New Whitehorse Continuing Care Facility
Business Case Analysis

Memo: Revised Functional Program Update

August 26, 2014

A Functional Program for a 300-bed Continuing Care Facility in Whitehorse was prepared and submitted in July 2013 by Kobayashi + Zedda Architects (KZA). The terms of reference for the current Business Case and Pre-Concept Planning study specified that this program be reviewed, verified, modified and refined to reflect an analysis of the best care mix for a new facility.

Previous Estimates Review and Adjustments

A review of the KZA Program was undertaken with the objective of making adjustments as required to produce an updated program that would provide reliable basis for exploring development options, undertaking site fit tests and estimating development and life cycle costs.

Our review indicated that the net areas in the KZA program were generally appropriate for the care mix described in the document. However, modifications were made to the area allowances selected spaces to better reflect current practice. To accommodate the updated care mix, as described in Section B, a Mental Health Unit and a High Acuity Unit were incorporated into the 300-bed program requirements in addition to the Intermediate, Extended, Special, Respite/Day Care, and Palliative Care services identified in the KZA program. These changes marginally increased the overall net area.

The building gross area in the KZA program was estimated at 18,024.6 gsm for a 300-bed facility. It was difficult to assess the suitability of this gross area estimate due to the lack of distinction between net area and component gross area allowances in the KZA program. For example, mechanical and electrical spaces that are usually by industry standards considered part of the gross area mark up were included in the net areas of several components and then factored up at 1.25 to obtain a gross area. A 1.25 gross up factor would be very low if it were applied to net space. However in the KZA program the factor is applied to a hybrid of net, component gross, and some building systems space as well as major circulation. It is therefore difficult to calculate the a comparable net to gross ratio but the KZA gross area appears to reflect a net to gross ratio of approximately 1.38 to 1.42. Although there are no widely accepted standards for Net to Building Gross multipliers for Continuing Care facilities, the generally accepted range is 1.50 to 1.60.

Rather than try to unravel the grossing up calculations, our revised program used the net areas and applied a “mid-range” grossing up factor of 1.54 to arrive at a building gross area of 21,909.6 gsm for a 300-bed facility. To provide the required net area within the total gross area, the building design will have to be efficient, but there is enough leeway to achieve the quality of environment necessary for this type of facility.

The increase of 3,885 sm over the previous estimate is a combination of a marginal increase in net area to meet standards and a more definitive care mix concept plus application of a grossing up factor that is more in line with industry standards and best practices. If the previous gross are had been maintained, it would not have been feasible to provide the required net area within the overall gross area allowance. This would have resulted in higher than anticipated costs and/or a reduced bed capacity.

Comparative Facility Tours

A tour of comparative continuing care facilities was organized and conducted by Valerie Gillies in July 2014. The YG participants included: Cathy Morton-Bielz, Cynthia Tucker, Anwar Rizvi, and Marian Geary. Members of the consultant team included John MacSween, David Whetter, and Laura Knezevic. The sites visited included:

- Deltaview Life Enrichment Centre, Delta BC
- Czorny Alzheimer Centre, Surrey BC
- Kiwanis Care Centre, North Vancouver BC
- Mission Complex Residential Care Facility, Mission BC
- The Residence at Clayton Heights, Surrey BC
- Sherbrook Care Centre, Saskatoon SK

A guided tour and discussions with senior personnel were undertaken in each location. The focus was on exploring what aspects of the facilities worked well and which aspects were problematic. Valuable insights were gained from the tours, which have now been incorporated into a revised version of the Functional Program.

Revised Functional Program

A revised program is being generated under separate cover to be used in the forthcoming RFP process. It may also be appended to the Business case Report, if deemed appropriate.

The modifications primarily relate to functional aspects. The component groupings, proximity relationships, and circulation concepts and design guidelines have been significantly modified. This program represents an advance in the evolution of continuing care models that were identified in the earlier standards and best practices review. In addition to providing a much clearer description of the functional requirements, the area requirements have been refined and rationalized since the previous Draft Program resulting in a reduction of 1,300 gsm in the gross area needed for the 300-bed facility.

	PHASE ONE			**PHASE TWO**			**TOTAL FOR 300 BEDS**		
	Total nsm	beds	Component Gross (CGSM)	Total nsm	beds	Component Gross (CGSM)	Total nsm	beds	Component Gross (CGSM)
VILLAGE CENTRE	909.5		1,111.0	0.0		0.0	909.5		1,111.0
ALL NEIGHBOURHOODS	6,000.0	150	7,620.0	6,066.5	150	7,703.0	12,066.5	300	15,323.0
STAFF SUPPORT	418.0		501.5	0.0		0.0	418.0		501.5
BUILDING SUPPORT	833.0		1,052.0	0.0		0.0	833.0		1,052.0
TOTALS	**8,160.5**	**150**	**10,284.5**	**6,066.5**	**150**	**7,703.0**	**14,227.0**	**300**	**17,987.5**
Major Circulation			*1,632.1*			*1,213.3*		*1.20*	*2,845.4*
Building Systems			*650.6*			*426.1*		*1.08*	*1,076.7*
TOTAL Building Gross (gsm)			**12,567.2**			**9,342.4**			**21,909.6**
Component to Building Gross Factor			*1.26*			*1.27*			*1.26*
Net to Gross Factor			*1.54*			*1.54*			*1.54*

Round 1 estimate	*23,233.0*
Round 2 Reduction	*1,323.4*