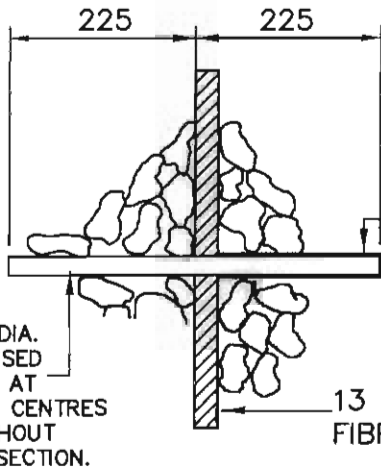


300 MM SURCHARGE						
H	a	b	c	d	e	f
3000	500	225	750	0	1475	450
2400	400	225	600	0	1225	375
1800	300	225	450	0	975	300
1200	200	225	300	0	725	225

1200 MM SURCHARGE						
H	a	b	c	d	e	f
3000	500	300	750	300	1850	450
2400	400	300	600	250	1550	375
1800	300	300	450	200	1250	300
1200	200	300	300	150	950	225



1 1/2: 1 BACKFILL SLOPE						
H	a	b	c	d	e	f
3000	500	600	750	300	2150	450
2400	400	450	600	250	1700	375
1800	300	375	450	200	1325	300
1200	200	300	300	150	950	225

24 MM DIA. GALVANISED DOWELS AT 600 MM CENTRES THROUGHOUT CROSS SECTION.

WRAP IN PETROLEUM JELLY IMPREGNATED TAPE.
13 MM BITUMEN IMPREGNATED FIBRE BOARD.

CONTRACTION JOINT DETAIL

RETAINING WALL – GROUTED RANDOM RUBBLE

NOTES:

1. MINIMUM BEARING VALUE OF THE FOUNDATION SHALL BE 22 TONNES PER SQUARE METRE.
2. 100 MM X 50 MM WEEPHOLES AT 3.00 M CENTRES SHALL BE USED. ALTERNATIVELY THE AGRICULTURAL DRAINS SHALL BE CONNECTED TO THE ROAD DRAINAGE SYSTEM.
3. LENGTH OF WALL BETWEEN CONTRACTION JOINTS SHALL NOT EXCEED 12.000 M.
4. THE TABLE FOR "1200 MM SURCHARGE" SHALL BE USED IF, WITH A HORIZONTAL BACKFILL, A ROAD PAVEMENT OR A BUILDING MAY BE CONSTRUCTED WITHIN A HORIZONTAL DISTANCE "H" FROM THE BACK OF THE WALL.
5. IF THE 1 1/2 TO 1 SLOPING BACKFILL EXTENDS LESS THAN A HORIZONTAL DISTANCE "H" FROM THE BACK OF THE WALL, THE TABLES MAY BE INTERPOLATED BETWEEN THE SLOPING BACKFILL CASE AND THE RELEVANT APPLIED SURCHARGE TABLE.
6. COLLECTOR DRAIN SHALL BE GRADED TO DISCHARGE INTO THE ROAD DRAINAGE SYSTEM.
7. DESIGN BASES ADOPTED WERE:
HORIZONTAL EARTH PRESSURE – 195 H KG PER SQ METRE
MINIMUM FACTOR OF SAFETY = 1.3 TO 1.4

CHECKED
Jan Stacey

APPROVED
Jan Stacey

SCALE
N.T.S.

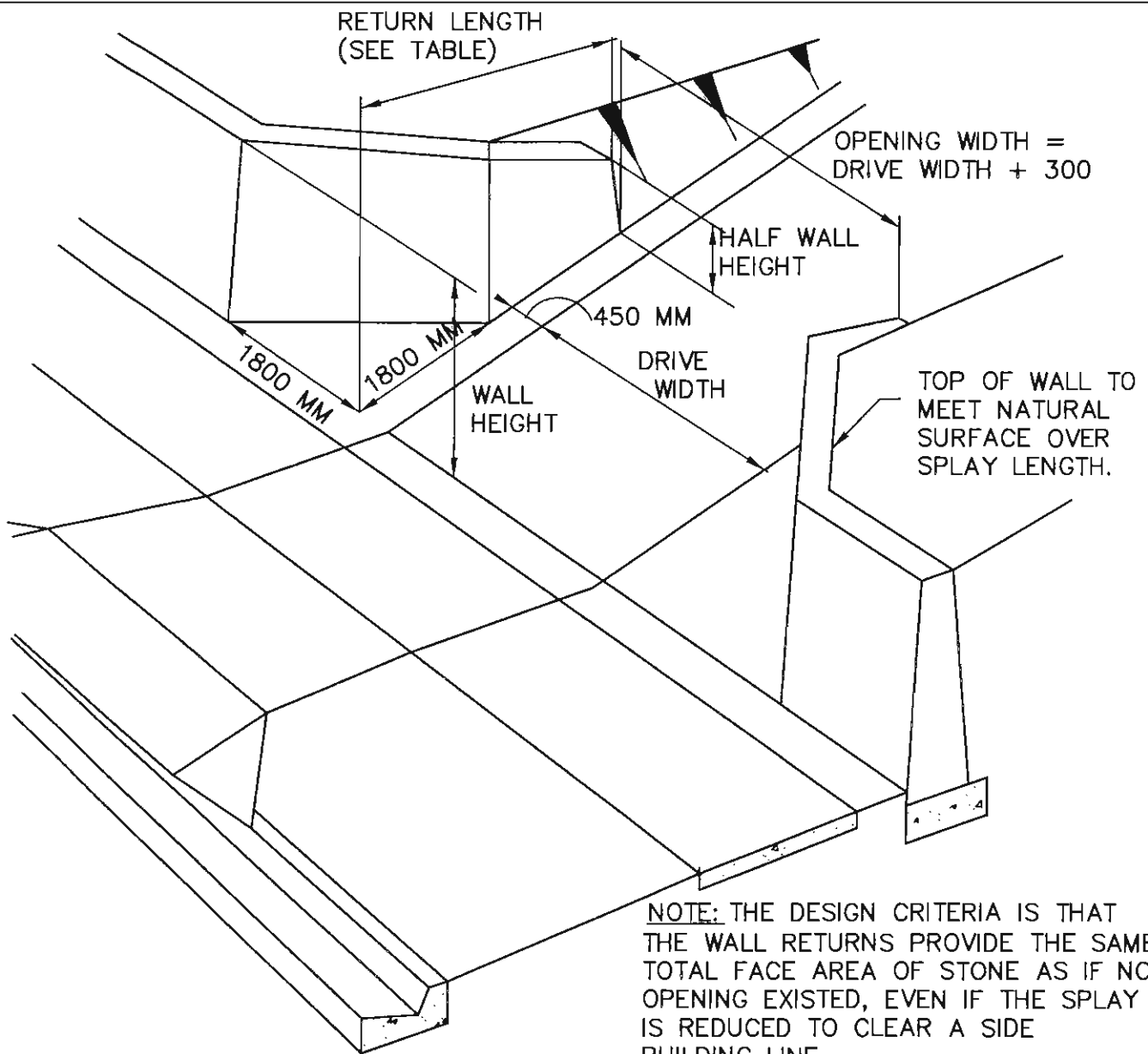
KNOX CITY COUNCIL

RETAINING WALL GROUTED RANDOM RUBBLE

DATE
1-8-2001

REVISION

CAD FILE NAME
S 400.1



NOTE: THE DESIGN CRITERIA IS THAT THE WALL RETURNS PROVIDE THE SAME TOTAL FACE AREA OF STONE AS IF NO OPENING EXISTED, EVEN IF THE SPLAY IS REDUCED TO CLEAR A SIDE BUILDING LINE.

WALL HEIGHT

	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750	3.000
2.750	3.500	3.460	3.430	3.400	3.390	3.370	3.360	3.350	3.340
3.000	3.670	3.630	3.600	3.570	3.550	3.540	3.530	3.520	3.510
3.500	4.000	3.970	3.930	3.910	3.890	3.880	3.860	3.850	3.840
4.000	4.350	4.300	4.270	4.250	4.230	4.210	4.200	4.190	4.180
4.500	4.690	4.640	4.600	4.610	4.560	4.550	4.540	4.520	4.520
5.000	5.020	4.980	4.940	4.920	4.900	4.880	4.870	4.860	4.850
5.500	5.360	5.320	5.280	5.260	5.240	5.220	5.210	5.200	5.190
6.000	5.700	5.650	5.620	5.590	5.570	5.560	5.540	5.530	5.520

RETURN LENGTH
OF STONE RETAINING WALL INTO PRIVATE DRIVEWAYS
(IN METRES.)

CHECKED
Jan Stacey

APPROVED
Jim Corboy

SCALE
N.T.S.

KNOX CITY COUNCIL

DIMENSIONS OF
STONE RETAINING WALLS
AT PRIVATE DRIVEWAYS

DATE
1-8-2001

REVISION

CAD FILE NAME
S 400.2

TREATED PINE(F7) PLANK
 SIZE AS PER TABLE

GALVANISED STEEL UPRIGHTS 150 UC
 23 CENTRES AS PER TABLE.
 WALL TO BE TILTED FROM VERTICAL.
 REFER TO NOTE 3.

1 IN 5 MAX. BATTER

APPROVED LOCAL TOPSOIL 75
 MINIMUM THICKNESS

SIZE 14 SCREENINGS BACKFILL.
 MIN 200 WIDE.

CONTINUOUS TIMBER BLOCKING
 BETWEEN PLANKS AND
 UPRIGHTS. SEE DETAIL A.

DEPTH OF FOOTING
 REFER TO TABLE

FINISHED SURFACE

100

100 DIA SUB SURFACE DRAIN
 CONNECTED TO STORM WATER
 SYSTEM.

DEPTH OF FOOTING
 REFER TO TABLE

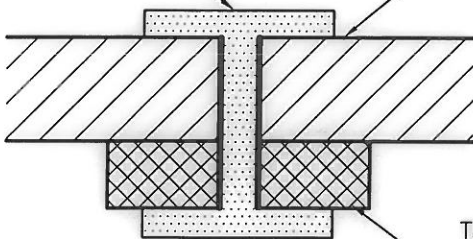
CONCRETE FOOTING
 25 MPa MINIMUM STRENGTH.

100

500

GALVANISED
 150 UC23
 UPRIGHT

TIMBER
 PLANK



TIMBER
 BLOCKING

DETAIL A

RETAINED HEIGHT	UPRIGHT SPACING	PLANK SIZE	HOLE DIAM	DEPTH OF FOOTING
0 - 1200	2400	200 x 100	500	1300

NOTES

1. ALL TIMBER SHALL BE A MINIMUM STRESS GRADE OF F7 (ACQ).
2. THIS WALL IS NOT TO BE USED WITHIN A HIGH OR M2 LANDSLIP RISK AREA, TO RETAIN SANDY SOILS, CARPARK AREAS OR ANY STRUCTURES. THE AREA ABOVE THE WALL IS FOR PEDESTRIAN TYPE USE ONLY - NO VEHICULAR LOADING.
3. TILT WALL BACK FROM VERTICAL BY 40mm FOR EACH 1000 HEIGHT.
4. FOUNDATION MATERIAL SHALL BE FIRM CLAY OVER FULL DEPTH OF FOOTING.

KNOX CITY COUNCIL

DATE
 11-07-2012

TIMBER RETAINING WALL
 (STEEL UPRIGHTS)

REVISION

CHECKED
[Signature]

APPROVED
[Signature]

SCALE
 N.T.S.

CAD FILE NAME
 S 402.2