Detailed Project Description

The University of Manitoba has entered into an exciting partnership with the Winnipeg Airport Authority that will see the transfer of a large scale work of art from the airport to the University. This opportunity has been brought about with the upcoming opening of the new James Richardson International airport and the closure and eventual demolition of the old airport terminal.

Within the old airport is a large piece of public art installed on the south wall, Eli Bornstein's *Structurist Relief in Fifteen Parts*. The University of Manitoba is receiving this work of art as a donation and we are pleased that this important piece of Winnipeg's airport history will be preserved and remain in our city for public view.

After extensive consideration of a location for the public art and after consultation with the artist, the University has decided to position the piece on the exterior south wall of the Max Bell Centre. The location will be prominently visible from the new campus pedestrian mall – a route that is well used by the campus community and that will serve as the main pedestrian connection between the University's various parking lots and the new stadium.

The size of this artwork is impressive. Once installed, the work will take up a space of 80 feet long by 20 feet tall and will add colour and interest to an existing plain wall. Because of the size of the work, it will be mounted on a frame along the exterior of the wall.

The removal and repositioning of this large scale work will be costly. Rather than call upon one donor to assist us we are assembling a group of partners to share in the relocation. We are requesting your assistance with the costs of installing the work.

The cost of installation on the exterior wall of the Max Bell Centre has been estimated at $110,000 according to our structural engineer. The University is able to budget $25,000 toward the installation of the piece and will be taking on responsibility for its ongoing maintenance. The Winnipeg Airport Authority is covering the cost of taking down the art and transporting it to the University and has agreed to make an additional contribution toward the cost of installation. However, we remain approximately $55,000 short of the required funding.

Included is a photo of the artwork and a diagram showing the proposed installation location on the Max Bell Centre.



Crosier Kilgour & Partners Ltd.

CONSULTING STRUCTURAL ENGINEERS

September 21, 2011 Our File No. 2011-0822

University of Manitoba
Physical Plant Department
89 Freedman Crescent
R3T 2N2

Attention: Mr. Bill Schellenberg MAA MRAIC LEED AP

Dear Sir:

Re: Max Bell Centre
South Elevation Potential Sculpture Installation
Proposal for Structural Engineering Consulting Services

Further to our recent conversation, we are pleased to submit the following proposal for structural engineering services.

The exterior wall construction is a tall split-face Tyndall Stone veneer with an insulated cavity and 8" concrete block back-up. The intent is to install the 15 individual panels of the "Structurist Relief in 15 Parts" that are currently housed inside the Winnipeg Air Terminal on the outside of the south wall of the Max Bell Centre.

We propose to perform a review of a typical panel to ascertain the construction, configuration, including maximum projection of the sculptural components, the weight and the current connection details. Inside the air terminal, each panel is offset from the wall face with two vertical frames of light steel angle construction. These frames are not likely suitable for the exterior installation. The achievable offset from the veneer at Max Bell, assuming one is required, will likely be determined by an iterative process, since moving the panels further from the wall significantly increases the forces to be resisted by the supports.

For each panel, we assume that we will be using four connections locations, with two near the top and two near the bottom. The stainless steel support "angle" configuration at each location may be in the order of 24" long in order to install epoxy anchors into the wall back-up with sufficient spacing between the anchors. We anticipate that each anchor will be structurally connected to the concrete block back-up and sleeved through the veneer to avoid adding any loads to the Tyndall Stone veneer system. Given the split-face of the veneer, it may be required to be ground smooth locally to create a uniformity in the connection details.

For the purpose of this proposal, we have assumed that the University will have a project coordinator for the sculpture installation and that our input will be required with regard to the structural support of the pieces only. Please advise if that is not your intention. Further, we have assumed that the sculptural pieces are sound and suitable in and of themselves and that we are only creating a support system for the new location.

Thus the proposed scope of work becomes performance of the above typical panel review, a preliminary connection design based on an agreed upon offset from the face of the wall, and two further iterations should they be required either technically or to reduce costs, and design and drafting of the details for the installation.

University of Manitoba
Attention: Mr. Bill Schellenberg

Our File No. 2011-0822
September 21, 2011

We would prepare a drawing indicating the connection detail and have all required technical specifications on the drawings. During the installation phase we have included for up to five site reviews/ meetings. Should additional meetings be required, we would charge an additional $350.00 per meeting.

We propose to perform the above scope of work for a fixed fee of $7,800.00 for the design phase and $2,850.00 during the installation phase.

With regard to the capital cost related specifically to the installation, we anticipate that it may be in the order of $97,000.00. This is not intended to include for dismantling, or moving or cleaning or other surface treatment of the sculpture itself, rather it is related to the installation on the south wall of the Max Bell Centre.

We trust that this is the information that you require at this time. Please do not hesitate to contact us if you have any questions or comments on this proposal.

Yours truly,

Kathy J. Pratt, [illegible], LEED AP, P. Eng.

/kjp

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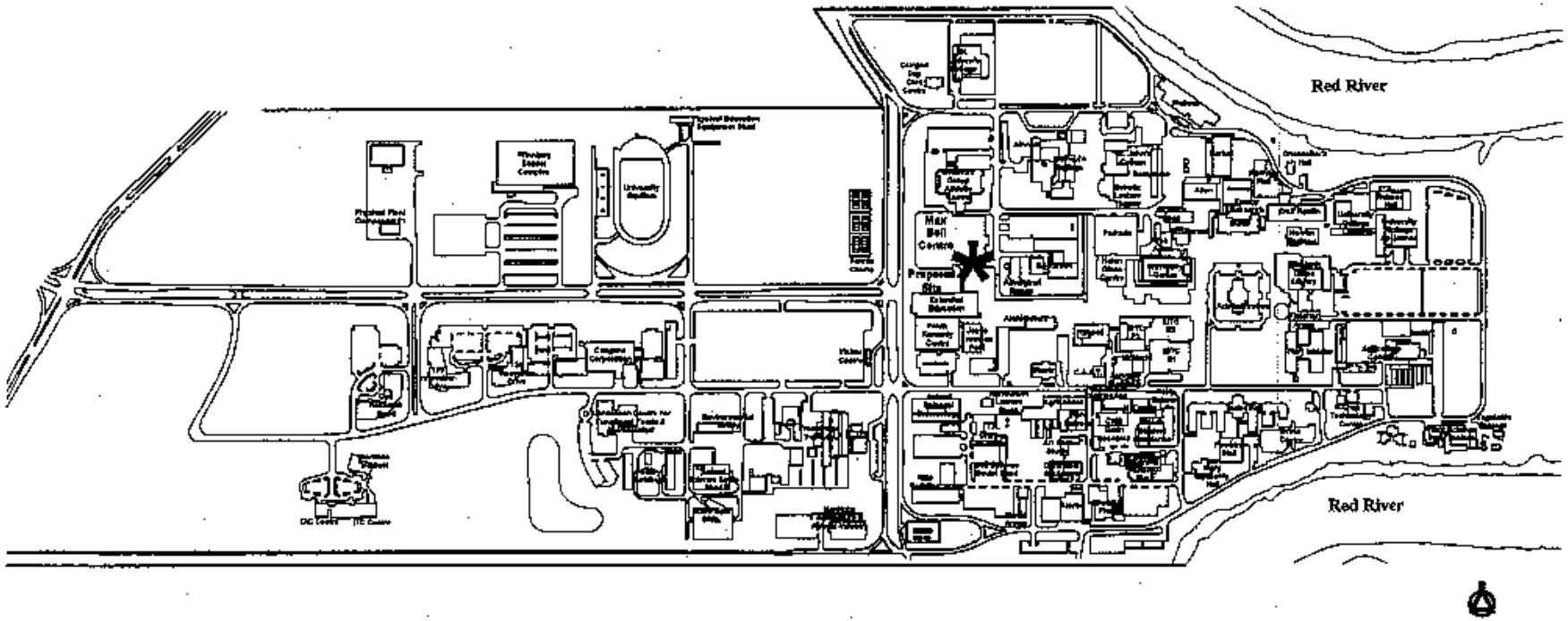
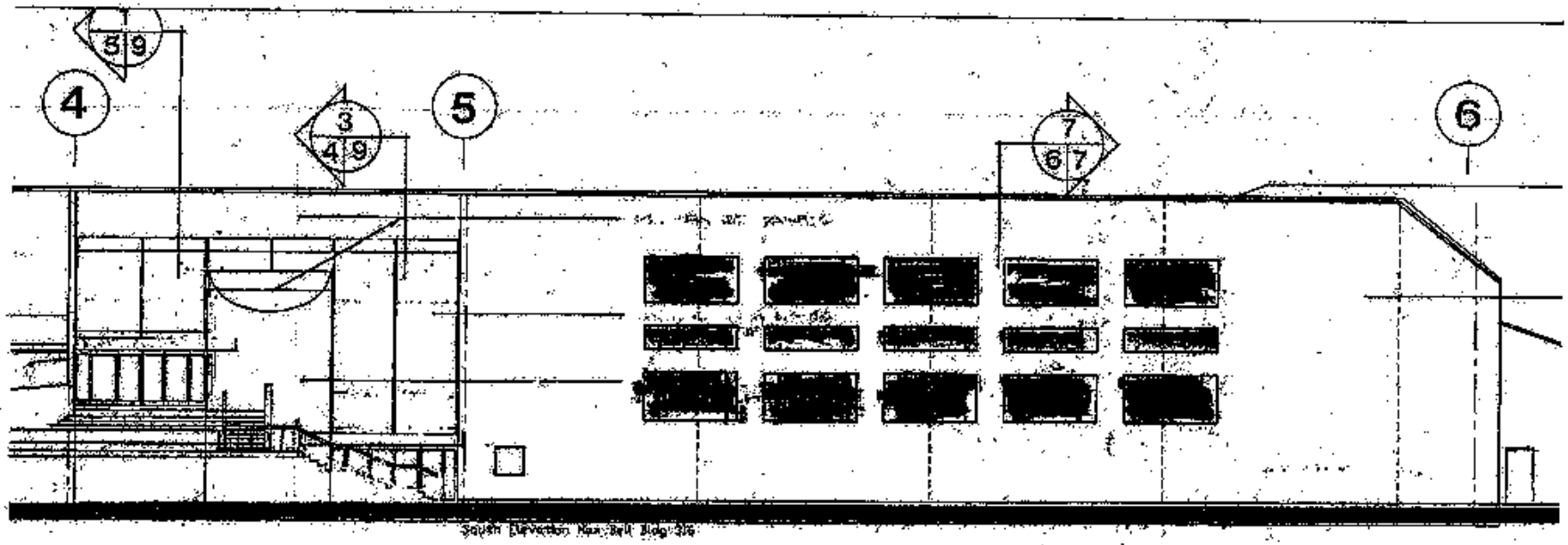


UNIVERSITY OF MANITOBA

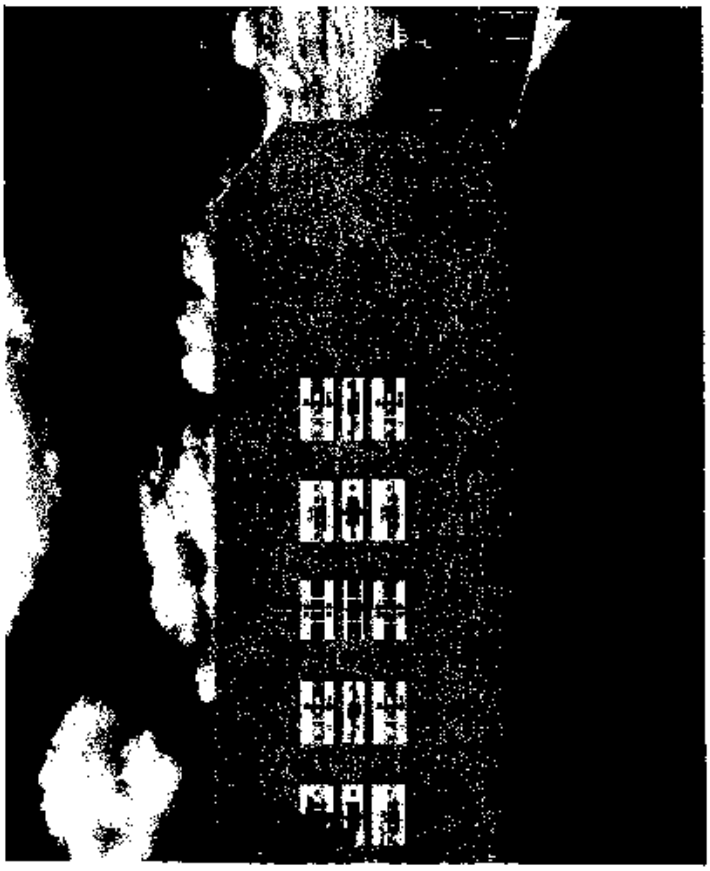
Max Bell Centre, Proposed Site for the Eli Bornstein - Structuralist Relief in Fifteen Parts

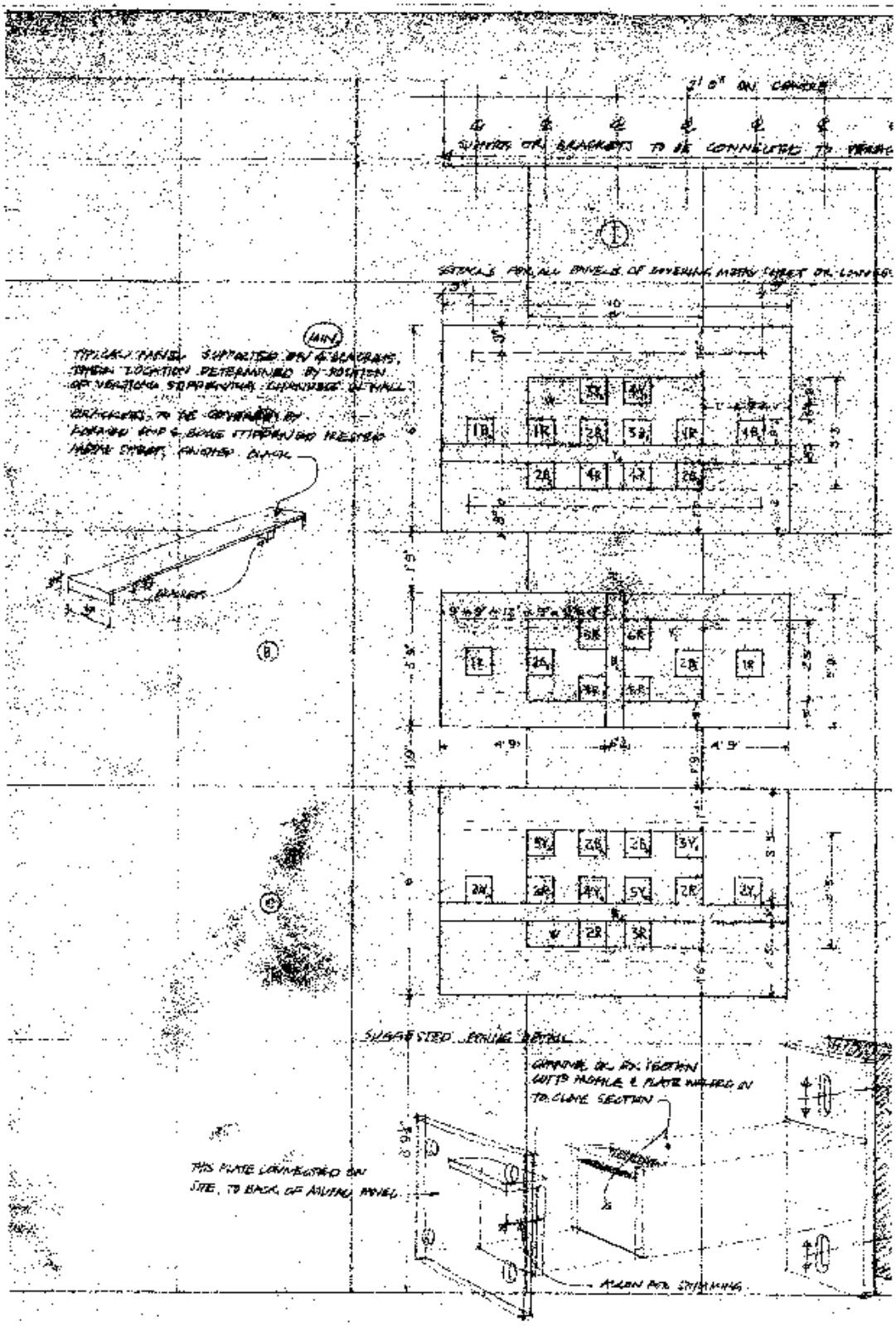
Physical Plant Department
99 Freedman Crescent Winnipeg, MB



Max Bell - South Elev.

SCALE: 0 5 10 20 40 FEET

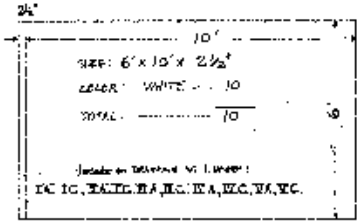


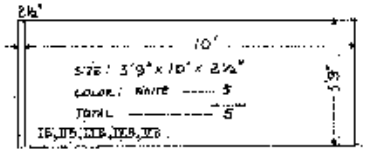


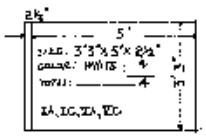
DRAWING NO. 1 NOTE. SHOP DRAWING TO B
OF SUPPORTING B

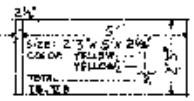
"TOTAL NUMBER OF PIECES", SIZE, COLOR, ETC., DRAWING NO. 2
AND TYPICAL ELEVATION.

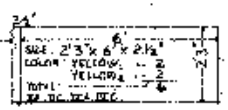
PANELS AND BLADES

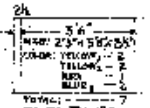


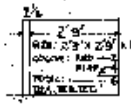


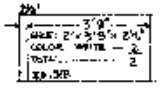


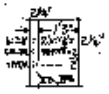




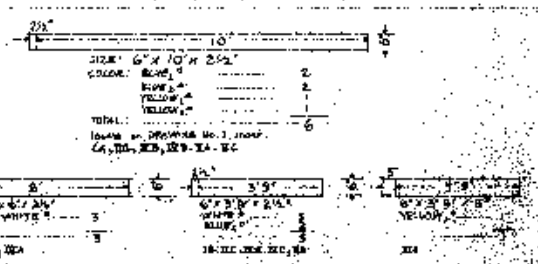








HORIZONTALS and VERTICALS



BACK SUPPORTS


5'-6"
SIZE: 3"x 6"x 5'-6"
COLOR: YEL. ART YELLOW PAINT
TOTAL — 24
IA, IB, IC, IIA, IIB, IIC, IIIA, IIIB, IIIC
5'-6"
RADIUS
RADIUS
RADIUS