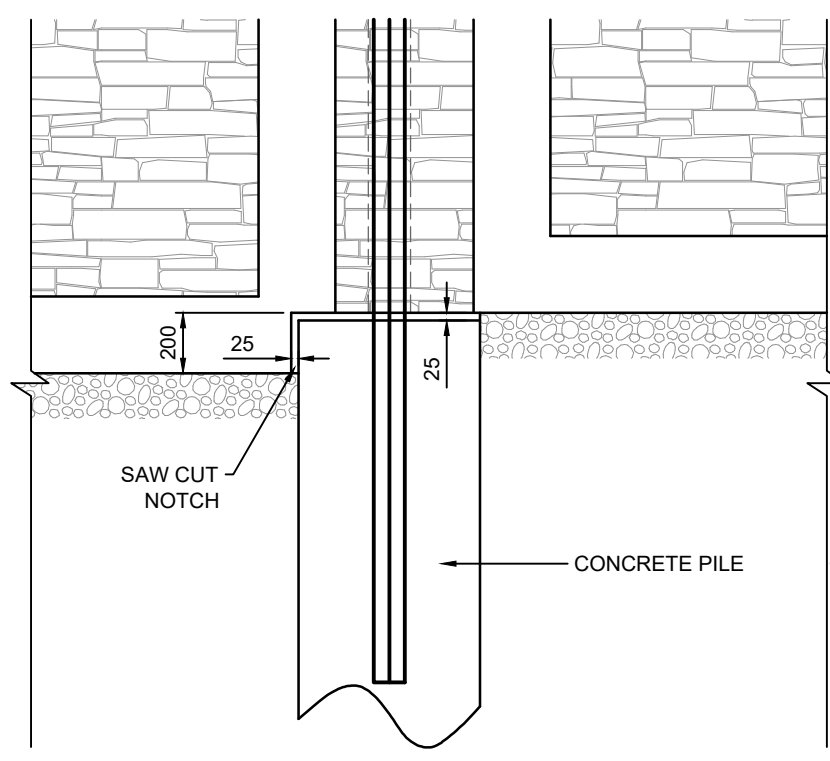
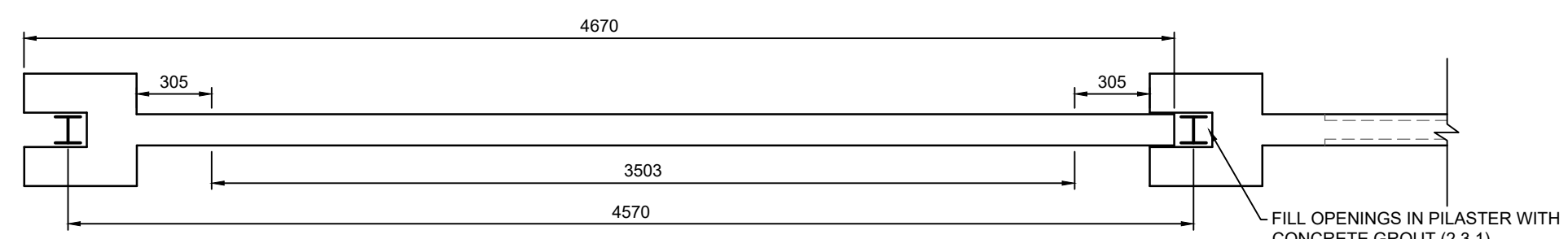


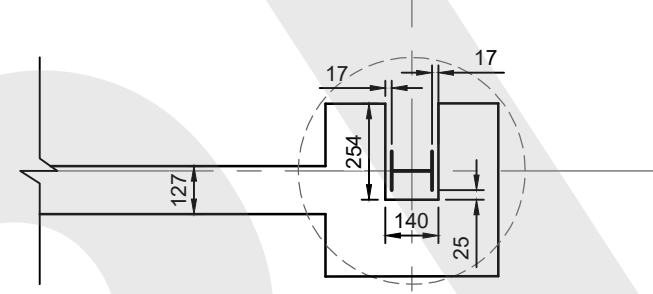
1 ELEVATION - NOISE BARRIER
SCALE 1:50



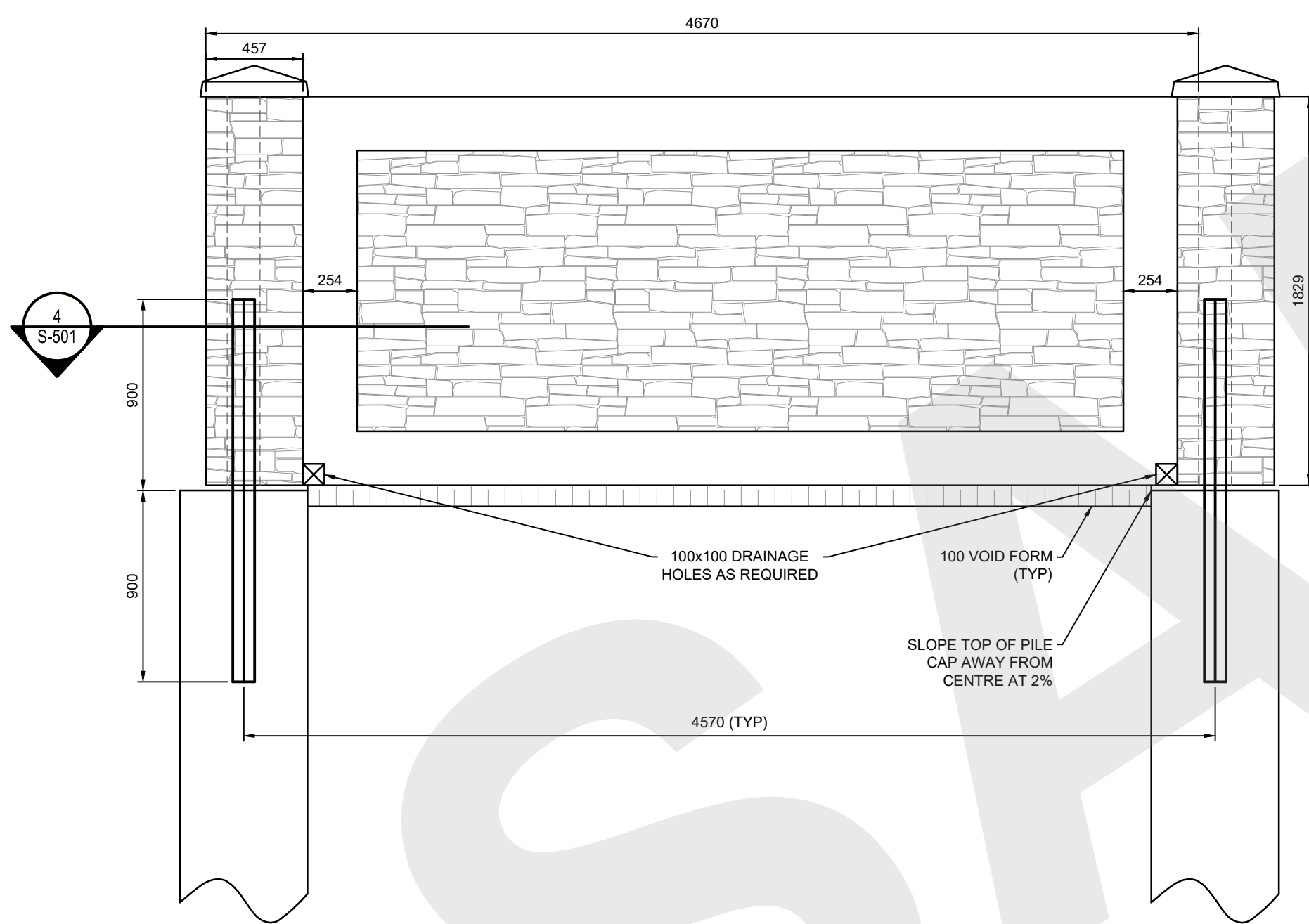
5 DETAIL - NOISE BARRIER PANEL STEP UP
SCALE 1:25



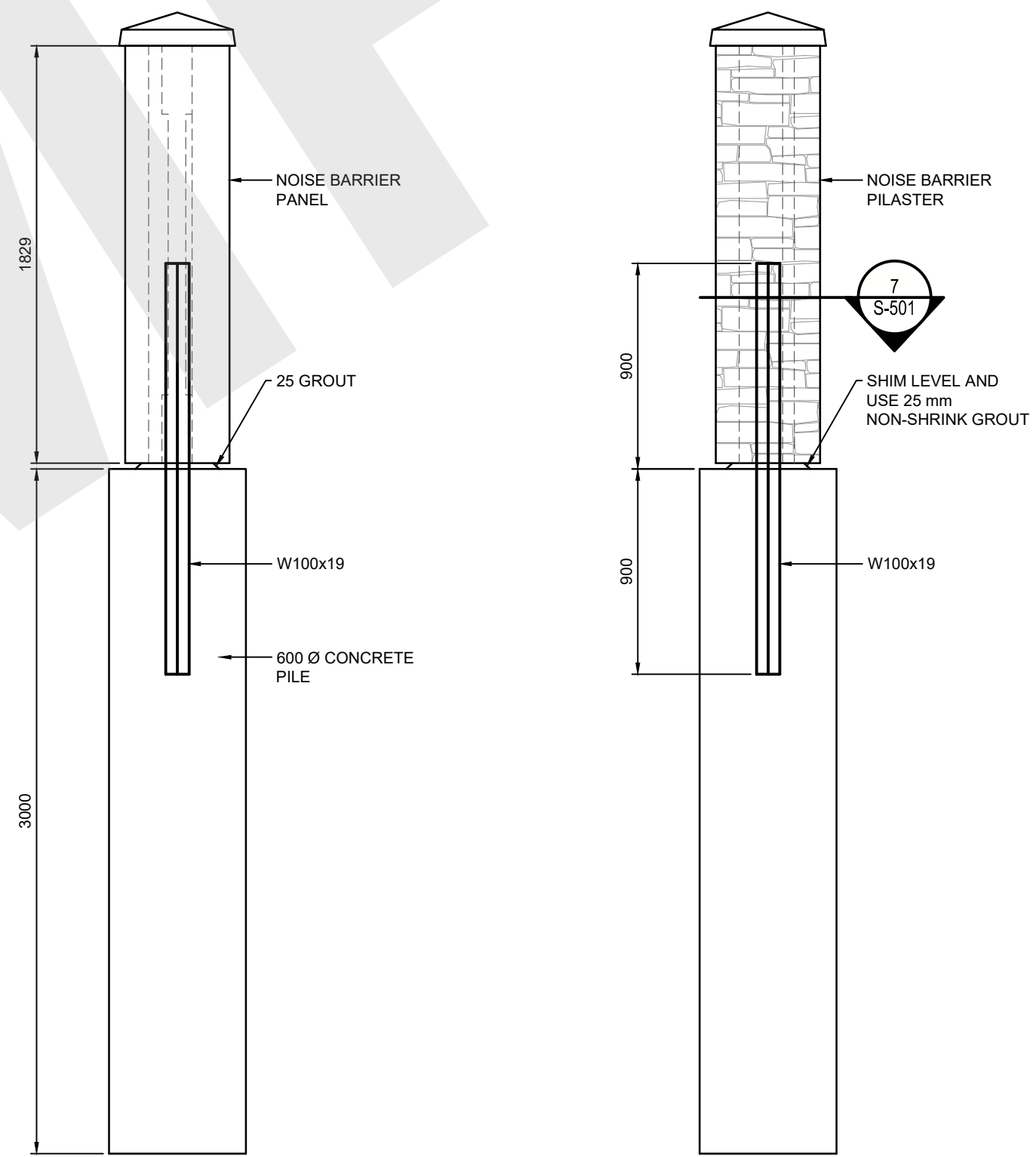
2 PLAN - NOISE BARRIER PANEL
SCALE 1:25



9 DETAIL - CORNER (TYP)
SCALE 1:20

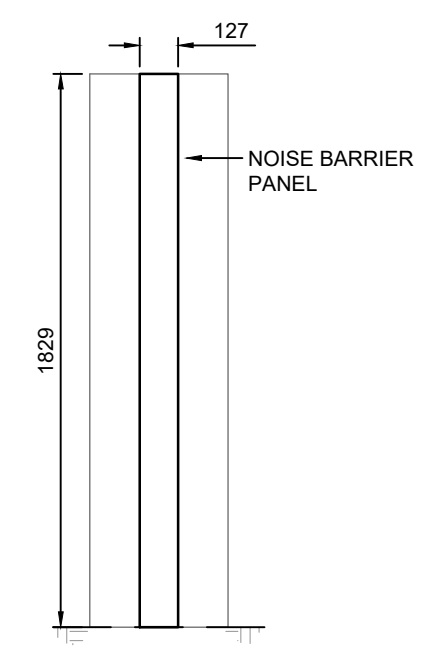


3 ELEVATION - NOISE BARRIER PANEL
SCALE 1:25

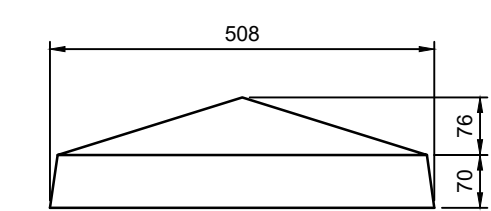


6 SECTION
SCALE 1:25

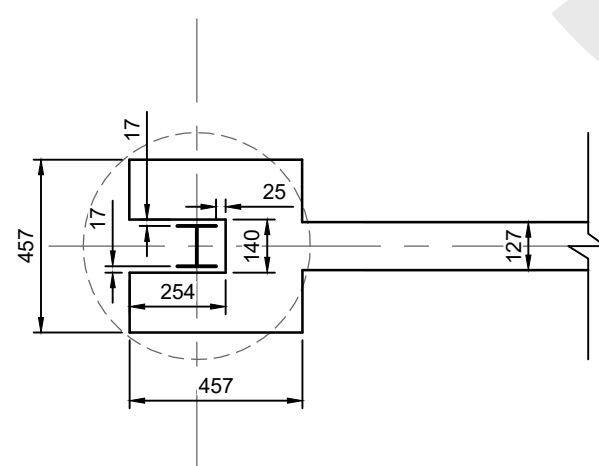
8 SECTION - STAND ALONE COLUMN
SCALE 1:25



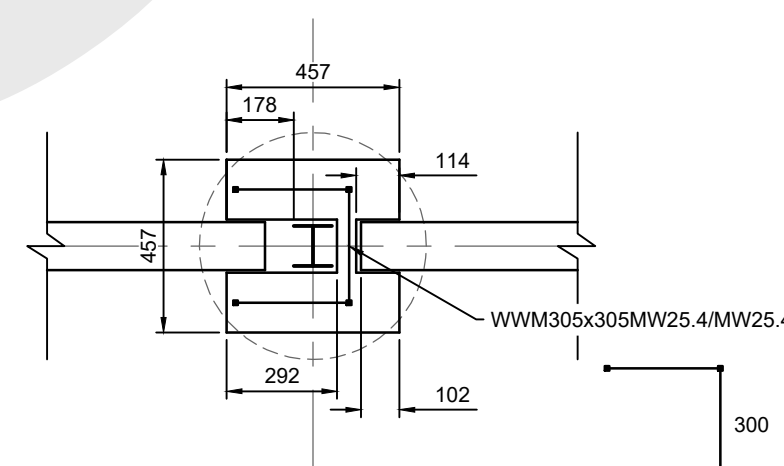
10 SECTION
SCALE 1:25



11 DETAIL - CAP
SCALE 1:10



4 DETAIL - END
SCALE 1:20



7 DETAIL - STAND ALONE COLUMN
SCALE 1:20

SECTION 1: GENERAL

1.1 SCOPE
1 WORK INCLUDES FURNISHING AND INSTALLING STONE TREE PRECAST FENCING SYSTEM TO THE HEIGHTS AND LENGTHS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND TO THE SPECIFICATIONS LISTED HEREIN.

1.2 REFERENCE STANDARDS
1 SUPPLEMENT TO NATIONAL BUILDING CODE OF CANADA, 2005.
2 CAN/CSA S6-06 CANADIAN HIGHWAY BRIDGE DESIGN CODE.
3 CAN/CSA A233-04. DESIGN OF CONCRETE STRUCTURES.
4 CAN/CSA A23.1-04. CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION.
5 CITY OF CALGARY DESIGN GUIDELINES FOR BRIDGES & STRUCTURES 2007.

1.3 DELIVERY, STORAGE AND HANDLING
1 INSTALLER SHALL CHECK THE MATERIALS UPON DELIVERY TO ASSURE PROPER MATERIAL HAS BEEN RECEIVED.
2 INSTALLER SHALL PREVENT EXCESSIVE MUD, CONCRETE AND LIKE MATERIALS FROM COMING IN CONTACT WITH THE MATERIALS.
3 MATERIALS SHALL BE PROTECTED FROM DAMAGE ONCE ON SITE. DAMAGED MATERIALS INCLUDING CRACKED AND CHIPPED BLOCK MUST NOT BE USED IN THE FENCE.

SECTION 2: MATERIALS
2.1 STONE TREE FENCE SYSTEM UNITS
1 SYSTEM UNITS SHALL BE STONE TREE FENCE POST, PANEL AND CAP UNITS AS PRODUCED BY A LICENSED MANUFACTURER.
2 SYSTEM UNITS: MINIMUM 28 DAY STRENGTH 35 MPa. HIGH PERFORMANCE CONCRETE MOIST CURE CONCRETE FOR 7 DAYS AFTER CASTING.
3 EXTERIOR DIMENSIONS SHALL BE UNIFORM AND CONSISTENT. MAXIMUM DIMENSIONAL DEVIATIONS SHALL BE 3 mm, NOT INCLUDING TEXTURED FACE.
4 COLOUR AS SPECIFIED BY THE PROJECT OWNER.
5 CONCRETE SEALER: TYPE 3, ALBERTA INFRASTRUCTURE & TRANSPORTATION APPROVED LIST.

2.2 PILE AND CAP CONCRETE
1 PILE, PILE CAP AND GRADE BEAM CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 25 MPa. MAXIMUM AGGREGATE SIZE 20 mm. MAXIMUM SLUMP 100 mm. AIR ENTRAINMENT 5-7%. CONCRETE SHALL USE TYPE HS CEMENT.

2.3 CONCRETE GROUT
1 CONCRETE GROUT USED AS PILASTER CORE FILL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa AND A MAXIMUM AGGREGATE SIZE OF 10 mm. 4-6% AIR. MAXIMUM SLUMP 100 mm. GROUT SHALL CONFORM TO CSA A179-04.

2.4 STEEL REINFORCEMENT
1 REINFORCING STEEL SHALL CONFORM TO CSA G30.18-M92. GRADE BE 400.
2 FIBRE MESH: DRAMIX RC-8086-ON, MINIMUM 15 kg / METRE. MIX INTO CONCRETE FOLLOWING MANUFACTURER'S INSTRUCTIONS.

2.5 EXTERIOR GRADE CONCRETE CONSTRUCTION ADHESIVE
1 CONSTRUCTION ADHESIVE USED TO ADHERE THE CAP BLOCK TO BOTH THE POSTS AND PANELS SHALL BE PL 400 PREMIUM AS MANUFACTURED BY QSI SEALANTS INC. OR ENGINEER APPROVED EQUIVALENT WITH A MINIMUM SHEAR STRENGTH OF 2.0 MPa.

2.6 STRUCTURAL STEEL
1 STRUCTURAL STEEL SHALL CONFORM TO CSA G40.21-04. GRADE 350W

SECTION 3: SYSTEM EXECUTION

3.1 LAYOUT
1 PILE LOCATIONS, SIZE AND DEPTH ARE SHOWN ON PLANS.
2 PILE CAP ELEVATIONS SHOWN ON PLANS.

3.2 PILE CONSTRUCTION
1 PROVIDE VERTICAL STEEL REINFORCEMENT WITH 100 mm CLEAR COVER WHEN USED.
2 DO NOT POUR CONCRETE AGAINST FROZEN SOIL. PROTECT CONCRETE FROM FREEZING FOR A MINIMUM OF 24 HOURS AFTER POUR. ALLOW THE CONCRETE TO HARDEN 4 HRS AT OR ABOVE 5° C OR UNTIL HARD ENOUGH TO RESIST MORE THAN A SURFACE SCRATCH WHEN SCRAPPED WITH STEEL REBAR BEFORE PLACING POST BLOCK.
3 A "SONOTUBE", 700 mm (SHALL BE INSERTED IN THE UPPER 600 mm OF THE HOLE PRIOR TO PLACING CONCRETE). THE SONOTUBE SHALL BE MAINTAINED IN POSITION DURING THE PLACEMENT OF THE REINFORCING AND CONCRETE.

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- CONSTRUCTION OF THE NOISE BARRIER SYSTEM SHALL BE IN ACCORDANCE WITH THE SPECIFICATION ON THIS DRAWING.
- NOISE BARRIER DESIGN IS BASED ON THE FOLLOWING DESIGN CRITERIA:
 - CAN/CSA S6-06 CANADIAN HIGHWAY BRIDGE DESIGN CODE: 25 YEAR HOURLY WIND PRESSURE = 455 Pa
DRAG COEFFICIENT = 1.20
GUST FACTOR = 2.5
- PILES: PILES ARE DESIGNED BASED ON FOLLOWING ASSUMPTIONS. LATERAL RESISTANCE: 5/DMPa/m
END BEARING: 250 kPa

CONSULTANT'S LOGO



NAD 83 COORDINATES

ISSUED FOR PRELIMINARY APPROVAL

NO.	DESCRIPTION	DATE (YYYY-MM-DD)	BY	APPD.
A	ISSUED FOR PRELIMINARY APPROVAL	2013-12-01	DEF	GHI

DESIGNED	ABC	2013-10-01
DRAWN	DEF	2013-10-01
CHECKED	GHI	2013-10-01
SCALE	AS SHOWN	

BY	DATE (YYYY-MM-DD)
ABC	2013-10-01
DEF	2013-10-01
GHI	2013-10-01

DEVELOPER'S LOGO

PROJECT
THE CITY OF CALGARY CONSTRUCTION DRAFTING STANDARDS AND TEMPLATES
SEC: 35 - TWP: 25 - RGE: 02 - W 5th M

SHEET TITLE
SUBDIVISION FENCING DETAILS SAMPLE SHEET

FILE NO.	12345678C-501.dwg	ENG DWG NO.	
SHEET ID.	C-501	SHEET NO.	044
BY		DATE (YYYY-MM-DD)	
DRAWN		PROFILE NO.	