Memo

Date: January 26, 2011

File: 1310-30

To: City Manager

From: K. Bouw, Architecture Planner, Infrastructure Planning

Subject: Schematic Design of Senior's Centre Relocation to PRC

Recommendation:

THAT Council approves the transfer of $277,000 from the Lakeshore Road Powerline Burial project (2918) to the Water Street Seniors Relocation (2851).

Purpose:
To update Council on the schematic design for the relocation of the Water Street Senior's Centre Society to the Parkinson Recreation Centre (PRC) site as committed in the 2011 Provisional Budget deliberations at the special meeting of Council on December 16, 2010 and to request additional funding.

Background:

The site for the new facility has been identified adjacent to the western wall of the PRC along the existing pool area (see Attachment 1) as presented to Council on 6 December 2010. The new facility will be constructed as a standalone building in order to avoid expensive upgrades to the PRC. A separate access for this facility will be created from the existing parking lot.

Schematic Design
The schematic design for the facility has been completed (Attachment 2). The design includes a 10,733 square foot gross building area on 2 storey's. The new building has the same area and accommodates the same functions as the Water Street Senior's Centre at 1360 Water Street. This includes:

- Reception and office area,
- Main hall,
- Kitchen and lounge area,
- Activity room,
- Meeting room,
- Computer room, and
- Billiards.

As part of the schematic design, a detailed study was prepared to review options and costs for energy efficient solutions to achieve the reduction of GHG emissions and life cycle operating costs for the building. The overall design reflects an integrated approach to the building's architecture and mechanical systems promoting the use of passive energy systems that use the natural solar orientation and passive ventilation to assist in heating and cooling the building. The proposed building system includes:

- A central solar chimney to provide a path for natural ventilation and air movement through the building;
- Two 5-ton air to water heat pumps to create chilled water in the summer and hot water in the winter with a supplemental condensing natural gas boiler for backup heating capacity;

- Radiant floor heating and cooling to meet the majority of the space loads;
- Low level displacement ventilation to distribute fresh air through the building;
- Fresh air supply via a Heat Recovery Ventilator (HRV) unit that recovers waste energy from the exhaust air; and
- Operable windows with sensors that are integrated with the building mechanical systems.

Project Budget

Council approved an initiation funding request for the new building in the 2011 Capital Budget of $3.2M. Upon completion of the schematic design phase, additional funding is needed for the project to proceed with the following components:

- Basic landscaping & site circulation (design & construction): est. at $130,000
- Kitchen equipment & fit-out: est. at $72,000
- Storage capacity for public programming needs: $75,000

Staff recommends allocating the necessary funds of $277,000 from the Lakeshore Road Powerline Burial project (2918). It is important for the City to have the required funds in place in 2011 to properly integrate all aspects of the detail design and to ensure an efficient tendering process for the project. The Lakeshore Road Powerline Burial fund currently contains $565,000.

The powerline burial on Lakeshore Road remains a key objective for the City. However, the work needs to be coordinated with the ultimate build-out of Lakeshore Road over the next few years. Staff would bring forth a capital budget request for construction of this project in future years for Council consideration.

As part of the detail design phase of the project, staff will be determining an appropriate new furniture and equipment list for the building with consideration for reusing existing equipment where possible. There will likely be a need for additional funds for purchasing furniture and equipment (tables, chairs, etc.) for the new building which has not been accounted for in the current cost estimate. If additional funds are required, staff will bring forward a request in the 2012 Capital Budget.

Project Schedule

The proposed schedule for the project is directly connected to the relocation of the Yacht Club anticipated in 2012 and includes the following key milestones;

- Schematic Design: October 2010 - January 2011
- Request for Proposal & Design Consultant Selection: February 2011- March 2011
- Detailed Design & Construction Drawings: March 2011 - June 2011
- Construction Tendering & Award: July 2011 - August 2011
- Construction: August 2011 - June 2012
- Building Commissioning & Final Occupancy: July 2012

Existing Policy:

Multiple Bottom Line Analysis

In keeping with Kelowna's Sustainable Municipal Infrastructure Policy 352, the City is required to build infrastructure that achieves targeted results across environmental, economic, financial, social and cultural indicators to achieve a sustainable city. In conjunction with Policy 352, staff committed to a Multiple Bottom Line (MBL) analysis on the Senior's Centre project to help refine its application and to evolve useful metrics for each indicator.

The following table is an evaluation of how the project contributes to the established MBL targets;

MBL Analysis of PRC Senior's Centre Relocation

	INDICATOR	MEASURE	COMMENT	SCORE
1.0	Climate Change	GHG emissions from all city-owned infrastructure will be reduced 22% from 2007 benchmark levels	The proposed building will result in a total GHG reduction of 75% (to 8.85 tons) as compared to the existing building at 1360 Water Street (35.25 tons) a reduction.	2
2.0	Ecological Footprint	Reduce the ecological footprint of municipal infrastructure by 33%	Ecologically productive land requirements have been reduced as follows: less carbon sequestration land, smaller building footprint (2 storey configuration), sustainable wood products used instead of brick to reduce land sterilized in the production of materials.	1
3.0	Watershed Protection	How the building contributes to watershed protection	The design of a 2-storey building ensures that the new facility will not extend into the Mill Creek riparian setback ensuring continued protection of the watershed.	1
4.0	Habitat Biodiversity	How the facility contributes to habitat diversity	The relocation of the Water's Street Senior's Centre allows for the restoration and rehabilitation of the Okanagan Lake waterfront between Stuart Park Phase 1 and the Water Street Boat Ramp. This will improve local water quality and riparian habitat (approx. 50 linear metres).	1
5.0	Built Value	Pass on equal infrastructure value/capita to future generations	The new building replaces an older facility that was nearing the end of its service life. The design life of the new facility will be twice that of the old one.	2
6.0	Level of Service	Provide infrastructure that maintains or augments Council approved levels of service	The facility will increase the quality of programs offered to Seniors and will provide additional programming for the larger community. The building has been designed to improve the ability of the City to provide programs through the layout and separation of spaces, the provision of program storage and the overall flexibility and security of the proposed spaces.	2
7.0	Return on Investment	Maximize the economic return created through public investment	Because it services both seniors and the public, the investment will serve two functions. Locating the seniors adjacent to the PRC increases the availability of fitness and recreational programming for seniors; healthier seniors are a return on investment. Finally, the project releases waterfront land for the expansion of the Kelowna Yacht Club and Stuart Park. This will have direct economic spin-offs for Kelowna's downtown.	1

8.0	**Connectivity**	How does the proposed building improve connectivity and accessibility within the City	The new facility is centrally located within the City and is easily accessible to a major Rapid Bus transit route and is further connected by multi-use trails and the Dayton Street Overpass.	2
9.0	**Safe and Secure**	Promote safety and accessibility	The design of the building has included CPTED principles and will be assessed on its adherence to universal accessibility standards and will be designed to ensure user safety.	1
10.0	**Distinct and Meaningful**	The creation of a landmark facility for the community.	The facility supplements the existing PRC recreational services with the integration of Senior's programming.	1
11.0	**Public Venues for Education, Recreation & Culture**	Improve places that support a creative city.	Creating new opportunities for intra-generational exchange has positive value	1
12.0	**Innovation & Design Quality**	Peer recognition.	The facility has been designed as a high performance building that promotes contemporary and innovative solutions. No potential awards have been identified at this time.	2
13.0	**Life Cycle Cost**	The design of the facility to reduce life-cycle costs (including operations, maintenance, capital renewal etc.) of the City's infrastructure	The building design will reduce the costs of utilities (savings of 55% or $8,240 annually) and maintenance and operations costs associated with the mechanical system (estimated 50%, $1500 annually) below the costs of the existing building; this will result in on-going savings to the City.	2
14.0	**Capital Reserves**	Funding sources	The building has been partially financed through the sale of the land at Water Street to help reduce the taxation component.	0
15.0	**External Investments**	What grants or external funding has been attracted by the facility	A grant application with the Enabling Accessibility Fund for $2.4M has been submitted, but not yet awarded.	0
16.0	**Public Engagement**	85% of the public will understand the rationale for this infrastructure.	The Senior's Society has participated in the design of the building and has given support to both the spatial concept and the inclusion of its specific sustainability features (see Attachment 3). A public information session is planned for early 2011.	1

**Score: 2 points for meeting or exceeding targets, 1 point for advancement towards the target, 0 points for no impact, -1 or -2 for negative impact*

Consistent with the policy, positive scores have been achieved without trading off negative impacts in any of the indicators.

Wood First Policy

On 28 June 2010 the City adopted Bill 9, the Wood First Policy, and is committed to considering the use of wood to support the provincial forest industry, the contribution of wood to climate change mitigation (low embodied energy or GHG emissions in manufacture, carbon storage while in use, reduced GHG emissions when sourced locally), and to recognize the economic impact of using wood as a local building material. The design of the facility incorporates the use of wood throughout the roof and wall assemblies and in the exterior cladding of the building. Further discussions with the BC Wood Council for innovative uses of wood will be pursued during the detailed design phase.

External Agency/Public Comments:

The Senior's Society has endorsed the spatial and the sustainability features of the building (see Attachment 3). A public open house will be held in February 2011 at the PRC.

Financial/Budgetary Considerations:

The following table shows that the building will achieve a 10% savings in electricity and an 85% savings in gas consumption and a 75% reduction in GHG emissions relative to the existing building. This represents on-going energy savings of $8240 in utility costs annually.

Operating Cost Comparison

	SYSTEM	ELEC-TRICITY (kWh)	ELEC-TRICITY % SAVINGS	GAS (GJ)	GAS % SAVINGS	TONS OF CO2	GHG Reduction	TOTAL ANNUAL ENERGY COSTS	% SAVINGS IN TOTAL ENERGY COSTS
1.0	High Efficiency (proposed)	76,461	10%	90	85%	8.85	75%	$6,760	55%
2.0	City of Kelowna Energy Efficient Baseline	105,043	-124%	287	52%	18.1	49%	$11,560	23%
3.0	Existing Building	85,043	0%	600	0%	35.25	0	$15,000	0

Grant Opportunity

An application to the Enabling Accessibility Fund for Mid-Sized Projects has been submitted by the City in January 2011. The City has requested a grant of 75% of the total project budget or $2,400,000. A decision on this grant is anticipated in spring 2011.

Internal Circulation:

Director, Recreation & Cultural Services
Director, Real Estate & Building Services
Director, Financial Services
Manager, Utility & Building Projects
Manager, Building Services
Manager, Strategic Land Development
Manager, Community & Neighbourhood Programs
Manager, Parks Services

Personnel Implications

Upon completion of the schematic design process, Infrastructure Planning will be transferring the project management responsibilities to Design & Construction for the Detail Design Phase and Construction Tendering.

Considerations not applicable to this report:
Legal/Statutory Authority
Legal/statutory Procedural Requirements
Technical Requirements
Community & Media Relations Comments
Alternate Recommendation

Submitted by:

K. Bouw, Architecture Planner

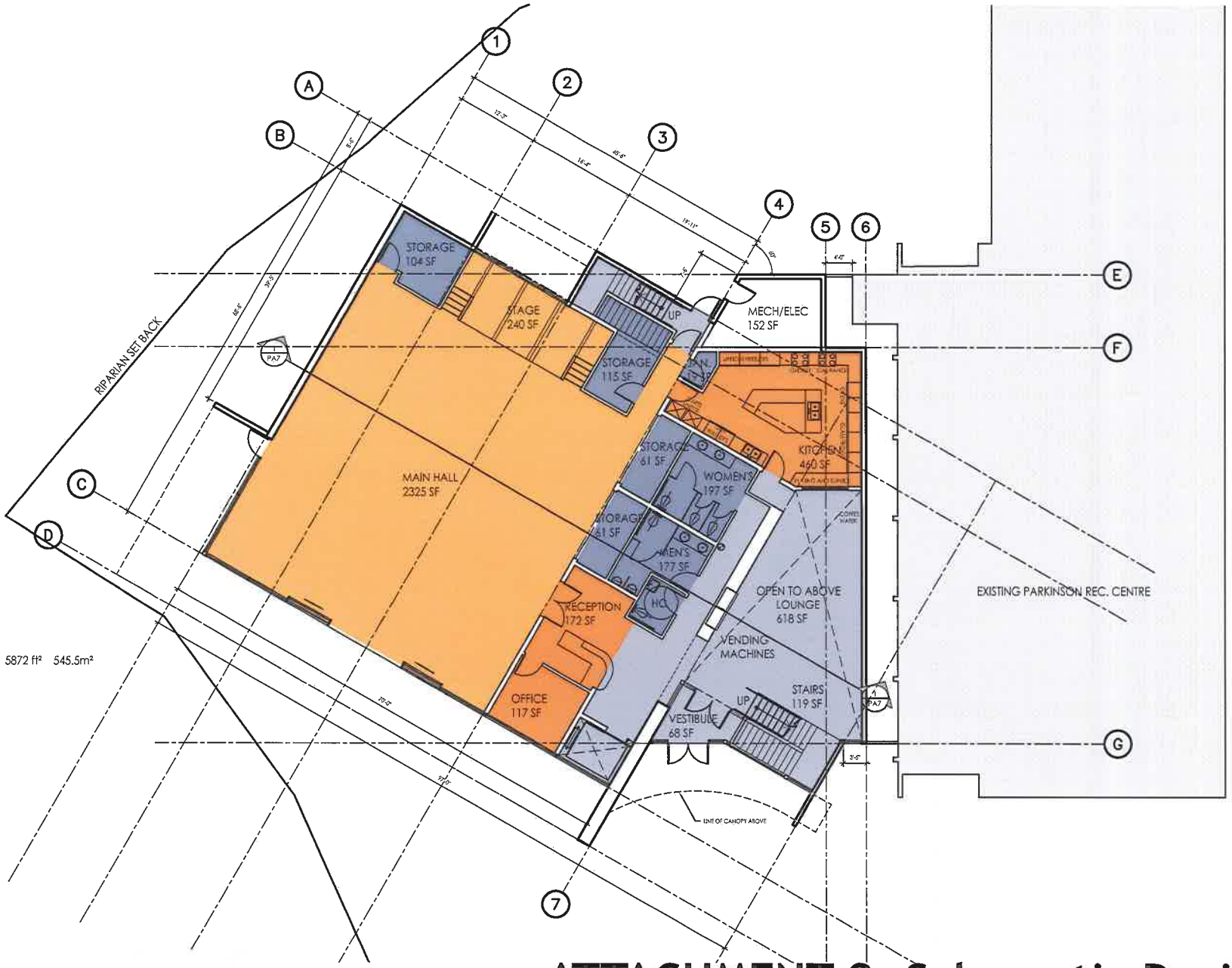
Approved for inclusion: T. Barton, Acting Director, Infrastructure Planning

Attachments:
1. Site Plan
2. Schematic Design
3. Letters of Support from the Seniors Society

cc: General Manager, Community Sustainability
Manager, Community Services
Director, Recreation & Cultural Services
Director, Real Estate & Building Services
Director, Design & Construction Services
Director, Civic Operations
Director, Financial Services
Director, Communications & Media Relations

ATTACHMENT 1

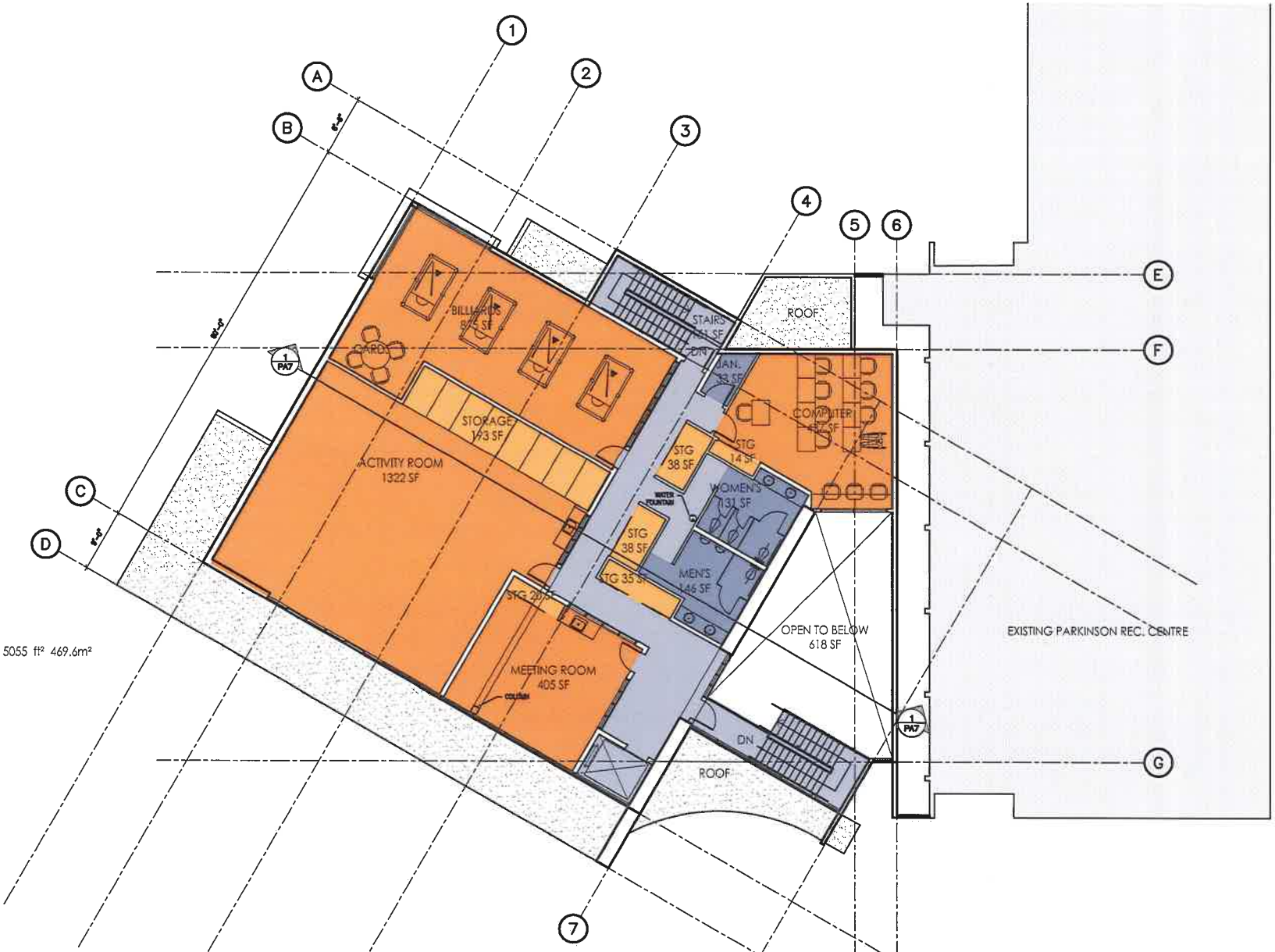
Site Location Plan



GROSS FLOOR AREA: 5872 ft² 545.5m²

ATTACHMENT 2: Schematic Design

Level 1 Floor Plan

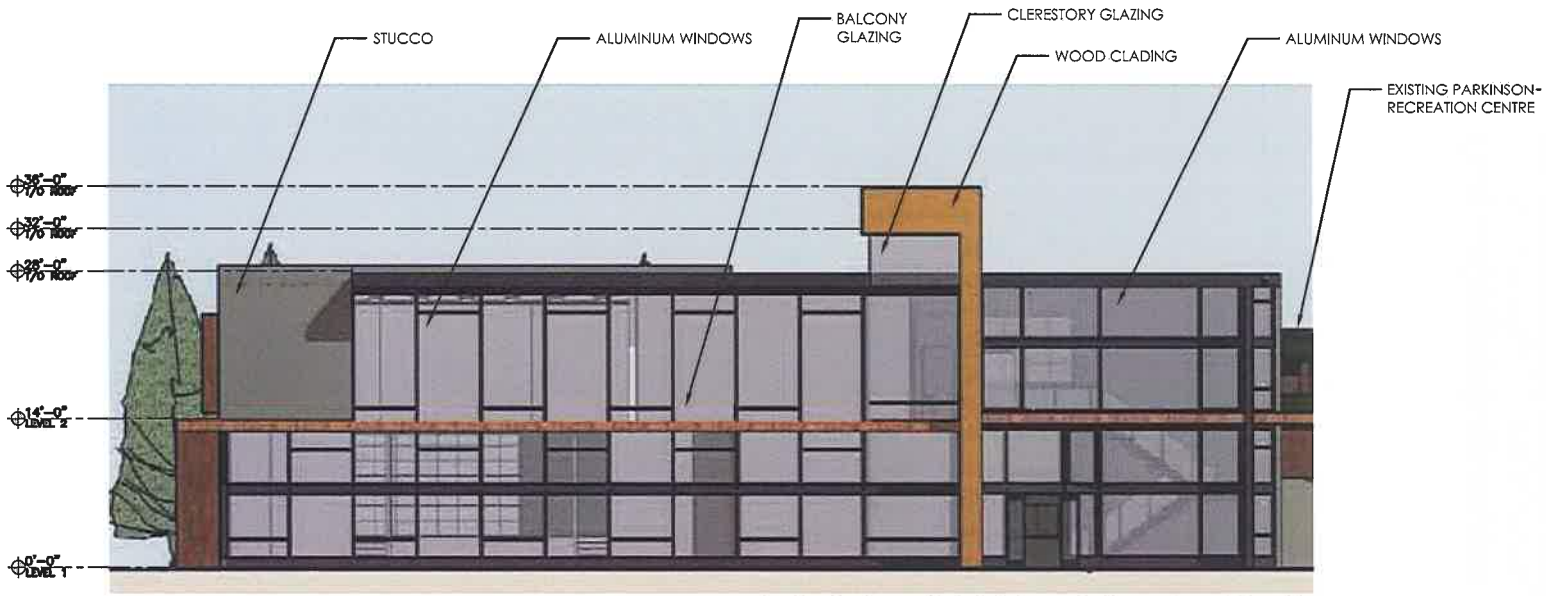


SS FLOOR AREA = 5055 ft² 469.6m²

ATTACHMENT 2: Schematic Design

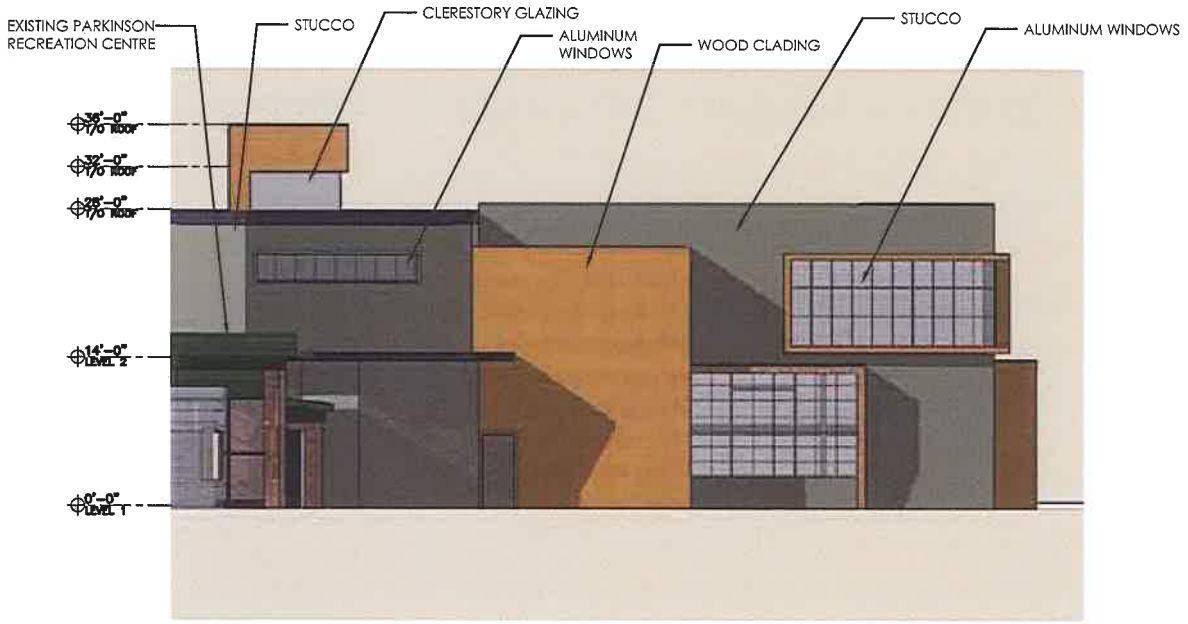
Level 2 Floor Plan

1 PAS LOBBY SOUTH ELEVATION
SCALE: 1/8"=1'-0"

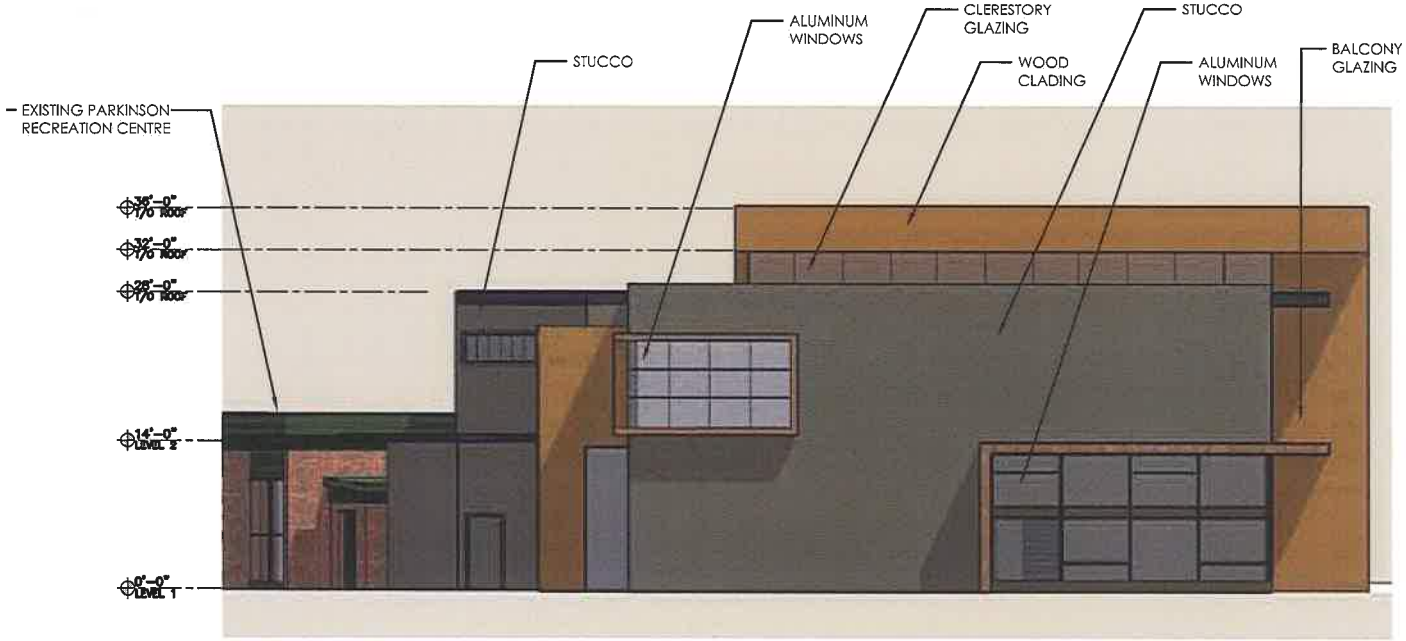


ATTACHMENT 2: Schematic Design

South Elevations



2 PAB NORTH ELEVATION
SCALE: 1/8"=1'-0"



ATTACHMENT 2: Schematic Design

North and West Elevations

1 PA9 LOBBY ENTRANCE
SCALE: NTS

2 PA9 LOBBY ENTRANCE CLOSE-UP
SCALE: NTS

3 PA9 MAIN HALL SOUTH WEST
SCALE: NTS

4 PA9 MAIN HALL NORTH WEST
SCALE: NTS

2011-01-25

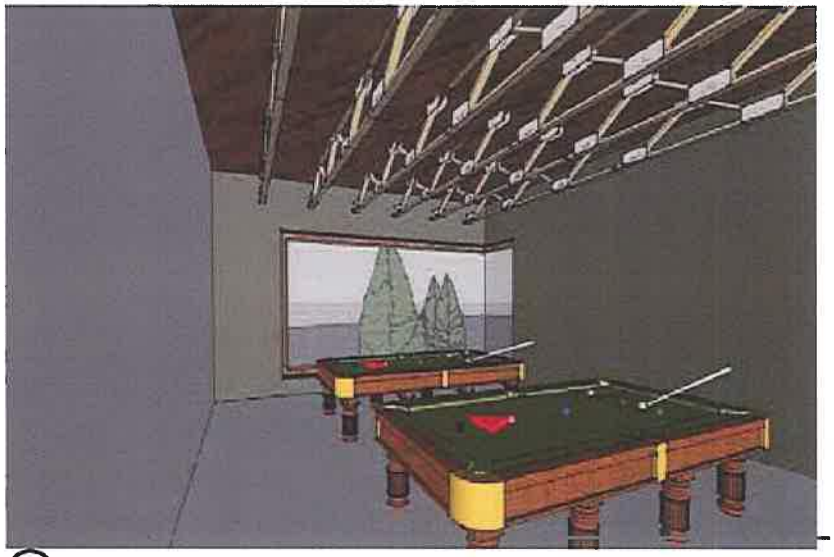
ATTACHMENT 2: Schematic Design

South Elevations

1 PA10 LOBBY FROM LANDING
SCALE: NTS

2 PA10 LOBBY LOOKING TOWARD ENTRANCE
SCALE: NTS

3 PA10 ACTIVITY ROOM
SCALE: NTS



4 PA10 BILLARD ROOM
SCALE: NTS

ATTACHMENT 2: Schematic Design

North and West Elevations

Water Street Senior Centre,
1360 Water Street, Kelowna, BC

November 30th, 2010

Dear Ms. Bouw,

I am sending this letter on behalf of the Water Street Centre Design and Relocation committee to express our support for the proposals that were presented at the meeting today. We are fully in support of using the most recent knowledge and technology to make this new building sustainable, environmentally progressive and in keeping with what we currently know about preserving and protecting our environment.

We feel that the new activity centre could be a model for other city buildings, in using sustainable technologies. After all, this building which is being constructed for the age 50 plus adults of today will be used by future generations who would expect nothing less than the most "earth-friendly" techniques.

Speaking as a 68 year old citizen of Kelowna, I have always been proud of how much our city and province do to keep our land "green". We, as a committee, would want to continue to follow this path especially as we have an opportunity to construct a building which could become a show piece of the latest technologies.

The ideas presented today by yourself, the architect, Mr. Meiklejohn and the engineer, Mr. Lavoie were exciting and thought provoking. Our committee looks forward to working with you to help make these proposals a reality.

Thank you so much.

Yours sincerely,

Chris Bischoff

Chris Bischoff (on behalf of Water Street Centre committee members)

Committee: C. Bischoff, T. Lee, C. Bridges

ATTACHMENT 3
Letter of Support from WSCCS 30 November 2010

The Water Street Senior Centre
1360 Water Street
Kelowna, B.C. V1Y 1J1
(250) 762-4108

January 11, 2011

Dear. Ms. Bowes,

On behalf of the Water Street Senior Centre Society, I would like to support the City of Kelowna's application for an Accessibility Grant to use in conjunction with our relocation expenditures.

The Water Street Senior Centre is being re-located to a new building in the near future and we are definitely addressing accessibility issues as we work on the designs and plans for the new senior centre. We are also working to make the centre technologically and environmentally friendly.

A grant to assist with accessibility issues would be very valuable to help us meet the needs of all of the 50+ adults who will be using our new centre.

Thank you so much for your consideration in this application.

Sincerely,

Chris Bischoff

Chris Bischoff
President
Water Street Senior Centre Society
Member of Design and Re-location Committee of
The Water Street Senior Centre
CB/mdl

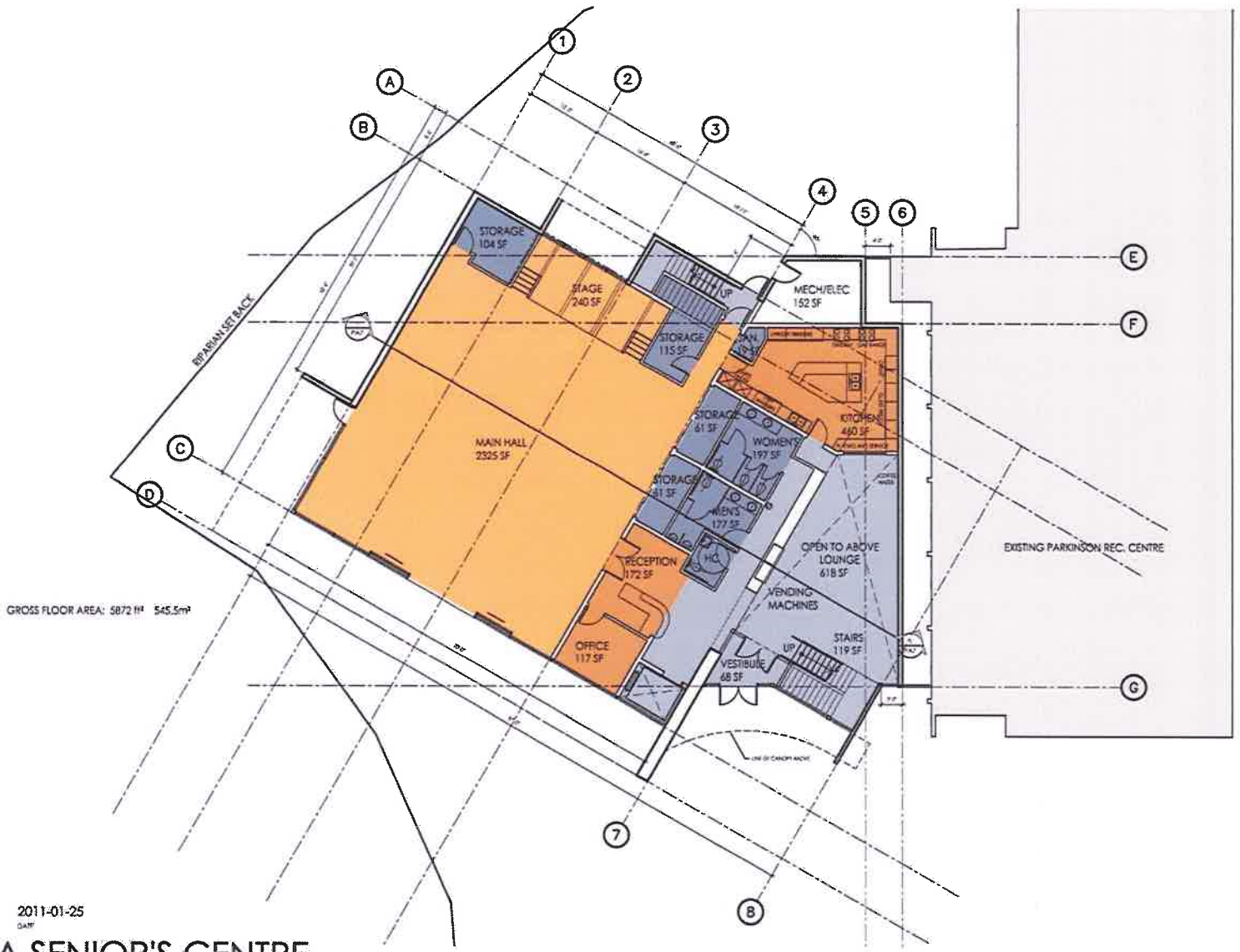
ATTACHMENT 3
Letter of Support from WSCCS 11 January 2011

City of Kelowna

WATER STREET SENIOR'S CENTRE

Facility Relocation to Parkinson Recreation Centre

Site Location Plan



LEVEL 1 FLOOR PLAN

DRAWING TITLE

PA4 1/8"=1'-0" 2011-01-25

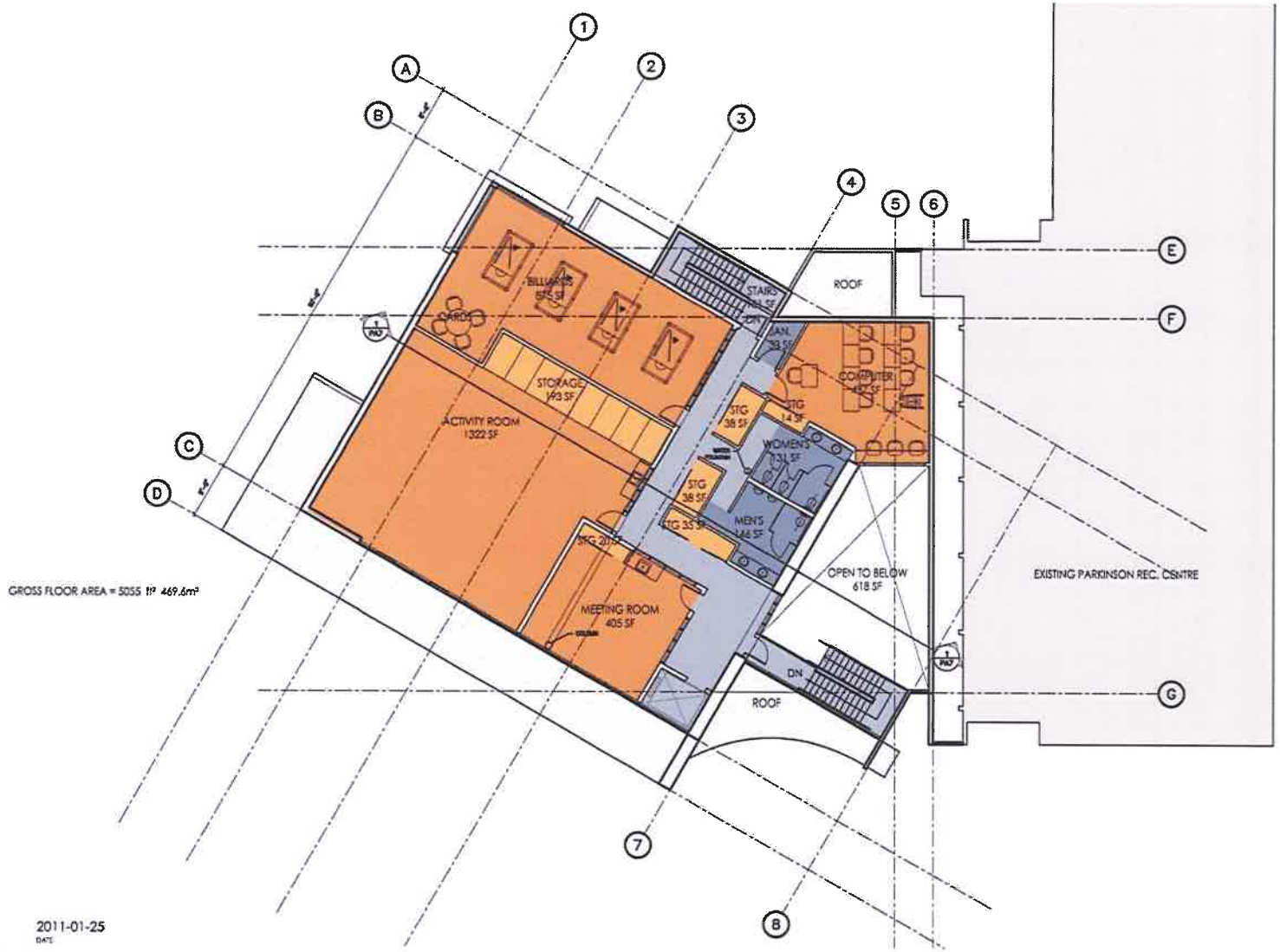
DRAWING NUMBER SCALE DATE

KELOWNA SENIOR'S CENTRE

m+m a

City of Kelowna

Level 1 Floor Plan



LEVEL 2 FLOOR PLAN

PA5 1/8"=1'-0" 2011-01-25

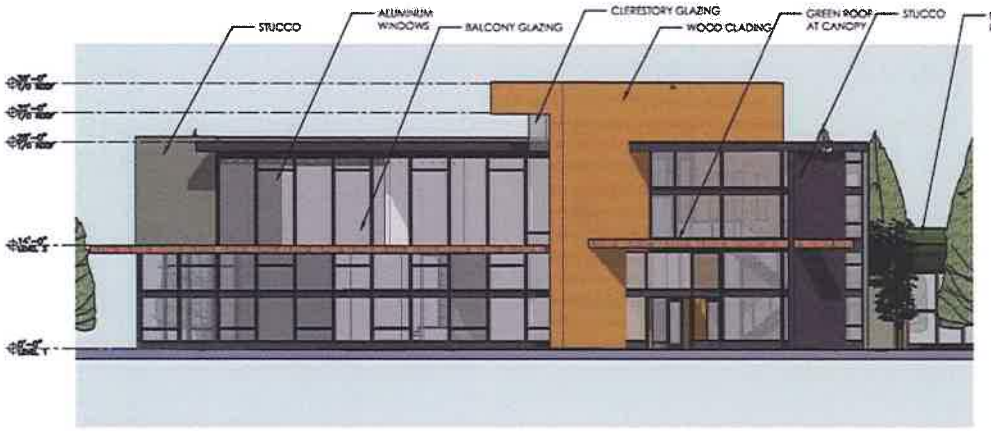
DRAWING NUMBER SCALE DATE

KELOWNA SENIOR'S CENTRE

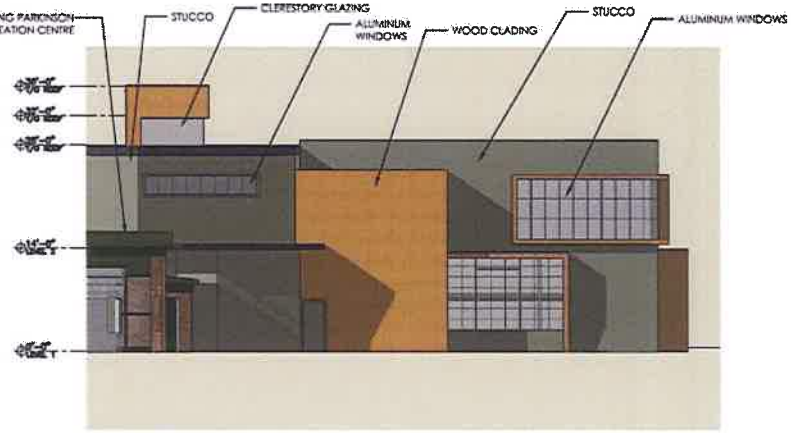
m+m a

City of Kelowna

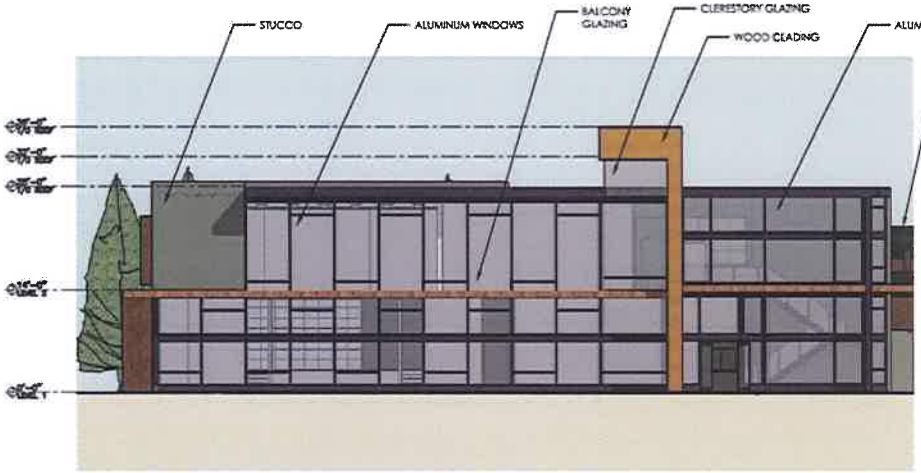
Level 2 Floor Plan



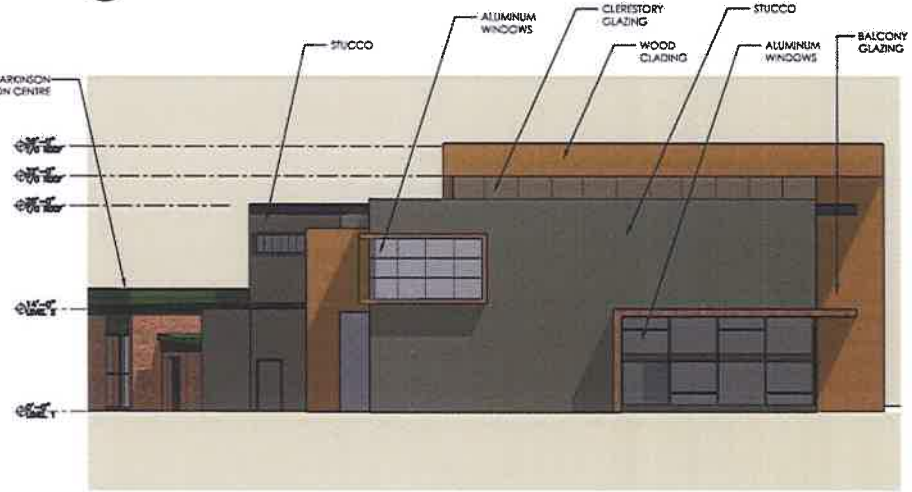
1 PAB LOBBY SOUTH ELEVATION



2 PAB NORTH ELEVATION



3 PAB SOUTH ELEVATION



4 PAB WEST ELEVATION

EXTERIOR RENDERINGS

PAB AS NOTED 2011-01-25

KELOWNA SENIOR'S CENTRE

m+m a

City of Kelowna

Exterior Renderings

1 PA9 LOBBY ENTRANCE

2 PA9 LOBBY ENTRANCE CLOSE-UP

3 PA9 MAIN HALL SOUTH WEST

4 PA9 MAIN HALL NORTH WEST

EXTERIOR RENDERINGS
DRAWING TITLE

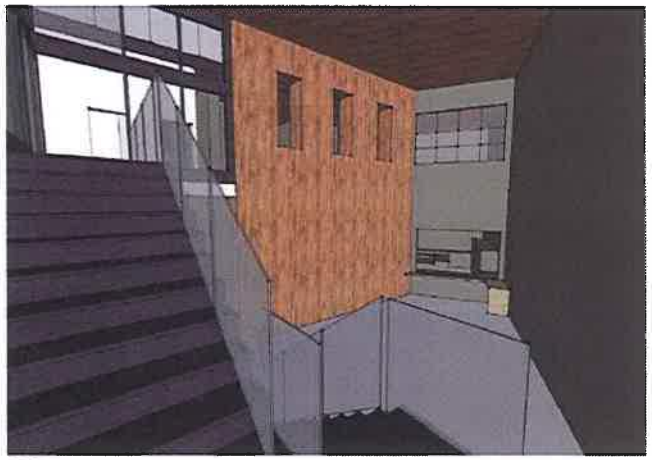
PA9 AS NOTED 2011-01-25
DRAWING NUMBER SCALE DATE

KELOWNA SENIOR'S CENTRE

m+m

City of Kelowna

Exterior Renderings



1 LOBBY FROM LANDING
PA10 SCALE: NTS

2 LOBBY LOOKING TOWARD ENTRANCE
PA10 SCALE: NTS

5 WOOD TRUSS REFERENCE
PA10 SCALE: NTS

3 ACTIVITY ROOM
PA10 SCALE: NTS

4 BILLARD ROOM
PA10 SCALE: NTS

6 WOOD TRUSS REFERENCE
PA10 SCALE: NTS

INTERIOR RENDERINGS
DRAWING TITLE

PA10 AS NOTED 2011-01-25
DRAWING NUMBER SCALE DATE

KELOWNA SENIOR'S CENTRE

m+m

City of Kelowna

Interior Renderings

	SYSTEM	ELEC-TRICITY (kWh)	ELEC-TRICITY % SAVINGS	GAS (GJ)	GAS % SAVINGS	TONS OF CO2	GHG Reduction	TOTAL ANNUAL ENERGY COSTS	% SAVINGS IN TOTAL ENERGY COSTS
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Operating Cost Comparison