



CITY OF KELOWNA

MEMORANDUM

Date: March 13, 2019
File No.: Z19-0056
To: Subdivision Approving Officer (WM)
From: Development Engineering Manager (JK)
Subject: Zoning Application – (S of) Academy Way - RU1h to RM2h

WORKS AND SERVICES REQUIREMENTS

The City's Development Services Department will handle the Works & Services requirements identified below for Zoning Approval from RU1h to RM2h for a 142 rental development subdivision plan.

The Development Engineering Technologist for this project is Ryan O'Sullivan.

The following Works & Services are required for this subdivision:

.1) General

- a) This proposed subdivision may require the installation of centralized mail delivery equipment. Please contact Arif Bhati, Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC V1Y 2K0 to obtain further information and to determine suitable location(s) within the development.
- b) Where there is a possibility of a high water table or surcharging of storm drains during major storm events, non-basement homes may be required. This must be determined by the engineer and detailed on the Lot Grading Plan required in the drainage section.
- c) The Fire Department and Environment Division requirements and comments are addressed separately by them.

.2) Geotechnical Report

- a) Provide a comprehensive geotechnical report, prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the items below: **NOTE: The City is relying on the Geotechnical Engineer's report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.**

The Geotechnical report must be submitted prior to submission of Engineering drawings or application for subdivision approval.

- (i) Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
- (ii) Site suitability for development.
- (iii) Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).
- (iv) Any special requirements for construction of roads, utilities and building structures.
- (v) Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.
- (vi) Slope stability, rock fall hazard and slippage including the effects of drainage and septic tank effluent on the site.
- (vii) Identify slopes greater than 30%.
- ii) Top of bank assessment and location including recommendations for property line locations, septic field locations, building setbacks, and ground water disposal locations.
- iii) Recommendations for items that should be included in a Restrictive Covenant.
- iv) Any special requirements that the proposed subdivision should undertake so that it will not impact the bank(s). The report must consider erosion and structural requirements.
- v) Any items required in other sections of this document.
- vi) Recommendations for erosion and sedimentation controls for water and wind.
- vii) Recommendations for roof drains and perimeter drains.
- viii) Recommendations for construction of detention or infiltration ponds if applicable.

.3) Water

- a) The property is located within the GEID service area.
- b) Provide an adequately sized domestic water and fire protection system complete with individual lot connections. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision, Development & Servicing Bylaw. Provide water calculations for this subdivision to confirm this.
- c) Ensure every building site is located at an elevation that ensures water pressure is within the bylaw pressure limits. Note: Private pumps are not acceptable for addressing marginal pressure.

- d) Hydrants are to be spaced at 200m but also must be located within 100m of a building.
- e) Design drawings must be reviewed by GEID prior to the City issuing the drawings for construction. Confirmation of their review must be provided to the City.

.4) Sanitary Sewer

- a) Provide an adequately sized sanitary sewer system in accordance with the Subdivision, Development & Servicing Bylaw.

.5) Drainage

- a) Provide an adequately sized drainage system complete with individual lot connections. The Subdivision, Development and Servicing Bylaw requires that each lot be provided with an individual connection; however, the City Engineer may permit use of individual ground water disposal systems, where soils are suitable. For on-site disposal of drainage water, a hydrogeotechnical report will be required complete with a design for the disposal method (i.e. trench drain / rock pit). The Lot Grading Plan must show the design and location of these systems for each lot.
- b) Provide the following drawings:
 - i) A detailed Lot Grading Plan (indicate on the Lot Grading Plan any slopes that are steeper than 30% and areas that have greater than 1.0 m of fill);
 - ii) A detailed Stormwater Management Plan for this subdivision; and,
 - iii) An Erosion and Sediment Control Plan.
- c) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- d) Significant banks are located on this site. The slopes appear to be sensitive to erosion; temporary and permanent measures must be taken to prevent erosion and sediment transport.
- e) Identify clearly on a contour map, or lot grading plan, the top of bank(s). Provide cross sections along the top of the bank at each property corner and at locations where there are significant changes in slope. Cross sections are to be perpendicular to the contour of the slope. Show the proposed property lines on the cross sections. Not all areas have a clear top of bank; and therefore, field reconnaissance by City staff and the applicant may be needed to verify a suitable location for property lines.
- f) Where ditches are provided they must be adequately lined and protected for the design flows.
- a) The drainage gullies are to be protected by way of Statutory Rights-of Way suitable to the Drainage Manager.

.6) Roads

- a) The proposed Development will cause more congestion on Academy way Vint intersection. It will be a requirement for this development to install a 4 leg traffic light control Academy Way and Vint Rd. With advanced flashers for south bound lane.
- b) The proposed roads must be built to an urban standard (SS-H12) to frontage of the subject property and through buildable areas; including curb and gutter, sidewalk, street lighting, landscaped boulevard, Sanitary, storm drainage system and water Mains.
- c) All terminal ending roads that will not be extended in the future can be no more than 200m and must end with a cul-de-sac (Schedule 4 section 4.4 By-Law 7900) and emergency access will be required.
- d) All terminal ending roads that will be extended in the future can be no more than 400m and must end with a cul-de-sac (Schedule 4 section 4.4 By-Law 7900) and emergency access will be required.
- e) Verify that physical driveway access will satisfy City requirements for all lots. For steeper lots (15%), show driveways on the lot grading plan with grades or profiles. Where lots are serviced by onsite sewage disposal systems, show limits of cut and fill line.

.7 Power and Telecommunication Services and Street Lights

- a) Overhead wiring is permitted for this subdivision although underground installation is recommended. Remove aerial trespass(es)
- b) Street lights must be installed on all roads.
- c) Before making application for approval of your subdivision plan, please make arrangements with Fortis BC for the pre-payment of applicable charges and tender a copy of their receipt with the subdivision application.
- d) Make servicing applications to the respective Power and Telecommunication utility companies. The utility companies are required to obtain the City's approval before commencing construction.

.8 Design and Construction

- e) Design, construction supervision and inspection of all off-site civil works and site servicing must be performed by a Consulting Civil Engineer and all such work is subject to the approval of the City Engineer. Drawings must conform to City standards and requirements.
- f) Engineering drawing submissions are to be in accordance with the City's "Engineering Drawing Submission Requirements" Policy. Please note the number of sets and drawings required for submissions.

- g) Quality Control and Assurance Plans must be provided in accordance with the Subdivision, Development & Servicing Bylaw No. 7900 (refer to Part 5 and Schedule 3).
- h) A "Consulting Engineering Confirmation Letter" (City document 'C') must be completed prior to submission of any designs.
- i) Before any construction related to the requirements of this subdivision application commences, design drawings prepared by a professional engineer must be submitted to the City's Development Engineering Department. The design drawings must first be "Issued for Construction" by the City Engineer. On examination of design drawings, it may be determined that rights-of-way are required for current or future needs.

.9 Servicing Agreements for Works and Services


- j) A Servicing Agreement is required for all works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works. The Servicing Agreement must be in the form as described in Schedule 2 of the bylaw.
- k) Part 3, "Security for Works and Services", of the Bylaw, describes the Bonding and Insurance requirements of the Owner. The liability limit is not to be less than \$5,000,000 and the City is to be named on the insurance policy as an additional insured.

.10 Other Engineering Comments

- a) Provide all necessary Statutory Rights-of-Way for any utility corridors required, including those on proposed or existing City Lands.
- b) If any road dedication affects lands encumbered by a Utility right-of-way (such as Terasen, etc.) please obtain the approval of the utility prior to application for final subdivision approval. Any works required by the utility as a consequence of the road dedication must be incorporated in the construction drawings submitted to the City's Development Manager.
- c) Both parcels will require a blanket easement for future COMC corridor.

.11 Charges and Fees

- d) Development Cost Charges (DCC's) are payable
- e) None of the Works & Services required are items included in the DCC calculations and therefore not eligible for DCC credits.
- f) Fees per the "Development Application Fees Bylaw" include:
 - i) Street/Traffic Sign Fees: at cost if required (to be determined after design).
 - ii) Survey Monument Fee: \$50.00 per newly created lot (HST exempt).
 - iii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
 - iv) Engineering and Inspection Fee: 3.5% of construction value (plus GST).



James Kay, P.Eng.
Development Engineering Manager

RO

ATTACHMENT A

This forms part of application
OCP20-0009?Z19-0056

Planner
Initials WM



LEGAL DESCRIPTION:
PROPOSED SUBDIVISION OF PART OF THE REMAINDER OF
LOT C PLAN 33993 SEC. 3, TP. 23.

CIVIC ADDRESS:
(S OF) ACADEMY WAY

SURVEY MONUMENT			
MONUMENT NUMBER	NORTHING	EASTING	ELEVATION
BM1	5533178.310	327554.438	478.614
IP712	5533783.081	327697.368	507.868
IP717	5533533.067	327703.802	484.046
IP746	5533700.914	327334.998	524.232

UTILITY INSTALLATION:
LOCATIONS AND OFFSETS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE COMPILED FROM THE MOST RECENT INFORMATION AVAILABLE, BUT ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. PROPOSED LOCATION OF ALL SHALLOW UTILITY APPURTENANCES ARE SCHEMATIC ONLY, DETAILS MUST BE OBTAINED FROM EACH UTILITY COMPANY.

ELECTRICAL
ALL CONSTRUCTION TO CONFORM TO FORTIS BC SPECIFICATIONS AND THEIR DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING CURRENT DRAWINGS.

TELEPHONE
ALL CONSTRUCTION TO CONFORM TO TELUS SPECIFICATIONS AND THEIR DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING CURRENT DRAWINGS.

CABLE T.V.
ALL CONSTRUCTION TO CONFORM TO SHAW CABLE T.V. SPECIFICATIONS AND THEIR DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING CURRENT DRAWINGS.

GAS
CARRIER PIPE IS REQUIRED AT ALL ROAD CROSSINGS TO FACILITATE GAS MAIN INSTALLATION. SEE GAS DESIGN DRAWINGS FOR INSTALLATION INSTRUCTIONS.

- ON-SITE SERVICING COORDINATION:
- CIVIL CONTRACTOR TO INSTALL SERVICING TO 1.0m FROM BUILDING.
 - ALL MECHANICAL INFORMATION PROVIDED BY MECHANICAL ENGINEER. REFER TO MECHANICAL DRAWINGS FOR COMPLETE DETAILS. FOR SERVICES TIE IN, SEE MECHANICAL DRAWINGS FOR CONTINUATION.
 - ALL ELECTRICAL INFORMATION PROVIDED BY ELECTRICAL ENGINEER. REFER TO ELECTRICAL DRAWINGS FOR COMPLETE DETAILS. FOR SERVICES TIE IN, SEE ELECTRICAL DRAWINGS FOR CONTINUATION.
 - ALL LANDSCAPE INFORMATION AROUND PROPOSED BUILDING PROVIDED BY LANDSCAPE ARCHITECT. REFER TO LANDSCAPE DRAWINGS FOR COMPLETE DETAILS.

- GEID WATERMAIN NOTES:
- ALL JOINTS AND FITTINGS TO BE PROTECTED BY DENSO PASTE AND TAPE AND BE PROTECTED BY SACRIFICIAL ANODES.
 - INSTALL #10 TO #12 GAUGE, SINGLE FIRE UF INSULATION TRACER WIRE ALONG ALL NEW WATERMAIN.
 - CONNECTION TO THE EXISTING WATERMAIN TO BE COMPLETED BY CONTRACTOR CREWS UNDER SUPERVISION OF GEID AT DEVELOPER'S EXPENSE. ADVANCE NOTICE IS REQUIRED TO PERMIT GEID TO NOTIFY EXISTING CUSTOMERS OF THE DISRUPTION, AND A WORK PLAN/SCHEDULE SHALL BE PROVIDED BY CONTRACTOR AND APPROVED BY GEID PRIOR TO THE TIE-IN PROCEEDING.

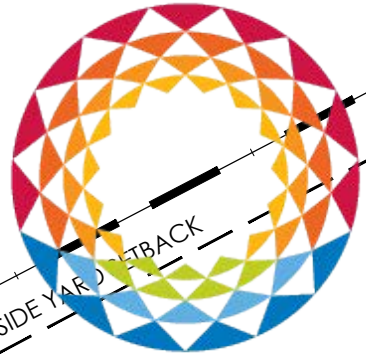
- NOTES:
- ALL WORK TO BE CONSTRUCTED IN ACCORDANCE WITH MMCD PLATINUM EDITION VOLUME II, THE CITY OF KELOWNA SUBDIVISION, DEVELOPMENT AND SERVICING BY-LAW NO. 7900 AND AMENDMENTS, AND BC BUILDING CODE 2018.
 - VERIFY LOCATION AND GRADE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OF PROPOSED STORM, SANITARY AND WATER MAINS.
 - MEASURE INFORMATION (LOCATION/ELEVATION) ANY AND ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION AND FORWARD THIS INFORMATION TO CTQ CONSULTANTS LTD.
 - ENSURE MINIMUM COVER OVER WATERMAIN IS 1.5m.
 - ENSURE WATERMAINS HAVE HORIZONTAL SEPARATION, PIPE EDGE TO PIPE EDGE, OF 3.0m FROM STORM AND SANITARY MAINS AND A VERTICAL DIFFERENCE, PIPE EDGE TO PIPE EDGE, OF 0.45m AT CROSSINGS.
 - WRAP WATERMAIN JOINTS WHERE THERE IS NOT 0.45m VERTICAL AND 3.0m HORIZONTAL SEPARATION FROM SANITARY OR STORM MAINS. (USE I.H.A. APPROVED WRAP).
 - MARK ALL SERVICE STUB LOCATIONS WITH 2x4 POST PAINTED AS PER MMCD; WATER-BLUE, SANITARY-RED, STORM-GREEN. MARK POSTS WITH SERVICE DEPTH.

UNIVERSITY HEIGHTS
VINT ROAD MULTI-FAMILY
SITE LOCATION PLAN

C-01

14145-16
SCALE 1:5000
MARCH 1, 2019





VINT ROAD DEVELOPMENT									
CIVIC ADDRESS: SOUTH OF ACADEMY WAY									
CITY OF KELOWNA									
PROPOSED SUBDIVISION OF PART OF THE REMAINDER OF LOT C PLAN 33993 SEC. 3 TP. 23									
EXISTING ZONING: RMDh - LOW DENSITY ROW HOUSING									
PROPOSED ZONING: RMDh - LOW DENSITY ROW HOUSING									
SITE DETAILS									
SITE AREA:	45,900.00	sq. m							
SITE WIDTH:	160	m							
LOT COVERAGE:	55% MAX								
	BUILDING AREA	GROSS FLOOR AREA	NET FLOOR AREA	UNIT/	BLOCK	TBA	TGA	TNA	TU/B
	(sq. m)	(sq. m)	(sq. m)	BLOCK	QTY	(sq. m)	(sq. m)	(sq. m)	
BLOCK A - WU 2PLEX	133.8	367.7	259.8	2	5	668.9	1838.6	1298.8	10
BLOCK B - WU 2PLEX	145.0	409.0	258.1	2	1	145.0	409.0	258.1	2
BLOCK C - WU 4PLEX	275.4	768.7	536.4	4	5	1376.8	3843.4	2682.1	20
BLOCK D - WO 4PLEX	229.0	556.3	471.4	4	4	916.0	2225.2	1885.6	16
BLOCK E - WO 6PLEX	326.6	812.6	693.6	6	5	1632.8	4063.1	3468.1	30
BLOCK F - WO 8PLEX	461.4	1104.8	784.8	8	8	3691.6	8838.4	6278.8	64
					28	8431.1	21217.7		142
TOTAL UNITS									
SITE BUILDING COVERAGE:						8431.1	sq. m	18%	
EMERGENCY ACCESS ROUTE COVERAGE:						5172.0	sq. m	11%	
EXTERIOR PARKING COVERAGE:						4579.3	sq. m	10%	
TOTAL LOT COVERAGE:						13603.1	sq. m	30%	
DEVELOPMENT REGULATIONS									
TOTAL GROSS FLOOR AREA:	REQUIRED	PROPOSED							
FLOOR AREA RATIO (FAR):	N/A	21217.65	sq. m						
BUILDING HEIGHT	0.65	0.46							
2 STOREY WALK-UP	9.50	0.00	m						
2 STOREY WALK-OUT	9.50	0.00	m						
PROPERTY SETBACKS (m)									
BUILDING(S)									
FRONT (EAST)	3.00	5.28	m						
SIDE (NORTH)	5.15	5.15	m						
SIDE (SOUTH)	7.50	11.46	m						
REAR (WEST)	7.50	7.62	m						
ADJACENT BUILDINGS	3.00	4.00	m						
PARKING									
FRONT (EAST)		4.35	m						
SIDE (NORTH)		39.2	m						
SIDE (SOUTH)		N/A	m						
REAR (WEST)		7.28	m						
DRIVE AISLE WIDTH									
MAIN STEET	6.00	7.00	m						
UPPER EMERGENCY ROUTE	6.00	6.00	m						
PARKING REQUIREMENTS									
NO. OF 2 BEDRM	NO. OF 3 BEDRM								
BLOCK TYPE	UNITS	UNITS	BLOCK QTY	TTL 2BED	TTL 3BED	STALLS/			
BLOCK A - WU 2PLEX	2	5	0	10	4	20			
BLOCK B - WU 2PLEX	2	1	0	2	4	4			
BLOCK C - WU 4PLEX	4	5	0	20	8	40			
BLOCK D - WO 4PLEX	2	2	4	8	8	4	16		
BLOCK E - WO 6PLEX	2	3	5	10	15	6	30		
BLOCK F - WO 8PLEX	4	4	8	32	32	8	64		
			SUBTOTAL	50	87		174		
PROVIDED PARKING									
TOTAL STALLS @ UNIT	174								
UNIT ADJACENT STALLS	34								
ONSITE STALLS	74								
TOTAL PARKING PROVIDED	282								
REQUIRED PARKING									
2 PER 3 BEDROOM UNITS	174								
1.5 PER 2 BEDROOM UNITS	75								
VISITOR	20								
TOTAL PARKING REQUIRED	269								

#100 - 1353 ELLIS STREET,
KELOWNA, BC. V1Y 6Y9
p: 236.420.3550

www.bluegreenarchitecture.com

☐ KAMLOOPS
☒ KELOWNA

Seal

Notes

- The illustrated landscape plan is conceptual only...not for construction.
- All plants, material and planting practices to conform to the Canadian Landscape Standard - Current Edition
- Contractor to provide a warranty and maintenance period of 1 year on all plants and materials. Plants and materials that fail before end of the warranty period shall be replaced by the contractor.
- All planting areas to receive 450mm of topsoil. Lawn and dryland grass areas 300mm depth topsoil
- Prior to delivery to site, a representative sample and test results of topsoil should be made available to the consultant for approval.
- Plant material selections are conceptual only. Final planting selections may vary depending on availability. No plant species substitution will be accepted without the written consent of the consultant.
- All planting beds to receive 50 mm depth of Ogo - Grow mulch or approved equivalent..
- All planting beds and lawn areas to be irrigated.

Sodded Lawn area

Dryland Grass Mix

Dryland Grass Mix Seed Blend
(% by weight)

Crested Wheat Grass	20
Perennial Ryegrass	15
Slender Wheat Grass	10
Tall Wheat Grass	10
Hard Fescue	10
Crested Wheat Grass	10
Annual Ryegrass	10
Fall Ryegrass	15

Application Rate - 150 kg/ha
Seed Mix to be certified #1 Grade

Undisturbed Areas
Retain Natural conditions

Existing Trees to be retained (locations approximate)

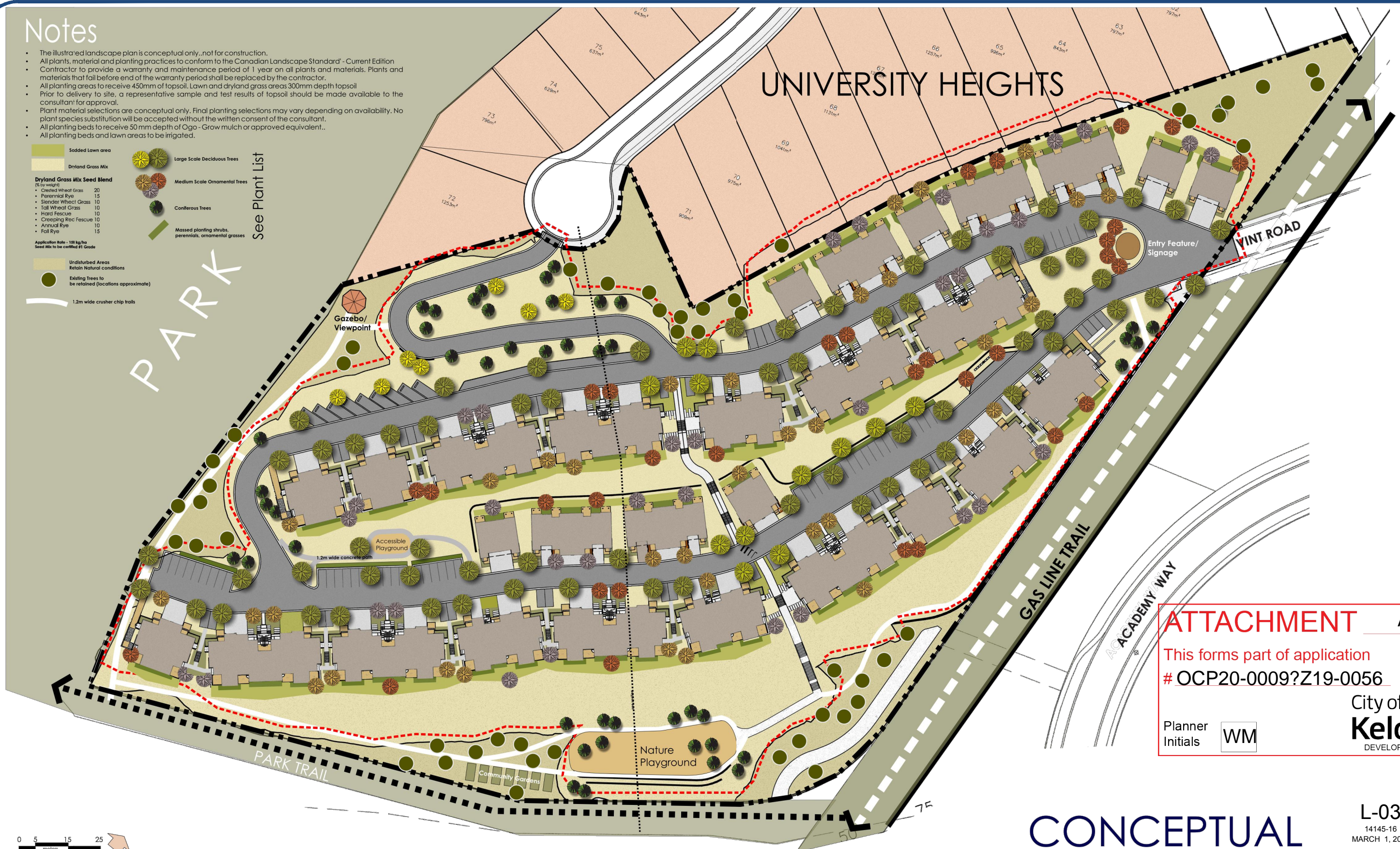
1.2m wide crusher chip trails

Plant List

- Large Scale Deciduous Trees
- Medium Scale Ornamental Trees
- Coniferous Trees
- Massed planting shrubs, perennials, ornamental grasses

See Plant List

UNIVERSITY HEIGHTS



ATTACHMENT A

This forms part of application
OCP20-0009?Z19-0056

Planner
Initials WM



City of
Kelowna
DEVELOPMENT PLANNING

CONCEPTUAL LANDSCAPE PLAN CTQ

L-03
14145-16
MARCH 1, 2019

VINT ROAD DEVELOPMENT

