

City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7910-0261-00

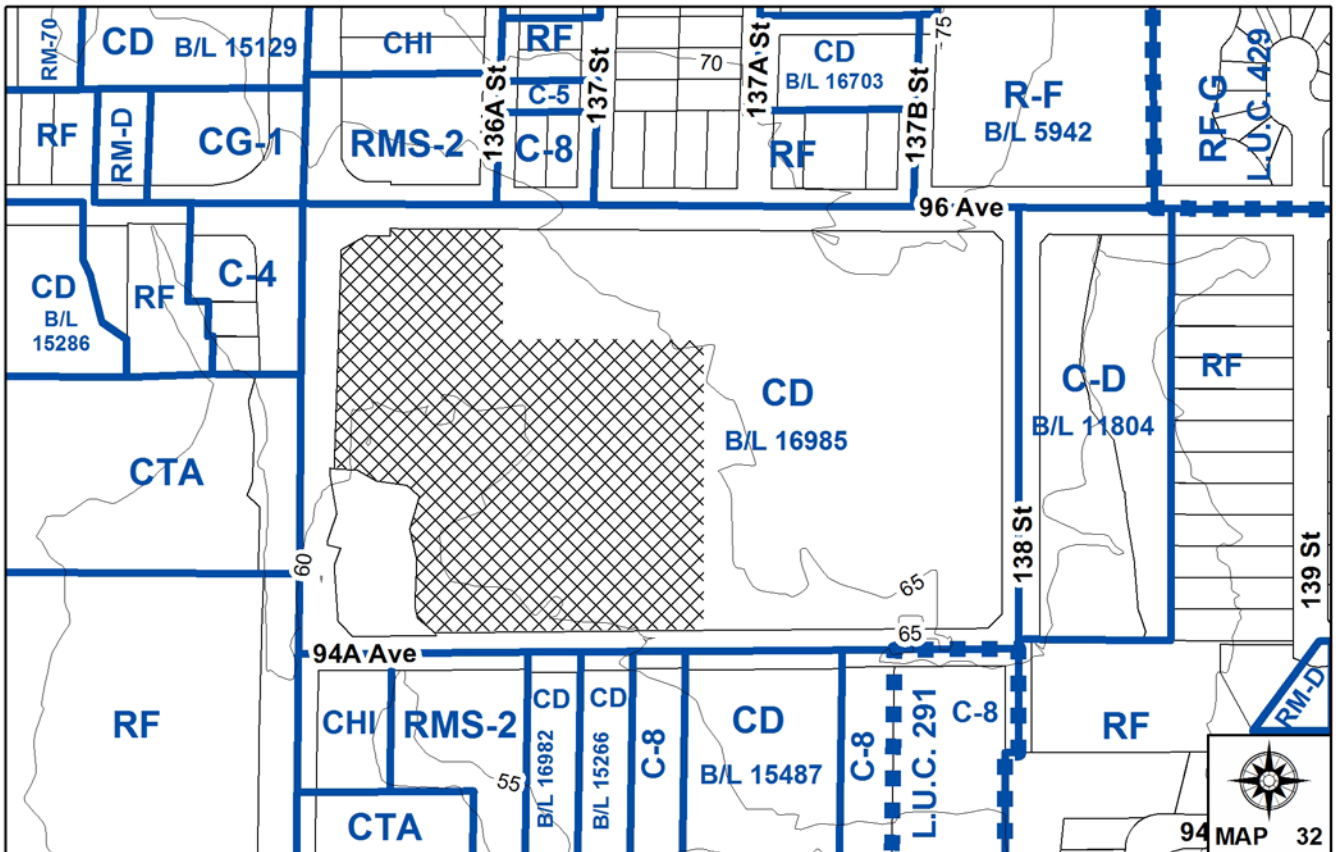
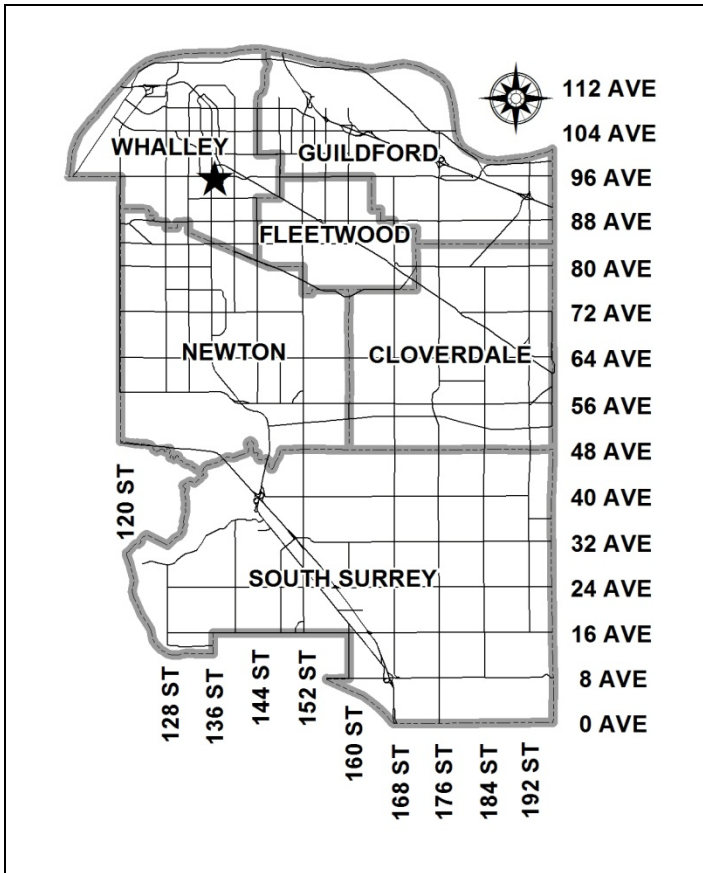
Planning Report Date: December 13, 2010

**PROPOSAL:**

- **Development Permit**

in order to allow a major expansion to Surrey Memorial Hospital

**LOCATION:** Portion of 13750 – 96 Avenue  
**OWNER:** Fraser Health Authority  
**ZONING:** CD (By-law No. 16985)  
**OCP DESIGNATION:** City Centre



RECOMMENDATION SUMMARY

- Execution of Development Permit.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the Surrey City Centre Land Use and Density Concept Plan.
- Facilitates a major expansion of Surrey Memorial Hospital including a new emergency ward as well as additional patient beds in a new critical care tower, plus teaching facilities associated with U.B.C. School of Medicine.

RECOMMENDATION

The Planning & Development Department recommends that the Mayor and Clerk be authorized to execute Development Permit No. 7910-0261-00.

**Note:** If the Development Permit as presented, is not acceptable to Council in relation to the character of the development, including landscaping and siting, form, exterior design and finish of the building and other structures, Council may refer the Development Permit application back to staff with direction regarding any of these matters.

SITE CHARACTERISTICS

Existing Land Use: Surrey Memorial Hospital.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across 96 Avenue):	Medical facility, medical clinic, temporary parking lots, single family dwellings.	Commercial	RMS-2, C-8 and RF
East (Across 138 Street):	Vacant lot.	Commercial	CD (By-law No. 11804)
South (Across 94A Avenue):	Variety of medically-related office buildings and medical support related facilities. Recently approved Creekside (sobering centre) facility.	Commercial	RMS-2, RA, CD (By-law No. 15266), C-8, CD (By-law No. 15487) and LUC No. 291
West (Across King George Boulevard):	Tim Hortons, mobile home park and Queen Elizabeth Secondary School.	Urban	C-4, CTA and RF

DEVELOPMENT CONSIDERATIONSBackground

- On June 4, 2009, the Fraser Height Authority (FHA) applied to redesignate the Surrey Memorial Hospital (SMH) site from Urban to City Centre and to rezone the subject site from Comprehensive Development (CD) Zone (By-law No. 12536) to a new CD Zone.
- The requested redesignation and rezoning was in response by an announcement from the Provincial Government, in early 2009, of a long-term, phased redevelopment of SMH in Surrey City Centre. Redesignation and rezoning of the subject site was required in order to accommodate the uses and densities envisioned under the long-term redevelopment plan.

- As part of the rezoning process, a master plan was established for the SMH site, along with a set of general urban design principles and guidelines that were intended to guide the various phases of the redevelopment of the SMH campus.
- On November 30, 2009, Council gave final reading to By-law No. 16984 redesignating the subject site in the Official Community Plan (OCP) from Urban to City Centre, and to By-law No. 16985 rezoning the site to a new CD Zone.

### Current Proposal

- The Phase 1 Expansion of SMH is being constructed as a Public-Private Partnership (P3) project.
- As a result, a competition to construct the facility took place between three, short-listed P3 proponents, throughout 2010.
- In October 2010, the preferred proponent was selected by FHA from amongst the three competitors.
- The preferred proponent is Integrated Team Solutions (ITS), which is a consortium of companies including CEI/Parkin architects, and Ellis Don.
- CEI Architecture, on behalf of ITS and FHA, has now applied for a Development Permit for the Phase 1 expansion of SMH.
- The development consists of an 8-storey critical care tower containing 40,844 square metres (440,000 sq. ft.) of floor area.
- The proposed Phase 1 development is in conformance with all requirements and regulations of CD By-law No. 16985.
- As the financial institutions that are involved in the funding of the project are not prepared to finalize funding until such time as the Development Permit has been issued, City Council is being requested to issue the Development Permit for the SMH Phase 1 expansion in conjunction with this report, on the understanding that any outstanding Engineering issues, as attached to this report, will be adequately addressed prior to Building Permit issuance.
- It is anticipated that site preparation work will commence in late February 2011, with full building construction beginning in July, 2011. The estimated date of completion of the Emergency Room portion of the building will be the fall of 2013 with the balance of the building scheduled for completion in Spring 2014.

## DESIGN PROPOSAL AND REVIEW

### Site Layout

- The Phase 1 expansion of SMH consists of an 8-storey building commonly referred to as the critical care tower.

- The proposed critical care tower will be located on the west side of the existing hospital building, just south of the existing multi-level car park that faces 96<sup>th</sup> Avenue.
- In order to accommodate the proposed development, three of the five temporary buildings on the northwest corner of the SMH site are being removed.
- As well, the berm along the King George Boulevard frontage of the SMH lot is being removed to open up the SMH site and the new critical care tower to King George Boulevard.
- A new vehicle and pedestrian access will be constructed along King George Boulevard that will lead from King George Boulevard to the new front entry of the hospital and to the entry to the new emergency room area, both of which will be located on the west side of the new critical care tower.
- This new vehicle and pedestrian access from King George Boulevard will connect to a new north-south road and pedestrian network that will link 96 Avenue to 94A Avenue through the SMH site, along the western side of the proposed critical care tower. The vehicle access from King George Boulevard will be restricted to right-in/right-out.

### Building Design

- The critical care tower incorporates four distinct architectural elements: a base, an entry pavilion, a patient care tower, and a circulation tower.
- The two-storey base of the building, which forms the foundation for the other three components of the building, will be clad primarily in wood and natural field stone.
- A large entry pavilion, comprised primarily of glass and wood, will be located in the southwest corner of the base of the building.
- A six-storey patient care tower, clad entirely in glass, will be located over the northern portion of the two-storey base.
- A public access circulation tower, containing stairs, elevators and lobbies, will be located in the centre of the building, to the south of the patient care tower and will be clad primarily in the same field stone as the base of the building and in metal louvers.

### Entry and Building Base

- A large entry pavilion for the new facility will be incorporated into the southwest corner of the base of the building
- This entry pavilion is intended to become the new main entry for the entire SMH complex. The existing main entry will be relocated from its current location on 96<sup>th</sup> Avenue to the King George Boulevard frontage of the site.
- The proposed entry is a dramatic two-storey space with floor to ceiling vision glass along the entire western façade and along a major portion of the south façade.

- The interior of the entry pavilion will be characterized by large, curved wooden beams intended to evoke trees in a forest. The ceiling will be comprised of large wooden beams and wood planking.
- As well as creating a main entry for the hospital and providing access to the circulation tower, which is the main public access into the proposed patient care tower, the entry pavilion constitutes the beginning of the creation of a new pedestrian central spine through the SMH campus.
- The long term redevelopment plan for the SMH campus is to create a central, indoor, pedestrian spine, at Level 2 of the building, that will provide a central artery which will connect the various, and diverse, components of the SMH facility
- As a result, the entry pavilion will provide not only the main public entry to the new critical care tower, but will also contain a large staircase and escalator that will lead to the Level 2 pedestrian spine.
- An elegant, curving bridge, at Level 2, will connect the new critical care tower to the existing SMH buildings to the east.
- The Level 2 pedestrian spine connection will also incorporate an upper lobby for the entry pavilion that will be south-facing and have access to a green, heavily landscaped outdoor area on the roof of the lower portion of the building.
- It is envisioned that Phase 2 of the SMH campus expansion will involve the construction of a second critical care tower. The proposed entry pavilion will become the principal public entry for both the Phase 1 and Phase 2 critical care towers.
- A short-term vehicle pick-up and drop-off area for six vehicles will be located in front of the entry pavilion.
- A thin, light, elegant, wood canopy, supported by curved wooden columns to mimic the columns in the entry pavilion will be constructed along the entire façade of the building, including across the front of the entry pavilion.
- Architecturally, the purpose of the canopy is to tie the various sections of the new building together, and can be extended toward the south in the future to link Phase 1 and proposed Phase 2.
- Functionally, the canopy is designed to provide pedestrian weather protection along the face of the building.
- Along the front of the entry pavilion, the canopy widens to provide weather protection for the vehicle pick-up and drop-off area as well.
- The public, non-ambulance entry to the new emergency room will be located at the north end of the west side of the proposed building where it will be easily visible and easily accessible from the new access from King George Boulevard and from the new north-south road through the site.

- Seven short-term pick-up and drop-off parking spaces will be provided at the door to the emergency room.
- The ground level of the west side of the base of the building will be primarily vision-glass glazing with a field stone base.
- The second level of the western façade of the base will be clad in wood composite paneling and will incorporate windows meant to reflect DNA sequencing.
- The ground level of the north side of the base of the building, which will incorporate an enclosed ambulance drop-off area, will be clad entirely in field stone.
- The second floor of the building will be clad in wood composite paneling and windows to match the western façade of the building.
- The eastern façade of the base of the building will also be clad in stone and wood composite panels to match the northern façade of the base of the building.
- The southern façade of the base of the building will be clad almost entirely of wood composite panels, with one small area clad with metal aluminum panels.

#### Patient Care Tower

- The patient care tower, which is basically a cube encased entirely in glass, will create the most dramatic element of the new building.
- Other than the third floor, which will be clad in clear vision glass and inset slightly from the rest of the patient tower, the patient tower will be clad in fritted glass panels containing light-blue and white-coloured fritted glass that will create a formal, geometric pattern on the exterior of the patient tower.
- Fritted glass is glass onto which a layer of film of ceramic dots has been baked to create an opaque pattern in the glass. The pattern can be any colour or shape or opaqueness, depending on the desire of the user.
- For the patient care tower, the architects have chosen white and Greek Mediterranean blue fritting that will create a formal pattern of circles and ovals and other geometric patterns.
- Even the vision glass within the patient care tower will contain a frit so that the pattern is unbroken on the entire skin of the building.
- A level housing mechanical equipment will be located above the 8<sup>th</sup> floor of the patient care tower.
- This mechanical level will be clad in silver-coloured metal louvers.
- A helicopter pad will be located on the roof of the mechanical level.

- Elevator access is required to the helicopter pad to allow patients to be transported from the helicopter into the hospital on stretchers and as a result, a large elevator shaft protrudes about the mechanical roof on the north side of the building.
- The elevator shaft will be clad in the same fritted glass as the rest of the patient care tower, although the north side will be clad in transparent glass to permit unobstructed views of the north shore mountains from the elevator lobby.

### Circulation Tower

- The circulation tower, containing stairs and elevators that constitute the main public access into the patient care tower, is located between the entry pavilion and the patient care tower.
- The west and south sides of the circulation tower will be clad in the same stone as the base of the building, while the other two facades will be clad in a combination of stone and metal louvers.
- The "bridge" portion of the circulation tower between the elevators and the patient care tower will contain visitor waiting rooms facing west toward King George Boulevard.
- Structural aluminum clad beams on the west façade of the building will tie the elevator and stair core to the patient care tower. Curved wooden strips, representing strands of DNA, will be attached to these beams as public art and to create more interest in the façade of the building.

### Building Interior Components

- The new critical care tower will contain a new, and greatly expanded emergency room facility on the first level of the building while the second level will contain a new perinatal centre for excellence for the care of high-risk newborns.
- As SMH has been designated a clinical academic campus for the University of British Columbia, level 3 of the critical care tower will contain UBC and administration space. A large UBC lecture theatre will be located in the lower level of the building as well.
- Level 4 of the proposed building will be occupied by expanded laboratory space, while level 5 will be occupied by a new and expanded intensive care unit.
- Levels 6, 7 and 8 will be occupied by additional patient beds. In total, it is anticipated that 151 patient beds will be added to the SMH facility.

### Landscaping and Outdoor Space

- The new access to the site along King George Boulevard provides the opportunity to open up the entire SMH site to the street and provides an opportunity to open up and showcase the stream setback protection area on the City-owned lot on the southwest corner of the SMH site.
- Although the entry from King George Boulevard into the site will be planted and landscaped to create a formal entry, the planting will still allow clear visual access to the main SMH entry and the Emergency Room for those entering the site from King George Boulevard.



- A hard-surfaced area with wooden benches will be created on the south side of the entry driveway from King George Boulevard to create an area for quiet seating that will allow overlook into the heavily treed stream setback protection area.
- A treed boulevard and sidewalk will be constructed along the east side of the stream setback protection area to create an additional area from which to enjoy this natural feature.
- An additional green area with heavy landscaping and additional seating will be created along the south face of the critical care tower, between the critical care tower and the existing Charles Barham building to the south.
- A large landscaped island in the surface parking area, across from the public access to the emergency room will be developed to provide additional green within the parking lot and to provide additional outdoor seating for those using the emergency room.
- Although the large berm that currently exists along the King George Boulevard of the SMH site will be removed to accommodate the ultimate sidewalk and boulevard along King George Boulevard and to open up the site and new building to the surrounding roads and community, a low, 1.8-metre (6 ft.) berm will be constructed to screen the surface parking lot on the west side of the site from vehicles and pedestrians along King George Boulevard.
- This landscaped berm will also contain a bio-swale that will play a role in the management of storm water and surface run-off on the SMH site.
- A larger berm will be located at the northwest corner of the site at the intersection of King George Boulevard and 96 Avenue as a way to help screen the two temporary buildings on the northwest corner of the site that will be retained until funding to replace these buildings with a more permanent structure is forthcoming.

### Parking

- Part of the proposed project is to construct a 3-level parking facility under the proposed critical care tower.
- The first level of this underground parking facility will extend under the surface drop-off areas and drive aisles along the western side of the proposed building.
- The principal vehicle access to the underground parking will be from a ramp located within the surface parking lot located on the west side of the SMH campus, between King George Boulevard and the new critical care tower.
- This entry ramp will be screened from ground views by substantial landscaping and from over views from within the hospital by a wood trellis.
- A second vehicle access to the underground parking will be established by a driveway leading from 94A Avenue to the parking facility entry at the southeast corner of the critical care tower.

- In addition to the underground parking a surface parking lot will be constructed along the western portion of the SMH site, adjacent to King George Boulevard, that is intended to provide short term parking for those using the Emergency area of the hospital, short term physician parking, and parking for the two temporary buildings that will be retained on the northwest corner of the SMH site.
- Currently, there are 1,294 parking spaces on the SMH campus site.
- A total of 119 parking spaces will be removed in order to permit the construction of the critical care tower leaving a total of 1,175 parking spaces.
- However, a total of 359 parking spaces will be created in the new underground parkade, along with an additional 87 parking spaces in the surface parking lot on the west side of the site, bringing the number of parking spaces on the SMH campus at the end of the Phase 1 expansion to a total of 1,621.
- Based on the requirements of the Zoning By-law, which requires parking to be provided at the rate of 1 parking space for every 100 square metres (1,076 sq.ft.) of building area, a total of 953 parking spaces is required for the existing buildings on the SMH site.
- The hospital portion of the critical care tower will require an additional 389 parking spaces while the portion of the critical care tower occupied by the UBC activities would require 57 parking spaces.
- As a result, the critical care tower will require a total of 446 parking spaces which is the number of parking spaces proposed to be built as part of the Phase 1 critical care tower project.
- Therefore, 1,399 parking spaces will be required for the existing SMH campus buildings and the proposed critical care tower.
- However, a total of 1,621 parking spaces will exist on the SMH campus by the end of the Phase 1 expansion, which is 222 parking spaces more than the 1,399 parking spaces required for the SMH campus under the provisions of the Zoning By-law.

ADP Meeting: October 28, 2010

- The ADP suggestions and comments have been satisfactorily addressed and are reflected on the plans attached to Development Permit No. 7910-0261-00 (Appendix IV).

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners, Action Summary and Project Data Sheets
- Appendix II. Engineering Summary
- Appendix III. ADP Comments and Applicant's Response
- Appendix IV. Development Permit No. 7910-0261-00

*original signed by Judith Robertson*

Jean Lamontagne  
General Manager  
Planning and Development

GAG/kms

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Information for City Clerk

Legal Description and Owners of all lots that form part of the application:

1. (a) Agent:      Name:            Michael McNaught, cei architecture  
                      Address:         500, 1500 W. Georgia Street  
   Vancouver, BC  
   V6G 2Z6  
                      Tel:                 604-687-1898
  
2.        Properties involved in the Application
  - (a)      Civic Address:         Portion of 13750 – 96 Avenue
  
  - (b)      Civic Address:         Portion of 13750 – 96 Avenue  
                 Owner:                 Fraser Health Authority  
                 Portion of PID:         007-207-972  
                 Parcel A Section 33 Township 2 Plan New Westminster District 74177
  
3.        Summary of Actions for City Clerk's Office

## DEVELOPMENT DATA SHEET

Existing Zoning: CD (By-law No. 16985)

Required Development Data	Minimum Required / Maximum Allowed	Proposed
LOT AREA (in square metres)		
Gross Total		
Road Widening area		
Undevelopable area		
Net Total		8.57 ha
LOT COVERAGE (in % of net lot area)		
Buildings & Structures	75%	
Paved & Hard Surfaced Areas		
Total Site Coverage		
SETBACKS ( in metres)		
North	4.5 m	69 m
South	4.5 m	74 m
West	4.5 m	88 m
East	4.5 m	150 m
BUILDING HEIGHT (in metres/storeys)		
Principal	50 m	47.5 m
Accessory	6 m	
NUMBER OF RESIDENTIAL UNITS		
Bachelor		
One Bed		
Two Bedroom		
Three Bedroom +		
Total		
FLOOR AREA: Residential		
FLOOR AREA: Commercial		
Retail		
Office		
Total		
FLOOR AREA: Existing SMH Campus		95,284 m <sup>2</sup> *
FLOOR AREA: Critical Care Tower		40,844 m <sup>2</sup>
TOTAL BUILDING FLOOR AREA	299,978 m <sup>2</sup>	140,744 m <sup>2</sup>

\* Includes the 384 m<sup>2</sup> addition to the building unit expansion, but does not include 3 existing buildings being removed to make way for the critical care tower proposal.

## Development Data Sheet cont'd

Required Development Data	Minimum Required / Maximum Allowed	Proposed
DENSITY		
# of units/ha /# units/acre (gross)		
# of units/ha /# units/acre (net)		
FAR (gross)		
FAR (net)	3.5 FAR	1.64 FAR
AMENITY SPACE (area in square metres)		
Indoor		
Outdoor		
PARKING (number of stalls)		
Existing SMH Campus	953	1,175*
Critical Care Tower	389	446
UBC	57	
Total Number of Parking Spaces	1,399	1,621
Number of disabled stalls		
Number of small cars		
Tandem Parking Spaces: Number / % of Total Number of Units		
Size of Tandem Parking Spaces width/length		

Heritage Site	NO	Tree Survey/Assessment Provided	NO
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\* *Includes existing parking spaces on-site, minus the 119 parking spaces being removed to make way for the construction of the critical care tower.*



**LAND DEVELOPMENT ENGINEERING REVIEW**

**File:** 7809-0098-00

**Location:** 13750 - 96 Avenue

**Applicant:** IBI Group  
**Address:** 1285 West Pender Suite 700  
**Phone:** 604-683-8797  
**Fax:** 604-683-0492  
**Owner:** Fraser Health Authority

- OCP Amendment       NCP Amendment       ALR Exclusion  
 Rezone       LUC Amendment       Subdivision  
 Existing Land Use: CD (based on PI)      Existing Lots: 1  
 Proposed Land Use:      Proposed Lots:
- DP       DVP

**Land Development Engineering Contacts:**  
 Richard Bull , Project Manager  
 604-604-591-4144, RWBull@surrey.ca  
 Rémi Dubé, P.Eng., Acting Development Services Manager  
 604-591-4893, RDube@surrey.ca

**Attachments:**  
 Project Layout  
 Road Right-of-Way Requirements Sketch

**Distribution:**  
 Applicant  
 Transportation Manager  
 Sewer Engineer  
 Water Engineer  
 Drainage Planning Manager  
 Project Manager, Development Services

No.	Date	Revision
3	February 12, 2010	Revised Traffic Input
2	January 8, 2010	Revised Boulevards
1	July 9, 2009	Original
No.	Date	Revision

# LAND DEVELOPMENT ENGINEERING REVIEW

File 7809-0098-00, Map #032

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## Background

The next phase of the Surrey Memorial Hospital (SMH) site will include a new emergency department, a neo-natal emergency care department, active treatment beds and teaching space for UBC medical students.

The Fraser Health Authority (FHA) recently rezoned the SMH site to increase the density to a Floor Area Ratio of 3.5 and future phases of the SMH will only require a Development Permit and not rezoning.

The development site is located within the Surrey City Centre Area. The applicant will be required to service the site in accordance with the City Centre Servicing Report.

This Review represents the key issues that the Engineering Department is aware of at this time. The issues listed may not be fully comprehensive and exhaustive and the applicant is required, as part of the planning and design process to identify and resolve all items relating to the proposed land development.

## Servicing Requirements

These Works are required as a condition of any subsequent Building Permit on the site.

### Transportation/Traffic Management

The following road works are required on existing roads fronting the site:

- Construct the north side of 94A Avenue to City Centre standards, classified as a 14.0-metre wide road within a 24.0-metre wide right-of-way. The applicant will be responsible for constructing the north 7.0 metres of road pavement, as measured from the centreline of the right-of-way, complete with barrier curb and gutter, a 3.0-metre wide concrete sidewalk, a 2.0-metre wide urban forest planting strip and standard davit street lights in a staggered pattern. The applicant may also be required to provide a 1.0-metre wide statutory right-of-way for service connections if any are proposed off this road;
- Construct the west side of 138 Street to City Centre standards, classified as a 14.0-metre wide road within a 24.0-metre wide right-of-way. The applicant will be responsible for constructing the west 7.0 metres of road pavement, as measured from the centreline of the right-of-way, complete with barrier curb and gutter, a 3.0-metre wide concrete sidewalk, a 2.0-metre wide urban forest planting strip and standard davit street lights in a staggered pattern. The applicant may also be required to provide a 1.0-metre wide right-of-way for service connections if any are proposed off this road;
- Construct on the 96 Avenue frontage of the site a 3.0-metre wide by 600mm deep (see Parks median planting specification SSD-PK 5079) urban forest planting strip adjacent to the existing curb complete with a 3.0-metre wide concrete sidewalk (the architectural details of the colour and finish of the sidewalk are to be determined in consultation with the Planning and Development Department prior to detailed design). The construction of these works will require the registration of a statutory



- right-of-way, approximately 2.3 metres wide, for public rights of passage without vehicles; and
- Construct on the King George Highway frontage of the site a 3.0-metre wide urban forest planting strip and a 3.0 metre wide concrete sidewalk (the architectural details of the colour and finish of the sidewalk are to be determined in consultation with the Planning and Development Department prior to detailed design). The applicant is advised that once the widening of the road is completed for transit lanes there will be a 4.0 metre wide boulevard remaining for the installation of utilities and for the above described planting strip and sidewalk. The applicant is advised that an additional 2.5 metre wide right-of-way for public rights of passage without vehicles will be required to accommodate the indicated sidewalk.
  - Since the King George Highway boulevard will be larger than normal, until such time as the transit widening is completed, the first three metres adjacent to the new sidewalk is to have topsoil 3.0 metres wide by 600mm deep (see Parks median planting specification SSD-PK 5079) with a 600mm root barrier at the future curb (150mm behind back of future curb) (see Parks specification SSD-PK 5120). The remaining boulevard is to have the usual topsoil and sod treatment;

The General Site Plan presented with the application shows a new driveway access from King George Highway. It also indicates that the existing access on 96 Avenue is to be connected to the new access via a proposed new surface parking lot. The applicant has provided a traffic impact study, based on the general site plan, and the City has accepted the information. Depending on the final design of the project, additional input to the traffic impact study may be required.

The applicant is advised that the proposed driveways must be restricted to right-in/right-out only. A restrictive covenant must be registered on title for this restriction.

Coast Mountain Bus Company - Adam Wisniowski (604-953-3052) – must be consulted to confirm impact/requirements relative to the two existing 96 Avenue bus stops fronting the site.

### **Drainage/Environmental**

The following City storm drainage facilities are located in the vicinity to the site:

- On the north side of 96 Avenue, there is an existing 450/600mm concrete storm main connected to the drainage system on King George Highway. City records show no connections to the site from this main;
- On the west side of 138 Street, there is an existing 300mm PVC/375mm concrete storm main which discharges directly into Quibble Creek. City records indicate there are three service connections to the site from this main;
- On the north side of 94A Avenue, there is an existing 200mm/300mm PVC storm main which discharges directly into a tributary to Quibble Creek. City records indicate there are three service connections to the site from this main; and
- The City has no records of the drainage system on King George Highway as the mains were constructed while the road was under the jurisdiction of the BC Ministry of Transportation and Highways. The applicant will have to determine the size and capacity of the existing system in order to determine if the mains are suitable for the proposed project.

The following storm drainage facilities are required:

- A service connection, complete with inspection chamber, must be provided to the new building; and
- The **proposed surface parking lot** must have a water quality/sediment control inlet chamber installed as a component of the on-site drainage system before discharge at the inspection chamber. A restrictive covenant is required to be registered on the title of the land to require the owner/operator to maintain and keep functional the water quality/sediment control inlet chamber.

The site is located within the Quibble Creek Master Drainage Plan (MDP) where known downstream capacity and erosion problems exist. Interim on-site detention will be required. A restrictive covenant must be registered on title for the interim on-site detention.

A stormwater management plan must be completed to the satisfaction of Surrey Drainage Engineering to assess the five year post development flows (minor system) and 100 year post development flows (major system) within the catchment.

A creek has been identified adjacent to this site, which requires protection in accordance with DFO/MWLAP Land Development Guidelines and Best Management Practices.

A sediment control plan must be developed in accordance with DFO/MWLAP Land Development Guidelines and Best Management Practices to manage soil erosion and sedimentation **during the off-site land development servicing**.

A water quality/sediment control inlet chamber is to be installed as a component of the **underground parking lot drainage system** before discharge at the inspection chamber. A restrictive covenant is required to be registered on the title of the land to require the owner/operator to maintain and keep functional the water quality/sediment control inlet chamber.

The City notes that the proposed underground parking lot drainage may be influenced by the **fluctuating water elevation of the Quibble Creek tributary** and as such the applicant is to ensure that the creek does not flood the underground parking structure and that any potential backflow of water from the creek does not enter into the drainage system of the underground structure.

The applicant will be required to obtain an Erosion & Sediment Control (ESC) Permit, under By-law 2006, No. 16138, from the Engineering Department, **prior to issuance of the Building Permit**. The process requires submission and approval of an ESC Plan that minimizes sediment and sediment-laden water from entering the City drainage system, during building construction and servicing.

## Water

The following City water facilities are located in the vicinity to the site:

- On the south side of 96 Avenue, there is a 300 mm watermain fronting the site. City records show a single service connection to the site from this main;
- On the east side of 138 Street, there is a 300 mm PVC watermain fronting the site;

- On the north side of 94A Avenue, there is a 300mm ductile iron watermain fronting the site. On the south side of this road, there is an existing 150mm ductile iron watermain; and
- On the east side of King George Highway, there is a 150mm cast iron watermain and, on the west side of this road, there is a 300mm ductile iron watermain.

The following water facilities are required:

- Construct a minimum 250mm watermain on the east side of King George Highway in accordance with the City Centre requirements. The applicant is to provide fire flow calculation to confirm the base size (250mm main) will meet the fire flow required for the development and if it does then the City will fund the upsizing to a 300mm main.

The City notes that the site is currently serviced by a single metered service connection. The applicant may wish to take this opportunity to service the proposed building with a new metered service connection to ensure uninterrupted water supply is maintained to the hospital complex.

Through normal processing by the Planning and Development Department - Building Division, the on-site fire protection requirements will be reviewed at building permit application stage and may require additional improvements to the building to meet the B.C. Building Code.

### **Sanitary Sewer**

The following City sanitary sewer facilities are located in the vicinity to the site:

- On the north side of 96 Avenue, there is a 250mm main fronting the site. City records indicate that there is a single service connection to the property from this main;
- On the east side of 138 Street, there is a 675mm PVC main fronting the site and, on the west side of this road, there is a 500mm ductile iron force main fronting the site;
- On the north side of 94A Avenue, there is a 250mm asbestos cement main fronting the site and, near the centre of this road, there are a 675mm PVC main fronting the site, a 500mm ductile iron force main fronting the site and a 200mm PVC main fronting the western half of the site;
- On the east side of King George Highway, there is a 250mm/300mm asbestos cement main fronting the site and, immediately west of this main, there is a 675mm PVC main fronting the site. On the west side of King George Highway, there is a 250mm asbestos cement main fronting the site. City records indicate that there is an existing service connection to the 250mm main; and
- At the intersection of 94A Avenue and King George Highway (on the northeast corner), there is a sanitary sewer lift station.

The existing sanitary sewer system has adequate capacity to service the proposed development.

### **Commercial Utilities**

The development must be serviced with hydro, gas, telecommunication and cablevision in accordance with utility company requirements and City standards.

## **Project Management**

A Servicing Agreement must be executed before the proposed Building Permit can be completed.

The following legal documents are known at this time to be required for this project:

- Statutory right-of-way for public rights of passage without vehicles adjacent to the 96 Avenue road right-of-way;
- Restrictive covenant for temporary on-site detention;
- Restrictive covenant for water quality/sediment control inlet chambers; and
- Restrictive covenant for right-in/right-out only for driveways onto 96 Avenue and King George Highway.

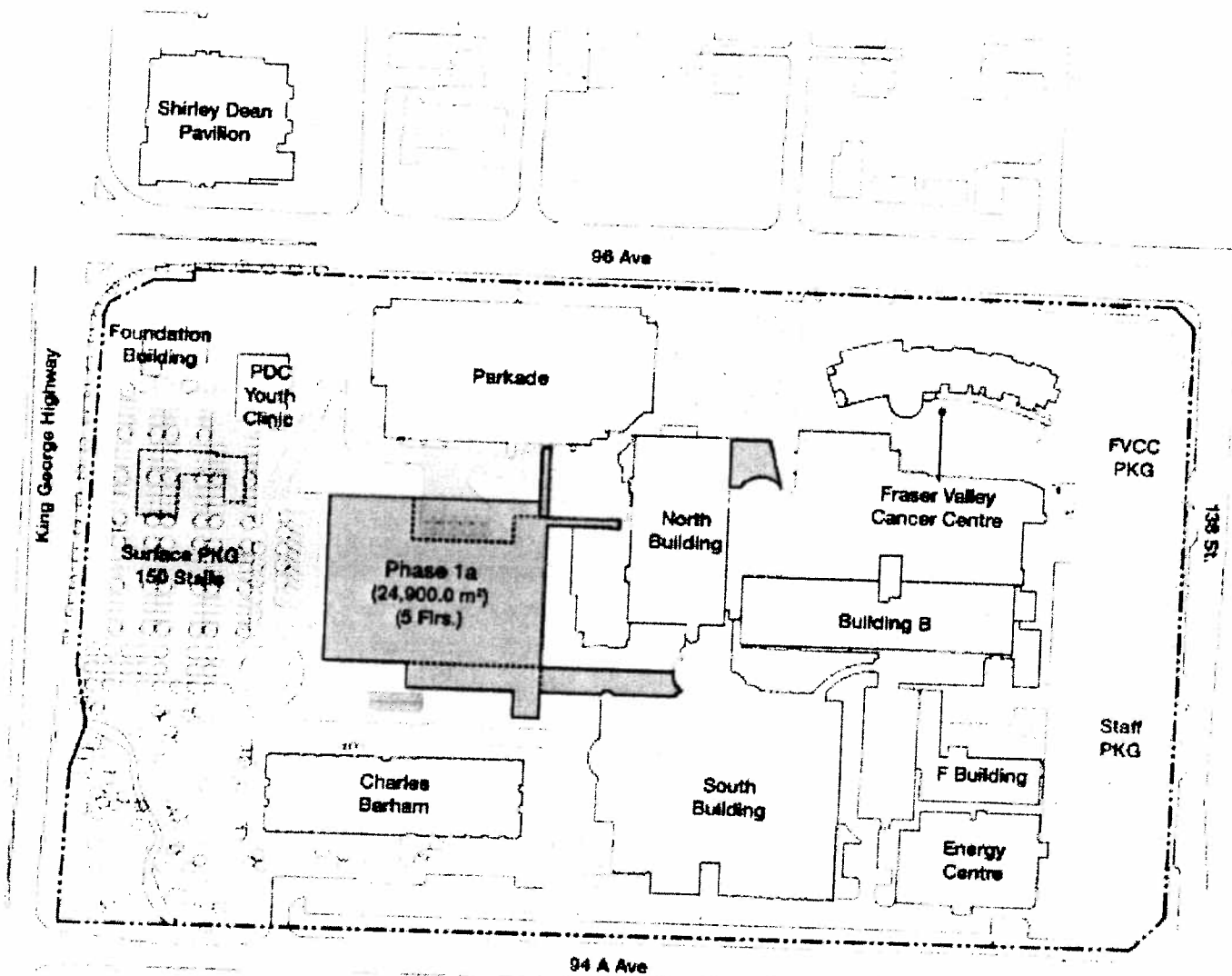
All Engineering legal documents required for this project must be executed prior to issuance of the Servicing Agreement.

## **Financial**

A processing fee of \$8,256.00 (2010 rate; plus applicable taxes, GST at this time) is required for the Servicing Agreement.

An application fee of \$420.00 (2010 rate; plus applicable taxes, GST at this time) is required for administration of the ESC Permit process at time of building permit application.

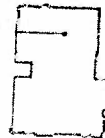
# Project Layout - Phase 1



## Legend

- Existing SMH Buildings
- New Phase Construction
- Previous Phase Construction
- New Roads & Parking
- Relocated Services
- Demolished Buildings

Relocated Annex



Creekside Withdrawal Mgmt. Centre



Scale 1:2000





## *Advisory Design Panel Minutes*

Parks Boardroom #1  
City Hall  
14245 - 56 Avenue  
Surrey, B.C.  
**THURSDAY, OCTOBER 28, 2010**  
Time: 4:03 p.m.

**Chair:**

P. Cotter

**Panel Members:**

M. Ehman  
R. Bernstein  
J. Makepeace  
D. Lee  
L. Mickelson  
S. Lyon  
CPL. M. Searle

**Guests:**

P. Martin, Wilson Chang Architect Inc.  
W. Chang, Wilson Chang Architect Inc.  
A. Good, DMG Landscape Architects  
M. McNaught, cei architecture  
W. Locking, cei architecture  
C. Philips, PFS  
D. Ingram, Fraser Health Authority  
C. Brooke, Fraser Health Authority  
M. Dekkers, Ellis Don  
B. Blair, Ellis Don  
S. Ho, dys architecture  
D. Simpson, dys architecture  
R. Yuen, dys architecture  
M. Patterson, Perry & Associates  
J. Ha, Concord Pacific  
C. Chan, Concord Pacific

**Staff Present:**

T. Ainscough, Planning & Development  
H. Bello, Planning & Development  
M. B. Rondeau, Planning & Development  
R. Duke, Planning & Development  
T. Mueller, Legislative Services

**A. RECEIPT OF MINUTES**

It was

Moved by M. Ehman

Seconded by L. Mickelson

That the notes of the Advisory Design Panel

workshop held on September 30, 2010 be received.

Carried**B. SUBMISSIONS**

2.	File No.:	7910-0261-00
	New or Resubmit:	New
	Description:	Surrey Memorial Hospital Expansion
	Address:	13750 – 96 Avenue Surrey City Centre
	Developer:	Dave Ingram, Fraser Health Authority
	Architect:	Michael McNaught, cei architecture
	Landscape Architect:	Chris Philips, PFS
	Planner:	Gary Gahr
	Urban Design Planner:	Mary Beth Rondeau

**The Urban Design Planner provided an overview of the project:**

- The project is the Surrey Memorial Hospital Site comprised of a critical care

- tower, emergency facility, academic facility and helicopter pad.
- The site has been rezoned based on an overall plan. This application does not require any significant variances.
- Design guidelines were developed for the P3 process. This included consideration of the fit with an overall campus plan, open space, connectivity and urban design.
- The Quibble Creek, which is a fish bearing creek, is located at the corner of the development. The ESA is minimal at the top of the bank. As much green, and open space as possible has been added.
- The future of connectivity and roadways into the site were given consideration. Specifically hoping to get a more of a pedestrian connection on the north side of the area which has turned out to be quite utilitarian.
- The site is facing King George Boulevard and has a role in the city centre, given its prominence to this main artery. The entry sequence and the driveway should be considered given that the driveway does not lead to any prominent feature such as the main entry.
- The building is large and needs to address the form to avoid a monolithic and institutional feel.
- The team will present the sustainability issues.

**The Project Architect made the following comments:**

- The north face of the patient tower is a concave curve. There is a strong wood image that flows from inside and outside of the project. The lobby is a large 60 x 75m structure supported by tree-like glu-lam structures.
- The project has three roles, the role it has for the city, patient care, and the human scale of the campus.
- The project will be a prominent building to mark the city centre where people want to live.
- A master plan was followed throughout the design process. The main entry comes into and goes through a rotunda.
- In Phase 1 the main entry comes in off of KGB and connects to the other parts of the hospital and will connect Phase 1 and Phase 2. It is a main pedestrian way finding element. All parts of the hospital need to be connected physically.
- There are green fingers around the site that will become courtyards and soft green spaces.
- The building will be a prominent civic building and will have the context of the community culture and what Surrey means. There is a strong art component and a strong nature component. The City of Parks was taken into consideration with the project.
- The connectivity of Phase 1 and Phase 2 should occur before 2020.
- The vision was sustainability and LEED Gold was used as the starting point. The Honeywell Team will bring life cycle costs and sustainability measures.
- There are two underground routes through the site. There are bicycle stations and pedestrian movement sites through King George. Trying to develop the artery on the north end of the project and it would be highly restricted due to

- the number of ambulance vehicles coming through.
- The building is highly designed to suite the efficiency for a hospital of the future. The main entry is controlled to have a strong procession and it is very well controlled and there is good visibility.
  - The project has strong features at night; there are spires of light that pull people to the project. Still dealing with dark skies elements but there are lighting elements in place to bring people to the project. The building was modelled at night to see what a pedestrian would see.
  - There are playful artist pieces that were pulled through the project that create a subtle DNA pattern that follows up the face of the building.
  - The concave facade came from ideas to tie in other elements from the campus and came out of the program. The intent was to come up with a more dynamic shape that could respond and draw attention.
  - The origins of the fritted pattern are based on a symbolic reference to veils and to culture. The veil is the only thing that separates people using the hospital from the outside world (e.g., like a curtain around a hospital bed). The veil is also a clearly identifiable symbol selected to transition across cultures. It was also used to create depth.
  - The porte-cochère and drop off is a one-way system.

**The Landscape Architect made the following comments:**

- Measures will be taken to protect the Quibble Creek environmentally sensitive areas. Have taken riparian planting to expand into the rest of the site. The edge of Quibble Creek has a walkway and is easy to access from a universally accessible point of view.
- There is a clear function of circulation for the parking. From KGB there is an opening to emergency or the front door. There is great connectivity and the importance of 94 A was recognized. There is easy penetration for bikes and pedestrians through the site and transit.
- There is a waterfall edge between emergency and the main entrance.
- There is a social space between the existing and the new building and a whole series of seating areas. From the main entry, one of the main advantages is that it looks over a backdrop of Quibble Creek.
- The garage entry is well thought out. For the entry there is planting on one wall at the base to soften up the edge of the wall. There is a trellis over the op to help screen the entry and to make it as green as possible.
- The streetscape on KGB will be widened. The parking will be screened but views allowed up to the building.
- There is landscaping at both edges of the building to provide opportunities for patients and staff to get outside and enjoy the space.

**ADVISORY DESIGN PANEL STATEMENT OF REVIEW**

**13750 – 96 Avenue Surrey City Centre**

**File No. 7910-0261-00**



It was Moved by R. Bernstein  
Seconded M. Ehman  
That the Advisory Design Panel (ADP)  
recommends that applicant address the following issues to the satisfaction of the  
Planning and Development Department.  
Carried

## STATEMENT OF REVIEW COMMENTS

### Context and Site Circulation

- Consideration should be given to the surface parking which is visible from King George Blvd. and how it will evolve over the long term.

*A landscaped berm is being provided along King George Boulevard. Parking spaces along the entry have been converted to small cars to increase the amount of landscaping.*

- Consider enhancing the sense of the main entry driveway and sidewalks to be much more ceremonial, with a much stronger outlet and presence on King George Blvd.

*The landscaping scheme has been revised to improve visual access to the entry from King George Boulevard. A decorative paving stone traffic table has been created at the intersection of the main entry and north-south road.*

- The expectations are for the glass lobby pavilion to be at the end of the driveway. The driveway could be offset.

*Due to site grading constraints, the driveway cannot be off-set.*

- Appears that the vehicle dominates the entry experience in terms of curb arrangements, turnarounds, etc. Would like to see the scale broken down to a more pedestrian character.

*A decorative paving stone traffic table has been created at the intersection of the main entry and north-south road.*

- Pedestrian crossings should have varied texture and contrasting materials to clearly depict pedestrian zones, i.e., consider alternatives to asphalt and typical curbs, for example concrete pavers.

*The site layout has been revised to increase the pedestrian priority network within the site.*

- Signage for vehicles may be necessary at the porte-cochere to explain the one-way circulation.

*A signage package will be considered under a separate application.*

### **Form and Character**

- Support the deliberate, detailed, and thoughtful integration of massing, material, finish, and texture.
- The building has an opportunity to be a great piece of architecture and this should be worked out in the details.
- The clarity of way finding should be commended. The project does a great job funnelling the pedestrians through a complex development.
- Building is massive and this is compounded by the density of the precinct.
- The concave facade is not convincing. The glass night lit and solid portions of the corner stairs will probably look different; uncertain with the intention. A different material or approach on the concave should be used.

*After considerable discussion with Surrey staff, it was determined that the concave façade is an acceptable architectural response that can be successfully integrated into the building design. As a result, the concave north façade will remain.*

- The building plan is unbelievably constrained and institutional; all the humanity is squeezed right out of the plan and needs to be blown out a bit to create some looseness. The waiting room appears jammed and tight. In a staff area, explore openings that are much more generous than a typical internalized patient condition.

*Openings have been created on the second level from the upper lobby to an outdoor landscaped roof amenity area.*

- The welcoming gesture of the main entrance is great.
- The circulation stair is on one of the most visible corners and is all clad; thought should be given to make it an interconnected stair or opening up the stair and elevator shaft to make them more visible and desirable to use. It could become a more interesting element incorporating sustainable features.

*Cladding of the circulation stair has been changed from glass to stone. Further explorations are being undertaken with the structural consultants to ascertain if the window openings can be made larger.*

- The roof over the pavilion hasn't any kind of treatment and is visible from above. It is an obvious choice for a green roof or to do something that is interesting and compelling.

*A decorative design in the shape of a stylized tulip has been added to the roof of the pavilion.*

- The use of wood is supported and helps to de-institutionalize but many of the elements are exterior elements that have to be well detailed or they will turn colour. The wood has to be really well detailed or it will be painted in the future or dismantled, particularly the public art stands and DNA elements.

*The wood elements of the building will be treated with various preservatives to ensure that the life of these elements is a minimum of 30 years.*

- The mechanical roof screen above the fritted glass volume seems to be a very abrupt transition. It looks like it is a service layer. There is a beautiful facade coming up to a hard line. Perhaps there is softer way of transitioning between the two elements.

*The mechanical level has been set back from the edge of the glass portion of the building.*

## **Landscaping**

- The biggest challenge is at full build out - it is an extremely dense site. There needs to be a bit of rigor applied to how open space is addressed on the site.

*The landscape architect has provided an open space plan that demonstrates the open space interconnections within the SMH site.*

- The care and attention given to the glass design needs to be applied to the ground plane which needs to be enhanced as a landscape opportunity, not just vehicular circulation with leftover landscaped spaces.

*The landscape architect has provided an open space plan that demonstrates the open space interconnections within the SMH site.*

- Project needs to provide more opportunities for accessible exterior spaces – enlarge exterior courtyards. Concerned that the east / west pedestrian connection will be lost in 2nd phase of development.

*A generous, accessible landscaped deck is provided on the second floor as well as additional outdoor area on the ground floor.*

- Consider the role that landscape plays in a place that is predicated on healing and the ability to accelerate the ability for people to heal themselves through exposure to nature.

*The second floor landscaped deck meets this criteria.*

- Engagement to exterior space is a benefit. The park and riparian area feels very disconnected from the hospital.

*Connections have been improved through the use of decorative paving and landscaping.*

- Provide green roof for visual healing landscape above the entrance feature.

*For structural and maintenance reasons, a green roof cannot be provided on the roof of the entry pavilion. A graphic design has been added to the roof instead.*

### **CPTED and Accessibility**

- Disabled access should not be considered as add-ons but should be part of the criteria from the onset.
- Consideration should be given to how individuals in wheelchairs can access the building. There should be an exterior ramp connection for universal access between entrances (emergency and main).

*For health and safety reasons, interior and exterior pedestrian ramps are not supported or encouraged by FHA.*

- Roll-over curbs need to be designed to accommodate wheelchairs.

*Details of roll-over curbs have been provided.*

- Elevator buttons should be paneled on the side so that they are all accessible.

*This issue will be addressed at Building Permit stage.*

- Accessible parking stalls should be located in close proximity to the elevators.

*Accessible parking spaces are provided at Level P1.*

- All pathways should be wheelchair accessible and paving stones need to be secure.

*Pathways have been made wheelchair accessible.*

- Consider identifying the interior functionality of the buildings given the number of police service call requests from the inside.

*FHA will develop an internal security and safety operations system.*

- Consider the routes used by hospital staff around the site especially afterhours, i.e., lighting should be considered very carefully on dark spots.

*A lighting concept has been developed.*

- Consider marking the roof tops of the buildings for day/night identification from the air. Police are using helicopters more and more.

*The roof-top helicopter pad is identified with a large painted H.*

### **Sustainability**

- Consider best practices in the parking lot to mitigate storm water with Quibble Creek so close.

*A storm water bioswale is incorporated into the surface parking lot landscaping.*

- LEED Gold certification – great job.
- Maximize permeability of exterior hard surfaces; consider green principles to maximize natural lighting and passive heating and cooling.

*A LEED checklist addressing these issues has been provided.*

- Strong consideration should be given to landscaped rooftops over main patient area and in front of stacked waiting areas.

*For structural and maintenance reasons, a green roof cannot be provided on the roof of the entry pavilion. A graphic design has been added to the roof instead.*

### **The Project Architect and Landscape Architect made the following comments:**

- Appreciate the comments received. It is a tough building to break out. Understand that the program is constrained but will attempt to maximize the opportunities and do the best they can.
- Will improve the landscape within constraints.

CITY OF SURREY

(the "City")

DEVELOPMENT PERMIT

NO. 7910-0261-00

Issued To: FRASER HEALTH AUTHORITY

(the "Owner")

Address of Owner: 300 - 10334 - 152A Street  
Surrey, BC  
V3R 7P8

1. This development permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development permit.
2. This development permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 007-207-972

Parcel A Section 33 Township 2 New Westminster District Plan 74177 Except Bylaw Plan 82111 and Plans LMP49509 and EPP4049

13750 - 96 Avenue

(the "Land")

3. This development permit applies to only shown in dashed black line on Schedule A which is attached hereto and forms part of this development permit.
4. The Land has been designated as a Development Permit Area in Surrey Official Community Plan, 1996, No. 12900, as amended.
5. The character of the development including landscaping and the siting, form, exterior design and finish of buildings and structures shall be in accordance with the drawings numbered 7910-0261-00(A) through to and including 7910-0261-00(UU) (the "Drawings") which are attached hereto and form part of this development permit.

6. Minor changes to the Drawings that do not affect the general form and character of the landscaping and the siting, form, exterior design and finish of buildings and structures on the Land, may be permitted subject to the approval of the City.
  
7.
  - (a) The landscaping shall conform to drawings numbered 7910-0261-00(Z) through to and including 7910-0261-00(UU) (the "Landscaping").
  
  - (b) The Landscaping shall be completed within six (6) months after the date of the final inspection of the buildings and structures referred to in the Drawings.
  
  - (c) Prior to the issuance of the building permit for this development, security is to be submitted to ensure satisfactory completion of the Landscaping. The security for the Landscaping is to be submitted as follows:

An Irrevocable Letter of Credit, in a form acceptable to the City, in the amount of \$1,463,050.51

(the "Security")
  
  - (d)
    - i. When the Landscaping is substantially complete as determined by the City, without the City having to use the Security, 90% of the original Security will be returned. When the Landscaping receives final approval by the City, not earlier than twelve (12) months after the date of substantial completion of the Landscaping, 10% of the original Security will be returned.
  
    - ii. If final approval of the Landscaping is not given by the City, the City has the option of using the Security to complete the Landscaping and any remaining money shall be returned. The Owner hereby authorizes the City or its agents to enter upon the Land to complete the Landscaping.
  
    - iii. If the City elects not to enter upon the Land to complete the Landscaping and the Owner does not complete the Landscaping, the Security is forfeited to the City five (5) years after the date of the provisional or final inspection of the buildings and structures referred to in the Drawings.
  
8. This development permit supplements and amends Development Permit Nos. 7994-0271-00 and 7996-0017-00.
  
9. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development permit.
  
10. This development permit shall lapse if the Owner does not substantially start any construction with respect to which this development permit is issued, within two (2) years after the date this development permit is issued.

- 11. The terms of this development permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
  
- 12. This development permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .  
ISSUED THIS DAY OF , 20 .

\_\_\_\_\_  
Mayor – Dianne L. Watts

\_\_\_\_\_  
City Clerk – Jane Sullivan

IN CONSIDERATION OF COUNCIL'S APPROVAL OF THIS DEVELOPMENT PERMIT AND OTHER GOOD AND VALUABLE CONSIDERATION, I/WE THE UNDERSIGNED AGREED TO THE TERMS AND CONDITIONS OF THIS DEVELOPMENT PERMIT AND ACKNOWLEDGE THAT WE HAVE READ AND UNDERSTOOD IT.

\_\_\_\_\_  
Authorized Agent: (Signature)

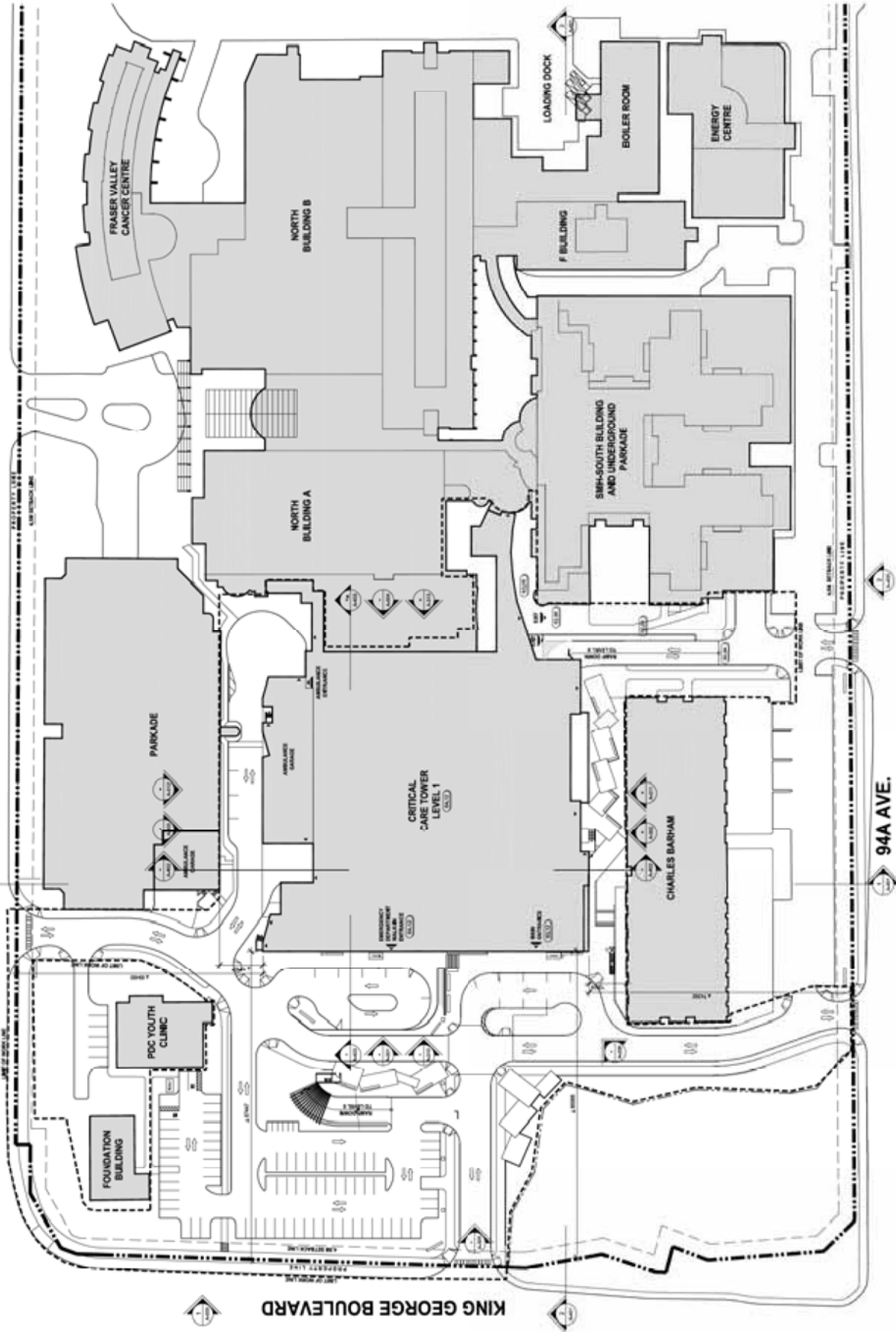
\_\_\_\_\_  
Name: (Please Print)

OR

\_\_\_\_\_  
Owner: (Signature)

\_\_\_\_\_  
Name: (Please Print)





KING GEORGE BOULEVARD

96 AVE.

94A AVE.



PROPOSAL REFERENCE  
T.2.1 (S)  
ARCHITECTURAL SITE PLAN



A-000

AERIAL VIEW  
**PRESENTATION RENDERING**  
SCALE: N.T.S.



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010





SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



AERIAL VIEW - PHASE 2  
**PRESENTATION RENDERING**  
SCALE: N.T.S.

A-000a



PROPOSAL REFERENCE  
 1.2.6 (0/0) MAIN ENTRANCE

THE MAIN ENTRANCE OF THE FACILITY  
**PRESENTATION RENDERING**  
 SCALE: N.T.S.



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010



**A-000c**



PROPOSAL REFERENCE  
1.2.6 (i) NORTH-WEST VIEW

THE MAIN ENTRANCE OF THE FACILITY  
**PRESENTATION RENDERING**  
SCALE: N.T.S.



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



**A-000b**



PROPOSAL REFERENCE  
 12.8 (R10) FACILITY FOR  
 KING GEORGE

FACILITY AS SEEN FROM KING GEORGE HIGHWAY  
**PRESENTATION RENDERING**  
 SCALE: N.T.S.



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010



A-305



PROPOSAL REFERENCE  
1.2.6(3) EAST ELEVATION

A-304

RENDERED ELEVATION  
**EAST ELEVATION**  
SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010





PROPOSAL REFERENCE  
1.2.6(3) WEST ELEVATION

A-301

RENDERED ELEVATION  
**WEST ELEVATION**  
SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



7910-0261-00 (G)





PROPOSAL REFERENCE  
1.2.6(3) SOUTH ELEVATION

A-302

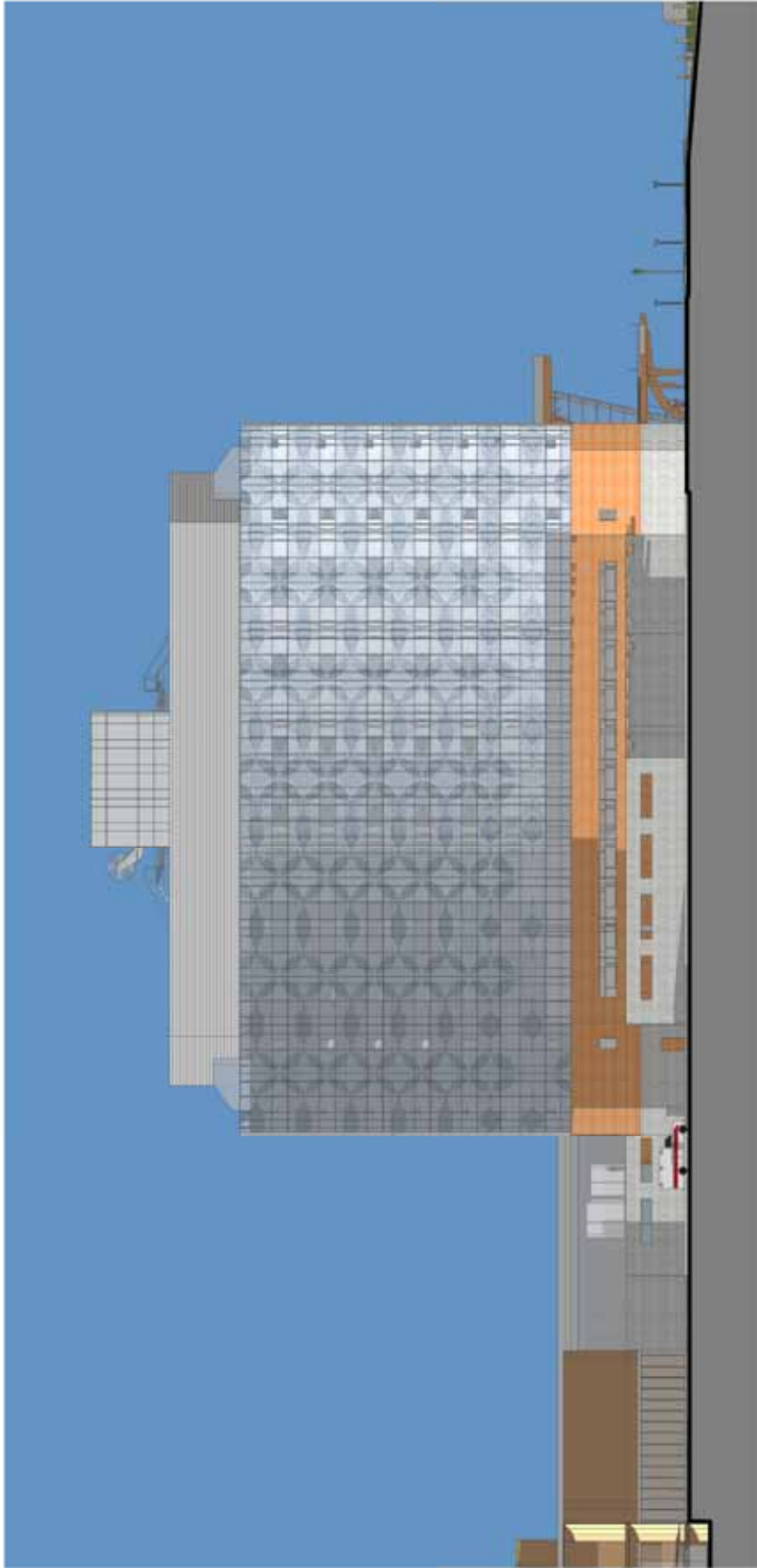
RENDERED ELEVATION  
**SOUTH ELEVATION**  
SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



7910-0261-00(H)



7910-0261-00(I)

PROPOSAL REFERENCE  
1.2.600 NORTH ELEVATION

A-303

RENDERED ELEVATIONS  
**NORTH ELEVATION**  
SCALE 1:200

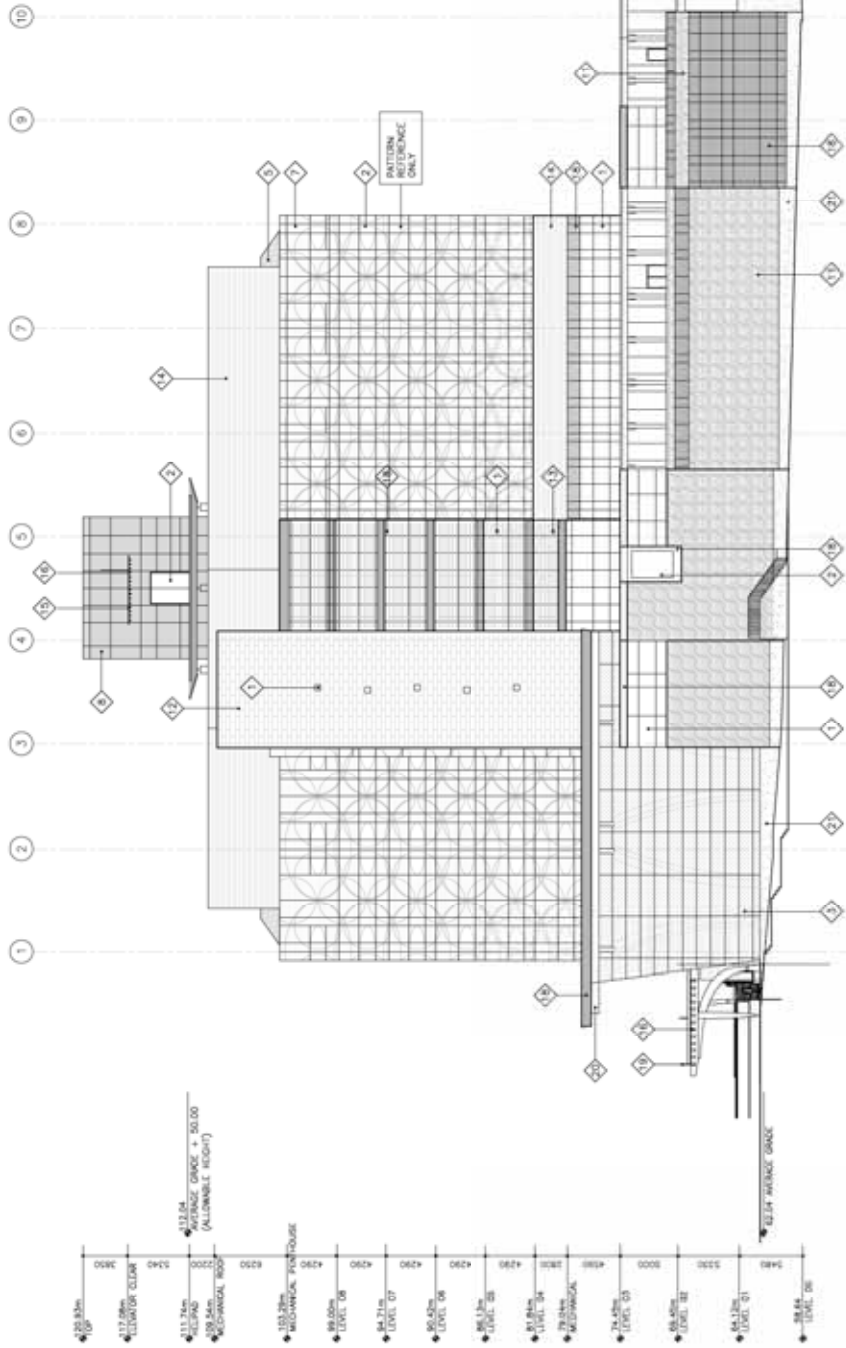


SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



EXTERIOR MATERIALS LEGEND

1	1.1 - VISION GLASS CURTAIN WALL SYSTEM
2	2.1 - VISION GLASS PANEL IN PVC CURTAIN WALL SYSTEM
3	3.1 - VISION GLASS CURTAIN WALL SYSTEM - WIND EXPOSURE
4	4.1 - VISION GLASS CURTAIN WALL SYSTEM - SEISMIC EXPOSURE
5	5.1 - VISION GLASS CURTAIN WALL SYSTEM - STAR RATED
6	6.1 - TRANSPARENT GLASS CURTAIN WALL SYSTEM - GLAZING UNIT
7	7.1 - INSULATED EXTERIOR FINISHED GLASS (EIFS)
8	8.1 - EIFS FINISHED GLASS (EIFS)
9	9.1 - COLOR ANODIZED ALUMINUM (CA)
10	10.1 - EXTERIOR FINISH (EIFS)
11	11.1 - WOOD COMPOSITE PANEL
12	12.1 - STONE
13	13.1 - ARCHITECTURAL SAN JUANITE
14	14.1 - ARCHITECTURAL CLAYED (PERFORATED)
15	15.1 - GLASS EXPANDED AND STRUCTURE
16	16.1 - WOOD EXPOSURE (REFER TO EXTERIOR)
17	17.1 - STEEL EXPOSURE (REFER TO EXTERIOR)
18	18.1 - ALUMINUM COMPOSITE PANEL
19	19.1 - STONE (EXTENDED)
20	20.1 - WOOD SHIP
21	21.1 - ARCHITECTURAL GRANITE
22	22.1 - BRICK
23	23.1 - STEEL PANEL



PROPOSAL REFERENCE  
1.2.6(C) SOUTH ELEVATION

A-311

TECHNICAL ELEVATION  
SOUTH ELEVATION  
SCALE 1:200



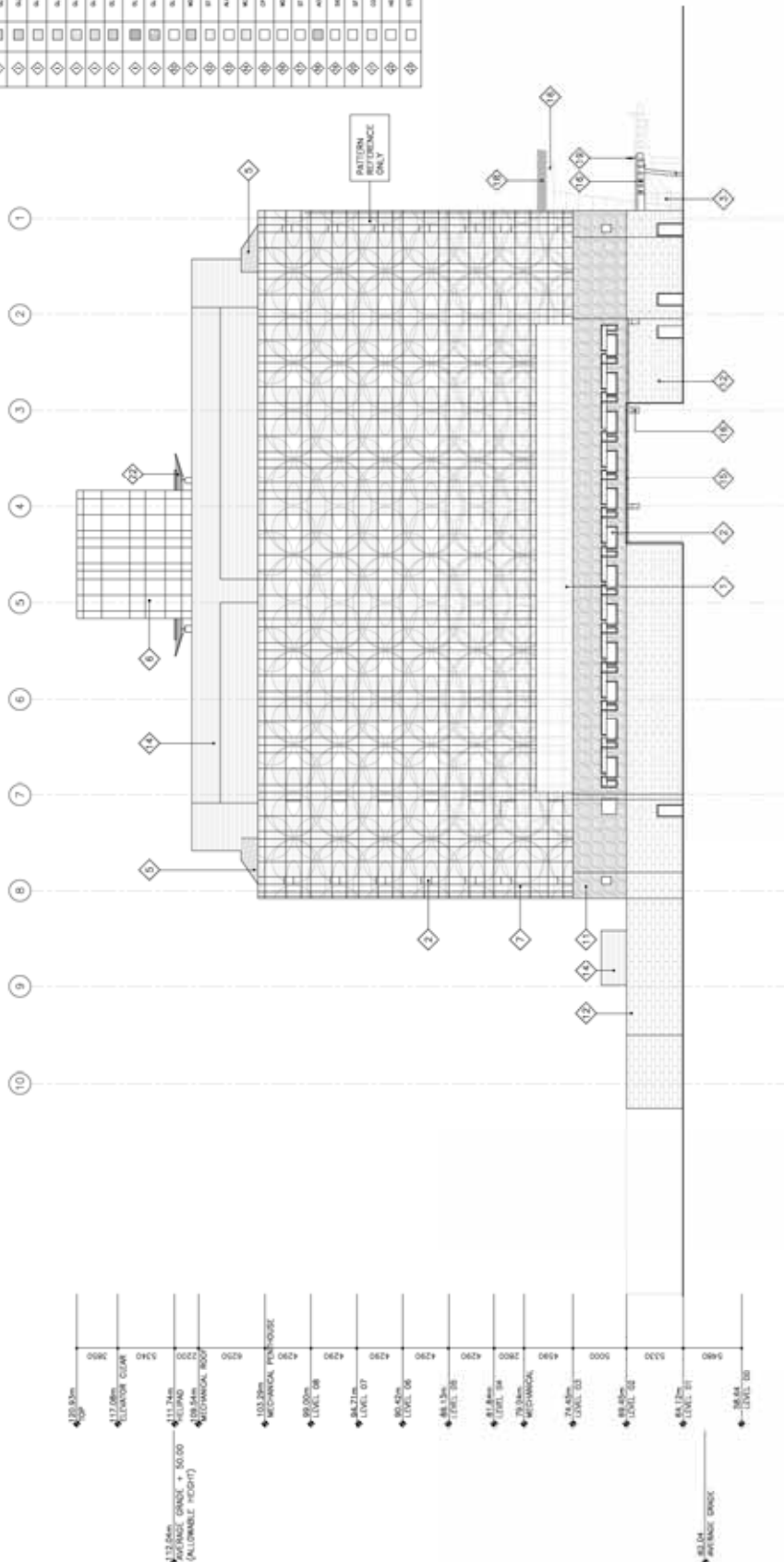
SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT

DECEMBER 03, 2010



EXTERIOR MATERIALS LEGEND

□	SL 1 - VISION GLASS CURTAIN WALL SYSTEM
□	SL 2 - VISION GLASS PANEL IN FPC CURTAIN WALL SYSTEM
□	SL 3 - VISION GLASS CURTAIN WALL SYSTEM - WIND BARRIER
□	SL 4 - VISION GLASS CURTAIN WALL SYSTEM - SECONDARY DRAINAGE
□	SL 5 - VISION GLASS CURTAIN WALL SYSTEM - STAR RAFTS
□	SL 6 - TRANSPARENT GLASS CURTAIN WALL SYSTEM - GLAZING JOINT
□	SL 7 - INSULATED GLAZED UNIT (IGU) PANELS (GLAZING JOINT)
□	SL 8 - FPC PANELS (GLAZING JOINT)
□	SL 9 - COLOR ANODIZED ALUMINUM (CA)Z
□	SL 10 - EXTERIOR FINISH (EIF)
□	W - WOOD COMPOSITE PANEL
□	ST - STONE
□	MT - METALLIC (MATERIAL SPECIFICATIONS)
□	MT - METALLIC (COLOR SPECIFICATIONS)
□	GP - GROUT (MATERIAL AND FINISH)
□	WE ST - WOOD ENCLAVE (REFER TO ENCLAVES)
□	WE ST - STEEL ENCLAVE (REFER TO ENCLAVES)
□	APP - ALUMINUM COMPACT PANEL
□	SM - STAINLESS STEEL (SUS304)
□	SP - STAINLESS STEEL (SUS316)
□	SM - METALLIC (MATERIAL SPECIFICATIONS)
□	WE - WOOD ENCLAVE
□	ST - STEEL ENCLAVE



PROPOSAL REFERENCE  
1.2.6(C) NORTH ELEVATION

A-312

TECHNICAL ELEVATION  
NORTH ELEVATION  
SCALE 1:200

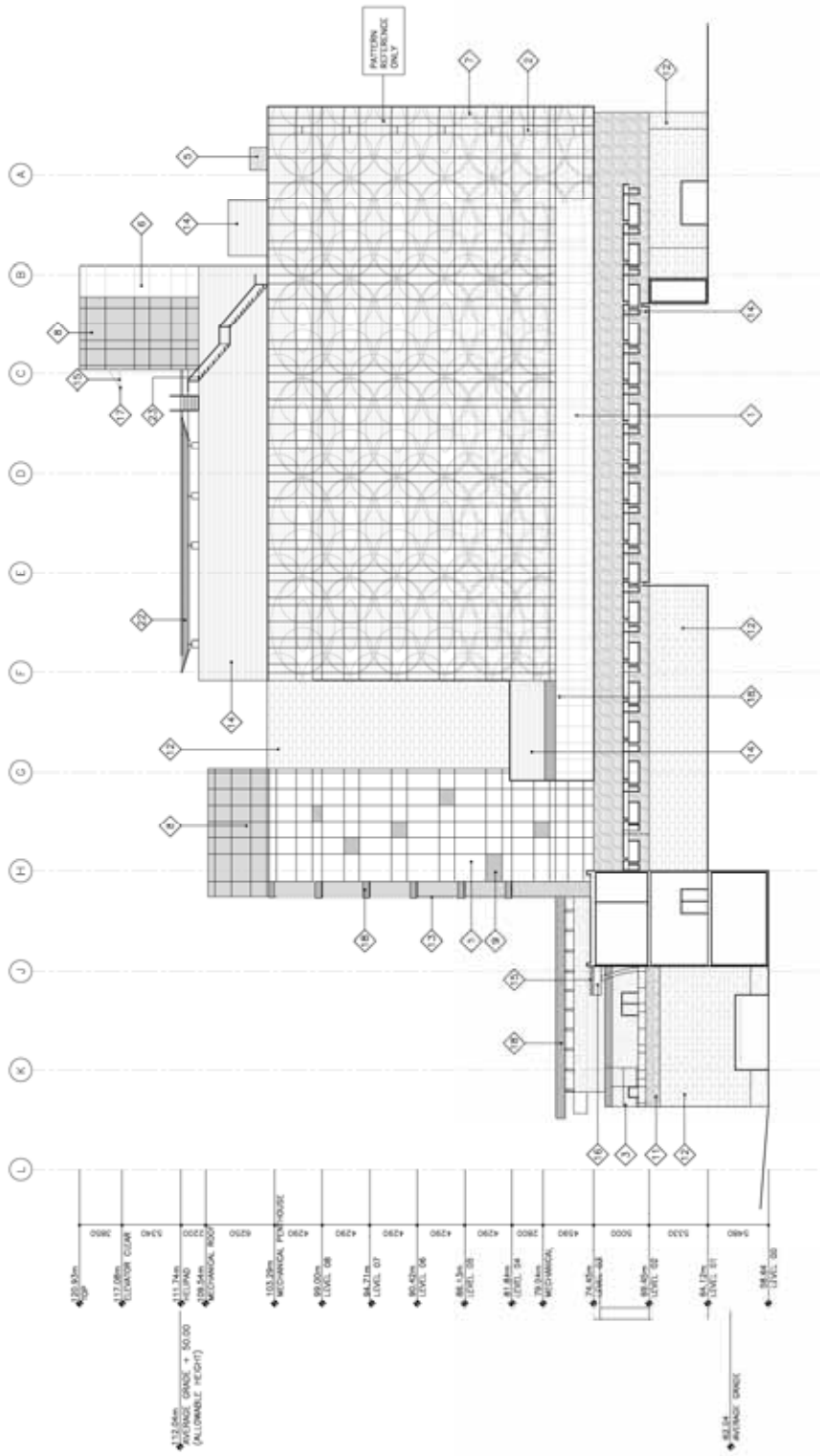


SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010



EXTERIOR MATERIALS LEGEND

□	SL 1 - VISION GLASS CURTAIN WALL SYSTEM
□	SL 2 - VISION GLASS PANEL IN FPC CURTAIN WALL SYSTEM
□	SL 3 - VISION GLASS CURTAIN WALL SYSTEM - WIND BARRIER
□	SL 4 - VISION GLASS CURTAIN WALL SYSTEM - EXTERIOR FINISH
□	SL 5 - VISION GLASS CURTAIN WALL SYSTEM - STAR RAFTS
□	SL 6 - TRANSPARENT GLASS CURTAIN WALL SYSTEM - GLAZING JOINT
□	SL 7 - INSULATED GLAZED UNIT (IGU) WINDOW SYSTEM
□	SL 8 - FPC HANDED GLASS (FPC)
□	SL 9 - COLOR ANODIZED ALUMINUM (CA)
□	SL 10 - EXTERIOR FINISH (EIF)
□	W1 - WOOD COMPOSITE PANEL
□	ST - STONE
□	MT - METALLIC FINISH (MECHANICAL)
□	MT - METALLIC FINISH (PAINTED)
□	GP - Gypsum BOARD AND STRUCTURE
□	WE ST - WOOD ENCLAVE (REFER TO ENCLAVES)
□	ST ST - STEEL ENCLAVE (REFER TO ENCLAVES)
□	AP - ALUMINUM COMPACT PANEL
□	SM - STONE (CUTTING)
□	ST - WOOD SPLIT
□	CM - METALLIC CORNER
□	MT - METALLIC CORNER
□	W1 - WOOD
□	ST - STEEL



PROPOSAL REFERENCE  
1.2.650 EAST ELEVATION

A-313

TECHNICAL ELEVATION  
EAST ELEVATION  
SCALE 1:200

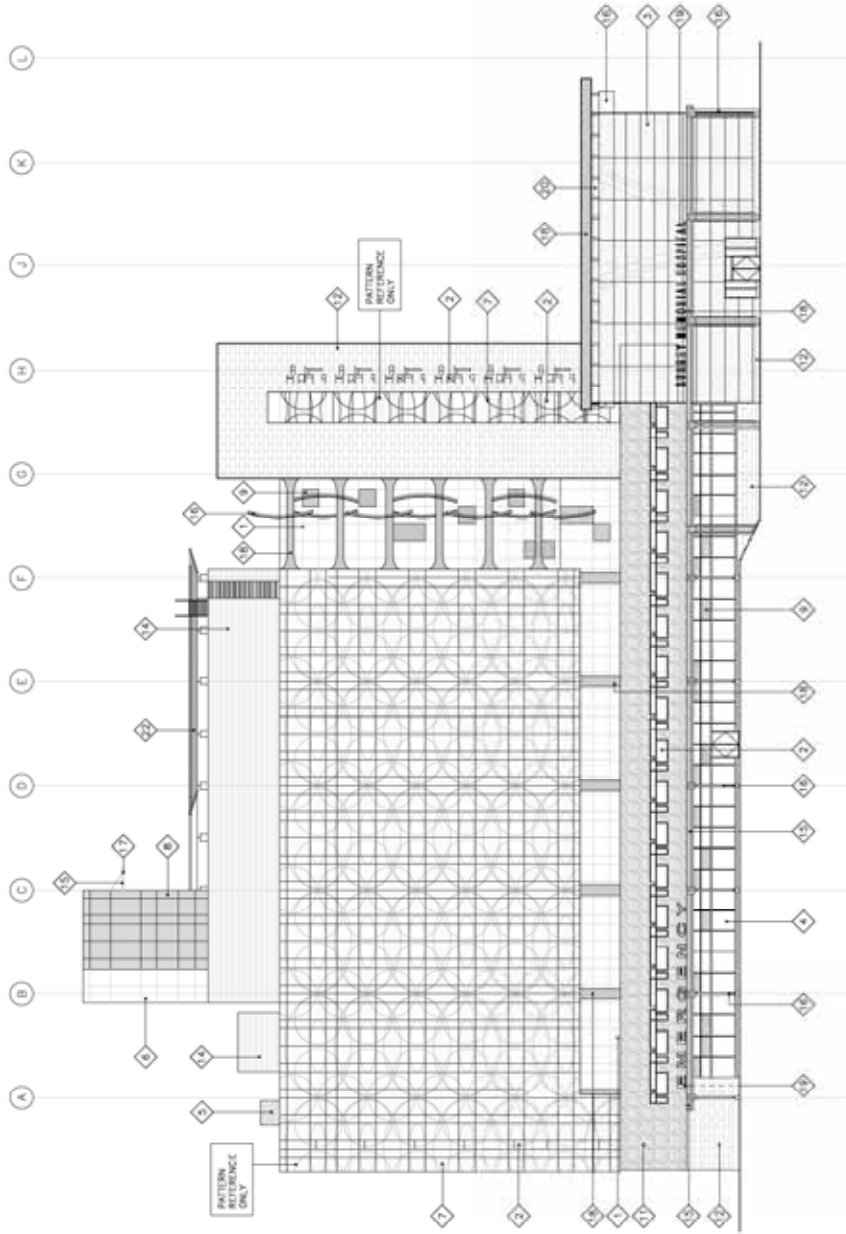


SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT



DECEMBER 03, 2010

EXTERIOR MATERIALS LEGEND	
1	SI.1 - 1000 SLAB CURTAIN WALL SYSTEM
2	SI.2 - 1000 SLAB PANEL IN FPC CURTAIN WALL SYSTEM
3	SI.3 - 1000 SLAB CURTAIN WALL SYSTEM - WIND DAMPING
4	SI.4 - 1000 SLAB CURTAIN WALL SYSTEM - EXTERIOR FINISH
5	SI.5 - 1000 SLAB CURTAIN WALL SYSTEM - 10M SPART
6	SI.6 - 1000 SLAB CURTAIN WALL SYSTEM - 10M SPART
7	SI.7 - INSULATED EXTERIOR FIBER REINFORCED CONCRETE (EIFS)
8	SI.8 - 1000 PANEL SLAB (FPC)
9	SI.9 - COLOR ANCHORED SLAB (CAI)
10	SI.10 - EXTERIOR FINISH (EIFS)
11	SI.11 - WOOD COMPOSITE PANEL
12	SI.12 - BRICK
13	SI.13 - ARCHITECTURAL BRICK
14	SI.14 - ARCHITECTURAL CLAYED BRICKWORK
15	SI.15 - SLAB CONCRETE AND FINISH
16	SI.16 - WOOD FINISH (INTERIOR TO EXTERIOR)
17	SI.17 - STEEL FINISH (INTERIOR TO EXTERIOR)
18	SI.18 - ALUMINUM COMPOSITE PANEL
19	SI.19 - BRICK (EXTERIOR)
20	SI.20 - WOOD FINISH
21	SI.21 - ARCHITECTURAL CONCRETE
22	SI.22 - STEEL PANEL



5480	LEVEL 09
5300	LEVEL 08
5000	LEVEL 07
4900	LEVEL 06
4300	LEVEL 05
2900	LEVEL 04
2700	MECHANICAL
2000	LEVEL 03
1500	LEVEL 02
1000	LEVEL 01
500	LEVEL 00
0	MECHANICAL ROOF
-100	LEVEL -01
-200	MECHANICAL ROOF
-300	LEVEL -02
-400	MECHANICAL ROOF
-500	LEVEL -03
-600	MECHANICAL ROOF
-700	LEVEL -04
-800	MECHANICAL ROOF
-900	LEVEL -05
-1000	MECHANICAL ROOF
-1100	LEVEL -06
-1200	MECHANICAL ROOF
-1300	LEVEL -07
-1400	MECHANICAL ROOF
-1500	LEVEL -08
-1600	MECHANICAL ROOF
-1700	LEVEL -09
-1800	MECHANICAL ROOF
-1900	LEVEL -10
-2000	MECHANICAL ROOF
-2100	LEVEL -11
-2200	MECHANICAL ROOF
-2300	LEVEL -12
-2400	MECHANICAL ROOF
-2500	LEVEL -13
-2600	MECHANICAL ROOF
-2700	LEVEL -14
-2800	MECHANICAL ROOF
-2900	LEVEL -15
-3000	MECHANICAL ROOF
-3100	LEVEL -16
-3200	MECHANICAL ROOF
-3300	LEVEL -17
-3400	MECHANICAL ROOF
-3500	LEVEL -18
-3600	MECHANICAL ROOF
-3700	LEVEL -19
-3800	MECHANICAL ROOF
-3900	LEVEL -20
-4000	MECHANICAL ROOF
-4100	LEVEL -21
-4200	MECHANICAL ROOF
-4300	LEVEL -22
-4400	MECHANICAL ROOF
-4500	LEVEL -23
-4600	MECHANICAL ROOF
-4700	LEVEL -24
-4800	MECHANICAL ROOF
-4900	LEVEL -25
-5000	MECHANICAL ROOF

7910-0261-00 (M)

PROPOSAL REFERENCE  
1.2.6(C) WEST ELEVATION



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010

ITS  
Engineering & Construction

TECHNICAL ELEVATION  
WEST ELEVATION  
SCALE 1:200

A-310



Reference - Glazing & Frit, Pattern as per Elevation



Reference - Wood Composite Panel - Colouration: Cedar



Reference - Exit Stair  
Architectural Form & Character

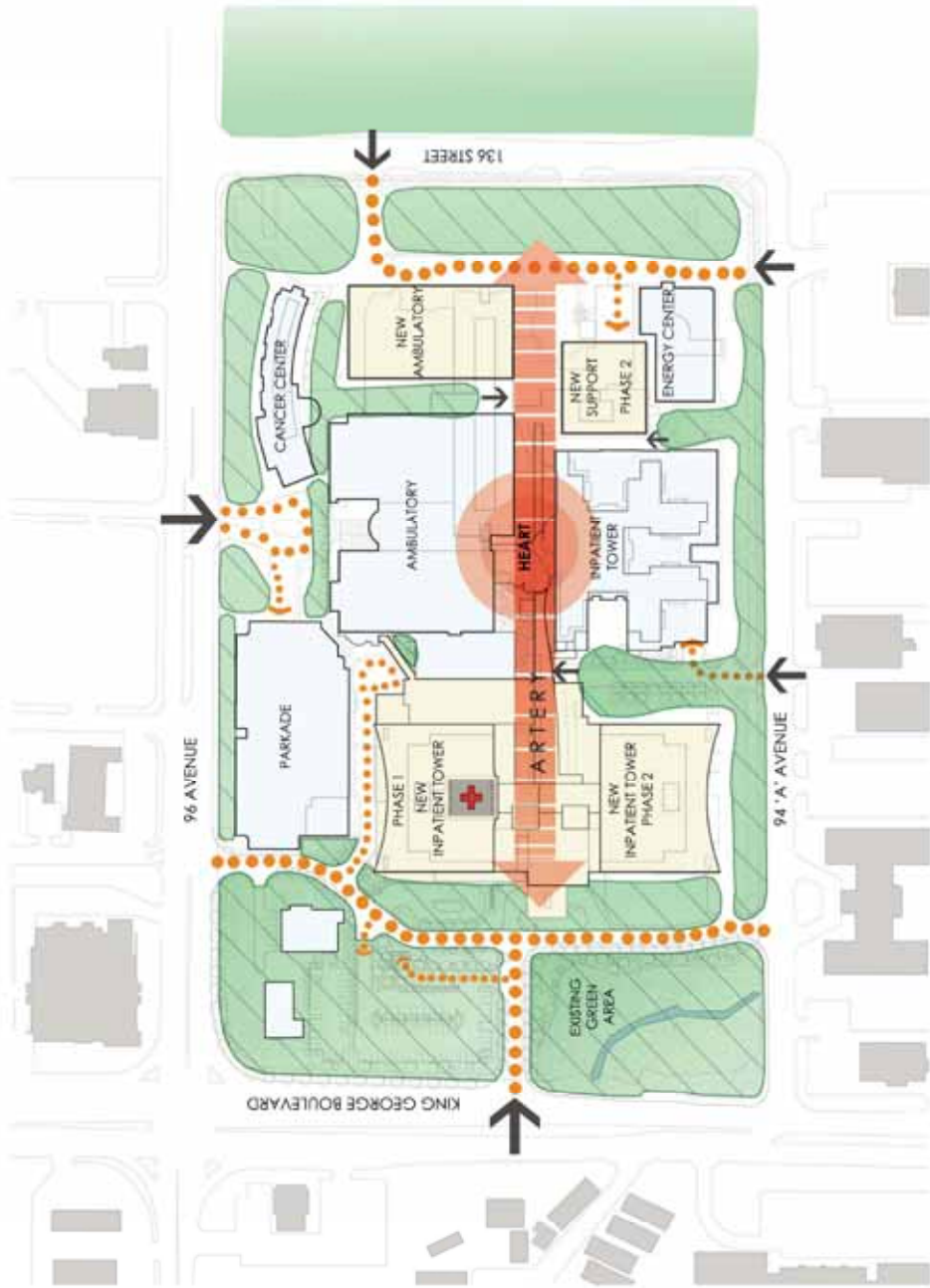


Reference Stone - Colouration: Off-White



Reference - Exterior Sample Board  
Surrey Memorial Hospital Redevelopment & Expansion  
Emergency Department & Critical Care Tower Project

**Development Permit Submission** December 3, 2010



PROPOSAL REFERENCE  
1.1.1(1) MASTER PLAN CONCEPT

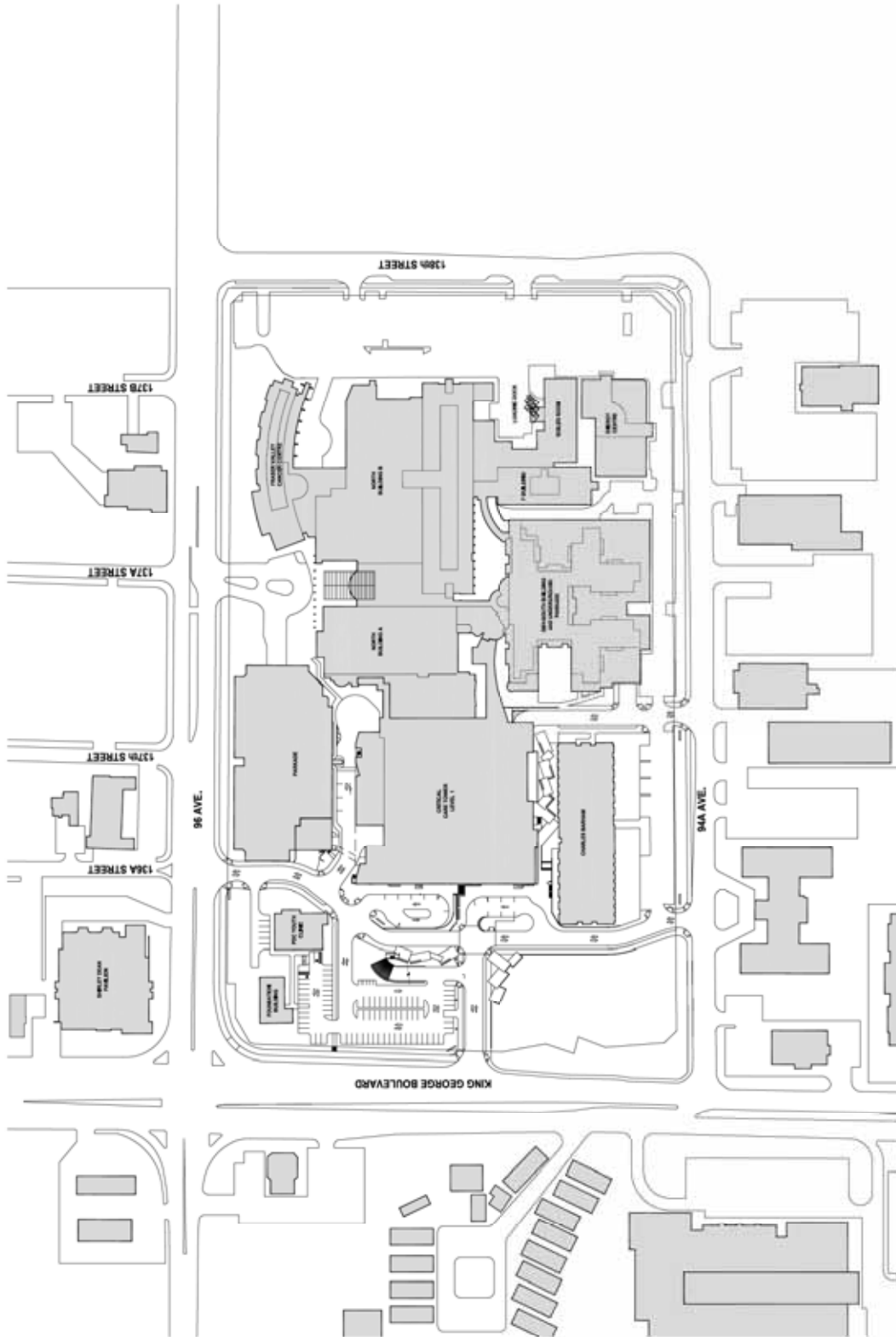
A-003

**iTS** MASTER PLAN CONCEPT  
SCALE 1:1000

SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DECEMBER 03, 2010







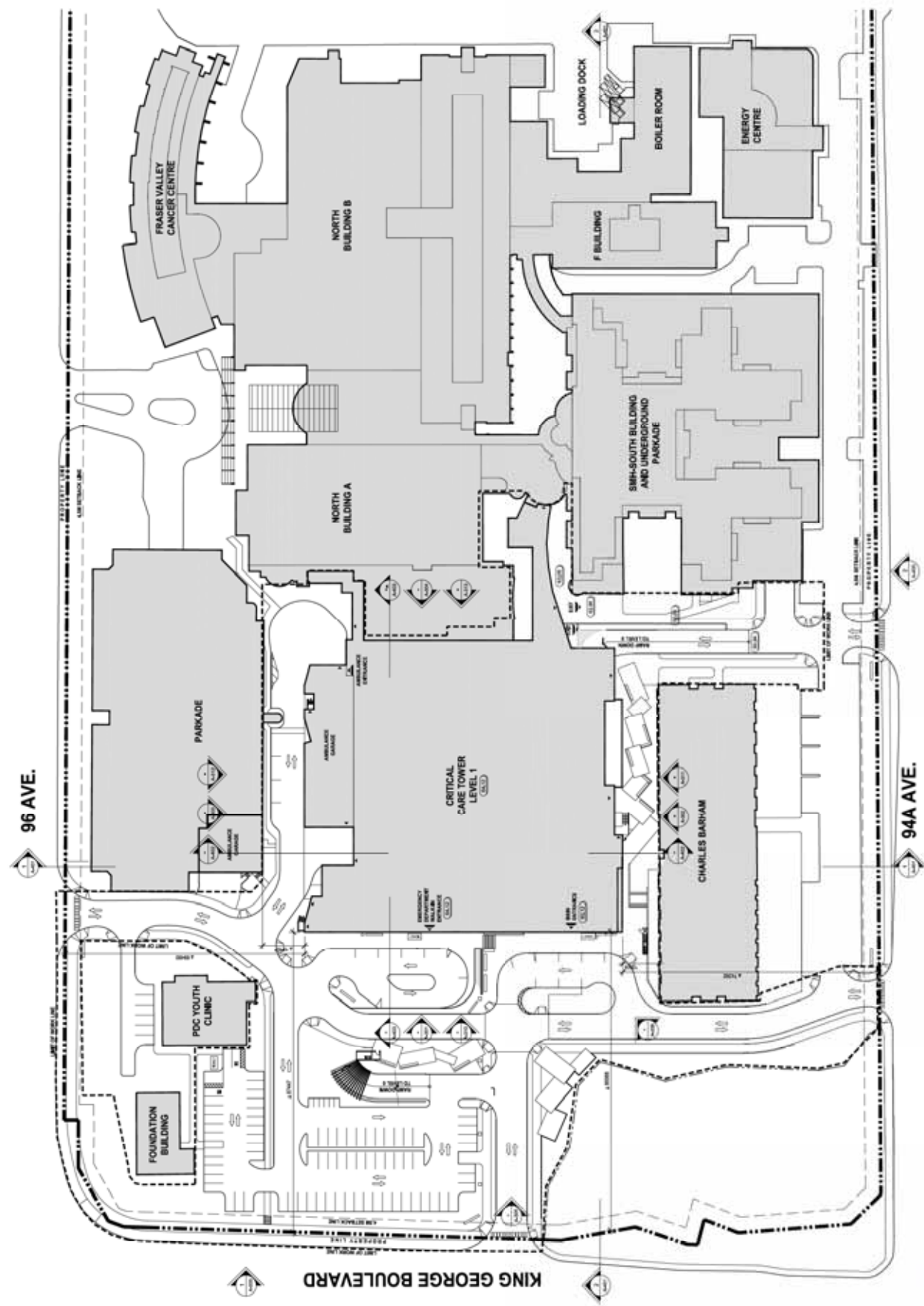
PROPOSAL REFERENCE  
 T.J.J. (P) - SITE CONTEXT PLAN

A-002

iTS  
 SITE CONTEXT PLAN  
 SCALE 1:1000

SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010





PROPOSAL REFERENCE  
 1.2.1 (5)  
 ARCHITECTURAL SITE PLAN

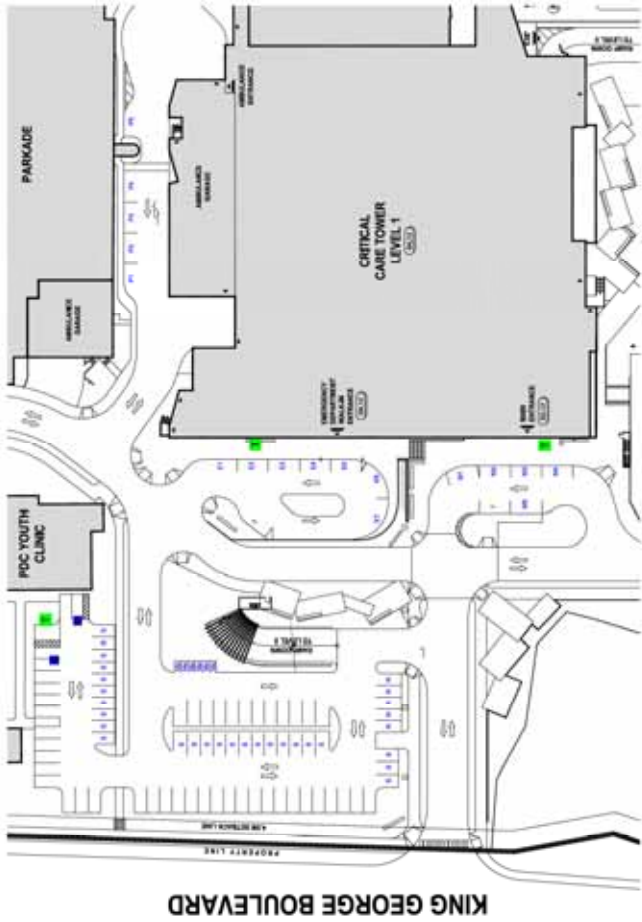
A-004

ARCHITECTURAL SITE PLAN  
 SCALE 1:500



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 NOVEMBER 23, 2010





KING GEORGE BOULEVARD

**KEY REFERENCE**

C	COURSER STALLS
E	EMERGENCY PICK-UP/DROP-OFF
H	MASS ENTRANCE PICK-UP/DROP-OFF
M	MOTORCYCLE STALLS
P	POLICE STALLS
PT	PATIENT TRANSFER AIRBORNE STALL
SE	CRITICAL EMERGENCY STALLS
S	SMALL CAR STALLS
T	TAXI
W	PERSONS WITH DISABILITIES
PS	PKY OR FOOT STATION

**NOTE:** STALLS WITHOUT DESIGNATIONS ARE STANDARD SIZE STALLS TO BE UTILIZED BY EITHER VISITORS OR STAFF.



2. LEVEL 0 PARKING PLAN



3. LEVEL P1 PARKING PLAN

**PARKING CALCULATIONS**

STALL TYPE	REG. 0	P1	P2
REGULAR STALLS	40	156	310
SMALL STALLS	25	0	14
ACCESSIBLE STALLS	3	0	4
TOTAL STALLS	71	162	338
GRAND TOTAL	444 STALLS PROVIDED		

SMALL CAR %:  $\frac{25}{444} = 5.6\%$

REQUIRED ACCESSIBLE: 1 PER 100 OR PART THEREOF  
 $\frac{444}{100} = 4.44 \approx 4.5$  REQUIRED



4. LEVEL P2 PARKING PLAN

**PROPOSAL REFERENCE**  
 1.3.2 (4) - PARKING PLAN

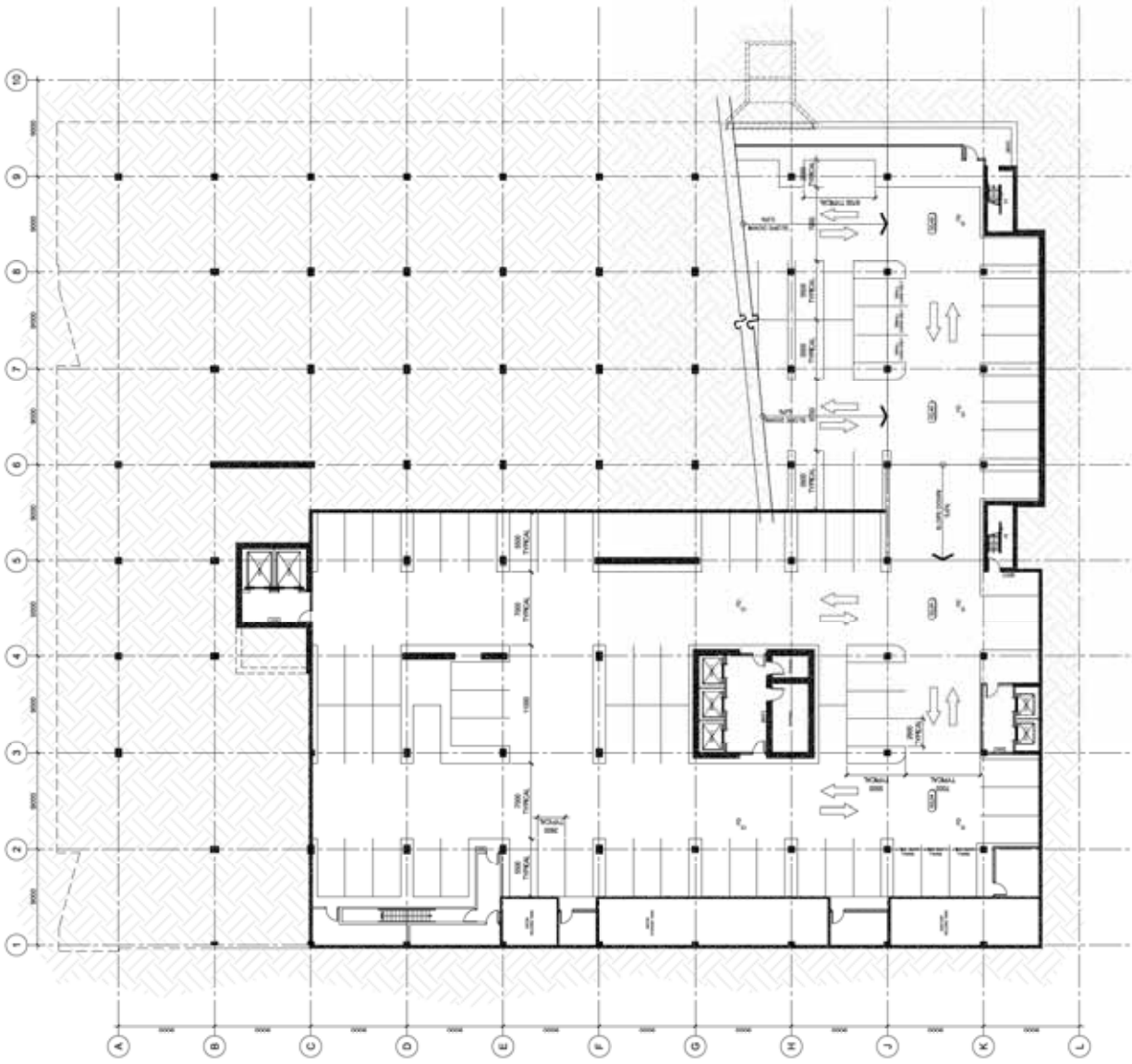


**SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT**  
 DECEMBER 03, 2010



**PARKING PLANS**  
 SCALE 1:500

**A-052**



PROPOSAL REFERENCE  
 1.2.2 (ii) TECHNICAL FLOOR PLANS

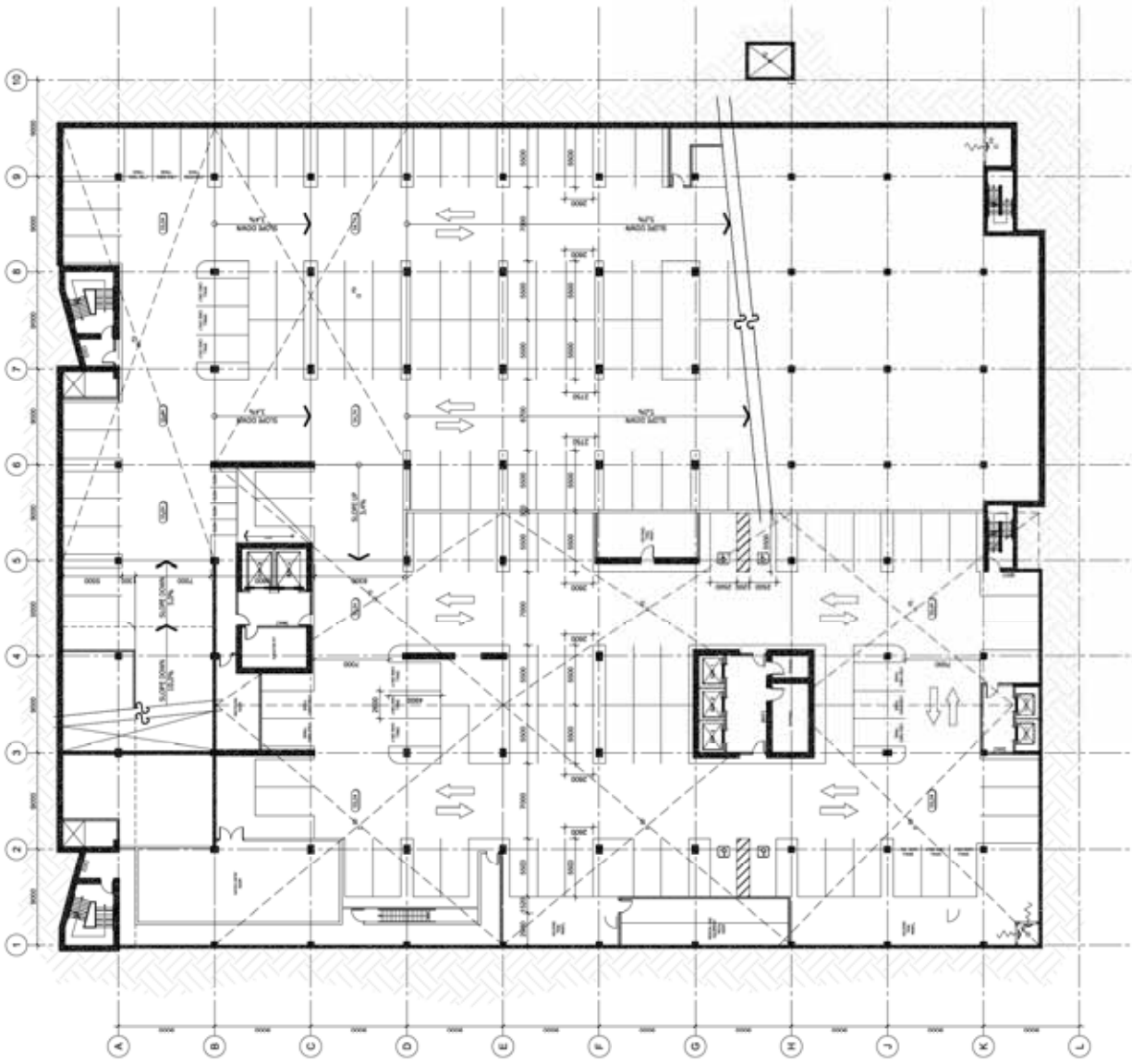
A-208C



TECHNICAL PLAN - PARKING LEVEL P2  
 SCALE 1:200

SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010





PROPOSAL REFERENCE  
 1.2.6 (T) TECHNICAL FLOOR PLANS

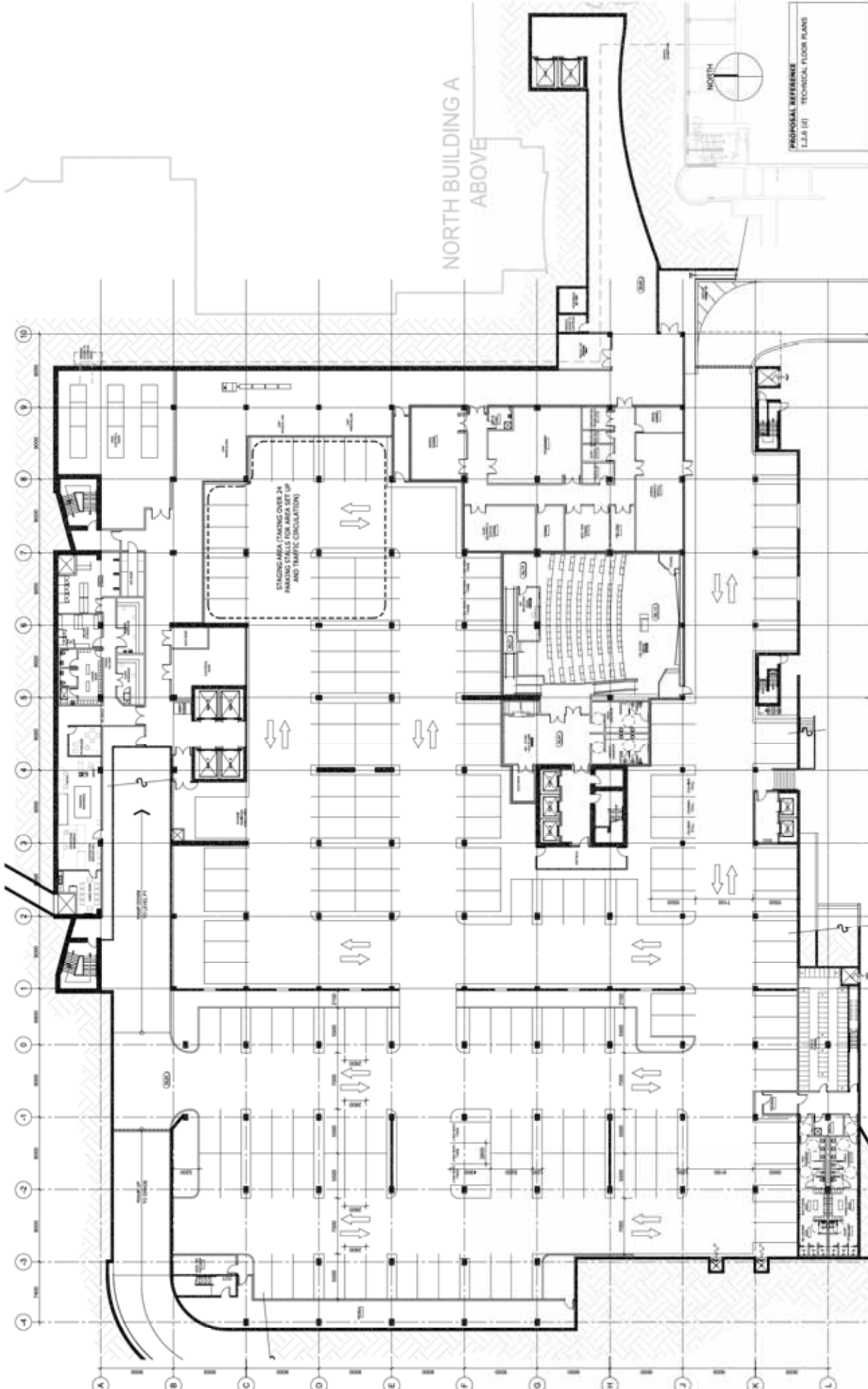
A-209C

ITS TECHNICAL PLAN - PARKING LEVEL P1  
 SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010





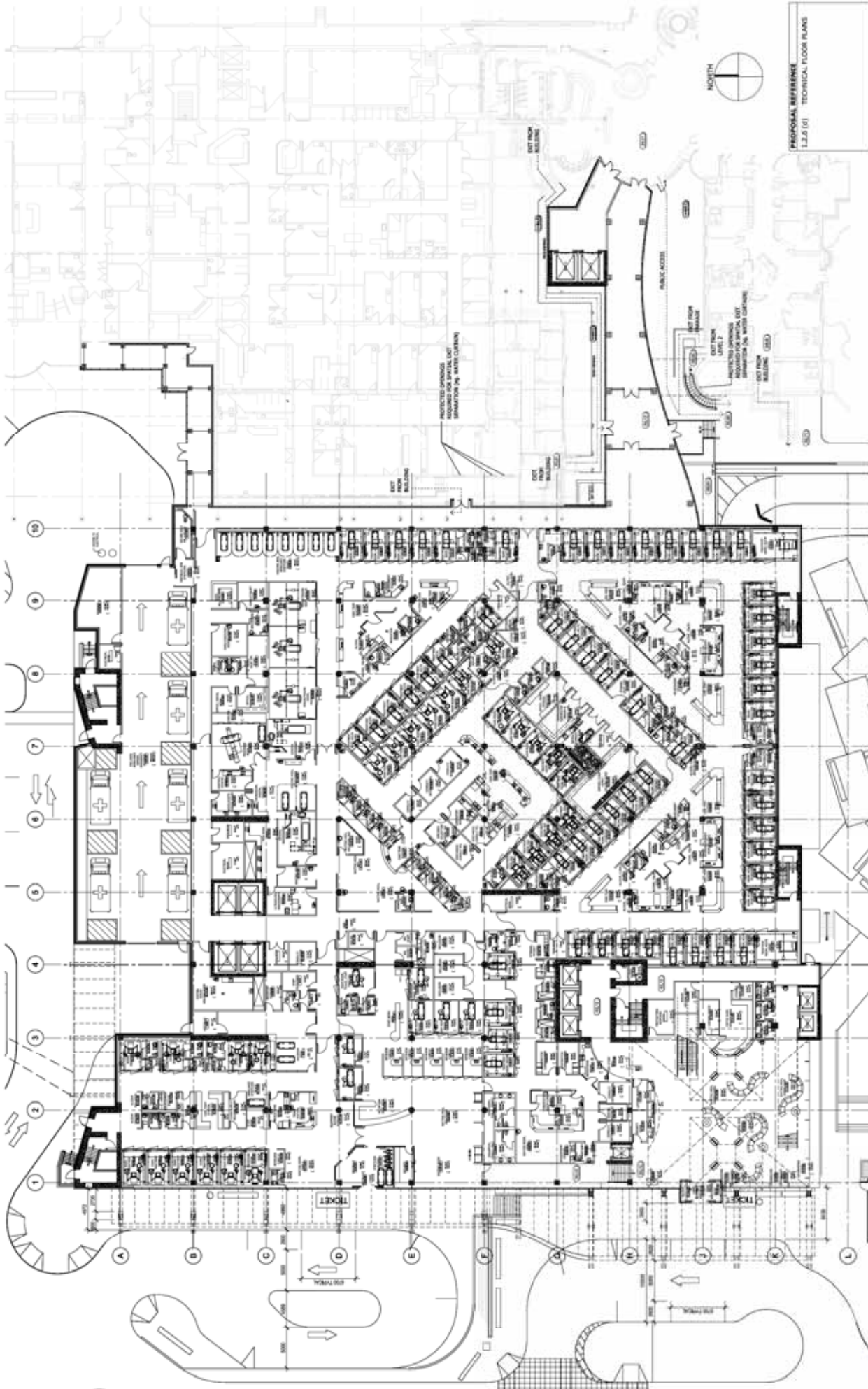
A-210C

F.M. SPACE AND LECTURE THEATRE  
**TECHNICAL PLAN - LEVEL 0**  
 SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010





PROPOSAL REFERENCE  
1.2.2.6 (I)  
TECHNICAL FLOOR PLANS

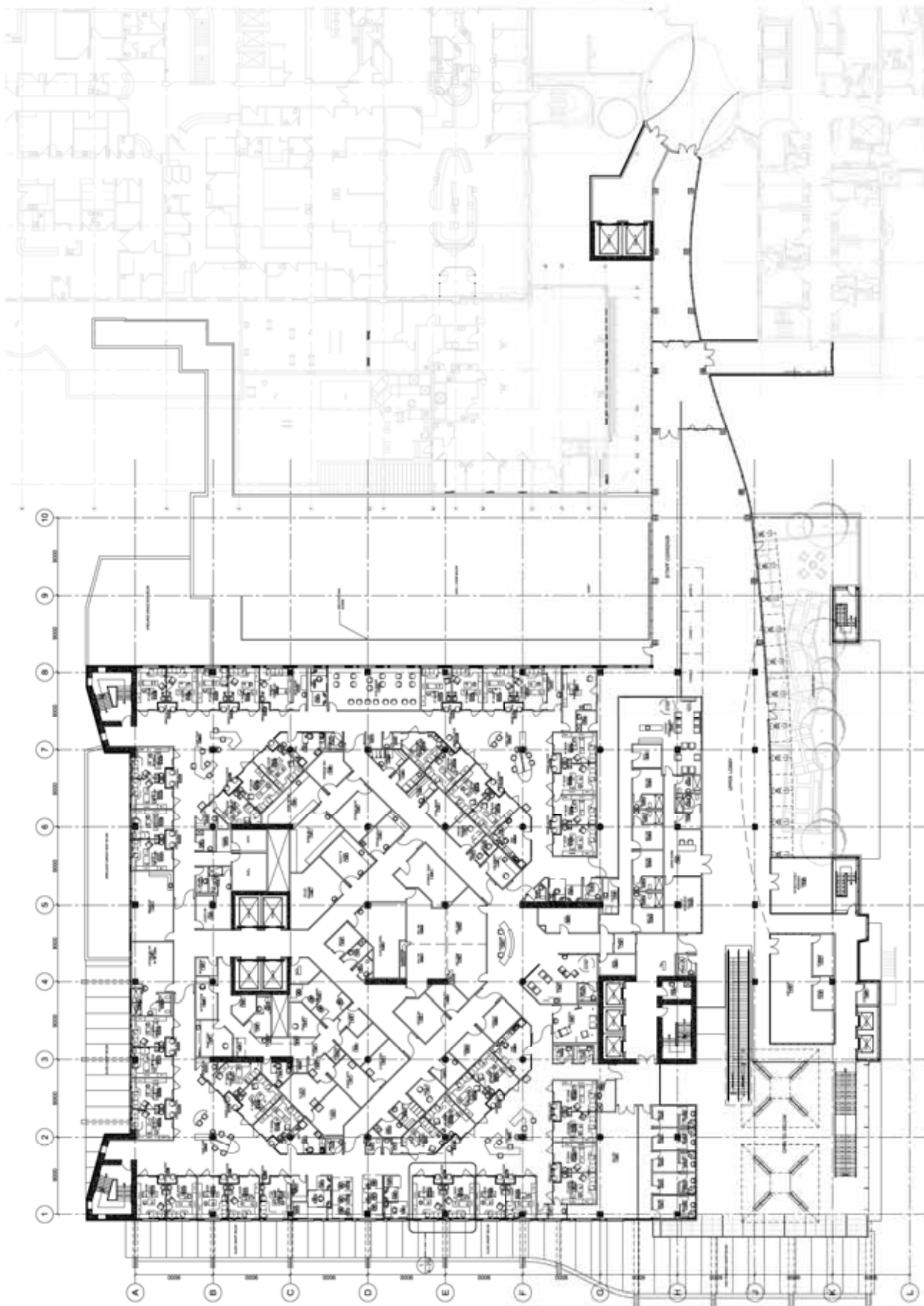
A-211C

EMERGENCY DEPARTMENT  
**TECHNICAL PLAN - LEVEL 1**  
SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
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PROPOSAL REFERENCE  
1.2.2 (f) INDU PLAN

A-212C

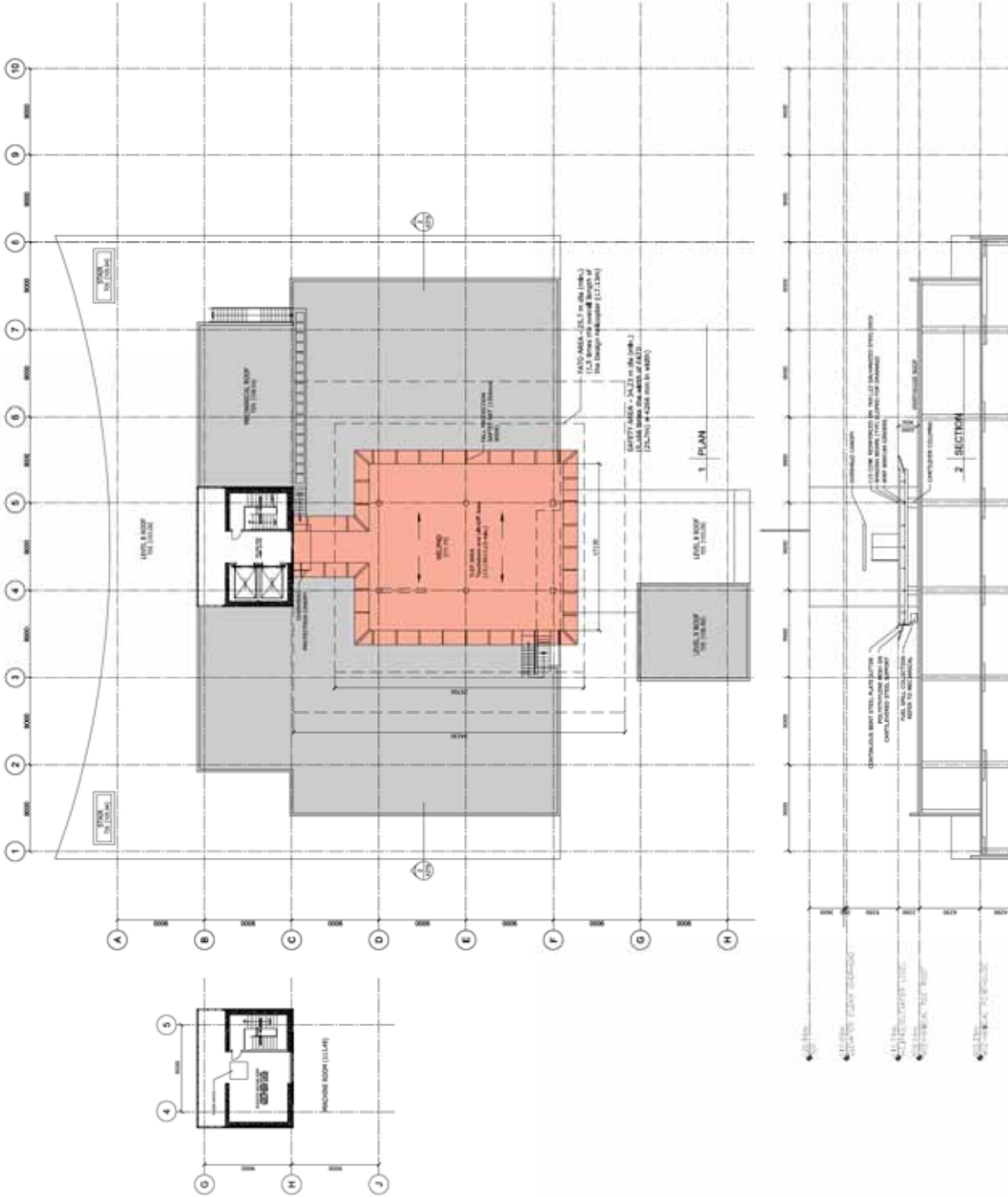
NEONATAL INTENSIVE CARE UNIT  
**TECHNICAL PLAN - LEVEL 2**  
SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
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SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
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HELIPAD / ROOF PLAN  
**LEVEL 10 FLOOR PLAN**  
SCALE 1:200

**A-220a**





LEGEND - LEVEL 9  
 ROOF  
 MECHANICAL PENTHOUSE



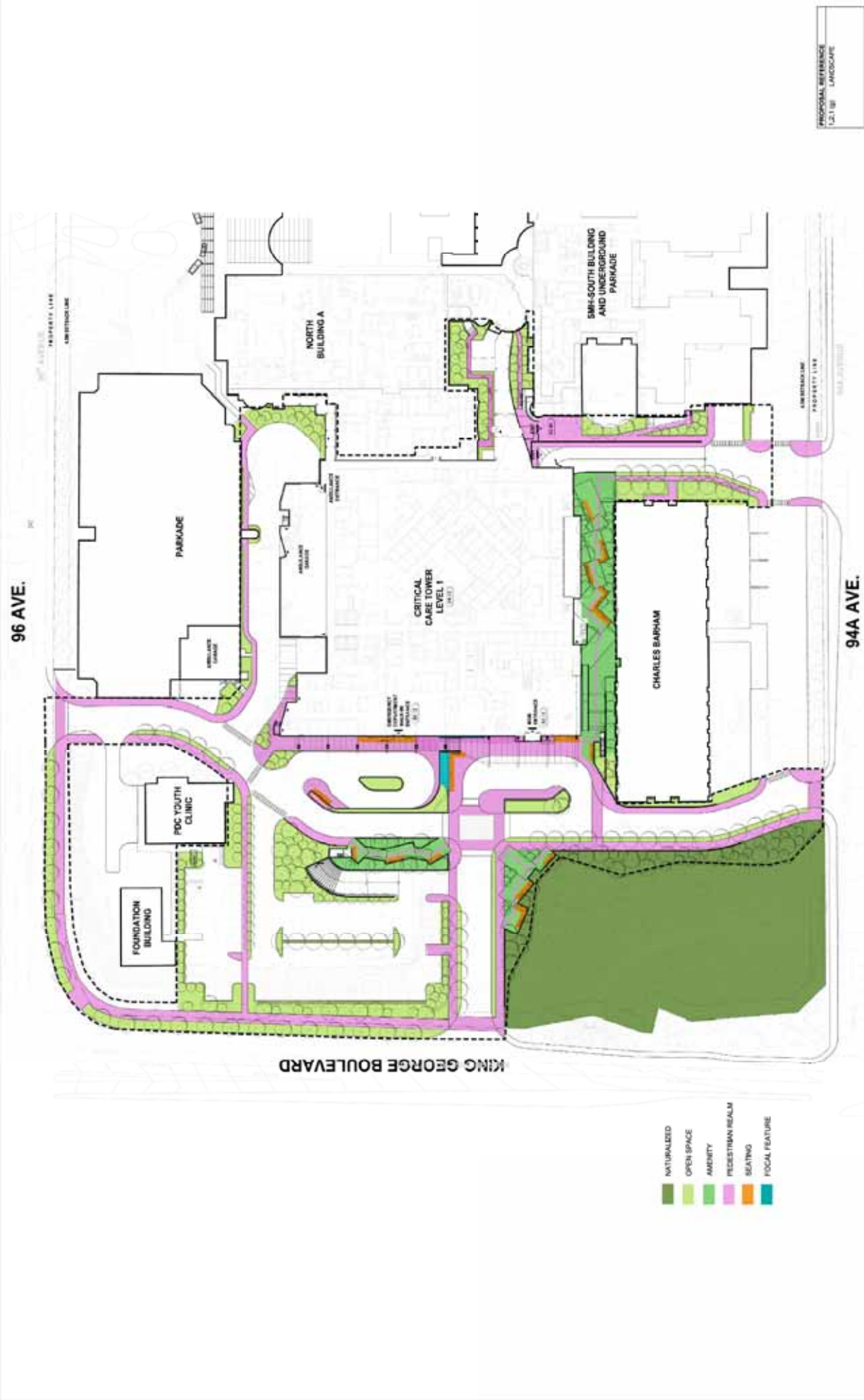
PROPOSAL REFERENCE
1.2.2N
FUNCTIONAL RELATIONSHIPS
1.2.2B
FUNCTIONAL RELATIONSHIPS
1.2.2D
FLOOR PLANS

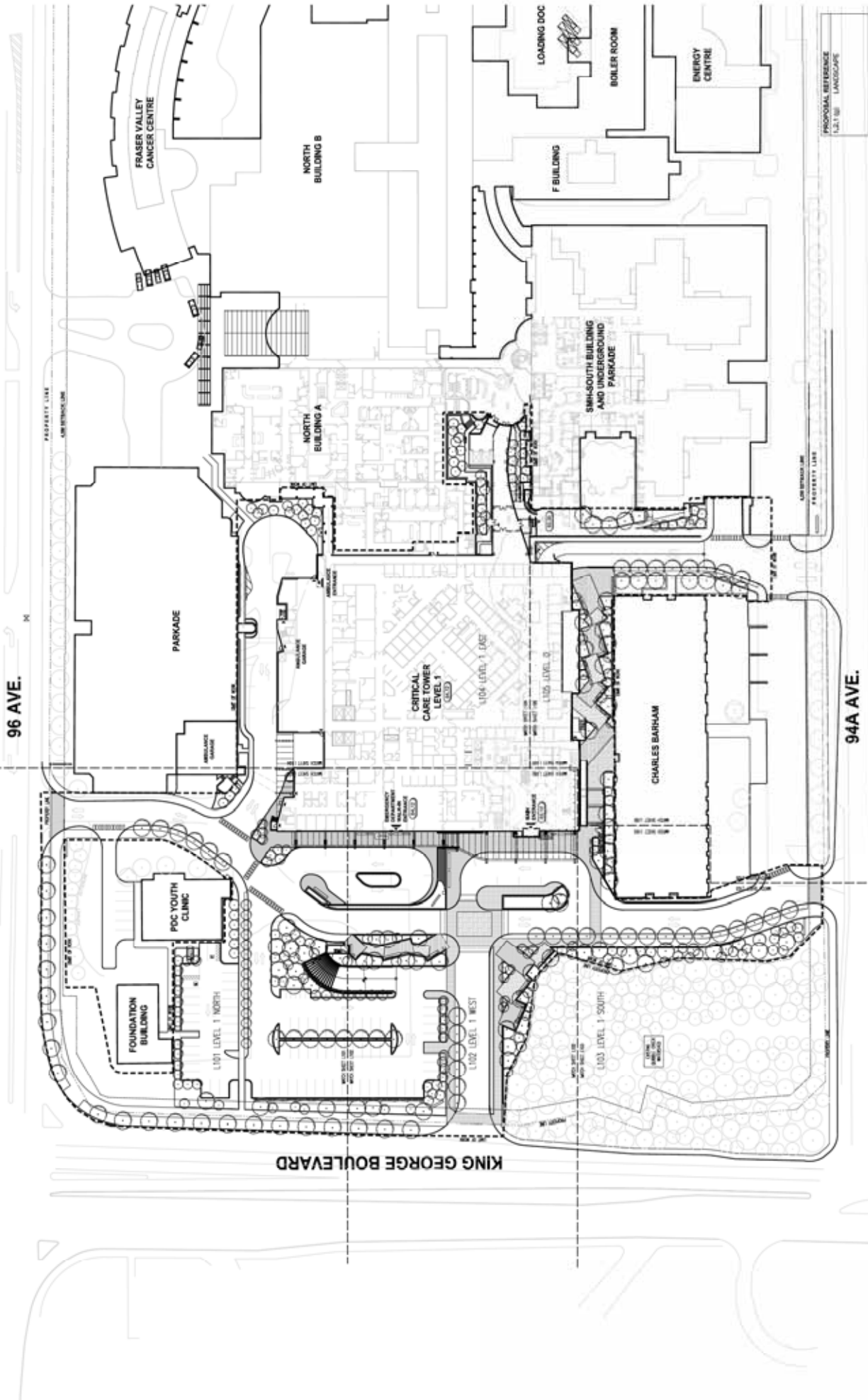
**A-219a**  
 MECHANICAL PENTHOUSE  
**FUNCTIONAL PLAN LEVEL 9**  
 SCALE 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DECEMBER 03, 2010







L-100

LANDSCAPE  
SITE PLAN  
1:500

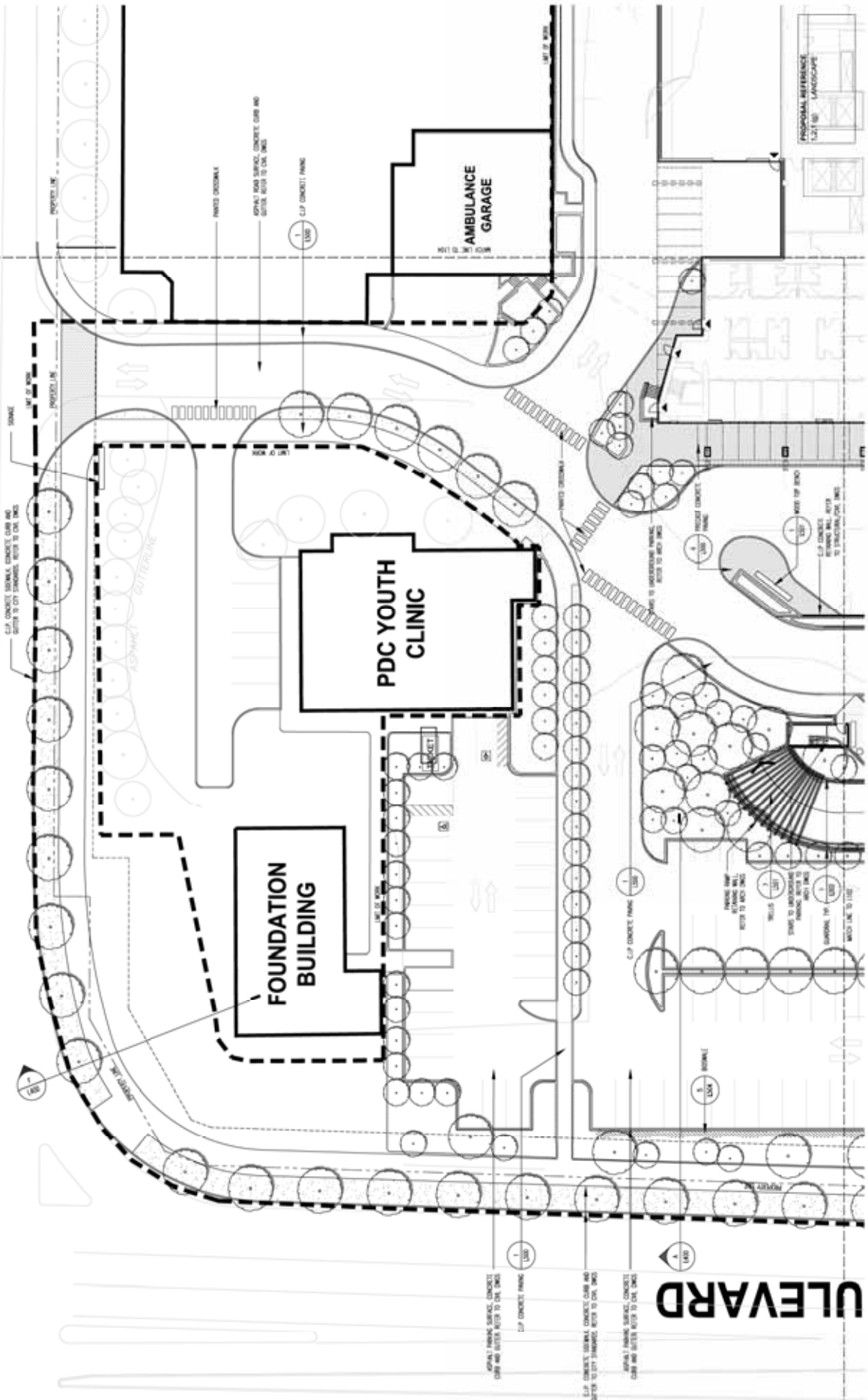


SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT

DEC 3, 2010



96 AVE.



ULEVARD

L-101

LANDSCAPE LANDSCAPE PLAN - LEVEL 1 NORTH 1:200

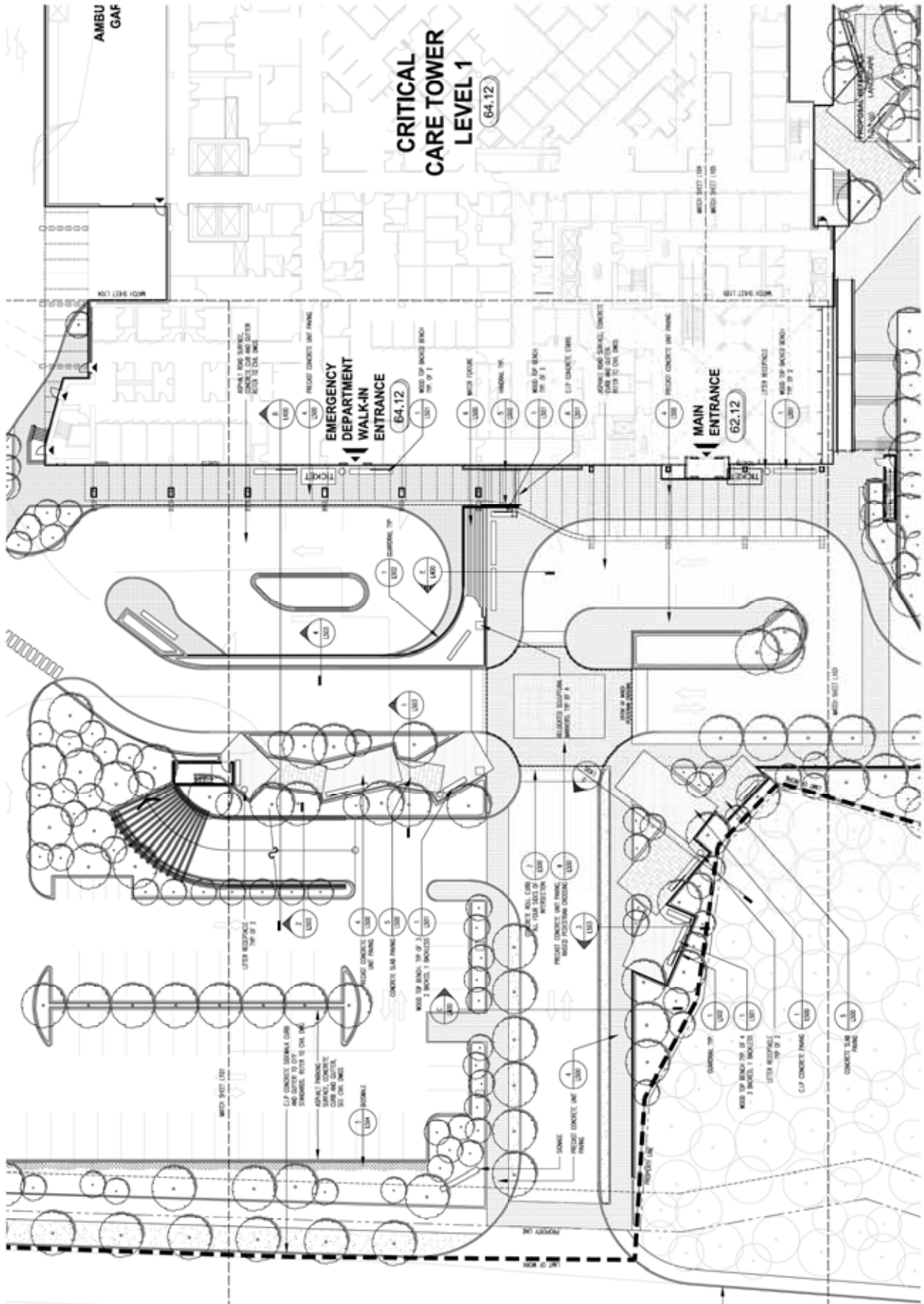


SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION: EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT



DEC 3, 2010

# KING GEORGE BOULEVARD



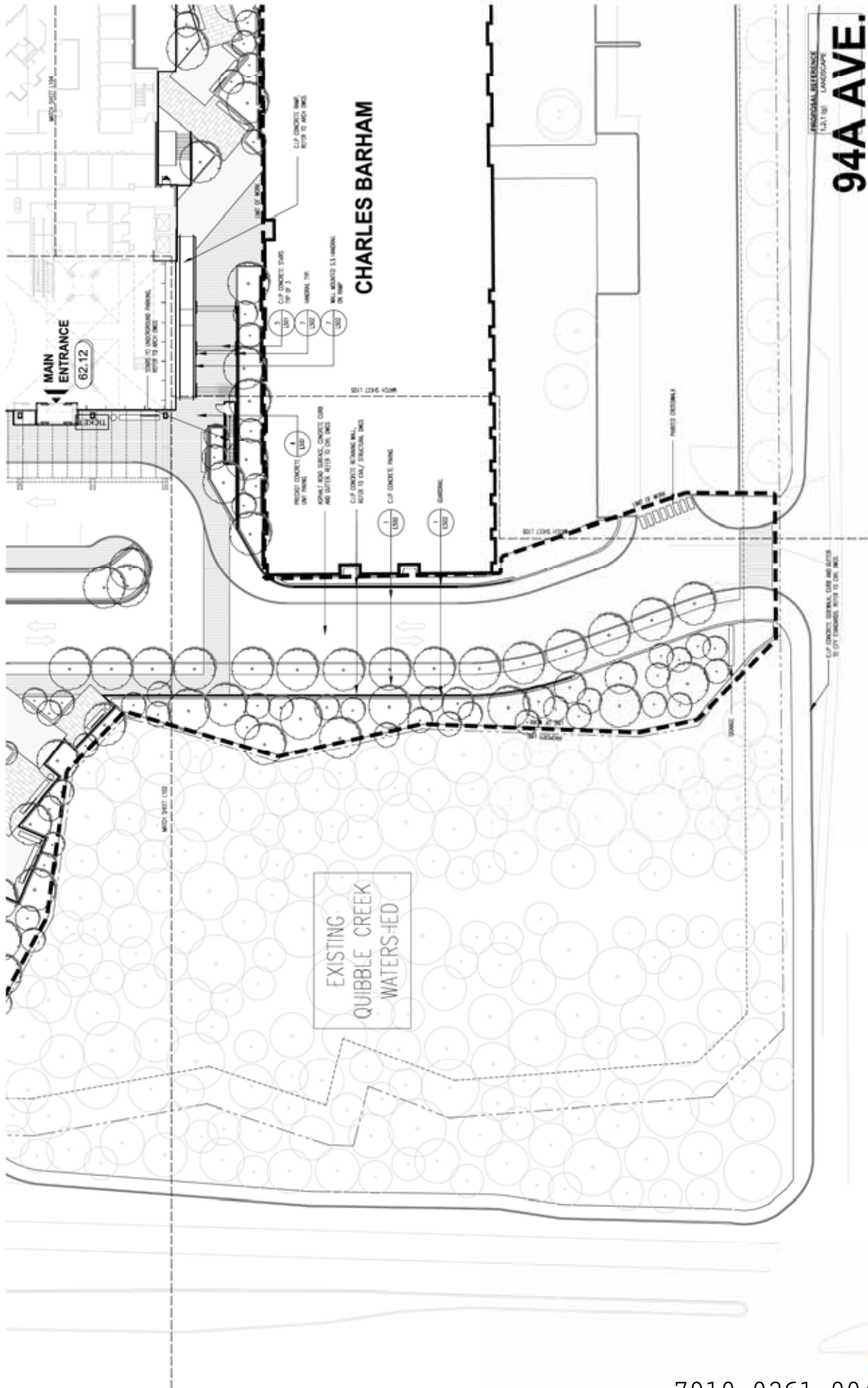
L-102

LANDSCAPE PLAN - LEVEL 1 WEST  
1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DEC 3, 2010





EXISTING QUIBBLE CREEK WATERSHED

**CHARLES BARHAM**

MAIN ENTRANCE 62.12

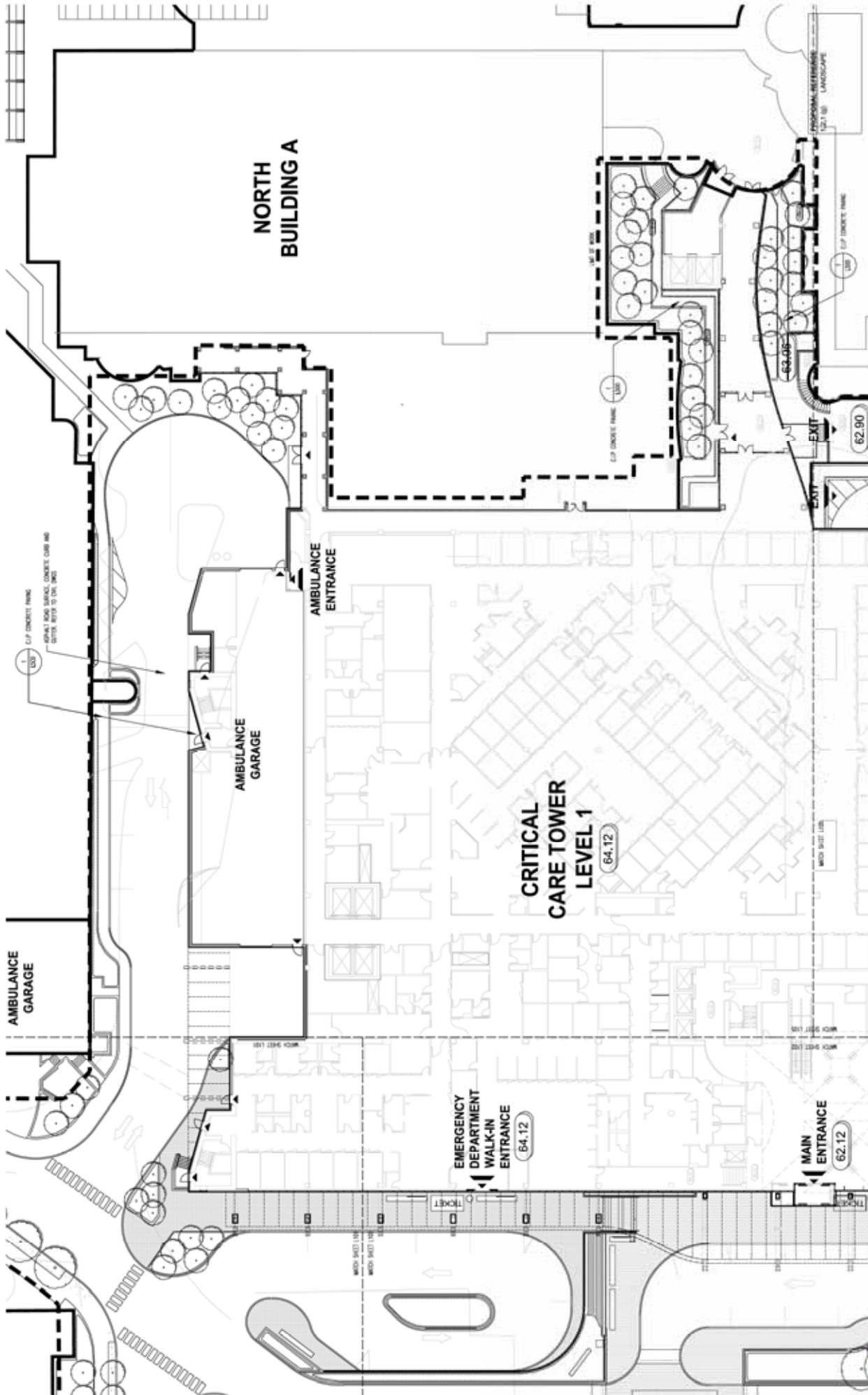
94A AVE.  
L-103

LANDSCAPE PLAN - LEVEL 1 SOUTH  
1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
DEC 3, 2010





L-104

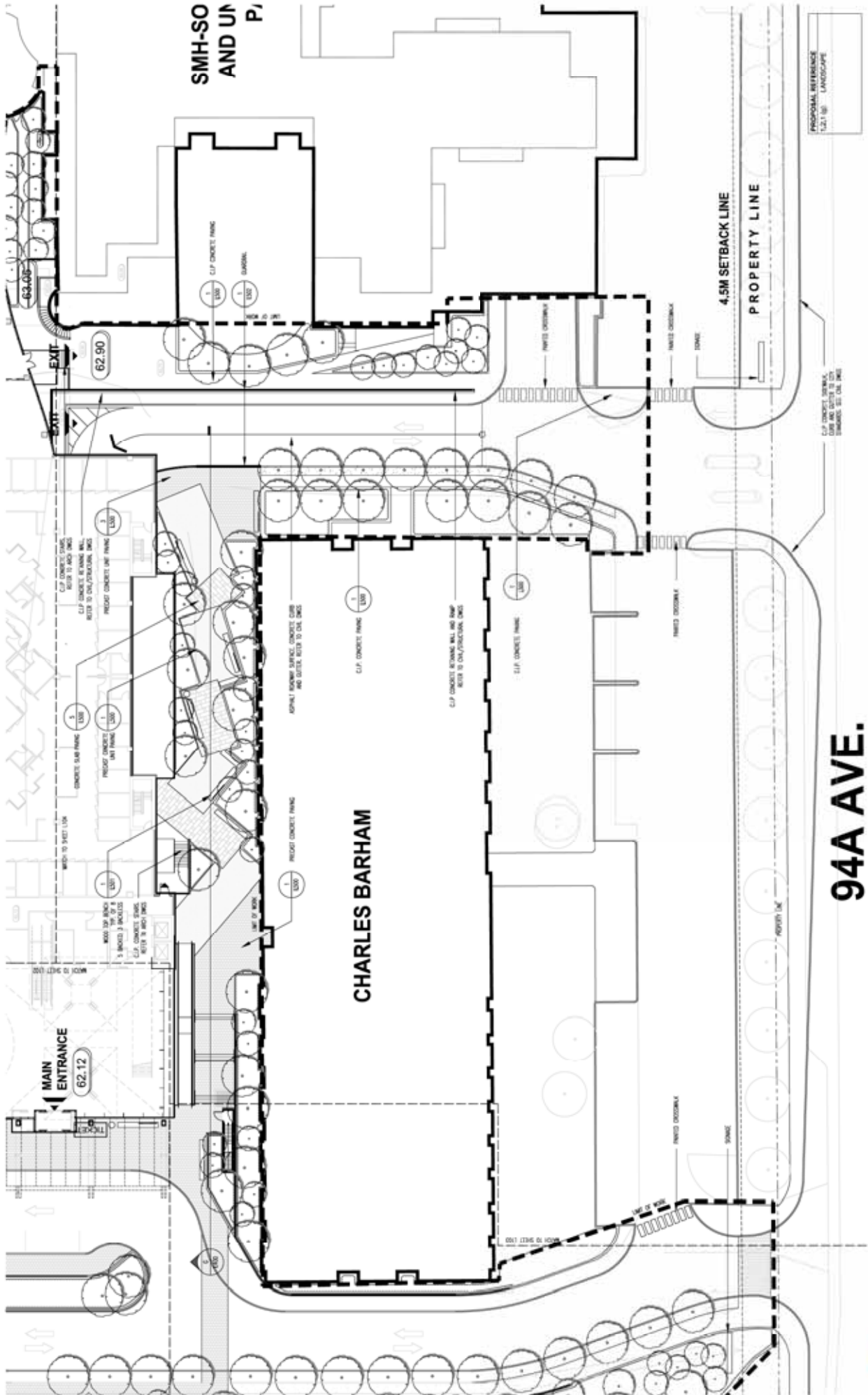
LANDSCAPE  
**LANDSCAPE PLAN - LEVEL 1 EAST**  
 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DEC 3, 2010







SMH-SO  
AND UP  
P1

CHARLES BARHAM

94A AVE.

SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT

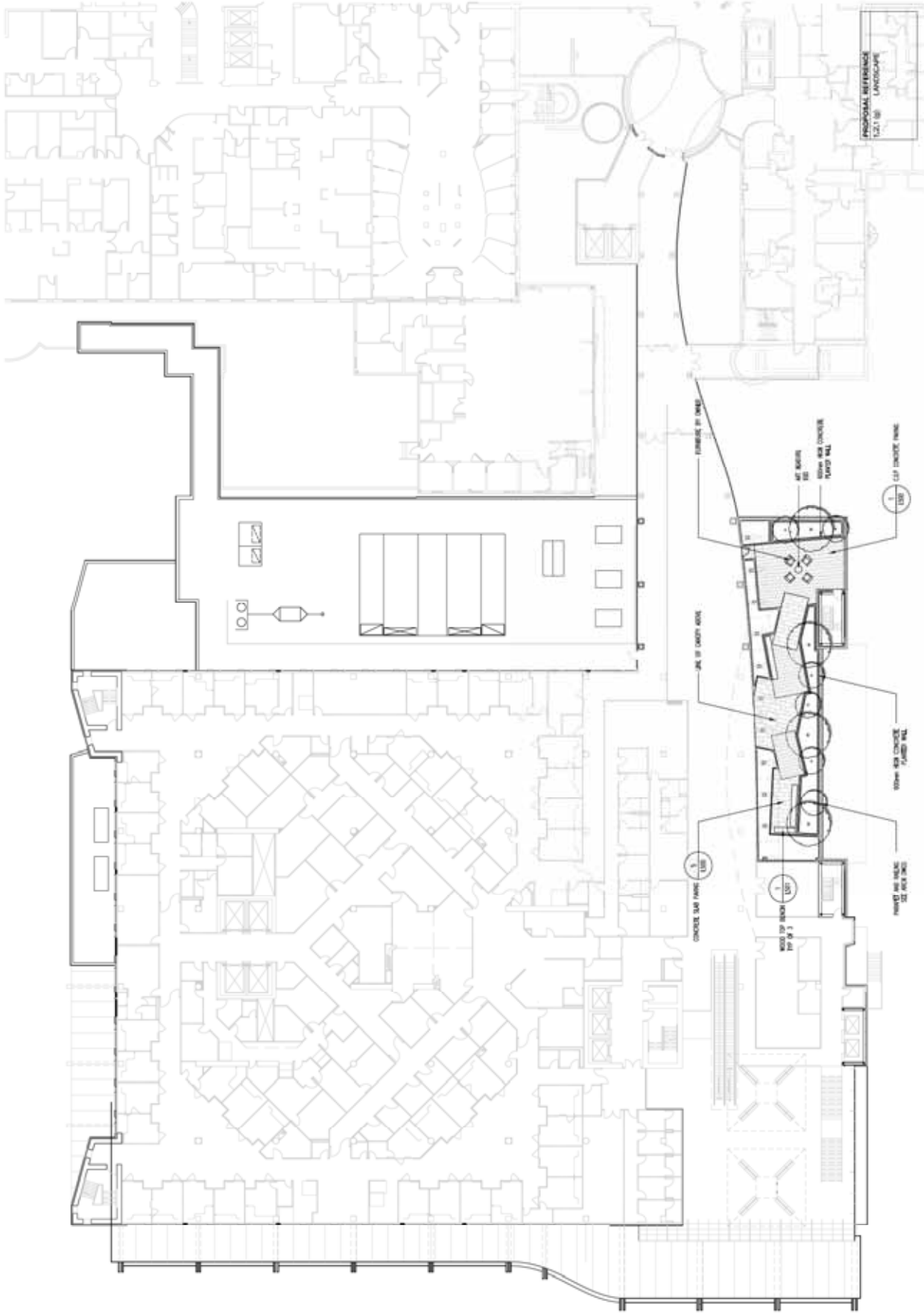


LANDSCAPE  
LANDSCAPE PLAN - LEVEL 0  
1:200

L-105



DEC 3, 2010



PROPOSAL REFERENCE  
1.2.2.10 LANDSCAPE

L-106

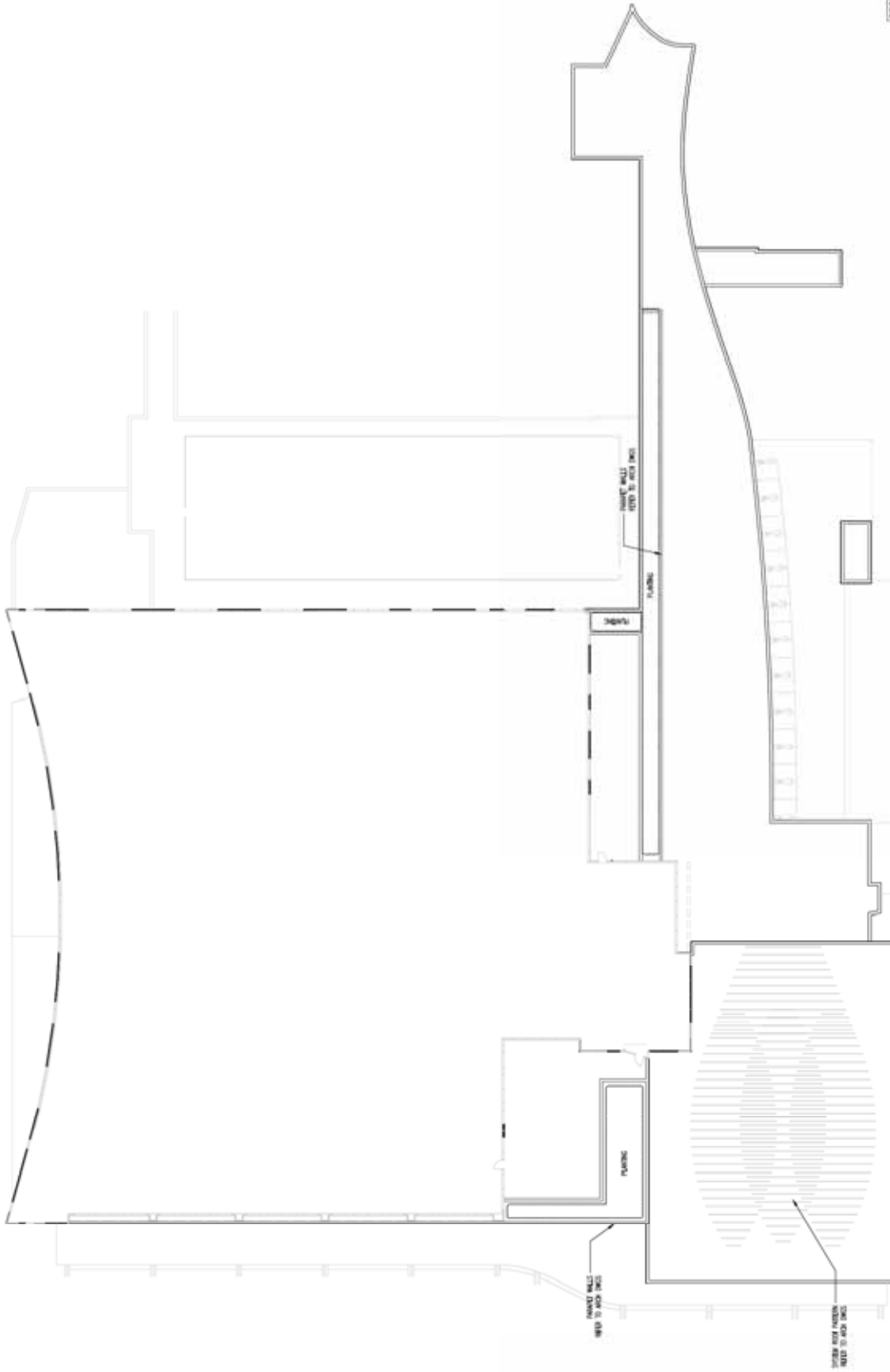
LANDSCAPE  
LANDSCAPE PLAN - LEVEL 2 ROOF  
1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT

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PROPOSAL REFERENCE  
 1.2.1 (B) LANDSCAPE

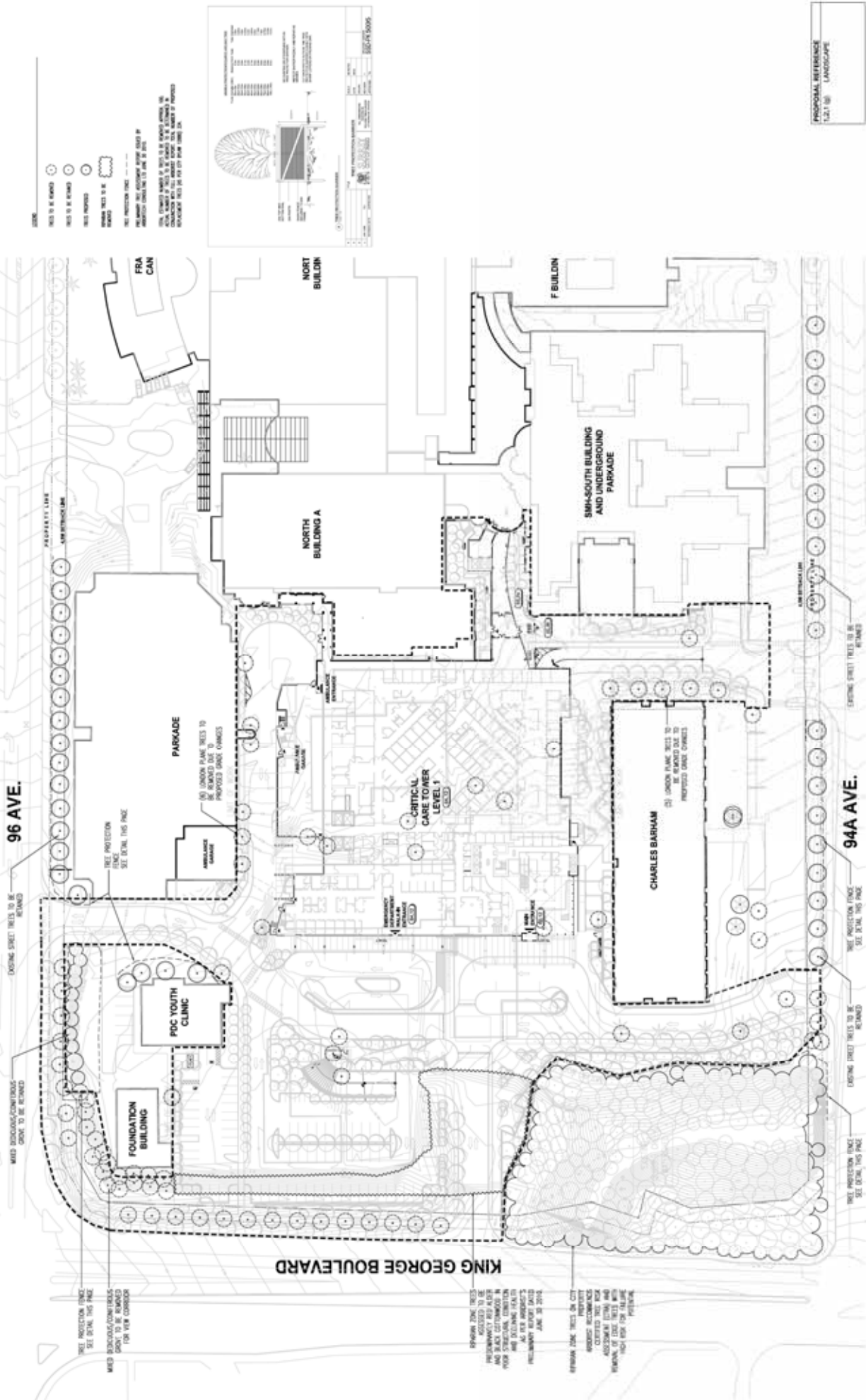
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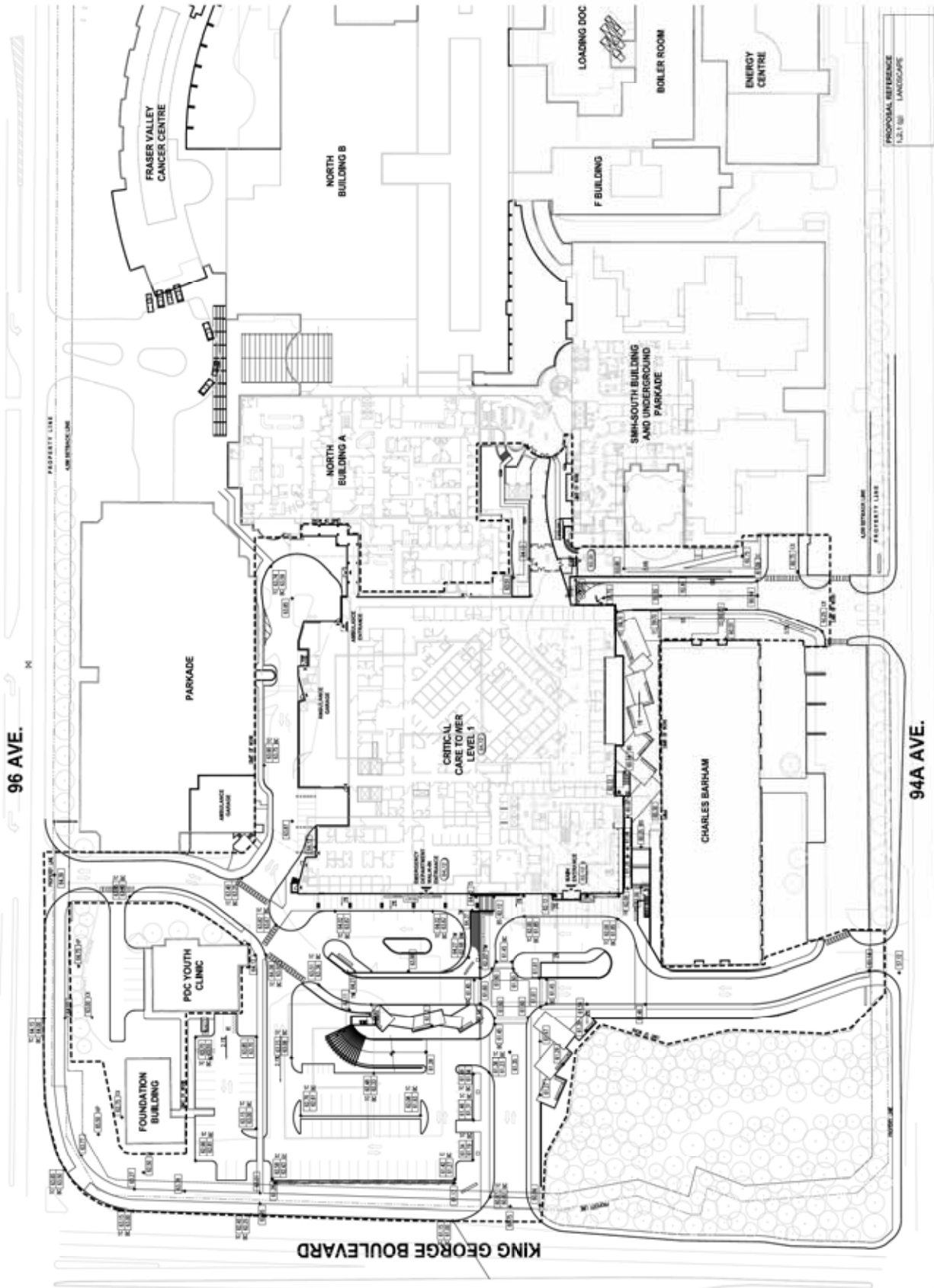
LANDSCAPE  
**LANDSCAPE PLAN - LEVEL 3 ROOF**  
 1:200



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
 EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT  
 DEC 3, 2010







96 AVE.

KING GEORGE BOULEVARD

94A AVE.

SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT

LANDSCAPE  
**GRADING PLAN**  
1:500



L-200

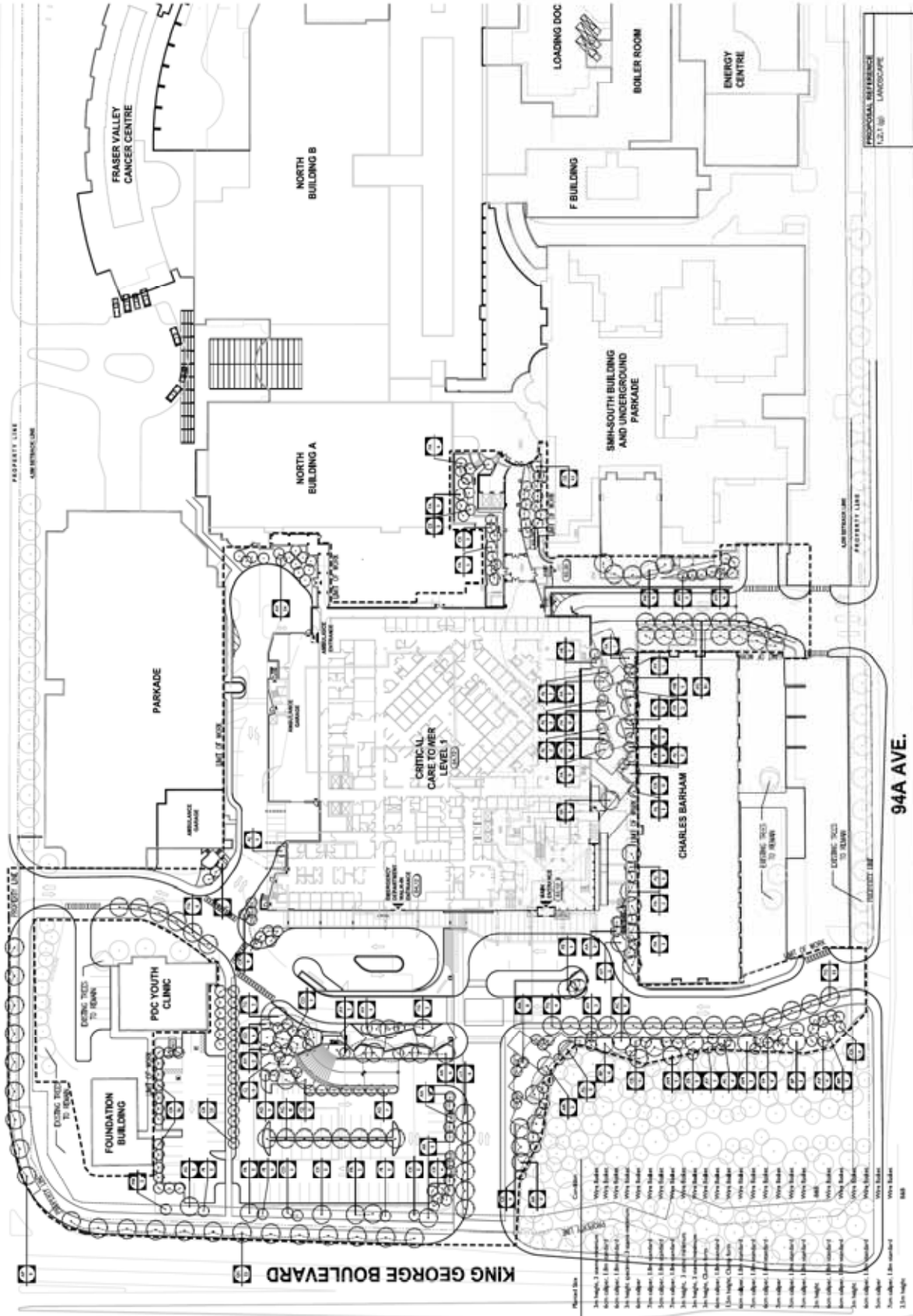


DEC 3, 2010

96 AVE.

M

KING GEORGE BOULEVARD



94A AVE.

LANDSCAPE TREE PLAN 1:500

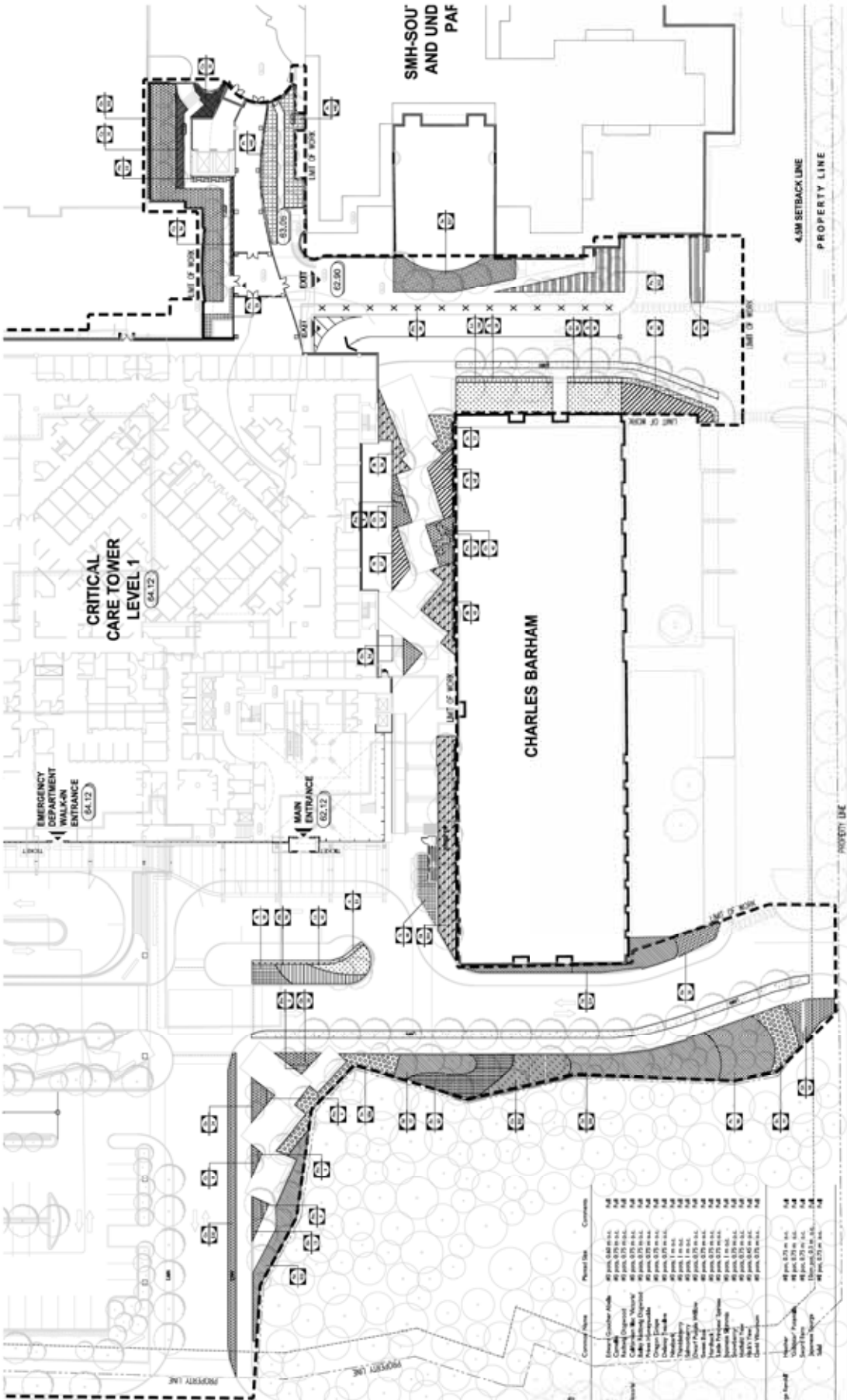
PROPOSAL REFERENCE L-300

LANDSCAPE TREE PLAN 1:500

PROPOSAL REFERENCE L-300



KING GEORGE B



94A AVE.

PROPOSAL REFERENCE  
1.2.1 @ LANDSCAPE

L-302

LANDSCAPE  
PLANTING PLAN - SOUTH  
1:300



SURREY MEMORIAL HOSPITAL REDEVELOPMENT AND EXPANSION:  
EMERGENCY DEPARTMENT AND CRITICAL CARE TOWER PROJECT



DEC 3, 2010

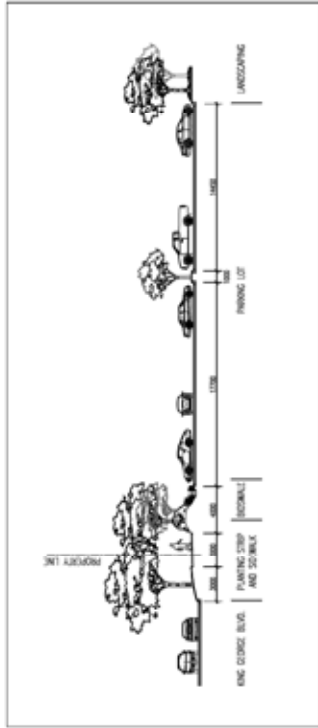
plant schedule

Site	Plant	Comments	Plant Size	Quantity
SMH-SOU	01	Small Street Tree	40' peak, 4.0m in dia.	10
	02	Small Street Tree	40' peak, 4.0m in dia.	10
	03	Small Street Tree	40' peak, 4.0m in dia.	10
	04	Small Street Tree	40' peak, 4.0m in dia.	10
	05	Small Street Tree	40' peak, 4.0m in dia.	10
	06	Small Street Tree	40' peak, 4.0m in dia.	10
	07	Small Street Tree	40' peak, 4.0m in dia.	10
	08	Small Street Tree	40' peak, 4.0m in dia.	10
	09	Small Street Tree	40' peak, 4.0m in dia.	10
	10	Small Street Tree	40' peak, 4.0m in dia.	10
	11	Small Street Tree	40' peak, 4.0m in dia.	10
	12	Small Street Tree	40' peak, 4.0m in dia.	10
	13	Small Street Tree	40' peak, 4.0m in dia.	10
	14	Small Street Tree	40' peak, 4.0m in dia.	10
	15	Small Street Tree	40' peak, 4.0m in dia.	10
SMH-SOU AND UND PAF	16	Small Street Tree	40' peak, 4.0m in dia.	10
	17	Small Street Tree	40' peak, 4.0m in dia.	10
	18	Small Street Tree	40' peak, 4.0m in dia.	10
	19	Small Street Tree	40' peak, 4.0m in dia.	10
	20	Small Street Tree	40' peak, 4.0m in dia.	10
	21	Small Street Tree	40' peak, 4.0m in dia.	10
	22	Small Street Tree	40' peak, 4.0m in dia.	10
	23	Small Street Tree	40' peak, 4.0m in dia.	10
	24	Small Street Tree	40' peak, 4.0m in dia.	10
	25	Small Street Tree	40' peak, 4.0m in dia.	10
	26	Small Street Tree	40' peak, 4.0m in dia.	10
	27	Small Street Tree	40' peak, 4.0m in dia.	10
	28	Small Street Tree	40' peak, 4.0m in dia.	10
	29	Small Street Tree	40' peak, 4.0m in dia.	10

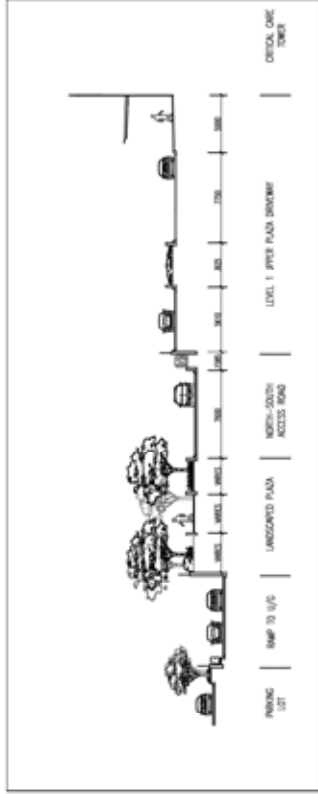




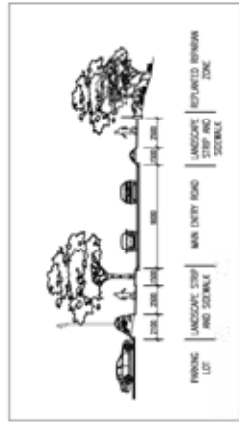




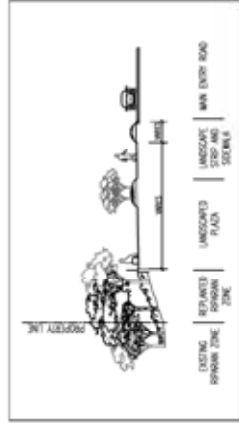
A WEST-EAST KING GEORGE BLVD THROUGH PARKING LOT  
Landscape 1:200



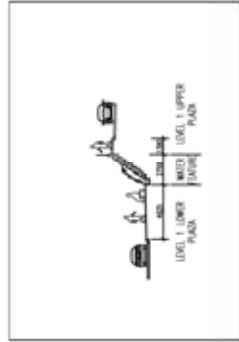
B WEST-EAST LEVEL 1 UPPER PLAZA  
Landscape 1:200



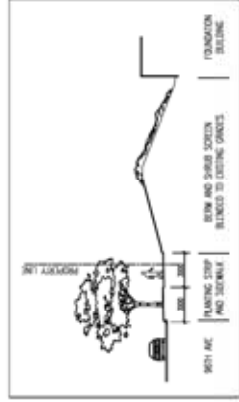
C NORTH-SOUTH MAIN ENTRY DRIVE  
Landscape 1:200



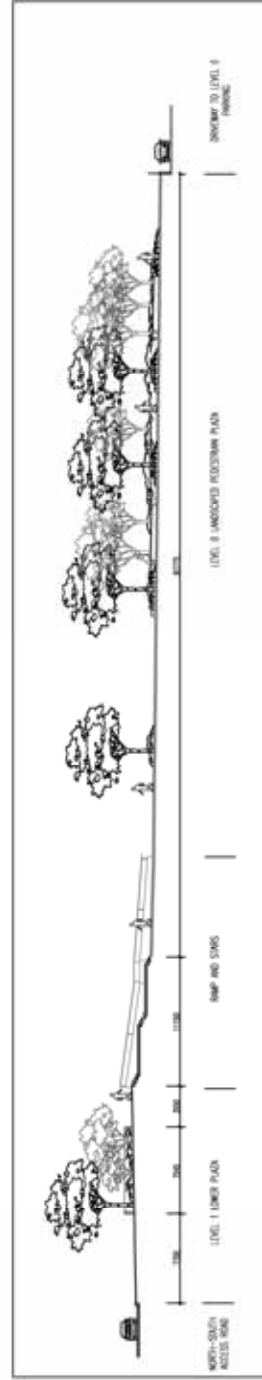
D SOUTH-NORTH BUBBLE CREEK PLAZAS  
Landscape 1:200



E SOUTH-NORTH LEVEL 1 LOWER ENTRY PLAZA  
Landscape 1:200



F CORNER OF KING GEORGE BLVD AND 96TH AVE  
Landscape 1:200



G WEST-EAST LEVEL 0 PEDESTRIAN PLAZA  
Landscape 1:200

PROPOSAL REFERENCE  
1.2.1 (B) LANDSCAPE

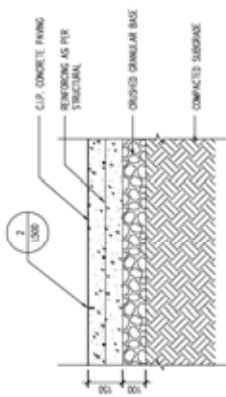


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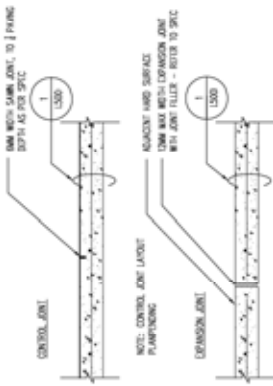


LANDSCAPE  
LANDSCAPE SECTIONS  
1:200

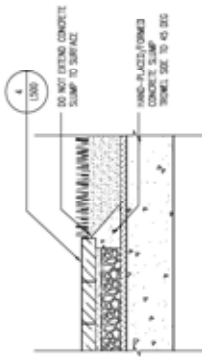
L-400



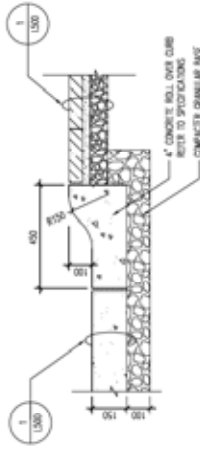
1 CAST-IN-PLACE CONCRETE PAVING  
L500 1:10



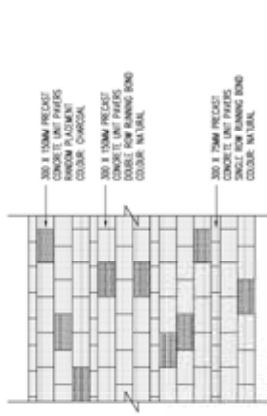
2 CONTROL AND EXPANSION JOINTS  
L500 1:10



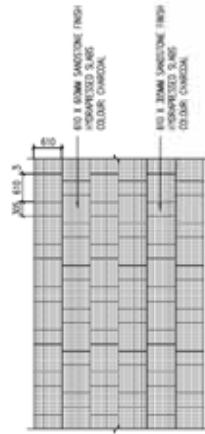
3 PRECAST CONCRETE UNIT PAVING EDGE RESTRAINT  
L500 1:10



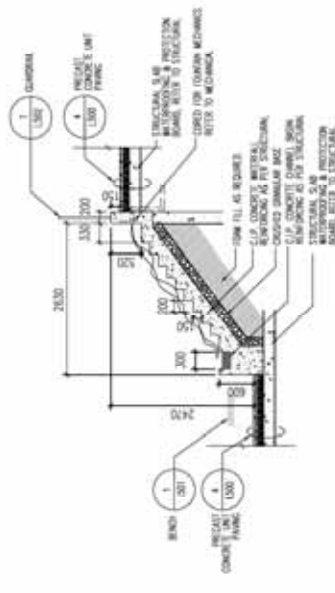
7 CONCRETE ROLLOVER CURB  
L500 1:10



4 PRECAST CONCRETE PAVER  
L500 1:10



4 CONCRETE SLAB PAVING  
L500 1:10



4 WATER FEATURE  
L500 1:20

PROPOSAL REFERENCE  
L2.1.10 LANDSCAPE



L-500

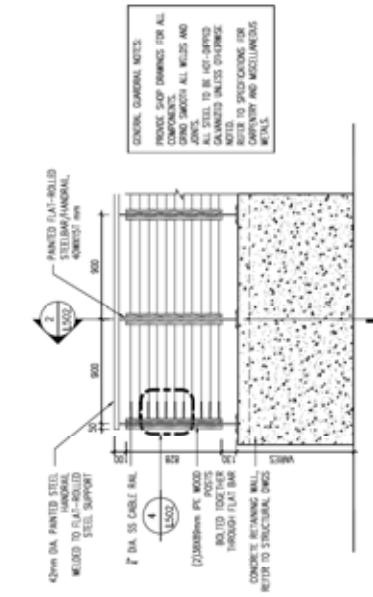
LANDSCAPE DETAILS  
AS SHOWN



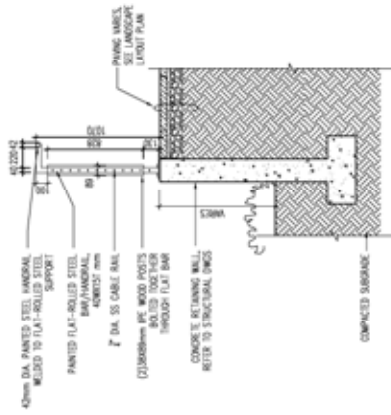
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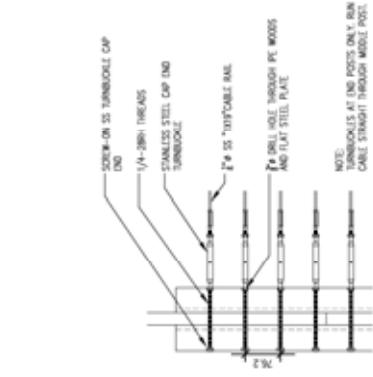




1 GUARDRAIL FRONT ELEVATION TYP. US 1:20



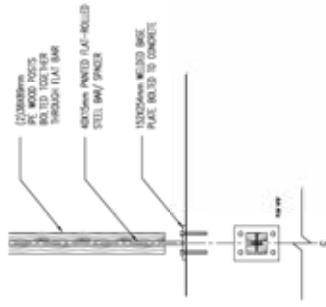
2 GUARDRAIL SECTION TYP. US 1:20



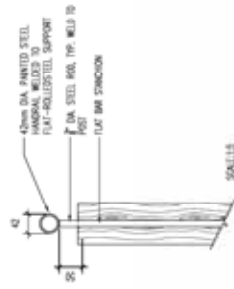
4 GUARDRAIL CABLE ATTACHMENT TYP. US 1:5



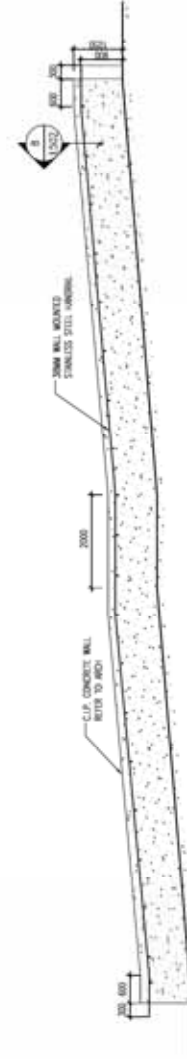
3 GUARDRAIL IPE WOOD ATTACHMENT TYP. US 1:10



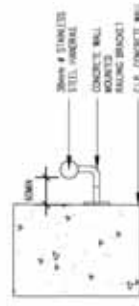
5 HANDRAIL ATTACHMENTS US 1:10



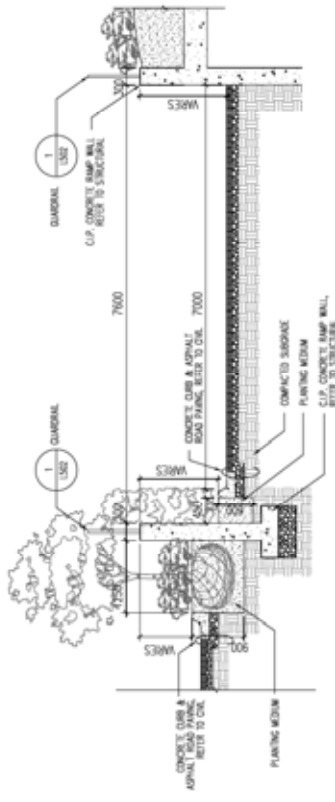
6 HANDRAIL ATTACHMENTS US 1:10



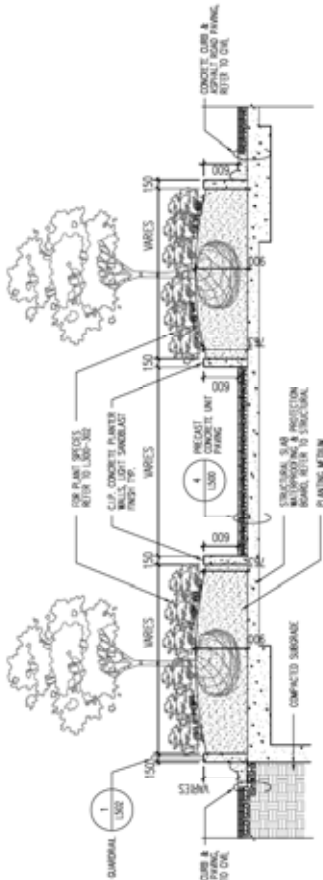
7 WALL MOUNTED STAINLESS STEEL HANDRAIL ON RAMP US 1:30



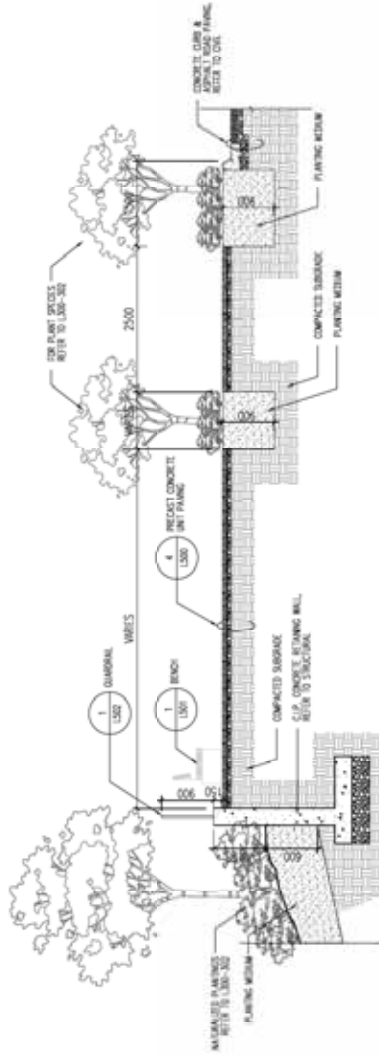
8 WALL MOUNTED STAINLESS STEEL HANDRAIL TYP. US 1:15



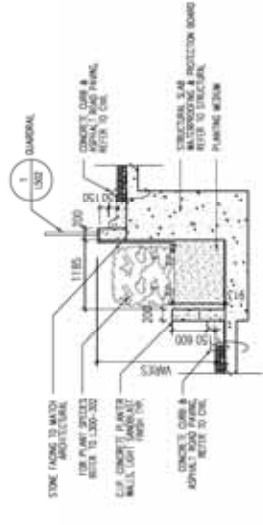
1 TYPICAL RAMP TO UNDERGROUND GARAGE  
1:40



1 TYPICAL PEDESTRIAN PLAZA  
1:40



1 TYPICAL RIPARIAN EDGE PLAZA  
1:40



1 TYPICAL UPPER PLAZA EDGE  
1:40

PROPOSAL REFERENCE  
1.2.1.10 LANDSCAPE

L-503

LANDSCAPE  
DETAILS  
AS SHOWN

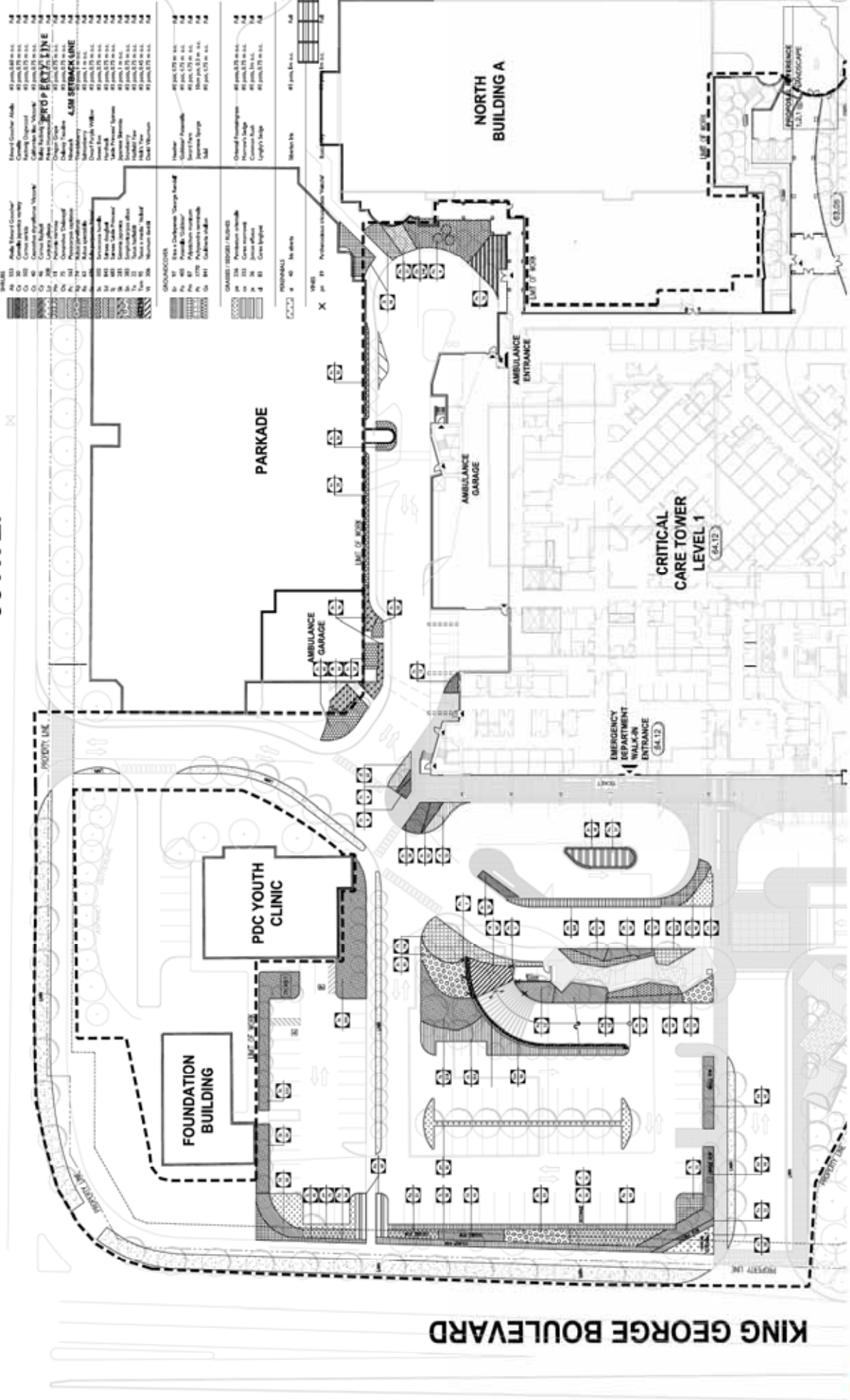


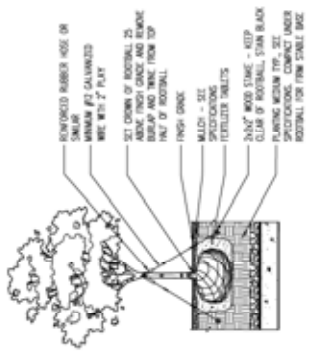
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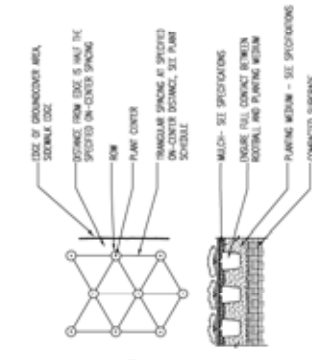
96 AVE.

plant schedule

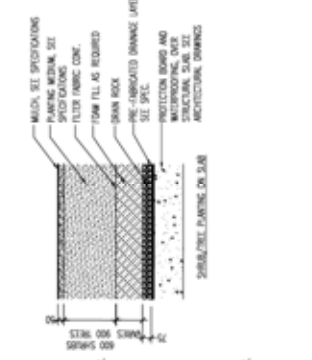




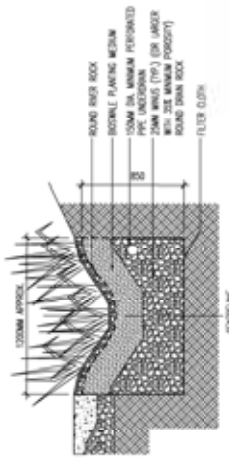
1 TREE PLANTING TYP  
 USK NTS



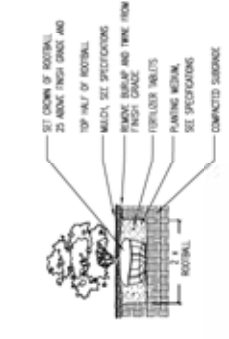
2 GROUNDCOVER PLANTING TYP  
 USK NTS



3 SOIL PROFILES  
 USK 1:20



4 BIOSWALE TYP  
 USK NTS



5 SHRUB PLANTING TYP  
 USK NTS

PROPOSAL REFERENCE  
 T.2.1.10 LANDSCAPE

L-504

LANDSCAPE  
 DETAILS  
 AS SHOWN



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