths and roadways shall be carried out regularly.

#### **Noise and Vibration**

##### **D10 Hours of Work**

The hours of construction, including the delivery of materials to and from the site, shall be restricted as follows:

- (1) Between 7:00 am and 6:00 pm, Mondays to Fridays inclusive;
- (2) Between 8:00 am and 2:00 pm, Saturdays;
- (3) No work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- (1) The delivery of materials is required outside these hours by the Police or other authorities;
- (2) It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm;
- (3) The work is approved through a CMP;
- (4) In relation to work to be undertaken on land owned by CPMPT and occupied by Fox Studios, this may not be carried out, except where otherwise agreed by Fox Studios; or
- (5) The work is approved by the Director-General.

##### **D11 Construction Noise Objective**

The construction noise objective for the project is to manage noise from construction activities to the levels set out in the table below.

##### **Initial Demolition Period of Approximately 8 Weeks**

Position*	Current LA10 (15minute)	Permissible Margin During Construction	Maximum Permissible LA10 (15minute) Construction Noise Objective	Comment
I	62dB(A)	+10dB(A)	72dB(A)	Temporary air conditioning required to Elsa Chauvel House
II	72dB(A)	+10dB(A)	82dB(A)	n/a



IV	62dB(A)	+10dB(A)	72dB(A)	n/a
Stage 1	62dB(A)	+8dB(A)	70dB(A)**	Some minor shielding may be required on an as needs basis

### Construction Phase

Position*	Current L <sub>A10</sub> (15minute)	Permissible Margin During Construction	Maximum Permissible L <sub>A10</sub> (15minute) Construction Noise Objective	Comment
I	62dB(A)	+5dB(A)	67dB(A)	Temporary air conditioning required to Elsa Chauvel House
II	72dB(A)	+5dB(A)	77dB(A)	n/a
IV	62dB(A)	+5dB(A)	67dB(A)	n/a
Stage 1	62dB(A)	+3dB(A)	65dB(A)**	Some minor shielding may be required on an as needs basis

Notes:

\* The noise monitoring positions are set out within the Acoustic Report Hill Grandstand Sydney Cricket Ground Project 206 056 prepared for Sydney Cricket & Sports Ground Trust by Peter Knowland & Associates Pty Ltd October 2006

\*\* This will need to be negotiated with Fox Studios in regard to usage of Sound Stage One

The noise monitoring stations nominated are to be constantly monitored with automatic noise logging equipment which shall download data to the Proponent's acoustic consultant. Such data shall be made available to Fox Studios' acoustic consultant at the time of download and the Department upon request.

The data loggers shall be configured to raise alarms when the noise objectives are breached. A detailed acoustic plan is to be agreed between Fox Studios and the Proponent prior to the commencement of the main construction phase.

Once agreed, this plan shall be adopted as part of the adopted CMP for the Project. If the parties fail to agree on an appropriate plan, the matter shall be determined by the Department.

### D12 Vibration Criteria

Vibration caused by construction at any residence or structure outside the subject site must be limited to:

- (1) For structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and
- (2) For human exposure to vibration, the evaluation criteria presented in British Standard BS 6841- Guide to Evaluate Human Exposure to Vibration in Buildings (1Hz to 80 Hz) for low probability of adverse comment.

These limits apply unless otherwise approved in the CMP's.

### Heritage

#### D13 Heritage Superintendent

Works on heritage components of the site shall be superintended by a consultant(s) experienced in the conservation of similar heritage buildings.

#### D14 Impact of Below Ground (Sub-surface) Works – Non-Aboriginal Relics

If any archaeological relics are uncovered during the course of the work, then all works shall cease immediately in that area and the NSW Heritage Office contacted. Depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the NSW *Heritage Act 1977* may be required before further works can continue in that area.

***D15 Impact of Below Ground (Sub-surface) Works – Aboriginal Relics***

If any Aboriginal archaeological relics are exposed during construction works, the Proponent shall immediately notify the National Parks and Wildlife Service and obtain any necessary approvals to continue the work. The Proponent shall comply with any request made by the NPWS to cease work for the purposes of archaeological recording.

**Ecologically Sustainable Development**

***D16 Recycling of Concrete***

Any existing concrete of suitable volume, which is not used as fill, shall be taken to a concrete recycling works and evidence that this has occurred shall be provided to the PCA.



## **PART E – PRIOR TO COMMENCEMENT OF USE OF THE COMPLETED GRANDSTAND**

### **Maximum Seating Capacity**

#### ***E1 Independent Audit***

Prior to commencement of use of the completed grandstand, the Proponent shall provide an audit from an independent verifier certifying that the permanent seating capacity of the Sydney Cricket Ground (SCG) does not exceed 48,000 seats.

### **Noise and Vibration**

#### ***E2 Operational Noise Management Plan***

An Operational Noise Management Plan shall be submitted to and approved by the Director, in consultation with CPMPT, Fox Studios and other key stakeholders, prior to commencement of use of the completed grandstand.

The Plan shall address the potential for noise to reflect from the ceiling through the openings at the rear of the new grandstand and any gaps between the new grandstand and the adjacent Bill O'Reilly and Clive Churchill Grandstands and any mitigation measures such as use of sound absorption materials.

### **Emergency Egress**

#### ***E3 Emergency Egress Management Plan***

An Emergency Egress Management Plan shall be submitted to and approved by the Director, in consultation with CPMPT, Fox Studios and other key stakeholders, prior to commencement of use of the completed grandstand.

### **Security Bond**

#### ***E4 Protection of Public Way***

The cost of repairing any damage caused to any Public Authority's assets in the vicinity of the subject site as a result of construction works associated with the approved development, is to be met in full by the Proponent prior to commencement of use of the completed grandstand.

Should the cost of damage repair work not exceed the bank guarantee, CPMPT will automatically call up the bond to recover the costs. Should the repair costs exceed the bond amount; a separate invoice will be issued.

The bond shall be released following practical completion of the works.

### **Second Dilapidation Report**

#### ***E5 Post-Construction Dilapidation Report***

- (1) The Proponent shall engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of the construction works. This report to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.
- (2) The report is to be submitted to the Department prior to commencement of use of the completed grandstand. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Department must:
  - (a) Compare the post-construction dilapidation report with the pre-construction dilapidation report, and
  - (b) Have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.

### **Sydney Water**

#### ***E6 Sydney Water***

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water

Corporation prior to commencement of use of the completed grandstand.



## **PART F – POST OCCUPATION**

### **Easements**

#### **F1      *Registration of Easements***

The Proponent shall provide to the Department evidence that all easements required by this approval have been registered on the certificates of title.

### **Traffic and Parking**

#### **F2      *Loading and Unloading***

All loading and unloading of service vehicles in connection with the use of the premises shall be carried out wholly within the site at all times.

### **Noise Management**

#### **F3      *Noise Control – Plant and Machinery***

Noise associated with the operation of any plant, machinery or other equipment on the site, shall comply with the relevant provisions of the NSW Industrial Noise Policy, as amended from time to time. The proponent shall use its best endeavours to minimise noise emissions to adjoining landowners.

### **Engineering**

#### **F4      *Fire Safety Certificate***

A Fire Safety Certificate shall be furnished to Council for all the Essential Fire or Other Safety Measures forming part of this approval.

An Annual Fire Safety Statement must be provided to Council and the NSW Fire Brigade commencing within 12 months after the date on which the approval authority initial Fire Safety Certificate is received.

### **Hazardous Materials**

#### **F5      *Storage of Hazardous or Toxic Material***

Any hazardous or toxic materials must be stored in accordance with Workcover Authority requirements and all tanks, drums and containers of toxic and hazardous materials shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be of sufficient size to contain 110% of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.

### **Public Access**

#### **F6      *Public Way to be Unobstructed***

The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.

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## ADVISORY NOTES

### **AN1 Compliance Certificate, Water Supply Authority Act, 2000**

Prior to occupation of building or commencement of use, a Compliance Certificate shall be obtained showing that the development has met with the detailed requirements of the relevant water supply authority for the region that the subject site is located within.

### **AN2 Requirements of Public Authorities for Connection to Services**

The Proponent shall comply with the requirements of any public authorities (e.g. Energy Australia, Sydney Water, Telstra Australia, AGL, etc) in regard to the connection to, relocation and/or adjustment of the services affected by the construction of the proposed structure. Any costs in the relocation, adjustment or support of services shall be the responsibility of the Proponent.

### **AN3 Structural Capability for Existing Structures**

The structural capabilities of an existing structure will need to meet the requirements of the BCA and may require engaging a structural engineer.

### **AN4 Use of Mobile Cranes**

The Proponent shall obtain all necessary permits required for the use of mobile cranes on or surrounding the site, prior to the commencement of works. In particular, the following matters where required shall be complied with:

- (1) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from CPMPT:
  - (a) At least 48 hours prior to the works for partial road closures which, in the opinion of CPMPT will create minimal traffic disruptions, and
  - (b) At least 4 weeks prior to the works for full road closures and partial road closures which, in the opinion of CPMPT, will create significant traffic disruptions.
- (2) The use of mobile cranes must comply with the approved hours of construction and shall not be delivered to the site prior to 7.30am without the prior approval of CPMPT.

### **AN5 Movement of Trucks Transporting Waste Material**

The Proponent shall notify the Roads and Traffic Authority's Traffic Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the site, prior to the commencement of the removal of any waste material from the site.

### **AN6 Construction Inspections**

Compliance certificate/s shall be submitted to Council in accordance with the mandatory inspection requirements of the *Building Legislation Amendment—Quality of Construction Act, 2002* for each stage of construction, such as the following:

- (1) Foundations,
- (2) Footings,
- (3) Damp proof courses and waterproofing installation,
- (4) Structural concrete, including placing of reinforcement and formwork prior to pouring,
- (5) Structural beam and column framing,
- (6) Timber wall and roof framing, and
- (7) Stormwater disposal.

Any Compliance Certificate issued for the above stages of construction shall certify that all relevant ancillary or dependent work has been undertaken in accordance with the Building Code of Australia and any other conditions of approval.



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**AN7 Noise Generation**

Any noise generated during the construction of the development shall not exceed limits specified in any relevant noise management policy prepared pursuant to the *Protection of the Environment Operations Act, 1997* or exceed approved noise limits for the site.

**AN8 Excavation – Aboriginal Relics**

Should any Aboriginal relics be unexpectedly discovered then all excavations or disturbance to the area is to stop immediately and the National Parks and Wildlife Service shall be informed in accordance with Section 91 of the *National Parks and Wildlife Act, 1974*.

**AN9 Excavation – Historical Relics**

Should any historical relics be unexpectedly discovered then all excavations or disturbance to the area is to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 146 of the *Heritage Act, 1977*.

**AN10 Compliance with Conditions**

The Proponent will be required to submit, documentary evidence that the property has been developed in accordance with plans approved by Project Application MP 06\_0136 and of compliance (or a Compliance Certificate) with the conditions of that approval, prior to commencement of use of the completed grandstand.

**AN11 Remediation and Validation Report**

Following the completion of remediation works on the site a Remediation and Validation Report is to be prepared by a suitably qualified environmental consultant. This report, together with a final site audit statement by an Environmental Protection Agency accredited environmental consultant, should include Notice of Completion statement, pursuant to clauses 17(2) and 18 of *State Environmental Planning Policy No.55—Remediation of Land*.

**AN12 Temporary Structures**

An approval under Section 68 of the Local Government Act 1993 must be obtained from the Council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the Building Code of Australia.

Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under Section 68 of the Local Government Act 1993 to certify the structural adequacy of the design of the temporary structures.

**AN13 Commonwealth Environment Protection and Biodiversity Conservation Act 1999**

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the Proponent's responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not have application. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.

## APPENDIX B. STATEMENT OF COMMITMENTS


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**B B C**

CONSULTING PLANNERS

**ERECTION OF REPLACEMENT HILL SEATING AND  
GRANDSTAND AT THE SYDNEY CRICKET GROUND  
MOORE PARK**

PART 3A MAJOR PROJECT  
PREFERRED PROJECT REPORT



Prepared for  
**Sydney Cricket and Sports Ground Trust**

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APPENDIX C. PREFERRED PROJECT REPORT *see Appendix B.*

see Appendix B.





# **ERECTION OF REPLACEMENT HILL SEATING AND GRANDSTAND AT THE SYDNEY CRICKET GROUND, MOORE PARK**

## **PART 3A MAJOR PROJECT**

### **PREFERRED PROJECT REPORT**



**Prepared for  
Sydney Cricket and Sports Ground Trust**

**By  
BBC Consulting Planners**

**with input from  
McLachlan Lister**

Job No. 06049 - Final  
October 2006

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## APPENDICES

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Appendix 1b:	Summary of submissions (part 2)
Appendix 2a:	Amended grandstand plans
Appendix 2b:	Amended video scoreboard plans
Appendix 3:	Amended Project plans clouded to identify main changes since exhibition of EAR
Appendix 4:	Schedule of grandstand design modifications
Appendix 5:	Revised Construction Management Plan
Appendix 6:	Revised Acoustic Report

## 1. INTRODUCTION

This Preferred Project report relates to the erection of replacement Hill seating and grandstand at the Sydney Cricket Ground, Moore Park in Sydney's Eastern Suburbs. The proposal involves the removal of all existing structures located between the eastern end of the Clive Churchill stand and the southern end of the Bill O'Reilly stand. Approval is sought for the following works:-

- remove the existing Doug Walters stand, the Hill and all other miscellaneous structures in the development zone including those at the rear of the Clive Churchill stand located adjacent to the boundary wall;
- relocate the electronic video scoreboard and advertising panels to the top of the Dally Messenger stand where it will partly project over adjoining land owned by the Centennial Park and Moore Park Trust;
- remove the old scoreboard;
- retain the boundary wall adjacent to the former President Avenue (now John Hargreaves Avenue) in Fox Studios Australia and the Creeping Fig thereon;
- construct a grandstand (but with two projections at high level above adjoining land owned by the Centennial Park and Moore Park Trust) and provide seating for around 12,395 patrons along with associated facilities such as corporate suites, food and beverage outlets, patrons' amenities, and dining rooms;
- relocate one existing light tower on top of a proposed new lift shaft within the new grandstand and upgrade all lighting tower luminaires; and
- all associated construction activities, including activities on adjoining land owned by the Centennial Park and Moore Park Trust and occupied by Fox Studios Australia Pty Limited in the case of Fox Studios and by CFS Managed Property Pty Limited in the case of the Entertainment Quarter.

The Environmental Assessment report relating to the above works was exhibited from 16 August 2006 to 15 September 2006. During, but mainly after, that period a total of 21 submissions was received by the Department of Planning. Seventeen of these submissions have been summarised by the Department of Planning in the document in Appendix 1a. The other four submissions are summarised in Appendix 1b.

The Proponent (ie. Sydney Cricket and Sports Ground Trust) has considered the submissions made during the exhibition period and has implemented various actions in relation thereto. In particular, the Proponent has prepared a revised Construction Management Plan for Option 3 (this being the option preferred by submitters) with a view to minimising the environmental impacts of the construction process on neighbouring land owners and occupiers. In its revised form, the preferred option is referred to as Option 3A.

Additionally, the Proponent has made various modifications to the detailed design of the proposed Hill grandstand and relocated electronic video scoreboard with a view to minimising





environmental impacts and reflecting the ongoing design development process. As a consequence of the foregoing, the Proponent has also modified the draft Statement of Commitments contained in the Environmental Assessment Report so as to better reflect the amended Construction Management Plan and to respond to concerns of submitters, where reasonable and appropriate.

Included with this Preferred Project report in Appendices 2a and 2b respectively are amended plans for the proposed grandstand and relocated video scoreboard. Appendix 3 contains a set of the amended grandstand plans, annotated to identify the main amendments made subsequent to the exhibition of the Environmental Assessment Report. Provided in Appendix 4 is a schedule of the modifications identified on the set of plans in Appendix 3. Provided in Appendices 5 and 6 are the revised draft Construction Management Plan and revised Acoustic Report respectively.

## 2. SUMMARY OF SUBMISSIONS

Provided in Appendices 1a and 1b is a summary of the submissions made during and after the exhibition period. A total of 21 submissions was received by the Department of Planning. Of these:-

- none were from local residents or resident associations;
- 5 were from government agencies;
- 4 were from film and television industry groups;
- 2 were from the Centennial Park and Moore Park Trust which owns adjoining land to the south and east of the SCG;
- 2 were from Fox Studios Australia Pty Limited which occupies adjoining land to the south and east of the SCG;
- 2 were from Breckenbridge Pty Limited, the occupiers of Building 11 in Fox Studios – this is the building nearest to Driver Avenue;
- one was from Visionbytes Pty Ltd, one of the occupiers of Building 16 in Fox Studios – this is the building on the southern side of John Hargreaves Avenue;
- one was from Bazmark Film II Pty Ltd which is making a new film at Fox Studios;
- one was from Colonial First State Property Management which manages the Entertainment Quarter at Moore Park;
- one was from Playbill Venue Services which manages the Hordern Pavilion, Royal Hall of Industries and the former Banquet Hall (now the Byron Kennedy Hall);
- one was from the operators of Telstra Stadium at Olympic Park; and
- one was from an individual who raised heritage issues relating to the old Scoreboard – this submission was actually submitted before the Environmental Assessment Report went on exhibition.

Over half of the submissions (excluding the two from the Centennial Park and Moore Park Trust) are from film-related commercial organisations, film industry groups or operators of facilities neighbouring the SCG.

Although there is general support for the Project, there is a high level of concern from more than half of the submitters about how the construction process (including its duration and “footprint”) might impact on the business activities and work environment within Fox Studios Australia in particular, but also within those parts of the Entertainment Quarter nearest to the SCG, as well as the three facilities managed by Playbill Venue Services (ie the Royal Hall of Industry, Hordern Pavilion and Byron Kennedy Hall).



### **3. RESPONSE TO SUBMISSIONS**

Provided overleaf is a response to the submissions. It has been prepared by McLachlan Lister with input from BBC Consulting Planners. Readers should note that the order in which the submissions are addressed below differs from the (chronological) order in which they are listed in Appendix 1. This is generally to reflect the concerns of the adjoining landowner (ie. the Centennial Park and Moore Park Trust) and those of adjoining and nearby businesses (including Fox Studios Australia Pty Limited, Breckenbridge, Visionbytes and others).

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
1	Encroachment of structure onto CPMPT land (leased by Fox)	Centennial Park and Moore Park Trust	<p>Although CPMPT has given consent, Fox must also give consent to the encroachment on terms not adverse to the interests of CPMPT.</p> <p>Easement for overhang is registered on the CPMPT land at completion of project.</p> <p>Right of carriage way is registered over the site of the existing road on the south east corner of the SCSGT's title to a height of 10 metres in favour of CPMPT promptly after receipt of planning approval of the proposed development and that the road be kept open until the right of carriage way is registered.</p>		<p>Commercial negotiations to continue.</p> <p>Register the easement for overhang on CPMPT land.</p> <p>Register the right of carriageway over the SCSGT land in favour of CPMPT.</p>
2	Advertising signage	CPMPT	No advertising be attached on the encroachment that is visible from outside the SCG. A clause of this nature should be included in the applicant's statement of commitments.	Ensure that no advertising can be seen from outside the SCG.	Include clause in Statement of Commitments to ensure that there is no advertising hung on the outside of the new grandstand visible from outside the SCG.
3	Design issues	CPMPT	A clause to be added to the Statement of Commitments that states that the roof design will remain within keeping of the configurations shown in Drawing numbers A.001.00 A.030.0.2 A400.2 and that the height be no greater than RL61.565 for the roof, and RL 64.915 for the ribs.	No significant design changes are proposed. Revised drawings presented to CPMPT.	Include clause in Statement of Commitments that the design will generally keep to the configuration shown in the submitted drawings.
4	Design issues	CPMPT	The final roof design is to be subject of approval by CPMPT.	Details of roof design provided to CPMPT.	Final roof design submitted to CPMPT for approval.



Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
5	Design issues	CPMPT	CPMPT requests 2 extra photomontages to assist in assessing the overall scale of the development. The first should be from a position closer to Building 16 (also facing east) the second, facing west from a position adjacent to Stanley Crick House.	The requested photomontages have been provided.	
6	Design issues	CPMPT	A clause should be added to the Statement of Commitments along the lines of "should a substantial change to the form of the roof be made during the engineering design detailing stage a reassessment of the shadow impacts onto the adjoining buildings is to be undertaken."	Minimise the changes that will have a detrimental effect for shadow impacts on adjoining buildings.	Include clause in Statement of Commitments, "Should a substantial change to the form of the roof be made during the engineering design detailing stage a reassessment of the shadow impacts onto the adjoining buildings is to be undertaken."
7	Design issues	CPMPT	The design of the structure supporting the scoreboard be finalised and included in the submission to enable review of the visual amenity.	Details of finalised relocated scoreboard structure provided to CPMPT.	
8	Design issues	CPMPT	More details on the Driver Ave entrance are required; to show the final elevation, form and scale structure.	Finalised entrance details in southwest corner provided to CPMPT.	
9	Design issues	CPMPT	Provision of the detailed finishes/ materials schedule should be included in the applicant's Statement of Commitments.	Details of finishes and materials provided to CPMPT.	Finishes and materials to be as proposed on Project plans and elevations.
10	Design issues	CPMPT	Accurate Shadow projection diagrams on building facades are required (elevation shadow diagrams) to be submitted by the Proponent.	Detailed elevational shadow diagrams provided to CPMPT.	
11	Emergency Egress	CPMPT	Emergency Egress Management Plan to address emergency egress operations between the grandstand and Fox Studios	Prepare an Emergency Egress Management Plan and submit to Dept of Planning for approval prior to	Prepare an Emergency Egress Management Plan and submit to Dept of Planning for approval prior to

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
			shall be made and submitted to CPMPT and Fox Studios for approval.	Occupational Certificate. Submit to Fox Studios and CPMPT.	Occupational Certificate. Submit to Fox Studios and CPMPT.
12	Heritage	CPMPT	The measures outlined in the Environmental Assessment Report to mitigate heritage impacts are to be incorporated as recommended into the Proponents Statement of Commitments.		Include measures outlined in the Environmental Assessment Report to mitigate heritage impacts into the Statement of Commitments (Wall and Ivy).
13	Construction issues	CPMPT	The following clause should be added to the Statement of Commitments "Construction activities and management will be agreed between the applicant, CPMPT and Fox Studios prior to the initiation of the construction phase. The applicant will develop a construction management plan in accordance with this agreement."		Add clause to Statement of Commitments, "Consultation will generally be in accordance with the Construction Management Plan for Option 3A. Construction activities and construction management will be agreed between the applicant CPMPT and Fox Studios prior to the initiation of the construction activities where construction activities will occur on land leased to Fox Studios."  Stake holder liaison will be implemented in accordance with the submitted Construction Management Plan.
14	Wind Issues	CPMPT	A copy of the wind impact assessment be provided to Fox Studios and Centennial Park.		Provide copy of wind impact statement to Fox and Centennial Park.
15	Plant location and waste storage	CPMPT	Details of the location of plant and waste storage are to be provided to Fox Studios and Centennial Park before the plans are finalised.	Details provided to CPMPT.	
16	Fox will only support the approval of the application if various conditions	Fox Studios Australia Pty Limited			



Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
	apply to the consideration of the application  Design Changes		Fox must be kept up to date with design changes and be the given the opportunity to make comments prior to the approval of the project. Key areas of potential change relate to the design of the roof and potential impacts on overshadowing, noise, wind and heritage issues; the location of the video scoreboard and the light towers; the location and size of the emergency exiting onto Fox Studios.	Keep Fox Studios up to date with any design issues that may have an impact on their property.	Develop Construction Management Plan. Include Stakeholder Liaison Plan.
17	Approval Conditions	Fox Studios Australia Pty Limited	Fox Studios to be consulted in relation to the formulation of Project Approval Conditions. Approval conditions set out in Annexure B of the Fox submission to be incorporated into the project approval conditions.		Stake holder liaison will be implemented in accordance with the submitted Construction Management Plan.
18	Studio Access	Fox Studios Australia Pty Limited	Any access to the Studios can only take place by prior agreement with Fox Studios.	Seek agreement from Fox Studios before gaining access to their property.	
19	Construction Option 3	Fox Studios Australia Pty Limited	The Project application should be reviewed upon the basis that Option 3 is the mandated approach to construction.  Construction Option 3 is the only option that meets Fox Studio's entrance and security requirements.		Construction Option 3A shall be used.

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
			The SCG's arborist should undertake a review with recommendations for the implications of construction Option 3, with regard to the preservation of the ficus and other landscaping along John Hargreaves Ave. Fox is to be given the opportunity to review the additional report and make further representations if required.	The Arborists should do a follow up report with regard to the impacts of the construction methods.	
20	Fox/ SCG agreement	Fox Studios Australia Pty Limited	SCG must come to an agreement with Fox Studios to provide commercial compensation for the impacts on Fox's business (including impacts on tenants and productions).	Reach commercial agreement.	Continue negotiations with Fox Studios.
21	SCG/ Fox Lease	Fox Studios Australia Pty Limited	The SCG must formalise the use of the piece of land by Fox (at the end of John Hargreaves Ave), that is currently owned by the SCG and used by Fox Studios.	SCG to enter into formal agreement for the use of the land.	SCG to enter into an agreement for the use of the land.
22	Video Scoreboard Relocation	Fox Studios Australia Pty Limited	The video scoreboard does not intrude into studio airspace.	Video scoreboard location on top of Dally Messenger Stand is temporary and will be moved when Fox wants to develop the building underneath (ie. Building 24).	Provide commitment to move Scoreboard and structure when Fox Studios want to replace Building 24.
23	Noise and Vibration.	Breckenbridge Pty Ltd (Casting) Building 11	Objects to the proposal. Based on the mentioned issues.	Adopt best practice for the management of dust, vibration and noise.  Implement stakeholder liaison system.	Implement Acoustic Report recommendations. Monitor levels of dust generated on site.  Develop Construction Management Plan. Include Stakeholder Liaison Plan.
24	Little attention has been given to Building 11 for construction options.	Breckenbridge Pty Ltd (Casting) Building 11	none	Consider Building 11 in Construction Management Plan.	Implement the Construction Management Plan.



Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
25	Diagram of Option 3 does not show details of continuous staging of trucks along Driver Ave	Breckenbridge Pty Ltd (Casting) Building 11	none	Show trucks along Driver Ave.	Shown in Construction Management plan Option 3A.
26	Heavy vehicle traffic flow past the building from the start of early works.	Breckenbridge Pty Ltd (Casting) Building 11	none	Number of vehicle movements for various construction phases are to be mentioned in the Construction Management Plan.	No heavy vehicles movements will occur in Hargreaves Ave except during early works. In later works vehicle movements along Hargreaves Ave will only occur with approval from Fox Studios in accordance with the Stakeholder Liaison Plan.
27	Concerned about construction hoarding across Hargreaves Ave.	Breckenbridge Pty Ltd (Casting) Building 11	none	Hoarding to be used where required under OH&S requirements.	Construction hoarding across Hargreaves Ave will only be setup when construction works are going to overhang Hargreaves Ave and will only be used as protection hoarding.
28	Disagree with the assessment that "the overhang will not have an adverse impact on Building 11".	Breckenbridge Pty Ltd (Casting) Building 11	none	None.	Commit to the materials and finished schedule.
29	Concerns about the movement of the crane	Breckenbridge Pty Ltd (Casting) Building 11	none	Preference for the crane shall be to swing over the SCG.	Crane generally will not move loads over building 11.
30	Believe that they have not been properly considered in the EIS or the acoustic report.	Breckenbridge Pty Ltd (Casting) Building 11	none	Give consideration to building 11 for acoustic analysis and in the Construction Management Plan.	Implement Construction Management Plan.

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
31	Building 11 is not sealed or air conditioned.	Breckenbridge Pty Ltd (Casting) Building 11	none	Noted.	
32	No clarity as to where the location of stationary pumps, equipment and staging area will be.	Breckenbridge Pty Ltd (Casting) Building 11	none	Equipment staging area, and mobile concrete pump areas to be shown on Construction Management Plan Option 3a.	Implement Construction Management Plan.
33	Distance of Building 11 to wall is 18m.	Breckenbridge Pty Ltd (Casting) Building 11	none	<p>The proximity of Building 11 to the construction staging area on the other side of the wall is in the order of 18m.</p> <p>Adopt best practice for the management of dust, vibrations and noise.</p> <p>Implement stakeholder liaison system.</p>	<p>Implement Construction Management Plan.</p> <p>Implement Acoustic and Vibration Report recommendations.</p> <p>Monitor levels of dust generated on site.</p> <p>Option 3A to be implemented.</p> <p>Develop Construction Management Plan. To include Stakeholder Liaison Plan.</p> <p>Works to be coordinated with Fox Studios Australia.</p>
34	Dilapidation Report	Breckenbridge Pty Ltd (Casting) Building 11	Commission a Dilapidation Report.		Commission a Dilapidation Report.



Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
35	Dust, noise and vibration from construction activities	Visionbytes, Building 16	<p>Minimise noise at all hours.</p> <p>Minimise dust, dirt and vibration.</p> <p>Inform Visionbytes when vibration will occur.</p> <p>Care to be taken not to sever fibre cable between Buildings 16 and 54.</p>	<p>Adopt best practice for the management of dust, vibration and noise.</p> <p>Implement stakeholder liaison system.</p> <p>Detailed electrical design still to occur, however power reticulation within the SCG will be by separate sub-stations dedicated to the SCG. Fox Studios supply should therefore not suffer brown-outs.</p>	<p>Implement Acoustic and Vibration Report recommendations.</p> <p>Monitor levels of dust generated on site.</p> <p>Option 3A to be implemented</p> <p>Develop Construction Management Plan. To include Stakeholder Liaison Plan.</p> <p>Works to be coordinated with Fox Studios Australia</p>
36	Dust and Noise from Construction Activities	Playbill Venues		Adopt best practice for the management of dust, vibration and noise.	<p>Implement Acoustic Report recommendations.</p> <p>Monitor levels of dust generated on site.</p>
37	Access to the Hordern Pavilion and Royal Hall of Industries for Staff Patrons and vehicles	Playbill Venues	Playbill will only accept Option 3 from the Leighton CMP.	Access will be maintained as Option 3A will be used.	Option 3A to be implemented.
38	Byron Kennedy Hall access, and dust and noise considering that it is closer to the construction zone	Playbill Venues		<p>Adopt best practice for the management of dust and noise.</p> <p>Access will be maintained using Option 3a.</p> <p>Implement stakeholder liaison system.</p>	<p>Implement Acoustic and Vibration Report recommendations.</p> <p>Monitor levels of dust generated on site.</p> <p>Option 3A to be implemented</p> <p>Develop Construction Management Plan. To include Stakeholder Liaison Plan.</p>
39	Dust and Noise	Bazmark Films	The most stringent noise and air quality conditions be imposed on demolition and construction works.	Adopt best practice for the management of dust and noise.	Implement Acoustic and Vibration Report recommendations.

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
			Any activity which would otherwise prevent filming to take place be suspended during nominated periods.	Implement stakeholder liaison system.	Monitor levels of dust generated on site.  Further develop the Construction Management Plan including Stakeholder Liaison.
40	Non specific objection to potential construction/ demolition events that will stop or disrupt film production at Fox Studios.	NSW Film and Television Office  NSW Film Makers Group  Media Entertainment and Arts Alliance  Ausfilm	Ensure development does not impact to a significant degree the film and television industry that is produced at Fox Studios.  Appropriate and sympathetic treatment of any hoarding over John Hargreaves Avenue.  Impose sufficient noise restrictions so that production activity will not be compromised.	Implement stakeholder liaison system.  Adopt best practice for the management of dust and noise.  Treat hoarding when erected.	Develop Construction Management Plan to include Stakeholder Liaison Plan.  Implement Option 3A to minimise hoarding requirement.  Implement Construction Management Plan.  Treat hoarding when erected.
41	Construction noise, materials handling, deliveries and traffic impact	Colonial First State Property Management	none		Implement Acoustic and Vibration Report recommendations.  Monitor levels of dust generated on site.  Develop Construction Management Plan to include Stakeholder Liaison Plan.



Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
42	Heritage of the old scoreboard	City of Sydney Council  Mr Brian O'Dowd	Investigate the feasibility of reconstruction or relocation of the scoreboard with public access. They have suggested replication in the south west corner of the site near Driver Ave. (City of Sydney).	Possible rebuild of scoreboard elements.	A statement that the salvage of elements of heritage significance from the scoreboard must take place in consultation with appropriate experts to be added to the Statement of commitments.
43	Heritage Issues	Heritage Office	The recommendations listed under Section 8.3 of the Heritage Impact Statement be incorporated within the conditions of approval prior to the occupation of the completed works.	Incorporate the recommendations under Section 8.3 of the Heritage Impact Statement into the statement of commitments.	The recommendations (Section 8.3) from the Heritage Impact Statement shall be implemented.
44	Noise from events	Dept of Environment and Conservation	Event noise to be managed using best practice techniques and technologies and appropriate monitoring and community consultation take place.	Design to Mitigate acoustic breakout.	Roof to be acoustically treated to minimise noise  PA system to direct sound into the SCG.
45	Stormwater management and reuse	Dept of Environment and Conservation	Amend Statement of Commitments to include amendments identified in Attachments.	Adopt best practice for stormwater management and reuse practices.	Include Dept of Environment and Conservation's Attachments into the Statement of Commitments.
46	Development of waste avoidance, recycling and reuse strategy	Dept of Environment and Conservation	Attachments contain noise and vibration impact and management. Stormwater management, dust management, Waste and Waste Water management.	Adopt best practice for Waste avoidance recycling and reuse.	Include Dept of Environment and Conservation's Attachments into the Statement of Commitments.
47	Requirement to be keep appraised of developments that may impact on bus servicing	Ministry of Transport	Requirement to be keep to kept appraised of developments that may impact on bus servicing.		Include item in Statement of Commitments to ensure that the Ministry of Transport is informed if there are any developments that will impact bus servicing.

Item	Description	Submitter	Submitter Recommendation	Mitigation Strategy	Commitment
48	Construction Traffic issues	RTA	Construction Traffic Management Plan should be submitted to council.		Submit Construction Traffic Management plan to Dept of Planning prior to the issue of a Construction Certificate for the main contract works.
49	Service Vehicle issues	RTA	Service vehicle delivery and pick ups are to occur outside of events.	Restrict service vehicles movements.	Current service vehicle arrangements will be maintained (ie. no service vehicle movement when grounds are open to the public).
50	Traffic management plan for events	RTA	Traffic management plan should be undertaken for the 6% increase in seating to investigate and implement appropriate measures to accommodate the additional pedestrian and traffic activity.	Undertake traffic management plan that accounts for an extra 6% capacity.	Provide Traffic Management Plan to RTA prior to Occupancy Certificate.
51	Seating Capacity must not exceed 47000 seats	Telstra Stadium (Project Agreement deed to limit the competition to Telstra Stadium)	Audit of Seats to ensure that there are less than 47000 seats prior to issue of occupancy certificate.	Get an audit of the seats to ensure that there are no more than the specified amount of seats.	Audit of the number of seats to occur prior to Occupancy Certificate.



## **4. AMENDMENTS TO THE PROJECT APPLICATION PLANS AND DOCUMENTS**

### **4.1 Amendments to Grandstand Plans**

A set of amended grandstand plans for which the Proponent seeks the consent of the Minister for Planning is contained in Appendix 2a. These plans contain design modifications to the grandstand plans exhibited with the Environmental Assessment Report ("EAR").

Provided in Appendix 3 is a set of the grandstand plans for which consent is now sought, clouded to identify the design changes which have been made to the exhibited grandstand plans. Provided in Appendix 4 is a schedule of modifications identifying the design changes which have been made.

The design amendments which have been made include:-

- retention in situ (rather than repositioning) of Light Tower 2;
- reduction in the number of penetrations in the historically significant southern boundary wall, and their repositioning onto the south-eastern splay corner of the SCG;
- slight realignment of the relocated video scoreboard on the Dally Messenger Stand resulting in a small projection over an adjacent single-storey building (Building No. 24) forming part of Fox Studios Australia;
- the detailed design of the roof to reflect structural engineering input into the design process; and
- modifications to ingress/egress areas to the new grandstand from Driver Avenue to reflect pedestrian movement strategies which achieve the required/ desired performance and safety levels and which result in an increase in the height of the southern wall abutting the existing boundary wall along the western section of John Hargreaves Avenue.

No fundamental changes have been made to the design of the grandstand as originally proposed.

### **4.2 Amendments to Video Scoreboard Plans**

Provided in Appendix 2b are amended plans relating to the relocated video scoreboard. Whilst they are much the same as the plans lodged with the Environmental Assessment Report, they differ in that the structure now extends over the south-western corner of Building No. 24 (the "Simmental Building") forming part of Fox Studios Australia. Otherwise, the projection as before is over a sub-station on land leased by the Sydney Cricket and Sports Ground Trust from the Centennial Park and Moore Park Trust.

The Sydney Cricket and Sports Ground Trust will commit (subject to agreement on a period of notice with Fox Studios Australia Pty Limited) to remove the video scoreboard in the event that Fox Studios Australia seeks to redevelop Building 24.

### **4.3 Amendments to Documents**

Consideration of the submissions made during the exhibition period has resulted to changes to two of the documents lodged with the Environmental Assessment Report: the Construction Management Plan and the Acoustic Report. These documents in their amended form are provided in Appendices 5 and 6 respectively. The key modifications to the Construction Management Plan are as follows:-

- Further development of Option 3 to give Option 3A as the basis of the proposed Construction Management Plan;
- The major crane has been relocated further to the north-east to reduce the oversail over Fox Studios' property;
- There will be no hoardings in John Hargreaves Avenue for approximately one year after construction commences;
- When hoardings are erected, they will be localised and for specific OHS purposes only;
- Major rock breaking of bases will be avoided by using low intensity explosives; and
- Use of Fox Studios' property for works will be limited to early works.

Changes to the Acoustic Report have been made to reflect the amended construction methodology and to identify appropriate mitigative measures having regard to the submissions which have been made.



## 5. REVISED STATEMENT OF COMMITMENTS

### 5.1 Introduction

A draft Statement of Commitments was provided in Section 8 of the Environmental Assessment Report. Following consideration of the submissions made during (and after) the exhibition period, the Proponent has amended the draft Statement of Commitments with a view to further mitigating the potential adverse environmental impacts arising out of the proposed Project. The revised Statement of Commitments is set out below with the revisions shown in bold type.

### 5.2 General

A. The development will be undertaken generally in accordance with the Environmental Assessment report prepared by BBC Consulting Planners, including accompanying appendices **except where amended by the Preferred Project Report and appendices thereto.**

B. The development will be undertaken generally in accordance with the following drawings prepared by Cox Robertson & Marks, Architects, while allowing for reasonable design development to occur:

Drawing No	Drawing Title	Issue
A.001.00	Roof Plan	E
A.115.2.1	Floor Plan Basement Part 1 (L2)	J
A.215.2.2	Floor Plan Basement Part 2 (L2)	J
A.115.3.1	Public Concourse Level 3 Plan (Part 1/2)	J
A.115.3.2	Public Concourse Level 3 Plan (2/2)	J
A.215.4.1	Corporate Suites Level 4 Plan	J
A.215.5.1	Public Concourse Level 5 Plan	J
A.215.6.1	Upper Seating Bowl Level 6 Plan	J
A.215.9.1	Roof Plan	E
A.0300.1	SCG and Aussie Stadium Elevations July 2006 (south)	C
A.0300.1.1	<b>South Elevation Part 2</b>	C
A.0300.2	SCG and Aussie Stadium Elevation July 2006 (east)	C

Drawing No	Drawing Title	Issue
A.0400.1	Cross Section 1	J
A.0400.2	Cross Section 2	J
A.0400.3	Cross Section 3	J
A.490.0.1	Relocated Video Board – SCG	B
<b>D-003</b>	<b>Proposed Plan Upper Deck</b>	<b>C</b>
<b>D-007X</b>	<b>New Video Screen Section</b>	<b>C</b>

C. The Sydney Cricket and Sports Ground Trust is committed to the principles of sustainability as defined in the *Environmental Planning and Assessment Act, 1979*.

D. The Sydney Cricket and Sports Ground Trust will develop a program of informing key stakeholders including Sydney City Council, the Centennial Park and Moore Park Trust, Fox Studios Australia Pty Limited, CFS Managed Property Pty Limited and Playbill Venue Management, of demolition, excavation and construction staging and activities throughout the development process.

### 5.3 Further Approvals

A. The Sydney Cricket and Sports Ground Trust will obtain all necessary approvals required by State and Commonwealth legislation in undertaking the project.

B. The Proponent will obtain a Construction Certificate prior to the implementation of building works.

C. Should Aboriginal objects be found during the works envisaged by the development the Department of Environment and Conservation will be informed (as required by the provisions of the *National Parks and Wildlife Act 1974 (NSW)*). The Proponent acknowledges that subject to an assessment of the extent, integrity and significance of any exposed objects, applications under either Section 87 or Section 90 of the *National Parks and Wildlife Act* may be required before work could resume.

### 5.4 Demolition, Excavation and Construction Management

#### 5.4.1 General

A. All demolition, excavation and construction work will be undertaken generally in accordance with the Construction **Management Plan** at Appendix 5 of the **Preferred Project Report**.

B. The Proponent will implement Option 3A in the Construction **Management Plan**.



C. Environmental controls will be put in place to mitigate the effects of noise, dust and stormwater during demolition, excavation and construction, including:-

- noise mitigation on construction equipment;
- management of dust by use of screens and/or hose down;
- visual screening; and
- installation of silt sock barriers and filter fabric in stormwater runoff pits and gutters.

D. The building contractor will establish a Safety Plan before work commences on-site detailing safe work methods and procedures to be followed on-site and to ensure compliance with OH&S and statutory requirements, such plan to address safety risks during demolition, excavation and construction activity, including:-

- stability of adjacent structures;
- excavation support;
- falls from heights;
- protection of the public;
- traffic controls around the perimeter of the site; and
- working with high voltage electrical supply.

E. The sandstone boundary wall along the northern side of John Hargreaves Avenue will be stabilised **where necessary** prior to excavation.

F. The Proponent will implement the recommendations set out in the Heritage Impact Statement in Appendix 8 **of the Environmental Assessment Report** insofar as they relate to the protection of buildings/structures with heritage significance during the excavation, demolition and construction phases.

G. Construction activities (including demolition and excavation but not early works) will only occur between 7.00am and 6.00pm, Monday to Friday, and between 8.00am and 2.00pm Saturdays, unless further acoustic analysis of specific noise-producing works has been carried out and endorsed by a qualified acoustic engineer.

#### **5.4.2 Demolition Management**

A. The contractor will be required to arrange sorting and recycling of waste materials to ensure maximum recycling is achieved.

B. Prior to the commencement of demolition and excavation, a Hazardous Materials Assessment will be undertaken on all structure and soil materials. Any hazardous materials identified will be disposed of in accordance with statutory and EPA requirements and guidelines.

- C. There will be close consultation with all stakeholders during the demolition phase to inform them of timing of any demolition works which may impact on their operations and amenity.
- D. The Proponent will **use methods other than heavy rock breakers (eg. low intensity explosives) to remove the light tower base.**
- E. The Proponent will consider concrete "splitting" and "crushing" on-site to minimise noise from the demolition of concrete slabs.
- F. The recommendations of the Acoustic Report in Appendix 6 of the **Preferred Project Report** will be implemented.

#### **5.4.3 Dismantling of Electronic Scoreboard**

- A. Any activities related to the dismantling of the electronic scoreboard which are identified in the Construction Management Plan as occurring within Fox Studios will be detailed in an Early Works Management Plan to be agreed with Fox Studios Australia Pty Limited.

#### **5.4.4 Dismantling of Light Towers**

- A. Any activities related to the dismantling of **the** light tower which are identified in the Construction Management Plan as occurring within Fox Studios will be detailed in an Early Works Management Plan to be agreed with Fox Studios Australia Pty Limited.

#### **5.4.5 Excavation Management**

- A. Prior to excavation, a detailed assessment of existing foundations including retaining walls and potential effects on excavation stability will be carried out.
- B. Where existing foundations are located in close proximity to the proposed excavation, detailed mapping of the rock face will be carried out and stabilisation methods, such as rock bolts and anchors, where necessary, will be identified.
- C. The sandstone boundary wall and Creeping Fig thereon will be protected during excavation.

#### **5.4.6 Construction Management**

- A. Construction activities will generally be consistent with the Construction **Management Plan in Appendix 5**. Mitigation measures contained therein will be implemented.
- B. Noise mitigation measures contained in the Acoustic Report in Appendix 6 of the **Preferred Project Report** will be implemented.



C. Tree protection measures and recommendations contained in the Arborist's Report in Appendix 12 of the **Environmental Assessment Report** will be **adjusted where relevant for Option 3A and implemented.**

## 5.5 Services

A. The Sydney Cricket and Sports Ground Trust will comply with the requirements of relevant public authorities in regard to the connection to, relocation and/or adjustment of services affected by the construction of the proposed development.

## 5.6 Heritage

### 5.6.1 Built Elements

A. An Interpretation Strategy/Plan and implementation options will be prepared for the SCG as a whole, including ways of interpreting the former Robertson and Marks scoreboard and Hill area.

B. A Conservation Management Plan for the SCG should be prepared to provide policies for detailed development and conservation of the SCG and its component parts.

C. Archival recording will be undertaken at the site prior to the commencement of works. The Robertson and Marks scoreboard will be archivally recorded both prior to and during the demolition works. The archival records will be prepared using the Heritage Office, Department of Planning's guidelines for archival recording.

D. Demolition of the Robertson and Marks scoreboard will be undertaken in consultation with a heritage professional. During and after the demolition process, an assessment will be made of what elements or fabric of potential heritage significance can be salvaged for interpretation purposes.

E. Consideration should be given in the design phase to the articulation materials and colour of façade elements of the rear of the new stand such that they are sympathetic to the adjacent elements within the Fox Studios site;

F. Appropriate protective measures will be adopted to ensure that significant built elements (for example, the wall on the former Presidents Avenue) are not damaged during the works. These will be included in the Construction **Management Plan**.

### 5.6.2 Landscape Elements

A. The Conservation Management Plan noted above will include a consideration of the adjacent landscape items, including policies for the management of actions, works, etc. within the SCG that may impact on the creeper on the wall on the former Presidents Avenue.

B. At a future detailed design stage, potential conflicts between the new penetrations in the wall on the former Presidents Avenue, footpaths, etc. and significant landscape elements will be identified and resolved.

C. Appropriate protective measures to ensure that potential damage to significant landscape elements (for example, the creeper on the wall on the former Presidents Avenue) is minimised during the works, will be included in the Construction **Management Plan**.

### 5.6.3 Movable Heritage

A. The Conservation Management Plan noted above will include a consideration of items of movable heritage at the site (such as elements of the scoring mechanism in the Robertson and Marks scoreboard) to help guide the future conservation management of identified items of potential movable heritage.

### 5.6.4 Site Interpretation

A. The Interpretation Strategy/Plan for the SCG will include recommendations for interpretation methods, locations of interpretative information and installations, and ongoing maintenance of the interpretation material.

B. In naming the new stand, consideration will be given to the incorporation of the words "The Hill" or "hill" in the new name, in recognition of the former character of this part of the SCG.

### 5.6.5 The Archaeological Resource

A. Suitable clauses will be included in all contractor and subcontractor contracts to ensure that on-site personnel are aware of their obligations and requirements in relation to potential relics.

B. All relevant site personnel will attend a site induction prior to commencement of works on site to ensure that all on-site personnel are aware of the heritage issues associated with the site, including archaeological issues.

C. In the event that unexpected historical archaeological remains are exposed on the site, they will be appropriately documented according to established archaeological procedures.

## 5.7 Noise During Operation

A. Acoustic absorption will be incorporated to the underside of the roof structure to increase the effectiveness of the acoustic shielding delivered by the enclosure of the southern end of the SCG.

B. The design of the new PA system will incorporate carefully selected directional speakers to **direct sound into the SCG and to** minimise noise spill to adjacent areas.



C. The PA system will be designed to have lower resultant noise impacts on adjacent owners/occupiers than are currently experienced.

D. Back of house areas will be designed to ensure that the noise levels ( $L_{eq}$  15 minutes) from activities at the rear of the new grandstand do not exceed the daytime background noise level by more than 5dB(A) at the Fox Studios boundary.

E. All mechanical plant associated with the new grandstand will comply with the EPA Industrial Noise Policy at all adjacent receiver locations.

## **5.8 Sports Lighting**

A. New sports lighting will not result in any increase in sky glow or light spillage when compared to the existing situation and will be generally in accordance with that described and assessed in the Sports Lighting Environmental Impact Report contained in Appendix 11 of the Environmental Assessment Report.

## **5.9 Noise and Vibration Impacts and Management**

A. The Proponent will commit to include detailed community consultation and complaints handling and management program, and a detailed noise monitoring, evaluation and mitigation program in the Construction Management Plan.

B. The Proponent will commit to a proposal that is consistent with prevention notice 1003904, that is currently in effect for activities undertaken at the premises. The Proponent will also commit to cross referencing the proposed development with the ongoing development and implementation of the operational noise management plan for the Sydney Cricket Ground (SCG) and Sports Ground Trust area of operation.

C. Any changes to the hours of operation will only be considered if necessary and will be justified by further acoustic analysis of specific noise producing works along with all necessary feasible and reasonable mitigation measures.

D. The Proponent commits that the proposed activities will comply with Section 120 of the Protection of the Environment Operations Act 1997 at all times.

## **5.10 Stormwater Management**

A. The Proponent will commit to develop and implement a full Stormwater Management Plan (SWMP) prior to the commencement of any demolition, excavation and construction activities, other than early works.

## **5.11 Dust Management**

A. The Proponent commits to minimise the generation of dust at the premises at all times.



B. The Proponent commits to provide further details relating to the generation of dust including but not limited to identifying all operations and activities that have potential to generate dust; to provide an environmental risk assessment for each operation or activity; and provide details of the operation specific mitigation measures proposed to minimise the generation of dust. Further the Proponent commits to proposing a monitoring program that ensures that dust is minimised at the premises at all times and that tracks the performance of dust mitigation measures.

## **5.12 Waste and Wastewater Management**

A. The Proponent commits to provide more information in relation to wastewater generation, its risk and the proposed mode of disposal.

B. The Proponent commits to compliance with Section 120 of the Protection of the Environment Operations Act 1997 at all times during the demolition, excavation and construction phase of the activity in relation to wastewater that is generated, stored and handled at the premises.

## **5.13 Stormwater Segregation and Reuse**

A. The Proponent commits to an examination of the use of rainwater tanks onsite as a more efficient way of harvesting rainwater rather than allowing rainwater to mix with potentially polluted stormwater and discharge to the artesian basin via surface waters in Centennial Park.

## **5.14 Waste Avoidance, Recycling and Reuse Strategy**

A. The Proponent recognises that waste avoidance is a crucial element of any waste management strategy and commits to giving further consideration to waste avoidance during consultation with key stakeholders.

## **5.15 Advertising**

A. The Proponent commits that no advertising will be hung on the outside of the new grandstand visible from outside the SCG.

## **5.16 Roof Design**

A. Should a substantial change to the form of the roof be made during the engineering design detailing stage, a reassessment of the shadow impacts onto the adjoining buildings is to be undertaken.



### **5.17 Finishes and Materials**

A. Finishes and materials are to be as shown on the approved Project Plans and Elevations.

### **5.18 Consultation During Construction**

A. Consultation will generally be in accordance with the Construction Management Plan for Option 3A. Construction activities and construction management will be agreed between the applicant, CPMPT and Fox Studios.

### **5.19 Video Scoreboard**

A. The Proponent commits to move the video scoreboard and associated support structure, subject to notice as agreed, should Fox Studios Australia Pty Limited wish to build on the site of Building 24.

### **5.20 Dilapidation Report**

A. The Proponent commits to procuring a Dilapidation Report prior to commencement of works, other than early works.

### **5.21 Salvage of Elements of Heritage Significance**

A. The Proponent commits to salvaging elements of heritage significance from the old scoreboard in consultation with a qualified heritage practitioner.

### **5.22 Bus Servicing**

A. The Proponent will inform the Ministry of Transport of any development that will impact on bus servicing.

### **5.23 Construction Traffic Management Plan**

A. The Proponent commits to submitting a Construction Traffic Management Plan prior to the issue of a Construction Certificate for the main contract works.

### **5.24 Service Vehicle Activity**

A. The Proponent commits that no service vehicles will access the SCG at times when the SCG is open to the public.

## **5.25 Seat Numbers**

A. The Proponent commits to preparing an audit of the numbers of seats prior to the issue of an Occupation Certificate.

## **5.26 Hoarding**

A. The Proponent commits to treating the hoarding along John Hargreaves Avenue when erected to reduce its visual impact.



## APPENDICES

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## APPENDIX 1a

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### Summary of submissions (Part 1)



No.	Date	Submitter	Nature	Comment	Issue Summary
1	17.08.06	Brian O'Dowd Planning and Design	Object	<ul style="list-style-type: none"> <li>The old SCG scoreboard is one of the most significant cultural icons of Australian history and should be reinstated as a reminder of the litany of names and contests performed by Australia within the SCG by reactivating it on Test days and recounting it the board of a similar previous day in history.</li> <li>The area above bays 20, 21 and 22 is considered to be more suitable for seating given that the void above the Clive Churchill Stand constitutes some of the most desirable airspace cricket viewing areas in the SCG and should be built over as a floating extension to this stand.</li> <li>The new grandstand and other proposed works should have due regard to the historical significance of this national cultural monument.</li> </ul>	<ul style="list-style-type: none"> <li>Heritage and archaeology</li> </ul>
2	30.08.06	NSW Roads and Traffic Authority	Object	<ul style="list-style-type: none"> <li>A detailed Construction Management Plan should be prepared and submitted to Council for approval, which investigates and implements appropriate measures to minimise construction traffic on the local road network and ensures pedestrian safety.</li> <li>Construction activities should not take place during events at the SCG and preferable not during events at Telstra Stadium.</li> <li>All service vehicle deliveries and pick ups are to occur outside of events and well before and after the SCG is opened to the public.</li> <li>A detailed Traffic Management Plan for the 6% increase in seating at the SCG should be undertaken to investigate and implement appropriate measures to accommodate the additional pedestrian activity and traffic as a result of the proposed development.</li> </ul>	<ul style="list-style-type: none"> <li>Demolition and construction management</li> <li>Plant servicing and utilities</li> <li>Traffic generation and management</li> </ul>
3	14.09.06	Telstra Stadium	Object	<ul style="list-style-type: none"> <li>Concern regarding long term seating capacity having regard to the Stadium Australia Project Agreement which restricts SCG seating capacity to 48,000 seats.</li> <li>Concern that the current project application canvasses plans for further development. Following review of the EA by Telstra Stadium and based on the proposed stand representing 20% of the entire SCG facility, the total development possible could be in the order of 55,000 seats.</li> <li>Requests the Minister impose conditions that: <ul style="list-style-type: none"> <li>restrict permanent seating capacity after the completion of the proposed construction to 47,000 seats;</li> <li>require the SCSGT provide an audit from an independent certifier verifying the permanent seating capacity of the SCG is not greater than 47,000 prior to issuance of the occupancy certificate.</li> </ul> </li> <li>Without the above conditions, the Stadium Australia Group (including Telstra Stadium) cannot be certain that the SCG proposal does not or will not trigger the "other stadiums" provisions of the Agreement.</li> <li>Remodelling of seats may have implications for car parking, traffic, transport assumptions and impacts on neighbouring properties.</li> </ul>	<ul style="list-style-type: none"> <li>Seating capacity</li> <li>Car parking</li> <li>Traffic generation and management</li> </ul>
4	15.09.06	City of Sydney Council	Object	<ul style="list-style-type: none"> <li>Whilst the visual presence of the Robertson and Marks Scoreboard building has been compromised by the Doug Walters stand this has not reduced its significant heritage value and it should be conserved.</li> <li>The Heritage Impact Statement (whilst recommending the salvage of minor elements) does not examine all options for conserving the entire structure.</li> <li>Detailed investigation should be undertaken into the feasibility of reconstruction or replication of the scoreboard building within a publicly accessible part of the site (such as the south west corner of the site facing Driver Avenue).</li> </ul>	<ul style="list-style-type: none"> <li>Heritage and archaeology</li> </ul>
5	15.09.06	Fox Studios Australia (Submission 1 of 2)	Object	<ul style="list-style-type: none"> <li>Demolition and construction phase of the project may have major impacts on the operation of Fox Studios and the operation of its tenants.</li> <li>Potential demolition and construction impacts include: <ul style="list-style-type: none"> <li>proposed hoarding on John Hargreaves Avenue at the only entrance to Fox Studios;</li> <li>risk that Fox Studios will lose productions and car parking as a result of the proposal and will be forced to consider an alternative pedestrian access.</li> <li>noise impacts to tenants in various buildings and the need for some tenants to be relocated during the construction period.</li> <li>Stages 1, 7 &amp; 8 may be rendered unusable if the noise and vibration impacts are significant, resulting in the loss of major film productions for Fox Studios and NSW;</li> <li>protrusions into Fox Studios including light, overshadowing, wind, noise and views.</li> <li>Fox Studios do not support approval being granted for "all associated construction activities, including activities on adjoining land owned by centennial Park Trust and occupied by Fox Studios Australia Pty Limited in the case of Fox Studios, by CFS Managed Property Pty Limited in the case of the Entertainment Quarter, and by Playbill, in the case of the Hordern Pavilion" in so far as the activities impact upon or access the Studio. Any access to the Studio must be subject to the agreement of Fox Studios.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Demolition and construction management</li> <li>Noise, vibration and acoustics</li> <li>Overshadowing</li> <li>Wind impacts</li> </ul>
6	15.09.06	Centennial Parklands and Moore Park Trust (Submission 1 of 2)	Object	<ul style="list-style-type: none"> <li>Proposed development will encroach on the CPMPT's adjoining land that is leased to Fox Studios as the seating in two places and part of the roof structure will overhang the title boundary.</li> <li>SCSGT has sought consent of CPMPT for these encroachments and the Minister for Tourism, Sport and Recreation has issued landowner's consent subject to conditions.</li> <li>The consent does not relate to any encroachment by the proposed scoreboard relocation further to the north of the ground or for any construction impacts on Fox Studios, Playbill, Colonial or the CPMPT.</li> <li>The Minister has emphasised that should the plans be amended, the landowner's consent would no longer apply. The CPMPT is particularly interested in any changes to roof design, the extent of the encroachments and access onto CPMPT land.</li> </ul>	<ul style="list-style-type: none"> <li>Land encroachment</li> <li>Landowners consent</li> <li>Urban design and built form</li> <li>Overshadowing</li> <li>Heritage and archaeology</li> <li>Pedestrian and vehicular access</li> <li>Demolition and construction management</li> <li>Noise, vibration and acoustics</li> </ul>



				<ul style="list-style-type: none"> <li>• There appear to be some inconsistencies in the plans and photomontages particularly in relation to roof form and projection of roof elements over the Fox Studios site.</li> <li>• Roof edge should not extend beyond its current alignment; there is no reference in the plans and documentation to any engineering details in relation to the proposed structure and a wind test has not been provided.</li> <li>• No information has been provided about the relocated scoreboard and what impacts this may pose.</li> <li>• It is not clear from the plans where and how waste collection will be undertaken and where building plant will be located.</li> <li>• Shadow impacts on the northern facades of Buildings 16 and 19 to the south and south east of the site are unclear.</li> <li>• Further information required to assess the building bulk / scale / visual impacts, specifically:               <ul style="list-style-type: none"> <li>➢ photomontages – looking east from the security booth in John Hargreaves Avenue and looking west from Stanley Crick House;</li> <li>➢ detailed finishes schedule</li> <li>➢ elevation of Driver Avenue entrance.</li> </ul> </li> <li>• Impacts on Creeping Fig along boundary wall and a significant tree slightly further south are of concern; measures recommended in the Arborist Report should be formalised through statement of commitments.</li> <li>• An emergency egress management plan is required particularly as it is likely that people would be discharged directly from the grandstand onto Fox Studios' land.</li> <li>• Amount of construction traffic would appear to be underestimated and the demolition and construction program has inadequate detail to provide for a thorough assessment.</li> <li>• A number of issues should be addressed prior to the Construction Management Plan being finalised, including:               <ul style="list-style-type: none"> <li>➢ noise levels and how they will be monitored;</li> <li>➢ safety and presentation of hoardings and potential conflict between demolition and construction activities, particularly vehicle movement and operation of Fox Studios;</li> <li>➢ nomination of a designated contact person and procedures to be implemented to resolve any issues as they arise.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Wind impacts</li> <li>• Plant servicing and utilities</li> <li>• Waste management</li> </ul>
7	18.09.06	Colonial First State Property Management	Object	<ul style="list-style-type: none"> <li>• Concern regarding the construction management techniques for works.</li> <li>• Potential disruption to The Entertainment Quarter tenants through construction noise, materials handling, deliveries and traffic impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Demolition and construction management</li> </ul>
8	19.09.06	Department of Environment and Conservation	Object	<ul style="list-style-type: none"> <li>• Noise matters should be managed using best practice techniques and technologies and appropriate monitoring and community consultation be implemented.</li> <li>• DEC is able to support proposal subject to a revised Statement of Commitments as per Attachment 1 of DEC's letter or alternatively imposed as conditions of approval.</li> <li>• Attachment 1 proposes revised statement of commitments or conditions of approval (which should be implemented as part of the proposal) to address:               <ul style="list-style-type: none"> <li>➢ noise and vibration impacts</li> <li>➢ stormwater management</li> <li>➢ dust management</li> <li>➢ waste and wastewater management</li> </ul> </li> <li>• The proposal should consider segregation of stormwater as it has significantly greater potential to increase utilisation of natural resources such as rainwater harvesting and reuse.</li> <li>• The proposal has greater potential to increase the avoidance of waste generated at the site during operations at the SCG; the draft Waste Management Strategy does not specify any waste avoidance initiatives for the proposal.</li> </ul>	<ul style="list-style-type: none"> <li>• Noise, vibration and acoustics</li> <li>• Stormwater management</li> <li>• Dust management</li> <li>• Plant servicing and utilities</li> <li>• Waste management</li> </ul>
9	20.09.06	Playbill Venue Management	Object	<ul style="list-style-type: none"> <li>• PVM operates the Royal Hall of Industries, the Hordern Pavilion and the Byron Kennedy Hall.</li> <li>• The history of the venues is long and significant; each currently hosts a number of prestigious events including high profile music concerts, exhibitions and corporate events.</li> <li>• Each venue is heritage listed and there is an obligation under the Management Deed to ensure that these items are kept in a satisfactory standard.</li> <li>• Concern that the dust and noise emanating from SCG during construction will have a detrimental effect on the possibility of marketing each venue to potential clients who may be averse to such activities taking place during their particular event.</li> <li>• Removal of additional dust and dirt that will be generated during the construction phase will be a costly and timely activity and may have a detrimental impact on the Hordern Pavilion air conditioning filters.</li> <li>• In addition to the construction impacts on each of the venues there is concern that the organisation's offices are on the top floor of Building 16 which is immediately adjacent the construction zone.</li> <li>• Pedestrian access and resultant queuing takes place along Errol Flynn Boulevard and Peter Finch Avenue towards Driver Avenue if necessary; any changing to queuing arrangements that does not maintain the same level of pedestrian safety is not supported.</li> <li>• The Peter Finch Avenue access point is the most commonly used and its disruption would force patrons to walk around the main entrance of the Entertainment Quarter.</li> <li>• Any development that discourages the use of public transport and access to the Hordern Pavilion by its patrons is opposed.</li> <li>• Playbill Venues use 3 gates to access Hordern Pavilion and Royal Hall of Industries; disruption to each of the gates will, to varying degrees, have a detrimental effect on PVM.</li> <li>• Car parking has been identified within the last three business plans as being a key risk in the success of the business and opening of Area 2 in addition to the multi-deck car parking at the Entertainment Quarter is rarely warranted; any</li> </ul>	<ul style="list-style-type: none"> <li>• Demolition and construction management</li> <li>• Pedestrian and vehicular access</li> <li>• Noise, vibration and acoustics</li> <li>• Traffic generation and management</li> <li>• Car parking</li> </ul>



				<p>effects on access and car parking is unacceptable.</p> <ul style="list-style-type: none"> <li>Concern about the impact building contractors will have on on-site car parking.</li> <li>Serious concern on Byron Kennedy Hall given its proximity to the SCG site and will be most affected by demolition and construction.</li> <li>There will be a detrimental impact on Byron Kennedy Hall from noise and dust during construction; the loss of business and compensation for extant bookings will have to be investigated.</li> <li>Of the three options canvassed by the proponent, option three is supported whilst options one and two are not.</li> </ul>	
10	20.09.06	NSW Film and Television Office	Object	<ul style="list-style-type: none"> <li>Concern regarding the impact of the construction of the new grandstand will have on the film and television industry in NSW.</li> <li>Fox Studios Australia is the largest and most sophisticated film and television studio in Australia and has been home to a large number of local and international film and television productions.</li> <li>The largest sound stage in Australia is at Fox Studios and will be directly affected by the proposed development; Stage 1 is contained within one of the heritage listed buildings that is not sound proofed and any activity from SCG has a direct impact upon this stage.</li> <li>Should the redevelopment of SCG result in Stage 1 being impossible to use it would have a major impact on NSW attracting big budget offshore production to the stage.</li> <li>Any reduction in the levels of production at Fox Studios will have a direct impact on employment in the NSW film and television industry.</li> <li>It is sought that the development proposal does not impact the film and television industry in NSW to a significant degree and the best outcome for the film and television industry in NSW will be considered.</li> </ul>	<ul style="list-style-type: none"> <li>Demolition and construction management</li> <li>Noise, vibration and acoustics</li> </ul>
11	20.09.06	NSW Heritage Office	Object	<ul style="list-style-type: none"> <li>The Heritage Impact Statement (HIS) identifies the following heritage impacts resulting from the proposal: <ul style="list-style-type: none"> <li>Demolition of the Robertson and Marks scoreboard;</li> <li>Removal of the open and informal character of the Hill area and replacement by a large new stand;</li> <li>The loss of some already compromised historic views from within the SCG to structures within the Fox Studios site;</li> <li>Creation of new penetrations in the heritage wall on the former President Avenue;</li> <li>Increase in bulk and scale of development adjacent the heritage items within the Fox Studios site;</li> <li>Disturbance or destruction of potential archaeological relics (albeit of limited significance)</li> </ul> </li> <li>Whilst it is preferable that these impacts did not occur it is noted that the recommendations listed within Section 8.3 of the HIS will reduce these impacts to some extent and should be incorporated within the conditions of approval.</li> </ul>	<ul style="list-style-type: none"> <li>Heritage and archaeology</li> </ul>
12	22.09.06	Breckenbridge Pty Ltd	Object	<ul style="list-style-type: none"> <li>Breckenbridge Pty Ltd leases part of the ground floor premises known as Elsa Chauvel House, Building 11, Fox Studios as a casting consultancy and sound studio; other areas are sub-leased to other integrated businesses namely Greg Apps casting and i4Casting (The Audition Room serves both businesses).</li> <li>Sound and vision are fundamental components of the casting sessions that take place within the building and it is essential that there is a quiet environment to record attendees for clients – there is concern that the work of the company and other integrated businesses will be severely impacted by the proposed works.</li> <li>Vibration will effect the professional sound equipment from heavy machinery passing the door, machinery located on the ground and most significantly, the action of demolition, foundation and construction works.</li> <li>The material available for the proposal and the detail as set out in the EA reveals a number of matters of concern to Building 11 and the businesses carried out therein.</li> <li>It is considered that the impact upon Breckenbridge Pty Ltd is significant and has not been properly evaluated in the following areas: <ul style="list-style-type: none"> <li>Each construction option recommended by Leighton Constructions impacts Breckenbridge Pty Ltd and the attention given to Building 11 is wholly inadequate.</li> <li>The diagram for Option 3 does not disclose the details of the continuous staging of trucks in Driver Avenue, and we must assume that it will be close to our building; the noise and vibration from the proposed activity will severely impact on the occupation of Building 11.</li> <li>This impact will commence from the time of the 'early works' during which time heavy vehicle traffic flow past the building which are a vastly different size, use and frequency to those as normally using the street.</li> <li>Concern about the impact during the period of the construction of the protective hoarding along John Hargreaves Avenue.</li> <li>The uppermost tiers of the seating and roof will overhang Fox Studios. We disagree with the statement that "None of these projections is considered to result in any significant adverse environmental impacts on Fox Studios" (at least as far as it relates to Building 11).</li> <li>The most significant impact to our business relates to our audio recordings; the vibration from the construction and related works, will damage the quality of the recordings for actors that we have to submit to clients.</li> <li>The movement of the crane causes concern as does the vibration and noise impacts from the filling of trucks, rock breaking, foundation work etc.</li> <li>The statement refers to relocation and other issues such as collaboration with stakeholder; however, to date there has been no discussion between the proponent and our company regarding the impact on the company and building.</li> <li>The consultants are either unaware of the nature of our business, or do not appreciate that there are material problems, or both.</li> <li>We are not aware of any representative from the proponent asking to enter our premises. We have not been properly considered in the EA and Acoustic Report for whatever reason, yet other affected tenants appear to have</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Noise, vibration and acoustics</li> <li>Demolition and construction management</li> </ul>



				<p>been considered, as they were singled out specifically.</p> <ul style="list-style-type: none"> <li>➤ The Acoustic Report states at No. 6 Construction Noise Impact that most of the receiver buildings are sealed, and therefore it states that the allowed maximum noise is satisfactory; the Breckenbridge Pty Ltd building is not sealed and the conclusion that to allow the maximum noise level to be satisfactory within the building at the given level is erroneous.</li> <li>➤ The Acoustic Report refers to the internal noise level for offices at 50dB(A); 45 for residential areas and 30 for sound stages. Accordingly as set out above, the Breckenbridge studio should have a maximum level of 30 (not that the rating is agreed but merely that we have not been considered on the same level as the sound studios).</li> <li>➤ The Acoustic Report (Page 6) identifies Building 11 as being close to the highest affected building outside the sound stage; however, Building 11 suffers a higher detrimental impact than Sound Stage 1 which is exacerbated with windows open (an unavoidable situation during summer months in a un-air conditioned heritage building).</li> <li>➤ The reference to 'Implementation of general strategies for construction equipment control' as referred to under 'Noise Management' on Page 59 of the EA does not provide any comfort; the recommendations do not adequately address the impact on a business that is reliant on consistent low levels of sound and vibration.</li> <li>➤ There is no clarity as to where the stationary equipment such as pumps, generators and the construction staging area are to be situated.</li> <li>➤ The distance from the NE corner of Building 11, to the ivy covered wall abutting the score board and construction site, is 18 metres (as per photos), placing the building in the epicentre of the building works and related noise and vibration.</li> <li>➤ We have not had an opportunity to commission specialist engineering consultants to examine the plans and documentation pore, but have tried to devote the time to look at what is patently obvious to us.</li> <li>➤ There are severe problems as a result of the proposed building construction and request that all concerns will be appreciated and respected.</li> <li>➤ Although we are aware that Fox Studios is keen to ensure that the safety and quiet enjoyment of its tenants is a priority the issues set out above overwhelmingly affect the company and the businesses with which we work in Building 11.</li> <li>➤ The future of our businesses, both individually as well as collectively, for the reasons set out above, will be in serious jeopardy; the business may be relocate to maintain our reputation and service level. Such relocation to a locale away from the film hub will be financially devastating.</li> </ul>	
13	22.09.06	Centennial Parklands and Moore Park Trust (CPMPT) (Submission 2 of 2)	Object	<ul style="list-style-type: none"> <li>• Acknowledge need for redevelopment of the Hill area and the need to replace existing spectator accommodation with improved facilities.</li> <li>• CPMPT owns land adjoining the SCG which is leased to Fox Studios, Colonial First State Property Management and Playbill Venue Management.</li> <li>• Some seating and part of the roof structure will encroach on CPMPT's adjoining land which is leased to Fox Studios.</li> <li>• SCSGT has sought landowners consent for the CPMPT for these encroachments and the Minister for Tourism, Sport and Recreation issued a landowners consent subject to conditions.</li> <li>• The Minister emphasised that should the plans be amended this consent would no longer apply and the consent was not approval for any encroachment by the proposed scoreboard location or for any construction impacts on other lessees.</li> <li>• CPMPT are particularly interested in any changes in roof design and the extent and encroachments and access onto their land.</li> <li>• The current plans do not provide a definitive roof design for the new grandstand as engineering details are subject to ongoing assessment.</li> <li>• Whilst the extent of encroaching is defined at this stage the final design of the roof detail will require resolution to fully appreciate potential solar access and amenity impacts on the adjoining Fox Studios site in particular overshadowing and bulk of new development.</li> <li>• The design features a series of reinforced concrete beams that wrap around seating plats and over roof decking to form a series of expressed concrete radial "ribs" which form the basis of the maximum height figures provided; there is flexibility for a larger and bulkier roof form within this overall height limit.</li> <li>• CPMPT considers that the final design of the roof structure needs to be clarified or an appropriately worded statement of commitment be made to ensure that the roof edge does not extend beyond the current alignment.</li> <li>• The proposed grandstand is considerably larger and more bulky than the existing structures on the Hill and there will be a significant change in the visual appearance of the SCG particularly from Hargreaves Avenue and Lottie Lyell Hill Avenue.</li> <li>• A final elevation showing the height and extent of canopy for the entrance structure at Driver Avenue should be provided to clarify the design intent at this location.</li> <li>• A schedule of detailed finishes for major elements of the development proposal including colours and materials should be provided given the scale of development and its location within a Conservation Area. Provision of a detailed finishes and materials schedule should be included in the statement of commitments.</li> <li>• It is requested that a statement of commitment be made requiring that the rear elevation of the proposed grandstand remain free from advertisement signage that would be visible from the adjoining site(s) and or public land(s).</li> <li>• The shadow diagrams indicate a general increase to the shadow footprint cast by the proposed grandstand over the areas west, south and east into the Fox Studios and Entertainment Quarter sites as a result of the larger scale of the new grandstand to existing structures and the reconfiguration of the radius of the new grandstand.</li> <li>• In particular, Stage 1 and Buildings 11, 15, 16, 19 and 61 will be affected by increased overshadowing during the winter</li> </ul>	<ul style="list-style-type: none"> <li>• Land encroachment</li> <li>• Landowners consent</li> <li>• Urban design and built form</li> <li>• Overshadowing</li> <li>• Heritage and archaeology</li> <li>• Pedestrian and vehicular access</li> <li>• Demolition and construction management</li> <li>• Noise, vibration and acoustics</li> <li>• Wind impacts</li> <li>• Plant servicing and utilities</li> <li>• Waste management</li> </ul>



				<p>period as shown on the submitted sections.</p> <ul style="list-style-type: none"> <li>Elevational shadow diagrams (including overshadowing on building facades) are required to assess its effect on a functional and time use basis.</li> <li>Shadow projections on the surrounding public domain should also be duly considered inclusive of roadways, pedestrian pathways and parks; in particular Lottie Lyel and Hargreaves Avenue.</li> <li>Given that the final roof structure is not determined at this stage further overshadowing diagrams will need to be provided (potentially through an additional statement of commitment).</li> <li>It is recommended that the measures outlined within the HIS be implemented to mitigate the impacts of the proposed development on the existing built heritage items such as the old scoreboard and the heritage wall (including its landscape elements) and the potential disturbance or destruction of any archaeological relics in the Hill.</li> <li>There is concern that during emergency situations grandstand occupants will be discharged into Fox Studios through the new openings in the boundary wall and no emergency plan has been provided at this stage and should be included as a statement of commitment.</li> <li>The construction phase of development will result in substantial impacts on the use of the adjacent land occupied by Fox Studios including noise, dust, vibration, traffic and issues associated with the proposed use of Fox Studios for a construction site compound; limited information has been provided in this regard.</li> <li>CPMPT and Fox Studios have concerns regarding Option 3 for the construction management process which is the preferred construction management outcome for SCSGT; in particular monitoring and management of noise levels, safety and presentation of hoardings and potential conflicts between demolition and construction activities and normal operation of Fox Studios.</li> <li>The construction plan does not include any issue management and dispute resolution arrangements and no designated contact person or consultative mechanism is mentioned; a statement of commitment should be provided accordingly.</li> <li>The scale and form of the new grandstand could potentially increase wind turbulence in Hargreaves Avenue to the detriment of pedestrian amenity. CPMPT requests that a wind impact assessment be provided to Fox Studios and CPMPT once completed.</li> <li>Details showing the location of building plant and waste storage should be provided prior to the plans being finalised.</li> </ul>	
14	22.09.06	Fox Studios Australia (Submission 2 of 2)	Object	<ul style="list-style-type: none"> <li>Fox Studio's major concern is the demolition and construction phase of the project as this will have a major impact on the operations of the studio for the following reasons (comments are based upon Construction Option 3 – the only viable option for Fox Studios of the 3 canvassed): <ul style="list-style-type: none"> <li>Loss of business as a result of the noise and visual impacts from due to the erection of a hoarding over John Hargreaves Avenue as well as loss of car parking.</li> <li>Loss of amenity due to the noise of businesses in various buildings within the studio grounds and the need to relocate various tenants who have sound and/or vibration sensitive businesses.</li> <li>Sound Stages 1, 7 and 8 may be rendered unusable as a result of noise/vibration resulting in a loss of major productions over the two year construction period.</li> <li>Concern regarding the long term impact on ficus and trees in Hargreaves Avenue as a result of erecting a hoarding on John Hargreaves Avenue and the proximity of demolition and construction activities.</li> <li>The only viable construction option is number 3 which can only succeed provided a number of appropriately worded conditions are imposed.</li> </ul> </li> <li>The acoustic report prepared in support of the project application states that during the demolition and construction works areas within Fox Studios may experience disruptive noise levels and proposes permissible interior noise levels during construction of 50dB(A) for offices and 30dB(A) for sound stages.</li> <li>Fox Studios' acoustic consultant recommends further acoustic assessment for demolition and construction works as these impacts will have the greatest impact on Fox Studios; possible inclusion within the construction management plan.</li> <li>Fox is a major operational site with 5,000 – 10,000 vehicle movements a day and over 1500 permanent staff across the over 80 businesses located at the Studio. Productions can add another effective annual employment of 500 staff.</li> <li>Vehicular access into the Studio is not "primarily" via John Hargreaves Avenue as stated in the Application. It is only via John Hargreaves Avenue unless access to Driver Avenue is temporarily unavailable.</li> <li>There are currently 35 car spaces on John Hargreaves Avenue. The number of those spaces is likely to be reduced in the construction phase. The SCGGST may need to provide alternative parking.</li> <li>Concern that the projected construction traffic movements may be too low.</li> <li>Option 3 is considered to be the preferred access option for works on the SCG site.</li> <li>The proposed overhead hoarding above John Hargreaves Avenue should be designed to allow the passage of large vehicles to and from the Fox Studios site.</li> <li>Temporary access and security arrangements will be required for traffic and pedestrian movements between the Fox Studios site and The Entertainment Quarter Site.</li> <li>Appropriate traffic and pedestrian directional signage will need to be provided and advance notification of changes will need to be given to tenants and employees on the Fox Studios site.</li> <li>Appropriate arrangements should be made to cover Fox Studios costs relating to the provision and management of temporary traffic and pedestrian access arrangements.</li> <li>Construction Option 3 should be reviewed by SCSGT's aborist having regard to the preservation of the ficus and other significant landscaping on the Fox Studio's site particularly in John Hargreaves Avenue.</li> <li>Given the extent of the demolition and construction work and the proximity of the businesses at Fox Studios, appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Demolition and construction management</li> <li>Noise, vibration and acoustics</li> <li>Pedestrian and vehicular access</li> <li>Heritage and archaeology</li> <li>Air quality</li> <li>Land encroachment</li> <li>Traffic generation and management</li> <li>Plant servicing and utilities</li> <li>Waste management</li> <li>Overshadowing</li> <li>Wind impacts</li> </ul>



				<p>conditions will need to be imposed to minimise the risk of air contamination including any arrangements to minimise the impact of dust on vehicles parked at Fox Studios and patrons utilising outdoor seating within the café area.</p> <ul style="list-style-type: none"> <li>• Fox Studios is concerned about the exact dimensions and locations of the projections into Fox Studios as the application contains a number of inconsistencies: <ul style="list-style-type: none"> <li>➤ It is not clear exactly where the light towers are proposed to be moved; confirmation is required to confirm that only the western light tower will be relocated and, if so, Fox Studio's will need to seek advice from its lighting consultant.</li> <li>➤ It is not clear exactly where the video scoreboard is to be relocated; Fox Studios does not support the projection of the video scoreboard over the studio as this may be an area that is developed in the future (Fox Studios has no objection if the scoreboard only projects over Lot 4 as this is not part of the studio).</li> <li>➤ The stated overhangs need to be confirmed to identify whether there will be any overshadowing, views or wind issues for Fox Studios.</li> </ul> </li> <li>• The PKA Acoustic Consulting Report acknowledges that crowd noise reflecting off the new roof into the Fox Studios site will be an issue requiring management and that this will require sound absorption material to be incorporated into the design. This requirement should be included within the conditions of approval.</li> <li>• Fox Studios' acoustic consultant advises that compliance only with EPA industrial noise policy may not provide sufficient protection of the existing amenity at the Studio.</li> <li>• It is noted that Section 2.11 of the Application states that no car parking is proposed within the Stand.</li> <li>• Fox Studios believe that event day traffic will be similar to existing traffic issues.</li> <li>• Access onto the Studio can only be provided for emergency egress. Fox Studios will not permit egress onto the Studio as a general operation. As there are 5 proposed emergency egress points, Fox Studios will lose parking in front of those areas during event days and must agree on an emergency egress plan with the SCGSGT.</li> <li>• Concern there is little design detail on the façade of the egress points.</li> <li>• Fox Studios has not agreed to any future pedestrian link into the Entertainment Quarter.</li> <li>• The proposal will have a number of significant adverse heritage impacts; some existing historic views will be compromised and views from within the SCG, towards significant Studio landmarks, such as the Grandstand Clocktower and the Byron Kennedy Banquet Hall tower will be reduced. There will also be long term heritage issues in relation to the changes to views and vistas within the Studio, towards the SCG backdrop.</li> <li>• The former RAS Council Stand may have a permanent shadow in winter, affecting its appearance and its amenity.</li> <li>• There is currently only one penetration in the Ficus covered wall. There will be 5 penetrations with the new Stand. This will clearly change the existing presentation of the Ficus covered wall. (As noted above, Fox Studios is also concerned that measures are taken to ensure the health and longevity of the Ficus, throughout the Project and beyond).</li> <li>• Fox Studios support the recommendations of the Application's HIS which apply to Fox Studios. These should be incorporated as conditions of approval and include both built and landscape elements.</li> <li>• No detail has been provided on waste removal plans. Fox Studios is concerned about the impact of the location of any waste compactors. The location of the waste compactors must be undertaken in consultation with Fox Studios.</li> <li>• The open area for patrons which has views into Fox Studios must be sufficiently fenced to deter the throwing of rubbish or projectiles into Fox Studios.</li> <li>• If any emergency egress points are approved it must be on the basis that access into the Studio can only be provided for emergency egress. It cannot be permitted as a general operation.</li> <li>• Given design changes, potential overshadowing issues need to be further considered.</li> <li>• Wind issues have not been considered by the Application. A condition is required which requires detailed consideration of wind impacts prior to approval.</li> <li>• The proposed encroachments contravene State Environmental Planning Policy 47 – Moore Park Showground.</li> <li>• Based on the issues outlined above, Fox Studios submits that a set of conditions be incorporated in the project approval, if granted to mitigate the environmental impact of the proposal (set of conditions appended to submission)</li> <li>• Fox Studios does not object to approval being granted to the following aspects of the application: <ul style="list-style-type: none"> <li>➤ Remove the existing Doug Walters Stand, the Hill, and all other miscellaneous structures in the development zone</li> <li>➤ Relocate the electronic video scoreboard and advertising panels</li> <li>➤ Remove the old scoreboard</li> <li>➤ Retain the boundary wall adjacent to Hargreaves Avenue</li> <li>➤ Construct a grandstand Relocate the two existing light towers</li> </ul> </li> <li>• Fox Studios does object to the nature of approval sought for construction activities in particular the length of the impact on Fox Studios operations and the relatively short period of time to prepare the submission.</li> <li>• Given the proposed timetable for the project, Fox Studios is also concerned about adequate time to take appropriate advice and provide feedback.</li> <li>• Fox Studios is a small company with 17 full time employees associated with the operation of the Studio. The project has already taken significant employee time and funds and will continue to do so if the project proceeds. Accordingly, Fox Studios will need to engage a project manager, possibly on a part time basis leading up to any approval of the project and on a full time basis if the project is approved.</li> <li>• As it is clear the detail of the design appears to be changing, Fox Studios needs to be continuously consulted by the Department of Planning in relation to proposed changes as the Department is notified.</li> </ul>	
15	25.09.06	NSW Film Makers Group	Object	<ul style="list-style-type: none"> <li>• NSW FMG is a group that formed due to the relatively recent decrease in film and television production in NSW.</li> <li>• Fox Studios have been unoccupied by large productions for many months but their facilities are soon to be utilised for a</li> </ul>	<ul style="list-style-type: none"> <li>• Noise, vibration and acoustics</li> <li>• Demolition and construction</li> </ul>



				<p>large production.</p> <ul style="list-style-type: none"> <li>It is important that SCG work closely with Fox Studios to ensure that any disruptions are minimised in particular increased noise levels arising from building activities.</li> <li>It is acknowledged that there will be some construction work however it is requested that the amount of noise disturbance is kept to a minimum and consideration be taken to minimise this.</li> <li>Access to Driver Avenue to Fox Studios be kept clear as the studios are an operating business.</li> <li>Fox Studios is home to many international productions and as an industry it is imperative that they maintain their reputation as a world class standard; this requires construction minimise the effects on surrounding businesses.</li> </ul>	management
16	29.09.06	The Media, Entertainment and Arts Alliance	Object	<ul style="list-style-type: none"> <li>The MEAA is the union that represents actors and technicians in the film and television industry.</li> <li>Concern that Fox Studios will be significantly impacted by the construction impacts.</li> <li>Production and employment levels in the film and television industry are currently at an extremely low level in NSW with no major offshore productions taking place at Fox Studios (three have taken place in Queensland and Victoria); concern that the proposed construction will prove a further disincentive for offshore productions to locate in Sydney.</li> <li>The MEAA acknowledges that the replacement grandstand is necessary but seeks reassurance that the construction work will not adversely impact the operation of Fox Studios.</li> <li>Pre-production of a major film is scheduled to commence in Fox Studios shortly; the needs of all adjoining landowners should be given due consideration in order for Fox Studios to remain as an attractive site for employment levels in the film and television industry.</li> </ul>	<ul style="list-style-type: none"> <li>Demolition and construction management</li> </ul>
17	03.10.06	Ausfilm	Object	<ul style="list-style-type: none"> <li>Ausfilm is a tenant at Fox Studios Australia and is located in Suite 3, Building 23 (the base of the Bill O'Reilly Stand) and markets and promotes Australia internationally as the world's best destination for screen production, with the objective of increasing the amount of footloose overseas production and post/digital production occurring in Australia.</li> <li>Ausfilm is a screen industry-government partnership, comprising some 40 private sector companies, Australia's state film offices and the Federal Government through the Department of Communications, IT &amp; the Arts.</li> <li>Ausfilm is concerned that noise and dust issues associated with the proposed demolition and construction activities will dissuade productions from shooting at Fox Studios Australia and could result in the loss of productions to New South Wales and Australia.</li> <li>Ausfilm is concerned that the appearance of the hoarding over John Hargreaves Avenue needs to be as attractive as possible to minimise the possible negative first impression of visiting international production executives.</li> <li>If the demolition and construction works proceed, it is crucial that consideration be given to minimise the noise, dust and presentation impacts on Fox Studios Australia, particularly on its productions and tenants. The Studio has attracted over 1.5 billion dollars worth of production to New South Wales since it opened in 1998.</li> <li>The new Grandstand proposal plans to undertake its demolition and construction activities over a 2 year period. The New South Wales production industry cannot afford to lose production activity at Fox Studios Australia for that period.</li> <li>Ausfilm submits that the Department must consider the impact on not only the businesses located at Fox Studios Australia but also the New South Wales and Australian production industries.</li> <li>Conditions of approval should be imposed to minimise the impact on production activities at Fox Studios by appropriate and sympathetic treatment of any hording over John Hargreaves Avenue and noise restrictions on demolition and construction so that production activity, particularly filming, will not be compromised.</li> </ul>	<ul style="list-style-type: none"> <li>Noise, vibration and acoustics</li> <li>Dust management</li> <li>Demolition and construction management</li> </ul>

## APPENDIX 1b

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### Summary of Submissions (part 2)



No.	Date	Submitter	Nature	Comment	Issue Summary
18	19.09.06	Ministry of Transport	Advice	<ul style="list-style-type: none"> <li>Notes that the proposal includes a seating increase in the grandstand of 2,739 seats.</li> <li>It is anticipated that the additional public transport requirement generated by the proposal can be catered for with existing bus capacity.</li> <li>If and when integrated event ticketing is introduced, the bus mode share can be expected to rise substantially, requiring additional capacity at the bus station, with additional pedestrian movements across Driver Avenue, and traffic impacts on roads including Anzac Parade.</li> <li>The proposed increase in bus patronage growth has implications for Strategic Bus Corridor No. 20 (Maroubra Junction – City) which follows Anzac Parade.</li> <li>The Ministry would request that it is kept appraised of any development in the area that could potentially impact on bus servicing.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts on bus services.</li> </ul>
19	22.09.06	Bazmark Film 11 Pty Limited	Expressing concern	<ul style="list-style-type: none"> <li>A major film production is proposed to be based at Fox Studios Australia, phasing in occupation from October 3, 2006, leading up to commencing principal photography on March 26, 2007.</li> <li>The film plans to utilise Stages 1, 2, 3, 7 and 28 in Fox Studios.</li> <li>The producers are extremely concerned about the impact the demolition and construction of the new stand at the SCG may have on the integrity of filming.</li> <li>Every effort must be made to minimise the noise and dust impacts associated with the demolition and construction.</li> <li>The production wants to be consulted in relation to the conditions of demolition and construction so that they can identify whether the production can continue in parallel to those works.</li> <li>They ask that the most stringent noise and air quality conditions be imposed on the demolition and construction works and that any activity which would otherwise prevent filming taking place, be suspended during nominated filming periods.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts on demolition and construction on film-making.</li> <li>Consultation during construction.</li> </ul>
20	4.10.06	Visionbytes Pty Ltd	Expressing concern	<ul style="list-style-type: none"> <li>Visionbytes occupies the first floor of Building 16, being the building on the southern side of John Hargreaves Avenue.</li> <li>Believes that the redevelopment proposed could affect their business across the board, significantly.</li> <li>The sales, marketing and administration of the business will potentially be affected by the distraction of noise.</li> <li>Staff working in the business will find the noise distracting and may have difficulty hearing the audio from programs they are working on. They request that noise be minimised at all hours and not just business hours, as their staff are particularly working from 6.00am until 10.00pm.</li> <li>Dust created by the construction process will impact on their IT-related systems and may contaminate the air entering the air-conditioning systems and will fall on vehicles parked outside the office.</li> <li>They request that the amount of dust and dirt produced on the site be minimised.</li> <li>They are concerned that vibration may have a significant impact on the computer storage systems and request that an attempt be made to minimise the amount of vibration and that Visionbytes be advised of times when vibration is expected to occur.</li> <li>They are concerned about the quality of the digital TV signal that they currently receive.</li> <li>They state that if the fibre optic cable connecting Building 16 to Building 54 is severed, there will be a significant impact on the provision of services to their clients.</li> <li>They are concerned that they may experience significant power-related issues during construction.</li> <li>They state that because of noise, vibration and dust, windows will be required to be closed to ensure minimal dust impact on their operations, which will affect the natural air flow to the office and the working environment of the staff.</li> <li>They state that although they support the development, they believe consideration for their business requirements should be taken into account during the demolition and construction periods.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts on demolition and construction on business activities.</li> <li>Power failures.</li> <li>Digital TV signal.</li> <li>Natural air flow to building.</li> </ul>
21	18.9.06	Breckenbridge (2 of 2)	Object	<ul style="list-style-type: none"> <li>Request a dilapidation report.</li> </ul>	<ul style="list-style-type: none"> <li>Dilapidation report.</li> </ul>

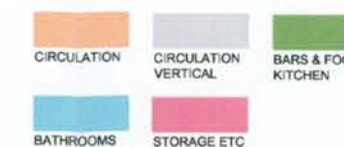
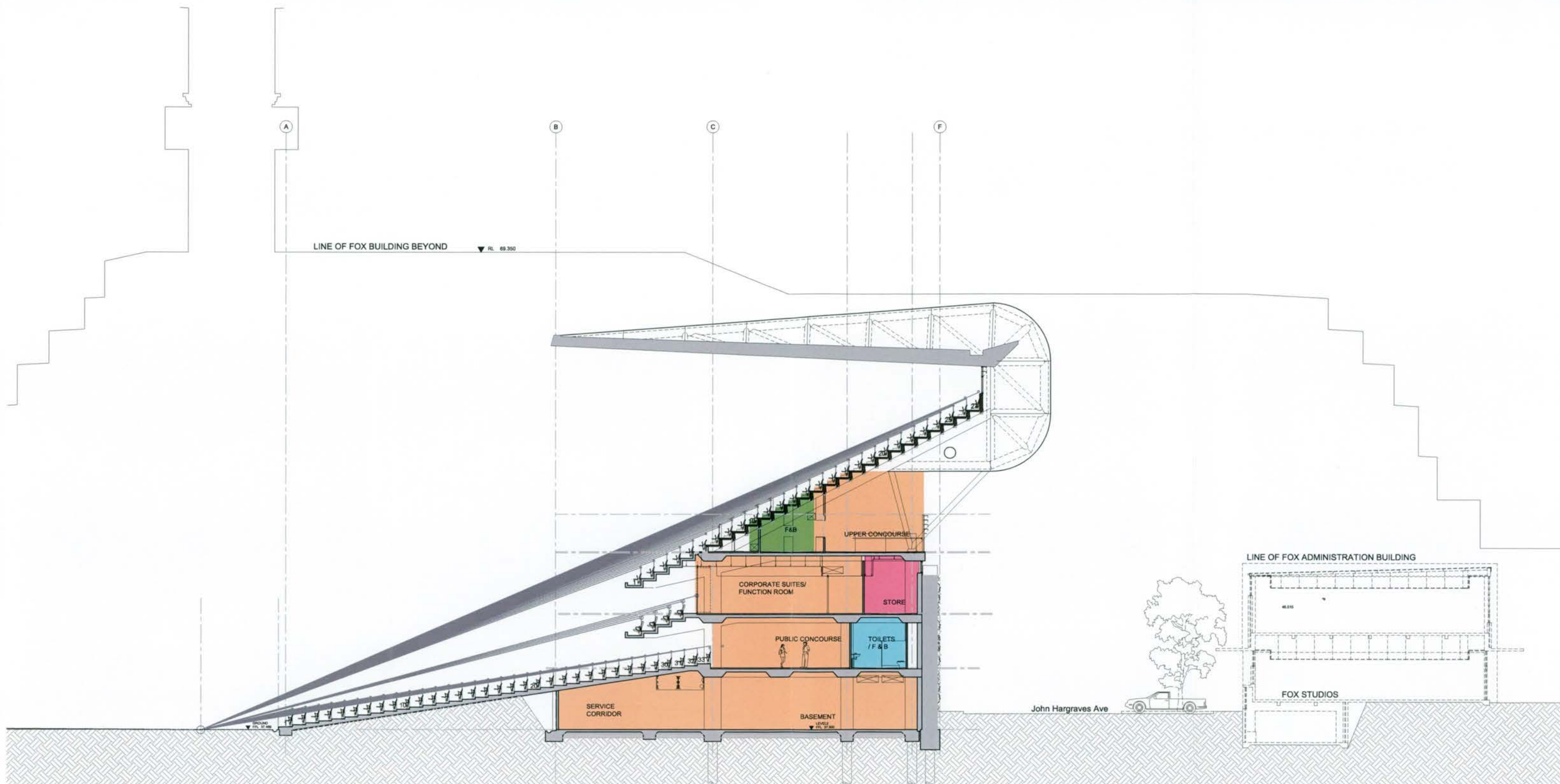


## **APPENDIX 2a**

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### **Amended Grandstand plans**





# S.C.G. Hill Grandstand - Section 1

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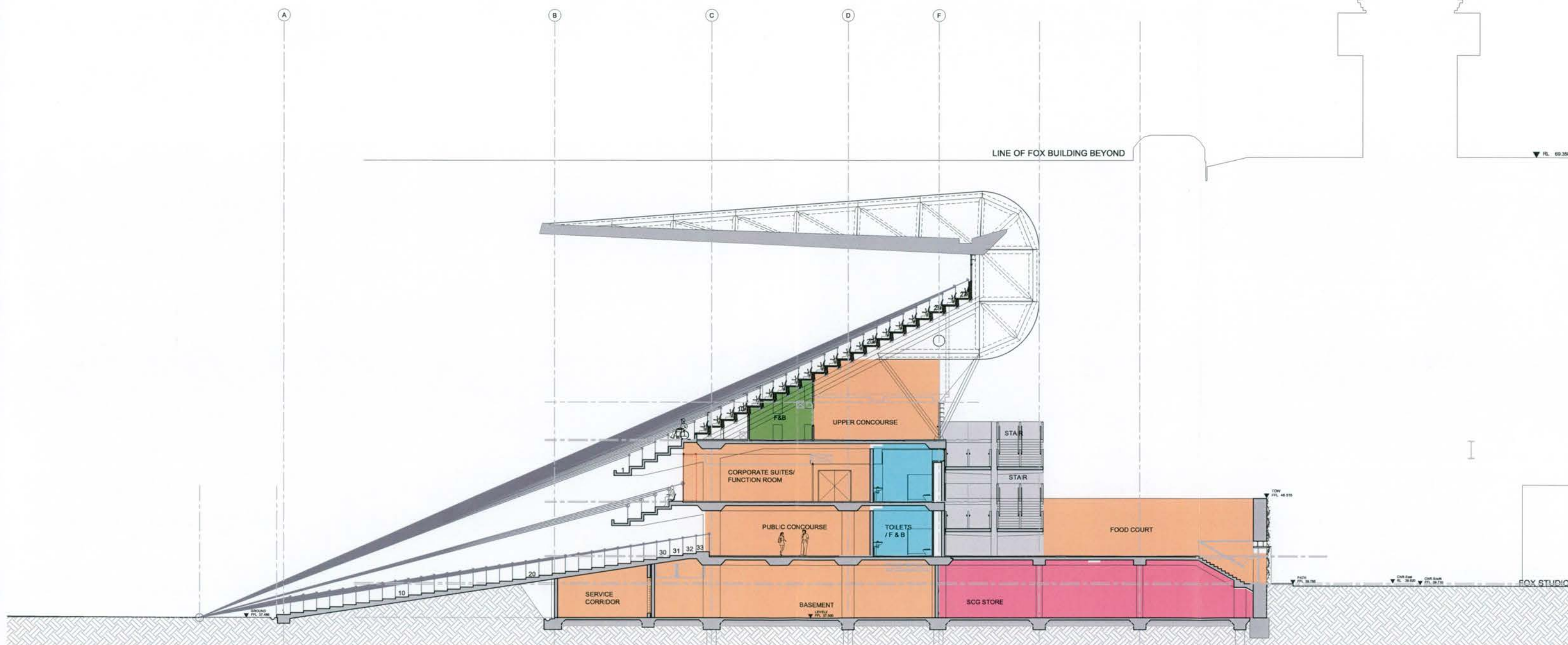
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Joint Venture Architects  
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ROBERTSON+MARKS Pty Ltd  
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ACN 003 127 222



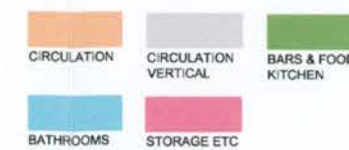




## S.C.G. Hill Grandstand - Section 2

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ISSUE | J

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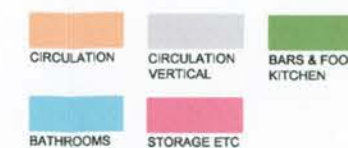
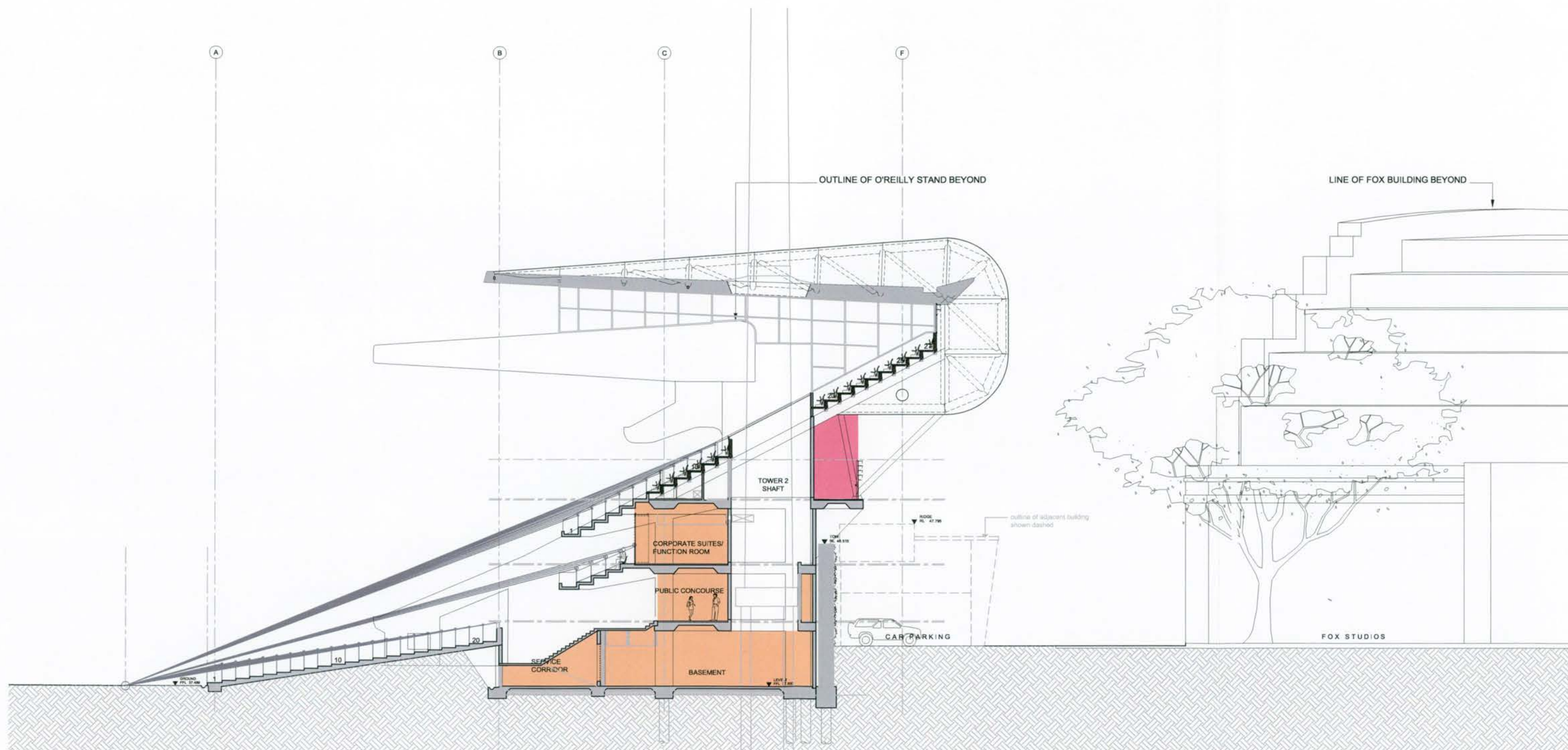
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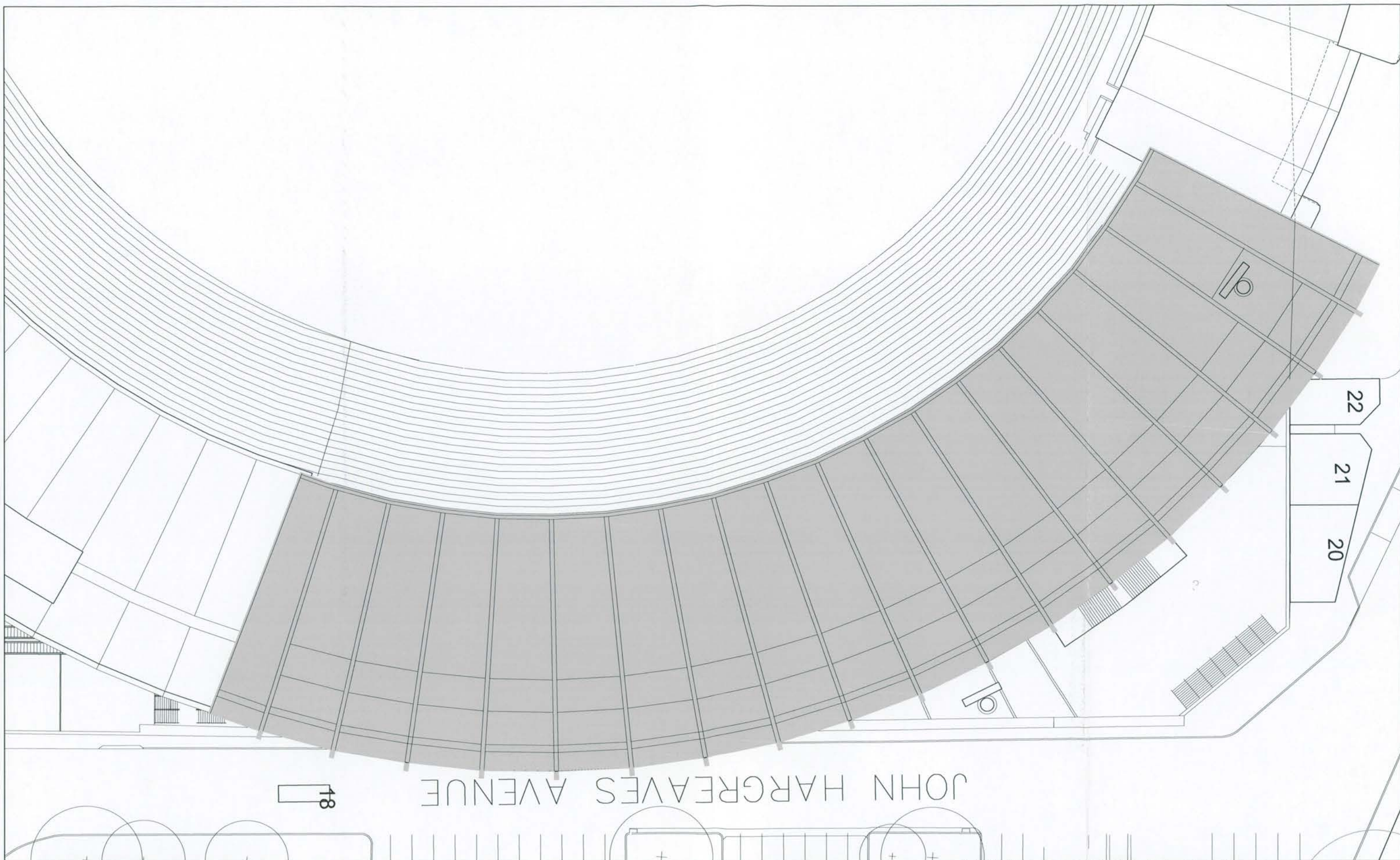
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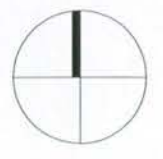
Joint Venture Architects	The Cox Group Pty Ltd ROBERTSON+MARKS Pty Ltd	ACN 002 535 891 ACN 003 127 222
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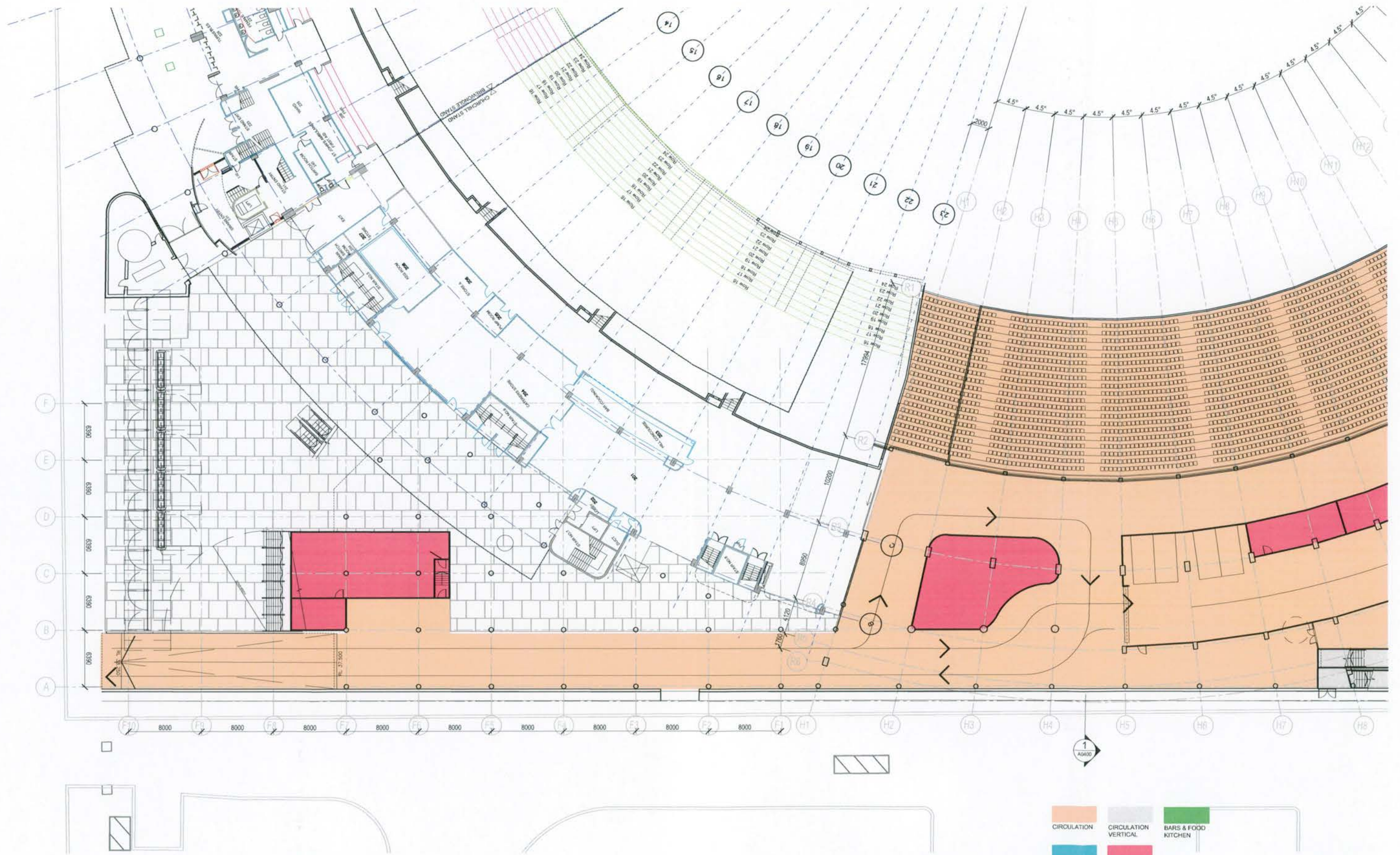
**HILL GRANDSTAND**

**ROOF PLAN**

Date 19.10.2006	Dwg A.215.9.1	1:400 @ A3 Rev E
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# S.C.G. Hill Grandstand - Floor Plan Level 2 - Part 1

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ISSUE | J

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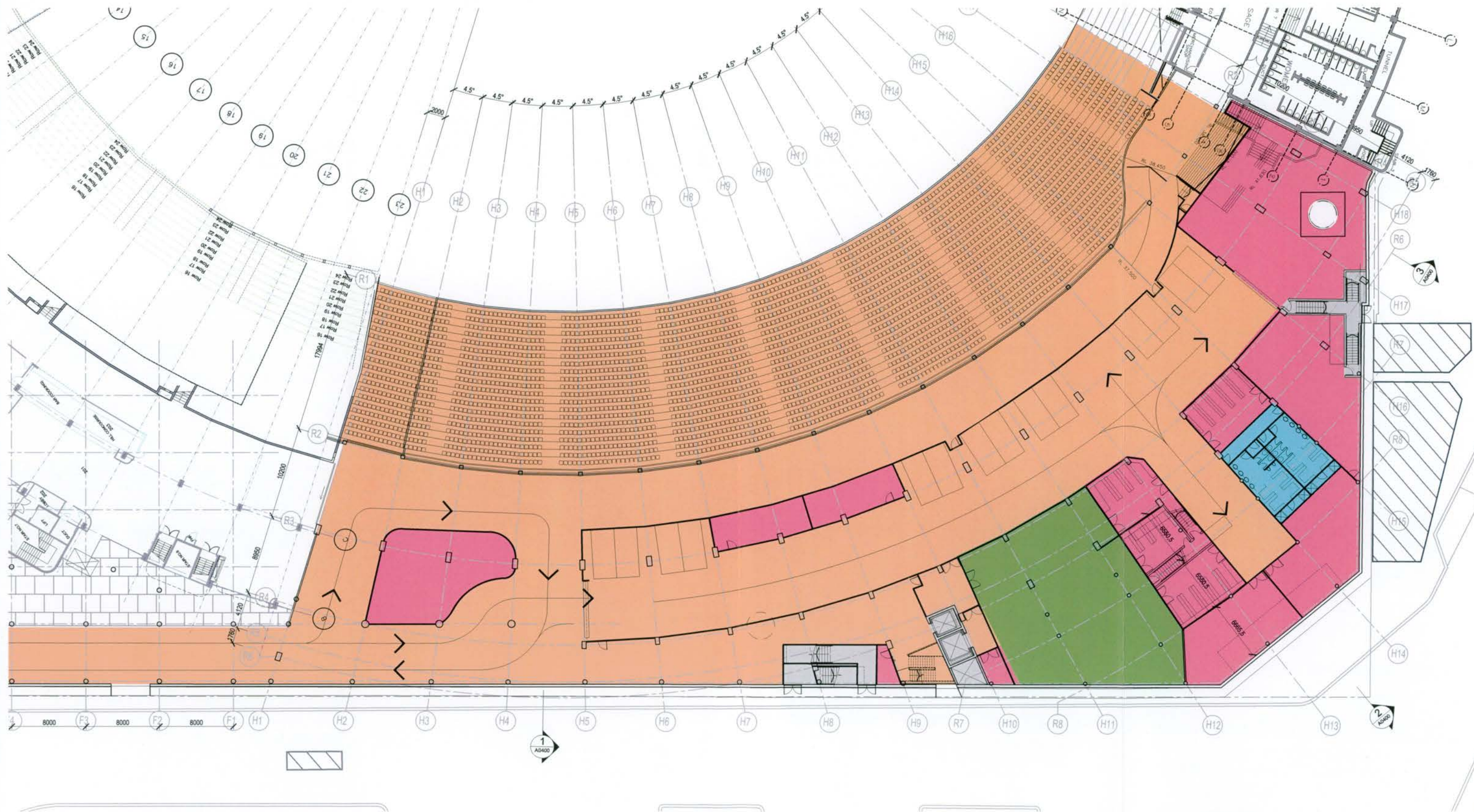
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# S.C.G. Hill Grandstand - Floor Plan Level 2 - Part 2

DWG | A.21522  
DATE | 16.10.06  
ISSUE | J

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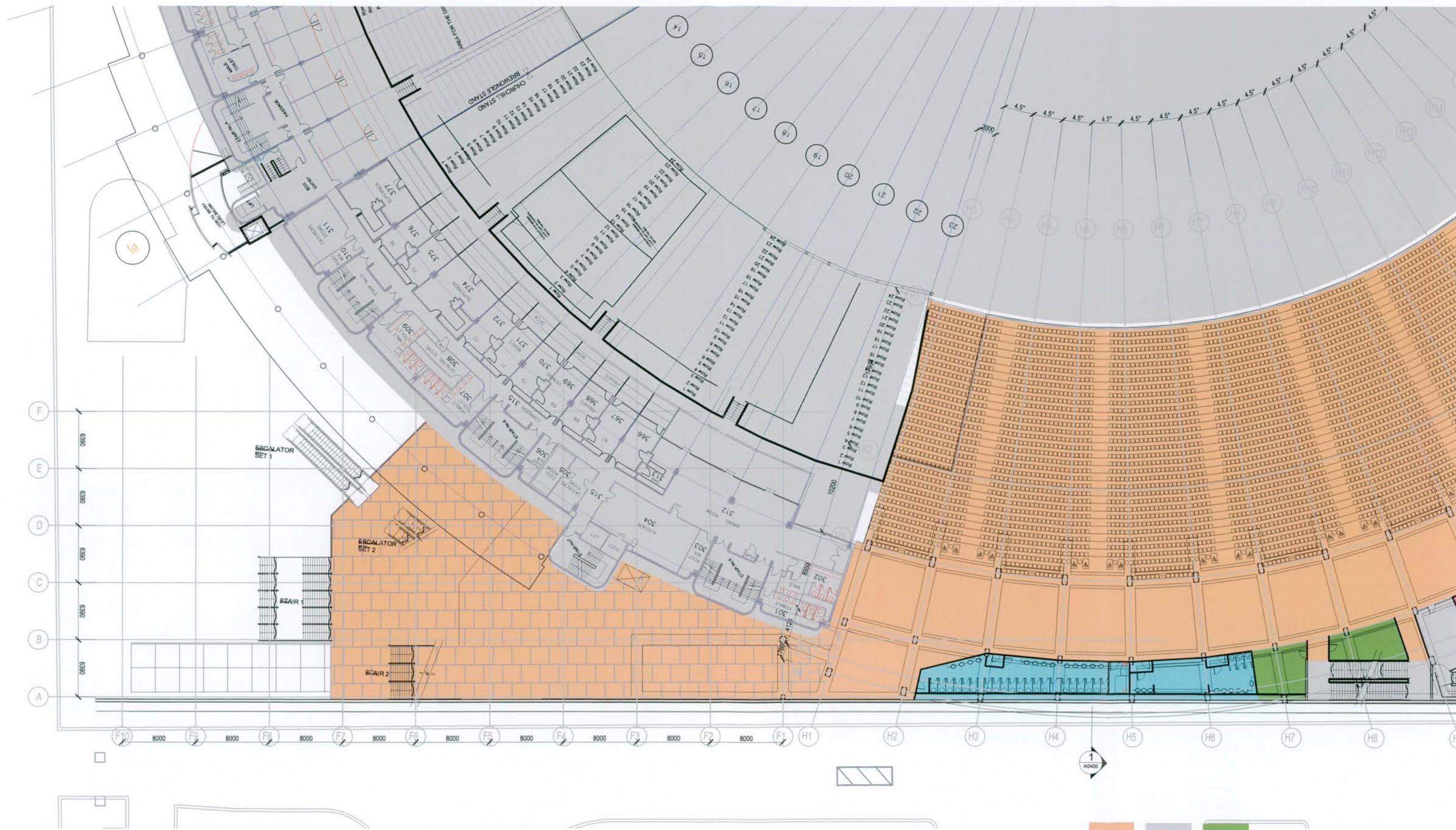
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Architects

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# S.C.G. Hill Grandstand - Floor Plan Level 3 - Part 1

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 DATE | 16.10.06  
 ISSUE | J  
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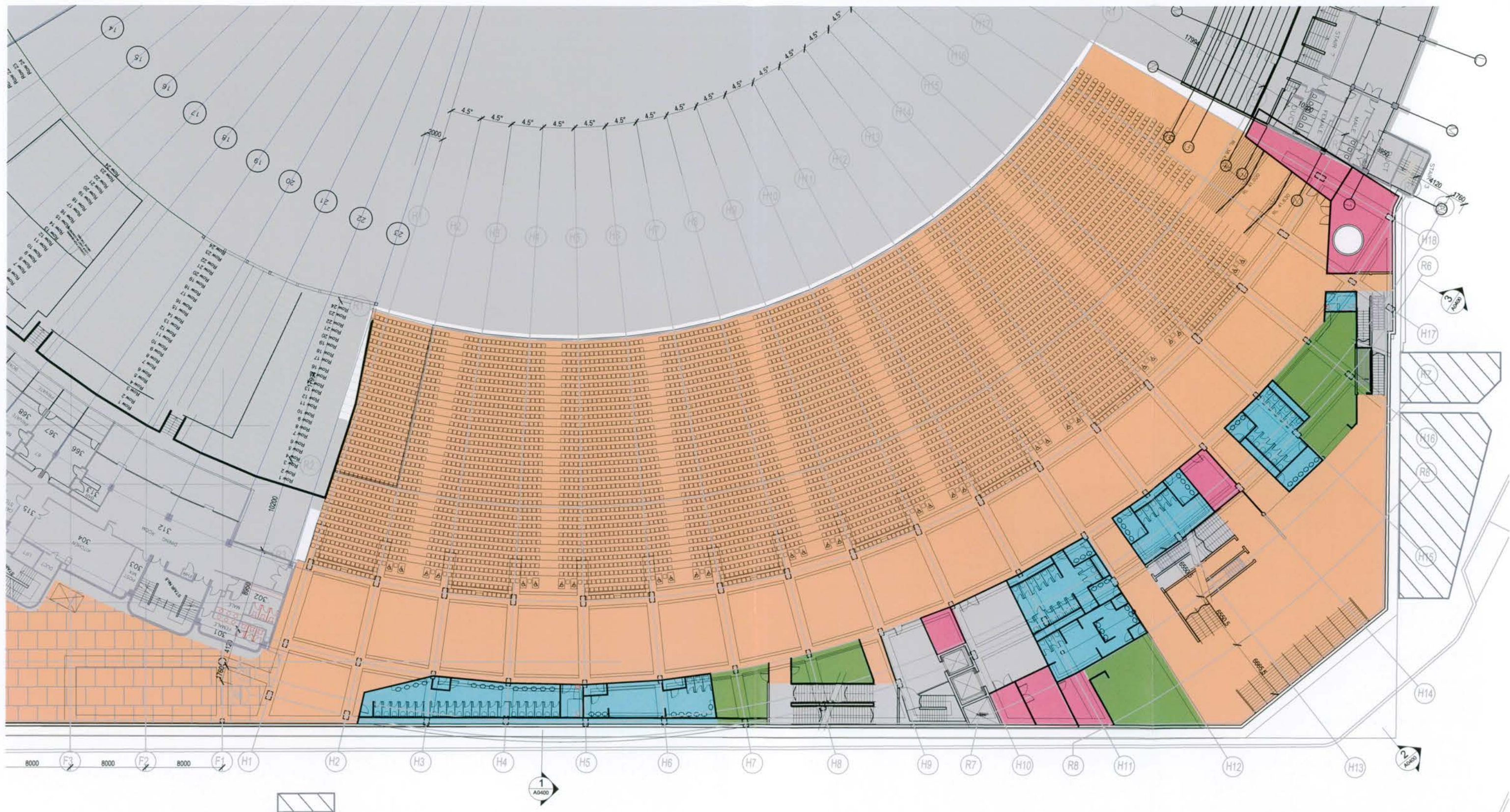
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# S.C.G. Hill Grandstand - Floor Plan Level 3 - Part 2

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DATE 16.10.06  
ISSUE J  
1:400 @a3

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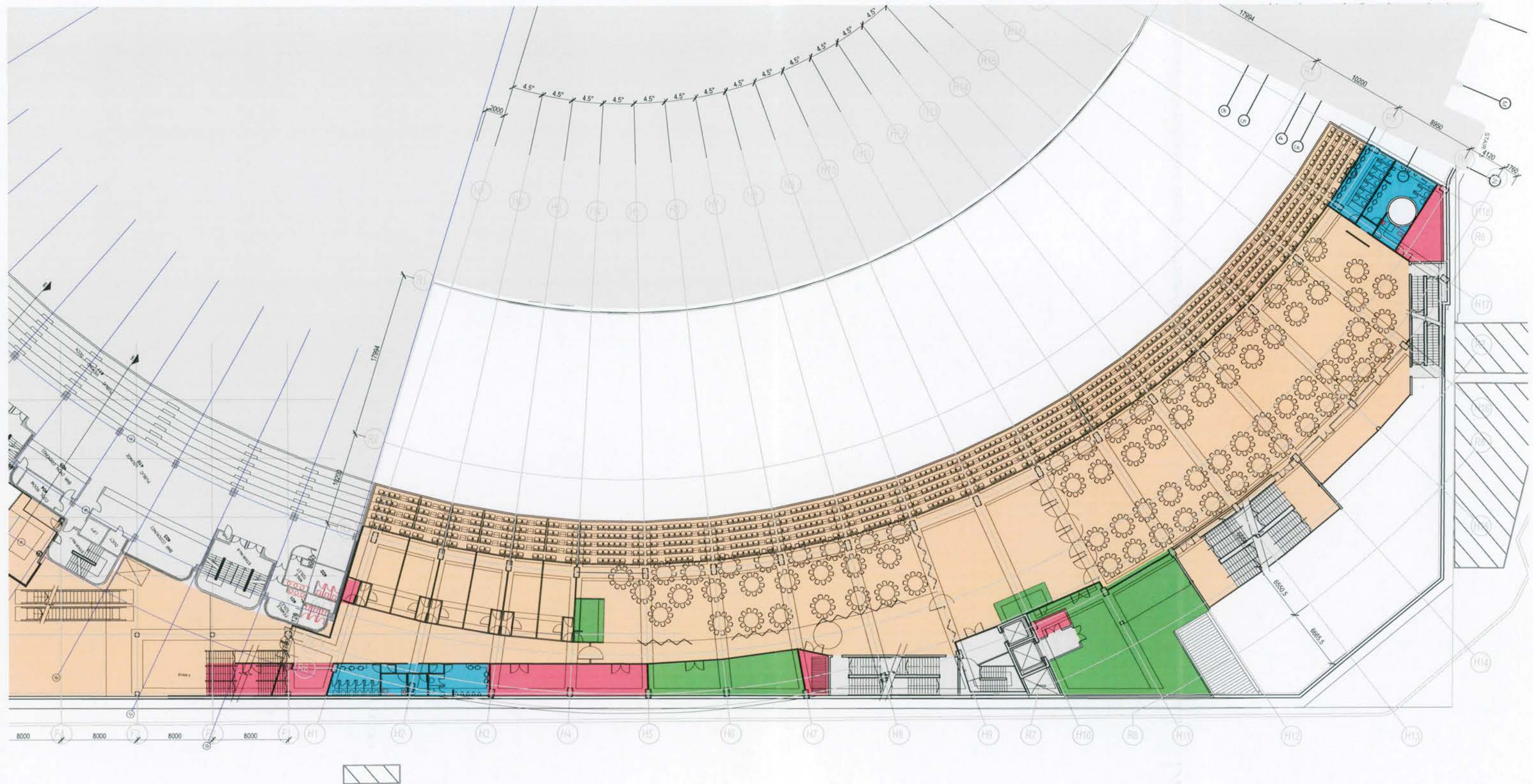
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# S.C.G. Hill Grandstand - Floor Plan Level 4

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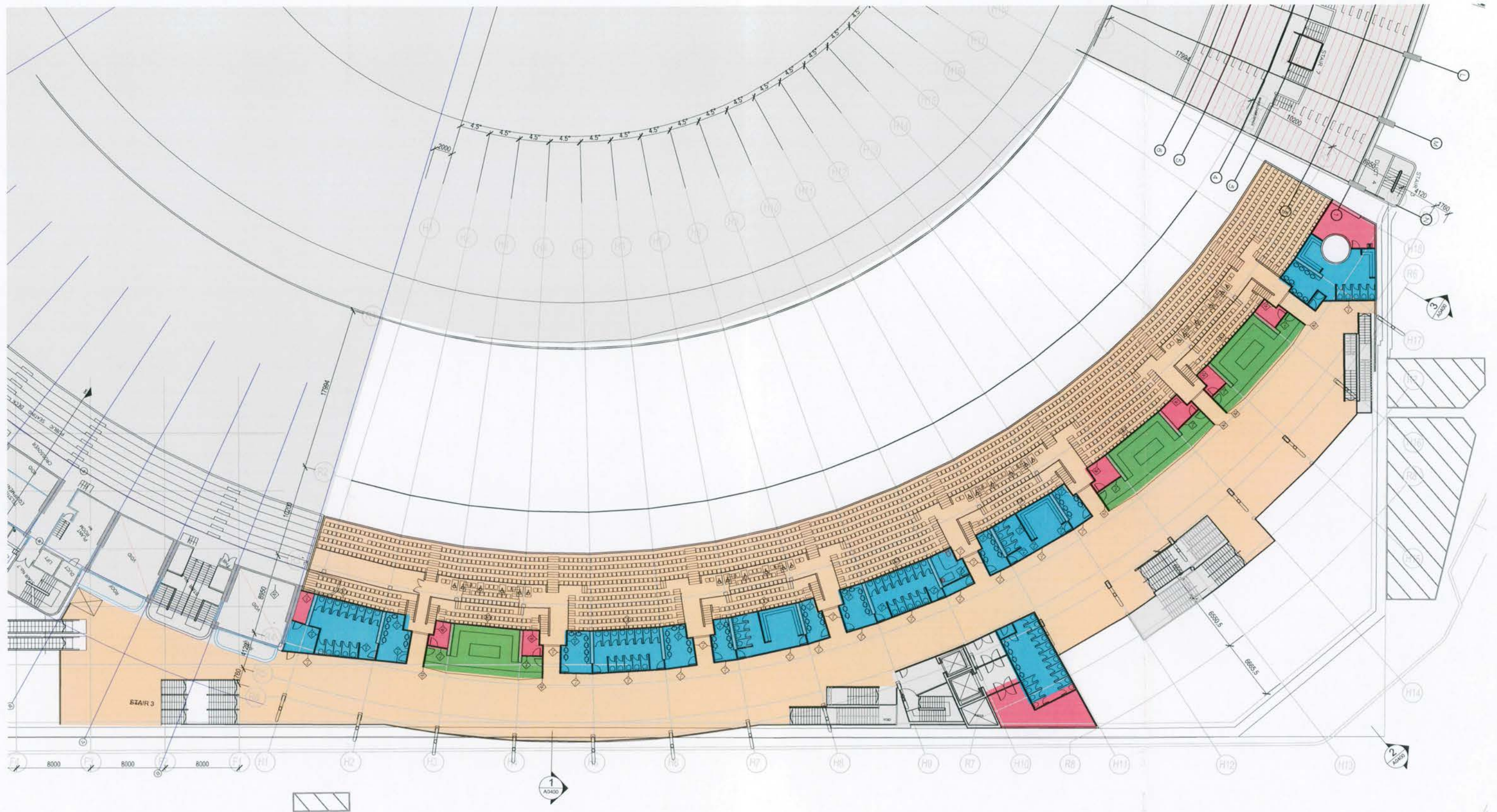
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# S.C.G. Hill Grandstand - Floor Plan Level 5

DWG | A.21561  
DATE | 16.10.06  
ISSUE | J  
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CIRCULATION  
CIRCULATION VERTICAL  
BARS & FOOD KITCHEN  
BATHROOMS  
STORAGE ETC

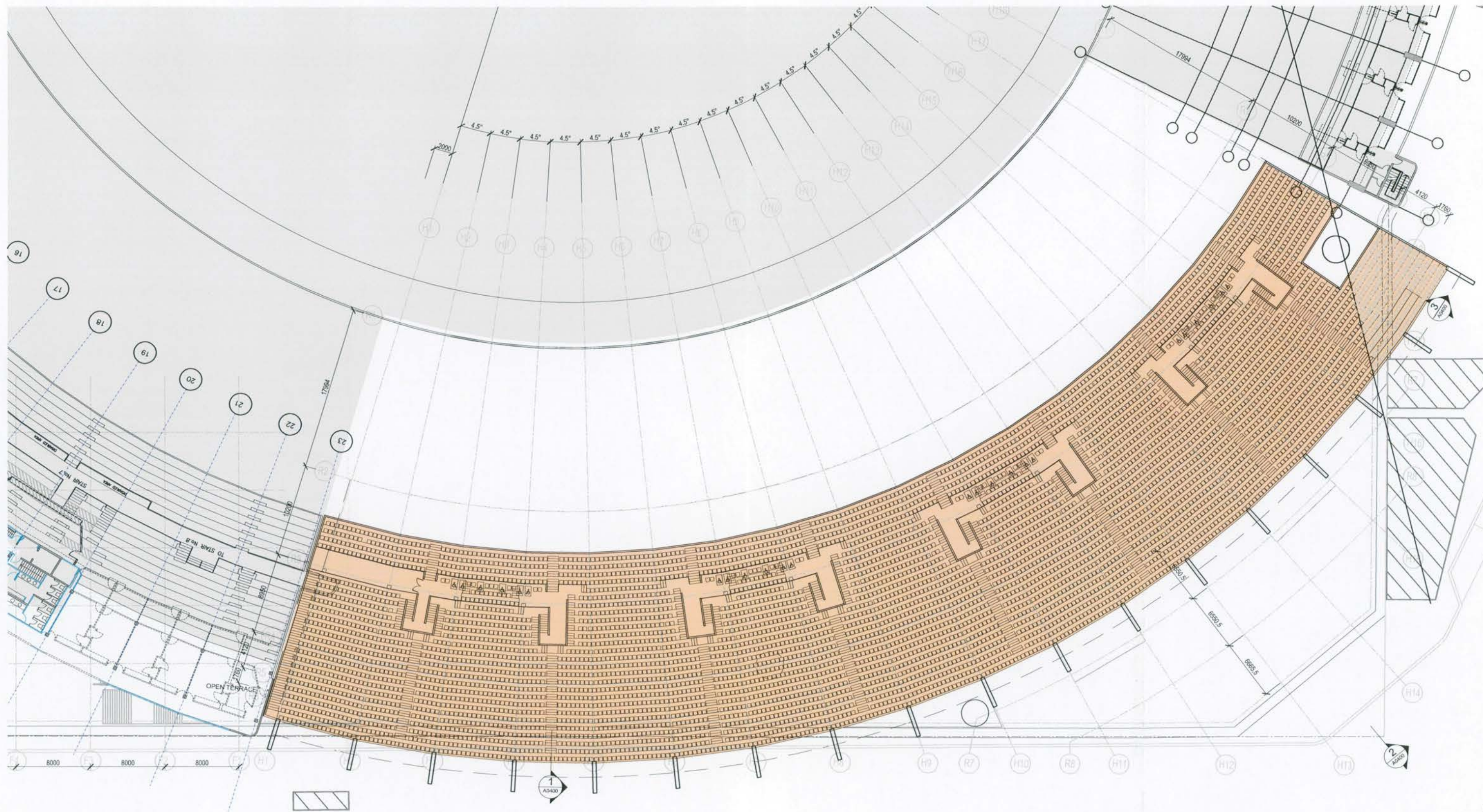
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# S.C.G. Hill Grandstand - Floor Plan Level 6

DWG | A.21561  
DATE | 16.10.06  
ISSUE | J  
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CIRCULATION  
CIRCULATION VERTICAL  
BARS & FOOD KITCHEN  
BATHROOMS  
STORAGE ETC

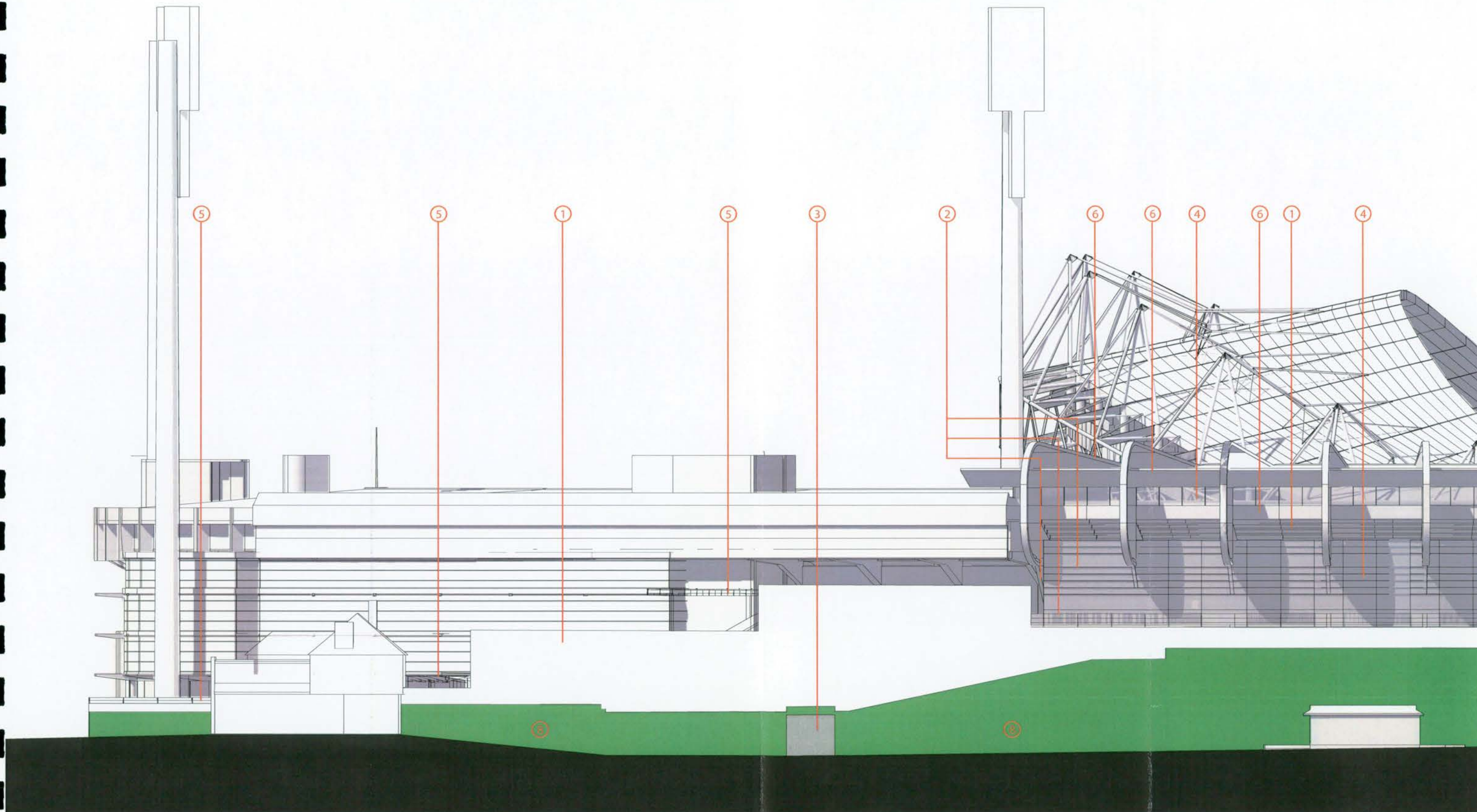
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① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



# S.C.G. Hill Grandstand - South Elevation Part 1

DWG | A03001  
DATE | 16.10.06  
ISSUE | C

1:500 @a3

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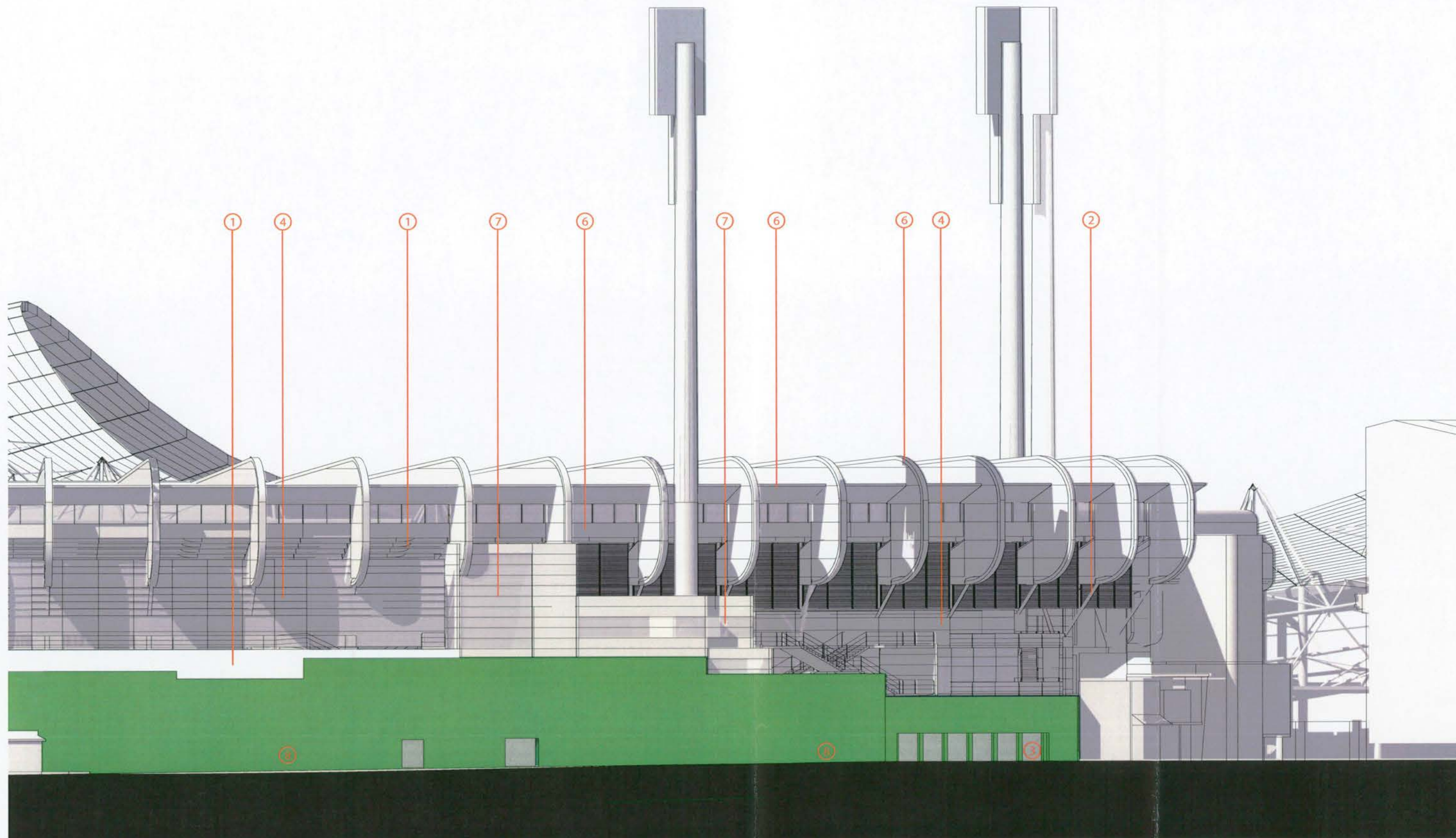
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① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



## S.C.G. Hill Grandstand - South Elevation Part 2

DWG | A03001.1  
DATE | 16.10.06  
ISSUE | C  
1:500 @a3

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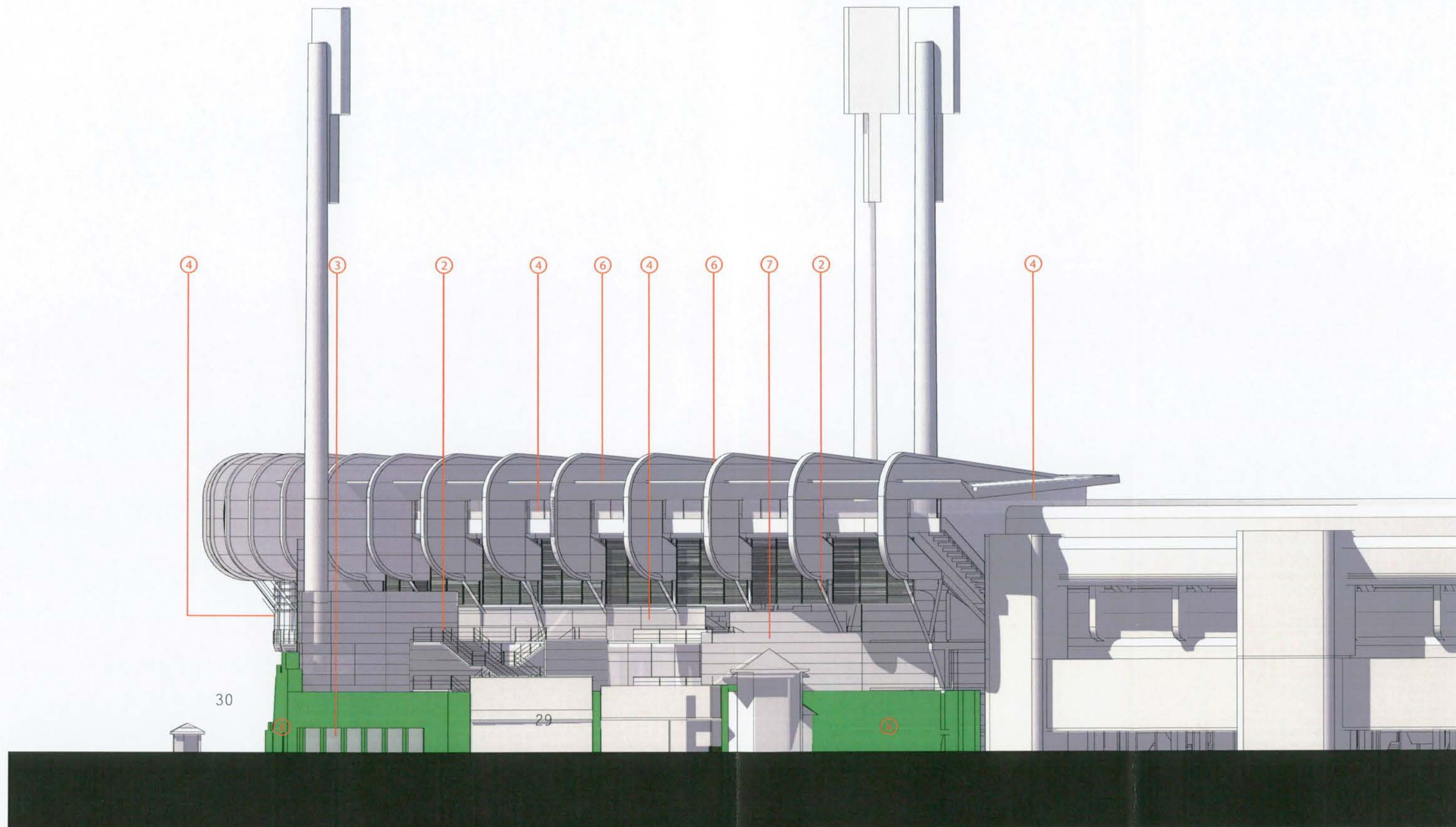
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ACN 003 127 222







① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



## S.C.G. Hill Grandstand - East Elevation

DWG | A03002  
DATE | 16.10.06  
ISSUE | C  
1:500 @a3

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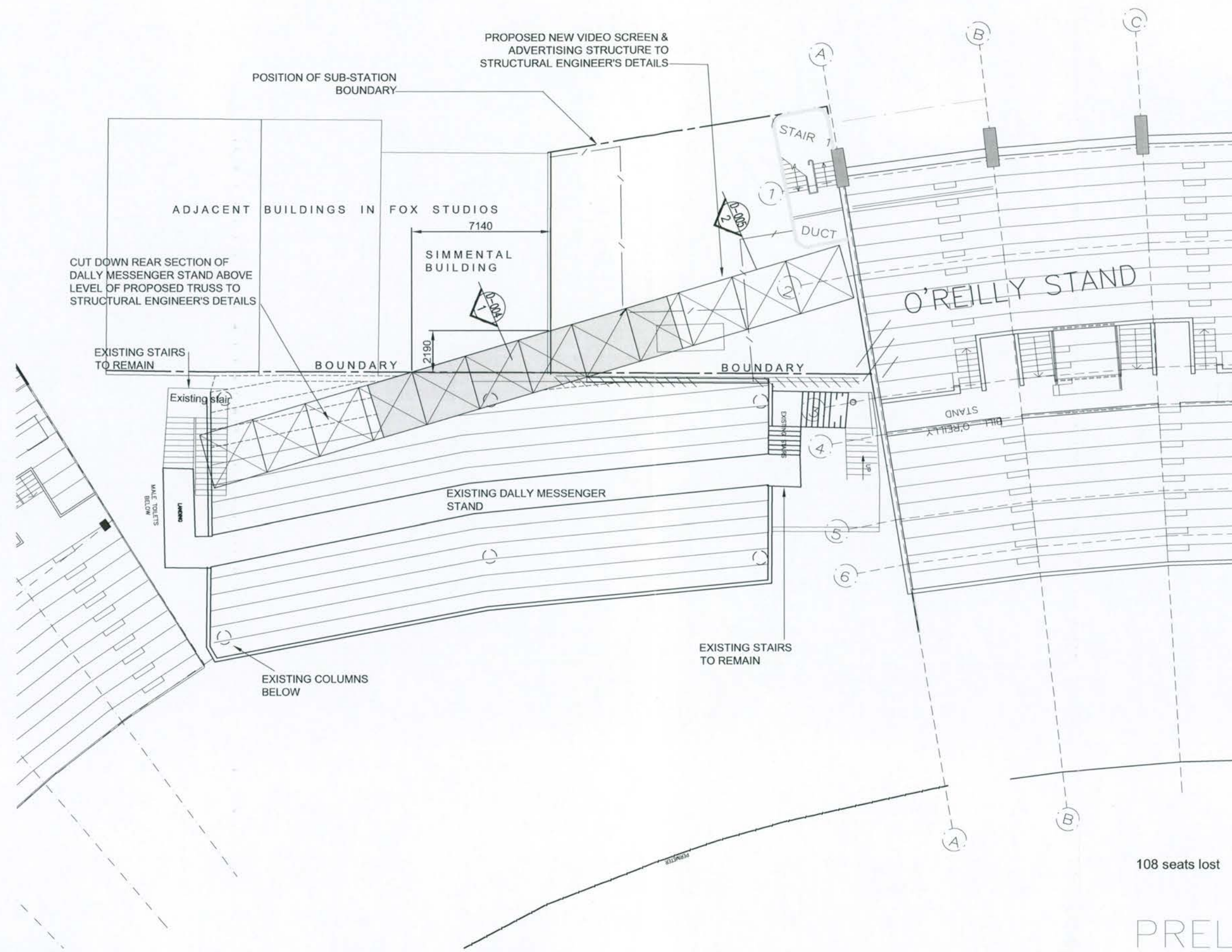


## APPENDIX 2b

---

Amended video scoreboard plans





108 seats lost

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**ARUP**  
 PROJECT MANAGER  
 M ASSOCIATES PTY LTD  
 LEVEL 14, 140 CHURCH STREET  
 SYDNEY NSW 2009  
 T 02 9550 1000 F 02 9550 1001

**SKM**  
 MECHANICAL - HYDRAULIC - ELECTRICAL - FIRE SERVICES ENGINEERS  
 SKEWER KNIGHT MORGAN  
 LEVEL 14, 140 CHURCH STREET  
 SYDNEY NSW 2009  
 T 02 9550 1000 F 02 9550 1001

**WEB AUSTRALIA**  
 LIGHTING CONSULTANTS  
 WEBB AUSTRALIA GROUP (NSW) PTY LTD  
 LEVEL 14, 140 CHURCH STREET  
 SYDNEY NSW 2009  
 T 02 9550 1000 F 02 9550 1001

**WT PARTNERSHIP**  
 QUANTITY SURVEYORS  
 WT PARTNERSHIP  
 LEVEL 14, 140 CHURCH STREET  
 SYDNEY NSW 2009  
 T 02 9550 1000 F 02 9550 1001

Drawing Key

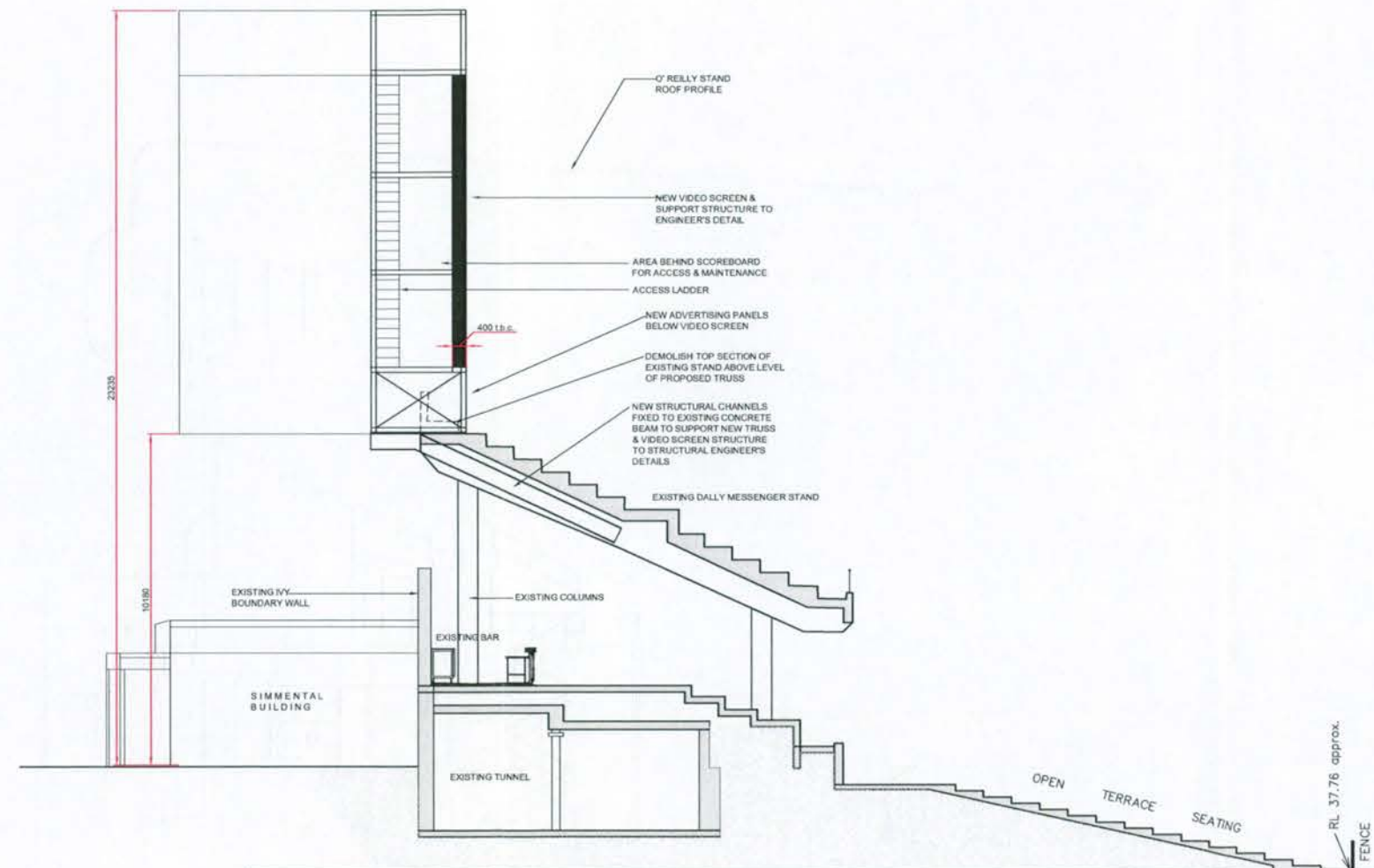
Rev	Description	By	Date
01	ISSUED FOR PERMIT	AT	00.00.00
02	FOR CONSTRUCTION	AT	00.00.00

**Client**  
 SYDNEY CRICKET AND  
 SPORTS GROUND TRUST  
 MOORE PARK ROAD,  
 PADDINGTON NSW 2021

**Project**  
 NEW DAILY MESSENGER STAND  
 Drawing Title  
 PROPOSED PLAN  
 UPPER DECK

**D-003**  
 Scale: 1:200 @ A3  
 Date: 20.09.06  
 Project Director: DM  
 Rev: C  
 North





PRELIMINARY

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Architects

The Cox Group Pty Ltd  
ROBERTSON-MARKS Pty Ltd

ACN/18225955  
ACN/18225955

PROJECT MANAGER  
M ASSOCIATES PTY LTD  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

STRUCTURAL & CIVIL ENGINEERS  
ARUP PTY LTD  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

IN ASSOCIATION WITH  
ROONEY & BYE  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

**ARUP**  
**Rooney & Bye**  
STRUCTURAL & CIVIL ENGINEERS

MECHANICAL - HYDRAULIC - ELECTRICAL - FIRE SERVICES ENGINEERS  
SKM  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

BOX CONCRETE  
DAVID LANGDON  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

SAFETY CONSULTANT  
Holmes Fin and Bailey  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
T: 03 9594 1000 F: 03 9594 1001

LIGHTING CONSULTANTS  
WEBB AUSTRALIA GROUP (NSW) PTY LTD  
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MELBOURNE VIC 3000  
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QUANTITY SURVEYORS  
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MELBOURNE VIC 3000  
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WT PARTNERSHIP  
LEVEL 14, 140 DOWLING STREET  
MELBOURNE VIC 3000  
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Client  
SYDNEY CRICKET AND  
SPORTS GROUND TRUST  
MOORE PARK ROAD,  
PADDINGTON NSW 2021  
T: 02 9594 1000 F: 02 9594 1001

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
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NEW VIDEO SCREEN SECTION

Drawing Title  
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Drawing Number  
D-007X

Project  
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NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
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NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

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NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

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NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
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Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
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Drawing Number  
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NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
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Drawing Number  
D-007X

Project  
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Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X

Project  
NEW DALLY MESSENGER STAND  
NEW VIDEO SCREEN SECTION

Drawing Title  
NEW VIDEO SCREEN SECTION

Drawing Number  
D-007X





EXISTING



PROPOSED

## S.C.G. MONTAGES DALLY MESSENGER SCOREBOARD

DWG | A.090.0.12  
DATE | 16.10.06  
ISSUE | A

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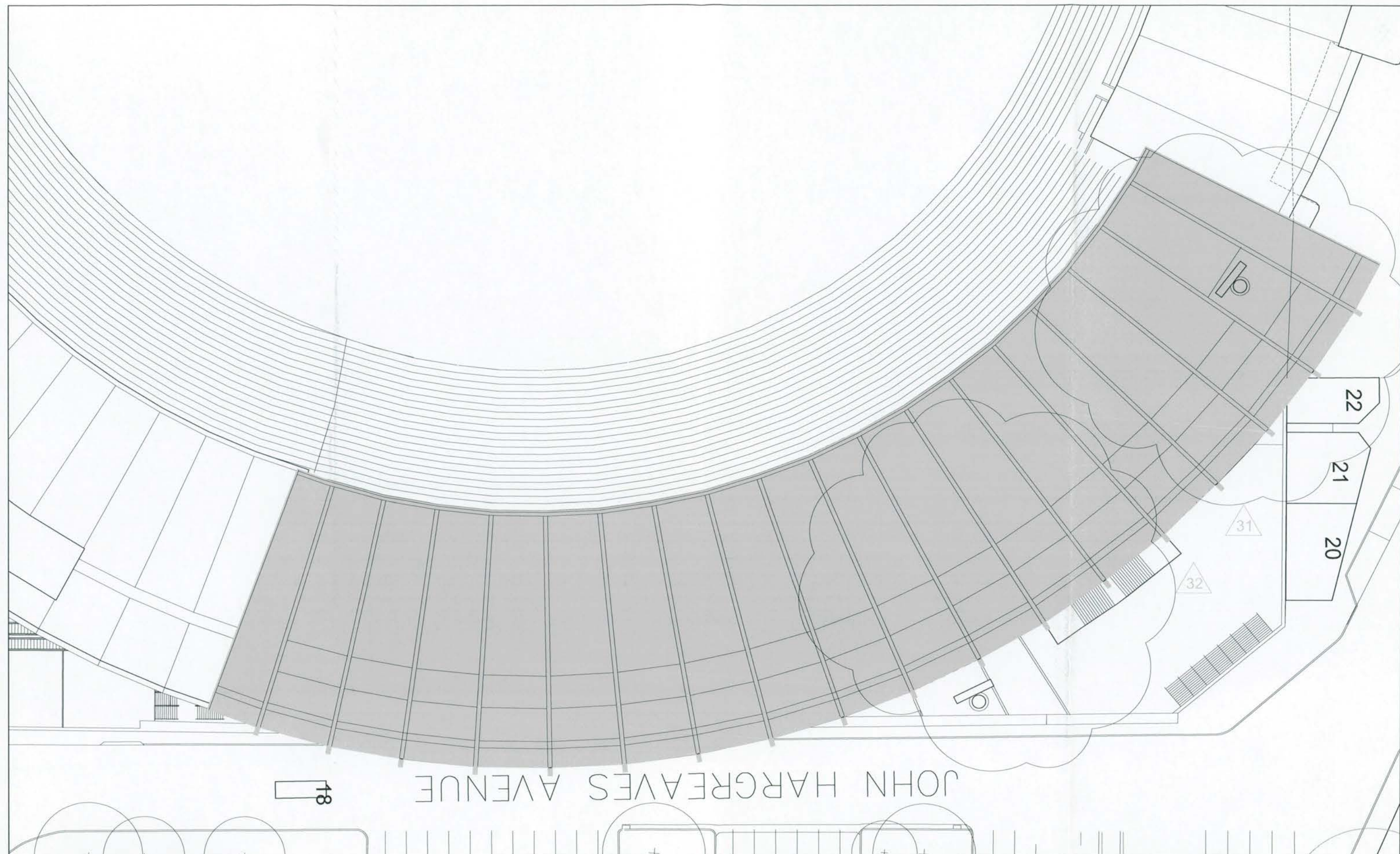


## APPENDIX 3

---

Amended Project plans clouded to identify main changes since  
exhibition of EAR





JOHN HARGREAVES AVENUE

18

22  
21  
20

31  
32

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**HILL GRANDSTAND**

**ROOF PLAN**

Date 19.10.2006

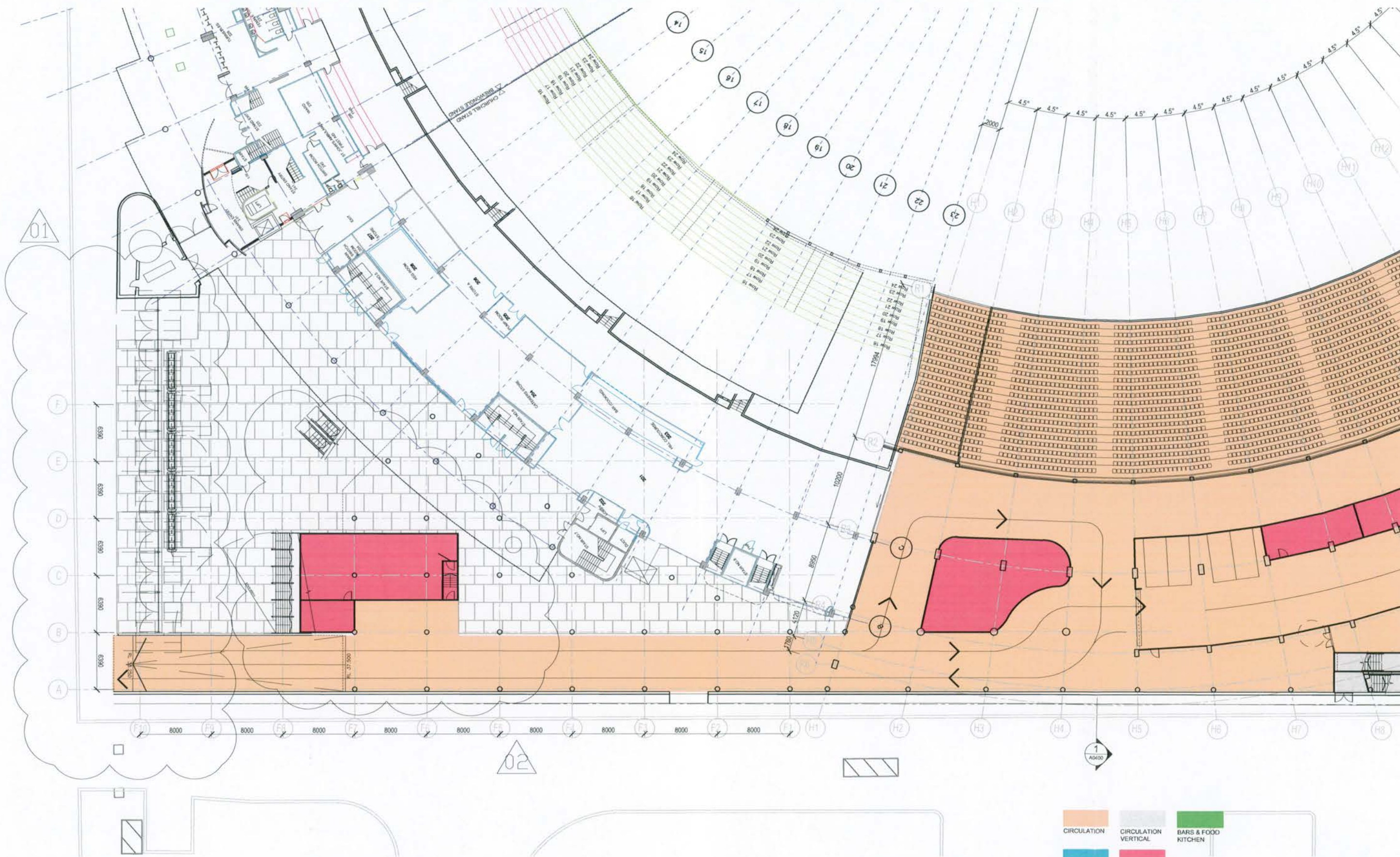
Dwg A.215.9.1

1:400 @ A3

Rev E







# S.C.G. Hill Grandstand - Floor Plan Level 2 - Part 1

DWG A11521  
DATE 16.10.06  
ISSUE J

1:400 @a3

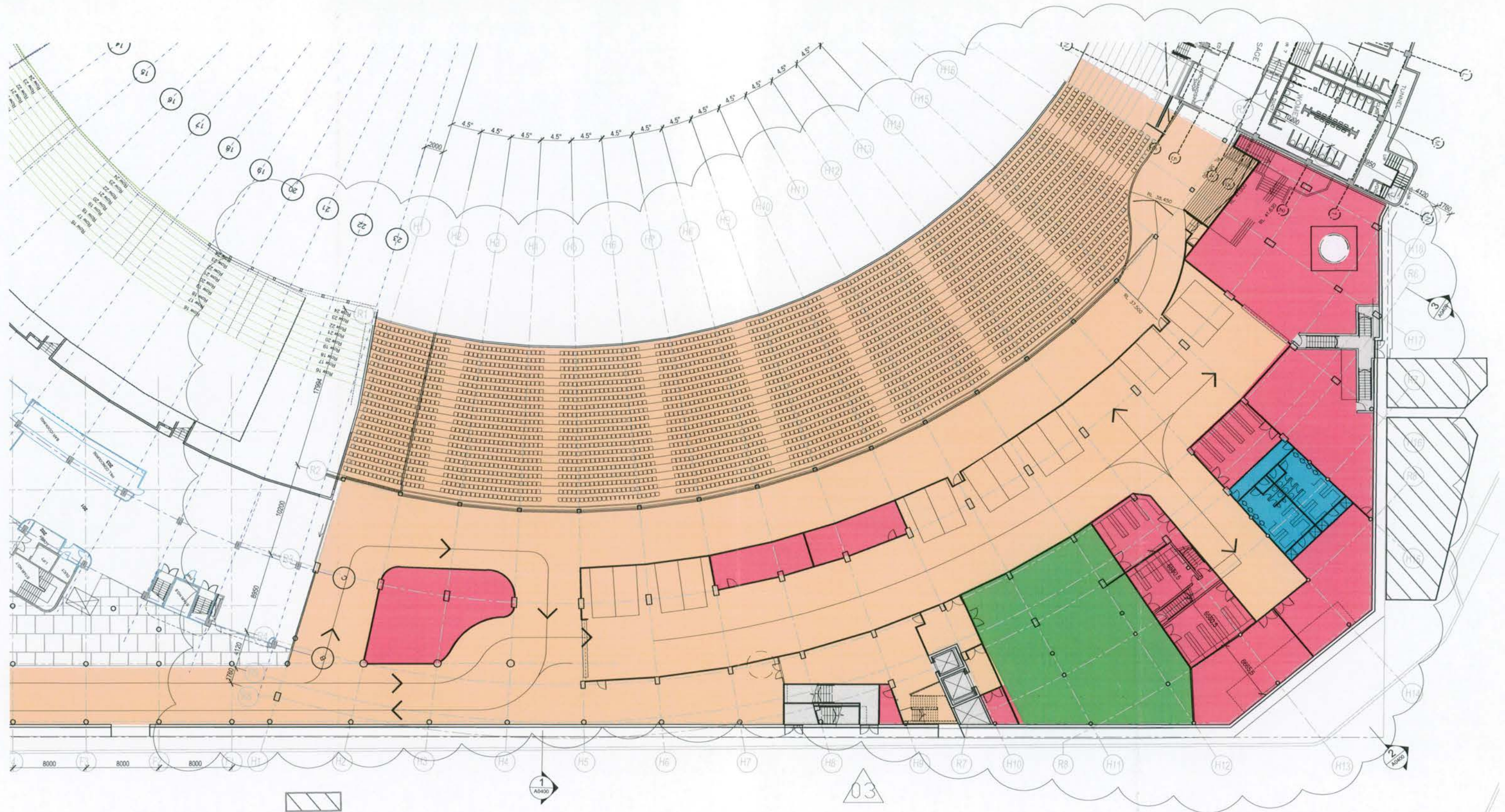
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CIRCULATION  
 CIRCULATION  
 BATHROOMS  
 VERTICAL  
 STORAGE ETC  
 BARS & FOOD  
 KITCHEN

# S.C.G. Hill Grandstand - Floor Plan Level 2 - Part 2

DWG | A.21522  
 DATE | 16.10.06  
 ISSUE | J

1:400 @a3

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# S.C.G. Hill Grandstand - Floor Plan Level 3 - Part 1

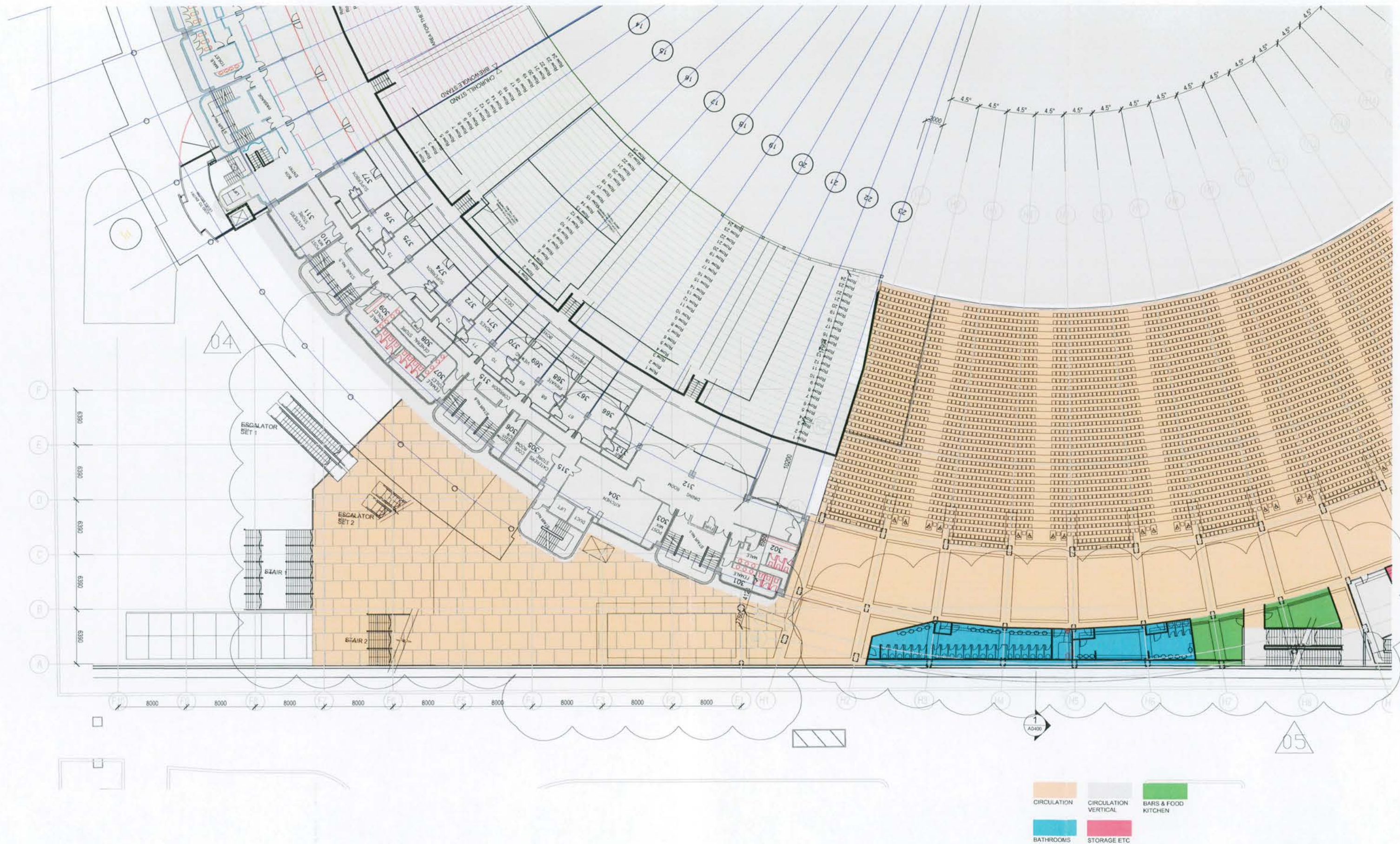
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ISSUE | J

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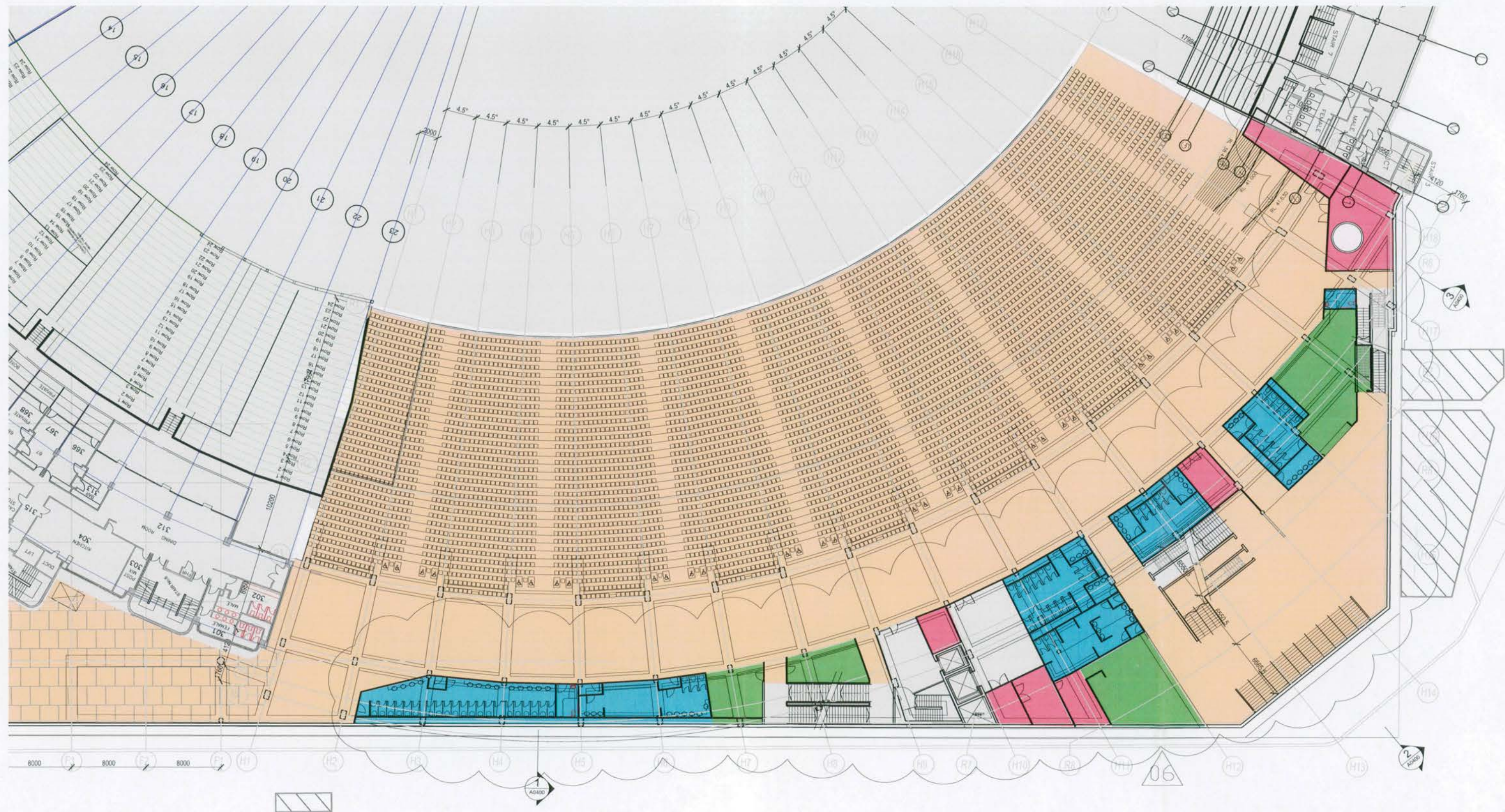
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- CIRCULATION
- CIRCULATION VERTICAL
- BARS & FOOD KITCHEN
- BATHROOMS
- STORAGE ETC

# S.C.G. Hill Grandstand - Floor Plan Level 3 - Part 2

DWG A.21532  
DATE 16.10.06  
ISSUE J  
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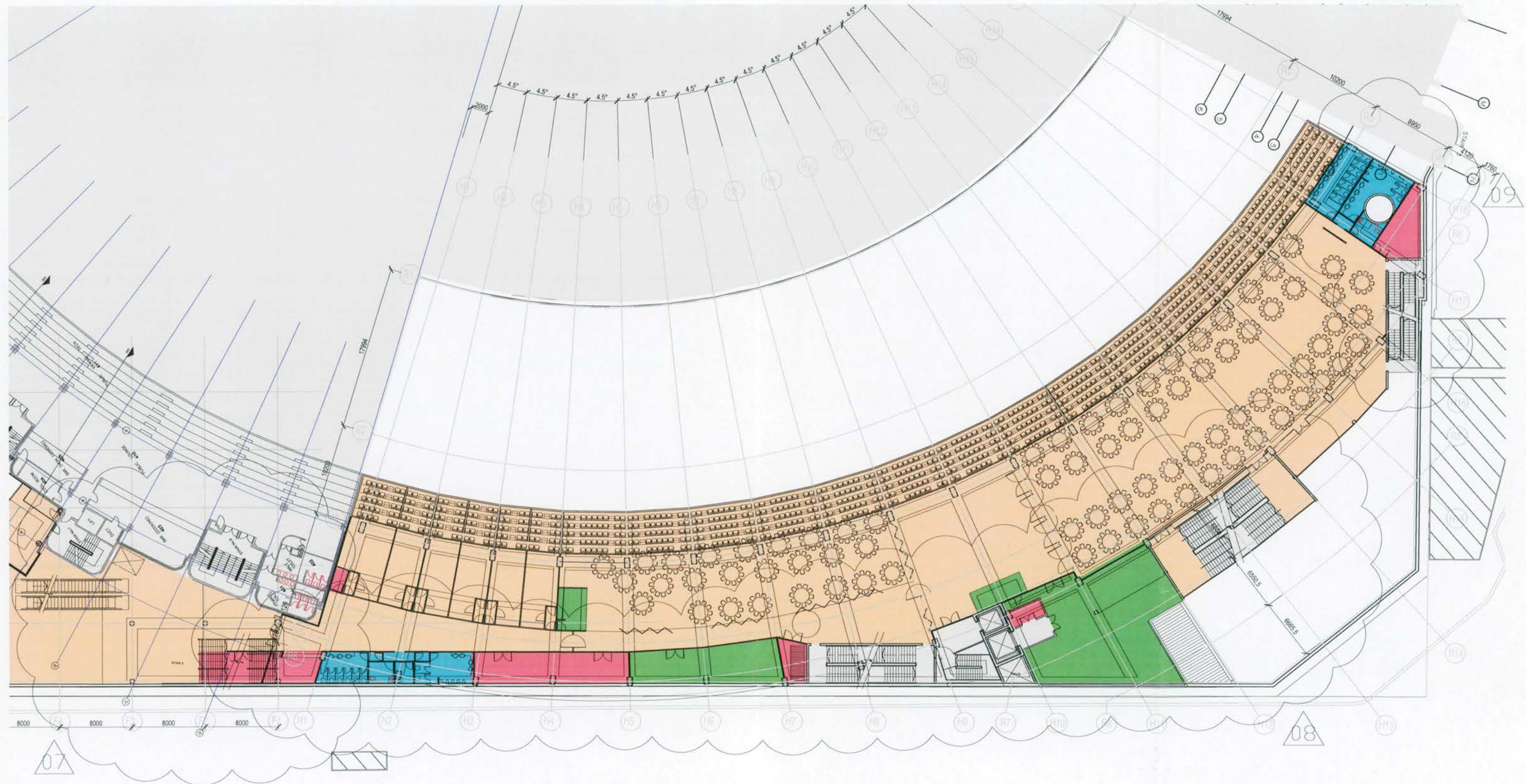
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## S.C.G. Hill Grandstand - Floor Plan Level 4

DWG | A.21541  
DATE | 16.10.06  
ISSUE | J

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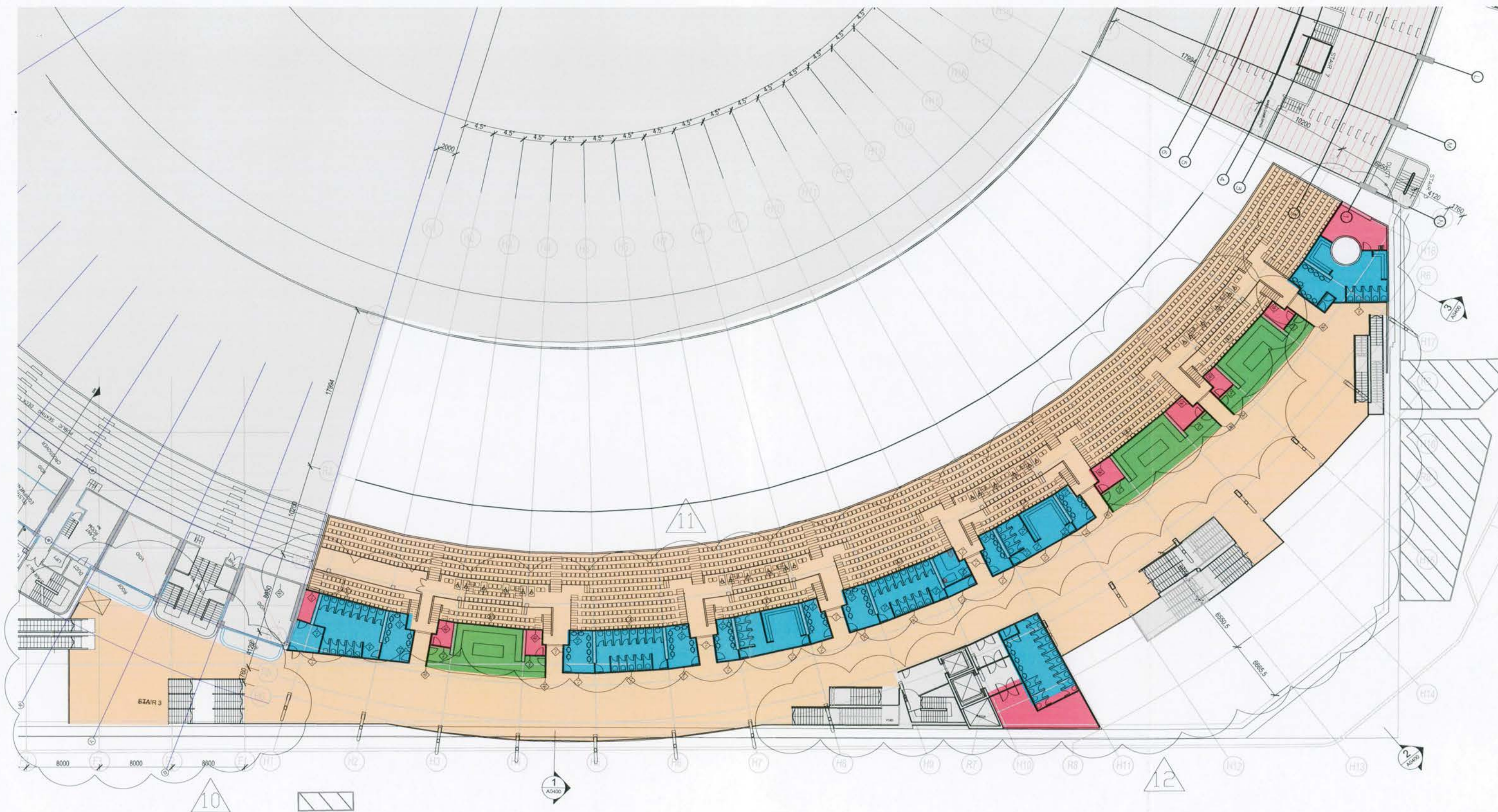
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# S.C.G. Hill Grandstand - Floor Plan Level 5

DWG | A.21561  
DATE | 16.10.06  
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1:400 @a3

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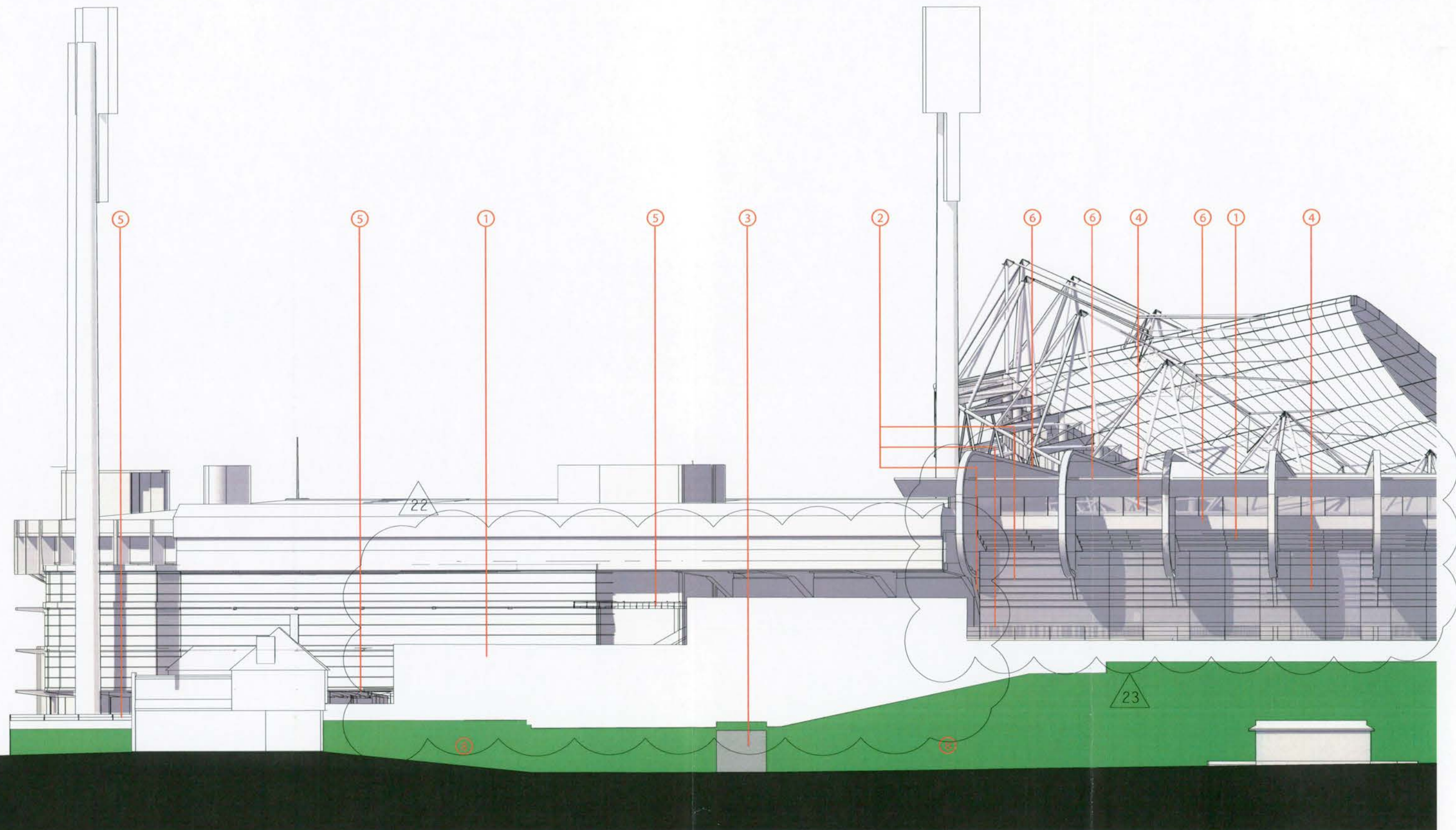
Joint Venture Architects	The Cox Group Pty Ltd ROBERTSON+MARKS Pty Ltd	ACN 002 535 891 ACN 003 127 222
--------------------------	--	------------------------------------











① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



# S.C.G. Hill Grandstand - South Elevation Part 1

DWG | A03001  
DATE | 16.10.06  
ISSUE | C  
1:500 @a3

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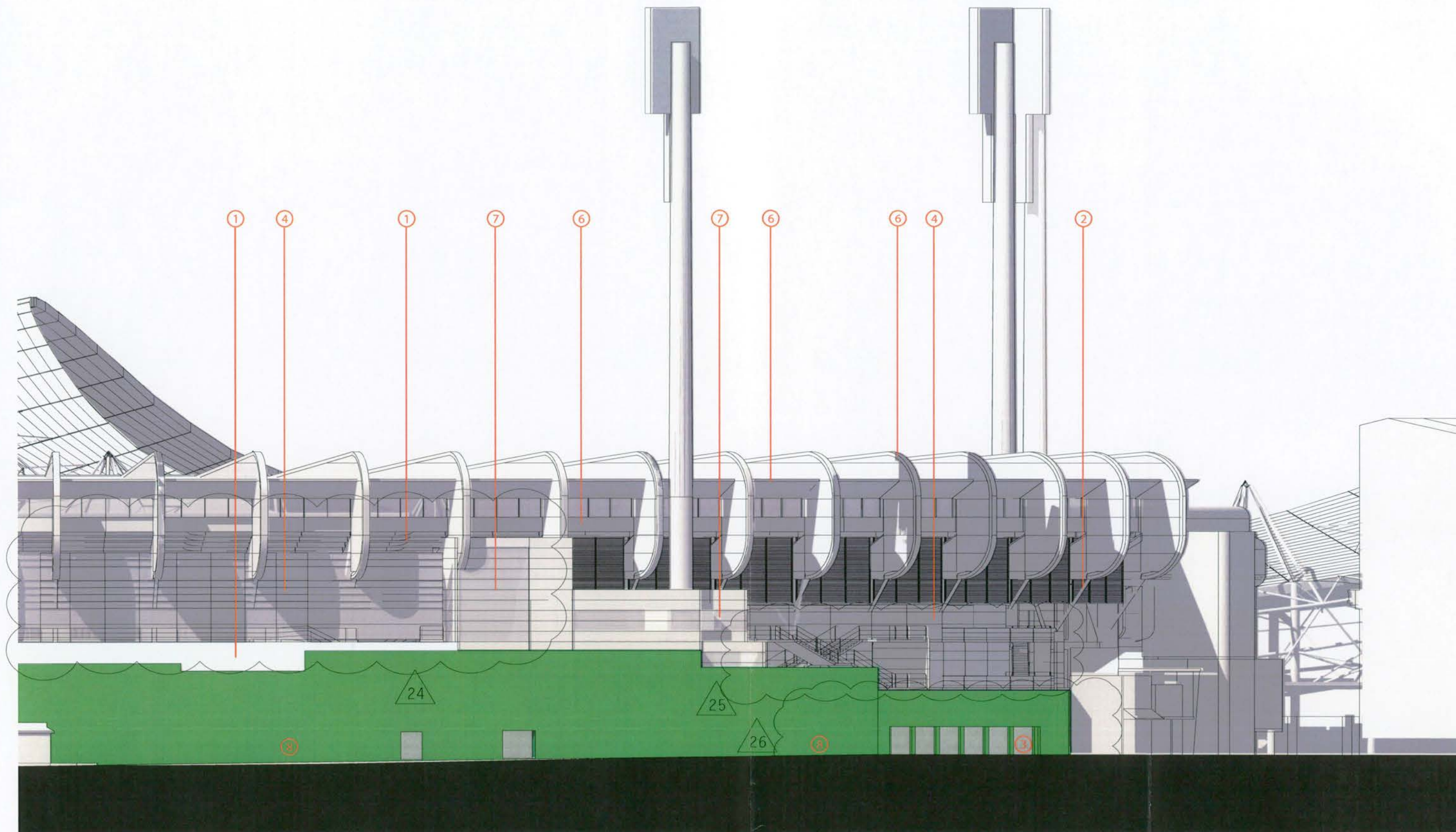
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ACN 003 127 222







① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



## S.C.G. Hill Grandstand - South Elevation Part 2

DWG | A03001.1  
DATE | 16.10.06  
ISSUE | C  
1:500 @a3

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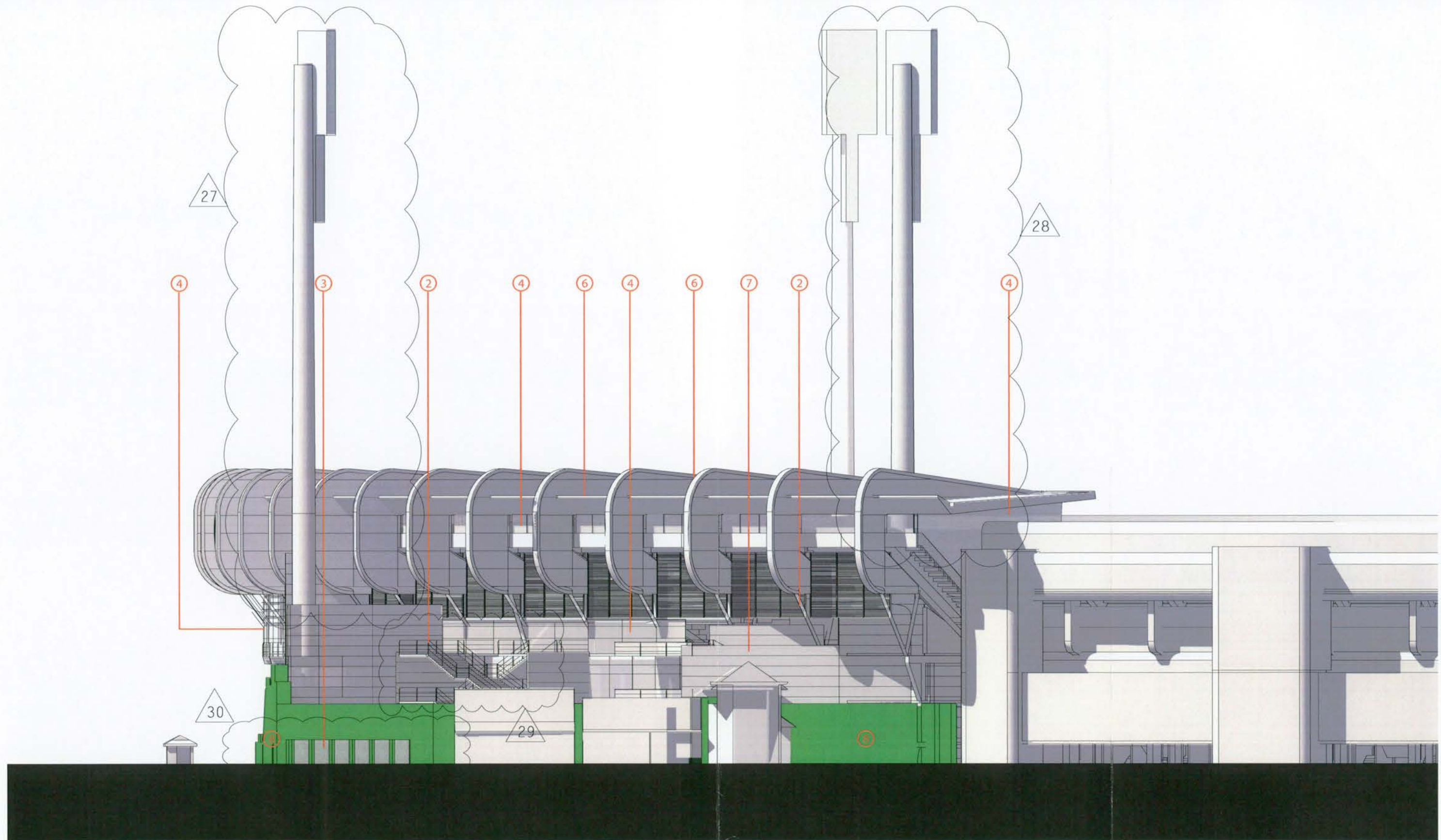
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ROBERTSON+MARKS Pty Ltd

ACN 002 535 591  
ACN 003 127 222







① CONCRETE



② STAINLESS STEEL



③ GALVANIZED STEEL



④ GLAZING



⑤ PAINTED SURFACE



⑥ PREFINISHED METAL



⑦ MASONRY



⑧ PHOTO-FIG.



## S.C.G. Hill Grandstand - East Elevation

DWG | A03002  
DATE | 16.10.06  
ISSUE | C  
1:500 @a3

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## **APPENDIX 4**

---

### **Schedule of grandstand design modifications**



**SUMMARY OF AMENDMENTS IN COMPARISON TO THE SUBMITTED SET OF DRAWINGS FROM THE 01/08/06**  
 THE AMENDMENTS ARE HIGHLIGHTED WITH A CLOUD ON THE DRAWINGS, THE ADJOINING KEY REFERS TO THE TABLE BELOW WHICH EXPLAINS MODIFICATIONS AND IMPACT

DRAWING TITLE	DRAWING NO				KEY SUMMARY OF DESIGN MODIFICATIONS		COMMENTS ON ISSUES / IMPACT
	AS LODGED		AS AMENDED		KEY	MODIFICATION	
Floor Plan Level 2 - Part 1	A.115.2.1	H	A.1152.1	J	01	processed planning of entry arrangements	main entry gate line of security for Hill and Churchill Stand impact on building appearance
Floor Plan Level 2 - Part 2	A.215.2.2	H	A.215.2.2	J	02	general entrance amendments based on reviewed egress strategy	impact on building appearance
					03	general plan amendments based on egress strategy	no further impact
Floor Plan Level 3 - Part 1	A.115.3.1	H	A.115.3.1	J	04	amendments based on reviewed entrance arrangements such as escalators, stairs and elevators	impact on building appearance
Floor Plan Level 3 - Part 2	A.115.3.2	H	A.115.3.2	J	05	general plan amendments based on reviewed egress strategy and processed planning	no further impact
					06	general plan amendments based on reviewed egress strategy and processed planning	no further impact
Floor Plan Level 4	A.215.4.1	H	A.215.4.1	J	07	amendments based on reviewed entrance arrangements such as escalators, stairs and elevators	impact on building appearance
Floor Plan Level 5	A.215.5.1	H	A.215.5.1	J	08	general plan amendments based on reviewed egress strategy and processed planning	no further impact
					09	general plan amendments based on reviewed egress strategy and processed planning	no further impact
					10	amendments based on reviewed entrance arrangements such as escalators, stairs and elevators	impact on building appearance
					11	general plan amendments	no further impact
Floor Plan Level 6	A.215.6.1	H		J	12	general plan amendments based on reviewed egress strategy and processed planning	no further impact
					13	amended vomitory arrangement based on processed planning	no further impact
Roof Plan	A.215.9.1	D	A.215.9.1	E	31/32	light towers relocated	impact on building appearance
Section 1	A.0400.1	H	A.0400.1	J	14	amended vomitory arrangement	no further impact
					15	amendments based on processed planning	no further impact
					16	general changes reflecting plan amendments	no further impact
Section 2	A.0400.2	H	A.0400.2	J	17	reviewed and amended roof design	impact on building appearance
					18	general changes reflecting plan amendments	no further impact
Section 3	A.0400.3	H	A.0400.3	J	19	reviewed and amended roof design	impact on building appearance
					20	general changes reflecting plan amendments	no further impact
South Elevation part 1	A.030.0.1	B	A.0300.1	C	21	reviewed and amended roof design	impact on building appearance
					22	southern wall extended with stairs	impact on building appearance
South Elevation part 2	new dwg	B	A.0300.1.1	C	23	upper concourse glazed in	impact on building appearance
					24	upper concourse glazed in	impact on building appearance
East Elevation	A.0300.2	B	A.0300.2	C	25	revised stair design	impact on building appearance
					26	new emergency egress doors	impact on building appearance
					27	relocated light tower	impact on building appearance
					28	relocated light tower	impact on building appearance
					29	revised stair design	impact on building appearance
					30	new emergency egress doors	

## S.C.G. Hill Grandstand - Modifications And Impact

DWG  
DATE 16.10.06  
ISSUE B

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## APPENDIX 5

---

### Revised Construction Management Plan



# SCG Hill Grandstand

Construction Plan  
October 2006

**McLachlan Lister Pty Limited**  
ACN 085 532 047

Level 1  
1 Hickson Road  
The Rocks NSW 2000

Telephone 61 2 9241 7328  
Facsimile 61 2 9241 7329  
[www.mclachlanlister.com](http://www.mclachlanlister.com)



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McLachlan Lister QA

Prepared by: Clive Chandler ..... Date: October 2006

Released by: Clive Chandler ..... Date: October 2006



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## EXECUTIVE SUMMARY

The following key modifications have been made to the previous Construction Management Plan (CMP)

- Further development of Option 3 to give Option 3A as the basis of the proposed Construction Management Plan
- The major crane has been relocated further to the North East to reduce the oversail over FOX Studios property
- There will be no hoardings in John Hargreaves Avenue for approximately one year after construction commences.
- When hoardings are erected, they will be localised and for specific OHS purposes only
- Major rock breaking of bases will be avoided by using low intensity explosives
- Use of FOX premises for works will be limited to early works → addresses Fox issues

how does this work?  
does lack of hoardings  
coincide with filming schedule?  
(ie: may address some of Fox's  
issues re: marshalling, etc).



## 1. INTRODUCTION

This report was drafted by Leighton Contractors Pty Ltd and lodged with the Submission of Environmental Assessment prepared under Part 3A of the Environmental Planning and Assessment Act 1979. Following a period of public exhibition a number of submissions were received. The plan has been further developed by McLachlan Lister to further address impacts highlighted by these submissions. As a result of the consultation process, Option 3 has been refined and this evolution is labelled Option 3A.



## 2. PROJECT DESCRIPTION

The project involves the demolition of the existing Doug Walters and Hill Stands and construction of a new Hill Grandstand.

The works also include the relocation of the videoboard to the Dally Messenger Stand, the dismantling and re-erection of lighting tower 3 and the construction of a new access road along the southern boundary from Driver Avenue to the new grandstand.

↳ how does this relate to A1?  
(ie: do we need to make sure  
the project description covers  
the construction of the road?)



### 3. CONSTRAINTS

Filming  
commences  
in March 07.

Major demolition work is not to commence until after the final One Day International cricket game scheduled to take place on 11 February 2007.

Various Early Works packages are to be let prior to this date, to prepare the site for lighting standard and videoboard relocations, and to strengthen the heritage "Ivy Wall" if demonstrated to be necessary. The Ivy Wall on the southern boundary of the SCG is a heritage item and must be protected and preserved during construction. Investigation to determine the foundation of the wall is currently being undertaken.

Has this  
been  
completed?  
How will  
wall be  
reinforced?  
Any impacts?

A staged completion of the works is required to provide 6000 seats in the new grandstand by December 2007.

The videoboard is to be relocated from its current position to its new location in the Dally Messenger Stand. This work will commence after the 11 February 2007 One Day International cricket game and the videoboard is to be re-commissioned by mid April 2007 for the Sydney Swans games.

where?  
when?  
what?  
impacts?

The majority of the work is to take place within the SCG grounds, however some works are required to be carried out outside the SCG boundary. These works include relocation of the videoboard and light towers.

Light Tower 2 will remain in its current position, and may require contiguous piling around its base to maintain its stability.


Construction works will overhang the Fox Studios boundary resulting in the requirement to protect the users of John Hargreaves Avenue during the construction works involving the erection of an overhead hoarding structure over John Hargreaves Avenue.

↳ what protection works are proposed?  
when will these works be put in place  
and for how long?



#### 4. KEY MILESTONES

Key milestones on the project include:

- Award of Early Works Contract by the end of January 2007.
- Award of Major Work Contract by April 2007.
- Last International cricket game 11 February 2007
- Commencement of demolition on 12 February 2007
- Transfer of videoboard by 12 April 2007
- Stage 1 Completion of 6000 seats mid December 2007
- International Cricket Season December 2007 – February 2008
-  Stage 2 Completion late 2008
- Fox Studios major film shooting from February 2007 (provisional)

Refer to Attachment 6 in this report for an indicative programme.

what is  
proposed in  
Stage 2



## 5. IMPACTS ON ADJOINING NEIGHBOURS

The effect of construction on adjoining neighbours will be:

- noise during demolition and construction activities
- traffic from demolition and construction activities
- perimeter hoardings
- overhead tower cranes
- overhead works
- work from within Fox Studios
- interactions with Fox Studios and Entertainment Quarter during the construction process

As the new grandstand overhangs the Fox Studio boundary, there is a requirement to protect the users of John Hargreaves Avenue and Lottie Lyell Avenue during the construction works.

With reference to Attachments 3 and 4, temporary construction infrastructure generally involves:

- Erection of an overhead hoarding structure over parts of John Hargreaves Avenue
- Use of the SCG grounds for construction activity access
- Construction Zone on Driver Avenue adjacent the Churchill Stand *traffic and pedestrian impacts?*
- Concrete pumping operations from within the SCG (behind Churchill Stand and from Paddington Lane)
- Two large tower cranes - *where?*

These measures essentially maintain the status quo with regards to the Fox Studios operations and points of entry. Preliminary discussions with Fox Studios indicate that it may be possible to deliver certain specific loads for lifting out of John Hargreaves Avenue out of hours subject to specific agreement. *have these discussions evolved? any agreement? if not, what are alternatives?*

A key element of the construction process will be the need for continual consultation with all affected stakeholders.



## 6. CONSULTATION PROCESS

### General

The Trust and its Contractor shall establish appropriate Liaison Groups with its neighbours, particularly Fox Studios, at various levels.

A neighbours CEO's Group has already been established, chaired by the Trust's CEO and will meet monthly or on an as needed basis. It has met twice to date.

A Project Control Group (PCG), chaired by the Trust or its nominee with CEO's nominees as members will meet monthly with appropriate representation from the Trust's Project Manager and Contractor. It will discuss progress and any issues arising from the previous period and will review planning specifically, but not limited to, the next period. Any issues that cannot be resolved will be dealt with by the CEO's immediately and if not resolved by them, by an independent arbitrator who will be required to determine the matter within 48 hours.

*when? → Should we require Monday am meetings to discuss week's activities?*  
A weekly Operations Meeting will be held chaired by the Trust or its nominee and attended by appropriate representatives of the Project Manager, the Contractor and representatives of Fox Studios. This will discuss progress, address any issues that have arisen and will review planning for the next period. Any issues that cannot be resolved will be dealt with by the PCG, immediately, if necessary.

Appropriate communications will be set between the Trust, the Project Manager, the Contractor and Fox Studios to allow instant access to each other should unforeseen issues arise.

*→ what is the scope of these "communications"? frequency? 24 hours?*

### Complaints Register

*Is it appropriate for complaints register to be forwarded to PCG?*  
The Contractor shall record details of all complaints received during construction and ensure that at least a verbal response on what action is to be undertaken is provided to the complainant within 2 hours (unless the complainant agrees otherwise) and a detailed written response within seven (7) calendar days. Information on all complaints received and response times shall be made available to the Trust every three months or any shorter period specified during construction. This information shall be made available to all relevant government agencies on request. The Contractor shall nominate an appropriate person(s) to receive, log, track and respond to complaints within the specified timeframe. The name and contact details of this person(s) shall be provided to the relevant Council(s), the Department of Planning and the Trust upon appointment or upon any changes to that appointment, but at least one week prior to the commencement of Early Works construction.



## Advertisement of Activities

Is three  
months  
too long  
a timeframe  
Perhaps  
one month is more appropriate?

Prior to the commencement of Early Works, and then at three-monthly intervals, the Trust shall advertise to all tenants and landowners in the Precinct the nature of the works proposed for the forthcoming three months, the areas in which these works are proposed to occur, the hours of operation and a contact telephone number.

If requested, it will arrange meetings with those tenants and landowners to explain its plans and to understand what the potential impacts may be on them and if necessary and if appropriate it will adjust its planning to take these impacts into account.



## 7. CONSTRUCTION RISKS AND MITIGATION MEASURES

With regards to construction risks and mitigation measures associated with the construction, refer to Table 1 below.

Table 1

Risks	Mitigation Measures
<p>1. Noise from demolition activities</p> <p>* such as? * which machinery?</p>	<ul style="list-style-type: none"> <li>excavator and smaller rock breaker will be used to break up the lower Hill ground slabs</li> <li>concrete pulveriser will be used to demolish the elevated section of the Doug Walters stand and to break up larger sections of the ground slabs</li> <li>noise mitigation equipment will be fitted to construction equipment</li> <li>close consultation with all stakeholders during the demolition phase to inform of timing of any demolition works which may impact on their operations and amenity</li> <li>light tower bases to be removed by methods other than heavy rock breakers (eg limited use of low intensity explosives)</li> </ul>
<p>2. Noise from construction activities</p> <p>* such as? * which machinery?</p>	<ul style="list-style-type: none"> <li>noise mitigation equipment will be fitted to construction equipment</li> <li>position concrete pumping operations in locations to cause minimum effect to neighbours</li> <li>close consultation with all stakeholders during the foundation phase to inform of timing of any works which may impact on their operations and amenity.</li> </ul>
<p>3. Vibration from foundation works</p> <p>see comments above</p>	<ul style="list-style-type: none"> <li>the use of bored piers in lieu of driven piles</li> <li>close consultation with all stakeholders during the foundation phase to inform of timing of any works which may impact on their operations and amenity.</li> </ul>
<p>4. Dust from demolition &amp; construction works</p>	<ul style="list-style-type: none"> <li>use of perimeter site screens</li> <li>removal offsite of precast elements to allow crushing at an offsite facility</li> </ul>

Is this consultation different to that outlined in Section 6? If yes, how?

→ locations should be specified.



Risks	Mitigation Measures
	<ul style="list-style-type: none"> <li>hose down of demolition activities</li> <li>hosing down of vehicle access routes</li> <li>hosing down of construction vehicles leaving the site</li> <li>regular cleaning of approach roadways</li> </ul>
5. Stormwater runoff	<ul style="list-style-type: none"> <li>use of silt socks and filter fabric in stormwater runoff pits and gutters</li> </ul>
6. Removal of hazardous materials	<ul style="list-style-type: none"> <li>No work will be commenced until the hazardous material assessment has been completed and approved removal and disposal methods will be employed if required.</li> </ul>
7. Waste water	<ul style="list-style-type: none"> <li>waste water from construction activities will be collected and treated prior to disposal</li> </ul>
8. Construction traffic <i>* what are "appropriate" traffic control measures and where will they be located?</i>	<ul style="list-style-type: none"> <li>ensure appropriate traffic control measures are employed to ensure separation of construction activities from the public.</li> <li>pre-agreed safe public access pathways to be established and maintained</li> <li>no construction work to be scheduled on major event days as agreed in consultation with stakeholders</li> </ul>

→ where and how often will it be disposed of

→ "pre-agreed" with who?  
\* where will they be located



## 8. SAFETY

The proposed building contractors will establish a Safety Plan before commencement on site detailing safe work methods and procedures to be followed on site and to ensure compliance with all OH & S and statutory requirements.

The initial identified safety risks during construction include

- Stability of adjacent structures
- Excavation support
- Falls from heights
- Protection of the public
- Traffic controls around the perimeter of the site
- Working with high voltage electrical supply



## 9. TRAFFIC MANAGEMENT

Construction access to the site will be from Driver Avenue. *- north or south?  
- where to from there?*

Material deliveries will generally approach the site via Moore Park Road or Lang Road and turn into Driver Avenue (refer to Attachment 1). *- should restrict construction traffic to Moore Park Rd/Driver Avenue*

Appropriate traffic controls will be put in place during construction to separate construction activities from the public. In addition, traffic controllers will be engaged to manage the interface between pedestrians and to direct vehicles entering and leaving the site. Refer to Attachment 5 for the general pedestrian traffic flow arrangement during the period of the construction activities.

*are these measures proposed for all works or only main construction activities? If so, why is this appropriate?*

Work from neighbouring properties will be managed and coordinated with these stakeholders *→ what are the impacts on adjoining properties and how will they be managed?* to maintain access and amenity.

The number and path of vehicle movements will vary during the construction period of the project. The majority of the vehicles will access directly onto the SCG from Driver Avenue. Refer to Table 2 below for estimated daily traffic movements during the construction phase.

*inconsistent with figures in Table 2 which actually show daily estimate of trucks (ie: quantum) not movements.*

*does this include early works?*



Table 2

Month	Activity	Daily estimate of trucks (not movements)
December 2006	Establishment	8 248
January 2007	Establishment	8 248
February 07	Demolition	17 476
March 2007	Demolition	18 558
April 2007	Excavation	43 1290
May 2007	Excavation/Foundations	30 930
June 2007	Foundations	17 510
July 2007	Structure	16 496
August 2007	Structure	16 496
September 2007	Structure	17 510
October 2007	Structure	16 496
November 2007	Structure	17 510
December 2007	Cladding & Finishes	16 496
January 2008	Cladding & Finishes	16 496
February 2008	Cladding & Finishes	18 522
March 2008	Cladding & Finishes	16 496
April 2008	Cladding & Finishes	17 510
May 2008	Cladding & Finishes	24 744
June 2008	Cladding & Finishes	10 300
July 2008	Cladding & Finishes	11 341
August 2008	Cladding & Finishes	6 186
September 2008	Cladding & Finishes	2 60
October 2008	Dis-establishment	2 62

→ where will these trucks be moving? will location change, be concentrated, etc? particularly during filming?

almost 3000<sup>+</sup> + than 8000 estimated below  
(10,981) (x2 = 21962)

The total number of trucks deliveries for the project is estimated at around 8,000 trucks (16,000 movements). i.e. an average of around 35 movements per day with a maximum of around 86 movements per day

Fox Studios has advised that they receive 5-10,000 movements per day. The total number of movements for this project appears insignificant in the context of the base traffic load, even if the FOX movements were all cars, and the construction movements were tripled to make equivalent car movements.

Carparking for the daily influx of construction workers will be centred on the use of the public carpark in the Entertainment Quarter or Gold Members carpark. It is anticipated that carparking required for construction associated personnel will be in the vicinity of 120 spaces per day.

Is this for the life of the construction programme (including early works)



## 10. EARLY WORKS PACKAGES

It is proposed to let early works contracts for the following trades:

1. Videoboard removal
2. Framing for Videoboard above Dally Messenger Stand and partial demolition of deck
3. Relocation of Videoboard
4. Decommissioning and removal of lighting tower 3
5. Services diversions
6. Demolition during February - April 2007 (including local protection works)
7. Bulk excavation during April - May 2007
8. Relocation of Substations at Driver Avenue
9. Heritage wall propping (if required)

Refer to Attachment 2, for indicative locations of the above mentioned works.

Items 2, 3 and 4 each require crane access, and it is proposed to access these works by agreement with FOX Studios from FOX Studios land.

*- Has this agreement been reached?  
How do placement of cranes affect traffic movements, if at all?*

The Dally Messenger stand needs to be modified to accommodate the new videoboard structure. In late December / early January 2007, it is proposed to install bracketry to the stair enclosure of the O'Reilly stand and an adjacent column. A raking support member will also be required to be installed to the midpoint of the Dally Messenger stand. This will take the major load from the videoboard.

Following the completion of the cricket ODI series on 12 February, the preparatory works will be completed by removing a section of parapet wall and local demolition of part of the upper tier of seating. Protection will be afforded to the Arthur Higgins and Brian Davies Buildings by means of a scaffold protection erected in the Dally Messenger stand and cantilevering 3m past the parapet, protecting the Buildings below. Sections of this work will be undertaken at weekends. There are 8 weekends available in the period from 12 February to 14 April when the scoreboard is required for the AFL season. The primary truss elements will be craned into position on one weekend, with framing elements to the videoboard superstructure being craned in afterwards. Should the works fall behind programme, additional possession times will be requested from FOX.

*- how far in advance?*

The Lighting Tower 3 removal and replacement will again be carried out from the FOX Studios premises.



## 11. MAJOR WORK PACKAGE

The major work package will involve the construction of foundations, structure, services and finishes to the Grandstand including constructing of new access road and re-installation of the lighting tower.

The works will be sequenced to provide the seating for 6000, in Stage 1 of the works to be completed by December 2007. The remainder of the grandstand Stage 2, is to be completed by late 2008.

During detailed design, a construction methodology for providing public access to the 6000 seats will be developed.

see previous  
comments  
re: scope of  
Stage 2  
works

↳ when is this?  
what does this entail?



## 12. SITE ESTABLISHMENT

Site establishment will involve the installation of:

- Site sheds & Site offices which may be located on the hoardings to Driver Avenue, but more likely to be accommodated within the SCG site. Shedding will be moved into the completed structure as soon as is practicable.
- Hoardings and scaffolds
- Delivery & crane pick-up locations
- Temporary services
- Security controls at the site entries and staging areas outside the SCG boundary

when will  
final location  
be  
determined?



### 13. SERVICES DIVERSIONS

when? All existing services in the construction area will be identified and located so as to ascertain the exact effect on the construction works and to minimise disruption to all other adjacent facilities. Thorough investigation and staging of works will be undertaken to ensure that capping and removal of services does not effect other parts of the facility.

Section 12 only refers to temporary services? Is this a permanent relocation? The existing substation 11 and the incoming high voltage control equipment, which are currently located in the vicinity of the new vehicle access, will be relocated at the rear of the Churchill Stand. This work will need to be part of the early works package.

The high voltage feeds for lighting towers 2 and 3, and the videoboard (substation 9), which currently reticulate through the construction area, will also be relocated.

is this a discrepancy or actually proposed for both towers? where will high voltage feeds be? All control circuitry and telephone services in the construction area will need to be de-energised and the mains removed. This will be done so as to ensure that the high voltage ring main and any controls will still be operational for services to the rest of the facility and that they can be readily reconnected upon completion of the construction works.

In addition, all hydraulic services, including water, stormwater and sewer drainage will be located and capped at the perimeter of the construction site during the early works.



## 14. WASTE MANAGEMENT

The proposed demolition contractor will be required to recycle the concrete, reinforcement and recoverable materials from the demolition of the existing grandstand.

Concrete elements will be pulverised to separate the concrete from the reinforcing and stressing. The crushed aggregate will be recycled as base course and ferrous components recycled as scrap. The proposed Grandstand contractor will be required to arrange sorting and recycling of waste materials to ensure maximum recycling is achieved. → *is this to be undertaken in accordance with AS?*

Some of this work will have to occur on site, however, the demolition contractor will remove precast elements that can be removed from their seatings intact offsite, to be crushed and recycled at a less sensitive offsite location

Prior to commencement of demolition and excavation works, a hazardous material assessment will be undertaken on all structures and soil material. Any hazardous materials identified will be disposed of in accordance with statutory and EPA requirements and guidelines.



## 15. MATERIALS HANDLING

Materials for the project will be hoisted and moved by a combination of tower cranes, mobile cranes and forklifts.

The tower cranes will be located within, and to the west of the new grandstand with appropriate crane pick up points located on Driver Avenue. Refer to Attachment 3 for detail. Effectively all materials for the project will be double handled, to avoid direct access from outside of the SCG site.

Concrete pumping for the new structure will generally take place from within the site as indicated.

In the initial stages of the project, with the permission of Fox Studios and co-ordinated for non-shooting days, mobile cranes will be set up within the Fox Studios precinct to install the site establishment and for removal of the videoboard and light towers as indicated on Attachment 2.

Following completion of the demolition and excavation, it is proposed that the new grandstand structure be constructed using mobile cranes and tower cranes located within the SCG site.



## 16. DEMOLITION

*Timing? Span? where?*

The demolition of the existing concrete structures will be carried out using a combination of concrete saws, pulverisers and rock breakers. Where practical, precast elements will be removed from site whole, and recycled offsite. The existing scoreboard will be demolished using a combination of hand tools and excavators.

No demolition work will commence until a hazardous material assessment has been completed, and any identified hazardous materials have been removed.

The demolition work will commence once all live services have been disconnected and the required hoardings and protection scaffolds are erected. In this early phase of the works, the Ivy Wall acts as a significant protection to others from the demolition works. Overhead protection will only be required for a short period whilst structures currently above the level of the Ivy Wall are demolished. This protection will be by means of a scaffold from the existing structure.

Light tower and videoboard bases are substantial structures and will need to be removed by methods other than heavy rock breakers (eg limited use of low intensity explosives) to mitigate the noise and vibration impacts on neighbours. The use of explosives in this manner to fracture massive foundations is not uncommon and is well understood. The works would be undertaken by a specialist with experience in the field.

*Noise  
impacts?*

|| An excavator and rock breaker will be used to break up the lower Hill ground slabs. A concrete pulveriser will be used to demolish the elevated section of the Doug Walters stand, but the demolition contractor will remove precast elements that can be removed from their seatings intact offsite, to be crushed and recycled at a less sensitive offsite location.

The demolition will commence with removal of the existing café structure at the rear of the Churchill stand to create a logistics handling zone.

The demolition of the existing grandstand structure and ground slabs will commence in the west in order to make areas available for loading out of materials and then progress to the east.

There will be close consultation with all stakeholders during the demolition phase to inform of timing of any demolition works, which may impact on their operations and amenity.



## 17. EXCAVATION

→ Timing?  
How long?  
Where?

The excavation of the existing Hill area will commence upon completion of the demolition and the relocation of all inground services. Soil material will be removed with the use of excavators and trucks. During this period, access will be via the rear of the Churchill Stand, which is likely to limit the available size of truck to 4 axle vehicles (no truck and dog combinations).

In parallel to this activity, piling operations will commence to stabilise the base of lighting tower 2 via a contiguous piled wall curtain.

During the excavation, care will need to be taken around the southern wall to ensure both the stability of the wall structure and the protection of the ivy wall ficus



## 18. FOUNDATIONS

→ timing?  
→ how long?  
→ where?

Cast insitu bored concrete friction bearing piles will be used. This will mitigate the noise and vibration impacts of using displacement piles. The construction of foundations will generally commence in the east, to allow construction of the new structure to progress toward the access point to the west of the site.

If required, a contiguous pile wall will be constructed in sections adjacent and to the North of the ivy wall to strengthen the foundation.

Following installation of piles, traditional detailed excavation and installation of pile caps will occur.



## 19. STRUCTURE

The new grandstand will be a reinforced concrete structure constructed conventionally. The construction works will generally proceed from the east to the west and in a segment by segment cascade in order to maintain truck access to the work face on the west of the site, for as long as possible.

The construction of the lower seating concrete structure (concourse seating) will be deferred for a period to enable the area nearest the pitch boundary to be used for materials staging.

The concourse structure to the rear of the Churchill stand will also be deferred to act as a materials handling area and potentially for site amenities.

There will need to be consideration during construction, of the egress path for use by the public from the Churchill Stand during match days. A temporary fencing tunnel will be erected along this path to isolate the public from the construction site through this area. Catering and other services may require access outside match days.

During the insitu concrete works, there will be no need for a protection gantry in John Hargreaves Avenue until about November 2007 when the construction will come close to the top level of the Ivy Wall. When protection is necessary, it will be of limited extent and be in place only until the insitu frame is complete – Christmas 2007. This will be designed as a Class B protection and may be a traditional portal frame hoarding from the street level, or a raking catch screen erected from within the site. In either case, the protection will extend at least 3 metres from the edge of the construction work and allow a 4.5 m high vehicle to pass along John Hargreaves Avenue. The columns supporting the hoarding will be placed with due care to the current parking arrangements, to minimise the interference to FOX. A 1.2m high parapet will be erected as a screening to the southern side of the hoarding, and a graphic banner will be placed on the south facing side to enhance the visual amenity of the area.

Good-  
addresses  
Fox's concerns  
re: amenity

arrival of guests at Fox.



## 20. ROOF, UPPER SEATING STRUCTURE AND ROOF CLADDING

The structure for the upper seating and roof structure is a combination of precast elements and structural steel. These elements will be prefabricated offsite in order to minimise high soffit formwork and work at heights, and to allow the minimum noise impact to neighbours. It is likely that the principal rib trusses will be pre-assembled to form larger elements and then lifted to site with only a few "lifts" per rib. The details of this will need to be worked out when the final design is known and the available pre-fabrication and pre-assembly areas are identified.

The rakers and precast seating plats will be erected bay by bay followed by the roof structure and roof cladding once the plats are in place.

The Level 5 structure will be strengthened for construction loads to allow small cranes, fork lifts etc to operate on this level and support the roof and upper tier construction activities.

Protection in John Hargreaves Avenue will only be required when works to the ribs come within 2m of the Ivy Wall. Protection must extend for 3m South of the element being constructed. At worst, this is 8m from the SCG boundary. When protection is necessary, it will be of limited extent and be in place only until the construction works in that area are complete – May 2008. This will be designed as a Class B protection and may be a traditional portal frame hoarding from the street level. The protection will allow 4.5 m high vehicle to pass along John Hargreaves Avenue. The existing Fox security checkpoint may require a dedicated class B protection structure for a limited period during the major structural steel erection.



## 21. LIGHT TOWERS

Light tower 3 is to be relocated onto the new grandstand following completion of the structure. This light tower will need to be delivered to the Fox Studio areas and pre-assembled prior to erection by a large mobile crane located outside the site boundary. Careful planning and detailed consultation will be required to co-ordinate this activity at a convenient time for FOX (weekends or other shutdown period).

→ when will this consultation occur?



## 22. FINISHES & FITOUT

The finishes and fitout of the levels 2, 3 & 4 will commence once the formwork in the main structure has been stripped.

This work will proceed in a conventional sequence with the masonry, services rough-ins and wet trades. The dry finishes and services fitout will be dependent on completion of the upper seating and roof in order to provide waterproofing to these levels.

Commencement of the level 5 finishes is also dependent on the upper seating. Installation of the seats will not take place until the soffit and services above have been completed and any temporary scaffolds or boom lifts for this work have been removed. It is envisaged that a special frame be utilised to allow a boom lift be installed on the tiered seating to access the roof soffit.



## 23. SERVICES

In-ground infrastructure services, including water, stormwater drainage, sewer drainage, fire services and electrical reticulation will be installed at the same time as the structure is commenced. The services design will determine the location of connection to mains supplies and also the need, if required, of any up-grading to these mains.

|| The location of a new substation for the Grandstand will need to be co-ordinated with the reinstatement of the electrical services for light towers 2 and 3.

The rough-in and fitout of services within the Grandstand will be undertaken with the fitout and finishes of the relevant areas.

The commissioning of these services will be required before completion and handover of the facility. Integration of the Grandstand services with the control systems for the entire facility will be a major task in achieving completion for the services.

When will  
location be  
known?



## 24. STAGE 1 COMPLETION DECEMBER 2007

The work is to be sequenced to allow completion of 6000 seats, in the lower area adjacent the playing field for use by the SCG by December 2007. This will involve the constructing the lower slab and installing the required seating together with all necessary handrails, signage and paths of access and egress.

This area will be isolated from the remaining construction site with a secure fence to prevent incursion by spectators during events, and suitable access provided for match day spectators.

The contractor will locate security personnel in the construction site during games to ensure no incursion by spectators and also to return any balls that may be hit or kicked into the site during the game.

It is not envisaged that the main roof & upper seating structure & cladding will have been completed by December 2007.

The remainder of this work will be sequenced to either occur on non-game days or on days with low spectator numbers as a section of the completed seating area will need to be isolated from the public by a temporary fence while work is in progress overhead.

This temporary fencing will be removed as required prior to match days and re-installed following the match day.



## 25. ACCESS OPTIONS

A number of access options have been explored in consultation with adjoining property owners and lessees during the planning process. Option 3 had been selected as the preferred option during the initial submission.

As a result of feedback from the consultation process, Option 3 has been refined and this evolution is labelled Option 3A and provided as Attachment 3.

*should be Attachment 4*

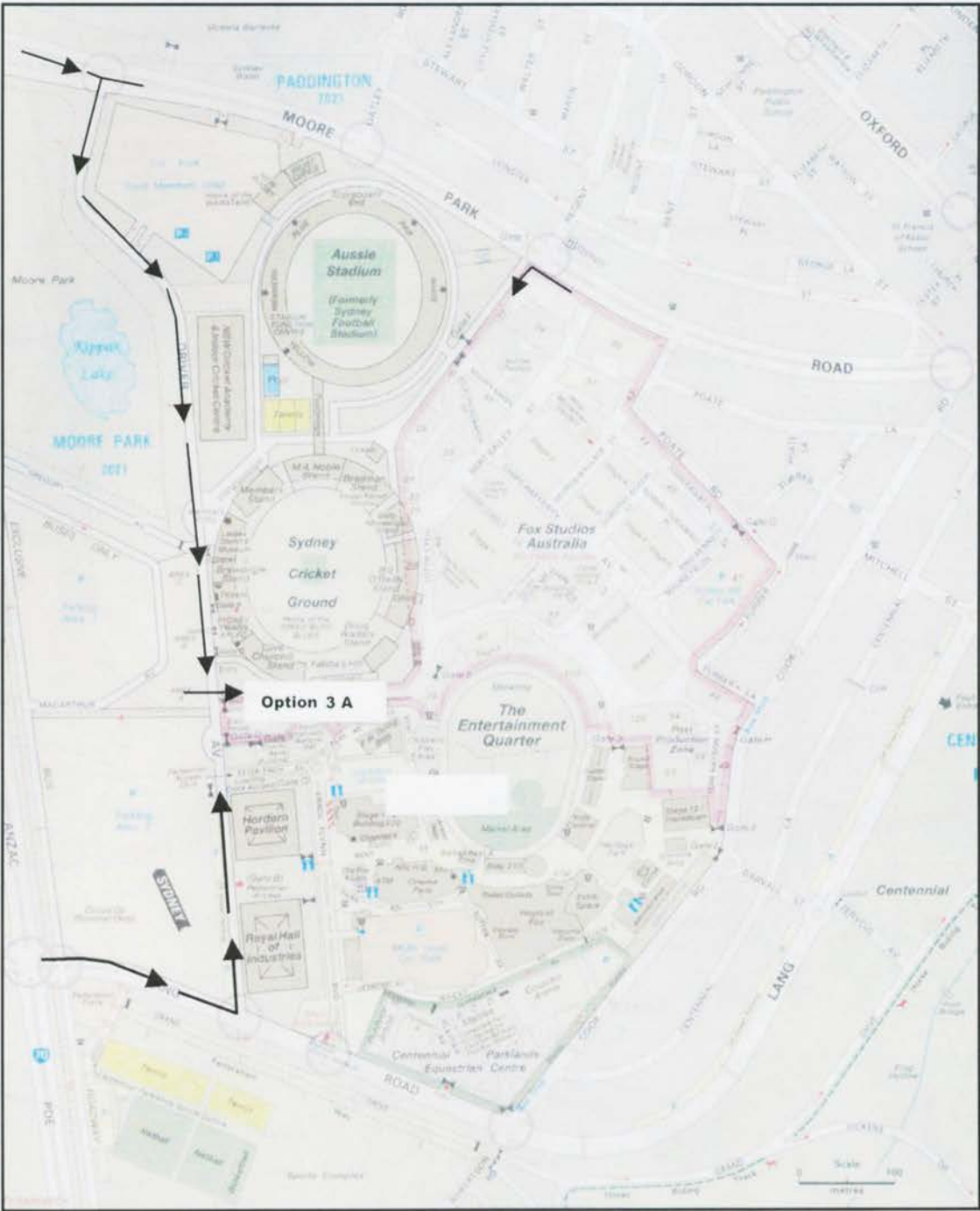


## Attachment 1 Construction Vehicle Access Routes





# CONSTRUCTION VEHICLES ACCESS ROUTES

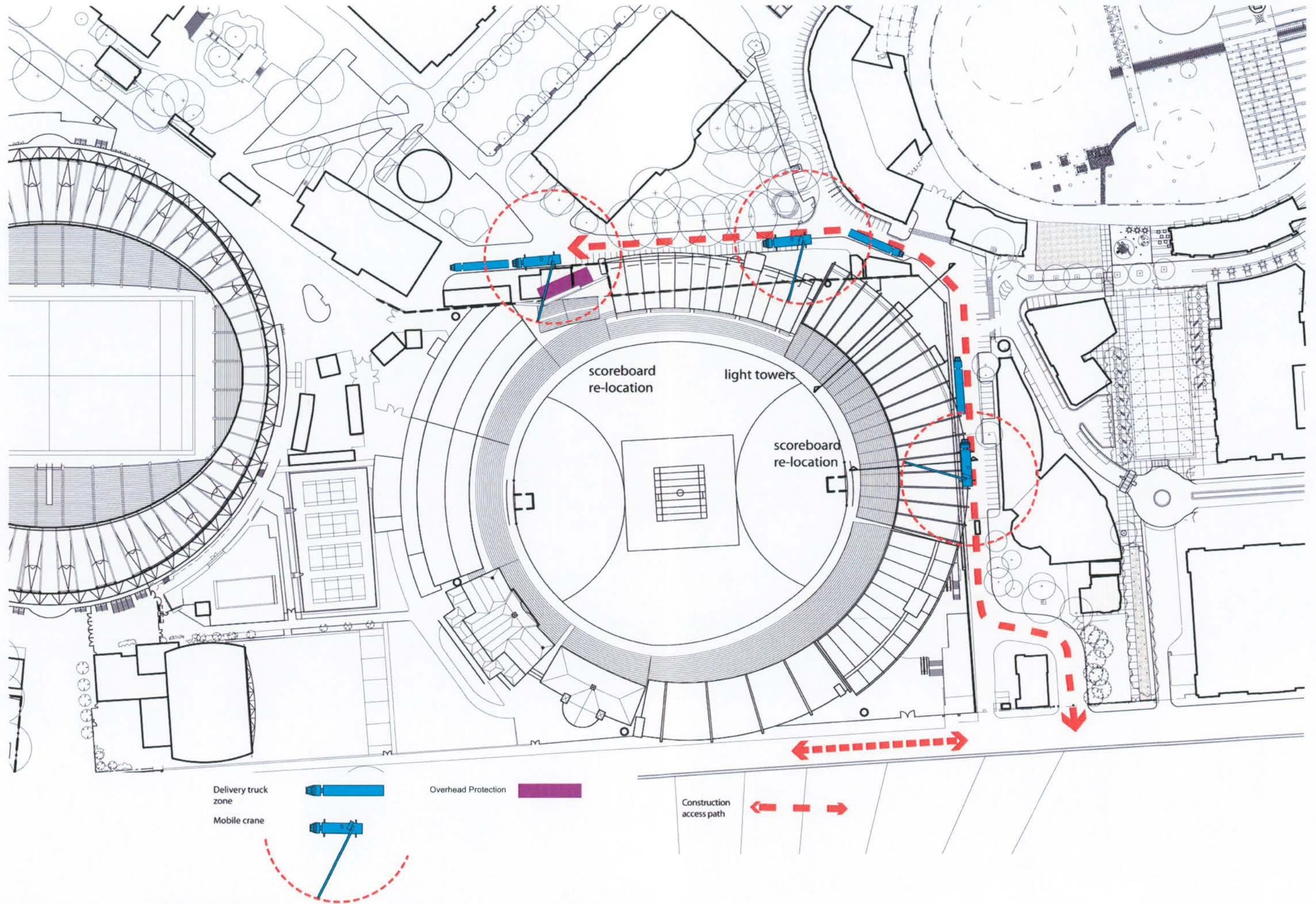


—▶ - Indicates construction vehicle access route



## Attachment 2 Early Works





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 Architects

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Sydney Cricket  
 Ground Trust  
 Hill Grandstand

Early Works





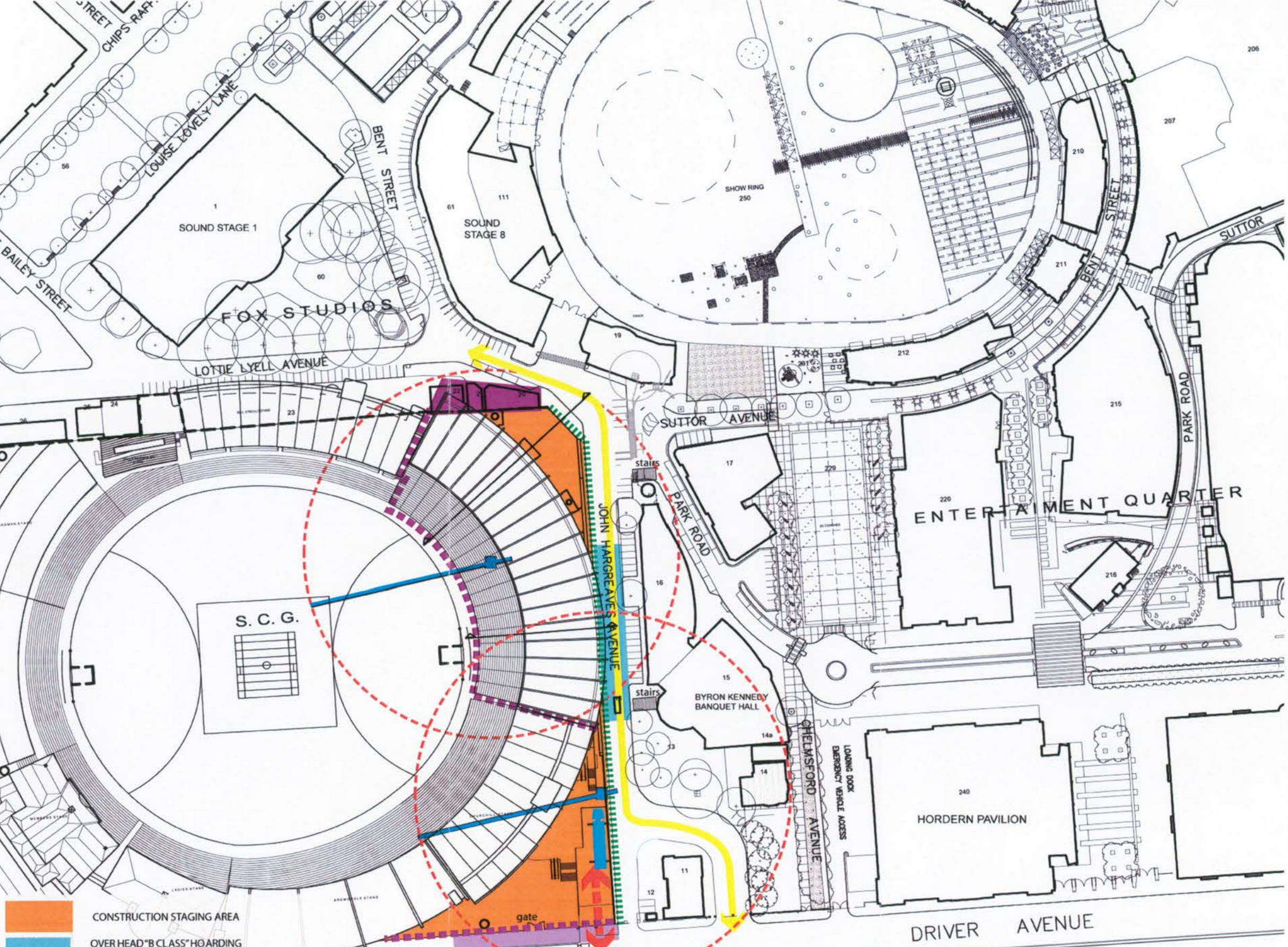
## Attachment 3 Construction Option 3A





BUILDING KEY	
B.G. No.	DESCRIPTION
1	STAGE 1: Raymond Langford Stage
2	STAGE 2: Charles Chauvel Stage
3	STAGE 3: Ken G. Hall Stage
4	STAGE 4: Freda Jay Barrett Stage
5	STAGE 5: Hector Crawford Stage
6	STAGE 6: Paulette McLoughlin Stage
11	Star Dressing Room
12	Star Dressing Room
13	Star Dressing Room
14	Star Dressing Room
15	Star Dressing Room
16	Star Dressing Room
17	Star Dressing Room
18	Star Dressing Room
19	Star Dressing Room
20	Star Dressing Room
21	Star Dressing Room
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60	Star Dressing Room
61	Star Dressing Room

B.G. No.	DESCRIPTION
101	FOX BACKLOT
102	Backlot Entrance
103	Fox Shop
104	Tutor Stand
105	Bent Street Stand
106	Flying Fox Theatre
107	Commemorative Pavilion
108	Star Dressing Room
109	Sound Stage
110	Gondola Building
111	Star Dressing Room
112	The Simpsons Down Under
113	The Baker Set
114	Backlot Administration
115	First Aid/First Aid Prevention
116	Hall of Fame
117	FOX BACKLOT
118	Fox Shop/Donor Art
119	Hope of Fox Workshop
120	Sports Centre
121	The Original Comedy Store
122	General Plants
123	Kiosk
124	Urban Edge
125	Chilliman, Guest Services, Ticketing
126	Play for Life
127	Sea Grid (Take-away)
128	Asian Kitchen (Take-away)
129	It's a Wrap (Take-away)
130	SportsCo
131	Starfish
132	Arena Bar and Restaurant
133	Kiosk
134	Starfish
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300	Starfish



Construction access path

Fox path of travel

Pedestrian path of travel

OVERHEAD 'B' CLASS HOARDING WITH SIDE SHEDS

CONSTRUCTION STAGING AREA

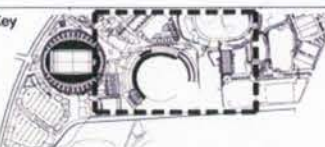
OVER HEAD "B CLASS" HOARDING

OVERHEAD PROTECTION

SECURITY FENCING - CONSTRUCTION ZONE

IVY PROTECTION

concrete pump location



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Sydney Cricket Ground Trust  
 Hill Grandstand

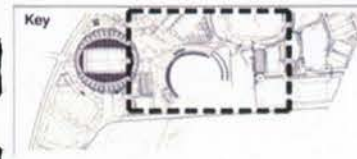
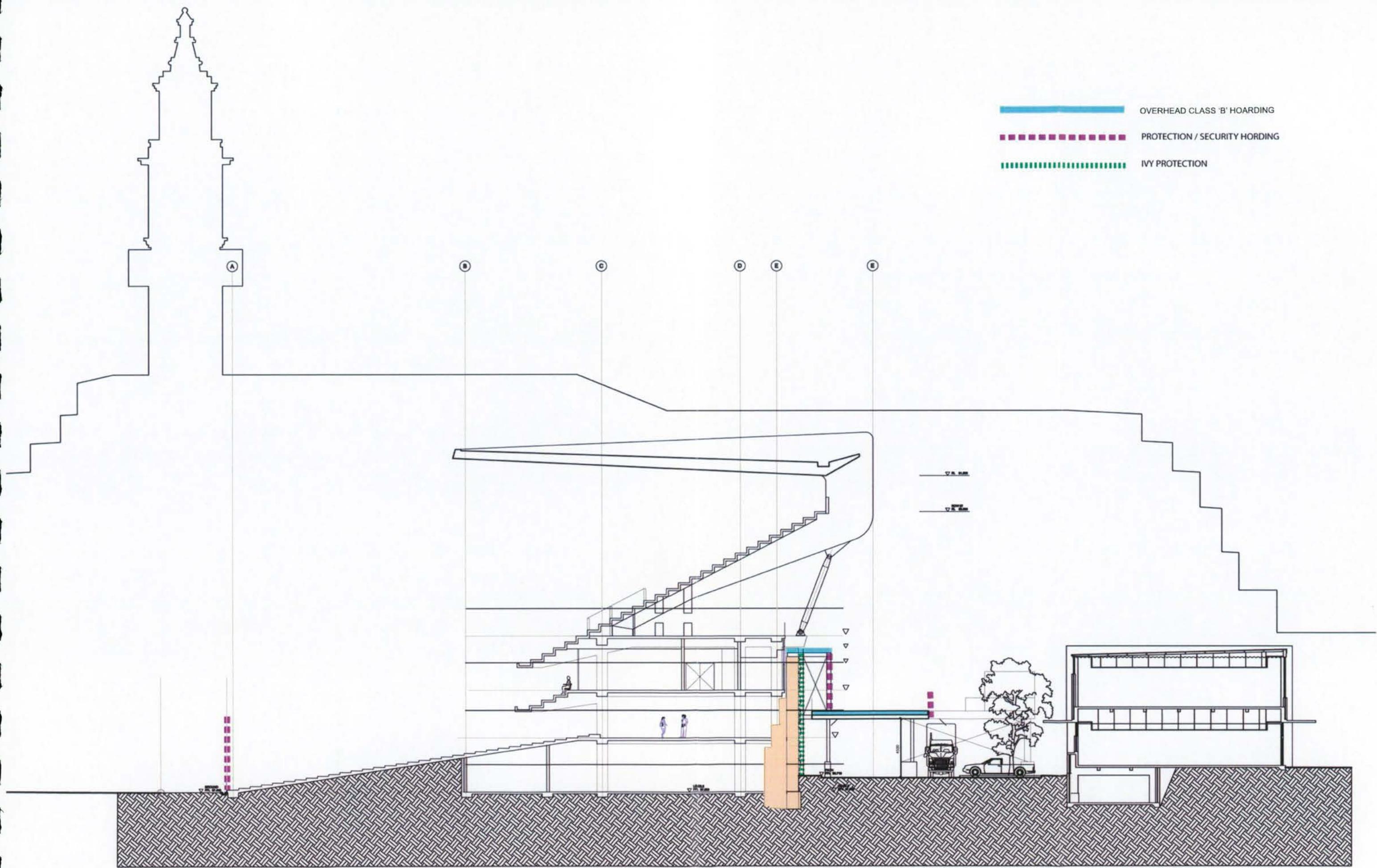
Construction  
 OPTION 3A





Attachment 4 Construction Option 3A (Side Elevation)





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Sydney Cricket  
 Ground Trust  
 Hill Grandstand

Construction Plan  
 Option 3 A

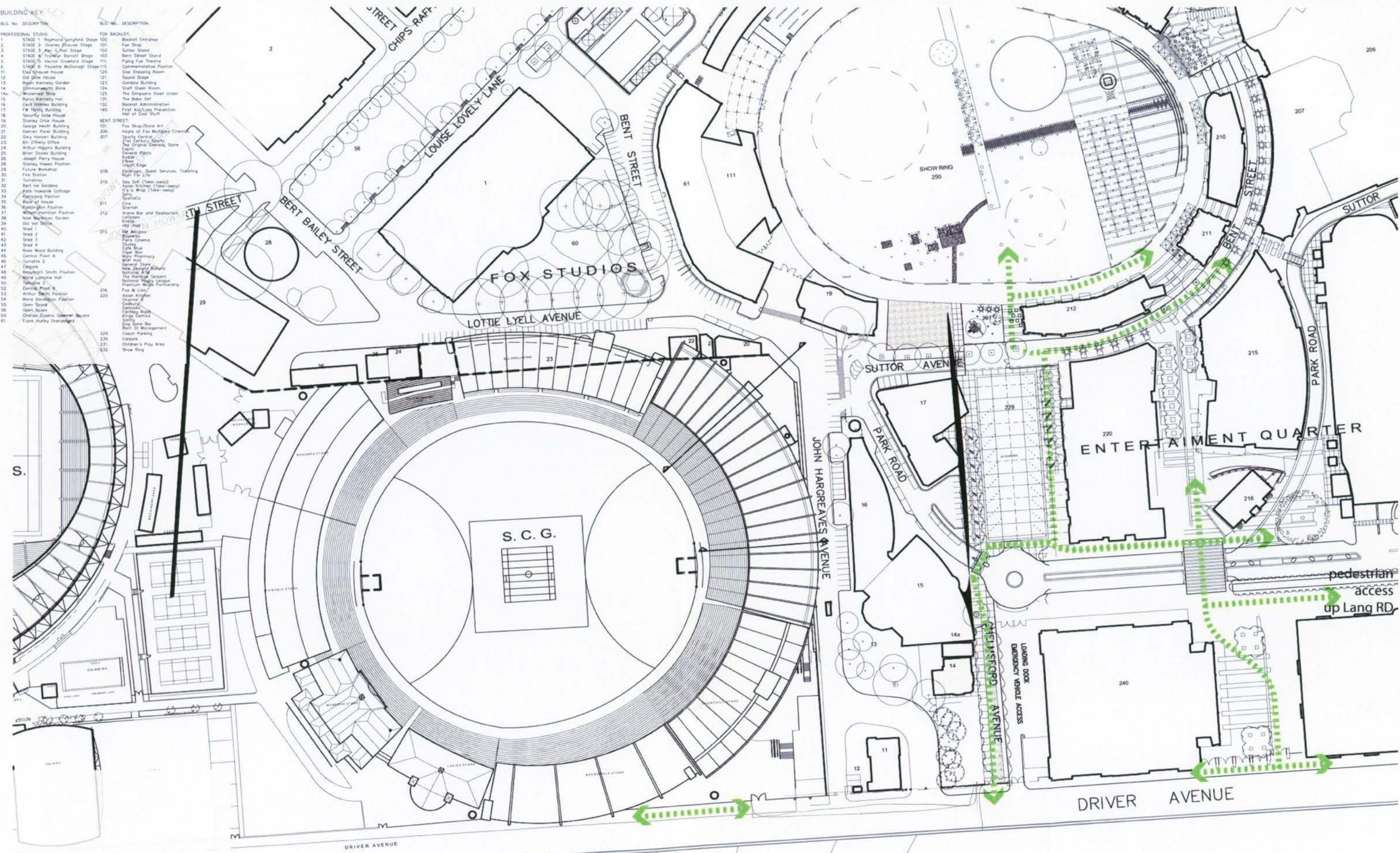


## Attachment 5 Pedestrian Access



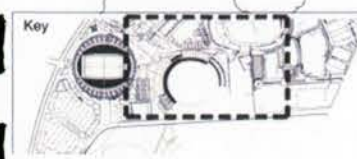
**BUILDING KEY**

Bldg. No.	Description	Bldg. No.	Description
1	PROFESSIONAL STUDIO	100	FOX BACKLOT
2	STAGE 1: Raymond Langford Stage	101	Backlot Entrance
3	STAGE 2: Charles Chauvel Stage	102	Fox Shop
4	STAGE 3: Mac O'Riain Stage	103	Sculptor Stand
5	STAGE 4: Trilby/Barrett Stage	104	Bent Street Stand
6	STAGE 5: Hector Crawford Stage	105	Flying Fox Theatre
7	STAGE 6: Poulette McLoughlin Stage	106	Commemorative Pavilion
8	Old Gilbey House	107	Star Dressing Room
9	Old Gilbey House	108	Sound Stage
10	Old Gilbey House	109	Gondola Building
11	Old Gilbey House	110	Staff Green Room
12	Old Gilbey House	111	The Simpsons Down Under
13	Old Gilbey House	112	The Babe Set
14	Old Gilbey House	113	Backlot Administration
15	Old Gilbey House	114	First Aid/First Aid Prevention
16	Old Gilbey House	115	Map of Cool Shutt
17	Old Gilbey House	116	Map of Cool Shutt
18	Old Gilbey House	117	Map of Cool Shutt
19	Old Gilbey House	118	Map of Cool Shutt
20	Old Gilbey House	119	Map of Cool Shutt
21	Old Gilbey House	120	Map of Cool Shutt
22	Old Gilbey House	121	Map of Cool Shutt
23	Old Gilbey House	122	Map of Cool Shutt
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26	Old Gilbey House	125	Map of Cool Shutt
27	Old Gilbey House	126	Map of Cool Shutt
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30	Old Gilbey House	129	Map of Cool Shutt
31	Old Gilbey House	130	Map of Cool Shutt
32	Old Gilbey House	131	Map of Cool Shutt
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59	Old Gilbey House	158	Map of Cool Shutt
60	Old Gilbey House	159	Map of Cool Shutt
61	Old Gilbey House	160	Map of Cool Shutt



pedestrian  
access  
up Lang RD

Pedestrian path  
of travel



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ACN 003 127 222



Sydney Cricket  
Ground Trust  
Hill Grandstand

# Pedestrian Access





## Attachment 6 Indicative Construction Programme







## **APPENDIX 6**

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### **Revised Acoustic Report**





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Acoustic Report

Hill Grandstand  
Sydney Cricket Ground

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Project 206 056

October 2006

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File : 206 056 R03 Project Application Acoustic Assessment

*Prepared For*

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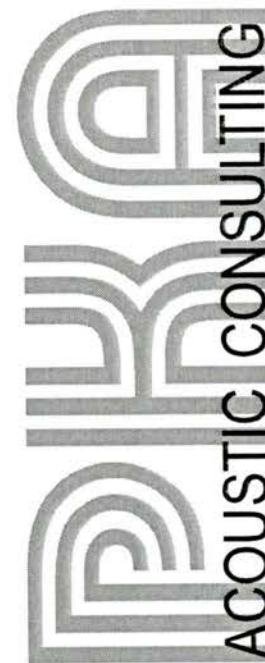
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## Document Information

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This firm is a member of the Association of Australian Acoustical Consultants.

The work reported herein has been carried out in accordance with the terms of membership. We stress that the advice given herein is for acoustic purposes only, and that the relevant authorities should be consulted with regard to compliance with regulations governing areas other than acoustics.



## 1 INTRODUCTION

A new multipurpose Grandstand is proposed for construction at the existing Hill site located at the Southern end of the Sydney Cricket Ground (SCGT).

The purpose of this report is to present the results and recommendations of an acoustic assessment of the potential noise impacts from the proposed Grandstand. This report addresses both the potential construction and operational noise impacts. Construction Option 3A is the basis of the recommendations in this report, which is a significant improvement on Option 3 previously assessed.

The proposed Hill Grandstand will replace the existing Doug Walters Stand and fill the void between the Churchill and O'Reilly Stands.

## 2 SUMMARY

The acoustic impacts relating to the Hill Grandstand can be broken down with reference to the three main stages of the project.

The first stage will be the demolition and excavation of the site. As with most such works noise impact cannot be eliminated but can be reduced. During the bulk of this work the noise impacts can be controlled to an acceptable level. However the demolition stage does involve removal of the foundations of the lighting tower and video scoreboard. Originally, this was assumed to be by means of rock breaking activities which would have the potential to create very high noise levels that cannot be readily reduced. We now understand that SCSTG will commit to the use of low intensity explosives or chemical expansion techniques to break up these bases. The concept is that the tower bases will be initially broken up in large pieces and then removed from site to allow the piece to be broken up to much finer pieces. As a result, this potential noisy stage of the demolition has been eliminated.

The operations of Sound Stages 1, 7 and 8 should not be limited by demolition and construction activities. These sound stages have to operate with an average aircraft flyover level of 77dB(A). The demolition and construction noise levels will be lower than 77dB(A) at these three sensitive locations.

In terms of vibration, a change to the slow release explosives to break up the tower bases, the use of rotary boring for the piles (rather than driven piles) and cutting down on the size and use of rock picks, the vibration levels likely to be transmitted to the sound stages will be significantly reduced. Vibration monitoring will be carried out during the demolition and construction to identify any problems. The position of this monitoring will be determined in consultation with Fox Studios.

The second stage will be construction of the new grandstand. This will comprise the bulk of the on site works. The noise impacts from these works can be managed to within acceptable levels as described in Section 7.4 of this report.

The operational noise impacts from the new grandstand will be minimised by the new design and will generally result in a higher acoustic amenity for adjoining owners than is provided by the existing grandstand. The details of the operational impacts are covered in Section 5 of this report.



### 3 SITE

The SCG is located in Moore Park with Centennial Parklands to the west (across Driver Avenue), Aussie Stadium to the north and Fox Studios to the east and south. The nearest residential properties are located around 300m to the east in Cook Road and Poate Lane.

The site is located below a takeoff flight track from runway 34R at Kingsford Smith Airport.

The most critical receivers for potential noise impacts are those located within the Fox Studios complex, which includes a number of Sound Stages as well as office buildings. The Entertainment Quarter (EQ) further to the south is also a critical receiver area, particularly to the outdoor recreation and eating areas within the EQ precinct. The residential properties to the east have also been considered.

### 4 AMBIENT NOISE LEVEL MEASUREMENTS

A series of noise level measurements were carried out at various locations in the surrounding area on the afternoon of Friday 7<sup>th</sup> July 2006. Measurements were conducted with a pair of Svan Type 949 Sound Level Analysers calibrated prior to and following measurements with a Bruel & Kjaer Sound Level Calibrator Type 4230. The measurement results are shown below.

Table 1: Ambient Measurement Results

Location #	Measurement Location	Time	L90 dB(A)	Leq dB(A)
I	Nth of Building 14	15:34-15:49	52	59
II	Sth of Building 16	15:32-15:47	51	69
III	SE corner of Coach Parking Lot (adjacent Children's Play Area)	15:10-15:25	59	69
IV	Nth end of Fox Showring	15:17-15:32	54	59
V	Bent Street outside Hoyts Cinemas	15:59-16:14	61	65
VI	Bent St outside Building 121	16:00-16:15	48	61

### 5 EXISTING AIRCRAFT NOISE IMPACTS

The site is directly influenced by aircraft using runway 34R of Kingsford Smith Airport. The aircraft depending upon how the "share the noise" policy is implemented may fly directly over the site. Using Australian Standard AS2021 the predicted noise level on the site for a Boeing 767 flyover was 84dB(A). A level of 84dB(A) was measured on site on Thursday 12<sup>th</sup> October as the result of a Boeing 767 flyover. During the measuring period on that date, the average noise level for many flyovers was 77dB(A). Measurements were also made for a 2 hour period on the morning of Friday 13<sup>th</sup> October. The pattern of aircraft noise on this occasion was quieter with the maximum being 76dB(A), however the average over that period was 75dB(A). Aircraft Noise level measurements made on site has been included as Appendix A in this report.

Whilst a studio may stop shooting for a maximum aircraft noise intrusion the studios must be able to operate during the average aircraft flyover noise level. This is particularly important for Sound Stage 1 which is a heritage building and has limited sound insulation.

A level of 77 dB (A) has been selected as a base line for the assessment of construction noise impacts on the Fox Complex generally.



## 6 OPERATIONAL NOISE IMPACTS

### 6.1 Persons in Grandstand

The existing Hill and Doug Walters Stands which are to be replaced have a capacity for 9633 spectators however their design is such that limited shielding is provided for noise from the spectators to impact on the Fox Studios site on match days. The proposed new Hill Grandstand will have an increased capacity of 12,395 however the design of the stand (and roof overhang) is such that increased acoustic shielding for neighbours will be provided. Acoustic absorption will need to be incorporated to the underside of the roof structure to increase the effectiveness of the acoustic shielding.

There will be an overall reduction of noise impact to adjoining owners by the provision of additional shielding both for spectators in the new Hill Grandstand as well as other stands around the ground (by providing shielding within the gap between the roofs of the O'Reilly and Churchill Stands).

### 6.2 PA System

The new grandstand will be serviced by a completely new public address system. The design of the system will need to incorporate carefully selected directional speakers (with tight control of noise beams) to minimise noise spill to adjacent areas. This will be in keeping with other systems installed in the SCG and Aussie Stadium. The PA system for the new stand will need to be designed to have lower resultant noise impacts on adjacent owners than are currently experienced.

The SCG Trust has an ongoing commitment to comply with DEC Prevention Notice 1003904 that currently is in effect for activities undertaken at the premises. The notice mainly applies to noise spillage from sound reinforcement systems in respect to the adjacent residential areas.

### 6.3 Ancillary areas

The proposed design incorporates a number of ancillary areas at on the southern side of the stand including an access driveway from Driver Avenue, and outdoor paved bar area, a function centre and back of house areas for catering etc. The back of house areas are to be designed to comply with current EPA criteria being the NSW Industrial Noise Policy. This will be achieved by acoustically selected façade constructions as well as additional acoustic treatments determined during the detailed design process.

### 6.4 Mechanical Plant

Any mechanical plant associated with the new grandstand will need to comply with the EPA Industrial Noise Policy at all adjacent receiver locations. This must be addressed during the detailed design stage once mechanical services requirements are finalised.



## 7 CONSTRUCTION NOISE IMPACTS

### 7.1 Construction Noise Criteria

Typically criteria for construction noise is expressed in term of an allowance of 5dB(A) above the background  $L_{90}$  level. In the case of the City of Sydney Council an allowance of 10dB(A) above the background level for works within the CBD is made. Reference to the noise levels measured for the project show that the existing noise environment in the area already has ambient  $L_{eq}$  levels more than 10-15dB(A) above the  $L_{90}$  in some locations. We also note that the site is subject to moderately high noise levels from aircraft overflights and that many of the potential receiver buildings have been designed to exclude this noise.

The DEC/EPA has identified that their current criteria do not work in practice (Roger Treagas of DEC at AAS Acoustics 2005 conference) and that they are now in the process of consulting with industry to formulate a workable construction noise management policy.

As most of the potential receiver buildings are sealed it is appropriate to consider the allowable maximum outside noise as the addition of the maximum design noise level for the particular area within the building and the sound insulation of the façade. This has been considered and is shown in Table 2 and 3.

For office areas we have allowed a maximum internal noise level ( $L_{eq}$  15min) 50dB(A) from construction noise.

For residential areas we have allowed a maximum internal noise level ( $L_{eq}$  15min) 45dB(A) from construction noise.

For sound stages we have allowed a maximum internal noise level ( $L_{eq}$  15min) 30dB(A) from construction noise.

For outdoor recreation areas in the Entertainment Quarter (including the outdoor play area and the Growers Market area) we have allowed a maximum noise level ( $L_{eq}$  15min) of the existing  $L_{eq}$  + 5dB(A).

Our experience is that the above criteria are acceptable noise levels generally. Note that the criteria are for daytime only (as no night-time construction is scheduled for the project).

The following table is a summary of the potential noise receivers located around the SCG site.



Table 2: Potential Noise Receiver Locations

Building	Fox Building Number	Use	Open Windows	Approx reduction in level through façade performance with windows closed dB(A)
Stage 1	1	Sound Stage	No	35
Stage 2	2	Sound Stage	No	50
Stage 3	3	Sound Stage	No	50
Stage 4	4	Sound Stage	No	50
Stage 5	5	Sound Stage	No	50
Stage 6	6	Sound Stage	No	50
Stage 7	7	Sound Stage	No	35
Stage 8	8	Sound Stage	No	40
George Heath Bld	20	Office	Yes	25
Damien Parer Bld	21	Office	Yes	25
Gary Hansen Bld	22	Office	Yes	25
Elsa Chauvel House	11	Office	Yes	25
Cecil Holmes Bld (Fox admin)	16	Office	No	25
FW Thring Bld (Colonial)	17	Office	No	25
Stanley Crick House	19	Office	No	25
Bill O'Reilly Office	23	Office	No	25
Arthur Higgins Bld	24	Office	No	25
Childrens Play Area	230	Outdoor	No	NA
EQ Market Area	-	Outdoor	No	NA
Poate Lane Res.	-	Residential	Yes	25



## 7.2 Construction Plant Noise Levels

Typical Sound Power Levels for the type of equipment to be used during construction are shown in the table below.

Table 3: Estimate typical plant Sound Power Levels

Item	Stage	Sound Power Level – dB(A)
Rock Breaker (excavator mounted <75mm dia)	Demolition	120
Concrete Muncher	Demolition	115
Truck 10-20T	Demolition/ Excavation/ Construction	105
Truck – Concrete Mixer 24T	Construction	110
Concrete Pump	Construction	105
Oxy-acetylene Welder	Demolition	96
Crane – Tower	Construction	106
Crane – Mobile	Demolition	118
Excavator	Excavation	115
Generator for power (110kVA)	Construction	108
Piling – Rotary Bored	Excavation	120
Saw – Stone	Demolition	118
Electric Drill (hand tool)	Construction	94
Electric Hammer Drill (hand tool)	Construction	106
Electric Grinder (hand tool)	Construction	103
Circular saw (hand tool)	Construction	112
Concrete Vibrator	Construction	105

Note that the above are typical estimated sound power levels for plant. All major plant on this project must be selected and certified for low noise level output. The equipment selected should be on the basis of not exceeding the above levels. Generally the above sound power levels are to be referenced in the plant selection stage and corresponding sound pressure levels at stated distances are to be used for certification on site. The specific sound pressure levels and measurement procedures for certification are to be set out in the Noise and Vibration Management Plan.

No equipment with a Sound Power Level of greater than 120dB(A) is to be brought onto site without the assessment and approval of the acoustic consultant to the project.

The tower crane whilst not the highest source is identified as having the main noise impact on the site. The tower crane is elevated and as a result is exposed to a major portion of the site generally without the benefit of acoustic shielding that occurs with most of the other noise sources. The tower crane will tend to run continuously therefore it will need to tight controls in terms of noise output. It is envisaged that the drive motor to the tower crane will need at least a high performance muffler, low noise fan and attenuated engine casing to comply with the noise criterion.

The use of rotary bored piles will eliminate the annoying impulsive sound of driven piles, this is considered a positive reduction.



## 7.3 Construction Plant Noise Levels Impact on Main Sensitive Receivers

Construction and demolition noise to Sound Stage 1 and to Building 11 at the entry road to the site have been examined. These are shown as Table 5 and Table 6 below.

Table 4: Estimated Noise Impacts at Sound Stage 1

Item	Sound Power Level - dB(A)	Distance to Receptor (m)	Losses to Sound Pressure Level dB(A) (excluding shielding)	Estimated Noise Level L <sub>10</sub> dB(A)
Rock Breaker (excavator mounted <75mm dia)	120	160	52	68
Concrete Muncher	115	160	52	63
Truck 10-20T	105	160	52	53
Truck - Concrete Mixer 24T	110	160	52	58
Concrete Pump	105	160	52	53
Oxy-acetylene Welder	96	160	52	44
Crane - Tower	106	200	54	52
Excavator	115	160	52	63
Generator for power (110kVA)	108	160	52	56
Piling - Rotary Bored	120	160	52	68
Saw - Stone	118	160	52	66
Electric Drill (hand tool)	94	160	52	42
Electric Hammer Drill (hand tool)	106	160	52	54
Electric Grinder (hand tool)	103	160	52	51
Circular saw (hand tool)	112	160	52	60
Concrete Vibrator	105	160	52	53

The estimated construction and demolition noise levels are of the order of 53-68 dB(A) depending on activity. Some addition will naturally occur due to concurrent activities. We estimate a reasonable level of the order of 70 dB(A) arising as a result of the combination of the above activities (simultaneous operation of all processes is unlikely). The above estimates exclude natural screening due to buildings between the site and the receptor. As such, actual noise levels are likely to be lower, although clearly the tower crane operation noise will not be subject to screening reductions. But this is only 52dB(A) at this location. There will always be acoustic shielding of some operations as well the random nature of equipment in use. Therefore a 15minute L<sub>eq</sub> of 65dB(A) is a reasonable assumption.

The average noise level for aircraft flyover of the site has been determined as 77dB(A). It can be seen that this is above the likely noise level due to construction and demolition operations.

Therefore the construction and demolition activities for the Hill Grandstand should not affect the use of Sound Stage 1.



Table 5: Estimated Noise Impacts at Building 11

Item	Sound Power Level – dB(A)	Distance to Receptor (m)	Losses to Sound Pressure Level dB(A) (excluding shielding)	Estimated Noise Level L <sub>10</sub> dB(A)
Rock Breaker (excavator mounted <75mm dia)	120	90	47	73
Concrete Muncher	115	90	47	68
Truck 10-20T	105	20	34	71
Truck – Concrete Mixer 24T	110	20	34	76
Concrete Pump	105	100	48	57
Oxy-acetylene Welder	96	90	47	49
Crane – Tower	106	130	50	56
Excavator	115	100	48	67
Generator for power (110kVA)	108	100	48	60
Piling – Rotary Bored	120	100	48	72
Saw – Stone	118	100	48	70
Electric Drill (hand tool)	94	100	48	46
Electric Hammer Drill (hand tool)	106	100	48	58
Electric Grinder (hand tool)	103	100	48	55
Circular saw (hand tool)	112	100	48	64
Concrete Vibrator	105	100	48	57

The estimated construction and demolition noise levels are of the order of 46-76 dB(A) depending on activity. Some addition will naturally occur due to concurrent activities. We estimate a reasonable level of the order of 78dB(A) L<sub>10</sub> and 75dB(A) L<sub>eq</sub> 15minute arising as a result of the combination of the above activities (simultaneous operation of all process is unlikely).

The above estimates exclude natural screening due to buildings between the site and the receptor. As such, actual noise levels from onsite activities are likely to be lower. However the main noise source (comprising the passing trucks) will not be subject to significant screening. Similarly, the tower crane operation noise will not be subject to screening reductions, however it is only in the order of 53-56dB(A).

The noise levels within Building 11 due to construction noise may generally be acceptable for normal office activities with the windows closed, however for noise sensitive activities (such as teaching, video production etc) noise levels will be above the preferred criteria. We note that the building is likely currently subjected to noise levels above the preferred criteria when aircraft overfly the site. It is recommended that consultation be entered into with the Building 11 management so that the noise impact to the occupants is minimised.



#### 7.4 Construction Stages

The construction works can be broken down into a number of smaller sub-stages as follows

Table 6: Construction Stages

Stage	Duration	Involving
Demolition	6-8 weeks	Removal of light towers by crane Demolition of light tower bases by low impact explosives Removal of video scoreboard for relocation to Messenger Stand Demolition of video scoreboard by low impact explosives Demolition of remainder of stand with concrete munchers and small hammers/excavators Removal offsite whole former precast elements where possible
Excavation	4-6 weeks	Will overlap with demolition to some degree Includes piling of piers
Construction	16 months	Construction of new grandstand
Other works		Relocation of substation Construction of southern access driveway Messenger Stand scoreboard installation (relocation)

Note that this report primarily addresses the acoustic impacts of construction Option 3A, which we are informed is the preferred construction option.



## 8 RECOMMENDATIONS

### 8.1 Construction Hours

Construction activities should only occur between 7am and 6pm Monday to Friday and between 8am and 2pm Saturdays. No noise producing works should be carried out outside of these hours without further acoustic analysis of specific proposals, unless agreement is arranged with adjacent owners via a neighbour Project Control Group. Any changes to the hours of operation shall only be considered if necessary and be completely justified by additional acoustic analysis of specific noise production works along with all necessary feasible and reasonable mitigation measures.

### 8.2 Rock breaking and foundations

One of the tasks during the demolition stage will be the break-up and removal of the foundations of the two lighting towers and the video scoreboard. The rock breaking activities can present very high noise levels which cannot be attenuated. These works (demolition of light tower and video scoreboard bases) have the potential to cause significant disruption to the operation of some adjoining areas in Fox Studios. SCSGT has elected to opt for low impact explosive methods to reduce the intensity and duration of this activity.

Similarly the piling of new foundations can be very noisy and may have similar impacts that cannot be acoustically controlled. We have been informed that bored piers will be used which are preferable acoustically to driven piles.

### 8.3 Relocation and/or façade upgrades for critical receivers

There are a small number of buildings that are close to the construction activities that will be subject to noise levels that cannot be accommodated with current building constructions.

The George Heath, Damien Parer and Gary Hansen Buildings (Fox Studios building numbers 20, 21 and 22 respectively) directly adjoin the proposed grandstand. Construction noise levels to these buildings (which are currently offices) will be high and very difficult to attenuate. SCSGT has committed to the relocation of the tenants of these buildings for the duration of the construction works.

Elsa Chauvel House (Fox Studios building number 11) is adjacent the truck access route to site and was observed on at least one site visit as having open windows. Calculations of likely noise impacts are shown on Table 5. Clearly this building is impacted by noise mainly due to the movement of trucks past the building. We note that noise levels currently experienced on site due to aircraft flyovers are above the preferred criteria for noise sensitive areas (such as for teaching and video production). It is recommended that consultation be entered into with the Building 11 management so that the noise impact to the occupants is minimised.

### 8.4 Truck access routes and noise shielding

We note that generally the trucks access routes have been arranged so that most truck access is via Driver Avenue (near Gate D) and will be on the SCG land (for construction Option 3A). This restricts the truck noise impacts to a small number of buildings on the Fox site. The masonry wall located on the SCG/Fox boundary will provide a significant degree of acoustic shielding.



### 8.5 Critical equipment selection, certification and noise controls

Critical plant must be selected for low noise levels. Some general strategies for equipment noise control are listed below and can be refined once the site-specific information is known.

- All trucks accessing the site must be certified to a maximum noise level.
- Generators to site are to be certified to a maximum noise output.
- Regular checks are to be carried out on equipment certifying noise levels on a two-monthly basis. New equipment for the site with the potential to increase noise levels must be reviewed and authorised by an acoustic consultant before use.
- The allowable sound pressure levels and the noise measurement procedures for certification of all equipment will be detailed in the Noise and Vibration Management Plan.
- Equipment (particularly stationary equipment such as generators) is to be located to maximise distance and acoustic shielding to critical receiver locations.
- Enclosures or barriers may need to be installed for critical stationary plant.
- The tower crane and mobile cranes are to be selected and attenuated to provide best practice noise emissions. Emissions should be limited to a sound power level of 106dB(A).
- Possibility of concrete 'splitting' and 'crushing' on site to be strongly considered to minimise noise impact from demolition of slabs. Where possible, precast elements to be removed and crushed offsite.

### 8.6 Community Consultation and Complaints Handling

Ongoing community consultation with affected stakeholders will be critical throughout the demolition and construction process. Prior to the commencement of works a community consultation program as well as a set of complaints handling procedures will be developed for incorporation into the Noise and Vibration Management Plan. The adoption of the community consultation program will allow noise concerns to be positively addressed before becoming problematic.

Part of this consultation will need to be the adoption of procedures for liaison with Fox Studios so that work may be organised to allow for 'quiet' periods for outdoor shooting etc.

### 8.7 Construction Noise and Vibration Monitoring

In light of the site's close proximity to critical receiver locations, one of the most critical components in avoiding problems for adjacent sites is the monitoring of noise from the site. To this end a real-time noise monitoring station will be positioned at a critical location adjacent the site. The station will not only record and store statistical noise levels every 15 minutes but more importantly will trigger an alarm/warning circuit in a remote monitoring room on the site. Once the alarm is triggered the operators on site will be able to listen to the sound from the monitoring location in real time in order to determine firstly if the noise is from the site and secondly identify what the source of the noise is. With this information immediate action can then be taken to address the problem. The system will therefore have the potential to identify and rectify problems even before adjacent land users notice them or complain.

It is recommended that the monitoring station be located on an adjacent building within the Fox Studios Complex, such as Building 61 or Sound Stage 1. Additional real-time monitoring locations may be included if required subject to consultation with Fox Studios and the Entertainment Quarter.



In terms of vibration, a change to the slow release explosives to break up the tower bases, the use of rotary boring for the piles (rather than driven piles) and cutting down on the size and use of rock picks, the vibration levels likely to be transmitted to the sound stages will be significantly reduced. Vibration monitoring will be carried out during the demolition and construction to identify any problems. The position of this monitoring will be determined in consultation with Fox Studios.



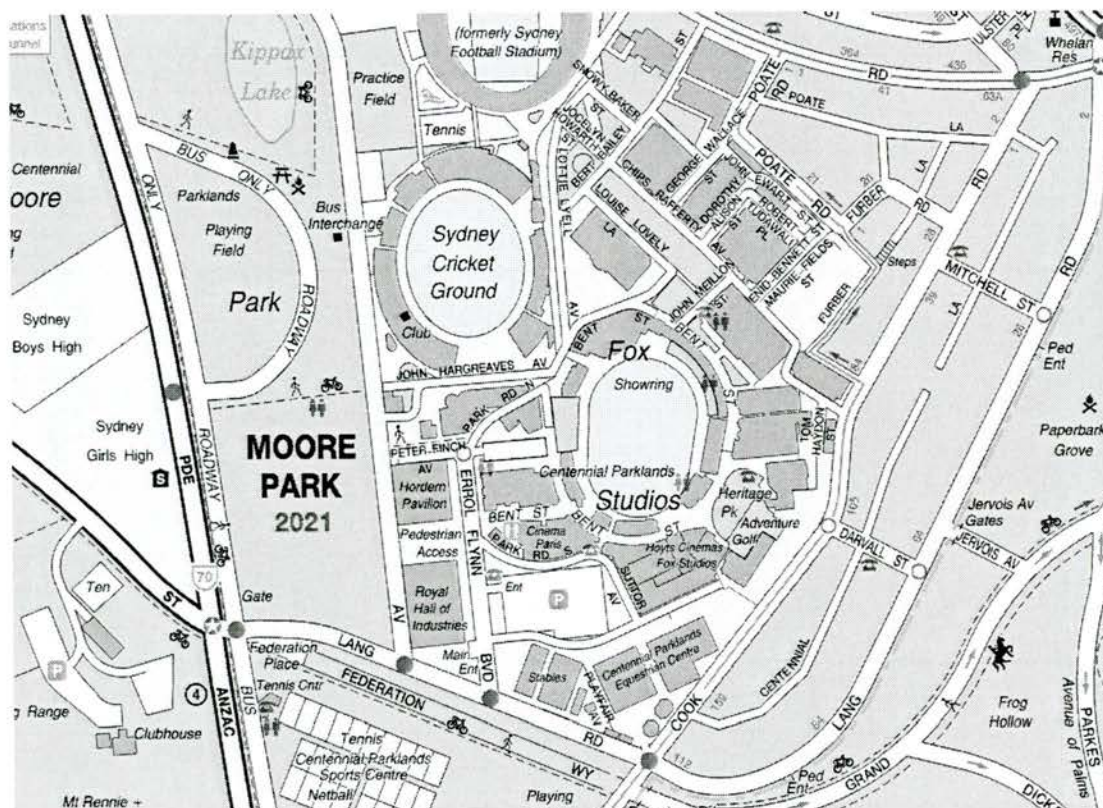






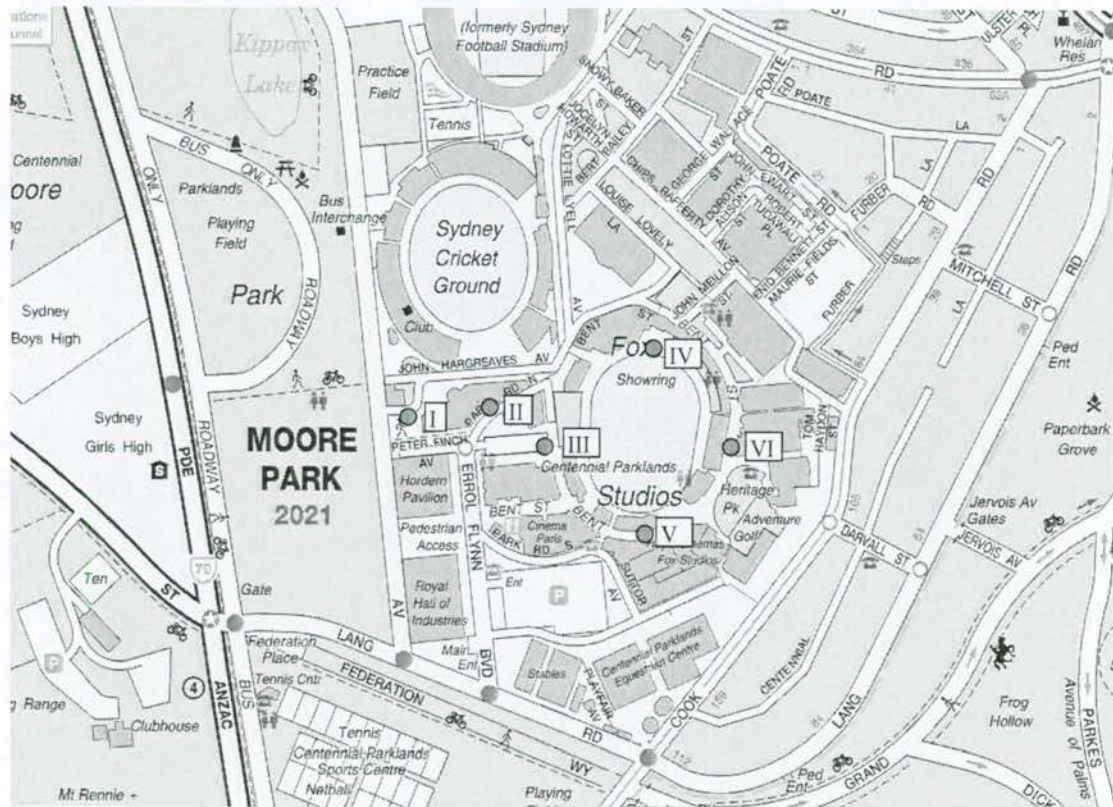


## 10 APPENDIX B: SITE LOCATION

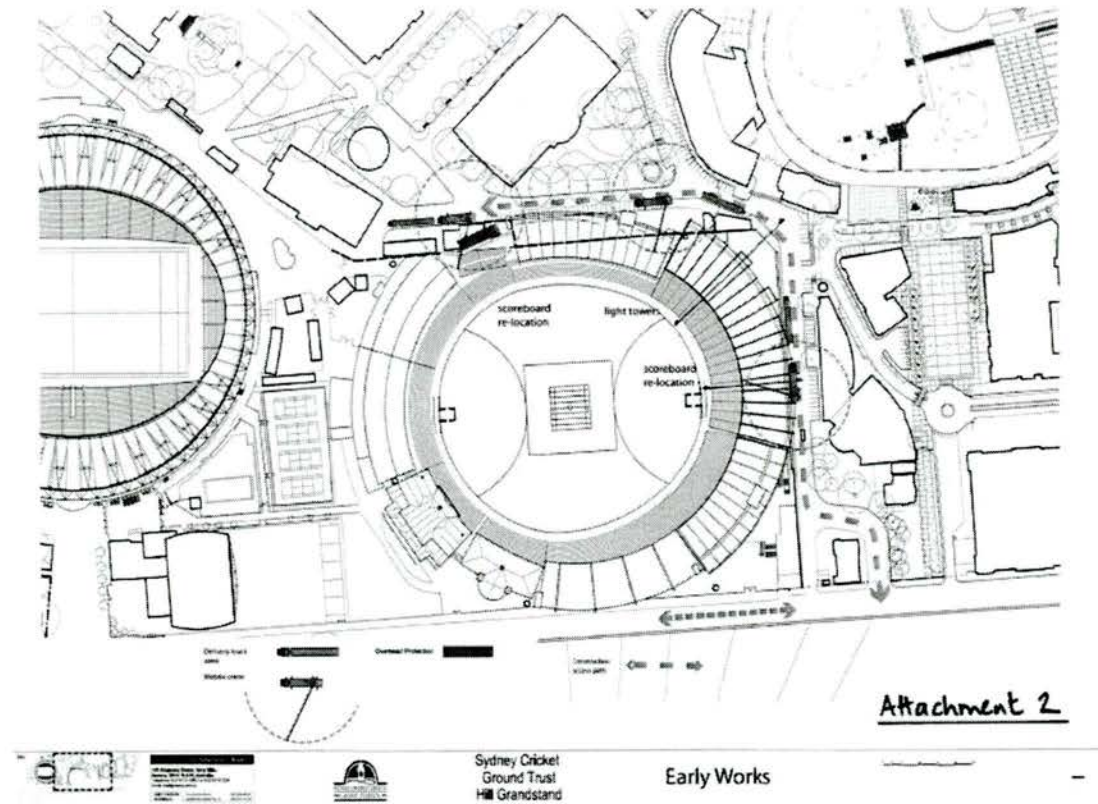




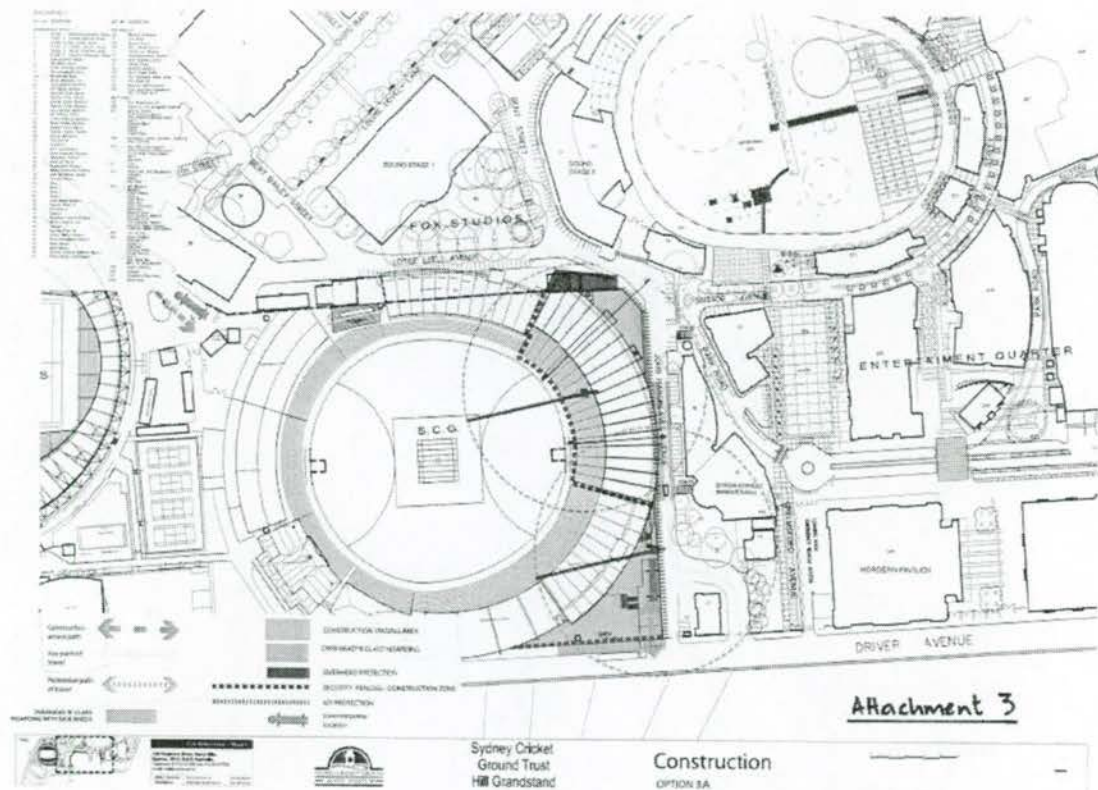
## 11 APPENDIX C: MEASUREMENT LOCATIONS



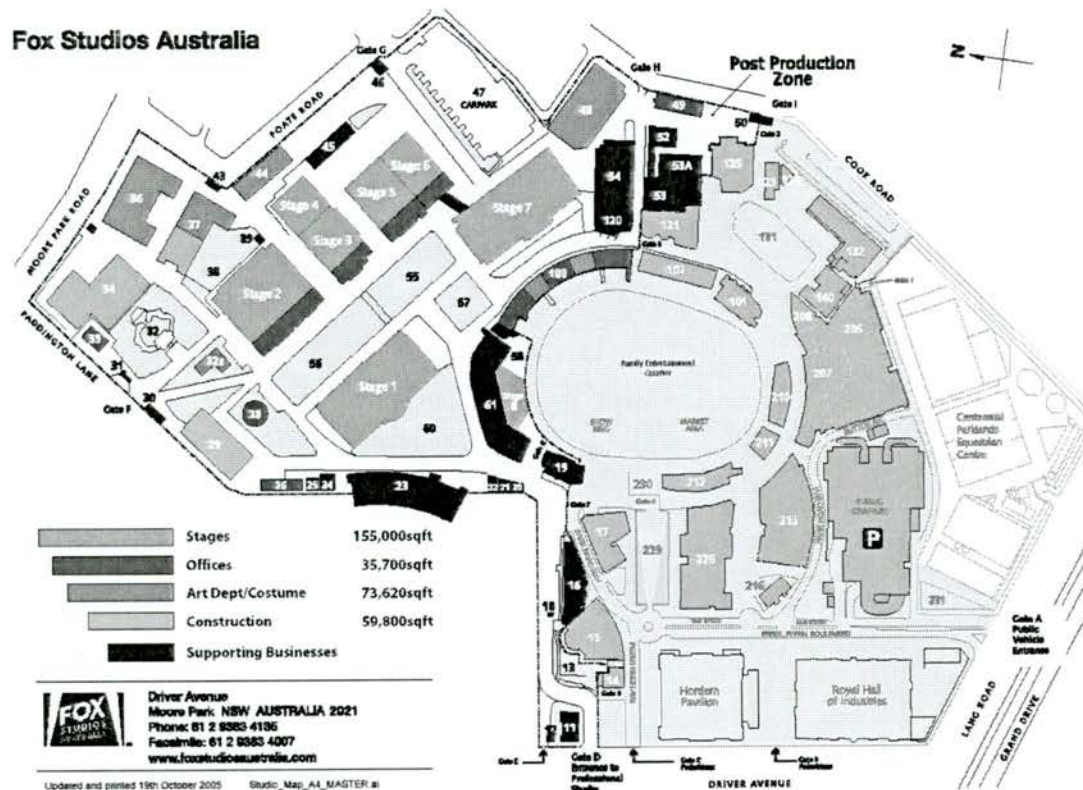
## 12 APPENDIX D: CONSTRUCTION PLANS







# 13 APPENDIX E: FOX STUDIOS BUILDING LAYOUT





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# **PKA ACOUSTIC CONSULTING**

BUILDING ACOUSTICS

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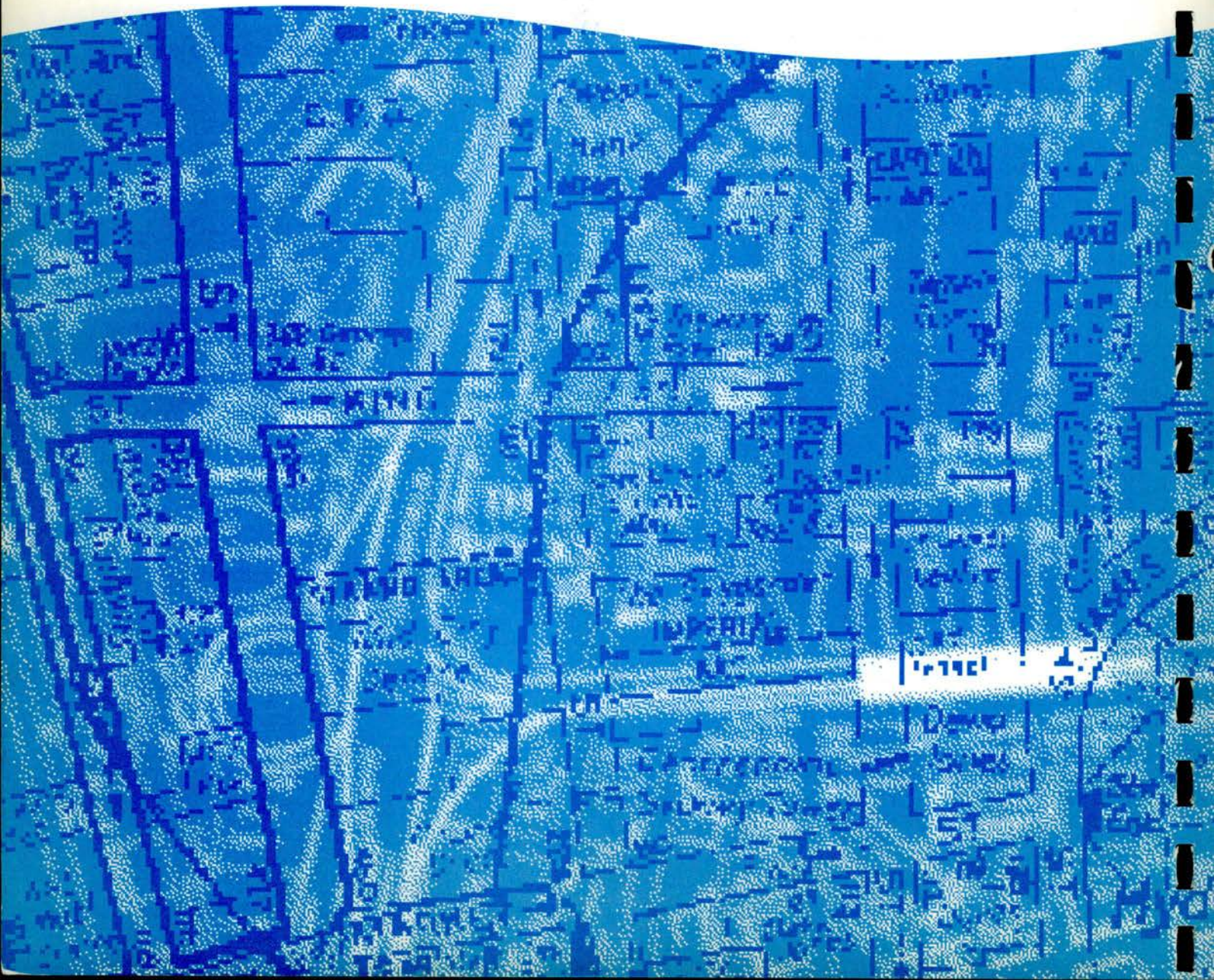
LEGAL ACOUSTICS

PO BOX 345, LANE COVE, NSW, 1595 SUITE 16 401 PACIFIC HIGHWAY ARTARMON 2064  
Tel 612 9460 6824 Fax 612 9460 6823 admin@pka.com.au



**B B C**

CONSULTING PLANNERS



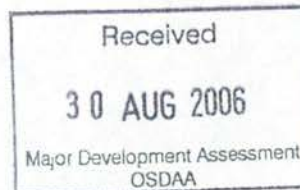


**APPENDIX D. RESPONSE TO SUBMISSIONS** *see Appendix B.*

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## **APPENDIX E. COPIES OF SUBMISSIONS FROM PUBLIC AUTHORITIES**



Major Development Assessment  
Department of Planning  
GPO Box 39  
Sydney NSW 2001

**Attention: Stephanie Ballango**

**PROPOSED CONSTRUCTION OF A REPLACEMENT GRANDSTAND AND  
SEATING AT SYDNEY CRICKET GROUND, MOORE PARK  
(MAJOR PROJECT 06\_0136)**

Dear Stephanie,

I refer to your letter of 14 August 2006 with regard to the above-mentioned Part 3A development application (your reference: 9042785), which was referred to the Roads and Traffic Authority (RTA) for comment.

The RTA has reviewed the development application and provides the following advisory comments to the Department of Planning for consideration in the determination of the development application:

1. A detailed 'Construction Traffic Management Plan' (TMP) should be prepared and submitted to Council for approval. This TMP should investigate and implement appropriate measures to minimise construction traffic on the local road network as well as ensure that pedestrian safety is not compromised.

Construction activity should not take place during events at the SCG and preferably not during events at the adjacent football stadium.

2. All service vehicle deliveries and pick ups are to occur outside of events and well before/after the SCG is opened to the public.
3. A detailed 'Traffic Management Plan' for the 6% increase in seating at the SCG should be undertaken to investigate and implement appropriate measures to accommodate the additional pedestrian activity and traffic as a result of the proposed development.





Any inquiries in relation to this matter can be directed to the undersigned on telephone 8814 2553 or facsimile 8814 2107.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'A. Gavazzi'.

Adriana Gavazzi  
Traffic and Development Assessment Manager  
Operations and Services Directorate

25 August 2006

**City of Sydney**

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RECEIVED  
15 SEP 2006

13 September 2006

Gordon Kirkby  
Director, Strategic Assessments  
Department of Planning  
23-33 Bridge Street  
SYDNEY NSW 2000

Dear Mr Kirkby

**CONSTRUCTION OF A REPLACEMENT GRANDSTAND AND SEATING AT THE SYDNEY CRICKET GROUND, MOORE PARK – ENVIRONMENTAL ASSESSMENT EXHIBITION**

I refer to your letter of 14 August 2006 regarding the above. We have reviewed the Environmental Assessment Report for the proposal and have a number of comments.

The Robertson and Marks scoreboard building has been a feature in the SCG for almost a century. Whilst its visual presence in the SCG has been compromised by the Doug Walters Stand this has not diminished either the significant heritage value of the building nor the opportunity to conserve it.

The Heritage Impact Statement (HIS) suggests the salvaging of minor elements from the scoreboard building (such as the scoring mechanism), however does not examine all options for conservation of the building itself. Detailed investigation should be undertaken into the feasibility of reconstruction or replication of the scoreboard building within a publicly accessible part of the site (such as the south west corner of the site facing Driver Avenue).

Thank you for the opportunity to provide input to this proposal. Should you require further information on this letter please contact me on 9265 9403 or at [jswan@cityofsydney.nsw.gov.au](mailto:jswan@cityofsydney.nsw.gov.au).

Yours faithfully

  
**JEREMY SWAN**  
Area Planning Manager

*city of villages*





Department of  
Environment and Conservation (NSW)

Your reference :  
Our reference : SRF15926  
Contact : Greg Abood (02) 9995 6829

RECEIVED  
19 SEP 2006

Ms Stephanie Ballango  
Office of Sustainable Development Assessment and Approval  
Department of Planning  
23-33 Bridge Street  
Sydney NSW 2000

Dear Ms Ballango,

**RE: Construction of a Replacement Grandstand and Seating at the Sydney Cricket Ground, Moore Park – Major Project MP 06\_0136**

I refer to the Project Application, Environmental Assessment, and accompanying information provided for the Construction of a Replacement Grandstand and Seating at the Sydney Cricket Ground, Moore Park received by DEC on 25 August 2006.

The Department of Environment and Conservation (DEC) has an ongoing role as appropriate regulatory authority for the activities at the SCG and therefore has an interest in the environmental impact of any changes at the site. The DEC receives regular complaints from neighbouring communities about noise from events at the SCG and recommends that noise matters in particular are managed using best practice techniques and technologies and appropriate monitoring and community consultation be implemented.

DEC has reviewed the information provided and has determined that it is able to support the proposal subject to the Department of Planning (DoP) seeking the amendments to the draft Statement of Commitments, identified in Attachment 1. Attachment 2 contains DEC's assessment of the proposal, including justification for the amendments.

It is expected that DEC will be given an opportunity to review the draft Director-General's Environmental Assessment Report for this proposal. If the amendments to the draft Statement of Commitments are not included to the satisfaction of DEC, we will be recommending that they are included in Conditions of Approval, if approval is recommended by the Department of Planning. It should be noted that these amendments are important for DEC's ongoing support of the proposal.

In assessing the proposal DEC has also identified a number of broader environmental and conservation issues that the DoP may wish to consider in its overall assessment of the application. These issues are discussed in Attachment 3 and include:

1. Development of stormwater segregation and reuse onsite for reuse onsite; and
2. Development of a comprehensive Waste Avoidance, Recycling and Reuse Strategy.

DEC would also appreciate receiving a copy of the submissions received by the DDoP (or a report summarising these submissions) received in response to the exhibition of the Environmental Assessment. This is to assist DEC to review of the draft Director-General's Report and to provide comment as conditions of approval, if required.

If you have any questions, or wish to discuss this matter further please contact me on (02) 9995 6851.

Yours sincerely

*G. Howard 15/9/06*

**Giselle Howard**  
**Manager Metropolitan Projects and Support**  
**Environment Protection and Regulation Division**



## **ATTACHMENT 1**

### **1. Noise and Vibration Impacts and Management**

- The DEC recommends the proponent commit to include detailed community consultation and complaints handling and management program, and a detailed noise monitoring, evaluation and mitigation program in Construction Noise and Vibration Management Plan (CNVMP).
- The DEC recommends that the proponent commit to a proposal that is consistent with prevention notice 1003904, that is currently in effect for activities undertaken at the premises. The DEC also recommends the proponent commit to cross referencing the proposed development with the ongoing development and implementation of the operational noise management plan for the Sydney Cricket Ground (SCG) and Sports Ground Trust area of operation.

### **2. Stormwater Management**

- The DEC recommends that the proponent commit to develop and implement a full Stormwater Management Plan (SWMP) prior to the commencement of any demolition, excavation and construction activities.
- The DEC recommends that any changes to the hours of operation be only considered if necessary and be completely justified by further acoustic analysis of specific noise producing works along with all necessary feasible and reasonable mitigation measures.
- The DEC also recommends that the proponent provide a statement of commitment that the proposed activities will comply with section 120 of the Protection of the Environment Operations Act 1997 at all times.

### **3. Dust Management**

- The DEC recommends the proponent commit to minimise the generation of dust at the premises at all times.
- The DEC also recommends that the proponent commit to provide further details relating to the generation of dust including but not limited to identifying all operations and activities that have potential to generate dust; provide an environmental risk assessment for each operation or activity; and provide details of the operation specific mitigation measures proposed to minimise the generation of dust. Further the DEC recommends that the proponent be required to propose a monitoring program that ensures that dust is minimised at the premises at all times and tracks the performance of dust mitigation measures.

### **4. Waste and Wastewater management**

- The DEC recommends that the proponent commit to provide more information in relation to wastewater generation, its risk and the proposed mode of disposal.
- The DEC recommends that the proponent commit to compliance with section 120 of the Protection of the Environment Operations Act 1997 at all times during the demolition, excavation and construction phase of the activity in relation to wastewater that is generated, stored and handled at the premises.



## **ATTACHMENT 2**

### **1. Noise and Vibration Impacts and Management**

#### **Draft Statement of Commitment**

The DEC considers that it is important for the proponent to be transparent in relation to the hours of operation and any operation outside of the hours.

In Section 8.4 under "General" the report specifies "*G. Construction activities (including demolition and excavation but not early earth works) will only occur between 7am and 6:00pm Monday to Friday and between 8am and 2:00pm Saturdays, unless further acoustic analysis of specific noise producing works has been carried out and endorsed by a qualified acoustic engineer.*"

- *The DEC recommends that any changes to the hours of operation be only considered if necessary and be completely justified by further acoustic analysis of specific noise producing works along with all necessary feasible and reasonable mitigation measures.*

The DEC considers that the information provided in the environmental assessment section of the report in relation to the community consultation, complaints handling and monitoring noise levels to determine the effectiveness of mitigation to be inadequate.

- *The DEC recommends that the proponent commit to further develop community consultation programs and complaints handling procedures in the Noise and Vibration Management Plan prior to any early works, construction, excavation and demolition activities.*

Specifically in the following areas, DEC has noted that a detailed community consultation has not been addressed and strongly recommends it be addressed further.

- (i) In Section 8.4.2 under "Demolition management" the report does not specify a commitment to robust community consultation. The commitment is limited to "*There will be close consultation with all stakeholders during the demolition phase to inform them of timing of any demolition works which may impact on their operations and amenity.*"
- (ii) In Section 8.4.5 under "Excavation management" the report does not specify a commitment to noise mitigation. The DEC endorses a commitment that only bored piers be permitted during all excavation activities and that all other recommendations of the Acoustic Reports are implemented for all excavation activities.
- (iii) In section 8.4.6 under "Construction management" the report specifies "*C. Noise mitigation measures contained in the Acoustic Report in Appendix 17 will be implemented.*" The DEC endorses a commitment to implementation of the noise mitigation measures as specified.

### **2. Stormwater Management**

The DEC does not consider the information provided is adequate in relation to the stormwater pollution, associated environment risk and measures designed to mitigate against water pollution.

For example, section 7 titled "Environmental Assessment" provides only a brief account of mitigation measures to control pollution in stormwater run off. The potential impacts and associated risks the development will have on stormwater needs to be properly assessed and mitigated to prevent pollution.



- *The DEC recommends that the proponent commit to compliance with section 120 of the Protection of the Environment Operations Act 1997 at all times during the demolition, excavation and construction phase of the activity.*

Information should be provided on a proposed program to monitor the effectiveness of the chosen controls, as well as their performance over time, and commit to a program that will adequately maintain controls to ensure compliance with relevant environmental criteria at all times.

Section 8.4 titled "*Draft statement of Commitments*" specifies under "*General C.*" the commitment for the "*installation of silt sock barriers and filter fabric in stormwater runoff pits and gutters*".

The DEC considers that an "Erosion and Sediment Control Plan" is required generally for smaller sites, typically involving the disturbance of less than 2,500 square metres while for large scale developments (greater than 2,500 square metres disturbed area) a "Soil and Water Management Plan" (SWMP) is required. The report submitted does not indicate a commitment to develop and implement either plan to protect waters.

- *The DEC recommends that the proponent commit develop and implement a full SWMP prior to the commencement of any demolition, excavation and construction activities.*

### **3. Dust Management**

The DEC considers that the information provided in relation to dust generation, associated environment risk and dust mitigation was inadequate.

Section 7 fails to identify potential sources of dust on the site, the activities associated with these sources, a risk analysis based on each source or activity and a mitigation measures correlated to each identified source and/or activity.

The report provides details of mitigation to dust generated from demolition and construction works in the summary table at the end of the section but does not provide details on when and how these measures are to be applied, for example the "hosing down of vehicle access routes" may be through the use of a hand held device or a mobile water cart.

- *The DEC recommends the proponent commit to minimise the generation of dust at the premises at all times. The DEC also recommends that the proponent commit to provide details relating to the generation of dust including but not limited to identifying all operations and activities that have potential to generate dust, provide an environmental risk assessment for each operation or activity and provide details of the operation specific mitigation measures proposed to minimise the generation of dust. Further the DEC recommends that the proponent commit to propose a monitoring program that ensure that dust is minimised at the premises at all times and tracks the performance of dust mitigation measures.*

### **4. Wastewater Management**

#### ***Wastewater***

The DEC considers that the information provided fails to provide details on the environmental impacts and risks associated with the generation of wastewater at the premises. The report fails to identify the source of each operation or activity that generates wastewater and an associated risk analysis. Further the report fails to provide details on the method of disposal.

- *The DEC recommends that the proponent commit to provide a risk assessment on wastewater and commit to a specific mode of disposal.*

- *The DEC recommends that the proponent commit to compliance with section 120 of the Protection of the Environment Operations Act 1997 at all times during the demolition, excavation and construction phase of the activity in relation to wastewater that is generated, stored and handled at the premises.*



### **ATTACHMENT 3**

#### **1. Stormwater Segregation and Reuse**

The DEC considers that this proposal has significantly greater potential to increase its utilisation of natural resources such as rainwater harvesting and reuse.

The report does not specify the segregation of stormwater drainage, for example segregation of loads generated from the roof and from hardstand surface that may contain pollutants including gross pollutants.

- *The DEC considers that the use of rainwater tanks onsite to be a more efficient way of harvesting the resource rather than allowing rainwater to mix with potentially polluted stormwater and discharge to the artesian basin via surface waters in Centennial Park. It also has a reduced water loss rate through evapotranspiration.*

#### **2. Waste Avoidance, Recycling and Reuse Strategy**

The DEC considers that this proposal has greater potential to increase the avoidance of waste generated at the site during operations at the SCG.

The report contains details to a draft Waste Management Strategy in Appendix 18 and has suggested that the strategy is to be further developed with input from key stakeholders (e.g. caterers, operations staff, hirers, etc). The draft strategy does not specify any waste avoidance initiatives for the proposed development. The DEC considers that waste avoidance is a crucial element of any waste management strategy and recommends that further consideration be given to waste avoidance during consultation with key stakeholders.

*For more information on Waste Avoidance, Recycling and Reuse Strategies, please visit the DEC web on <http://www.environment.nsw.gov.au/education/recyclingandwaste.htm>.*

Contact: Rajeev Maini  
Telephone: 02 9873 8592  
Rajeev.maini@heritage.nsw.gov.au  
File: S94/01096/008  
Our Ref: HRL41531  
Your Ref: 9042785

Mr Gordon Kirkby  
Director  
Strategic Assessments  
Department of Planning  
GPO Box 39  
SYDNEY 2001

RECEIVED

20 SEP 2006

Dear Mr Kirkby

**MAJOR PROJECT MP 06\_0136 - ENVIRONMENTAL ASSESSMENT EXHIBITION  
CONSTRUCTION OF A REPLACEMENT GRANDSTAND AND SEATING AT THE SYDNEY  
CRICKET GROUND, MOORE PARK  
Attention: Stephanie Ballango**

Thank you for your letter of 14 August 2006 referring the subject Major Project application to the Heritage Office under section 75F(4) of the EP&A Act.

The application is for approval of a major project as described in clause 5 of Schedule 2 to State Environmental Planning Policy (Major Projects) 2005 relating to Sydney Cricket Ground. It is noted that the site is listed on the State Heritage Register. However, the Heritage Council is not a consent authority as the proposed project is an "approved project" for the purposes of Part 3A of the EP&A Act, it therefore suspends the requirement for an approval under the Heritage Act. The opportunity to comment on the environmental assessment for the project is appreciated.

It is noted that section 8.0 of the Heritage Impact Statement prepared by Godden Mackay Logan identifies the following impacts resulting from the proposed development:

- o Demolition of the Robertson and Marks scoreboard;
- o Removal of the open and informal character of the Hill area and replacement by a large new stand;
- o The loss of some already compromised historic views from within the SCG to structures within the Fox Studios site;
- o Creation of new penetrations in the heritage wall on the former Presidents Avenue;
- o Increase in the bulk and scale of development adjacent to the heritage items in Fox Studios;
- o Disturbance or destruction of potential archaeological relics (albeit of limited significance).

Although it is preferable that these adverse impacts did not occur, it is noted that the recommendations listed under section 8.3 of the Heritage Impact Statement will reduce the impacts to some extent. It is considered that these recommendations be incorporated within the conditions of any approval for this project ensuring they are implemented prior to the occupation of the completed works.



If you have further query in this regard please contact Rajeev Maini on 98738592 or [Rajeev.maini@heritage.nsw.gov.au](mailto:Rajeev.maini@heritage.nsw.gov.au).

Yours sincerely



**Susan Macdonald**

Director

Policy & Heritage Management

Heritage Office

Department of Planning

18.09.08

15 September, 2006

The Director  
Strategic Assessments – SCG  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

RECEIVED  
21 SEP 2006

Attention: Stephanie Ballango

Dear Sir / Madam,

**Re: Major Project: Construction of Replacement Grandstand and Seating at the Sydney Cricket Ground, Moore Park ( MP 06\_0136 )**

I refer to the proposed major project above, currently on public exhibition. As an adjacent landowner, the Centennial Park and Moore Park Trust (CPMPT) has a strong interest in any development of the SCG lands and appreciates the opportunity to comment on this proposal.

Before commenting specifically on the proposal I would like to highlight two points.

Firstly, this submission will be lodged by the deadline of today, Friday 15 September 2006. However, because of the scale and complexity of the project, the fact that some aspects are still changing and the limited opportunity to undertake a thorough assessment in the time available, the Trust has sought some specialist advice which is still to be finalised. This will not be available till early next week. We seek therefore your acceptance of receiving some additional information from us by Tuesday 19 September 2006. Please advise if there is any problem with this.

The second point relates to the encroachment of the proposed development on CPMPT land. As you would be aware, the Trust owns land adjoining the SCG to the south and east. CPMPT has leased this land to Fox Studios on a long term basis. The Trust also owns other land in the immediate area, some of which, namely the Entertainment Quarter, is leased to Colonial First State Property Management, and some of which, namely the Horden Pavilion and the Royal Hall of Industries is managed by Playbill Venue Management.

The proposed development will encroach on the Trust's adjoining land that is leased to Fox Studios. Seating in two places and part of the roof structure will overhang the title boundary.

The Sydney Cricket and Sports Ground Trust (SCSGT) has sought the consent of the CPMPT for these encroachments and the Minister for Tourism, Sport and Recreation has issued a landowner's consent for this on behalf of the Trust, subject to the following conditions:

1. Fox as lessee of the affected land also consents to the encroachments on terms not adverse to the interests of the CPMPT.
2. An easement for the overhang is registered on the CPMPT's land, promptly after completion of the proposed development.



3. A right of carriageway is registered over the site of the existing road on the south east corner of the SCSGT's title to a height of 10 metres in favour of CPMPT promptly after receipt of planning approval of the proposed development and that the road be kept open and not interfered with until the right of carriageway is registered.
4. SCSGT, CPMPT, Fox, Playbill and Colonial continue their discussions on the proposed pedestrian link from the proposed development to the Entertainment Quarter.
5. No advertising will be attached to the encroachments which would be visible from outside the SCG.

The Minister emphasised that, should the plans be amended, the consent would no longer apply. The CPMPT is particularly interested in any changes to the roof design, the extent of the encroachments and access onto CPMPT land. It was also emphasised that the consent was not an approval for any encroachment by the proposed scoreboard relocation further to the north of the ground or for any construction impacts on Fox, Playbill, Colonial or the CPMPT.

#### **Specific comments on the proposed development**

CPMPT acknowledges the relatively poor condition of the Hill area in the SCG and the need for replacing the existing facilities with improvements. We do not object to the proposed development in principle but have a number of issues with the design and the development process which need to be addressed before it can receive the Trust's endorsement. As noted above we will provide more information early next week on these issues but list them here briefly for your immediate consideration.

1. Quality of plans and accompanying reports – There would appear to be some inconsistencies in the plans and photomontages particularly in relation to the roof form and projection of roof elements over the Fox Studio site. We have been advised that the the design of the roof form is still being developed. We believe that, at the very least, the roof edge should not extend beyond its current alignment. There is no reference in the plans and reports to any engineering details in relation to the proposed structure and a wind test report is still unavailable. No information is provided about the relocated scoreboard and what impacts this may impose. It is not clear from the plans where and how waste collection will be undertaken and where building plant will be located. These could potentially impose significant impacts on Fox Studios and its tenants. These inconsistencies and omissions need to be addressed to enable a thorough assessment.
2. Solar access and shadow projections – The shadow impacts on the northern facades of buildings 16 and 19 immediately to the south and south east of the site respectively are not entirely clear. Assessment would be assisted by some elevation shadow diagrams. The design of the structure should as far as possible seek to mitigate these impacts.
3. Building bulk, scale and materials / visual impact – While it is acknowledged that any new grandstand that fills the gap between the O'Reilly and Churchill Stands of a similar scale



to these will be highly visible. These impacts should be mitigated as far as possible. Additional photomontages, one looking east from the security booth in John Hargreaves Avenue and the other looking west from the Stanley Crick House, would be helpful as would a detailed finishes schedule and an elevation of the Driver Avenue entrance in properly assessing visual impact.

4. Heritage impacts – Would appear to be minimal and, where evident, could probably be mitigated by implementing the range of measures that have been incorporated in the draft Statement of Commitments. Main impacts would be on the Creeping Fig along the boundary wall and a significant tree a little further to the south. These could be mitigated if the measures recommended in the Arborists report are implemented. It would be desirable therefore if these were also included in the Statement of Commitments.
5. Management plan for emergency egress – No information is provided on this although it has the potential to impose a significant impact on the Fox Studios as people would be discharged directly from the grandstand onto Fox land.
6. Demolition, excavation and construction impacts – Would be considerable. The construction plan it seems is yet to be finalised. There is a range of issues that need to be addressed. These include noise levels and how they will be monitored, the safety and presentation of the hoardings and the potential conflict between demolition and construction activities, particularly vehicle movement, and the operation of the Fox Studios. There should be a designated contact person and some consultative mechanism established to resolve issues as they arise. The amount of construction traffic would appear to be underestimated and the demolition / construction program has inadequate detail to provide a thorough assessment.

The above is a summary of issues as we see them at the moment. As indicated above, however, we would like the opportunity to expand on this with a further submission next week.

Should you require any further information regarding this matter, please contact our Coordinator of Planning, Geoff Reinhard, on telephone (02) 9339 6651 or via email to [geoff.reinhard@cp.nsw.gov.au](mailto:geoff.reinhard@cp.nsw.gov.au)

Sincerely,



Amanda Bock  
*Director Strategic Planning & Projects*





## MINISTRY OF TRANSPORT

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TP06/01901

Mr Gordon Kirkby  
Director - Strategic Assessments  
Department of Planning  
GPO Box 39  
Sydney NSW 2001

19/09/2006

Dear Mr Kirkby

### **SYDNEY CRICKET GROUND Project Application (PA No. 06\_0136) – Response to Exhibition**

I refer to the exhibition documents provided on the DoP's website and note that the proposal includes a seating increase in the grandstand of 2,739 seats.

The Ministry of Transport's primary focus is on the provision of efficient public transport services. It is anticipated that given the current bus mode share, the additional public transport requirement generated by the proposal can be catered for with existing bus capacity.

However, if and when integrated event ticketing is introduced, the bus mode share can be expected to rise substantially. This would require additional capacity at the Bus Station, there will be additional pedestrian movements across Driver Avenue, and traffic impacts on roads including Anzac Parade.

The proposed increase in bus patronage growth has implications for Strategic Bus Corridor No. 20 (Maroubra Junction – City) which follows Anzac Parade. The Ministry of Transport targets an average speed of 25 kph on Strategic Bus Corridors, and is working with the RTA to implement appropriate bus priority measures. Service reliability is further impacted by the increases in population and housing resulting from the draft City to the Airport Corridor Strategy and the draft East Sub-regional Strategy.

The Ministry would request that it is kept apprised of any developments in the area that could potentially impact on bus servicing.

If you would like to discuss this further, please contact the Senior Policy Officer, Transport Planning, Catherine Barlow, on 9268 2833 or email [catherine.barlow@transport.nsw.gov.au](mailto:catherine.barlow@transport.nsw.gov.au)

Yours sincerely

Lyall Kennedy  
Director Transport Planning