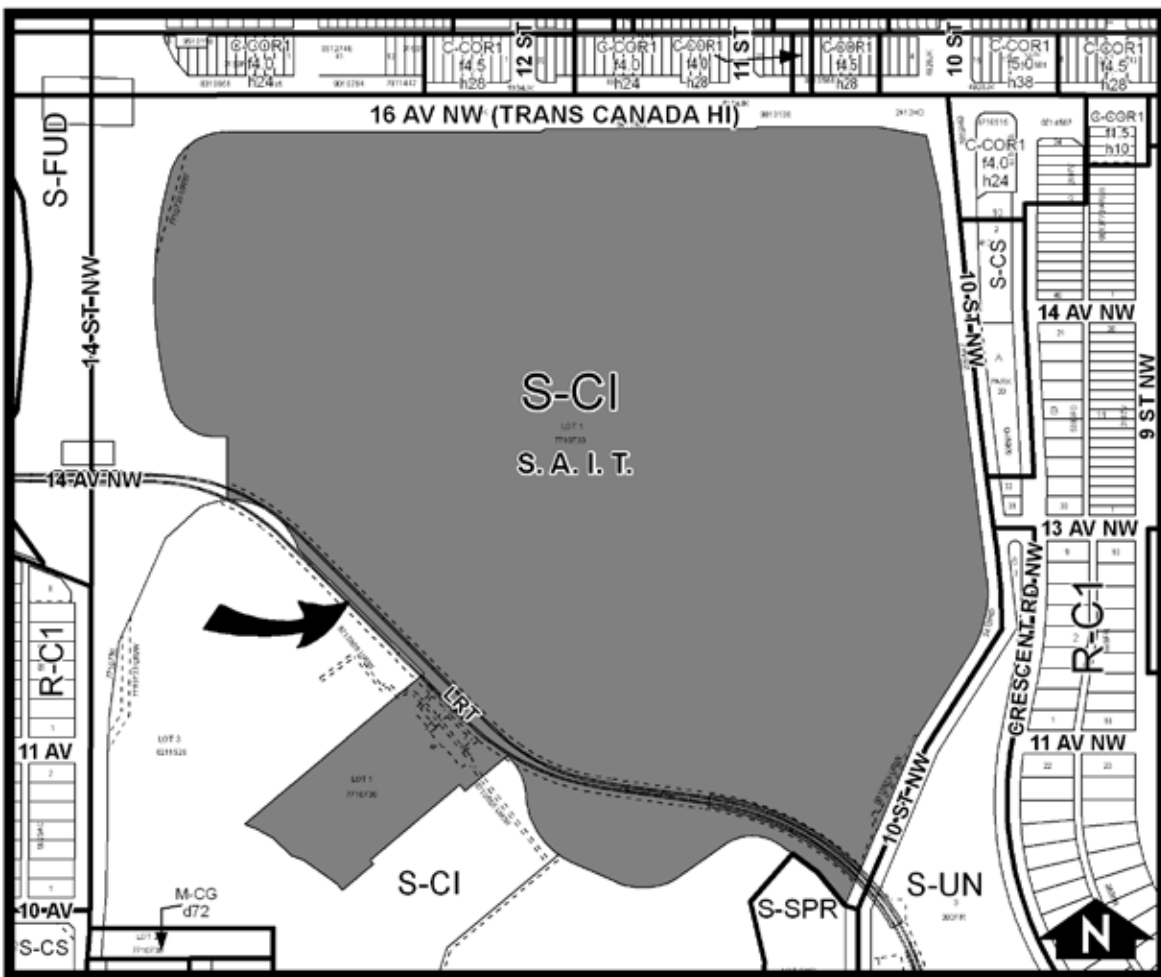


REPORT TO THE CALGARY PLANNING COMMISSION

DEVELOPMENT PERMIT	ITEM NO: 04	
	CPC DATE:	2009 October 01
	FILE NO.:	DP2009-2084

HILLHURST  
(Ward 7 - Alderman Farrell)



**PROPOSAL:**  
Post-secondary Learning Institution: Signs – Class B (fascia and window)  
Redevelopment of the Southern Alberta Institute of Technology (SAIT) campus to provide the West Wing for the new Trades and Technology Complex (TTC).

<b>APPLICANT:</b> Gibbs Gage Partnership	<b>OWNER:</b> The Board of Governors of the Southern Alberta Institute of Technology
<b>MUNICIPAL ADDRESS:</b> 1301 - 16 Avenue NW	<b>LEGAL DESCRIPTION:</b> 7710730;;1  (Map 21C)
<b>EXISTING LAND USE DISTRICT(S):</b> S-CI Special Purpose - Community Institution District	
<b>AREA OF SITE:</b> 3.88 ha ± (9.59 ac ±) – TOTAL SITE AREA	
<b>CURRENT DEVELOPMENT:</b> Existing educational facility	

**ADJACENT DEVELOPMENT:**

**NORTH:** SAIT Campus – Thomas Riley Building

**SOUTH:** SAIT Campus – Boyce Crescent/General Motors Drive with Campus Centre and C-Train further to the south.

**EAST:** SAIT Campus – Heart Building and Heritage Hall

**WEST:** SAIT Campus – Fowler Drive and Clayton Carroll Automotive

<b>DEVELOPMENT SUMMARY</b>			
<b>RULE</b>	<b>BYLAW STANDARD</b>	<b>PROPOSED</b>	<b>RELAXATION</b>
<b>PARKING</b>	Subject to a parking study	see report	N/A
<b>EXTERIOR FINISH MATERIALS</b> <b>Walls: Aluminium, Terracotta, Glass</b> <b>Roof: Metal</b> <b>Windows: Glass</b>			

<b>SUMMARY OF CIRCULATION REFEREES</b>	
<b>CPTED ASSESSMENT</b> Crime Prevention Through Environmental Design	A CPTED report has been prepared with respect to this application, the results of which are summarised in the main body of this report and reproduced in full at Appendix II.
<b>ENVIRONMENTAL MANAGEMENT</b>	Storm water Management Report, and Remediation Action Plan/Risk Management Plan were reviewed with this application.
<b>URBAN DESIGN REVIEW COMMITTEE</b>	Support proposals, see below.
<b>SPECIAL REFEREE(S)</b>	N/A
<b>COMMUNITY ASSOCIATION</b>  <b>Hillhurst/Sunnyside;</b>  <b>Hounsfeld Heights;</b>  <b>Capitol Hill;</b>  <b>Mount Pleasant; and</b>  <b>Rosedale</b>	Written comments were not received from any of the Community Associations that were circulated as part of the consideration of this Development Permit application.

## PLANNING EVALUATION

### Introduction

A submission from the applicants, identifying the relevant plans and rationale for the proposals is identical for all of the development permit applications relating to the redevelopment of SAIT, for the reasons that all five applications are considered holistically. This package of information has been appended to the report relating to DP2009-2082 and should be cross referenced when considering this application. The specific development permit drawings for the West Wing are reproduced at Appendix I.

This application is one of five concurrent Development Permit applications for the partial redevelopment of the Southern Alberta Institute of Technology ("SAIT") campus, to provide a new Trades and Technology Complex ("TTC") (City of Calgary references: DP2009-1602, 2009-2082, 2009-2084, 2009-2085 and 2009-2088, respectively). Taken as a whole these development permit applications represent the comprehensive modernization and updating of the campus that will endure into the 21<sup>st</sup> Century.

Development permit application DP2009-2084 relates to the creation of the 'West Wing' building, which will be located to the west of the existing Heart Building and Heritage Hall. This will necessitate the demolition of the existing Colonel James Walker Building.

The remaining development permit applications are described, briefly, below:

- DP2009-1602 – Overall site plan, establishing circulation spaces, landscape, vehicular, pedestrian and cycle access;
- DP2009-2082 – construction of Centre Wing on the campus façade with 16 Avenue NW;
- DP2009-2085 – construction of South Wing, linking into the existing Eugene Coste Building; and
- DP2009-2088 – alterations to the Thomas Riley Building, including provision of new atrium and frontage to 12 Street NW

The overall site plan (DP2009-1602) deals specifically with access to and within the site, internal road layouts, pedestrian environment, internal lighting and hard and soft landscaping. These elements cut across the four remaining development permit applications, which deal specifically with the four new buildings/building elements.

Each of the individual development permit applications, listed above, are subject to a separate report however all are inextricably linked together as, taken as a whole, they collectively result in the holistic redevelopment of the campus.

The West Wing sits entirely within the SAIT campus and does not share a property line with any adjoining parcel. There is, as a consequence, no adverse impact on any surrounding land uses. Internally to the site it has the closest visual link to Heritage Hall and has been designed in a way that reflects the materials and style of the historic building. The City's Heritage department has been consulted on the proposals and raises no objection.

The West Wing proposal represents an opportunity to update the site of the Colonel James Walker building and replace it with a purpose built, modern construction that will enable views into the building and assist in providing an improved environment within the campus.

One element of the West Wing is the provision of the 'Exploratorium'. This is a circular structure in the south east corner of the proposed building, clad in a metal curtain wall with fenestration punched through to provide visual interest. The Exploratorium sits on six concrete columns that provide an under-storey of circulation space. The intent of the Exploratorium is to provide an educational facility for visiting students, explaining the courses and technologies taught at the Polytechnic.

## **Relaxations**

### Height

As this building does not share a property line with any adjacent land uses that are identified in the Land Use Bylaw 1P2007, there are no height restrictions on the proposed West Wing. Notwithstanding this, the maximum building height of this building will be 24.075 metres.

### Setback

Sitting within the campus, this building complies with all setback distances from the property line, established in 1P2007.

### Signage

The development proposes window signage as defined under Class B of the Land Use Bylaw 1P2007. This definition includes that a window sign must not exceed the lesser of 2.5 square metres or 30 percent of the window area.

Given the scale of the building and its location within the campus, the Administration considers that 2.5 square metres would not be an appropriate criterion against which to consider the window signage of the West Wing. The proposals include for signage in the following proportions of the total elevations:

- North elevation – 1.6 percent;
- West elevation – 2.9 percent; and
- East elevation – 0.2 percent

There is no signage proposed on the south elevation. Taken as a whole, the signage represents 4.7 percent of the total elevation area of the West Wing. The Administration supports this minimal level of signage.

### **Site Context**

#### Existing land use

The current land use of the West Wing proposal, containing the extant Colonel James Walker building, is part of the SAIT campus and is therefore covered by the S-CI Land Use District (described in detail below).

#### Surrounding land uses

This part of the redevelopment proposals shares boundaries with the following features:

- Northern Boundary – Thomas Riley Building, part of which is subject to DP2009-2088.
- Eastern Boundary – Heart Building and Heritage Hall.
- Southern Boundary – Boyce Crescent/General Motors Drive with Campus Centre and C-Train further to the south.
- Western Boundary – Fowler Drive and the Clayton Carroll Automotive Centre with 14 Street NW further west, forming the western boundary of SAIT.

There are, therefore, no adjoining land uses other than SAIT (S-CI) itself.

### Other Development Permit applications

There is a considerable history of development at SAIT. Of particular relevance to this application are the four other Development Permit applications that form the remainder of the TTC proposals (DP's 2009-1602, 2082, 2085 and 2088 respectively). These are identified, briefly, above and considered in separate reports to Calgary Planning Commission.

There have been a number of applications for relatively minor development, together with more sizeable developments, including the new Halls of Residence, granted on 6 February 2006 for 448 residential units; and the newly created parkade (for 1157 parking stalls) to the south of the Heritage Building (see below).

The remaining history for the campus, according to the City's records is identified in Table 1 below.

DP No.	Description	Decision Date	Comments
2004-3782	Addition to campus	26 January 2005	Minor addition to Jubilee Building, southern side
2005-3927	Multi-residential	6 February 2006	22 Storey halls of residence
2007-3025	Fascia signage	17 January 2008	
2007-0697	Addition to hockey rink	8 March 2007	
2008-4213	Exterior renovations and fascia sign	29 January 2008	
2008-0099	Two fascia signs	30 January 2008	
2008-0604	Fascia signage	1 April 2008	
2009-1720	Special events sign	28 May 2009	
2007-4164	New parkade	31 July 2008	Currently under construction, including football pitch on parkade roof (at grade)
2008-3962	Temporary use and sign	17 December 2008	

Table 1 – Development History

### Land Use District

The subject parcel is designated as 'S-CI: Special Purpose – Community Institution' district. The purpose of the S-CI district is intended to provide for large scale culture, worship, education, health and treatment facilities. Land Use Bylaw 1P2007 identifies an 'Post-secondary Learning Institution' as a discretionary use under Section 1055 (1)(p).

The proposals include an area identified as "Food Service - Small" on the main floor. A "Food Kiosk" is a defined Discretionary use in the S-CI District under Section 1055 (1)(g) of the Land Use Bylaw (1P2007), identified as including a use where: food and beverages are provided for immediate consumption; do not have a seating area; and have a maximum gross floor area of 75.0 square metres.

The definition of a Post-secondary Learning Institution identifies, at Section 263 (a)(ii) that “*food and other services may be offered to enrolled students, faculty members and staff*”. The identified food service area is considered to be entirely appropriate and ancillary to the development being, as it is, located within the building for the intention of serving only those users of SAIT and not the wider general public.

The proposed development meets all the rules as outlined in the Special Purpose district with relaxations noted within the report.

### **Site Characteristics**

The site is previously developed land, currently occupied by the Colonel James Walker Building, and sits entirely within the SAIT campus. There is no impact on any third party land. There are no notable features on the site of the proposed building.

### **Legislation & Policy**

Land Use Bylaw 1P2007, established in accordance with s.632(1) of the Municipal Government Act identifies the Land Use District to which this Development Permit application relates, as described above.

The City's Land Use Planning and Policy department (“LUPP”) has been consulted on this application. Correspondence from LUPP is reproduced at Appendix III. In section 5 of that correspondence, LUPP advise that the proposed TTC development is supported and notes that no amendments to policy would be required.

Subject to the relaxations identified in this report, the West Wing proposals conform to all relevant policies and legislation.

### **Site Layout & Building Design**

The site layout and building design is shown in the plans and supporting information, reproduced at Appendix I of the report for DP2009-2082. These plans have been amended from the original submission to reflect the comments of CPAG.

Issues relating to linkages to, from and within the site, for the pedestrian and vehicular network, including circulation, are discussed in detail in the report elsewhere on this agenda relating to the overall site plan (DP 2009-1602).

The Urban Design Review Panel sat on 19 August 2009 to consider the TTC applications. The full minute of that meeting is reproduced in IV. The UDRP supported the proposals as a significant improvement to what is currently on the site, particularly in relation to the Murdoch Parkade and the proposed Centre Wing development. Table 2 identifies the comments made by the UDRP.

<b>UDRP Comment</b>	<b>CPAG Comment</b>
Respect and recognition of historic elements. Architecture is progressive and speaks to innovation and technology.	Noted

Proper imposition of pedestrian and vehicular movement into a currently chaotic situation.	Noted
Pedestrian precinct at 16 Avenue NW and 11 Street NW interface is compromised and would benefit from more generous proportion.	Pedestrian environment considered an improvement on existing. Available land has been maximised with improved surface treatment provided (shown for DP2009-1602).
Encourages working with City to provide consistent signage, incorporating potential use of dynamic/projected images.	Noted. Copy of signage included as Prior to Release requirements.
Discourages use of large static signage, except building signs, incorporated into building design	Noted, see above.
Look at creative possibilities for tower element at roundabout.	This area incorporates the relocation of the existing SAIT clock and is considered to be acceptable by the Administration.
Optimize opportunities for interface between interior and exterior public spaces along major pedestrian avenues.	Interior spaces are for the sole use of students, staff and faculty members of SAIT and are not 'public spaces. Interface with exterior environment considered under DP2009-1602.
Additional consideration of form, use, potential integration with roundabout warranted for mechanical service yard. (notes that this is not within the scope of the project).	The service yard is not part of the TTC applications. It houses existing important mechanical plant and equipment for extant buildings.

Table 2 – UDRP Considerations of Scheme

### **CPTED - Crime Prevention Through Environmental Design**

A CPTED report was completed on 8 July 2009 in relation to all five development permit applications. The outcome of the report is as follows:

- Lighting/visibility – eliminate entrapment spots and provide uniform levels of illumination;
- Sightlines – Maximise lines of sight in all directions. Visibly permeable barriers;
- Corridor – eliminate hidden recesses, provide forward vision mirrors where necessary and exit potential in long corridors;
- Wheelchair ramps – open and transparent as possible;
- Entrapment and movement predictors – avoid unlit recesses, corners or alcoves. Single washrooms in low activity areas are preferable. No entrapment areas in courtyards. Clear glass elements in doors. Use of columns in enclosed spaces. Multiple exits and alternative pedestrian routes where possible;
- External paths – avoidance of entrapment areas and use of signage is promoted;
- Edges of buildings – avoid recesses and unlit areas;
- Isolation – clear, concise and highly visible signage in low pedestrian areas;
- Access control – maintain separation between public, semi-public and private space, barrier free entrances, staffed reception areas allowing 'casual surveillance'; and
- Communication – provide means of communication in vulnerable areas, e.g. cash collection locations, reception areas, kiosks, etc.

The applicant has confirmed that the development proposals for all of the TTC Development Permit applications will fully comply with the findings of the CPTED report. A copy of that correspondence is reproduced at Appendix II.



### **Environmental Site Assessment**

This application did not require the submission of an Environmental Site Assessment as it does not relate to any residential development.

### **Landscaping**

Landscape for the whole of the TTC proposals is dealt with under the separate Development Permit application for the overall site plan (DP2009-1602).

### **Site Access & Traffic**

Issues relating to site access and traffic movements (including pedestrian and cycle movements) are fully dealt with in relation to the overall site plan application (DP2009-1602)

### **Parking**

Parking issues relate to the whole of the SAIT campus and not to the specific development permit applications that form the new TTC. A revised parking study has been submitted with the overall site plan (DP2009-1602) and demonstrates that there are no adverse impacts from traffic generation in relation to the proposals.

### **Site Servicing for Utilities**

The West Wing will utilise existing services to the SAIT campus.

### **Environmental Sustainability**

The applicant has identified that the redevelopment, generally, of the SAIT campus will conform to a minimum standard of LEED Silver. This holds true for this West Wing application. Whilst the File Manager has expressed concerns that SAIT should seek to attain a more prestigious LEED credential, the applicant has provided letters from its LEED consultant and separately in response to those concerns raised. The correspondence identifies that, in order to secure Provincial funding for the project, a minimum LEED silver must be achieved. At this time, attaining a higher rating would have attendant costs associated with it, for which funding has not been secured. The applicant is committed, however, to pursuing higher LEED credentials through the drafting of construction phase drawings. Copies of correspondence in relation to attaining LEED classification is reproduced in IV.

### **Community Association Comments**

The surrounding Community Associations, noted above, were consulted on the West Wing application. No comments have been received in relation to the proposals.

### **Adjacent Neighbour Comments**

At the request of the Administration, the applicants undertook a process of public consultation in respect of the proposals. As a result of this consultation exercise, there have been no comments received.

**CONCLUSION:**

The proposal is supported for the following reasons:

1. There is conformance with policy documents (statutory or otherwise).
2. The proposals are compatible with adjacent development, land use, or conditions.
3. The proposals represent a significant improvement to one of Calgary's premier post-secondary educational establishments, particularly with regard to the significant planning "merits and positive impacts" of the proposal.

**CORPORATE PLANNING APPLICATIONS GROUP RECOMMENDATION:      APPROVAL**

Recommend that Calgary Planning Commission **APPROVE** the application with the following conditions:

**Prior to Release Requirements**

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The following requirements shall be met prior to the release of the permit. All requirements shall be resolved to the satisfaction of the Approving Authority.

**Planning:**

1. The development shall incorporate, to the satisfaction of the Development Authority, all of the issues identified in the Crime Prevention Through Environmental Design (C.P.T.E.D.) report, issued on 8 July 2009.
2. The copy for all proposed signage will be submitted to and approved in writing by the Development Authority.

**Urban Development:**

3. Submit three (3) sets of Development Site Servicing Plan and one (1) set of plans complete with the waste and recycling services details to the Building Grades Supervisor, Urban Development, for approval from Water Resources, as required by Section 5 (2) of the *Utility Site Servicing Bylaw 33M2005*. The scope and details of the plans are found in both the *Stormwater Management and Design Manual (December 2000)* and the *Design Guidelines for Development Permits and Development Site Servicing Plans (June 2007)*.

**Transportation:**

No comments

## Parks:

No comments.

## Permanent Conditions

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### Planning:

4. The development shall be completed in its entirety, in accordance with the approved plans and conditions.
5. No changes to the approved plans shall take place unless authorized by the Development Authority.
6. A Development Completion Permit shall be issued for the development; **before the use is commenced or the development occupied**. A Development Completion Permit is independent from the requirements of Building Permit occupancy. Call Development Inspection Services at 268-5491 to request a site inspection for the Development Completion Permit.
7. Fascia signage shall be placed only in the designated sign area as indicated on the approved plans. Any damage to the building face, as a result of the sign installation or removal, shall be repaired to the satisfaction of the Development Authority.

### Urban Development:

8. If **during construction** of the development, the developer, the owner of the titled parcel, or any of their agents or contractors becomes aware of any contamination, the person discovering such contamination shall immediately report the contamination to the appropriate regulatory agency including, but not limited to, Alberta Environment, the Calgary Health Region and The City of Calgary (311).  
  
If **prior to or during construction** of the development the, developer, the owner of the titled parcel, or any of their agents become aware of contamination on City of Calgary lands or utility corridors, the City's Environmental Assessment & Liabilities division shall be immediately notified (311).
9. The developer shall be responsible for the cost of public work and any damage during construction in City road right-of-ways, as required by the Manager, Urban Development. All work performed on public property shall be done in accordance with City standards.
10. In accordance with the *Encroachment Policy* adopted by Council on June 24, 1996, and as amended on February 23, 1998, encroachments of retaining walls, planters, entry features, building projections, etc. are not permitted to extend into the City right-of-way. New encroachments that are a result of this development are to be removed at the developer's expense.
11. Indemnification Agreements are required for any work to be undertaken adjacent to or within City rights-of-way, bylawed setbacks and corner cut areas for the purposes of

**crane operation**, shoring, tie-backs, piles, **sidewalks, lane paving**, lay-bys, utility work, +15 bridges, culverts, etc. All temporary shoring, etc., installed in the City rights-of-way, bylawed setbacks and corner cut areas must be removed to the satisfaction of the Manager of Urban Development, at the applicant's expense, upon completion of the foundation. Prior to permission to construct, contact the Indemnification Agreement Coordinator, Roads at 403-268-3505.

12. Where an ESC report and/or drawing(s) has been reviewed by Water Resources, the developer, and those under their control, shall ensure good erosion and sediment control (ESC) housekeeping practices and the timely implementation, inspection and maintenance of all controls and practices specified in such documents. Notify the Erosion Control Coordinator (or the designated Erosion Control Technician), Water Resources at 403-268-2655 of changes to the controls and practices specified in the report and/or drawing(s).

For all other soil disturbing projects, the developer, or those under their control, shall develop an erosion and sediment control drawing and implement good housekeeping practices to protect onsite and offsite storm drains, and to prevent or mitigate the offsite transport of sediment by the forces of water, wind and construction traffic (mud-tracking) in accordance with the current edition of The City of Calgary Guidelines for Erosion and Sediment Control ([www.calgary.ca/waterservices/esc](http://www.calgary.ca/waterservices/esc)). Some examples of good housekeeping include stabilization of stockpiles, stabilized and designated construction entrances and exits, lot logs and perimeter controls, suitable storm inlet protection and dust control.

For **all soil disturbing projects**, the developer, or their representative, shall designate a person to inspect all erosion and sediment controls and practices every seven (7) days and within 24 hours of precipitation or snowmelt events. Controls and practices shall be adjusted to meet changing site and winter conditions.

13. Contain storm run-off on site.
14. The grades indicated on the approved Development Permit (DP) plans must match the grades on the Development Site Servicing Plan (DSSP) for the subject site. **Prior to the issuance of the development completion permit (DCP)**, the developer's Consulting Engineer must confirm under seal that the development was constructed in accordance with the grades submitted on the development permit (DP).

### **Transportation:**

No comments

### **Parks:**

No comments.

Jules Hall  
2009/10

DRAWINGS INDEX

ARCHITECTURAL DRAWINGS

DP-00	COVER SHEET
DP-1.1	PROJECT STATISTICS & CONTEXT PLAN
DP-1.2	REFERENCE SITE PLAN
DP-2.1	MAIN FLOOR PLAN
DP-2.2	SECOND FLOOR PLAN
DP-2.3	THIRD FLOOR PLAN
DP-2.4	FOURTH FLOOR PLAN
DP-2.5	BASIS/CLIMATE PLAN
DP-2.6	ROOF PLAN
DP-3.1	ELEVATIONS (SOUTH & NORTH)
DP-3.2	ELEVATIONS (WEST)
DP-3.3	COURTYARD ELEVATIONS

LEGAL DESCRIPTION

PLAN 77 (REPL) LT 1  
 NE 1/4 SEC 21, TWP 24 N, RGE 1 W04  
 CMC ADDRESS  
 1000 UNIVERSITY AVENUE  
 CALGARY, ALBERTA

ISSUED FOR

DATE  
 08/08/10  
 09/08/10

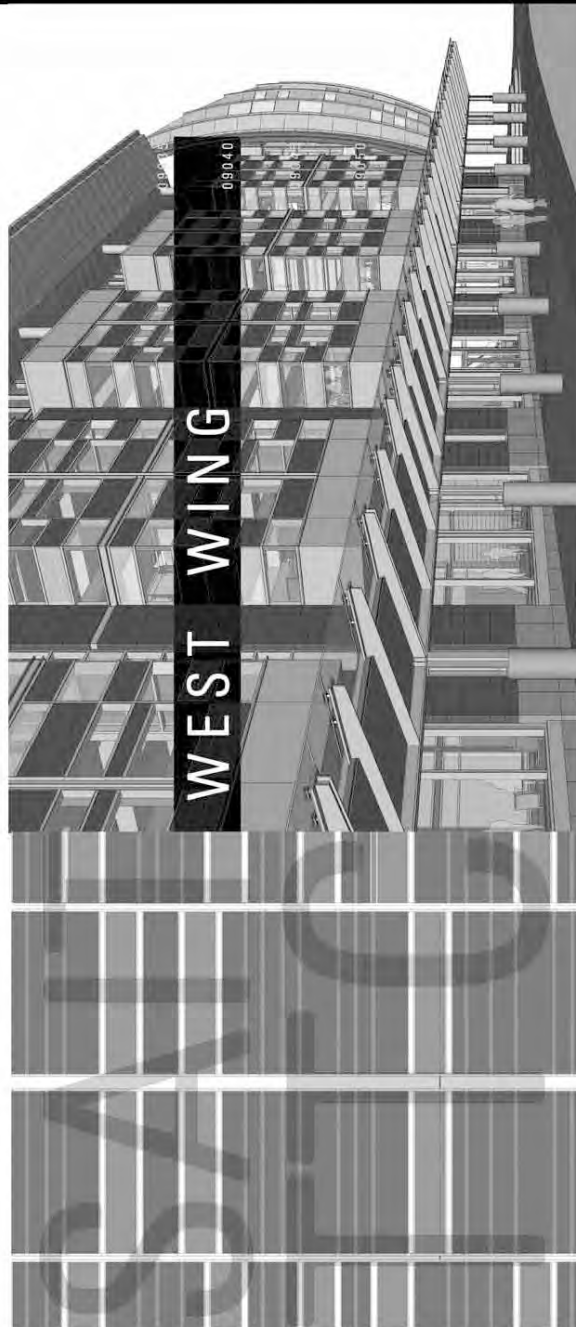


**Gibbs Gage**  
 ARCHITECTS

905, 277 8 Avenue SE, Calgary, Alberta T2G 5C3  
 Ph: 403.233.2000 Fax: 403.264.0879

SMITTC-WEST WING  
 CALGARY, ALBERTA

PROJECT: 09040



THIS PLAN IS THE PROPERTY OF GIBBS GAGE ARCHITECTS AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GIBBS GAGE ARCHITECTS.

DATE: 10/01/09  
 DRAWN BY: J. GAGE  
 CHECKED BY: J. GAGE  
 PROJECT NO.: 09-001

LEGAL DESCRIPTION

PARCELS 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

CIVIC ADDRESS

1500 AVENUE N  
 SUITE 1000  
 CALGARY, ALBERTA

ZONING

COMMERCIAL ZONING - C-1

SITE ANALYSIS

CHANGELINE: 1500 AVENUE N  
 1500 AVENUE N  
 1500 AVENUE N

BUILDING ANALYSIS

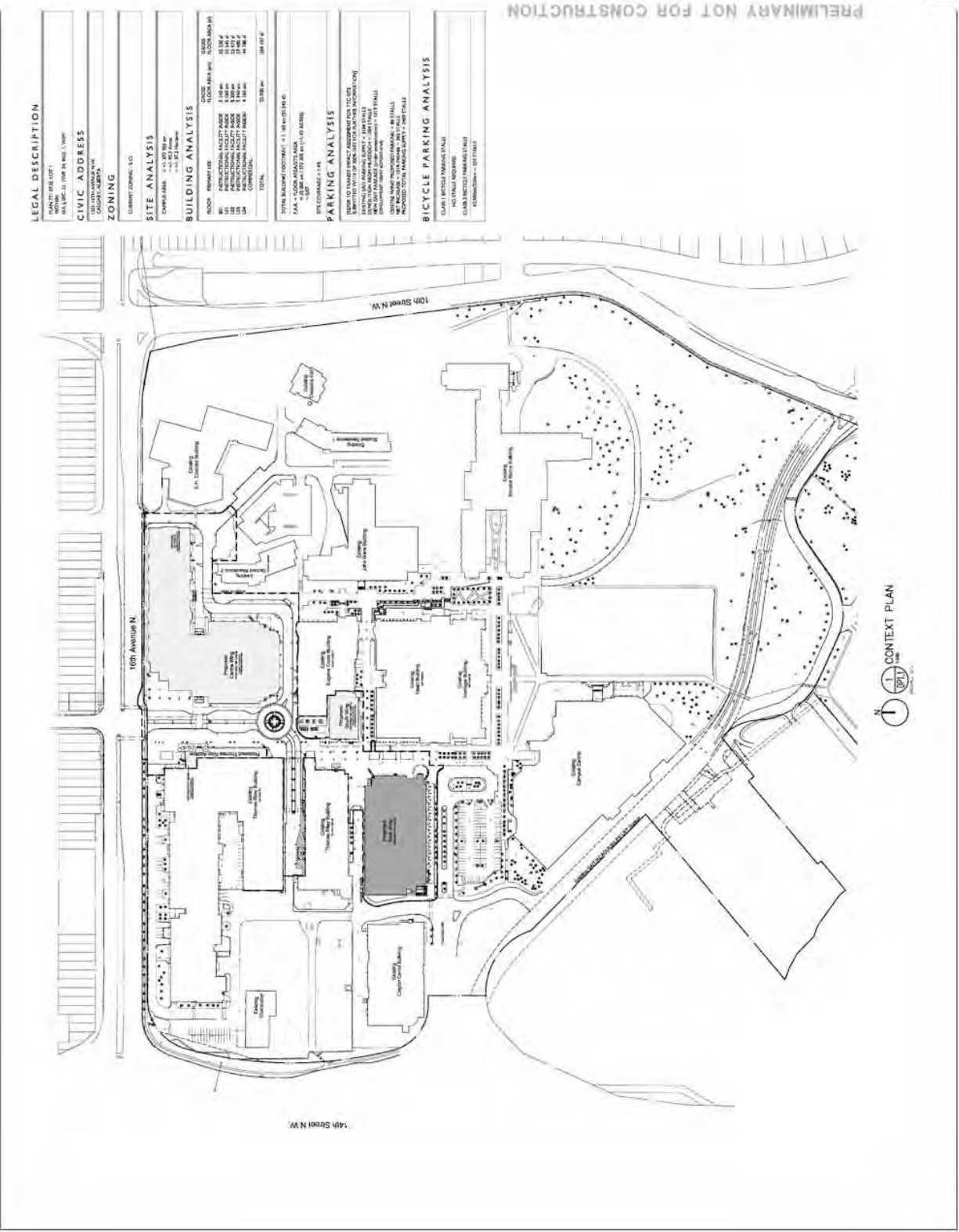
FLOOR	PRIMARY USE	FLOOR AREA (SQ. M)	GLASS CURTAIN WALL AREA (SQ. M)
1	OFFICE	10,000	1,000
2	OFFICE	10,000	1,000
3	OFFICE	10,000	1,000
4	OFFICE	10,000	1,000
5	OFFICE	10,000	1,000
6	OFFICE	10,000	1,000
7	OFFICE	10,000	1,000
8	OFFICE	10,000	1,000
9	OFFICE	10,000	1,000
10	OFFICE	10,000	1,000
TOTAL		100,000	10,000

PARKING ANALYSIS

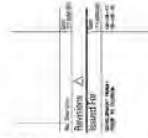
BASED ON TRAFFIC ANALYSIS AND SITE SPECIFIC DATA:  
 REQUIRED PARKING SPACES = 100 SPACES  
 AVAILABLE PARKING SPACES = 100 SPACES  
 DEFICIT/PURPLUS = 0 SPACES

BICYCLE PARKING ANALYSIS

BASED ON TRAFFIC ANALYSIS AND SITE SPECIFIC DATA:  
 REQUIRED BICYCLE PARKING SPACES = 10 SPACES  
 AVAILABLE BICYCLE PARKING SPACES = 10 SPACES  
 DEFICIT/PURPLUS = 0 SPACES



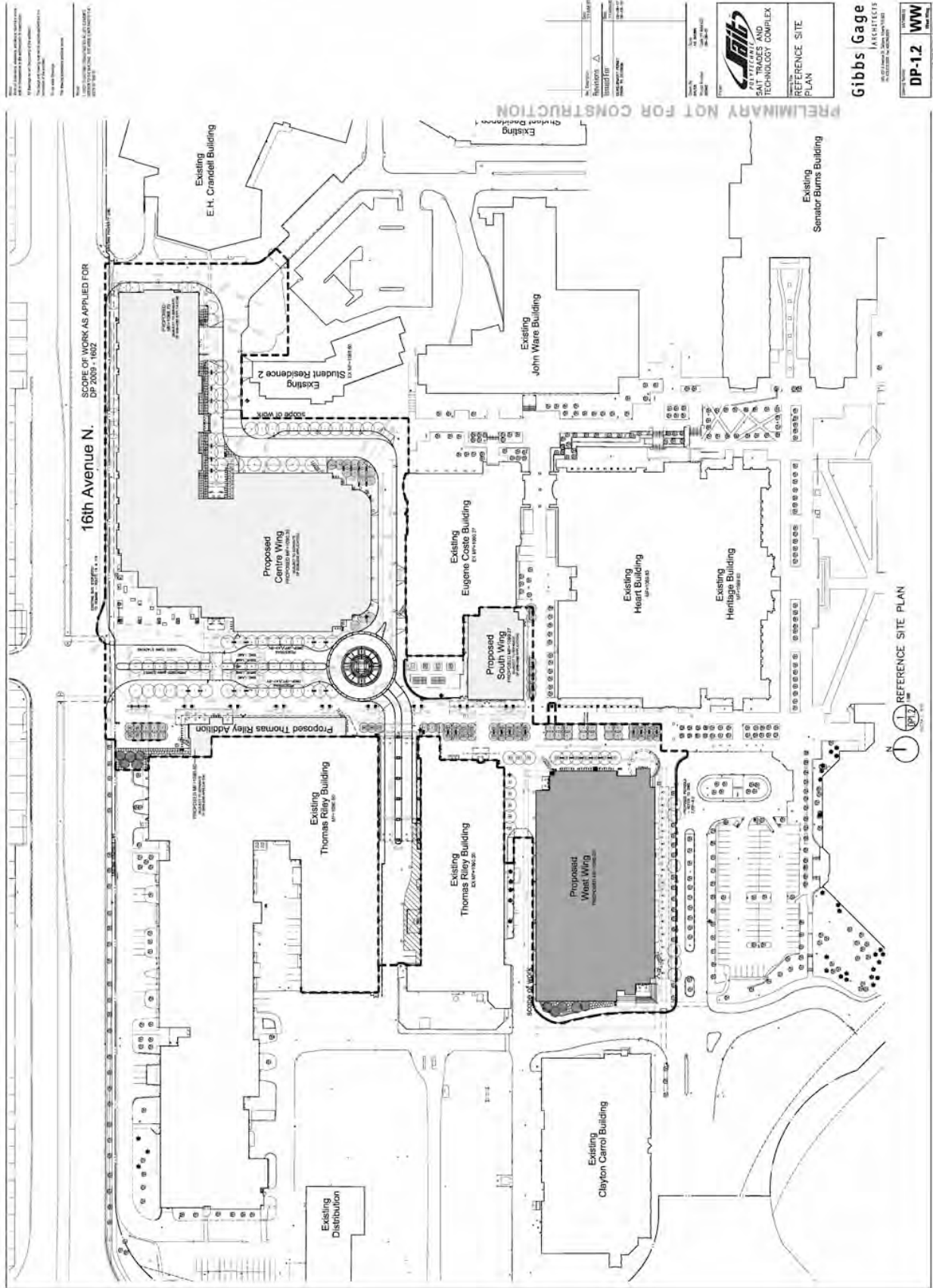
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**DP-1.1 WW**  
 DRAWING NO.



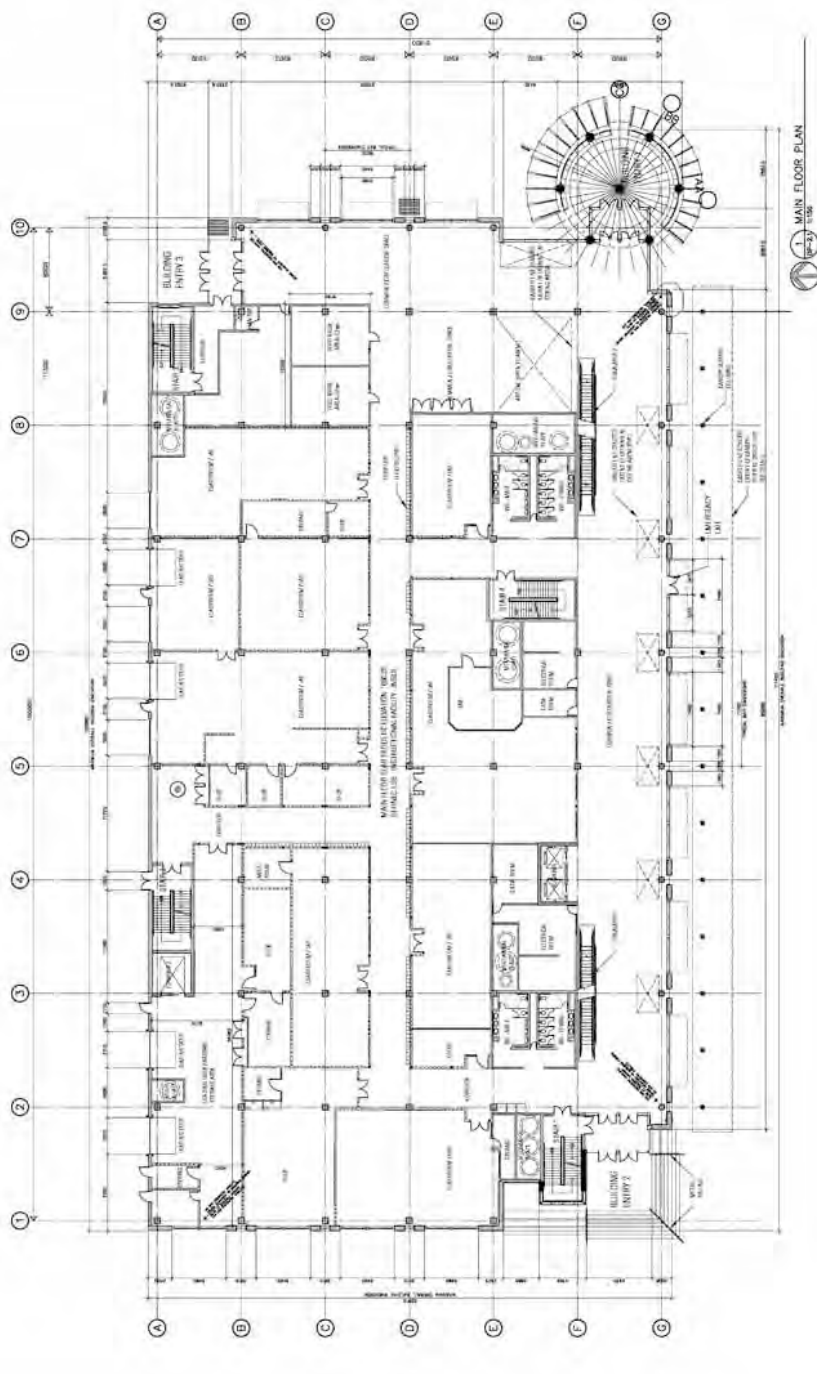
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REVISIONS	DATE	BY	CHKD


  
 ARCHITECTS

MAIN FLOOR PLAN

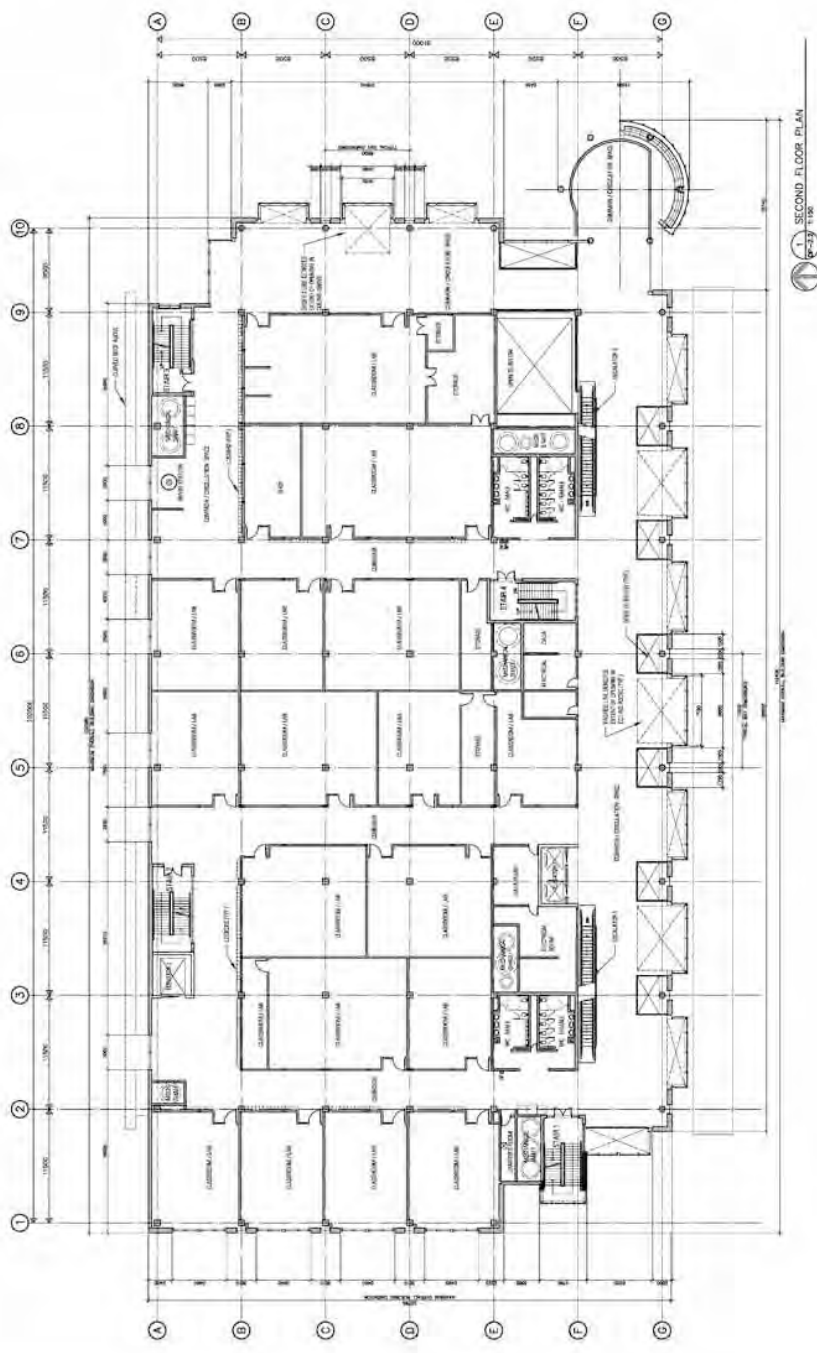
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**DP-21 WW**



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**DP-22**  
 WW  
 ARCHITECTS

1 SECOND FLOOR PLAN  
 1/8" = 1'-0"

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.  
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 5. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 6. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 7. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 8. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 9. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.  
 10. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.

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THIRD FLOOR PLAN



**Gibb Architects**  
 ARCHITECTS  
 1111 WEST WING  
 3RD FLOOR  
 PLAN

**Gibbs Gage**  
 ARCHITECTS  
 1111 WEST WING  
 3RD FLOOR  
 PLAN

**DP-23 WW**  
 DRAWING NO.

1. The Architect shall be responsible for obtaining all necessary permits and approvals from the relevant authorities. The Architect shall also be responsible for ensuring that the design complies with all applicable building codes and regulations.

2. The Architect shall be responsible for coordinating with the relevant authorities to ensure that the design complies with all applicable building codes and regulations. The Architect shall also be responsible for ensuring that the design is consistent with the client's requirements and the project's objectives.

3. The Architect shall be responsible for providing the client with regular updates on the progress of the design and any issues that arise. The Architect shall also be responsible for ensuring that the design is completed within the agreed-upon timeline and budget.

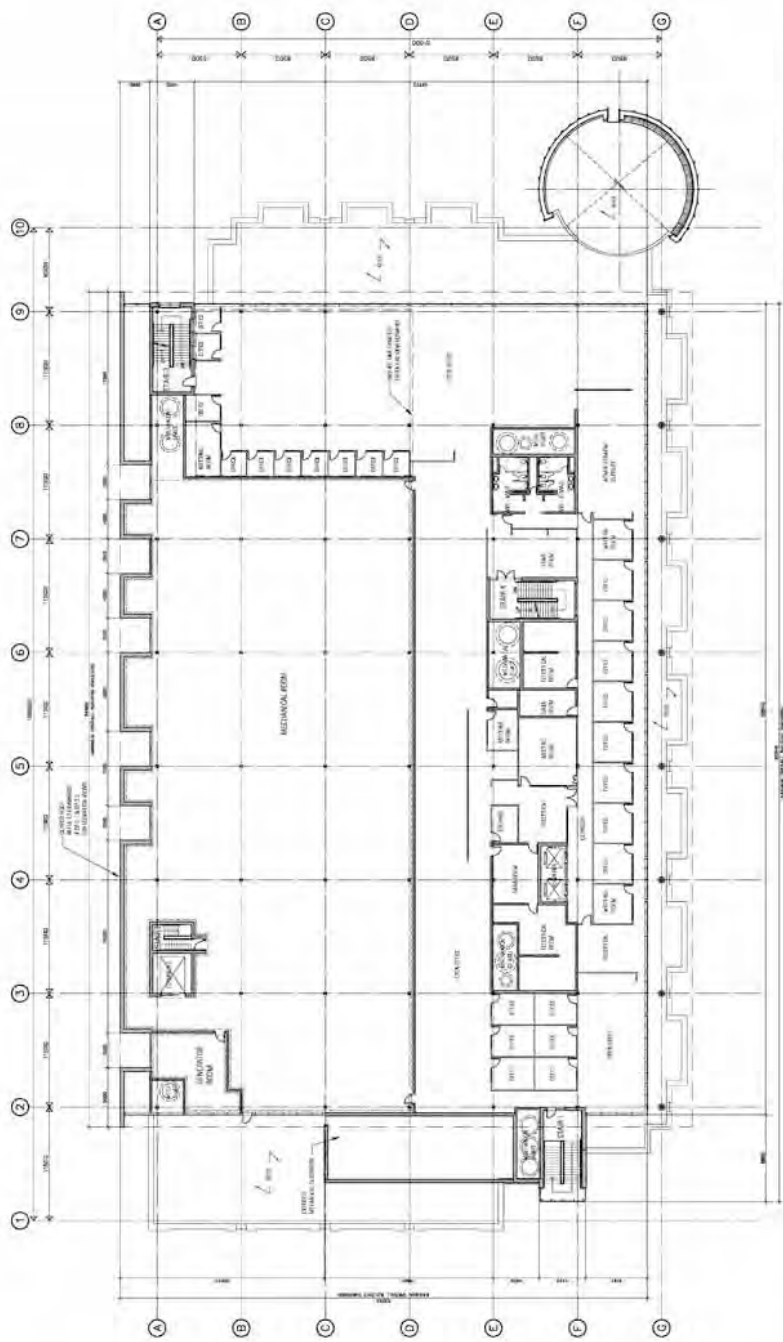
4. The Architect shall be responsible for ensuring that the design is of high quality and meets the client's expectations. The Architect shall also be responsible for ensuring that the design is consistent with the project's objectives and the client's requirements.

5. The Architect shall be responsible for providing the client with a detailed and accurate set of drawings that can be used for construction. The Architect shall also be responsible for ensuring that the drawings are consistent with the design and the project's objectives.



**Gibbs**  
 ARCHITECTS  
 111 WEST WING  
 FOURTH FLOOR  
 PLAN

**Gibbs Gage**  
 ARCHITECTS  
 111 WEST WING  
 FOURTH FLOOR  
 PLAN  
**DP-24 WW**



FOURTH FLOOR PLAN

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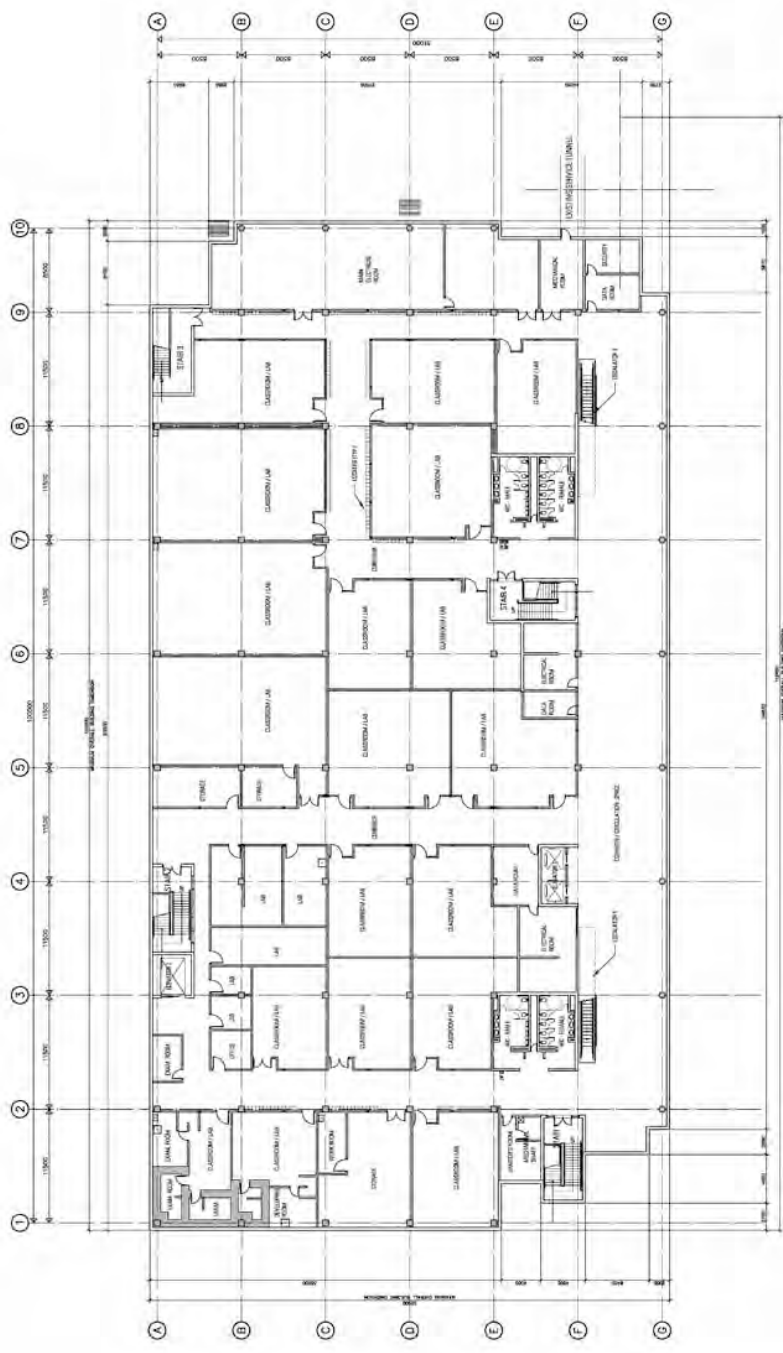
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BASEMENT PLAN 1/8" = 1'-0"



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**DP-25 WW**  
 10/01/09

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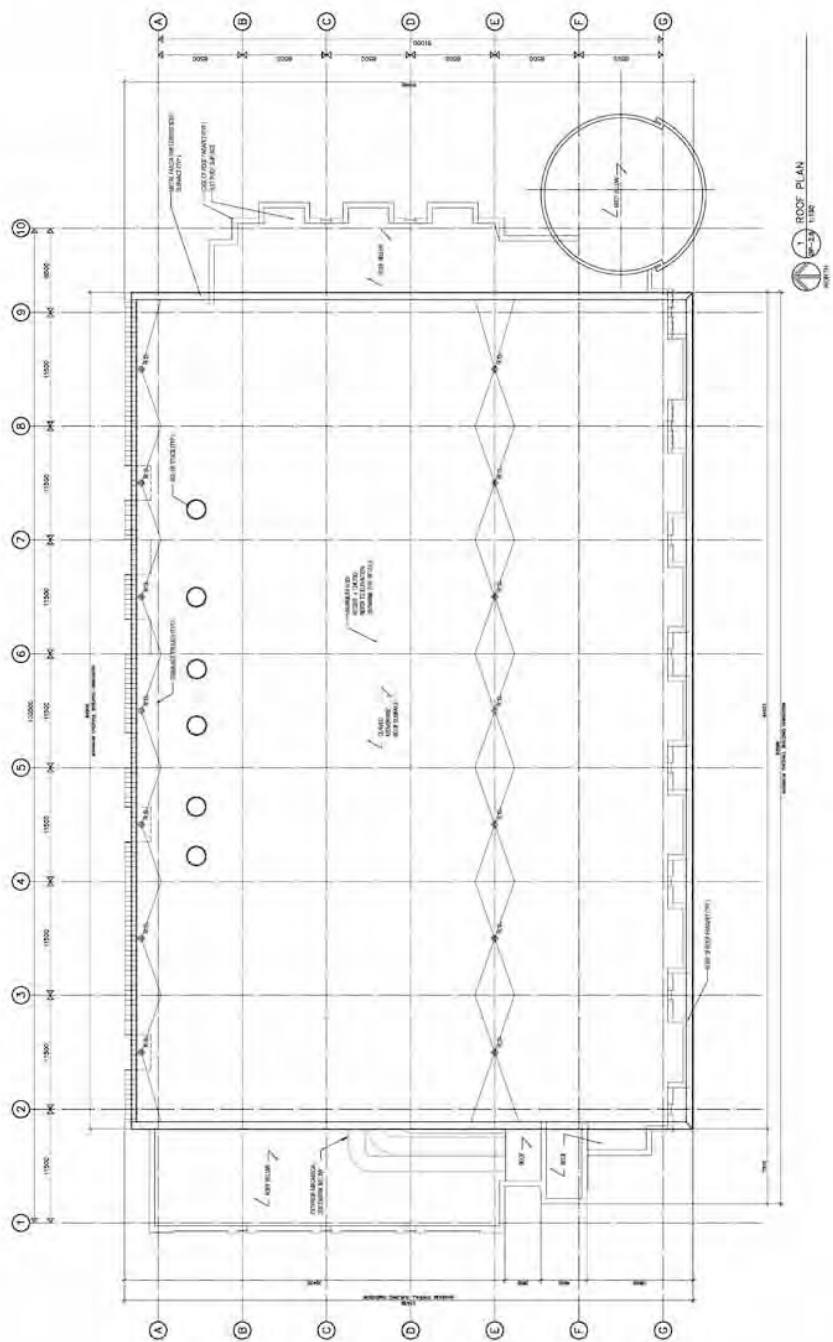
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**DP-26** **WW**  
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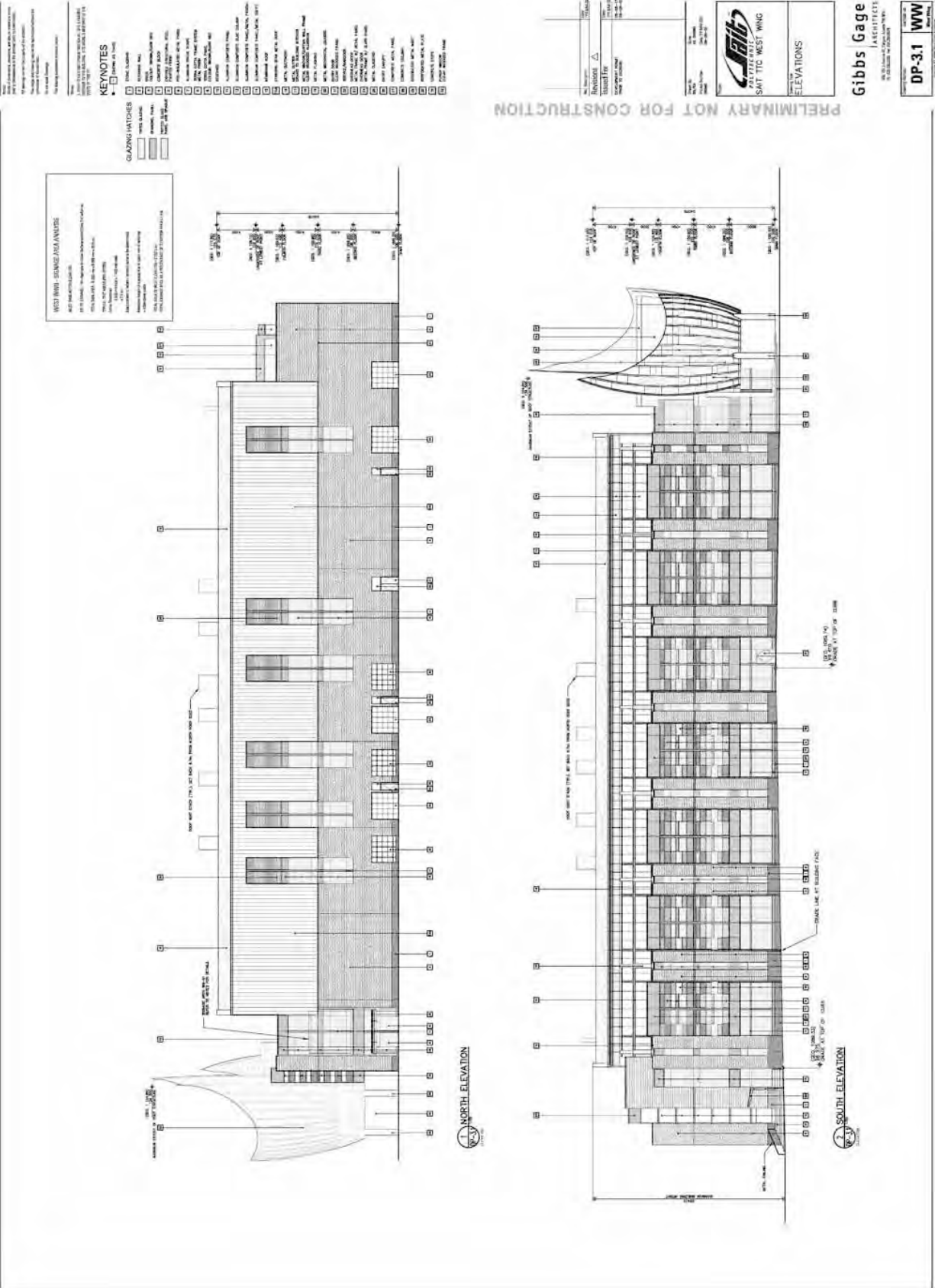
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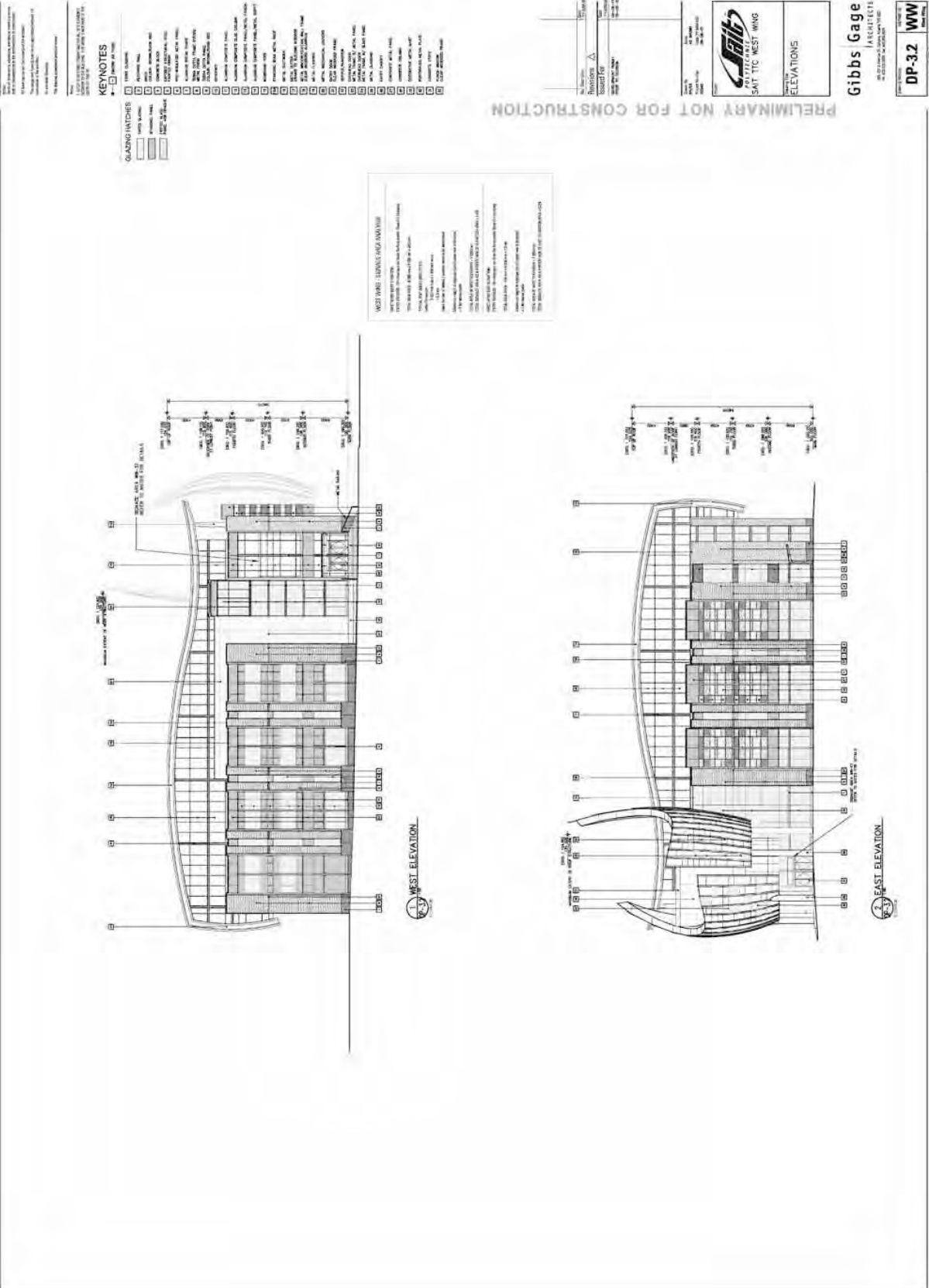
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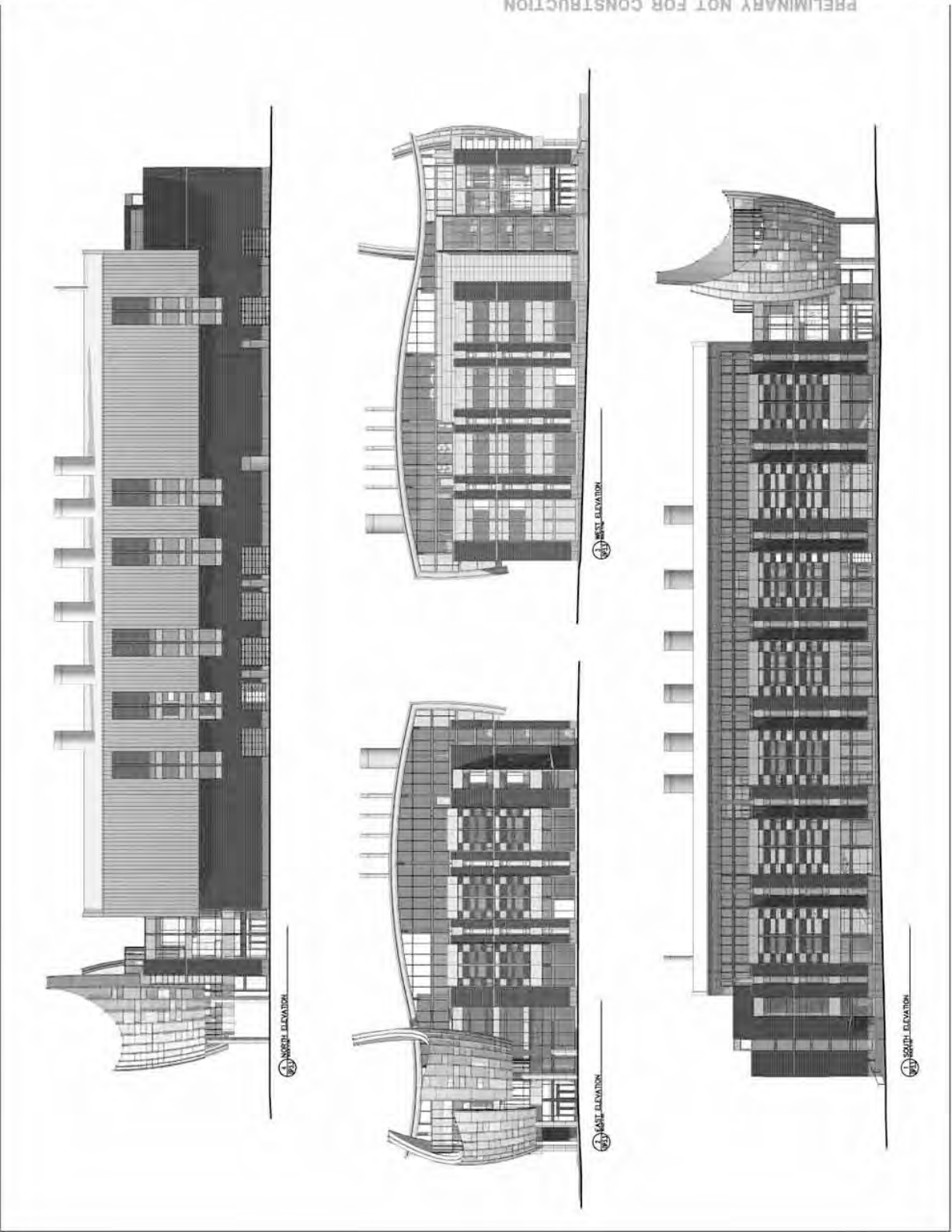
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Project No.	DP-33
Client	WW
Architect	Gibbs Gage Architects
Date	2009-10-01
Scale	1/8" = 1'-0"
Sheet No.	12

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**CRIME PREVENTION  
THROUGH ENVIRONMENTAL DESIGN  
(C.P.T.E.D.)  
ASSESSMENT**

**DP#:2009-2088  
DP#2009-2082  
DP#2009-2085  
DP#2009-2084  
DP#2009-1602**

**Location: 1301 – 16 Ave NW**

**Completed by: Gerry Bailey**

**Date Completed: July 08, 2009**

**CRIME PREVENTION  
THROUGH ENVIRONMENTAL DESIGN  
(C.P.T.E.D.) ASSESSMENT**

**Requested By: Jules Hall**

**Conducted By: Gerry Bailey and Cst. Eric Levesque, Calgary Police Service**

**STATEMENT OF PURPOSE**

This survey and the enclosed recommendations are not intended to completely eliminate the crime risk to the subject property. They will however enhance the personal safety and reduce the probability of attacks against the property if properly applied and maintained.

Implementation of these recommendations should not be fragmented. Many times the incorporation of one phase depends upon the implementation of other security recommendations and the failure to utilize the systems approach can breach all elements of the system.

**BACKGROUND**

The Southern Alberta Institute for Technology (SAIT Polytechnic) 1301 – 16 Ave NW

This is a student campus with multiple facilities for technical and trades training.

The learning facility has its own on site Campus Security contracted by SAIT and deals with all security matters that do not require Police Intervention.

The history of the Campus does not have major criminal issues and for the most part functions, security wise, independently and has no major problems on Campus. Calls for service to the Calgary Police Service are minimal and usually require traffic

*Crime Prevention through Environmental Design*

investigation of Motor Vehicle Accidents, Trespassers who won't leave the property, individual theft reports and some personal assault investigations.

The Campus is considered a Safe Place by the students and faculty.

Since 2006/01/01 most reports to the police where for Motor Vehicle Collisions, several thefts from students, some internal thefts at SAIT as the result of B&E, minor occurrences of fraud, 2 Minor Sexual Assaults involving touching and a small portion of assaults. In relation to the size of the Campus as compared to a city that would accommodate the same populous of this demographic, the crime problems are very low and do not indicate the propensity of on campus major crime.

#### SCOPE

This report is based on the crime prevention strategy known as Crime Prevention Through Environmental Design or CPTED (pronounced sep-ted for short.) CPTED is a strategy that recognizes that a relationship exists between the built environment and incidence of crime.

The most attractive feature of CPTED as a strategy is that it, unlike other strategies such as target hardening, attempts to accomplish a high level of personal security without imposing a fortress like structure on the environment.

#### SUBJECT FACILITY

The Southern Alberta Institute for Technology (SAIT Polytechnic) 1301 – 16 Ave NW

This is a student campus with multiple facilities for technical and trades training. It also has student housing on campus.

#### CONCERNS

These concerns were discussed on July 6th, 2009, at a meeting at SAIT with the Stakeholders of this development, (CLO from 3 Dist, Cst Eric Levesque, Barry Cochrane, Ben Hann | MKT Arkle Development Management Inc., Boris Dragicevic

1. Benches to have 'arms' to stop people sleeping on them.
2. South Wing / Q block gap to be gated to block the gap between the buildings.
3. Washroom Maze entrance is preferred to doors for security reasons with people blocking doors.
4. Lights in bollards to assist with general lighting.
5. MKT to Issue phasing diagrams to District #3 that were reviewed in the meeting.
6. SAIT to Inform District #3 when the 24hr security office is relocated.

7. Generally the access to the front of the campus is a great improvement.
8. Way finding signage and Landmarks to be used where possible to assist people when in an emergency situation.
9. SAIT to look at ownership of meeting locations and rules surrounding these locations so that they do not become controlled by undesirable activities.
10. Lighting was discussed and will be adequate for the development.
11. CCTV will be integrated into the project at a high level.
12. SAIT has on campus Security to deal with issues as they arrive and with the incorporation of this unit the Level of Fear and Incidents of Crime have been greatly reduced.
13. There will be some problems in the construction phase of all of these buildings with traffic and pedestrian control. SAIT must consider the safety of persons in this phase a high priority and implement strategies to eliminate the risk to personal safety of the individuals having to move within these areas.

General recommendations to be considered to aide in the development of Strategies to remove risk.

#### SAFETY ISSUES AND CONCERNS

Personal safety of the individuals that will be using and occupying the SAIT Campus. A number of different elements must be reviewed and seriously considered to ensure that the design provides a safe and comfortable environment. All planning and design development within the Educational facility must acknowledge the need to enhance the users' sense of personal safety and reduce design features which provide opportunities for intimidation, threat or assault. The addition of an underground parkade requires special attention and serious scrutiny of the design of the structure when it comes to satisfying the needs of user safety.

#### Lighting and Visibility

Light fixtures shall be placed so as to eliminate entrapment spots and shall provide a uniform level of lighting minimizing the contrast between light and shadow. Light fixtures which can withstand vandalism and which can be easily maintained should be utilized. Wall and floor surfaces should be light in colour, which would improve visibility in interior parking facilities. Often lighting is used to light the movement areas of vehicle traffic; this should continue to the Parking structures and lots and illuminate pedestrian user space once the vehicle is

parked. Lighting of walkways and pathways should be consistent throughout the campus, so users are not moving from a well lighted area to a dark area and visa - versa.

#### Sightlines

The structures should be designed so as to maximize lines of sight ahead, behind and to the sides. Barrier materials should be visually permeable and use reflective surface at corners to improve visibility. Clear glazing in areas such as stairwells, elevator lobbies and entrances should be built into the design. Landscape material should be selected and located so as not to impede long views. Building exterior design and placement should maximize overlook and casual surveillance of public spaces.

#### AREAS OF SPECIAL ATTENTION

##### Corridor

Hidden recesses in corridors should be eliminated. In curved or angled corridors, mirrors or mirrored surfaces should be provided to allow a view further ahead. Corridors with unlit recess shall be avoided. Long corridors should have midway exit possibilities. There should be a choice for exiting or going back.

Wheelchair ramps are to be as open and transparent as possible. The sides of Ramps should not be constructed of a solid material. A transparent material or pickets providing views through and beyond the ramp should be used. If the ramp is placed adjacent to a solid wall, the other side should be transparent.

##### Entrapment and Movement Predictors

Areas of entrapment are to be avoided. Potential areas of entrapment are: unlit recesses, corners or alcoves; small structures (sheds, storage areas) which are unlit or unlocked. Washrooms which are located in low activity areas can be entrapment areas, especially if the entrance configuration is complicated and communication to a corridor is difficult. Single use washrooms are better choices.

Quadrangles and courtyards must be so designed so that there are no entrapment areas.

The use of clear glass panels is recommended in all doors to stair wells, corridors and entrances. All unnecessary corners, planters, walls and fences which could produce entrapment spots should be eliminated. In enclosed public spaces, columns, rather than shear walls, should be used as structural members. Alternative pedestrian routes, multiple exits and choices in direction should be provided wherever possible.

Structures which create entrapment spots must be avoided. In any area where entrapment is an issue, consideration must be given to communication needs, particularly for emergency assistance.

Pathways which force users to go past entrapment areas should be avoided. Paths shall be designed to allow users several alternate means of movement and a means of escape.

#### External paths

External paths shall be designed and located to avoid entrapment areas. Appropriate signage should be located so as to identify a choice in direction or route, and where each will lead.

#### Edges of Buildings

Recesses and unlit areas shall be avoided. Reflective surfaces should be provided at corners where appropriate. Proper lighting shall be provided to avoid dark entrapment areas.

#### Isolation

In areas of low pedestrian traffic, clear, concise and highly visible signage should be used. Clear directions to the nearest communication device must be given. Wherever it is deemed necessary, alert stations (emergency telephones) should be used to aid in emergency situations. Surface parking lots located behind or beside buildings must have sightlines to nearby assistance within the building. Clear, concise, diagrammatic building plans should be provided inside the

**building**

Entrance identifying the location of washrooms, telephones, reception areas, public spaces, cafeterias and lecture halls. Sufficient information, identifying the nearest staffed area or exit should be provided at major decision points within the building.

**Access Control**

The issue of access control is extremely critical on campuses. A number of buildings are occupied during normal working hours and are locked for the evening and during the night. However, in a large number of buildings, classes are held late into the evenings, and in some cases students work in libraries late into the night. Some of the items to be considered should include:

- Access control needs to be designed in a way that permits staff to maintain a separation between public, semi-public and private areas.
- A system shall have wide flexibility and the ability to accommodate immediate change, at relatively low cost.
- Main entrances should be designed to be barrier free and easily used by all.
- Special attention regarding access control shall be given to libraries, student residences and academic buildings used after normal building hours.
- Systems shall be designed for the long term and not become obsolete shortly after installation.
- The main lobby and entrance shall open onto a properly staffed reception / office area allowing casual surveillance of the entrance to the building.

**Communication**

The need to communicate and to be able to call for assistance in cases of emergency is extremely important. A means of communication shall be provided in areas of greatest vulnerability where confrontation may potentially occur such as:

- cash collection locations;
  - reception counter areas;
  - parking kiosks;
  - Other areas where confrontational discussions may occur.
- Some of the design options should include:
- providing emergency phones in problematic areas or isolated areas and

connecting to the Campus Security.  
-providing a public address system in buildings to facilitate internal building Communication.

#### Activity Generators / Activity Mix

In planning of a project, the concept of locating high risk or low volume activities next to high volume activities should be implemented. This should be considered in the following situations:

There are situations where the office areas and reception areas are far removed from the main doors or entrances to the building. This allows for anyone to enter the building at anytime and leaves the reception area in a very isolated situation. This should be avoided. Special attention shall be paid to the location of pathways, entrances and exits for people with mobility difficulties.



**Hall, Jules**

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**From:** Jamie Clark [jamie.clark@gibbsgag.com]  
**Sent:** 2009 September 10 2:34 PM  
**To:** Hall, Jules  
**Subject:** DP2009-1602 - SAIT TTC CPTED Report

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hello Jules,

I am writing to you to confirm that we are in receipt of the CPTED report prepared by Gerry Bailey pertaining to DP applications DP2009-1602, DP2009-2082, DP2009-2084, DP2009-2085 and DP2009-2088. We have reviewed the document and are in agreement with the principles and recommendations it contains. Many of the items contained in the report are typically incorporated at the working drawing stage, further downstream in the development of the design. For example, these include the intercom system, prohibition of bench "arms," and main lobby reception design. We will agree to continue to develop these contents on the Prior to Release Stage drawings.

In our review of the comments, I have found that the request for clear glazing and unobstructed sight lines lends itself well to the TTC buildings as designed. As you are aware, there is extensive glazing on all four of the TTC buildings, and visibility to and from the atrium spaces is well accommodated. In this case, the CPTED comments and SAIT's desire to have an open, transparent learning environment are on the same page.

At this point, we do not believe that there are any items contained within the CPTED review that are in conflict with the building as designed. I look forward to continuing to work with you on some of the finer grain details in relation to this report as we go forward with the release drawings.

Best Regards,

Jamie Clark  
*B.Sc., M.Arch., M.Phil.(Cantab.)*  
Intern Architect - AAA

**Gibbs Gage**

ARCHITECTS

505, 237 – 8th Avenue, S.E.  
Calgary, Alberta T2G 5C3

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**To:** Jules Hall, File Manager  
**From:** Brian Green, Land Use Planning & Policy  
**Date:** 14 August 2009  
**Re:** File # DP2009-2082

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The following are the Land Use Planning & Policy comments on the Land Use Amendment application:

1. **The Calgary Plan** - The subject property is currently identified as 'Institutional' in the Municipal Development Plan (MDP) and is designated as Special Purpose – Community Institution (S-CI) District under Land Use Bylaw 1P2007. The Special Purpose – Community Institution District is intended to:-

- a) provide for large scale culture, worship, education, health and treatment facilities
- b) provide for a wide variety of building forms located throughout the city; and
- c) be sensitive to the context when located within residential areas

2. **Local Policy Context** - The subject property falls partly under the 16 Avenue North Urban Corridor Area Redevelopment Plan (ARP). Within the ARP, the subject property is identified as an important asset to the 16 Avenue NW corridor, the adjacent communities and the City as a whole. Policies support the continued intensification of use on the SAIT site and require that it is designed to reflect the built form north of the avenue, while complimenting the character of the campus.

The policy objectives are to:-

- reinforce SAIT as an important focal point on 16 Avenue North Corridor and to recognise its distinct character as a significant post-secondary facility in the city.
- To ensure the future educational facilities and their related uses fronting onto 16 Avenue and its adjacent streets are pedestrian friendly and transit friendly in design.
- To promote a unique sense of place at the western end of the corridor that would enhance and celebrate the collegiate theme and reflect the built form north of the avenue.

It is considered that the proposals are in accordance with these policy objectives, in relation to the development proposals along 16 Avenue.

3. **Application** - This application proposes the partial redevelopment of the SAIT campus and comprises five concurrent applications. Taken as a whole these applications represent the comprehensive modernization and updating of the campus buildings and facilities and will implement the policies and objectives of the recently adopted Area Redevelopment Plan, specifically in relation to Chapter 6 of the ARP.

4. **Planning Considerations**

The proposed developments are fully in accordance with the Policies and Objectives of the adopted ARP, specifically in relation to Section 6. This section strongly encourages the retention and reinforces SAIT as an important focal point and land use on the 16 Ave North Corridor.

The proposed developments affecting 16 Ave Corridor will implement an important element of the ARP and significantly enhance this part of the corridor through a contemporary and superior architectural backdrop to what is currently in place, contributing to the character and vitality of the Corridor.

5. **Recommendation** - After reviewing the application, Land Use Planning & Policy would support the Development Permit applications. The ARP will not need to be amended to accommodate the applications.

Please ensure that the applicant receives a copy of these comments. We would be pleased to discuss these comments with the applicant if necessary.

Please ensure that we are informed of any revisions to the application. Further comments may be forthcoming as the review process continues.

**Urban Design Review Panel**  
**2009 AUGUST 19**  
**Page 2**

**ITEM NO. : 1**  
**(1:30 pm)**

Jules Hall, Lindsey Glover

**COMMUNITY:**

Hillhurst Sunnyside

**FILE NUMBER:**

DP2009-1602, DP2009-2082, DP2009-2084,  
DP2009-2085, DP2009-2088

**MUNICIPAL ADDRESS:**

1301 – 16 Avenue NW

**APPLICANT:**

Gibbs Gage Partnership on behalf of the Southern  
Alberta Institute of Technology

**DESCRIPTION:**

The new SAIT Trades and Technology Complex

**Comments Provided by the Panel:**

- The Panel would like to commend the Applicant for a very thorough and thoughtful presentation. The Applicant has done an excellent job of combining a respect and recognition of the history of the campus and its architecture with a progressive approach which speaks to innovation and technology.
- The Panel recognizes the Applicant's proper imposition of pedestrian and vehicular patterns and overall movement into a current chaotic situation.
- The Panel feels the pedestrian precinct at the 16<sup>th</sup> Avenue /11<sup>th</sup> Street NE interface is compromised and would benefit from a more generous proportion.
- The Panel encourages the Applicant to work with the owner and the City on a consistent signage/graphic approach which incorporates potential use of projected, dynamic images.
- The Panel discourages the use of large static signs except building signs which are incorporated in the building design.
- The Panel encourages the design team & the owner to look at all creative possibilities for the tower element in the roundabout. This is an opportunity for SAIT to demonstrate their commitment to technology, education and innovation.
- The Panel encourages the Applicant to optimize the opportunities for the interface between the interior (coffee shops, book stores, retail) and exterior public spaces along major pedestrian avenues.
- Although the existing mechanical service yard immediately north of the south wing is not in the immediate scope of this project, the Panel feels additional study and consideration is warranted re: form, use, potential integration with the turnabout.

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September 9, 2009

**City of Calgary**P.O. Box 2100, Station M  
Calgary, Alberta T2P 2M5

Attention: Jules Hall

**RE: SAIT TTC, DP2009-1602, DP2009-2082, DP2009-2084, DP2009-2085, DP2009-2088**

Dear Jules,

I am writing you to clarify some of the sustainability aspects of the SAIT Trades and Technology Complex, as part of your continued processing of the above noted development permit application. I hope that this summary will provide you with an understanding of the LEED design approach being used for the TTC site and buildings.

One of the aspects of planning for LEED and sustainable design is that targets are set out early in the design process. The details of how those targets are met by the mechanical, electrical, and other building systems are determined in the design stage and confirmed during construction. Finally, the targeted LEED rating is considered achieved upon successful review of the submission package by the Canadian Green Building Council, after construction has been completed.

For projects such as the SAIT TTC, a number of LEED credits have already been targeted for achievement at the beginning of the project. In the case of the TTC, the Center wing has targeted fifty-six points, the West wing fifty-six points, and the South wing has targeted fifty-nine points. As you may be aware, sixty points is the threshold for LEED Gold, fifty points are required for LEED Silver, and forty points for LEED Certified. In Enermodal's practical experience, as design development continues a limited number of the points targeted will not be achievable. As the project progresses, the score will be continually evaluated and some credits may move into targeted, either to improve the projects score, or to maintain the desired rating. Also, as explained by Gibbs Gage Architects, the funding for the TTC is still in the process of being secured from several sources, including government and private industry. Given that, to a certain extent, LEED ratings are dependent on budgetary means, the rating of the TTC may still be affected by fundraising considerations.

It is also important to note that as part of the planning for the TTC, SAIT could have used the current version of LEED as the evaluating criteria. Instead, SAIT has chosen to use the new, tougher and, as yet, unproven LEED 2009 as a demonstration of their progressive approach to environmentally friendly buildings. It should be noted that a number of the credits in 2009 have tougher benchmarks compared to the current version of LEED.

Hopefully the following list of measures that we are *Targeting* (confirmed to be in the design as shown in the development permit application) and measures that we have as *Pending* (measures that are still being evaluated) will provide you a more detailed understanding of the LEED status of the project:





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### **Targeted Measures**

#### **Site Selection**

As has been described in the Development Permit Applicant Submission, the SAIT TTC represents a substantial redevelopment and densification an existing urban campus. The demolition of the Murdoch Parkade in particular returns usable space to the SAIT campus that was previously dedicated entirely to vehicular uses. Additionally, the immediate adjacency to the 16<sup>th</sup> Avenue corridor with its bus services and local businesses is a resource both for promoting transit use and foot traffic. Specific LEED points targeted are:

- Selection of a previously developed site to lessen impact on greenfields.
- Selection of a high density location to ensure close proximity to sufficient amenities.
- Underground Parking and high solar reflectance roofing materials to minimize urban heat island effects.
- Proximity to public transport and provision of facilities to encourage alternative forms of transportation and minimize vehicle related emissions.
- Lighting design to minimize light pollution.
- Erosion and Sedimentation Control Plans to mitigate the loss of soil and protect waterways and wetland habitats.

#### **Energy & Atmosphere**

As part of your prior discussions with Gibbs Gage regarding the layout of the building interiors, you are aware of the intent of providing atrium and student space that feature prominently on the building exteriors to improve daylighting, for example in the middle of Centre Wing, and on the south elevation of West Wing. The buildings will also feature premium efficiency equipment and high performance windows. LEED measures include:

- High efficiency lighting systems including daylighting and occupancy sensors.
- A highly efficient building design including high performance windows for excellent levels of comfort and insulation.
- Heat recovery and free cooling to lower overall heating and cooling requirements.
- Premium efficiency boilers, chillers, fans, and pumping equipment.
- A long term commitment to measurement and verification of energy consumption.
- Best practice in terms of commissioning all systems to ensure operation as designed
- Avoidance of ozone damaging CFCs and halons.

#### **Materials & Resources**

Part of the Prior to Release package that was submitted on August 11 included a report on the waste management aspects of the campus. Of particular note is the substantial marshalling yard on the south elevation of Centre Wing that will be continually used for the recycling of materials and will affect some of the following credits.

- Space for the collection of recyclable materials.
- 50% Diversion of construction waste materials from landfill.
- Specification of building materials with recycled content – 10% overall.
- Specification of a proportion of building materials from regional sources to lower the carbon impacts of long distance transportation – 20% overall.



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### **Indoor Environmental Quality**

Part of SAIT's mandate for the TTC buildings is to provide a healthy, comfortable learning environment for the 3600 students who will use the new buildings. This implies a high level of attention to interior environmental quality, as reflected in the following targeted credits.

- Ventilation levels to provide a healthy learning environment.
- Prohibition of smoking in the buildings.
- Active monitoring systems designed to provide adequate fresh air to all spaces.
- Specification of low-emitting materials such as paints, carpets and composite wood.
- Construction measures to minimize the presence of harmful materials in the finished building.
- Systems designed to meet thermal comfort standards.
- Permanent monitoring of internal thermal comfort.
- Interior design which promotes daylighting and views of the outdoors.

### **Innovation and Design Process**

- A commitment to green housekeeping measures such as using environmentally cleaning products.
- Low emitting furniture (GREENGUARD certified) to maintain a health indoor environment.
- Development of a waste management plan for operation waste.
- Input from a LEED ® Accredited Professional throughout the design process.

### **Pending Measures**

In addition to the measures already confirmed as being in the design, the following items are actively being considered for implementation in the SAIT TTC:

- Increased water efficient design (40% reduction compared to LEED baseline).
- Additional energy efficiency measures.
- Green Power (Two points available for 35% of power from a certified supplier).
- 75% Diversion of construction waste materials from landfill.
- Specification of building materials with recycled content – 20% overall.
- Specification of a proportion of building materials from regional sources to lower the carbon impacts of long distance transportation – 30% overall.
- FSC Certified Wood.
- Outdoor Air Delivery Monitoring.

Again, I will re-emphasize that the above points are being labelled as targeting and pending, and that their achievement will depend on our continued work through the design development and working drawing progress. Rest assured, we are confident that the TTC will meet a LEED Silver rating, and that a higher rating is still very much under investigation at this point.





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If you require any further information on sustainability or LEED on this project, please do not hesitate to ask for a clarification through Gibbs Gage Architects.  
Regards,

**Matt Grace**  
Division Head  
Enermodal Engineering, Calgary

