

NOTES

1. PLANT MATERIAL AND CONSTRUCTION METHODS SHALL MEET OR EXCEED B.C.L.N.A. STANDARDS.
2. ALL SOFT LANDSCAPE AREAS SHALL BE WATERED BY A FULLY AUTOMATIC TIMED UNDERGROUND IRRIGATION SYSTEM.
3. TREE AND SHRUB BEDS TO BE DRESSED IN A MINIMUM 50mm WOOD MULCH. DO NOT PLACE WEED MAT UNDERNEATH TREE AND SHRUB BEDS.
4. TREE AND SHRUB BEDS TO RECEIVE A MINIMUM 300mm DEPTH TOPSOIL PLACEMENT.
5. TURF AREAS FROM SOD SHALL BE NO. 1 GRADE GROWN FROM CERTIFIED SEED OF IMPROVED CULTIVARS REGISTERED FOR SALE IN B.C. AND SHALL BE TOLERANT OF DROUGHT CONDITIONS. A MINIMUM OF 100mm DEPTH OF GROWING MEDIUM IS REQUIRED BENEATH TURF AREAS. TURF AREAS SHALL MEET EXISTING GRADES AND HARD SURFACES FLUSH.

PLANT LIST

BOTANICAL NAME	COMMON NAME	QTY	SIZE/SPACING & REMARKS
TREES			
ACER GRISEUM	PAPERBARK MAPLE	3	6cm CAL
ABIES BALSAMEA	BALSAM FIR	1	6cm CAL
POPULUS TREMULOIDES	TREMBLING ASPEN	6	6cm CAL
SYRINGA RETICULATA	JAPANESE TREE LILAC	1	6cm CAL
TILIA CORDATA	LITTLELEAF LINDEN	13	6cm CAL
SHRUBS			
EUONYMUS ALATUS 'COMPACTA'	DWARF BURNING BUSH	124	#01 CONT. /1.0M O.C. SPACING
FORSYTHIA INTERMEDIA 'COURDEAU'	GOLDEN PEEP FORSYTHIA	86	#01 CONT. /1.2M O.C. SPACING
SPIRAEA JAPONICA 'GOLDFLAME'	GOLDFLAME SPIREA	124	#01 CONT. /1.0M O.C. SPACING
SYMPHORICARPOS ALBUS	SNOWBERRY	38	#01 CONT. /1.8M O.C. SPACING
PINUS MUGO	MUGO PINE	86	#01 CONT. /1.2M O.C. SPACING
PERENNIALS & GRASSES			
ACHILLEA FILIFENDULINA 'CLOTH OF GOLD'	CLOTH OF GOLD YARROW	54	#01 CONT. /0.75M O.C. SPACING
ARRHENATHERUM E. BULBOSUM 'VARIEGATUM'	BULBOUS OAT GRASS	83	#01 CONT. /0.6M O.C. SPACING
CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	30	#01 CONT. /1.0M O.C. SPACING
CAREX MORWQII 'ICE DANCE'	ICE DANCE SEDGE	120	#01 CONT. /0.5M O.C. SPACING
DIGITALIS PURPUREA	FOXGLOVE	54	#01 CONT. /0.75M O.C. SPACING
ECHINACEA PURPUREA 'MAGNIUS'	PURPLE CONEFLOWER	54	#01 CONT. /0.75M O.C. SPACING
HELIOTRICHON SEMPERVIRENS	BLUE OAT GRASS	83	#01 CONT. /0.6M O.C. SPACING
HOSTA 'HALCYON'	HALCYON HOSTA	30	#01 CONT. /1.0M O.C. SPACING
LAVANDULA ANGUSTIFOLIA 'HIDCOTE'	ENGLISH LAVENDER	30	#01 CONT. /1.0M O.C. SPACING
MONDARDA DIDYMA	BEEBALM	54	#01 CONT. /0.75M O.C. SPACING
NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	30	#01 CONT. /1.0M O.C. SPACING
PHLOX PANICULATA	SUMMER PHLOX	54	#01 CONT. /0.75M O.C. SPACING
RUDBECKIA FULGIDA 'GOLDSTURM'	GOLDSTURM BLACK EYED SUSAN	83	#01 CONT. /0.6M O.C. SPACING
SALVIA NEMOROSA 'MAY NIGHT'	MAY NIGHT SALVIA	54	#01 CONT. /0.75M O.C. SPACING



PROJECT TITLE
PROVIDENCE BOULEVARD

Kelowna, BC

DRAWING TITLE
CONCEPTUAL LANDSCAPE PLAN

ISSUED FOR / REVISION

1	17.09.28	Review
2	17.12.04	Development Permit
3		
4		
5		

PROJECT NO: 17-105

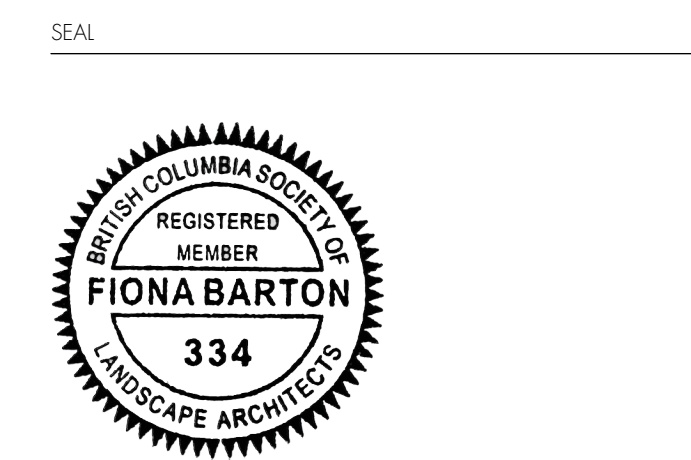
DESIGN BY: NG

DRAWN BY: NG

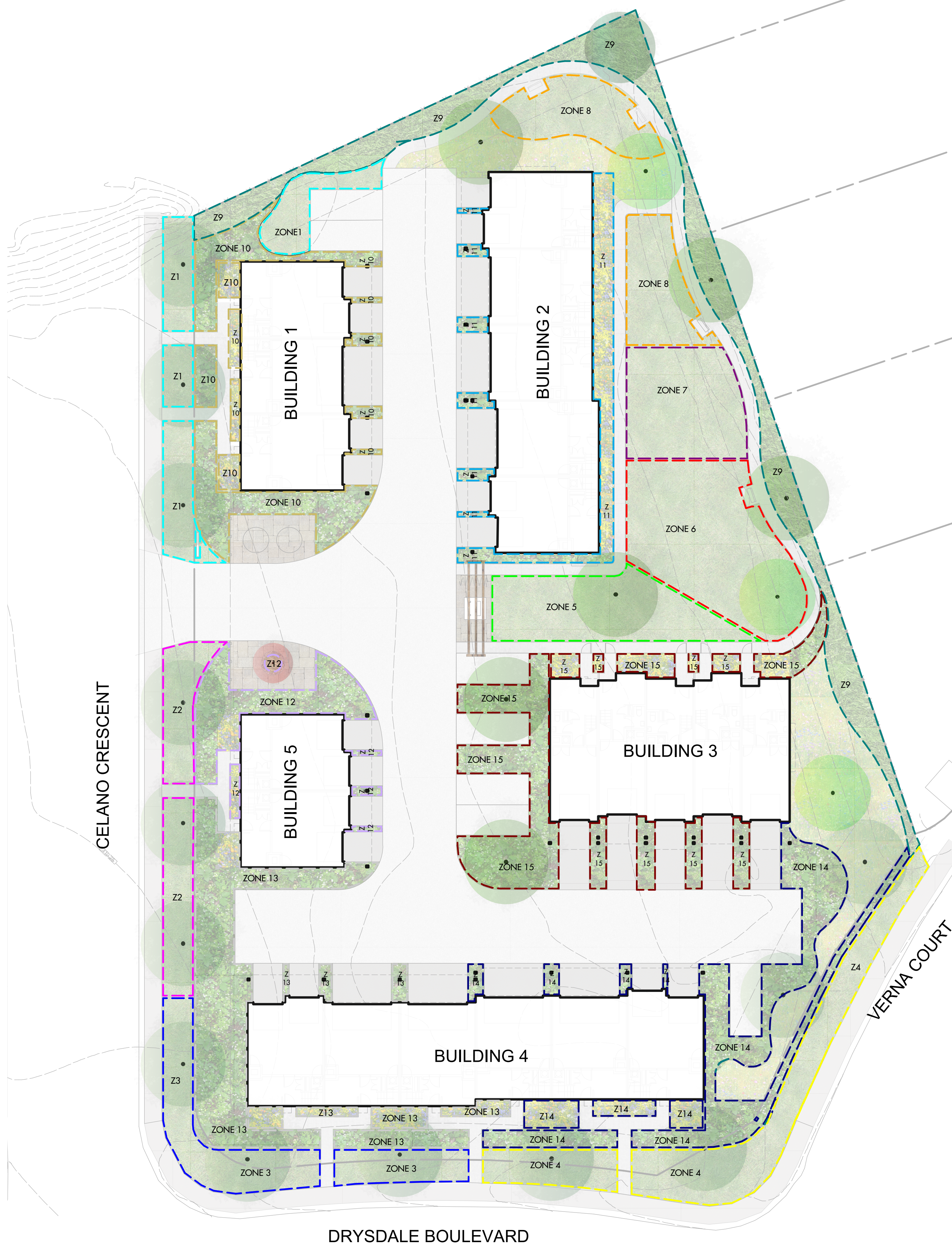
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DATE: DEC. 4, 2017

SCALE: 1:200



DRAWING NUMBER
L1/2



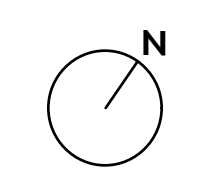
IRRIGATION LEGEND

	ZONE #1: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 106 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 151 cu.m.		ZONE #9: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 182 sq.m. MICROCLIMATE: NORTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 101 cu.m.
	ZONE #2: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 81 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 116 cu.m.		ZONE #10: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 136 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 76 cu.m.
	ZONE #3: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 107 sq.m. MICROCLIMATE: SOUTH WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 153 cu.m.		ZONE #11: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 82 sq.m. MICROCLIMATE: EAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 46 cu.m.
	ZONE #4: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 149 sq.m. MICROCLIMATE: SOUTH EAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 213 cu.m.		ZONE #12: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 139 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 77 cu.m.
	ZONE #5: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 101 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 144 cu.m.		ZONE #13: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 200 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 111 cu.m.
	ZONE #6: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 156 sq.m. MICROCLIMATE: EAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 223 cu.m.		ZONE #14: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 187 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 104 cu.m.
	ZONE #7: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 91 sq.m. MICROCLIMATE: EAST EXPOSURE, FULL SUN ESTIMATED ANNUAL WATER USE: 130 cu.m.		ZONE #15: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 168 sq.m. MICROCLIMATE: EAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 93 cu.m.
	ZONE #8: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREA TOTAL AREA: 117 sq.m. MICROCLIMATE: NORTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 167 cu.m.		

- ### IRRIGATION NOTES
- IRRIGATION PRODUCTS AND INSTALLATION METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE WATER USE REGULATION BYLAW NO. 10480 AND THE SUPPLEMENTARY SPECIFICATIONS IN THE CITY OF KELOWNA BYLAW 7900 (PART 6, SCHEDULE 5).
 - THE IRRIGATION SYSTEM SHALL MEET THE REQUIREMENTS, REGULATIONS, AND BYLAWS OF THE WATER PURVEYOR.
 - THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTION DEVICE, WATER METER, AND SHUT OFF VALVE LOCATED OUTSIDE THE BUILDING ACCESSIBLE TO THE CITY.
 - AN APPROVED SMART CONTROLLER SHALL BE INSTALLED. THE IRRIGATION SCHEDULING TIMES SHALL UTILIZE A MAXIMUM ET VALUE OF 7" / MONTH (KELOWNA JULY ET), TAKING INTO CONSIDERATION SOIL TYPE, SLOPE, AND MICROCLIMATE.
 - DRIP LINE AND EMITTERS SHALL INCORPORATE TECHNOLOGY TO LIMIT ROOT INTRUSION.
 - IRRIGATION SLEEVES SHALL BE INSTALLED TO ROUTE IRRIGATION LINES UNDER HARD SURFACES AND FEATURES.
 - IRRIGATION PIPE SHALL BE SIZED TO ALLOW FOR A MAXIMUM FLOW OF 1.5m / SEC.
 - A FLOW SENSOR AND MASTER VALVE SHALL BE CONNECTED TO THE CONTROLLER AND PROGRAMMED TO STOP FLOW TO THE SYSTEM IN CASE OF AN IRRIGATION WATER LEAK.

WATER CONSERVATION CALCULATIONS

LANDSCAPE MAXIMUM WATER BUDGET [WB] = 2,294.m. / year
 ESTIMATED LANDSCAPE WATER USE [WU] = 2,066 cu.m. / year
 WATER BALANCE = 228 cu.m. / year
 *REFER ATTACHED IRRIGATION APPLICATION FOR DETAILED CALCULATIONS



PROJECT TITLE
PROVIDENCE BOULEVARD

Location: Kelowna, BC
DRAWING TITLE

WATER CONSERVATION & IRRIGATION PLAN

ISSUED FOR / REVISION

1	17.09.28	Review
2	17.12.04	Development Permit
3		
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5		

PROJECT NO: 17-105

DESIGN BY	NG
DRAWN BY	NG
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DATE	DEC 4, 2017
SCALE	1:200

SEAL



DRAWING NUMBER

L2/2