
CITY OF KELOWNA
MEMORANDUM

DATE: December 27, 2006
TO: City Manager
FROM: Planning & Development Services Department
APPLICATION No.: Z06-0014
OWNER/APPLICANT: Watermark Developments Ltd. (John Hertay)
LOCATION: South of UBC Okanagan
PURPOSE: To rezone the a portion of the subject property from the A1 – Agriculture 1 zone to the P2 – Education & Minor Institutional zone in order to allow for a private preparatory school.
EXISTING OCP DESIGNATION: Multiple Family Residential (Medium Density)
PROPOSED OCP DESIGNATION: Institutional
EXISTING ZONE: A1 – Agriculture 1 **PROPOSED ZONE:** P2 – Institutional
REPORT PREPARED BY: Danielle Noble

1.0 RECOMMENDATION

THAT Rezoning Application No. Z06-0014 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of a part of Lot 7, Plan 1638, Secs. 10 & 11, Twp 23, ODYD, located on Curtis Road, Kelowna, BC, from the A1 – Agriculture 1 zone to the P2 – Education and Minor Institutional zone as shown on Map “A” attached to the report of Planning & Development Services Department, dated December 27, 2006, be considered by Council;

AND THAT Zone Amending Bylaw be forwarded to a Public Hearing for further consideration.

AND THAT final adoption of the zone amending bylaw be considered in conjunction with Council's consideration of a Development Permit on the subject property;

AND THAT final adoption of the zone amending bylaw be considered following registration of a Road Reservation Agreement in the Land Title Office;

AND THAT final adoption of the zone amending bylaw be considered subsequent to the requirements of the Inspection Services Department, Works & Utilities Department,

Ministry of Highways, Terasen Gas and the Glenmore Ellison Irrigation District being completed to their satisfaction.

2.0 SUMMARY

The applicant is proposing to rezone a portion of the subject property from the A1 – Agriculture 1 zone to the P2 – Institutional zone in order to facilitate the construction of a private preparatory school.

3.0 ADVISORY PLANNING COMMISSION

The Advisory Planning Commission at their meeting of March 28th, 2006, reviewed the application and the following recommendation was passed:

THAT the Advisory Planning Commission supports Rezoning Application No. Z06-0014, for 1081 Curtis Road, Lot 7, Plan 1638, Secs. 10 & 11, Twp. 23, ODYD, by Watermark Dev. Ltd. (John Hertay), to rezone from the A1 - Agriculture 1 zone to the P2-Education & Minor Institutional in order to allow for a private school, provided the area being rezoned does not extend beyond the boundaries shown in the Area Structure Plan for institutional development.

4.0 BACKGROUND

The University South Area Structure Plan (ASP) Future Land Use Map, dated June of 1997, was incorporated into the Official Community Plan in January 1998. Since that time the only development within the ASP boundaries that has occurred is the College Heights modular home park (Phase I) in the south east corner of the ASP boundary west of the Hollywood Road N. extension and an industrial subdivision east of the Hollywood Road N. extension.

In 2005 the applicant submitted an OCP amendment application as a result of the change in status of the Okanagan University College to the UBC Okanagan, which caused the owners to reconsider the development strategy within the University South ASP.

The proposed revisions to the overall Land Use Concept Plan included the following:

- Relocation of the commercial node to the north of the ASP area, to better serve the future development of the University site;
- Relocation of the public school and park sites from the south end of the property to the mid-point. The school district has indicated to the applicant that if the site is graded to meet their requirements they are satisfied with the re-location. The School District has also advised the applicant that they anticipate needing the school in approximately 12 years;
- Re-designation of the Multiple-unit Residential – medium density site and the Educational/Major Institutional site at the south end of the ASP area to Single/Two unit residential;
- Recognition of the relocation of the proposed Central Okanagan Bypass Road alignment (formerly referred to as the North End Connector) as required by the City of Kelowna Transportation Division;
- Designating a second area at the north end of the ASP area for an institutional use in order to facilitate the location of a private school (the subject of this Development Permit application);

- o Designating the north end of the ASP as a Village Centre area which will contain the commercial, multi-family, and institutional (subject property) designated areas.

As the subject property will be included in a Village Centre, it is subject to the relevant Development Permit Guidelines.

5.0 THE PROPOSAL

The applicant is requesting the P2 – Institutional rezoning in order to facilitate the construction of a new private school. Referenced within the development plans are construction of a two-storey private school for the Aberdeen Hall Preparatory School. The conceptual layout of the buildings, parking areas, playing fields and outdoor amphitheatre are shown on the Aberdeen Hall Site Plan attached to this report.

The proposed development will consist of a private school building, temporary portables, and loading bay/ancillary utility area with provisions for considerable expansion plans on the principal building footprint. The first phase of the school will accommodate a range of school grades, with future development phases to incorporate additional buildings to eventually segregate the elementary from the high school grades.

The development is proposed to be phased into three future development stages. Future phases largely will impact additions onto the primary school site, with possible inclusions of pre-school building, basketball court, soccer field, tennis court, gymnasium and/or other combined uses, additional parking and turn around areas, and playground fields. Importantly, given that this is one of the first developments on the Master Land Use Concept Plan, the architecture and design details will establish a precedent for other anticipated developments within the Area Structure Plan.

The proposed P2 – Institutional zoned lot meets the P2 zone requirements as follows:

CRITERIA	PROPOSAL	P2 ZONE REQUIREMENTS
Site Area (m ²)	71,000m ²	660m ²
Site Width (m)	360.1m	18m
Site Depth (m)	121.7m (min.)	30m
Site coverage (%) (for bldgs, parking, roads)	3.63% (all 3 phases)	60%
Total Floor Area (m ²)		
F.A.R.	0.016 (for phase 1)	1.0
Storeys (#)	2	3
Setbacks		
• Front	86.6m	6.0m
• Rear	39.7m	7.5m
• East Side	125.9m	4.5m
• West Side	257.0m	4.5m
Bicycle Parking	37	37
Loading Spaces	15 (+ 2 for buses)	15 (+2 for buses)
Parking Stalls (#)	78	28

6.0 SITE CONTEXT

The Watermark Group is proposing to develop a 115 ha property, with the school site consuming 7.1 ha of that total. The property is located in an area of north Kelowna that segregates the new University of British Columbia Okanagan (UBCO) from other residential and industrial uses within close proximity. The entire property will be developed in multiple phases, with the highest density of the development to occur at the north end of the property, including the school site. Land uses include a mix of

commercial, education, single and multi-family residential communities, park, and open space.

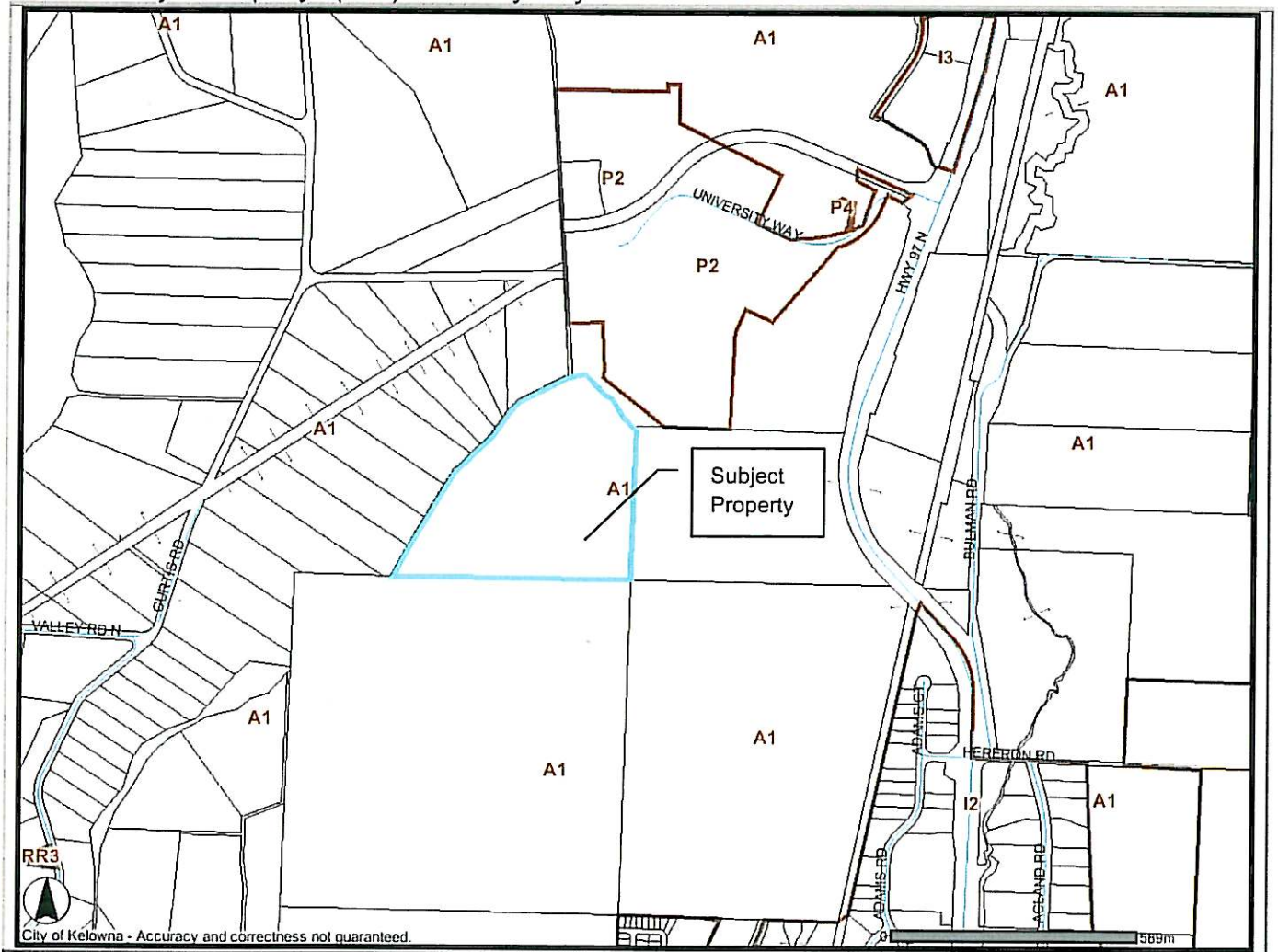
Currently there is no public dedicated road access to the subject property. Therefore, through the concurrent subdivision application, access will be secured through the dedication and construction of a public road as shown on the attached site plan.

Adjacent zones and uses are, to the:

- North - A1 – Agriculture 1 & P2 – Institutional; UBC Okanagan
- East - A1 – Agriculture 1; Rural agricultural (undeveloped)
- South - A1 – Agriculture 1; undeveloped
- West - A1 – Agriculture 1; rural residential & agricultural parcels.

6.1 SITE LOCATION MAP

Subject Property: (S of) University Way



7.0 **CURRENT DEVELOPMENT POLICY**

7.1 **CITY OF KELOWNA STRATEGIC PLAN 2004 EDITION**

The Strategic Plan objectives relating to development in general are:

- Manage human impacts on our natural environment, including Okanagan Lake and the surrounding hillsides.
- Sensitively integrate new development with heritage resources and existing urban, agricultural and rural areas.

7.2 **KELOWNA 2020 – OFFICIAL COMMUNITY PLAN**

The OCP establishes objectives for development within urban and village centres, requiring that all development should be an appropriate response to its physical context, or anticipated future context where an area is designated for increased density or land use transition in the OCP. Additionally, all development should contribute to the creation of pedestrian-oriented streets and public spaces, encouraging a sense of community identity and sense of place (integration of development within larger community belonging, community cohesiveness). It is also suggested that appropriate, high quality, public spaces which provide links to surrounding areas and open space relief should be encouraged.

8.0 **TECHNICAL COMMENTS**

8.1 **Environment Department**

Subdivision should be subject to completion of the environmental review that is currently ongoing. Provided no findings or outcomes of the report would preclude this proposed land use, we would have no objection to the change in land use. For example, open space areas and wildlife corridors need to be identified that are suitable for wildlife movement and satisfactory measures can be implemented to protect the values and functions of those corridors.

Recommendations of the Environmental assessment include preserving a portion of each of the vegetation types that are present on site to maintain connections between them for wildlife, and configure the development to retain a portion of each of the four distinct plant communities. Therefore, an Environmental DP should be a condition of the zoning to address the various recommendations for the environmental assessment as they pertain to the proposed development plan.

With regard to the Aberdeen Hall rezoning plan, we have some concerns with the proposed basketball court (building located toward the east) and the fill slopes proposed to accommodate that building. Some further thought should be given to the overall plan and orientation of buildings on the site to better work with the natural contours of the site. Some additional thought could be given to methods of retaining fill to minimize the length of unsightly fill slopes.

8.2 **Fire Department**

Fire department access and hydrants as per the BC Building Code and City of Kelowna Subdivision Bylaw. Engineered fire flows should determine hydrant requirements.

- 8.3 Fortis BC
No comment.
- 8.4 Inspections Department
Probable environmental concerns, Geotech engineer should be involved during rezoning, subdivision and building permit stages with regards to soil conditions (clay).
1. Natural soil bearing capacity. What lots are proposed to be filled?
 2. Will a geotech review be required at excavation/footing inspection?
 3. Are there Sulphate issues.
 4. Minimum recommended frost protection. The city bylaw has a 24? minimum, but we have noticed some reports recommend 30.
 5. Recommended drainage requirements for foundation, roof and lot. Who will be sizing and inspecting the dry wells?
 6. Site grading when filling or cutting on an individual lot.
 7. Special conditions such as slope protection.
- 8.5 Glenmore Ellison Irrigation District (GEID)
As attached.
- 8.6 Ministry of Transportation
Ministry of Transportation has no objection to this proposed rezoning.
- 8.7 Parks Department
1. The OCP Future Land Use Map 19.1 has a portion of the subject property shown as natural open space. We recommend that this portion is dedicated to the City as Natural Area Park as an extension of the proposed park (the Gorge Area) further south.
2. Prior to the City assuming responsibility for any future public lands, the Applicant will retain a registered professional forester or recognized equivalent to develop and implement a plan to reduce potential wildfire hazards. The plan will address fuel reduction, forest health and the protection of significant characteristics of the forested area. The plan and work will be reviewed and approved by the Parks Division prior to undertaking any work.
3. To prevent private/public encroachment, the applicant will be required to fence the private yards of all properties adjacent to parkland with min. 4' high black chain link fence or City approved equal.
- 8.8 Interior Health
Provided community sewer and water are available.
- 8.9 RCMP
No comment.
- 8.10 School District No.23
No comment.
- 8.11 Shaw Cable
Owner/Developer to install Shaw duct, as per Shaw specifications and drawings.
- 8.12 Telus
Developer to provide a 5 metre x 8 metre easement at no cost to TELUS. TELUS will place a concrete Walk-in Cabinet to house. TELUS switching equipment to service this property, which could also serve surrounding properties. TELUS will require 24 hour access to the Walk-in-Cabinet. TELUS will provide underground

facilities to this development. Developer will be required to supply and install conduit as per TELUS policy.

8.13 Terasen Gas
As attached.

8.14 Works and Utilities
Works & Utilities Department comments and requirements regarding this application to rezone the subject properties from A1 to P2 are as follows:

1. Geotechnical Study.

- Overall site suitability for development.
- Slope analysis (i.e. 0-10 %, 10-20 %, 20-30% and over 30 %).
- Presence of ground water and/or springs.
- Presence of fill areas.
- Presence of swelling clays.
- Presence of sulphates.
- Potential site erosion.
- Provide specific requirements for footings and foundation construction.
- Provide specific construction design sections for roads and utilities including the East-West connector to insure that the staged construction, as proposed by CTQ consultants, is achievable in the long term.

2. Domestic water and fire protection.

- a) This development is within the service area of the Glenmore Ellison Improvement District (GEID). The developer is required to make satisfactory arrangements with the GEID for these items. All charges for service connection and all necessary upgrading costs are to be paid directly to the GEID.
- b) The water system must be capable of supplying domestic and fire flow demands in accordance with the Subdivision & Servicing Bylaw for the requested zoning. The applicant must provide water computations for this development to confirm the available water supply.

3. Sanitary Sewer.

- a) The municipal wastewater collection system is available within a reasonable distance of the subject property. The wastewater collection main crossing Hwy 97 is 250 mm. in diameter, the applicant must provide a comprehensive report confirming that this portion of collection system is able to carry the ultimate combined wastewater flow produced by the UBCO development and the subject property.
- b) It is anticipated that the collection system servicing the subject property will follow a portion or the entire East-West Connector. The applicant must demonstrate the staging of the sanitary sewer construction and operation between the time of the construction of the local access road and the ultimate arterial road construction. The construction cost of the wastewater collection system extension to the subject property is to be determined for bonding purpose.

4. Drainage.

A comprehensive site drainage management plan and design to comply with the City's drainage design and policy manual, is a requirement of this application. This plan can become part of the geotechnical study to identify the ground recharge/detention areas.

5. Power and Telecommunication Services.

The services to this development are to be installed underground. It is the developer's responsibility to make a servicing application to the respective utility companies. The utility companies are then required to obtain the City's approval before commencing their works.

6. Road improvements.

The property is located within the Gateway Transportation Study area. The City of Kelowna, the Ministry of Transportation, UBCO and other stakeholders in the vicinity are in the process of finalizing the overall transportation network plan for the area. The City of Kelowna has agreed to phase some of the construction of the access to the proposed development based generally on the plan prepared by CTQ consultants dated September 29th, 2006. The road construction requirements for this application are as follows:

- a) The applicant is responsible to dedicate and construct an interim rural local road from the UBCO roundabout identified in the Gateway project to the proposed interim main access on the subject property. The work is to include the relocation of the Terasen high pressure transmission line, street lights, storm drainage in accordance with current City policies, the cost of the interim access is to be determined for bonding purpose.
- b) The preliminary conceptual drawing of the East-West Connector indicates that the main access to the subject property will require to be relocated to the west. The applicant is required to register a road reserve over the proposed ultimate alignment of the main access onto the subject property. Along with the road reserve, the applicant is required to submit a security equivalent to 140% of the cost of the ultimate urban collector. The cost of the ultimate collector is to be determined for bonding purpose.

7. Street lights.

Street lights must be installed on all fronting roads as per bylaw requirements. Design drawings to include level of illumination plan

8. Engineering.

- a) Design, construction, supervision and inspection of all off-site civil works and site servicing must be performed by a Professional Engineer and all such work is subject to the approval of the City Engineer.

9. Bonding and Levies Summary.

a) Performance Bonding

Temporary rural access road	To be determined
Ultimate west access road from connector	To be determined
Sanitary sewer extension and upgrade	To be determined

b) Levies

Specified area # 1 inclusion fee	\$250.00.
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5.0 PLANNING & DEVELOPMENT SERVICES COMMENTS

The Planning & Development Services is generally supportive of the development to facilitate a private school use; however it is contingent upon Council's approval of the OCP amendment application for the University South ASP land use designation. Staff have been working with the applicant and are generally in support of the proposed revisions to the University South Area Structure Plan as it applies to this property, including the provision of a Village Centre that provides community commercial, multiple unit residential designation, park and institutional uses.

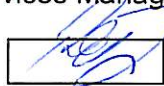
Through the concurrent subdivision application, the Planning & Development Services Department will review the proposed layout in order to achieve a sensitive development with respect to site grading. This review will ensure that all servicing issues for the proposed development are addressed and that the access to the site is achieved through a road network that will also serve the future development of the University South ASP lands as development extends south of the subject property.

The Official Community Plan (OCP) designates portions of this site as Natural Environment / Hazardous Condition and Wildland Fire Hazard DP areas. These issues will be dealt with through the subsequent Development Permit processes. While Staff are supportive of the zoning amendment, further environmental impact and mitigation assessments will be addressed by way of an Environmental Development Permit. Additionally, given the location within a Village Centre, the private school site will also be subject to the guidelines pertaining to Village Centre design objectives, which will regulate the form and character of the private school.



Shelley Gambacort
Acting Development Services Manager

Approved for inclusion

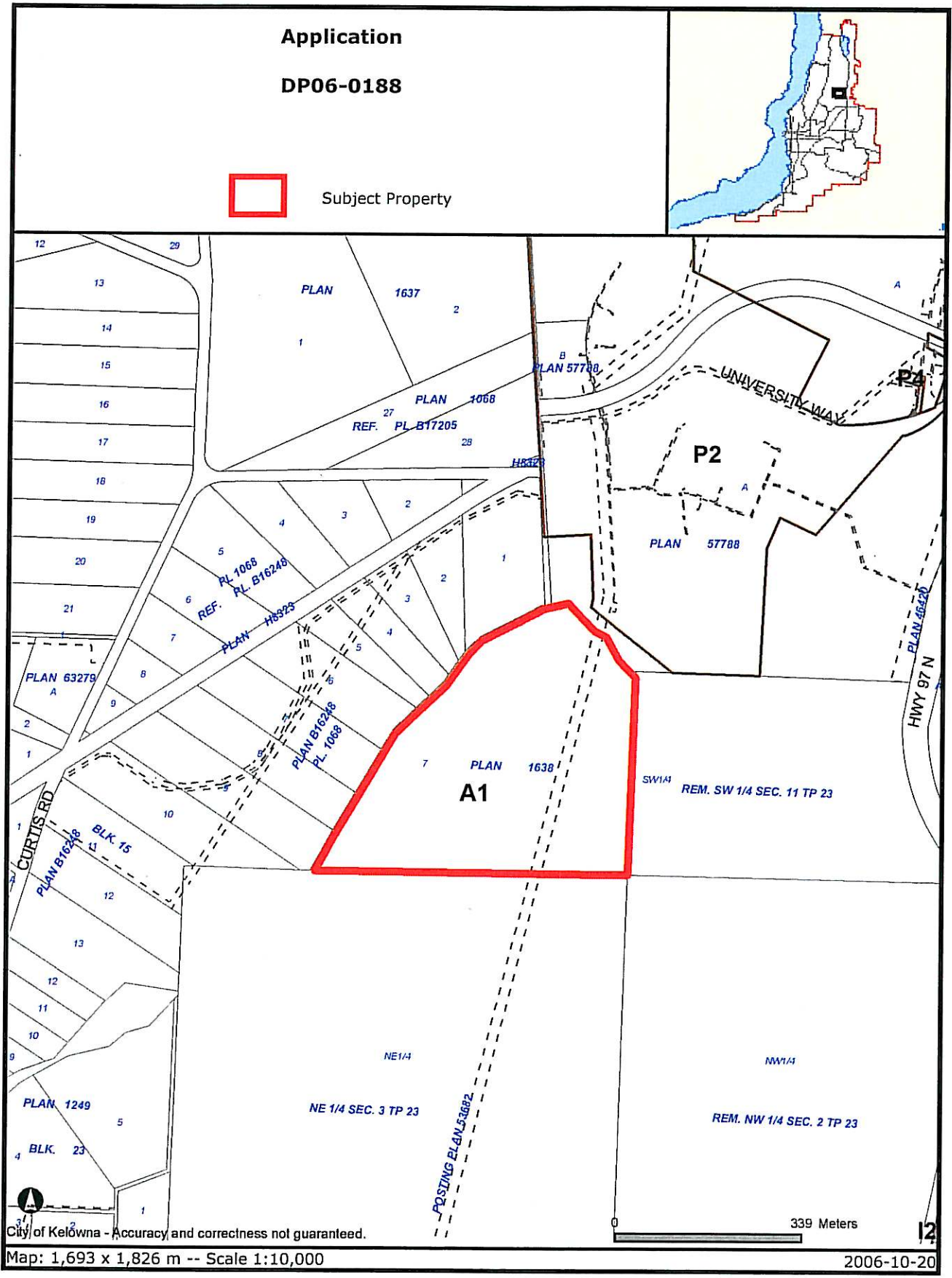


Mary Pynenburg, MRAIC MCIP
Director of Planning & Development Services

Attach.
SG/DN

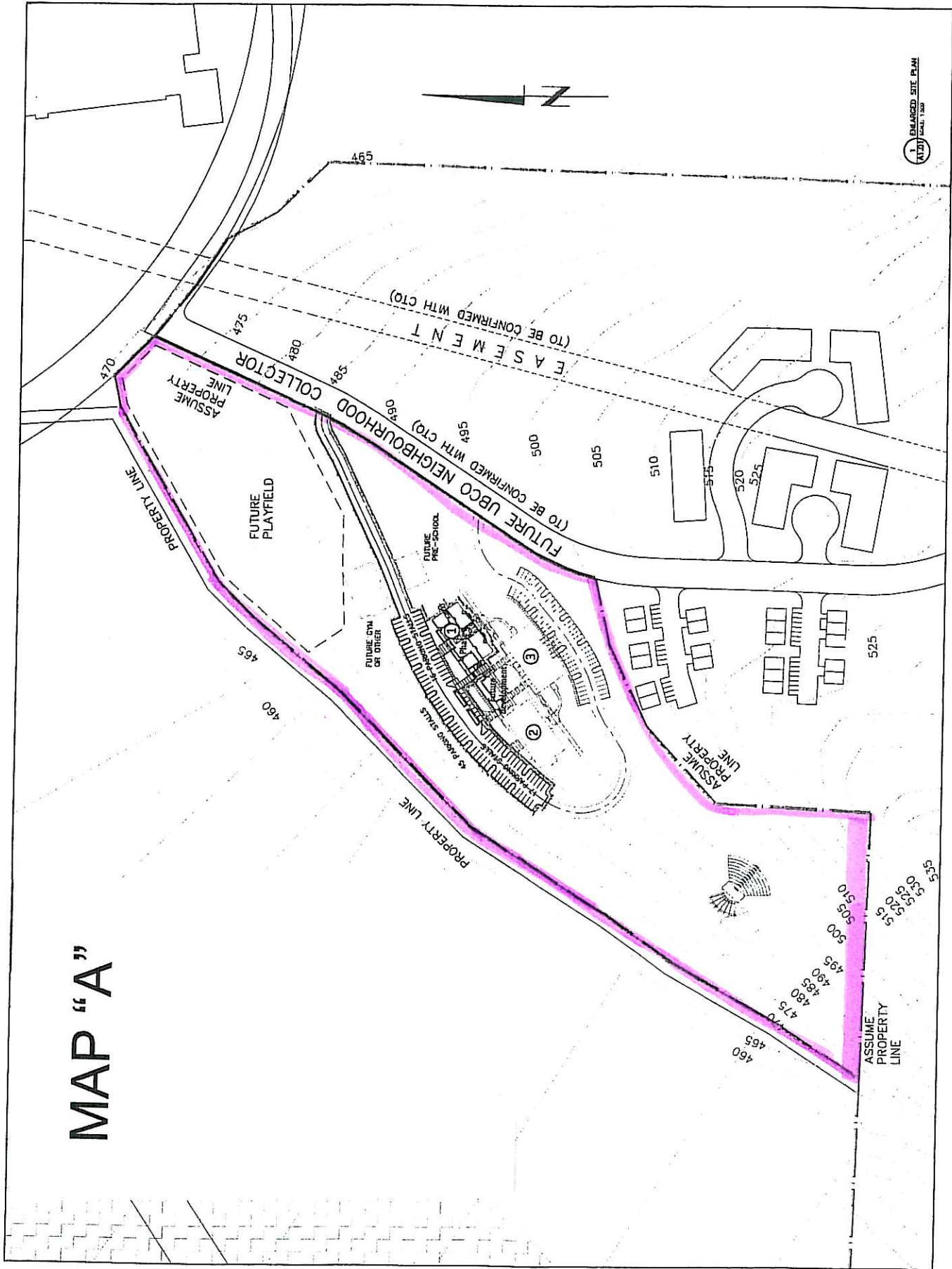
Attachments

- Subject Property Map
- Future Land Use Concept Plan Map
- Site Plan
- Floor Plans
- Building Elevations
- Glenmore Ellison Improvement District Development Requirements
- Terasen Gas Development Requirements
- Aberdeen Hall Preparatory School Development Vision/Letter of Rationale



Certain layers such as lots, zoning and dp areas are updated bi-weekly. This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.

MAP "A"



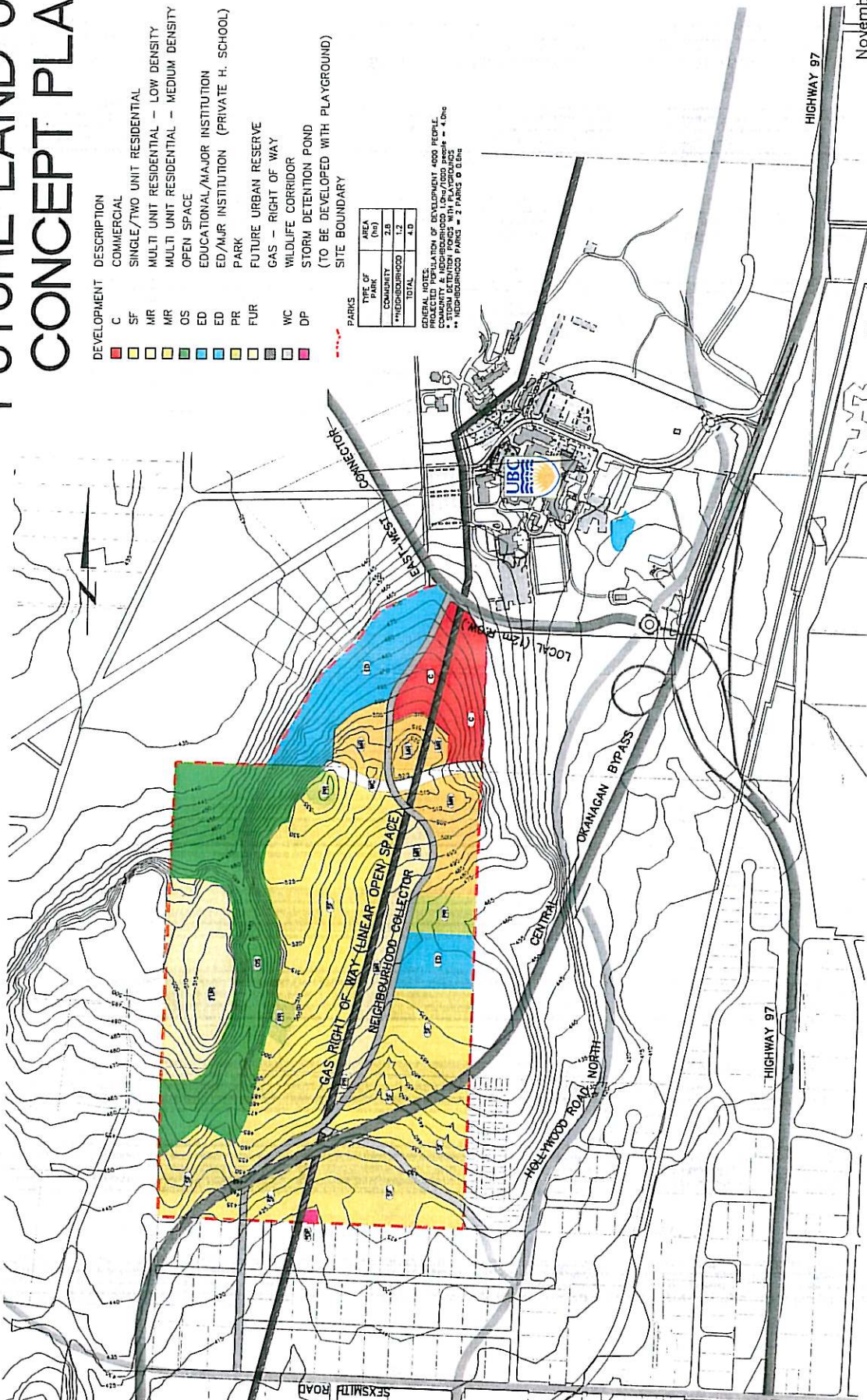
FUTURE LAND USE CONCEPT PLAN

DEVELOPMENT	DESCRIPTION	AREA (Ha)
C	COMMERCIAL	5.5
SF	SINGLE/TWO UNIT RESIDENTIAL	45.8
MR	MULTI UNIT RESIDENTIAL - LOW DENSITY	4.3
MR	MULTI UNIT RESIDENTIAL - MEDIUM DENSITY	8.5
OS	OPEN SPACE	19.2
ED	EDUCATIONAL/MAJOR INSTITUTION	2.8
ED	ED/MJR INSTITUTION (PRIVATE H. SCHOOL)	7.7
PR	PARK	4.0
FUR	FUTURE URBAN RESERVE	8.5
	GAS - RIGHT OF WAY	2.8
WC	WILDLIFE CORRIDOR	1.1
DP	STORM DETENTION POND (TO BE DEVELOPED WITH PLAYGROUND)	0.1

--- SITE BOUNDARY
 --- (TO BE DEVELOPED WITH PLAYGROUND)

TYPE OF PARK	AREA (Ha)
COMMUNITY	2.8
NEIGHBOURHOOD	1.2
TOTAL	4.0

GENERAL NOTES:
 PROJECTED POPULATION OF DEVELOPMENT 4000 PEOPLE.
 COMMUNITY & NEIGHBOURHOOD LOW/MEDIUM DENSITY = 4.0ha
 ** NEIGHBOURHOOD PARKS = 2 PARKS @ 0.8ha

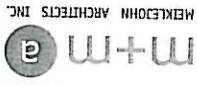


November 1, 2006
 Project: 04026
 Scale: 1:10,000



Consultants Ltd

MEKELOHN ARCHITECTS INC.
 1000 W. 10th St.
 Kelowna, B.C. V1Y 9V6
 TEL: 250.860.2000
 FAX: 250.860.2004
 WWW.MEKELOHNARCHITECTS.COM



DP Amendment
 Nov. 23, 2006



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NO.	DATE	DESCRIPTION
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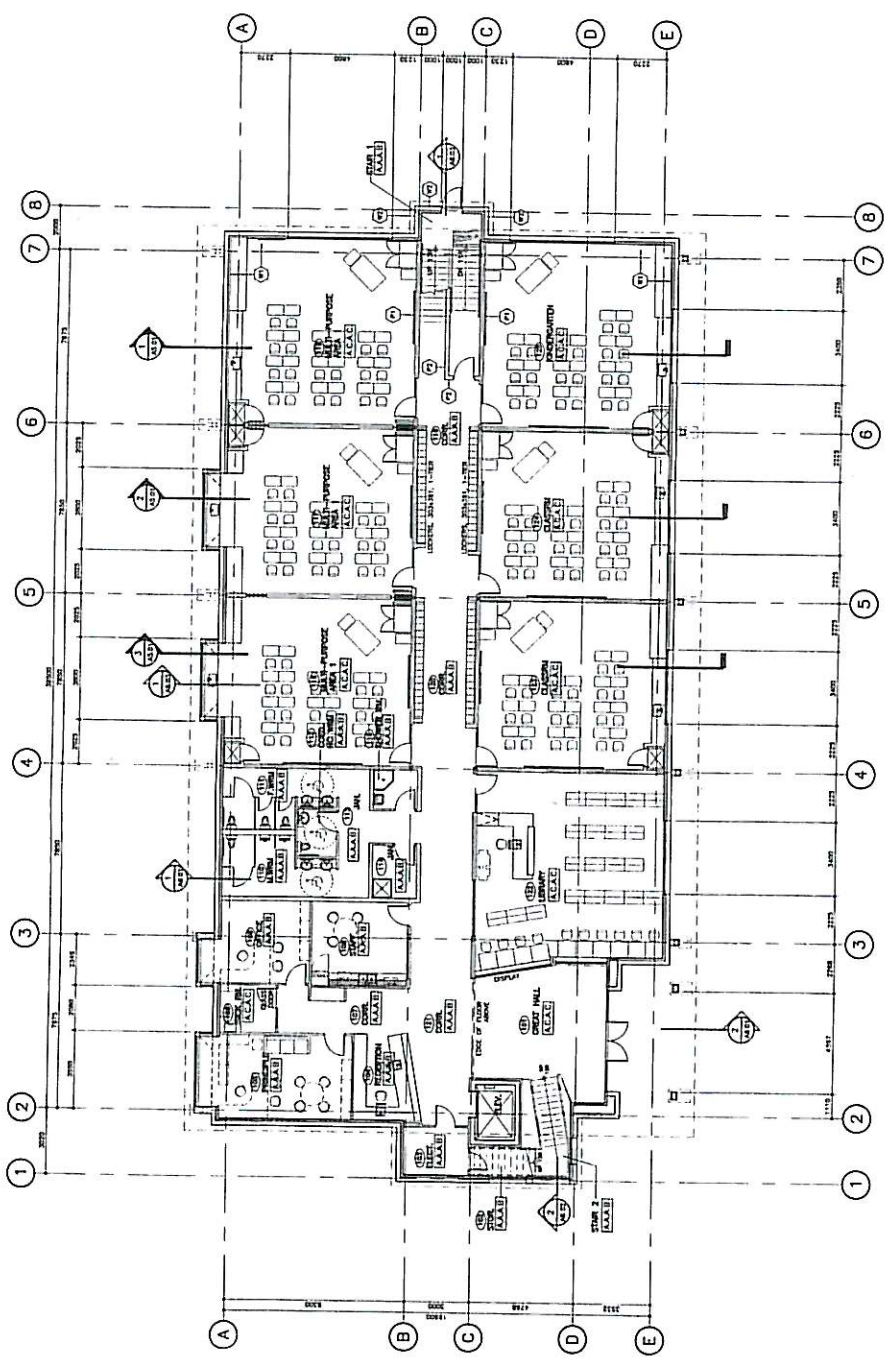
ABERDEEN HALL
 PRIVATE SCHOOL
 KELOWNA, B.C.

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MEKELOHN ARCHITECTS INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.

MAIN FLOOR PLAN

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10	11/23/06	Issue for construction



1 MAIN FLOOR PLAN
 SCALE: 1/8" = 1'-0"

24 HANCO STREET
 FAYETTEVILLE, N.C.
 704.336.4422 FAX
 704.336.4423
 704.336.4424
 2111 HERRING AVENUE
 FAYETTEVILLE, N.C. 28404
 704.336.4422
 704.336.4423
 704.336.4424
 EMAIL: info@mkarch.com

M+M
 MERKEJOHN ARCHITECTS INC.



DP Amendment
 Nov. 28, 2006



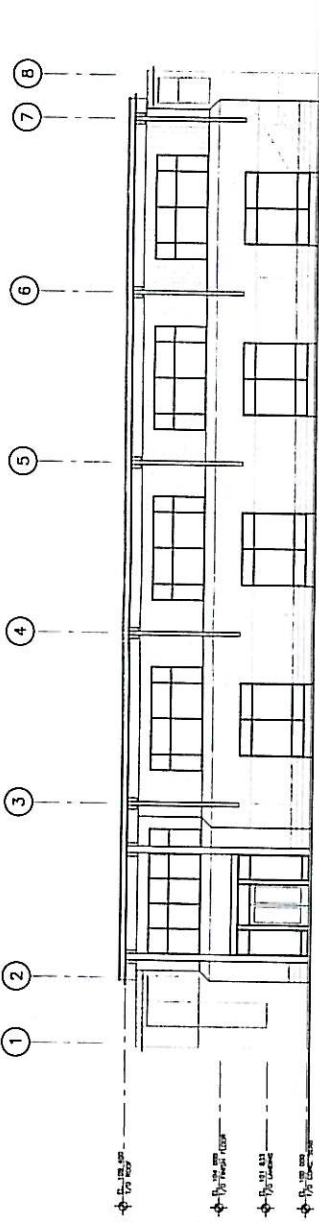
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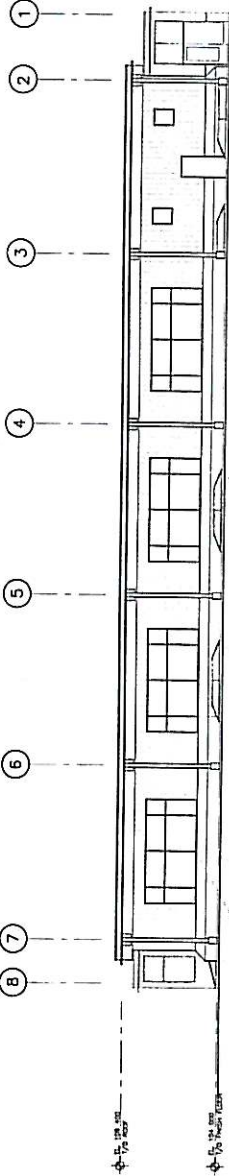
Project No.
**ABERDEEN HALL
 PRIVATE SCHOOL**
 KELOWNA, B. C.

A4.01 OF .
 BUILDING ELEVATIONS

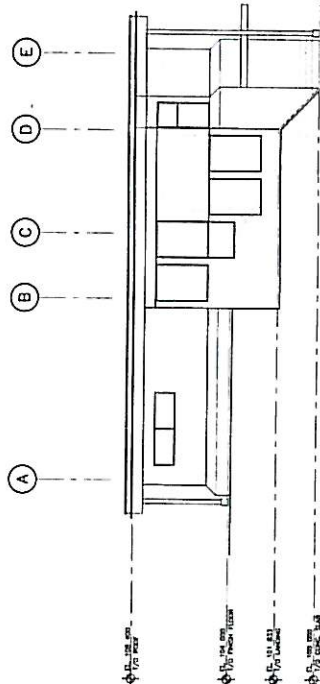
DATE: 10/08/06
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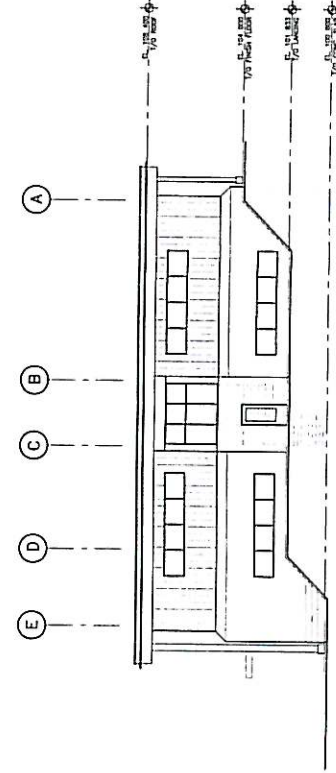
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 (X1/8) SCALE 1/8"



2 BUILDING ELEVATION - REAR
 (X1/8) SCALE 1/8"

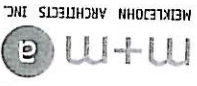


4 BUILDING ELEVATION - LEFT SIDE
 (X1/8) SCALE 1/8"



3 BUILDING ELEVATION - RIGHT SIDE
 (X1/8) SCALE 1/8"

MEKLEOH ARCHITECTS INC.
 233 BROADWAY, SUITE 200
 WASHINGTON, D.C. 20004
 TEL: 202.462.1313
 FAX: 202.462.1318
 WWW.MEKLEOH.COM



DP Amendment
 Nov. 28, 2006



NOT TO SCALE. DIMENSIONS SHOWN ARE APPROXIMATE. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

NO.	DATE	DESCRIPTION
1	11/28/06	DP AMENDMENT
2	11/28/06	DP AMENDMENT
3	11/28/06	DP AMENDMENT
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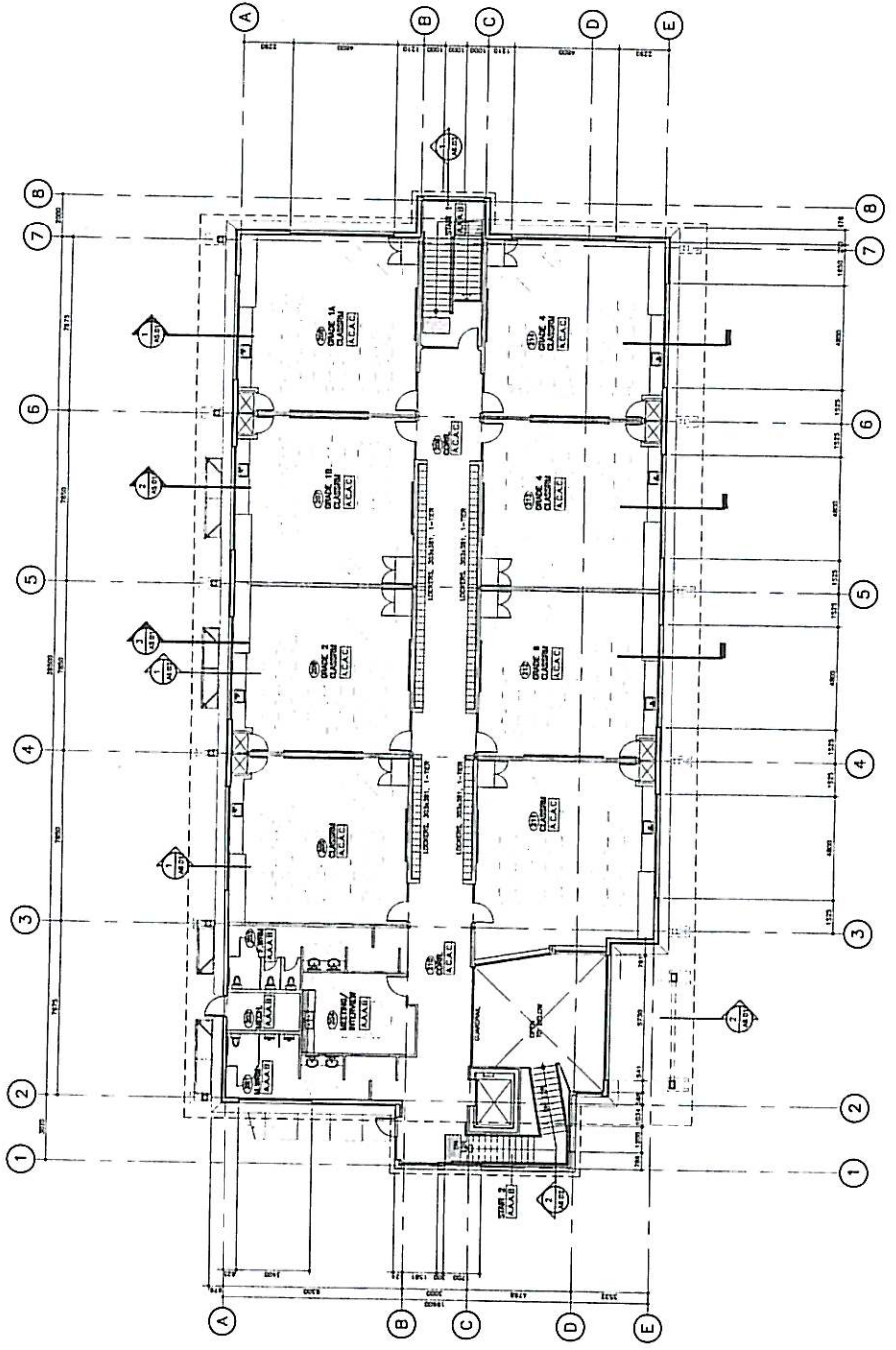
PROJECT NAME
ABERDEEN HALL PRIVATE SCHOOL
 KELOWNA, B.C.

A3.02
 OF 4

DATE: 11/28/06
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO.: [Number]

SECOND FLOOR PLAN

NO.	DATE	DESCRIPTION
1	11/28/06	SECOND FLOOR PLAN
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5	11/28/06	SECOND FLOOR PLAN
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19	11/28/06	SECOND FLOOR PLAN
20	11/28/06	SECOND FLOOR PLAN



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



16705 Fraser Highway
Surrey, B.C. V3S 2X7
Tel: (604) 576-7000
Fax: (604) 592-7658
www.terasen.com

October 25, 2006

File: ML22-003
Your File: Z06-0014 & S06-0026

Ms. Shelley Gambacort
City of Kelowna
1435 Water Street
Kelowna, B.C. V1Y 1J4

Danielle

RECEIVED
OCT 30 2006
CITY OF KELOWNA
PLANNING DEPT.

*Nov. 6/06
Copied to
John Bena
EB*

**Re: Proposed Development of Lot 7 Section 10 Township 23 ODYD Plan 1638 –
1081 Curtis Road, Kelowna**

Thank you for notifying Terasen Gas regarding the proposed development of the aforementioned property. Terasen Gas has an existing, 18.2-meter wide Statutory Right of Way corridor crossing the property which contains a 323mm (12-inch) high-pressure gas transmission pipeline, located approximately 9.1 meters from the right of way boundary.

As requested, Terasen Gas has reviewed the development proposal, which is a revised proposal that we have commented on before. As an update we have the following specific and general comments:

1. As the pipeline in this location is an older installation it was not designed to a standard that would allow it to withstand the weight of vehicles traveling over and across it. Therefore, one of our on-going concerns relates to the weight of additional fill and/or vehicle traffic over the pipeline and how this could adversely affect the pipeline, compromising public safety. In this case, the applicant cannot construct the driveway across our pipeline as shown in the site plan unless the pipeline in this area is upgraded to an appropriate standard (please see item 6 below). This will be done at the applicants cost. Additionally, it appears the applicant will be dealing with topographical issues in the development of this site, therefore, care must be taken to ensure the amount of cover over the pipeline is not compromised to an unsafe level.

General Comments:

2. We also complete regular pipeline patrols as well as perform maintenance on a regular basis within our right of way and therefore, access to the right of way must be available at all times. Where possible, we will give prior notice before entering a right of way to complete maintenance work, however, in emergency situations, it is not always possible. The applicant should be aware of this entry provision.
3. Any activity within or crossing the Terasen Gas right of way (i.e. road, driveway, equipment crossing, telephone and electrical ducts, storm and sanitary sewers and water main crossing, etc.) will require an application for a pipeline crossing permit from Terasen Gas. **No work is to take place within or crossing the Terasen Right of Way without a permit.** Roads, lanes, driveways, and utilities will not be

permitted to run parallel within the Terasen Gas right of way. All crossings must cross the pipeline at as close to a 90 degree angle as possible with no crossing at less than 45 degrees being permissible under current regulations.

4. Any imported fill to be placed within the Terasen Gas right of way must consist of clean uncontaminated material and will only be permitted subject to a review of the filling plan and geotechnical information by Terasen Gas engineering staff and only in accordance with their written requirements.
5. A clear 2.0m corridor centered, over both pipelines, must be maintained and restricted to low growing ground cover not to exceed 0.3m in height. The remainder of the right of way may be planted with vegetation that does not exceed 1.8m maximum height at maturity. All landscaping within the right of way must conform to Terasen Gas' standards. Tree exceeding 1.8m in height should not be planted in a location where the tree canopy will encroach on the right of way. Large tree canopies are not permitted within the right of way. Please see the attached drawing regarding parking lot layout and landscape details for further information.

It is noted that the applicant proposes building envelopes within close proximity to the Terasen right of way. Sufficient space should be left between any building envelopes and the Terasen right of way to allow construction of other improvements, such as sidewalks, benches, litter barrels, etc. outside of our right of way instead of encroaching within it. Keeping our rights of way clear of encroachments is a top priority for Terasen Gas.

6. Vehicle Crossings

Terasen Gas is required to complete an engineering assessment of all proposed vehicle crossings of a Terasen Gas transmission pipeline. A physical inspection and possible upgrading of the pipelines is required at all proposed vehicle crossings. If this engineering assessment was not completed at the time any existing crossing was installed, it will have to be completed prior to any proposed upgrade.

This assessment will include the following:

Physical inspection and engineering assessment of the pipelines over the total length of the proposed traveled area; and

Mitigative action by Terasen Gas to protect or upgrade the pipelines or facilities. This may require upgrading, realigning or replacing the existing pipeline in order to accommodate the development proposal and change in land use.

The property owner/applicant is responsible for the following:

To retain the services of a qualified geotechnical engineer to prepare a soils report of the existing soil conditions below and around the pipeline;

To provide an engineering drawing illustrating the geodetic elevation of the pipeline, existing grade, and proposed grade; and

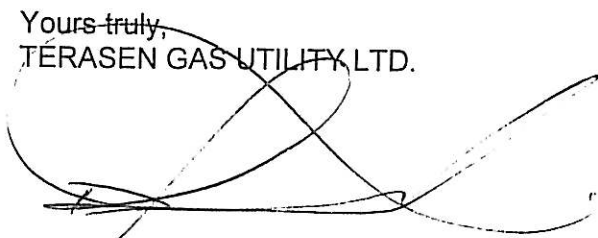
To pay Terasen Gas' costs to complete the pipeline inspection, engineering assessment and facility upgrade. The property owner must commit the necessary funds to Terasen Gas by way of certified cheque. Scheduling of the pipeline inspection and upgrade will be at the discretion of Terasen Gas.

7. As a general comment, effective March 1, 1998, Terasen Gas will not endorse a subdivision plan that consents to the dedication of a new roadway or park over an area presently charged with a Terasen Gas Statutory Right of Way. This applies to Transmission pipelines only, operating in excess of 2069 kPa. Terasen Gas will require that a new lot be created over the Right of Way, which is to become road or park. The new lot must be assigned a lot number and registered with the Land Title office. For road, it can be noted on the subdivision plan that the lot is "For Road Purposes Only". This is to ensure that are rights of way, which allow us to protect and maintain the pipeline, are not extinguished. Additionally, Terasen Gas would prefer not to sign any subdivision plan, where new road crossings are indicated, until we are assured that any inspection and/or upgrade to the gas pipeline is completed.
8. The property owner/developer is responsible to ensure that their actions adjacent to the Terasen Gas right of way do not adversely impact our facilities. This includes: Activities such as landfilling and preloading which have the potential of displacing the pipelines as a result of loading; and
9. The existing drainage must not be altered in a manner that will result in water accumulation within the right of way.

Therefore, in consideration of the above comments, we agree in principle to the proposed development, subject to the required upgrades/inspection of the pipeline and the applicant submitting the appropriate permit applications and abiding by their conditions.

We trust the information contained herein is suitable for your purposes at this time, however, if you require any further clarification, please contact the undersigned directly at 604-576-7091.

Yours truly,
TERASEN GAS UTILITY LTD.



Doug Fourchalk, RI(BC), FRI, SRWA
Right of Way Representative
Transmission Operations



Glenmore-Ellison Improvement District

445 Glenmore Road
Kelowna, BC V1V 1Z6

Email: glenmore.ellison@shaw.ca
Website: www.glenmoreellison.com

Phone: (250) 763-6506

Fax: (250) 763-5688

November 24, 2006

City of Kelowna
1435 Water Street
Kelowna, BC V1Y 1J4

Attention: Danielle Noble, Planning & Development Services Department

**Re: Aberdeen Hall Private School, Lot 7, Plan 1638, Sec 10, Twp
City of Kelowna Development Permit DP06-0188
1081 Curtis Road**

RECEIVED
NOV 28 2006
CITY OF KELOWNA
PLANNING DEPT.

Glenmore-Ellison Improvement District (GEID) has completed the review of the revised Development Permit Application DP06-0188 received from the City of Kelowna for the proposed Aberdeen Hall Private School, located near Curtis Road and University Way.

GEID sent a letter regarding the development to City of Kelowna on July 10, 2006, at the rezoning stage, which included a copy of an engineering review completed by Agua Consulting which was dated January 13, 2006. Since that time, a boundary extension was approved, and the property is now within GEID's boundaries.

We have reviewed the applicant's submitted plans and make the following comments.

1. Background

The subject property is located within GEID boundaries. At present the water allocation for Lot 7 Plan 1638 is entirely "D Grade", or dry land. No Capital Expenditure Charges have been paid for the property, and the property does not have water service.

Based on architect's plans attached to City of Kelowna DP06-0188, the applicant proposes the construction of a private school on the property. The school will include one building in the first phase, with four additional buildings and a sports field proposed for future development.

2. Fireflow Availability and Hydrants

Onsite hydrant spacing and flowrates must conform to City of Kelowna Bylaw # 7900. An FUS fire calculation sheet must be provided by the Applicant's Engineer for building development proposal for the development. The calculation sheet is to be filled out and sealed by the Applicant's Engineer of Record. The number will be used when reviewing the District's computer model to verify that adequate fire flow exists for the development.

GEID requires that the developers obtain review of the hydrant locations and spacing by the City of Kelowna Fire Department, and that a written response be provided to GEID prior to constructing the proposed water works.

As the site will be serviced by the new UBCO reservoir, please note that the UBCO reservoir was designed to store fire flows for 3 hours at 225 L/s, plus 25% emergency

storage. As future expansion at UBCO reservoir is intended to provide service to other lands in the area, rather than additional fire storage, GEID requires that all development serviced by this reservoir have fire flow requirements of 225 L/s or less.

3. Off-Site Waterworks

A discussion of off-site waterworks was provided in the January 10, 2006 letter by Agua Consulting. Proposed pressure zones and an overview of GEID's servicing strategy for the College Heights area was provided in that letter, and included two existing pressure zones, Scenic pressure zone (HGL of 502m) and UBCO pressure zone (HGL of 515m), along with a new pumped pressure zone of 570m.

Based on the architect's drawings, Aberdeen Hall will be located within the proposed 570m pressure zone shown in Agua's letter. Due to the elevation of the proposed buildings, it cannot be serviced by gravity from UBCO reservoir, and construction of a booster station at developer's expense is required.

Key requirements for a booster station were outlined in Agua's letter, and include construction of a booster station building which contains booster pumps, pressure tanks, an emergency generator and a fire pump. GEID also requires a City of Kelowna approved Land Use Concept Plan in order to determine appropriate sizing for the pump station and for piping between the pump station and our existing water mains. In addition, review of the Land Use Concept Plan by GEID is required to determine whether upgrades to existing water mains are required to service water demands imposed by the Aberdeen Hall development and the surrounding properties. Review and approval by GEID, the City of Kelowna, and IHA is required for the design of all off-site works completed by the developer, including the booster station and water mains.

After completion of the works, GEID requires a one (1) year maintenance bond from the developer in the amount of 25% of the GEID estimated value of the off-site works that will become the property of GEID.

4. On-Site Waterworks

We note that the property owner is responsible for servicing the on-site water system. For institutional developments with a single water meter servicing multiple buildings, GEID requires that a metering building be provided in accordance with our standard specification. Site servicing and meter building plans must be reviewed and approved by GEID prior to construction, and constructed in accordance with the current specifications prior to water servicing at the site. The following is required from the developer prior to GEID providing a water service certificate to permit building construction:

- Submit two (2) copies of engineered plans showing site servicing for review in accordance with GEID servicing bylaws and policies. The developer is also responsible for meeting City of Kelowna requirements such as building setbacks, and obtaining required review from the City of Kelowna. One set of review comments will be provided at no cost. If additional sets of review comments are required, charges for GEID staff or consultant time (including overhead) will be assessed to the applicant.

- Include a flow meter in an above ground meter building at the property line as per the attached specification drawing. (Note if the City of Kelowna requires onsite fire hydrant(s), then the fireline meter is required; if all fire protection water is provided from offsite then a properly sized commercial meter is acceptable).
- Submit meter building detail drawings, c/w meter building location, to meet the attached GEID specification. The meter building must be accessible to GEID staff and sufficient equipment parking space must be available to GEID to permit meter reading, servicing and meter replacement.
- Submit irrigation system mechanical plans conforming to GEID Bylaw No. 76. Please note that the maximum allowable flow for an automated sprinkler system is 10 USgpm, unless irrigation CECs are paid for additional land.

The meter building will be inspected by GEID, and any deficiencies must be remedied by the developer prior to water service turn-on to a completed building. In addition, a maintenance bond in the amount of 25% of the meter cost shall be provided to GEID for a one-year period.

Upon completion the Owners engineer must provide the following:

- A stamped certificate that all waterworks have been constructed according to the approved plans and good engineering practices;
- Bacteriological testing results;
- Pressure test results.

5. Connection, Administration and Inspection Fees

The applicant is responsible for GEID connection, administration and inspection/observation fees for the on-site and off-site works. At the present time, insufficient information is available to determine these costs. These costs will be determined once a review of the design drawings is completed, and a final version is approved by GEID.

6. New Account Fees

GEID Bylaw #76 states that all new accounts or transfer of ownership shall pay a fee of \$20.00/unit. Therefore for the proposed development the fees would be \$20.

7. Capital Expenditure Charges

These rates are subject to change without notice. CEC's for future phases will be charged as per the Bylaw that governs at the time. GEID notes that no CEC's have been paid for the parcel at this time.

It appears that the existing parcel will require subdivision prior to proceeding with the development shown on the architect's plans. The payment of Capital Expenditure charges is required for each new parcel at the time of subdivision.

GEID Bylaw # 84 presently states that dry land CEC's are payable for each building at a rate of \$3,600 for the first 250 m² of floor area. CEC's are payable for the remaining floor area of each individual building at a rate of \$8/m² for buildings with approved fire sprinkler systems, or \$10/m² for buildings without fire sprinkler systems.

For dry land properties, payment of CEC's provides the water rights to irrigate up to 1/3 acre of landscaping around each building. We note that the proposed sports fields will exceed this area, and application to the Board of Trustees to purchase irrigation CECs (the current rate is \$7,200/hectare) will be required prior to installation of an irrigation system for the sports fields.

8. Latecomer Charges

Latecomer charges are applicable for the use of storage from UBCO reservoir. At this time, final costs are not yet known for the UBCO reservoir, and a Latecomers Bylaw incorporating the final costs has not yet been passed by the GEID Board of Trustees, or registered in Victoria by the Inspector of Municipalities. However, balancing storage will be required in accordance with GEID standards, in an amount of 6 hours of maximum day demand, plus 25% emergency storage. The estimated latecomers cost for balancing storage at the UBCO reservoir is approximately \$463/m³.

A limited amount of available balancing storage remains at UBCO reservoir, and the remaining balancing storage is allocated on a first-come, first-serve basis. Once the existing reservoir storage is fully allocated, construction of the next cell by developers will be required.

9. Summary of Engineering Submissions and Payables

At this time, the property has no water service, but is within GEID boundaries. In order to provide water service to the site GEID requires payment of applicable CECs and other fees, along with completion of off-site works.

Prior to permitting off site waterworks construction to proceed, GEID requires the following:

- Provide Land Use Concept Plan for the area shown in order to ensure that developer-installed works are appropriately sized;
- Submit two (2) copies of engineering plans completed by a Professional Engineer registered and insured in the Province of British Columbia for all off-site works for review, in accordance with City of Kelowna and GEID servicing bylaws and policies;
- Provide City of Kelowna approved drawings;
- Written confirmation from Kelowna Fire Department that they have reviewed and approve the hydrant spacing;
- Payment of applicable Observation fees, Inspection fees for off site works, administration costs, and connection fees (all to be determined by GEID); and
- Provide Interior Health Authority Waterworks Construction Permit for the off-site works and on-site works (including the meter building), well in advance of the works.

Prior to issuance of a water letter to permit building construction at the proposed development, GEID requires the following:

- Payment of applicable Capital Expenditure Charges;

Aberdeen Hall Private School
November 24, 2006

- Payment of Latecomer fees for UBCO Reservoir after a bylaw is registered. Alternatively, GEID will accept a signed agreement between GEID and the developer which contains a commitment to pay latecomers fees once a bylaw is registered, along with bonding for the estimated amount of latecomers fees;
- Completion of off site works and maintenance bonding;
- Payment of New Account Fees in the amount of \$20.

Prior to turning on water service to the site, GEID requires the following:

- Signed and stamped as-built drawings for all off-site works
- Stamped certification by the Developer's Engineer that all works have been installed in accordance with approved plans
- Maintenance bond in the amount of 25% of the value of the works that will become property of GEID, including all off site works, and the water meter.
- Satisfactory on-site waterworks pressure test results and bacteriological results.
- Completion of meter building in accordance with GEID standards, including satisfactory inspection by GEID and amendment of all deficiencies

If you have any further questions please contact me at (250) 763-6506.

Sincerely,
**GLENMORE-ELLISON
IMPROVEMENT DISTRICT**



Darren Schlamp, B.Sc.
Manager, Engineering & Development

cc: John Hertay, Watermark Developments Ltd.

Attachments: Inspection Requirements
GEID Standard Meter Building Specifications
January 10, 2006 Letter by Agua Consulting Ltd.



Agua Consulting Inc.

"Engineered Water Solutions"

Agua file: 025-003-037a

January 13, 2006

Glenmore-Ellison Improvement District
445 Glenmore Road
Kelowna BC
V1V 1Z6

Attention: Mr. Pat Hickerson, General Manager

Dear Pat:

RE: Engineering Review – College Heights Development and Adjacent Lands to East

1.0 BACKGROUND

Thank you for informing us of the proposed development located adjacent to Glenmore-Ellison Improvement District (GEID) boundaries. We have reviewed the information submitted by the applicant and provide the following comments. This review comes at your request in early August, 2005. This letter includes the revisions provided to GEID by the developer in late November of 2005.

This letter report focuses on the infrastructure requirements for servicing the College Heights Development and Adjacent Lands to the East. This letter was prepared in conjunction with our Engineering review for *College Heights –Phase II*, revised as of January 10th, 2006.

Location of proposed College Heights Development is shown in Figure 1. Based on the drawing provided by CTQ Consultants, the total area of the proposed development is 105 ha. The Future Land Use Concept Plan shows where the designated areas are located. Table 1 provides an area breakdown by proposed land use.

Table 1 – College Heights Development – Land Use

Proposed Land Use	Area (ha)
Single Family Units	59.5
Multi Family Units (low & med. density)	10.4
Commercial	1.25
Educational (public and private schools)	6.6
Parks	4.0
Open Space	23.5
Total	105.25

The proposed development area is located outside of the GEID boundaries north of Arab Road. The elevation of the area to be serviced ranges from 420m to 535m. The adjacent land to the east has an area of 67.7 ha. The minimum and maximum elevations are 405m and 500m respectively. The Land-use

Agua Consulting Inc

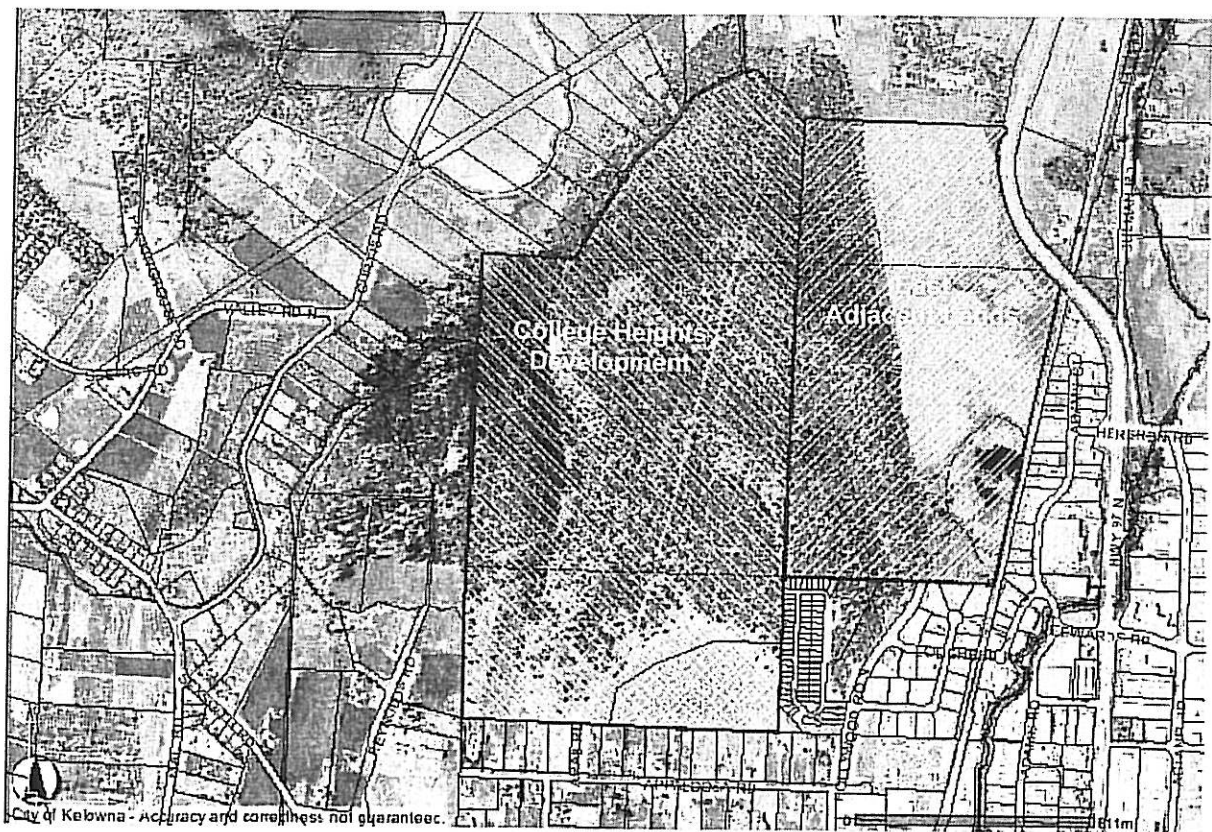
- o 3349 East Kelowna Road, Kelowna, BC, V1W4H3
- o Phone: 250.860.1222 Facsimile: 250.860.1254 Cellular: 250.212.3266

Concept Plan for these lands is not available at the moment, therefore water demands have been estimated based on land use and densities of the initial College Heights Development.

Reference Information Reviewed in Preparation of this letter

- Re-zoning application, Dated May 13th, 2005, delivered by the City of Kelowna;
- Revised land use drawing dated Nov. 7th, 2005, received by GEID Nov 24th, 2005;
- GEID Capital Plan, Agua Consulting Inc. November 2004;
- GEID computer model for this area;
- CITY OF KELOWNA, Zoning Bylaw

Figure 1 – Aerial Photograph of Site



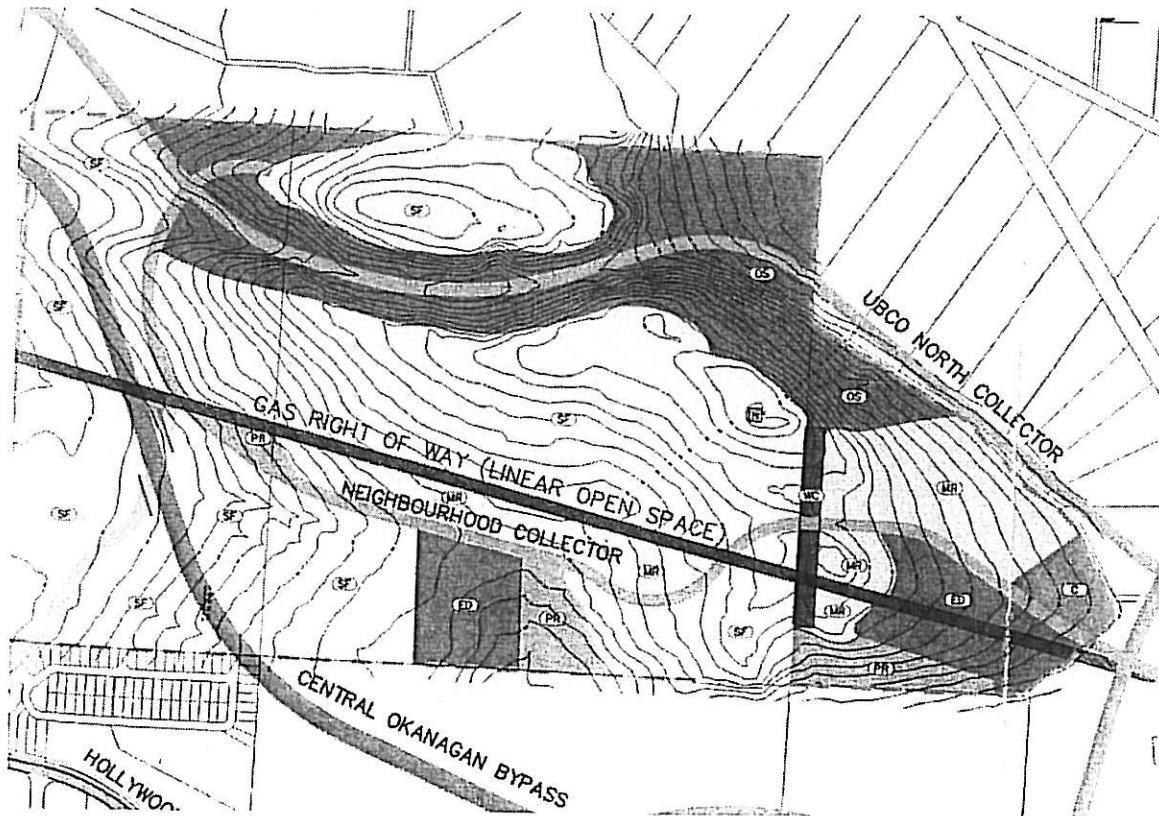
Scale: approximately 1:20,000

Aerial Photograph, City of Kelowna Web Mapping, 2003

The following sections describe the water servicing requirements to meet the servicing bylaws and policies of GEID.

Proposed land use for the area is presented on Figure 2 on the following page. The land use shows residential development for a substantial portion of the site.

Figure 2 – Proposed Land Use



Source: CTQ Nov. 7th, 2005 submission

2.0 ENGINEERING ANALYSIS

The engineering analysis is consistent with fire flow criteria within the City of Kelowna Subdivision Bylaw and that of the Glenmore-Ellison Improvement District. A summary of the parameters utilized is as follows:

Maximum Static Pressure	95.0 m (135 psi)
Minimum Dynamic Pressure	31.7 m (45 psi)
MDD for average SF lot	0.083 L/s/connection
MDD for multi-family unit	0.055 L/s/connection
Minimum FF for multi-family and institutional	150 L/s

Pressure Zones

College Heights and the adjacent lands to the east range in elevation from approximately 405m to 535m. It is anticipated that the majority of these lands will be serviced from the future UBCO Reservoir at PZ 515. Based on the minimum dynamic pressure requirement, PZ 515 could service lands with a maximum elevation of approximately 480m. Three pressure zones are proposed for the College Heights and adjacent lands, as shown on Figure 3.

Figure 3 – Proposed Pressure Zones

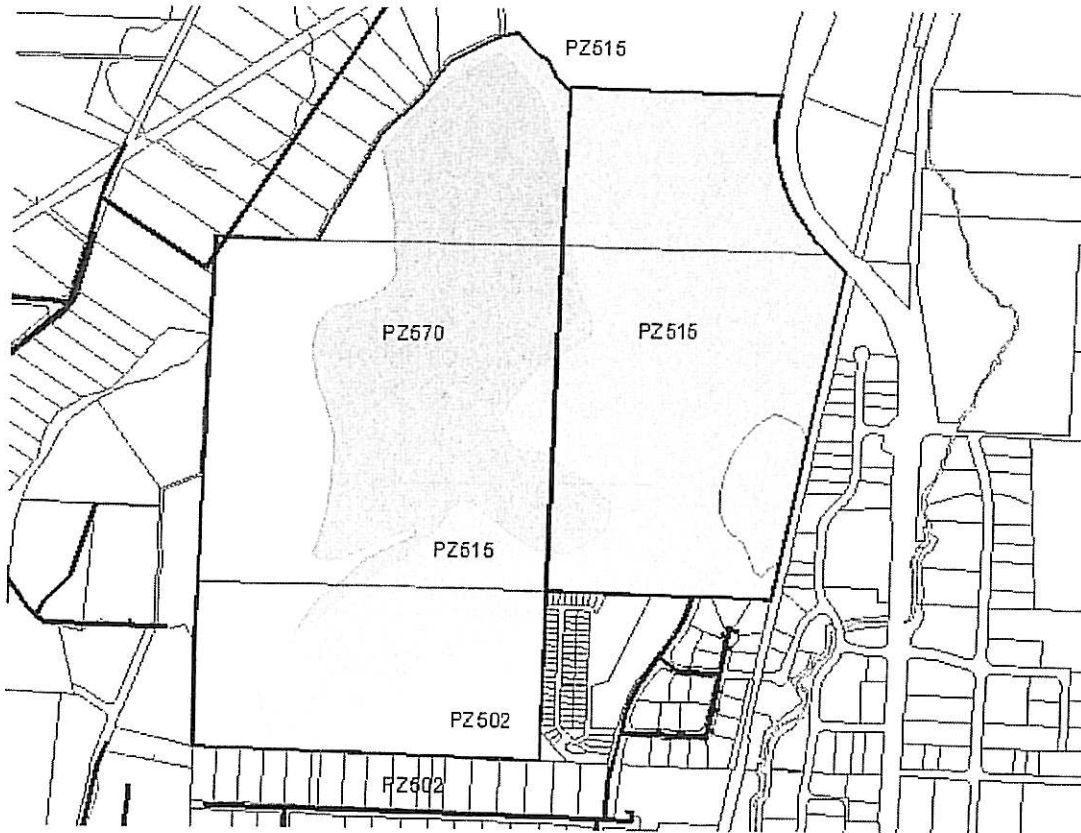


Table 2 summarizes the proposed pressure zones and indicates the maximum and minimum service elevations within each pressure zone. The area to the west of PZ 570 would be located within PZ 515.

Table 2 – Proposed Pressure Zones

Pressure Zone ID	Proposed Minimum Service Elev.	Proposed Maximum Service Elev.	Comments
PZ 502	410m	449m	Existing GEID PZ
PZ 515	420m	475m	From UBCO reservoir
PZ 570	475m	535m	

Water Demand

Estimates for the maximum day demand (MDD) and peak hour demand (PHD) for the College Heights Development and adjacent lands were completed. The estimates for the proposed Single Family Unit areas are based on the same density proposed for Phase II. Density of multi-family areas is consistent with City of Kelowna Zoning Bylaw.

MDD as per GEID criteria is as follows:

MDD for Single Family Units	0.083 L/s/connection
MDD for Multi-Family Units	0.055 L/s/connection
Park Irrigation	0.62 L/s/ha as per GEID 2004 Capital Plan

Water Demand for Commercial and institutional areas are adopted based on current demands in the City for similar developments. Table 3 summarizes the water demands for College Heights Development and adjacent lands to the east. It should be noted that Phase II demands are not included in Table 3. The water demand estimated in the table is only for the purposes of providing an order of magnitude estimate of future water demand for this site.

Table 3 – Water Demand Summary

Land Use	Area (ha)	Density (Units/ha)	No of Units	MDD (L/s)	PHD (L/s)
College Heights Development (Excluding Phase II)					
Single Family	59.5	11	654	54.5	90.8
Multi-Family	10.4	70	728	40.4	67.4
Commercial	1.25	-	-	2.5	3.75
Educational	6.6	-	-	5.0	7.5
Parks	4.0	-	-	2.5	2.5
Open Space					
SUBTOTAL	81.75	-	1382	104.9	171.95
Adjacent Lands to the East					
SUBTOTAL	67.7	-	-	96.1 *	143.5**
TOTAL	149.4			201.0	315.4

* Based on Land Use similar to College Heights Development and MDD of 1.42 L/s/ha

** Based on Land Use similar to College Heights Development and PHD of 2.12 L/s/ha

On-Site Infrastructure Requirements

Based on the proposed pressure zones, the new development will require distribution watermain and one booster station. The entire area will be fed from UBCO reservoir (TWL at 515m). The booster station will pump up one pressure zone from PZ515 to PZ570.

The total area for PZ570 has been estimated at approximately 52.3 ha. The MDD based on 1.42 L/s/ha is 74.3 L/s. Based on these very preliminary numbers, the Booster Station should be designed to supply the estimated PHD of 110.9 L/s while having the biggest pump out of service. The transmission and distribution mains from PZ515 to the development area should be sized based on a maximum recommended velocity of 2.0 m/s and minimum required pressures should be checked under MDD plus fire flow and PHD. The developer must submit the proposed piping layout from review by GEID prior to construction.

The Booster Station will require stand-by power and a Fire-Pump to provide fire protection for PZ570. During low demand times the pressure in the system will be maintain by hydro-pneumatic pressure tanks installed within in the proposed Booster Station.

Figure 3 illustrates the water distribution system conceptual plan for the lands reviewed within this report.

Figure 3, Conceptual Water System Plan



Off-Site Infrastructure Requirements

In addition to the on-site infrastructure requirements, the developer would be responsible for payment of Capital Expenditure Charges (CECs) as per the GEID CEC Bylaw in place at the time of payment and for Latecomers Charges that are applicable.

The first step for development of these lands is to apply to have the greater area included in the service boundary of the GEID. It is recommended that one application be submitted by the developer for all of the College Heights lands not presently within the GEID service area boundary.

It is expected that there will be Latecomers Charges for connection to the GEID infrastructure of the UBCO Reservoir. The amount of latecomers payable is directly proportionate to the volume of balancing storage required from the UBCO Reservoir.

The Latecomer Charge per lot is expected to be spread over the first 314 single family equivalent units that access the reservoir storage. After the 314 SFE units are constructed, the developer must contribute to additional watermain capacity to get water to the UBCO Reservoir and must also contribute to or build the third cell of the UBCO Reservoir.

3.0 SUMMARY OF ENGINEERING SUBMISSIONS AND PAYABLES

We have summarized the development requirements:

- It is recommended that the developer, in conjunction with the adjacent development lands, make application to include the properties within the GEID service boundary area. This process will take several months to complete.
- It is recommended that the developer and their engineer provide a long term servicing plan for their entire development area. The development of a plan should show how the development water system will integrate into the GEID water system and how the project phasing is expected to evolve. This should help to reduce the risk of mains being improperly sized and should provide GEID with confidence that the right steps are being taken during the design.
- The developer should also provide fire flow requirement calculation as per FUS recommendations and procedures.
- Before any water system designs can be reviewed, the developer must apply to have the land brought within the district boundaries of the GEID. The process for this is available from the GEID office and through the Ministry of Community Services.
- The developer would be responsible for payment of fees and advertising to bring the lands within the District boundaries.
- Capital Expenditure Charges as per the GEID CEC Bylaw in place at the time of payment.
- Payment of applicable Latecomers Charges (exact charges to be confirmed).

We trust this letter answers your immediate questions. If you have any further questions regarding the technical issues, please contact me at (250) 212-3266.

Yours truly,
Agua Consulting Inc.



Bob Hrasko, P.Eng.
Principal

RJH/rh



GLENMORE-ELLISON IMPROVEMENT DISTRICT WATER METER STANDARD FOR PROPERTIES WITH ON-SITE PRIVATE WATER SYSTEMS

Policy

GEID has established a water meter standard for properties with on-site private water systems (pursuant to the Local Government Act Section 747.1). This standard covers properties such as strata developments with on-site water mains, hydrants and irrigation systems as well as commercial, residential and institutional developments with on-site hydrants. The requirement is for an above-ground meter building located at the development property line. This building can be incorporated with other accessory buildings such as the entrance house, community mailboxes or refuse station. Design criteria, materials and workmanship not specifically described in this document shall be in accordance with the applicable American Water Works Association (AWWA) standards, good engineering practice and trade-quality workmanship.

Ownership & Operation

The property owner or strata corporation is responsible for building design, construction, operation and maintenance. GEID retains ownership and is responsible for maintenance and reading of the water meter.

The water meter building shall be located adjacent to the frontage property line, with unrestricted access provided to GEID from the road side. Meters shall be supplied with a remote meter reading system compatible with the Invenys Radio Road™ system. The remote touchpad shall be located outside the building near the entrance door.

The developer shall purchase a GEID lock box for key entry, and install it near the entrance door, c/w door keys. Contact Kurt Lock & Site (250) 763-7872 to purchase MS Super Master Lock-Box keyed for GEID.

Required Submittals for Approval

- Submit to GEID and receive approval prior to construction;
 - engineering plans shall be submitted showing a site plan, GEID vehicular access, meter building location, property main water shut off valve, on-site piping layout and fire hydrants, water meter building mechanical, electrical and ventilation systems
 - calculations for water meter selection and sizing
 - evaluation of requirements for cross connection equipment, and include properly isolation backflow prevention device in the meter building if so required.
- Submit as-built Record Drawings following construction, c/w meter manufacturer, model, serial no. and meter readings.

Design Criteria

Water meters shall meet all applicable AWWA standards. Meter shall read in cubic meters. A straight run of pipe shall be provided on each side of the meter in accordance with meter manufacturer requirements. Typically meter manufacturers may require 5 pipe diameters of straight run or full open components on both sides of the meter assembly.

Where water meters are used on a service providing fire flow, the water meter must meet Underwriters Laboratory (UL), Factory Mutual (FM) specifications and AWWA standard C703 for fire meters.

Based on AWWA C-703, fireline meters shall be sized for the following maximum flows:

- 10 44 L/s (700 USGpm) 100 mm meter
- 10 101 L/s (1600 USGpm) 150 mm meter
- 10 177 L/s (2600 USGpm) 200 mm meter

Piping arrangement shall allow for removal of the water meter.

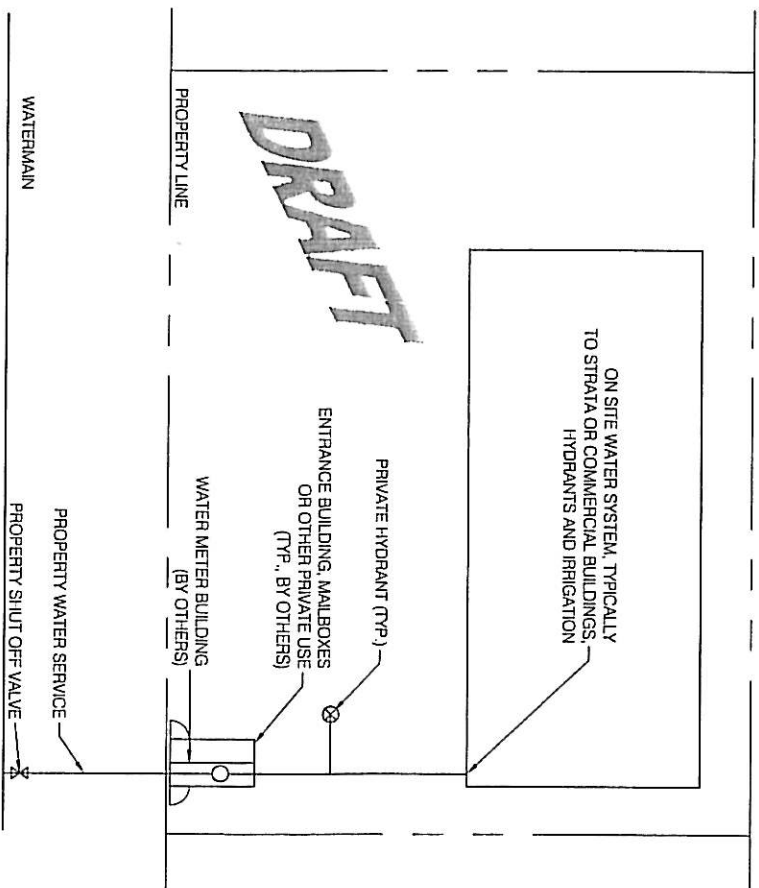
For fireline meter arrangements the compound or duty meter shall be located on the access side.

Minimum building inside height is 2400 mm. Minimum door height is 2000mm. The building door shall be placed to provide sufficient working area (as determined by GEID) to service and/or remove the meter. Minimum inside width shall provide at least 1000 mm clear on the access side of the meter, and 400 mm clear behind and beside the meter. Minimum inside width shall provide at least 1000 mm clear on the access standard wrenches. Piping centerline shall be 1000 mm above the floor.

The meter building heating system shall be thermostatically-controlled and able to maintain a temperature of 13°C. The ventilation system shall be humidistat-controlled and provide minimum 6 air changes per hour.

The building floor shall slope towards a floor drain with grille. The floor drain shall daylight or connect to the site's stormwater system.

The building door shall be steel frame and door and incorporate one passage lock and one deadbolt lock, keyed alike. The door width shall be 50mm greater than the widest portion of the water meter. The minimum door width shall be 750 mm. The door width shall be 50 mm IPT outlets and valves shall be provided upstream and downstream of the isolation valves.



TYPICAL SITE PLAN

N.T.S.



SCHEDULE OF FITTINGS

No.	RECORD	DESCRIPTION (150 mm INSTALLATION SHOWN)
1	2	150 mm F - 90° BEND
2	1	150 mm FIRELINE METER c/w LOW FLOW BY-PASS, STRAINER AND REMOTE TOUCH-HEAD SYSTEM AFFIXED TO EXTERIOR OF BUILDING (NEPTUNE HP PROTECTUS III OR INVENSY'S FIRELINE)
3	1	150 mm F x PE SPOOL, PIECE c/w 25 mm THRED-O-LET, LENGTH TO SUIT
4	2	150 mm ADAPTER COUPLING (STEEL TO PVC)
5	2	150 mm WAFER STYLE BUTTERFLY VALVE c/w ALUMINUM BRONZE ALLOY DISK, BOLT LUGS, GEAR OPERATOR AND HAND WHEEL
6	2	50 mm THREAD BALL VALVE AND FITTINGS TO SUIT
7	1	19 mm HOSE BIB FOR WASHDOWN & WATER SAMPLING
8	2	ADJUSTABLE PIPE SUPPORT (STANDON MODEL S99 FLANGE SUPPORT SYSTEM OR APPROVED EQUAL)
9	2	PRESSURE GAUGE, 115mm FACE, 0-200 psi, 6 mm NPT, 1% ACCURACY c/w 25 mm BALL VALVE, Ø25 mm REDUCING BUSHING AND NIPPLE AS REQUIRED
10	2	150 mm PIPE SPECIAL FPIPE c/w 90° BEND, FLOOR THRUST RING & 50 mm THRED-O-LET
11	2	THRUST BLOCK TO ENGINEER'S DIMENSIONS
12	1	25 mm MINIMUM AIR/VACUUM VALVE c/w 25 mm ISOLATION BALL VALVE & NIPPLE AS REQUIRED.
13	1	100 mm FLOOR DRAIN c/w GRILLE INLET
14	1	RESTRAINING FLANGE ADAPTER

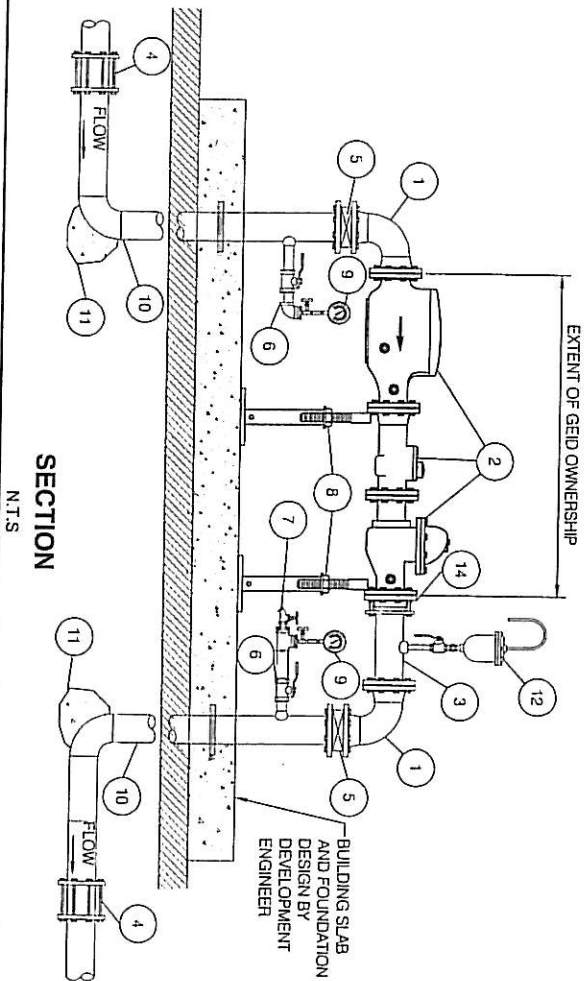
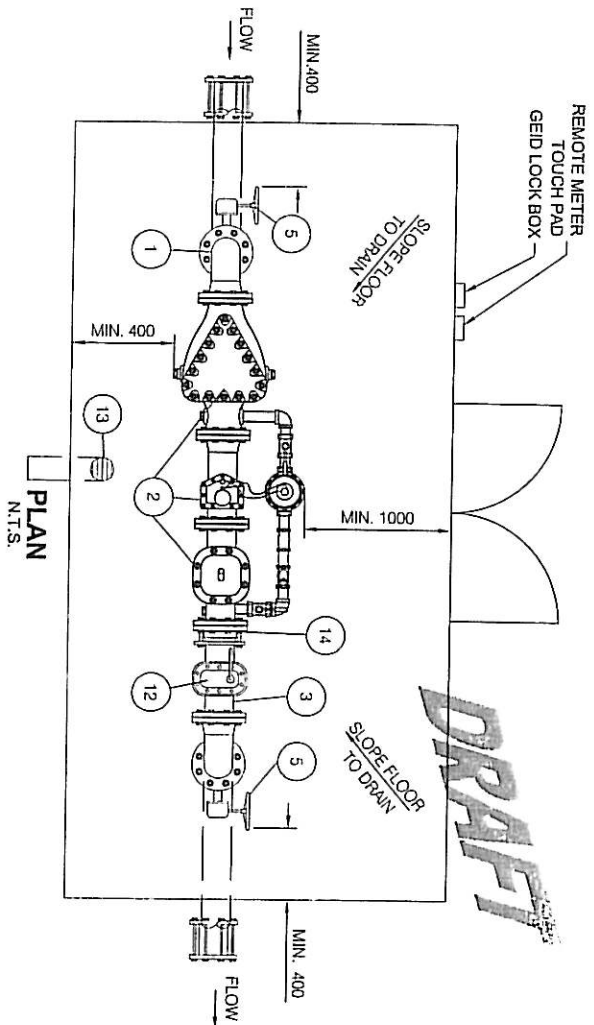
MATERIAL SPECIFICATIONS

All piping shall be:

Schedule 40 steel pipe & fittings with lining and coating to AWWA Standard C-213 and NSF Standard 61 specification or
Schedule 10S stainless steel pipe & fittings (ASTM A312 for piping, ASTM A403 for fittings)

The meter, fittings and appurtenances shall be fusion bonded epoxy coated.

NOTE:
TO BE COMPATIBLE WITH INVENSY'S RADIO HEAD SYSTEM



Date: August 16, 2005

Memo To: Developers

Memo From: Patrick M. Hickerson A.Sc.T.
Manager Engineering and Development

RE: INSPECTION SERVICES

GEID has reviewed its inspection procedures on Developers works that will become GEID property. In the past, GEID has retained an independent engineering firm for inspections and then charged a 6% inspection fee to the Developers.

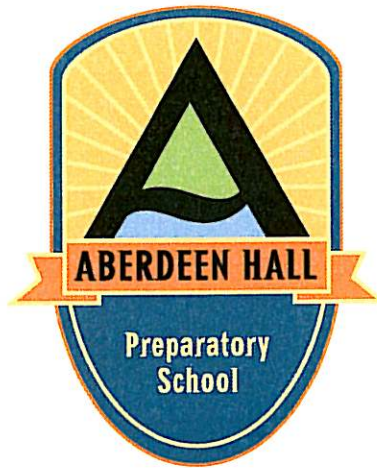
We now require the Developer to retain a Professional Engineering firm licensed in good standing and insured in the Province of B.C., to conduct inspections on their behalf. These inspections must ensure that all water works installed meet all applicable GEID, City of Kelowna, and MMCD requirements. GEID may at their discretion conduct periodic observation to ensure the inspections are carried out as required. GEID will charge the Developer 1% of the estimated waterworks, as determined by GEID, for administration and observation time. A minimum charge of \$1,000 would apply to all waterworks installations.

For the works that will become the property of GEID, we will require the Developer or their Contractor to post a Maintenance Bond in the amount of 25% of the total value of the waterworks for a one (1) year period from the date of substantial completion by GEID. If there are concerns with contractor or Engineer performance, GEID reserves the right to extend this maintenance period to two (2) years if it deems necessary.

Specific requirements for the developer's engineer to carry out during inspection include but are not limited to these duties listed below:

- Submit proof of Engineers license & insurance (minimum level of \$2,000,000 liability or the value of the works, which ever is greater);
- The developer shall arrange and pay for an independent testing agency to provide quality control testing for all materials supplied and incorporated into the works. Material Quality and Compaction Testing shall be conducted on aggregates, bedding, and trench backfill and shall include, but not limited to the following tests:

- Stamped certification, see attached sample, by the Developer's Engineer that all works have been installed in accordance with approved plans, prior to issuance of Water Service Certificate
- Record drawings, including offsite works, 1 set of prints, 1 digital Auto Cad 14 CD and 1 digital pdf drawing CD prior to issuance of Water Service Certificate
- Submission of a complete digital record of the works at the end of the job organized for easy reference.
- Submission of As-Constructed drawings for the works within **30** days of substantial completion.



ABERDEEN HALL PREPARATORY SCHOOL



December 2006

Contact Information

Aberdeen Hall Preparatory School
2455 Acland Road
Kelowna, BC V1X 6N5
250 491 1270
AberdeenHall.com



Aberdeen Hall Preparatory School

General Description

Aberdeen Hall Preparatory School is an independent, non-profit, non-denominational, University Preparatory School, located in Kelowna, British Columbia. The school was formed in 2004 by a core group of enthusiastic and like minded parents that together with a dedicated educational staff has seen the current enrollment increase to over 120 students, from pre-school through Grade 6. Small class sizes of 18 students means each student is able to access and benefit from the enriched curriculum which includes world languages starting in Kindergarten, specialized music classes and band lessons that commence in grade four. The school has just begun accepting applications for Grade 7 for the 07/08 school year.

Unique in Kelowna, Aberdeen Hall is filling an educational void by providing an enriched and balanced learning environment that prepares students for post secondary opportunities. The school's Educare Montessori pre-school program provides students with a balanced learning environment that focuses on their interests. Pre-school classrooms are equipped with essential Montessori materials that enable children to explore learning in a systematic yet unstructured way. This academically enriched program meets all criteria of the Montessori pre-school model. Kindergarten is a full-day program for five year olds with the goal of providing the essential skills required to be reading and completing basic arithmetic by year end. They are also exposed to the fundamentals of Spanish and French language development. In Grades 1 through 6, the curriculum blends the traditional areas of study in the Sciences and the Arts with a full complement of additional study opportunities in subjects such as Spanish, French, Music and Drama. Through planned growth, Aberdeen Hall will add at least one additional grade every year until it reaches Grade 12. The school's goal is to have students fully prepared to pursue any post secondary education they choose with enthusiasm and confidence.

Aberdeen Hall came into being after the collapse of the former Central Okanagan Academy (COA) in 2004. A group of COA parents, that wanted to continue in the independent school model with more meaningful involvement, established the Aberdeen Hall Preparatory School Society. This is a registered non-profit, charitable entity that is 100% responsible for the school governance, operations and capital.

School Vision of a new Campus

The vision for the new Aberdeen Hall Preparatory School campus is to build a state-of-the-art facility with separate buildings, courtyards and open spaces for approximately 600 students on a 17+ acre property. The new school aims to provide students with a safe environment to participate in an innovative and balanced educational program. The proposed facility will be comprised of several classroom buildings as well as special program amenities such as music & arts rooms, science & computer labs as well as a library. Sports facilities will include a new gymnasium and sports fields with tennis and basketball courts. The open-air amphitheatre will become a centre for the performing arts.

Construction of the first building, the Junior Hall, a complete elementary school building, is expected to commence within the 2006/2007 school year as soon as all necessary approvals from the City of Kelowna are obtained.



Financing of the property, the first building and all subsequent developments will be provided in a combination of a parent supported “Smart Trust” debenture program, conventional bank financing as well as donations and a capital funding campaign. The property for the campus has been donated to the school.

The proposed location of the new Aberdeen Hall Preparatory School campus is adjacent to the South boundary of the UBC-O campus. The Highway 97 interchange to UBC-O, will also allow access to the school’s campus.

Overall Campus Build-out

The overall campus build-out is dependent on the future enrollment at Aberdeen Hall. The level and pace of enrolment will by its nature dictate the level and pace of construction of the new phases. Aberdeen Hall’s planned enrollment increase of at least one grade per year will lead to the maximum student base of 600 and a complete campus build-out by approximately 2015.

Phase	Building	Description	Projected Enrollment*	Estimated Completion
I	The Junior Hall (Elementary School)	<ul style="list-style-type: none"> • Complete elementary school including classrooms, library, staff room and offices as well as meeting rooms. • Short term temporary facility for pre-school and daycare using portables. • Roads & landscaping • Some sports/play fields 	160	2007
II	The Athletics Hall	<ul style="list-style-type: none"> • Gymnasium, club house and more sports fields • Additional parking 	220	2009
III	The Senior Hall (High School)	<ul style="list-style-type: none"> • Similar building to the Junior Hall • Additional classrooms and specialty space for the senior grades • Additional parking 	400	2012
IV	The Main Hall	<ul style="list-style-type: none"> • Main school building: <ul style="list-style-type: none"> ○ Additional specialty classrooms, ○ Assembly area/theatre, ○ Central library, ○ Cafeteria, and ○ Administration Offices • Additional parking 	350	2011
V	The Minor Hall (Pre-school & Daycare)	<ul style="list-style-type: none"> • Separate permanent pre-school and daycare building 	465	2013
VI	Site & Property Enhancements	<ul style="list-style-type: none"> • Additional parking • Sports fields • Outdoor amphitheatre • Nature trails, etc. 	520	2014
VII	The Residence	<ul style="list-style-type: none"> • On-campus Head of School residence. 	600	2015

*includes pre-school students



Site and Construction Considerations

It is expected that the site servicing and development work of the neighbouring properties will generate considerable fill material which can be used as base for the various proposed sports fields. In addition a number of level areas will be prepared for use as contractor parking, material staging areas, pre-assembly areas, etc. while the first building is being built. Safety is of primary concern in school construction and as such Aberdeen Hall is being designed with perimeter fencing and limited access options.

After completion of the Phase I construction, portions of the previously mentioned level areas will be converted to sports fields. Other areas may remain reserved for construction and contractors depending on the timing of the subsequent phases. Great consideration and planning has been undertaken to insure that at all times any and all construction activity will be physically separated and secured from any student and staff interaction.

Construction Site Management & Safety Plan

JDL Construction Management will provide the overall building constructions of the Aberdeen Hall Preparatory School. As on our other projects we will provide an on-site Construction Superintendent that will oversee the day-to-day construction activities of the project. Initially we will fence off all of the areas that will be required during the different stages of construction. These areas will be posted as construction areas and will be policed on a daily basis.

All Vehicle traffic will be expected to report to the Site Office upon arrival to the job site and from there, will be directed, where they are able to drive. A designated construction parking area will be cleared and all on-site construction personnel will be expected to park their vehicles in this area unless they are loading or unloading materials.

JDL will work with the Aberdeen Hall Property Society to provide an on-site Construction Safety Plan, which will comply with all aspects of Construction Safety as set out and required by Work Safe BC. We will provide a Level 3 First Aid Attendant during the hours of construction and as required ensure that all persons working on the site are put through a Construction Safety Site Orientation before they begin any work.

Date: 06/02/27 TITLE SEARCH PRINT - KAMLOOPS Time: 11:39:57
Requestor: (PB35788) C.T.Q. CONSULTANTS LTD. Page: 001
TITLE - KW77406

KAMLOOPS LAND TITLE OFFICE TITLE NO: KW77406
FROM TITLE NO: KT33959

APPLICATION FOR REGISTRATION RECEIVED ON: 17 JUNE, 2004
ENTERED: 30 JUNE, 2004

REGISTERED OWNER IN FEE SIMPLE:
WATERMARK DEVELOPMENTS LTD., INC.NO. 642787
102 - 260 HARVEY AVENUE
KELOWNA, BC
V1Y 7S5

TAXATION AUTHORITY:
CITY OF KELOWNA

DESCRIPTION OF LAND:
PARCEL IDENTIFIER: 010-261-401
LOT 7 SECTION 10 TOWNSHIP 23 OSOYOOS DIVISION YALE DISTRICT PLAN 1638

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND COMMISSION ACT, SEE AGRICULTURAL LAND RESERVE PLAN NO. M11328

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA) FILED DECEMBER 13, 1977 UNDER NO. M74009 & S23537 SEE PLAN M13304

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE
CHARGE NUMBER DATE TIME

RIGHT OF WAY
72980E 1958-01-30 12:32

REGISTERED OWNER OF CHARGE:
INLAND NATURAL GAS CO. LTD.
72980E

REMARKS: INTER ALIA

MORTGAGE

76706E 1958-10-31 11:29

REGISTERED OWNER OF CHARGE:
THE ROYAL TRUST COMPANY IN TRUST DD 69780E & 76706E
76706E

REMARKS: INTER ALIA (SEE ALSO 90376E, 101710E
F39048, H19707 & K31231) OF 72980E

"CAUTION - CHARGES MAY NOT APPEAR IN ORDER OF PRIORITY. SEE SECTION 28, L.T.A."

DUPLICATE INDEFEASIBLE TITLE: NONE OUTSTANDING

TRANSFERS: NONE

PENDING APPLICATIONS: NONE