LANDSCAPE NOTES

ALL OF THE CLAUSES STATED BELOW ARE THE MINIMUM STANDARD UNLESS A HIGHER STANDARD HAS BEEN INDICATED ELSEWHERE IN THE CONTRACT DOCUMENTS.

A. GENERAL NOTES

- 1. THESE NOTES ARE SPECIFIC TO WORK IDENTIFIED ON LANDSCAPE DRAWINGS ONLY AND ARE TO BE READ IN THE CONTEXT OF, AND IN CONJUNCTION WITH THE COMPLETE SET OF CONTRACT DOCUMENTS INCLUDING THE 2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, WRITTEN SPECIFICATIONS, DRAWINGS, AND OTHER DETAILS AS ISSUED FOR THIS PROJECT.
- 2. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SITE PRIOR TO SUBMITTING BIDS; OR, SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS. ANY DISCREPANCIES BETWEEN THE EXISTING SITE AND THESE DRAWINGS ARE TO BE REPORTED TO THE MINISTRY REPRESENTATIVE FOR CLARIFICATION PRIOR TO BIDDING.
- 3. THE LIMITS OF THE WORK ARE TO BE CLEARLY UNDERSTOOD BY THE CONTRACTOR PRIOR TO ANY WORK TAKING PLACE ON SITE. THE CONTRACTOR IS TO CONTACT THE MINISTRY REPRESENTATIVE FOR CLARIFICATION IF REQUIRED.
- 4. ALL ANCILLARY WORK NORMALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION INDICATED ON THE CONTRACT DRAWINGS AND DOCUMENTS SHALL BE DEEMED TO BE PART OF THE CONTRACT.
- 5. ANY AMBIGUITY IN THIS DRAWING OR ACCOMPANYING DETAILS IS TO BE REPORTED TO THE MINISTRY REPRESENTATIVE. THE CONTRACTOR SHALL NOT PROCEED WITHOUT A CLEAR UNDERSTANDING OF THE
- 6. THE CONTRACTOR IS RESPONSIBLE, PRIOR TO THE START OF CONSTRUCTION, TO COORDINATE WITH LOCAL UTILITY CORPORATIONS TO LOCATE, OR ARRANGE THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE
- 7. THE CONTRACTOR IS RESPONSIBLE FOR GENERAL SITE CLEAN UP AND RESTORATION TO AREAS DISTURBED BY CONSTRUCTION ACTIVITY, INCLUDING ANY AND ALL DAMAGE TO THE EXISTING SITE OUTSIDE THE LIMITS OF WORK. ALL REPARATIONS MUST BE RESTORED TO PRE-CONSTRUCTION CONDITION AND SHALL BE EITHER INCIDENTAL TO OTHER PAY ITEMS OR AT THE CONTRACTOR'S OWN EXPENSE.

B. PERMITS. MATERIAL STANDARDS AND PRODUCT TESTING

- 1. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY ARRANGEMENTS ARE MADE WITH APPROPRIATE REGULATORY AUTHORITIES CONCERNING THE MOVEMENT OF MATERIALS AND EQUIPMENT NEAR ANY RIGHTS-OF-WAY.
- 2. THE CONTRACTOR SHALL PROVIDE PRODUCT SAMPLES FOR ALL MATERIALS, FINISHES, PRODUCTS AND MULCHES UNLESS NOTED OTHERWISE (U.N.O.). SAMPLES SHALL BE PROVIDED TO THE MINISTRY REPRESENTATIVE FOR APPROVAL PRIOR TO DELIVERY TO THE SITE.
- 3. A QUALITY CONTROL TEST PANEL COMPLETE WITH JOINTS SHALL BE IDENTIFIED FOR ALL DECORATIVE LANDSCAPE OR PEDESTRIAN SURFACING TREATMENTS. TEST PANELS SHALL BE A MINIMUM OF 2.0 m2 IN SIZE AND SHALL BE A MINISTRY REPRESENTATIVE APPROVED REPRESENTATIVE SAMPLE OF THE QUALITY EXPECTATIONS FOR THE WORK. TEST PANELS SHALL BE MAINTAINED IN APPROVED CONDITION FOR COMPARATIVE REVIEW UNTIL SUBSTANTIAL PERFORMANCE HAS BEEN PROVIDED ON ALL WORK.
- 4. ALL SUBGRADE PREPARATION UNDER LANDSCAPE SURFACES SHALL BE INSPECTED BY THE MINISTRY REPRESENTATIVE TO ENSURE SUBGRADE IS NOT OVER-COMPACTED AND HAS DESIRABLE DRAINAGE. INSPECTIONS SHALL BE PERFORMED PRIOR TO PLACEMENT OF GROWING MEDIUM OR OTHER LANDSCAPE MATERIALS.
- FINISHING OF FORMED SURFACES EXPOSED TO VIEW SHALL BE FREE OF BULGES, FINS, LIPS, AND STAINS.
 ALL IMPERFECTIONS SHALL BE REMOVED BY CHIPPING OR GRINDING AND SHALL BE PATCHED AND
 REPAIRED AS SPECIFIED. PREVENT DISLODGEMENT OF COARSE AGGREGATE PARTICLES.

C. TREE PROTECTION

- 1. TREE PROTECTION SHALL BE PROVIDED WHERE INDICATED ON THE LANDSCAPE PLANS AND SHALL CONSIST OF A TEMPORARY FENCE OR APPROVED EQUIVALENT BARRIER AT THE DRIP LINE OF THE CANOPY UNLESS APPROVED OTHERWISE.
- 2. THE TREE PROTECTION MEASURES SHALL REMAIN IN PLACE UNTIL SUCH TIME AS THE REMOVAL IS APPROVED BY THE MINISTRY REPRESENTATIVE.
- NO CONSTRUCTION MATERIAL SHALL BE STORED WITHIN THE TREE PROTECTION ZONE.
 DURING ANY SITE DEMOLITION OR EARTHWORKS THE CONTRACTOR SHALL ENSURE THAT TREE
- PROTECTION FENCING IS MAINTAINED TO THE FULL EXTENTS OF THE DRIP LINE.
- 5. ANY CONSTRUCTION ACTIVITY WITHIN DESIGNATED TREE PROTECTION AREAS SHALL BE PRE-APPROVED BY THE MINISTRY REPRESENTATIVE PRIOR TO COMMENCEMENT OF SAID ACTIVITY. A CERTIFIED ARBORIST, OR OTHER QUALIFIED PROFESSIONAL MAY PROVIDE ADDITIONAL INPUT OR CONDITIONS UNDER WHICH CONSTRUCTION MAY TAKE PLACE.

D. LAYOUT

- 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.).
- 2. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE MINISTRY REPRESENTATIVE FOR FURTHER DIRECTION OR CLARIFICATION.
- 3. THE CONTRACTOR SHALL CONFIRM ON-SITE LAYOUT REQUIREMENTS OF LANDSCAPE MATERIAL, PLANTS, PRODUCTS AND OTHER SITE AMENITIES WITH THE MINISTRY REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.

E. MATERIALS

REPRESENTATIVE FOR DIRECTION.

- THE CONTRACTOR SHALL SUPPLY ALL MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS. ANY DISCREPANCIES IN QUANTITIES SHALL BE REPORTED TO THE MINISTRY
- 2. NO SUBSTITUTIONS OF MATERIALS, PRODUCTS, OR QUANTITIES SHALL BE PERMITTED WITHOUT PRIOR CONSENT OF THE MINISTRY REPRESENTATIVE

F. PLANTING

- 1. ALL PLANTS SHALL BE NURSERY GROWN STOCK; LOCALLY HARDENED AND ACCLIMATIZED UNLESS APPROVED OTHERWISE AND SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE CANADIAN NURSERY
- TRADES ASSOCIATION FOR SIZE, HEIGHT, SPREAD, GRADING, QUALITY, AND METHOD OF CULTIVATION.

 2. ALL PLANTS TO BE AVAILABLE AT ONE LOCATION FOR INSPECTION AND APPROVAL AT LEAST 1 WEEK PRIOR TO INSTALLATION.
- 3. PRIOR TO PLANTING, ALL AREAS SHALL BE FREE FROM WEEDS AND INVASIVE SPECIES. INVASIVE SPECIES MANAGEMENT MAY INCLUDE PHYSICAL, CULTURAL, BIOLOGICAL AND CHEMICAL METHODS AS PERMITTED BY PROVINCIAL AND MUNICIPAL BYLAW AND REGULATION. NOXIOUS WEEDS SHALL BE MANAGED AS GOVERNED BY THE BC WEED CONTROL ACT.
- PLANTING SHALL NOT OCCUR WHEN SOILS ARE SATURATED OR FROZEN. PLANTING SHOULD OCCUR IN FALL OR SPRING, OUTSIDE OF TYPICAL SUMMER DROUGHT CONDITIONS. IF PLANTING OCCURS BETWEEN THE MONTHS OF JUNE AND SEPTEMBER, ADDITIONAL SUPPLEMENTAL WATERING MAY BE REQUIRED.
 ALL TOPSOIL AND GROWING MEDIUM UTILIZED ON THIS PROJECT SHALL BE IN CONFORMANCE WITH MOTI
- STANDARD SPECIFICATION SECTION 751; TOPSOIL AND LANDSCAPE GRADING UNLESS NOTED OTHERWISE.

 6. ESTABLISHMENT MAINTENANCE FOR ALL AREAS SHALL BE IN CONFORMANCE WITH MOTI STANDARD
- SPECIFICATIONS UNLESS NOTED OTHERWISE.
- ALL TREE TIES AND STAKES SHALL BE REMOVED BETWEEN 12 AND 14 MONTHS AFTER INSTALLATION EXCEPT WHERE STABILIZATION OF PLANTS IS DIRECTED TO REMAIN IN PLACE FOR LONGER PERIODS DUE TO SPECIAL CONSIDERATIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR STAKE REMOVAL.

G. RIPARIAN AREAS

- LARGE WOODY DEBRIS (LWD)
- 1.1. REFER TO DETAIL DRAWINGS FOR LARGE WOODY DEBRIS (LWD) LOG FEATURE DETAILS.
- 1.2. QUANTITY OF LWD ON LANDSCAPE PLAN IS APPROXIMATE BASED ON SUITABILITY OF ONSITE STOCK OF LOGS FROM TREE REMOVALS. QUANTITY AND LOCATION OF LOG FEATURES TO BE CONFIRMED WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

2. LIVE STAKE PLANTING

- 2.1. DORMANT PLANTS (LIVE STAKES) SHALL BE HARVESTED AND INSTALLED DURING THE DORMANT SEASON, AFTER THE BUDS HAVE SET IN THE LATE FALL UNTIL BEFORE THE BUDS BREAK IN EARLY SPRING (GENERALLY END OF NOVEMBER TO END OF MARCH).
- 2.2. STAKES SHALL BE SOURCED FROM AREAS REPRESENTING THE PLANTING SITE'S CONDITIONS WITHIN A 50km RADIUS OF THE PROJECT SITE. CONTRACTOR MUST DISCLOSE SOURCE SITE IF REQUESTED.
- 2.3. HARVEST METHODOLOGY
 a. WHEN HARVESTING STAKES, SELECT HEALTHY, LIVE WOOD THAT IS REASONABLY STRAIGHT.
 - b. HARVEST LIVE WOOD AT LEAST 1 YEAR OLD OR OLDER. AVOID SUCKERS OF CURRENT YEARS
 GROWTH. THE BEST WOOD IS 2-4 YEARS OLD WITH SMOOTH BARK THAT IS NOT DEEPLY FURROWED
 c. MAKE CLEAN CUTS WITHOUT SPLITS IN THE ENDS.
 - d. TRIM BRANCHES FROM STAKES AS CLOSE AS POSSIBLE TO THE MAIN STEM.
 - e. THE BUTT END OF THE CUTTING SHALL BE ANGLED AND THE TOP END SHALL BE CUT SQUARE
- f. DIAMETER:STAKES TO BE A MINIMUM OF 20mm DIAMETER.
- STAKES SHOULD GENERALLY BE BETWEEN 20mm AND 30mm IN DIAMETER.
- g. LENGTH:
 STAKES TO BE A MINIMUM OF 18 INCHES (500mm) LONG. STAKES THICKER THAN 1.5 INCHES (40mm)
- SHOULD BE LONGER, 0.5 to 1 METER.

 STAKES SHOULD BE CUT SO THAT TERMINAL BUD SCAR IS WITHIN 1-4 INCHES (25-100mm) OF THE
- TOP. EACH STAKE SHOULD HAVE A MINIMUM OF 6 BUDS AND / OR BUD SCARS.

 2.3. LIVE STAKE BUNDLES SHALL CONSIST OF 8 TO 10 LIVE STAKES DEPENDING ON THE LIVE STAKE DIAMETER (i.e., 8 x 30mm STAKES OR 10 x 20mm STAKES). EACH BUNDLE SHALL CONTAIN A MINIMUM OF TWO DIFFERENT SPECIES AS NOTED IN THE RIPARIAN RESTORATION AREAS PLANTING SCHEDULE.

2.4. HANDLING

- a. STAKES MUST NOT BE ALLOWED TO DRY OUT. STAKES TO BE INSTALLED WITHIN ONE (1) DAY AFTER HARVEST UNLESS PRE-SOAKED. SOAKING SHALL CONSIST OF FULLY IMMERSING THE STAKES IN WATER FOR A MINIMUM OF 24 HOURS PRIOR TO INSTALLATION.
- b. STAKES NOT INSTALLED WITHIN 1 WEEK AFTER HARVEST NEED TO BE KEPT DORMANT IN COLD STORAGE.

2.1. PLANTING

- a. INSTALL LIVE CUTTINGS AT SPACING INDICATED IN PROJECT PLANT SCHEDULE.b. USE AN IRON STAKE OR BAR TO MAKE A PILOT HOLE IN FIRM SOIL. OTHER METHODS OF LIVE STAKE
- PLANTING MAY BE CONSIDERED WITH PRIOR APPROVAL FROM MINISTRY REPRESENTATIVE.

 c. INSTALL LIVE CUTTING AS PER INSTALLATION DETAIL & ADDITIONALLY:
- CUTTINGS MUST BE PLANTED WITH A MINIMUM OF TWO LEAF BUD SCARS BURIED AND EMERGING BUDS SHOULD ALWAYS POINT UP.
- SET STAKE AS DEEP AS POSSIBLE INTO SOIL AND IN CONTACT WITH MID-SUMMER WATER TABLE.
- TAMP SOIL AROUND THE CUTTING.
- DO NOT DRIVE THE LIVE STAKES INTO THE GROUND WITH A HAMMER.
- SPLIT OR DAMAGED STAKES SHALL BE REMOVED AND REPLACED.

H. SOD MIX

. SOD SHALL BE A DROUGHT-TOLERANT TURF BLEND COMPOSED OF:

COMMON NAME BOTANICAL NAME % B	Y WEIGHT
RED FESCUE FESTUCA RUBRA	35%
CHEWINGS FESCUE FESTUCA RUBRA COMMUTATA 2	25%
SHEEP FESCUE FESTUCA OVINA 2	20%
HARD FESCUE FESTUCA BREVIPILA 2	20%

. ESTABLISHMENT MAINTENANCE

. ESTABLISHMENT MAINTENANCE SHALL BE PERFORMED BY THE CONTRACTOR AS PER MOTI STANDARD SPECIFICATION SECTION 754.

PROJECT PLANT SCHEDULE - TREES AND SHRUBS (BY OTHERS)

TREES GRAND FIR	BOTANICAL NAME ABIES GRANDIS	CONTAINER B&B	CAL. (MM)	HGT. (M) 1.5		QTY 1
PAPER BIRCH	BETULA PAPYRIFERA	B&B	60			6
TUXEDO WHITE ASH	FRAXINUS AMERICANA 'DURGAR'	B&B	60			6
WESTERN MOUNTAIN ASH	SORBUS SITCHENSIS	B&B	60			5
PARK SHRUB PLANTING SERVICEBERRY	BOTANICAL NAME AMELANCHIER ALNIFOLIA	CONTAINER #3	SPACING (M) 2.00	HEIGHT (MM)	SPACING 2m	QTY 17
TUFTED HAIR GRASS	DESCHAMPSIA CESPITOSA	#1	0.45		0.45m	552
SWEETGRASS	HIEROCHLOE ODORATA	#1	0.50		0.5m	94
WILD MINT	MENTHA ARVENSIS	#1	0.80		0.8m	66
NOOTKA ROSE	ROSA NUTKANA	#3	1.50		1.5m	32
SOOPOLALLIE	SHEPHERDIA CANADENSIS	#1	1.75		1.75m	28
COMMON WHITE SNOWBERRY	SYMPHORICARPOS ALBUS	#3	1.50		1.5m	127
XERISCAPE PLANTING KINNIKINNICK	BOTANICAL NAME ARCTOSTAPHYLOS UVA-URSI	CONTAINER #1	SPACING (M) 1.50	HEIGHT (MM)	SPACING 1.5m	QTY 8
SILVER KING WHITE SAGEBRUSH	ARTEMISIA LUDOVICIANA 'SILVER KING'	#1	0.75		0.75m	19
BIG SAGEBRUSH	ARTEMISIA TRIDENTATA	#3	1.50		1.5m	5
TUFTED HAIR GRASS	DESCHAMPSIA CESPITOSA	#1	0.45		0.45m	71
BLUE OAT GRASS	HELICTOTRICHON SEMPERVIRENS	#1	0.50		0.5m	47
STELLA DE ORO DAYLILY	HEMEROCALLIS X 'STELLA DE ORO'	#1	0.30		0.3m	79
BLUEBUNCH WHEATGRASS	PSEUDOROEGNERIA SPICATA	#1	0.50		0.5m	34
NOOTKA ROSE	ROSA NUTKANA	#3	1.50		1.5m	11

PROJECT PLANT SCHEDULE - RIPARIAN RESTORATION PLANTING AREAS

LIVE STAKE

LIVE STAKE

PER DETAIL

PER DETAIL

35%

35%

SALIX BEBBIANA

SALIX LUCIDA

BEAKED WILLOW

PACIFIC WILLOW

<u>LIVE STAKE PLANTING - IN RIPRA</u>	<u>.P</u>	PLANT SQUARE SPACING IN SAME SPECIES IN SWATHS OF 10-25m2							
APPROXIMATE TOTAL PROJECT P	PLANTED AREA (m2)	735							
COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING (m)	DESIRED % (OF TOTAL AREA)	SPACING (m)	QTY / m2	APPROXIMATE TOTAL m2 PLANTED	TOTAL PROJECT QTY. REQ'D	<u>NOTES</u>
RED TWIG DOGWOOD	CORNUS SERICEA	LIVE STAKE	1.25	25%	1.25	0.64	184	120	
NOOTKA ROSE	ROSA NUTKANA	LIVE STAKE	1.25	25%	1.25	0.64	184	120	Space live stakes between 1.5m on centre as per ripra
BEAKED WILLOW	SALIX BEBBIANA	LIVE STAKE	1.25	25%	1.25	0.64	184	120	void availability
PACIFIC WILLOW	SALIX LUCIDA	LIVE STAKE	1.25	25%	1.25	0.64	184	120	
LIVE STAKE PLANTING - NO RIPRA	<u>AP</u>			PLANT SQUARE	SPACING IN SAM	E SPECIES IN SW	/ATHS OF 10-25m2		
APPROXIMATE TOTAL PROJECT P	PLANTED AREA (m2)	585							
COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING (m)	DESIRED % (OF TOTAL AREA)	SPACING (m)	QTY / m2	APPROXIMATE TOTAL m2 PLANTED	TOTAL PROJECT QTY. REQ'D	NOTES
SITKA ALDER	ALNUS VIRIDIS SINUATA	LIVE STAKE	1.2	20%	1.20	0.69	117	80	
RED TWIG DOGWOOD	CORNUS SERICEA	LIVE STAKE	1.2	20%	1.20	0.69	117	80	
NOOTKA ROSE	ROSA NUTKANA	LIVE STAKE	1.2	10%	1.20	0.69	59	40	
BEAKED WILLOW	SALIX BEBBIANA	LIVE STAKE	1.2	25%	1.20	0.69	146	100	
PACIFIC WILLOW	SALIX LUCIDA	LIVE STAKE	1.2	25%	1.20	0.69	146	100	
PLUG PLANTING				PLANT SQUARE	SPACING IN SAM	E SPECIES IN SW	/ATHS OF 10-25m2		
APPROXIMATE TOTAL PROJECT P	PLANTED AREA (m2)	585							
COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING (m)	DESIRED % (OF TOTAL AREA)	SPACING (m)	QTY / m2	APPROXIMATE TOTAL m2 PLANTED	TOTAL PROJECT QTY. REQ'D	<u>NOTES</u>
PEARLY EVERLASTING	ANAPHALIS MARGARITACEA	PLUG	0.5	10%	0.50	4.00	59	240	
BLACK HAWTHORN	CRATAEGUS DOUGLASII SUKSDORFII	PLUG	0.5	15%	0.50	4.00	88	350	
EIGHTPETAL MOUNTAIN-AVENS	DRYAS OCTOPETALA	PLUG	0.5	10%	0.50	4.00	59	240	
FIREWEED	EPILOBIUM ANGUSTIFOLIUM	PLUG	0.5	10%	0.50	4.00	59	240	
CREEPING MAHONIA	MAHONIA REPENS	PLUG	0.5	10%	0.50	4.00	59	240	
CHOKECHERRY	PRUNUS VIRGINIANA	PLUG	0.5	10%	0.50	4.00	59	240	
RUSSETT BUFFALOBERRY	SHEPHERDIA CANADENSIS	PLUG	0.5	10%	0.50	4.00	59	240	
GOLDENROD	SOLIDAGO CANADENSIS	PLUG	0.5	25%	0.50	4.00	146	580	
LIVE STAKE BUNDLES - IN DIKE R	<u>IIPRAP</u>								
APPROXIMATE TOTAL PROJECT P	PLANTED AREA (m2)	821	8-10 LIVE STAKE	S PER BUNDLE (RI	EFER PROJECT N	OTES)			
COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING (m)	DESIRED % (OF TOTAL AREA)	SPACING (m)	QTY / m2	APPROXIMATE TOTAL m2 PLANTED	<u>TOTAL</u> PROJECT QTY. <u>REQ'D</u>	NOTES
RED TWIG DOGWOOD	CORNUS SERICEA	LIVE STAKE	PER DETAIL	30%		PER DETAIL		130	Space live stake bundles
						DED DETAIL			Space in a state buildies

		URBAN SYSTEMS		BRITISH COLUMBIA BRITISH AND INFRASTRUCTURE SOUTHERN INTERIOR REGION HIGHWAY ENGINEERING AND GEOMATICS
SCALE: NO	OT TO SCALI		LAND-R2-1131-1100 2023-11-16	LANDSCAPE NOTES HIGHWAY No. 95
REV DAT	TE	REVISIONS	NAME	KICKING HORSE RIVER BRIDGE 1 & 2 REPLACEMENT AND APPROACHES
				DESIGNED S. MCCOY DATE 2023-11-16 QUALITY CONTROL J. WILKISON DATE 2023-11-16 SENIOR DESIGNER QUALITY ASSURANCE T. BLACKBURN DATE 2023-11-16

DATE 2023-11-15

FILE NUMBER

1961.0459.01

PER DETAIL

PER DETAIL

PROJECT NUMBER

26379-0000

PLANT TRIANGULAR SPACING AS PER DETAIL - MIN TWO SPECIES PER BUNDLE

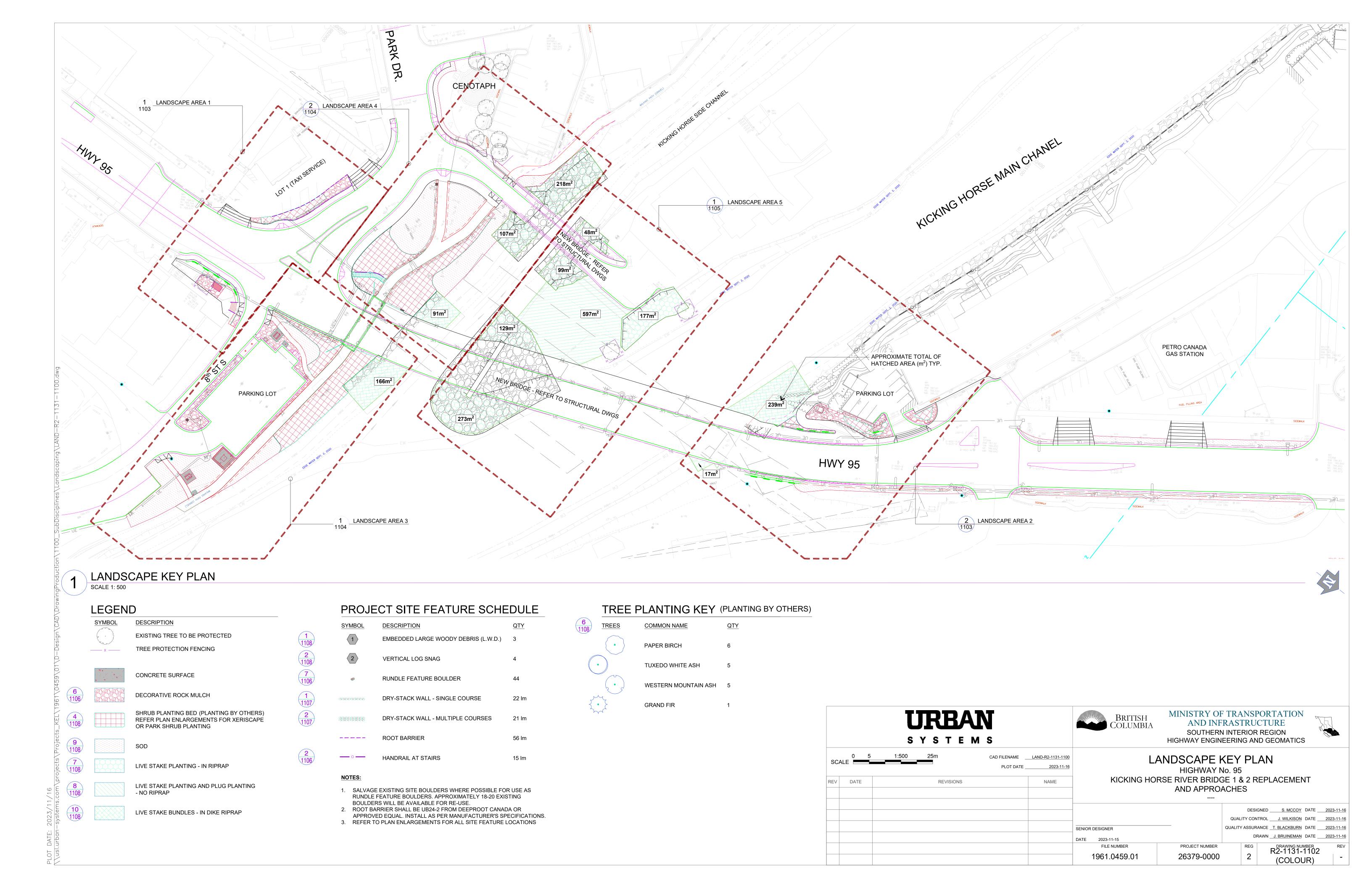
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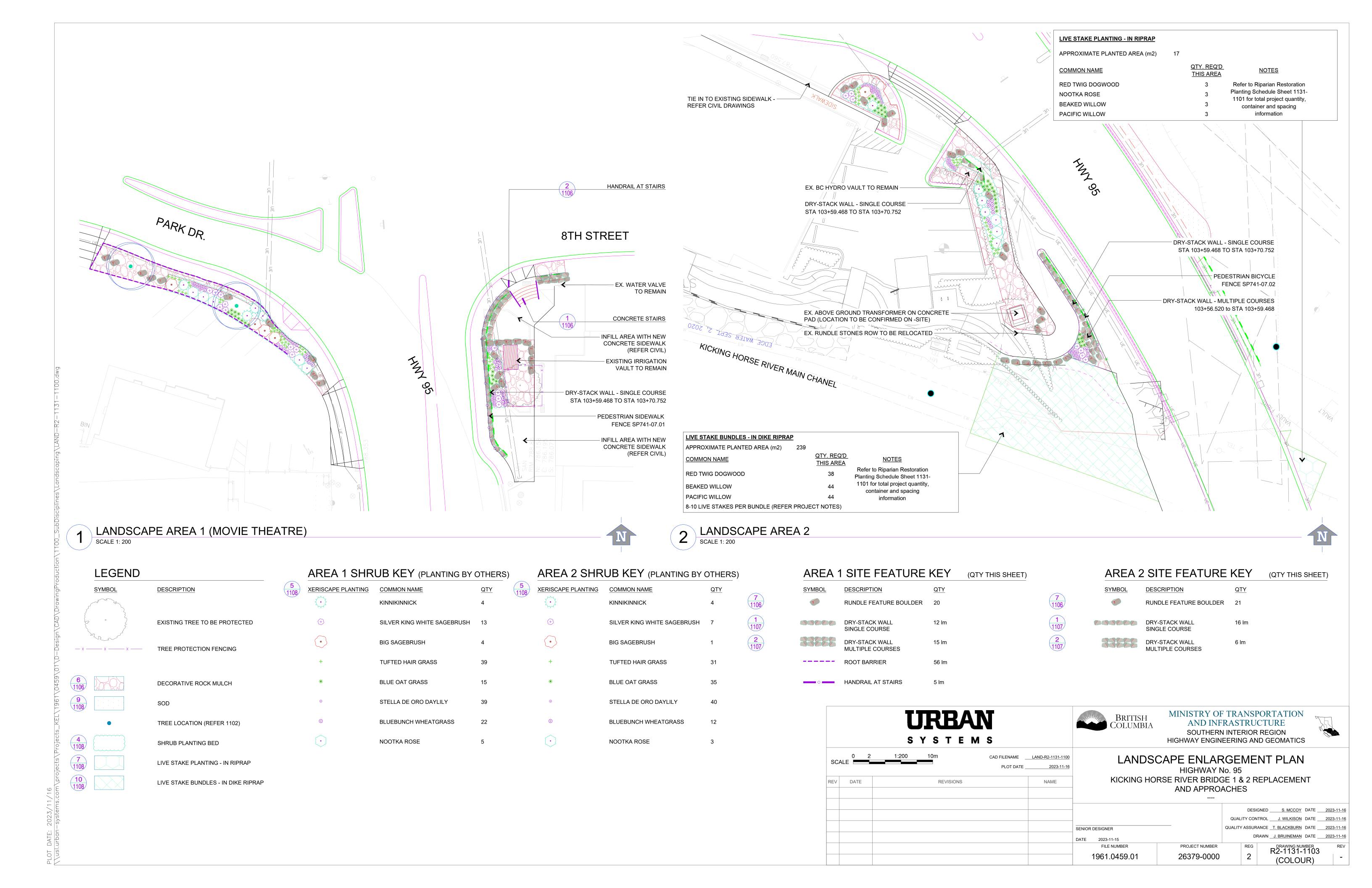
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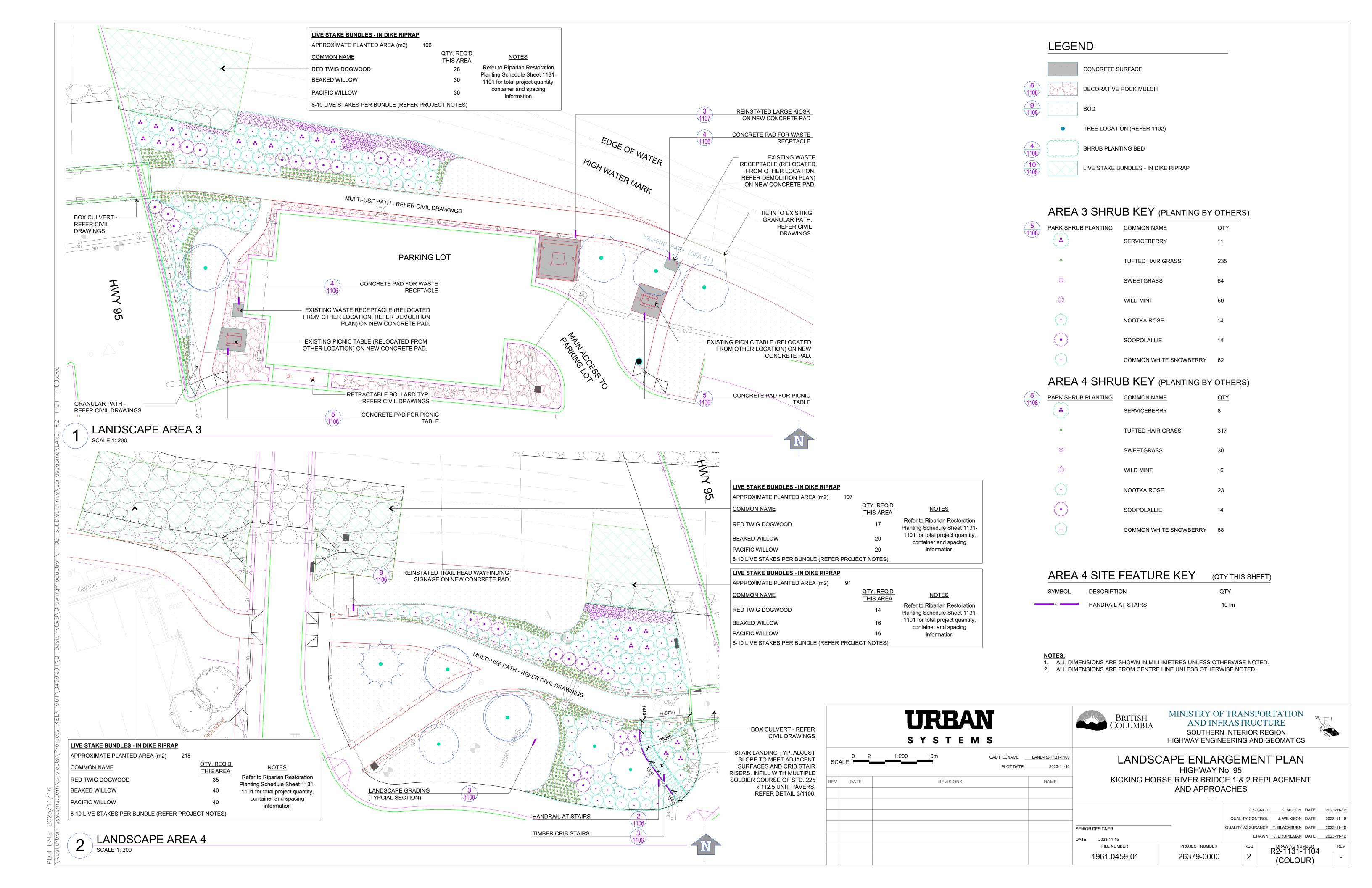
DRAWN J. BRUINEMAN DATE 2023-11-16

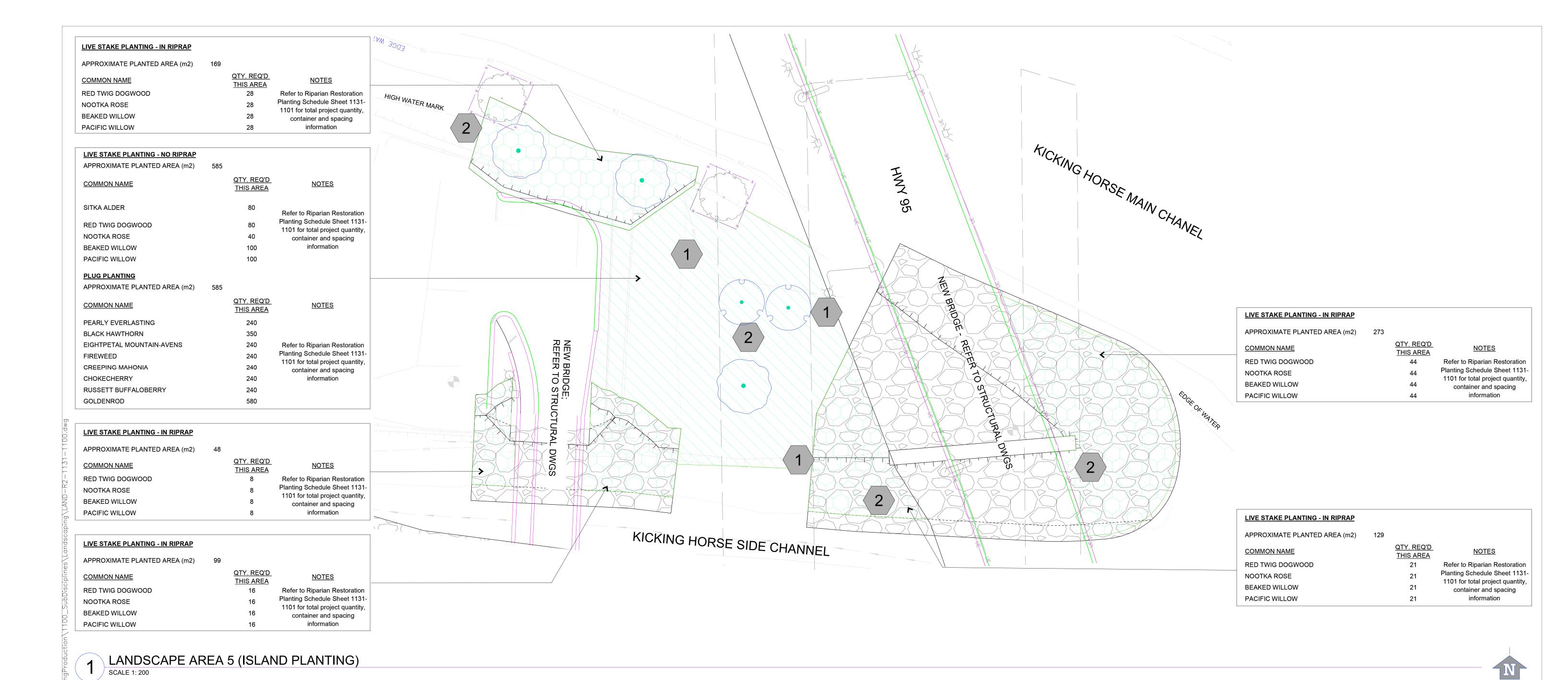
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(COLOUR)









LEGEND

SYMBOL

DESCRIPTION

EXISTING TREE TO BE PROTECTED

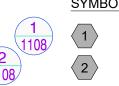
TREE PROTECTION FENCING



LIVE STAKE PLANTING - IN RIPRAP

LIVE STAKE PLANTING AND PLUG PLANTING - NO RIPRAP

AREA 5 SITE FEATURE KEY (QTY THIS SHEET)



DESCRIPTION EMBEDDED LARGE WOODY DEBRIS (L.W.D.)

VERTICAL LOG SNAG



BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE SOUTHERN INTERIOR REGION



LANDSCAPE ENLARGEMENT PLAN
HIGHWAY No. 95

KICKING HORSE RIVER BRIDGE 1 & 2 REPLACEMENT AND ADDDOACHES

AND APPROACHES						
	DESIGNED	S. MCCOY	DATE _	2023-11-16		
	QUALITY CONTROL	J. WILKISON	DATE _	2023-11-16		
SENIOD DESIGNED	QUALITY ASSURANCE	T. BLACKBURN	DATE	2023-11-16		

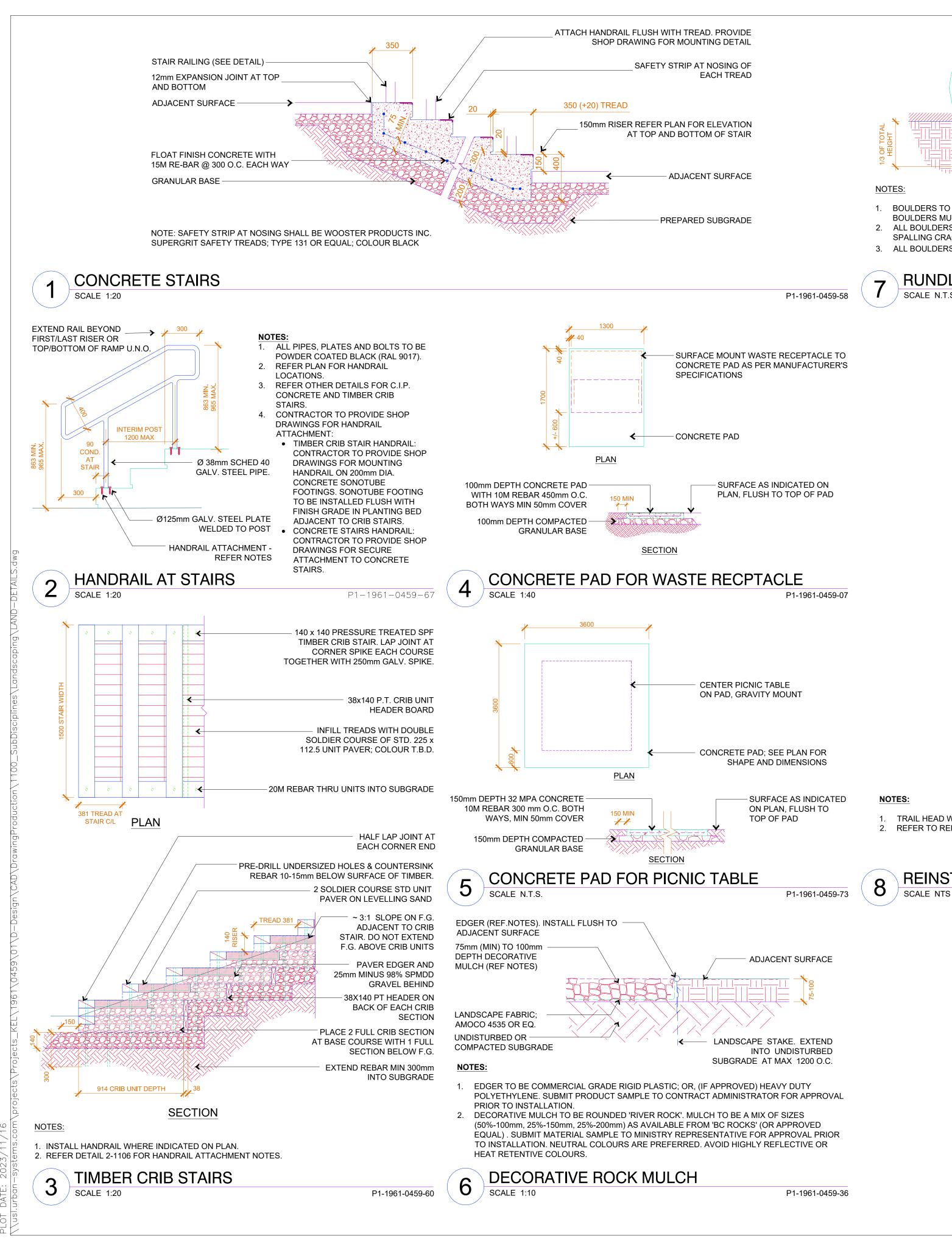
GNER		QUALITY	/ ASSUR	ANCE <u>T. BLACKBURN</u> DATE	2023-11-1
			D	RAWN J. BRUINEMAN DATE	2023-11-
023-11-15					
FILE NUMBER	PROJECT NUMBER		REG	DRAWING NUMBER	RE
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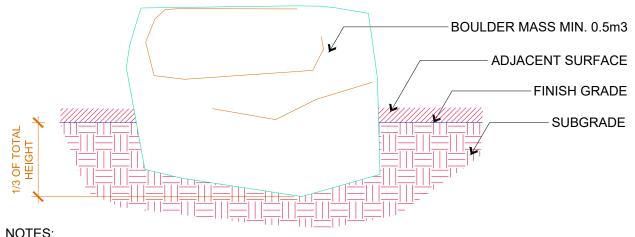




	2023-11-16	PLOT DATE _	ALE	SC
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DATE				
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DATE _____2023-11-16 1961

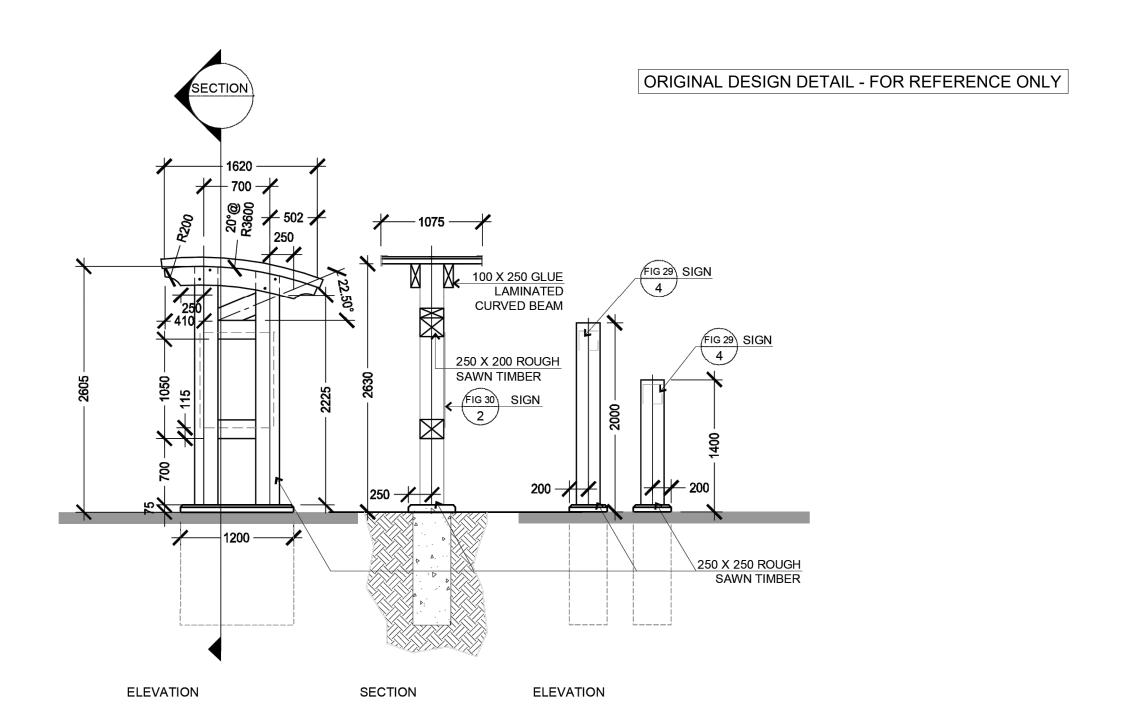




- 1. BOULDERS TO BE GENERALLY RECTANGULAR IN FORM. ANY IRREGULAR SHAPED BOULDERS MUST BE APPROVED PRIOR TO INSTALLATION
- 2. ALL BOULDERS TO BE RUNDLE STONE, STRUCTURALLY SOUND, FREE OF ANY
- SPALLING CRACKS, CREVICES OR SPLINTERS.

 3. ALL BOULDERS TO BE BURIED ¹/₃ OF THEIR DEPTH INTO GROUND.

7 RUNDLE FEATURE BOULDER SCALE N.T.S.

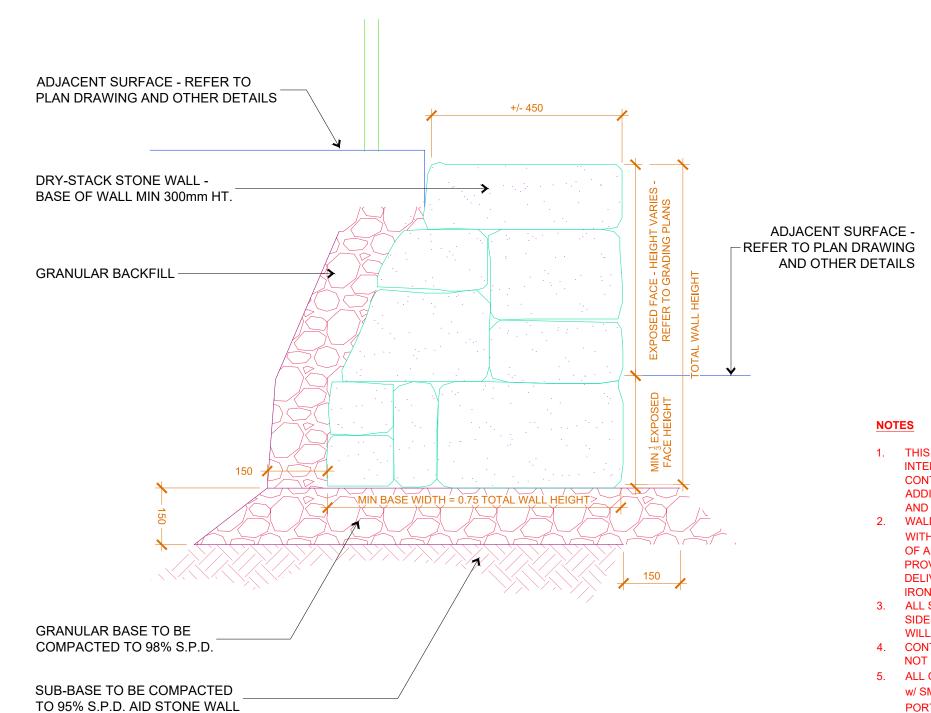


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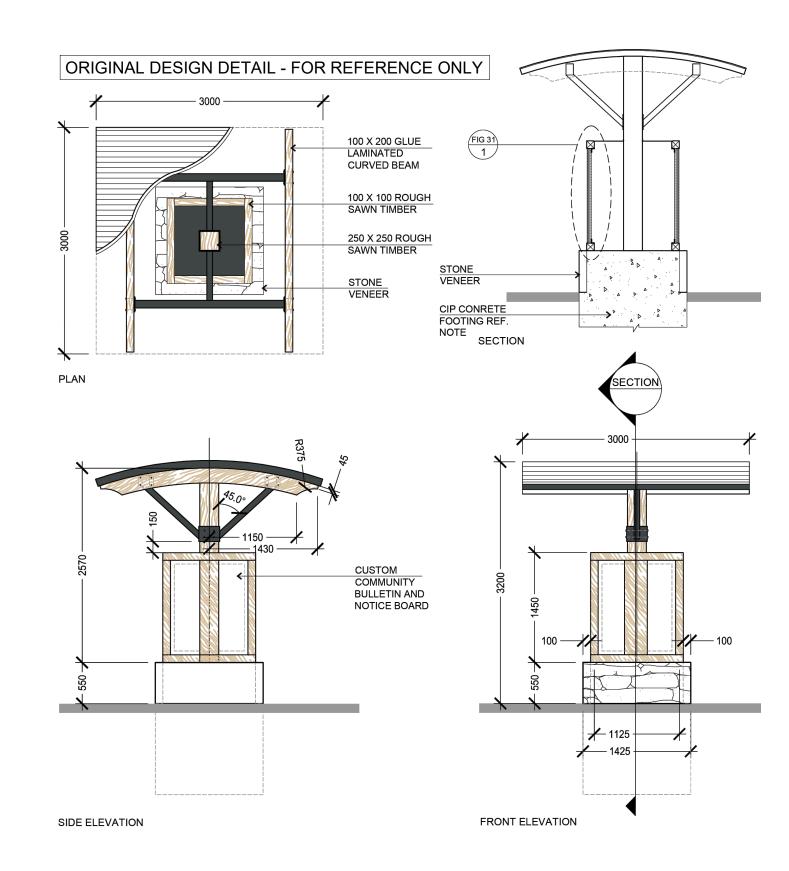
- TRAIL HEAD WAYFINDING SIGNAGE DRAWING SHOWN FOR REFERENCE ONLY.
 REFER TO REFERENCE MATERIAL FOR ADDITIONAL INFORMATION.
- REINSTATED TRAIL HEAD WAYFINDING SIGNAGE ON NEW CONCRETE PAD

URBAN MINISTRY OF TRANSPORTATION **BRITISH** AND INFRASTRUCTURE COLUMBIA SOUTHERN INTERIOR REGION SYSTEMS HIGHWAY ENGINEERING AND GEOMATICS CAD FILENAME LANDSCAPE DETAILS LAND-DETAILS SCALE: AS SHOWN 2023-11-1 PLOT DATE ___ HIGHWAY No. 95 KICKING HORSE RIVER BRIDGE 1 & 2 REPLACEMENT DATE REVISIONS NAME **AND APPROACHES** DESIGNED S. MCCOY DATE 2023-11-16 QUALITY CONTROL J. WILKISON DATE 2023-11-1 QUALITY ASSURANCE _ T. BLACKBURN DATE _ ___ 2023-11-1 SENIOR DESIGNER DRAWN J. BRUINEMAN DATE 2023-11-16 DATE 2023-11-15 R2-1131-1106 FILE NUMBER PROJECT NUMBER 1961.0459.01 26379-0000 (COLOUR)

P1-1961-0459-54



- 1. THIS DETAIL IS SCHEMATIC AND REPRESENTS THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON SITE FOR A DRY-STACK STONE WALL. CONTRACTOR TO CONSULT WITH LANDSCAPE ARCHITECT FOR ANY ADDITIONAL CLARIFICATION TO ACCOMMODATE SITE CONDITIONS AND TO ENSURE HIGHEST QUALITY OF FINISH.
- 2. WALL STONE TO BE RUNDLE STONE OR OTHER APPROVED PRODUCT WITH FLAT SIDES. WALL STONE TO BE STRUCTURALLY SOUND, FREE OF ANY CRACKS, CREVICES, OR SPLINTERS. CONTRACTOR TO PROVIDE SAMPLES OF WALL STONE FOR APPROVAL PRIOR TO DELIVERY ON SITE (TOWN PREFERENCE IS FOR WALL STONE WITH NO
- 3. ALL STONE UTILIZED IN DRY-STACKING TO BE MIN 150mm ON TWO SIDES AND MIN. 300 ON AT LEAST 1 SIDE. NUMBER OF STONES IN WALL WILL BE DEPENDENT ON SIZE OF STONE USED.
- 4. CONTRACTOR TO ENSURE WALLS ARE SELF LOCKING, STABLE & DO NOT SHIFT FOLLOWING INSTALLATION.
- 5. ALL GAPS GREATER THAN 100mm ON VERTICAL FACES TO BE CHINKED w/ SMALLER ROCK. GAPS GREATER THAN 100mm ON HORIZONTAL PORTIONS TO BE FILLED & COMPACTED w/ CRUSHED AGGREGATE.



NOTES:

- 1. KIOSK DRAWINGS SHOWN FOR REFERENCE ONLY.
- 2. REFER TO REFERENCE MATERIAL FOR ADDITIONAL KIOSK AND STRUCTURAL INFORMATION.

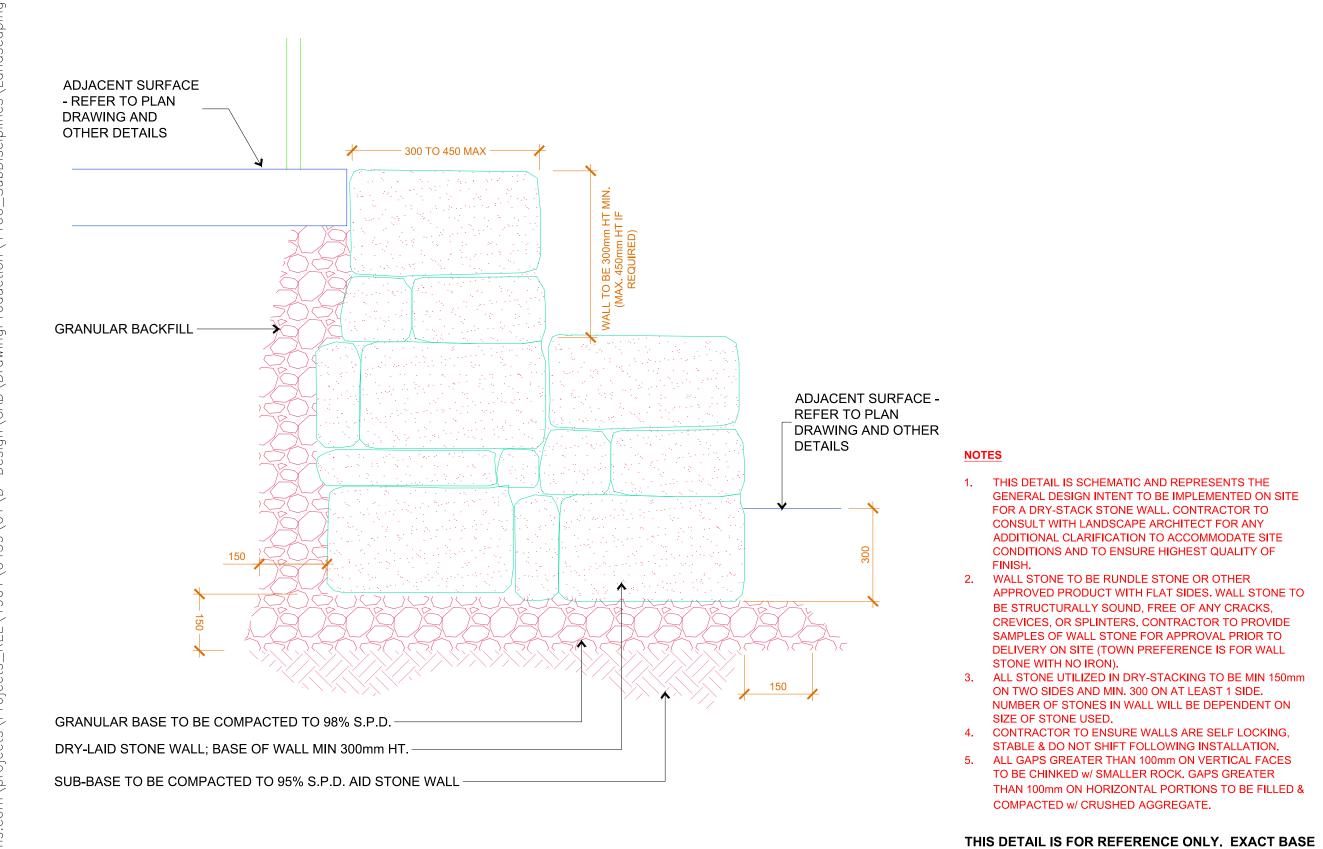
DRY-STACK WALL - SINGLE COURSE SCALE 1:10

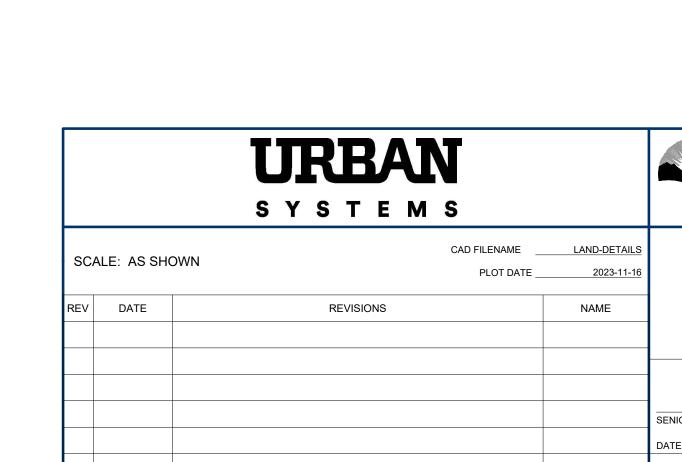
2 DRY-STACK WALL - MULTIPLE COURSES
SCALE 1:10

P1-1961-0459-37

REINSTATED LARGE KIOSK ON NEW CONCRETE PAD SCALE NTS

P1-1961-0459-43







1961.0459.01

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE SOUTHERN INTERIOR REGION

HIGHWAY ENGINEERING AND GEOMATICS

LANDSCAPE DETAILS HIGHWAY No. 95 KICKING HORSE RIVER BRIDGE 1 & 2 REPLACEMENT AND APPROACHES

DESIGNED S. MCCOY DATE 2023-11-16 QUALITY CONTROL J. WILKISON DATE 2023-11-16 QUALITY ASSURANCE T. BLACKBURN DATE 2023-11-16 SENIOR DESIGNER DRAWN J. BRUINEMAN DATE 2023-11-16 FILE NUMBER PROJECT NUMBER R2-1131-1107

(COLOUR)

26379-0000

P1-1961-0459-57

STRUCTURE IS BASED ON SIZE OF BOULDERS USED.

