

CIVIL ENGINEERING DRAWINGS

195-197 DIBBS STREET

EAST LISMORE NSW 2480

ISSUED FOR DEVELOPMENT APPROVAL

DRAWING SCHEDULE

PLAN NUMBER	DRAWING TITLE
8976-DA-000	COVER SHEET
8976-DA-001	GENERAL NOTES & LEGEND SHEET 1 OF 2
8976-DA-002	GENERAL NOTES & LEGEND SHEET 2 OF 2
8976-DA-100	STORMWATER PLAN SHEET
8976-DA-500	STORMWATER DETAILS
8976-DA-501	OSD TANK SECTIONS AND DETAILS
8976-DA-601	OSD CATCHMENT PLAN
8976-DA-800	EROSION AND SEDIMENT CONTROL PLAN
8976-DA-810	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS



LOCALITY PLAN
NTS

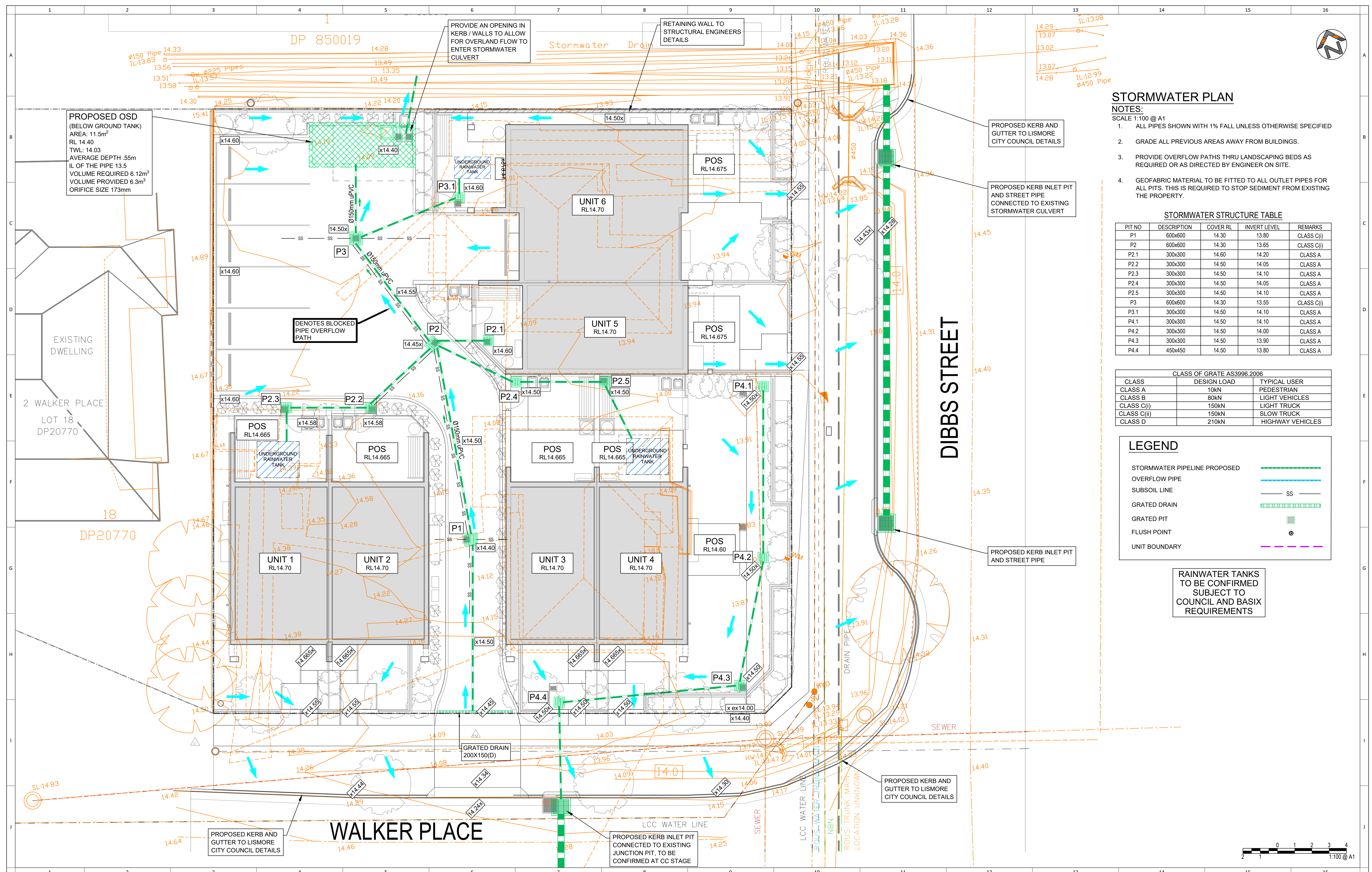
ARCHITECT:

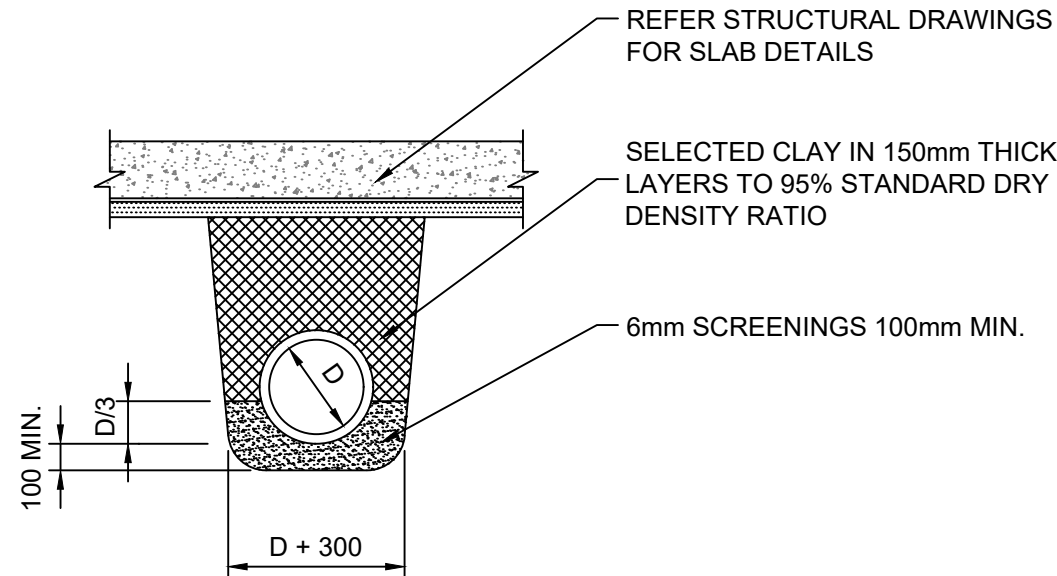


COUNCIL:

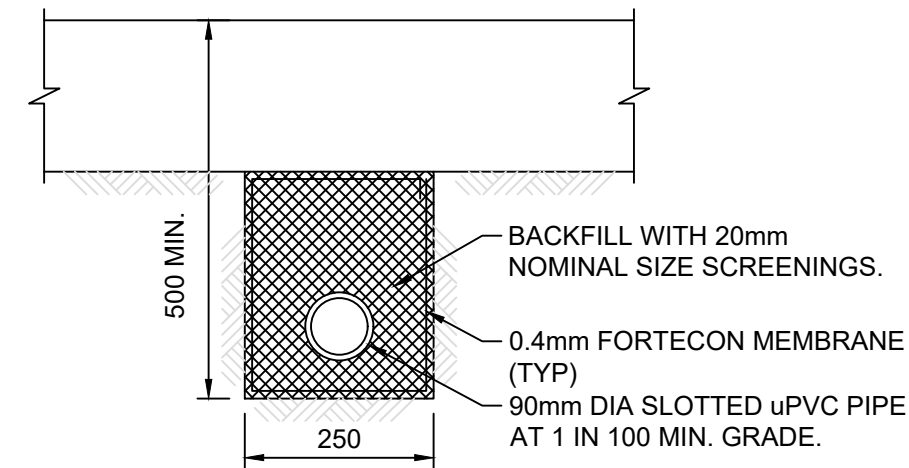


[illegible]

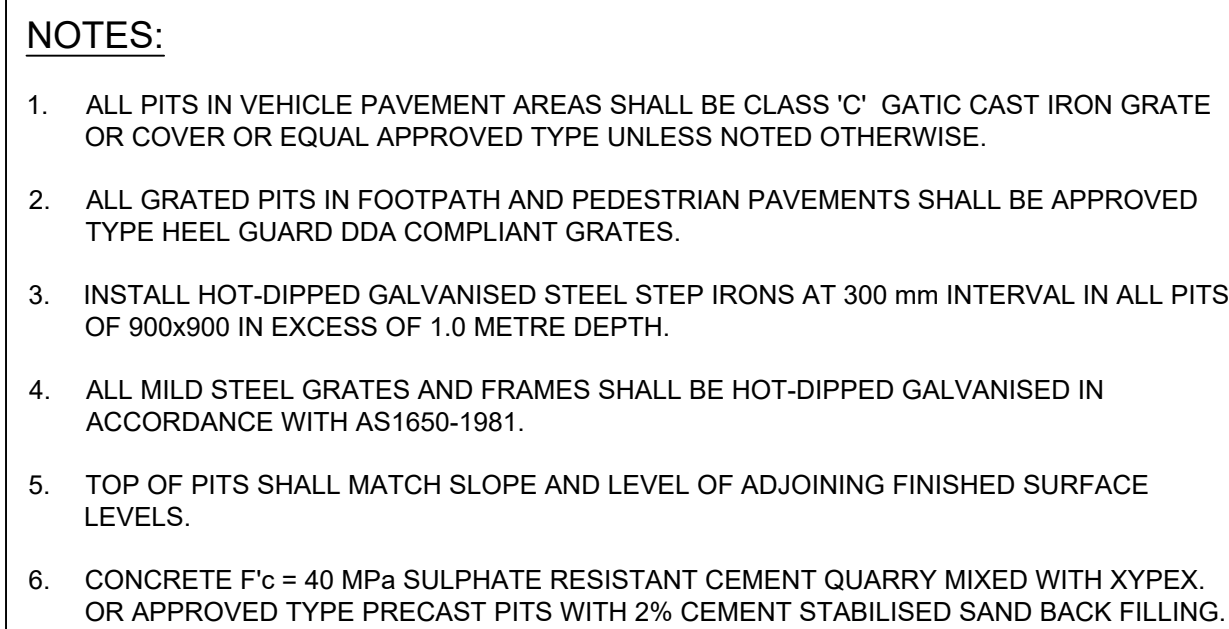




PIPE BEDDING - UNDER FLOOR SLAB



AGRICULTURAL DRAIN (SS)
DETAIL
NOT TO SCALE



GRATED AND JUNCTION PIT DETAIL



1		2		3		4	
REV.	DESCRIPTION	DRAWN	DESIGNED	VERIFIED	APPROVED	DATE	
1	ISSUED FOR DEVELOPMENT APPROVAL	DK	MS			26.10.2023	

webber



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE: 1800 738 718
www.dpie.nsw.gov.au/land-and-housing-corporation



PROJECT TITLE

LAND AND HOUSING
CORPORATION
195 - 197 DIBBS STREET
EAST LISMORE NSW 2480

CLIENT	
--------	--

FAMILY & COMMUNITY SERVICES

DRAWING STATUS	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

SCALE
AS SHOWN

COORDINATE SYSTEM

DATUM
AHD

SHEET SIZE

PROJECT NUMBER

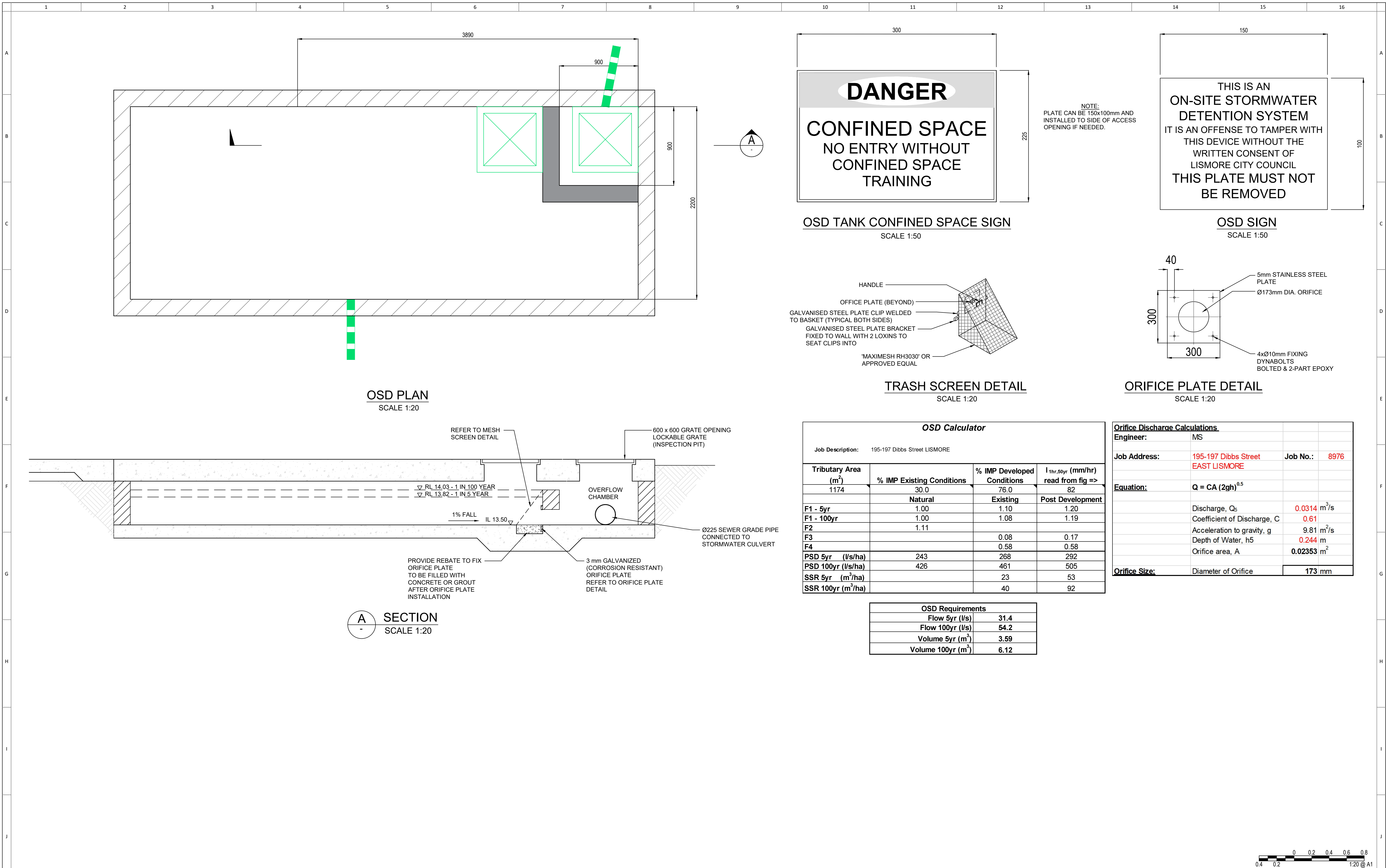
DRAWING TITLE

STORMWATER DETAILS

DRAWING NUMBER

REVISION

1

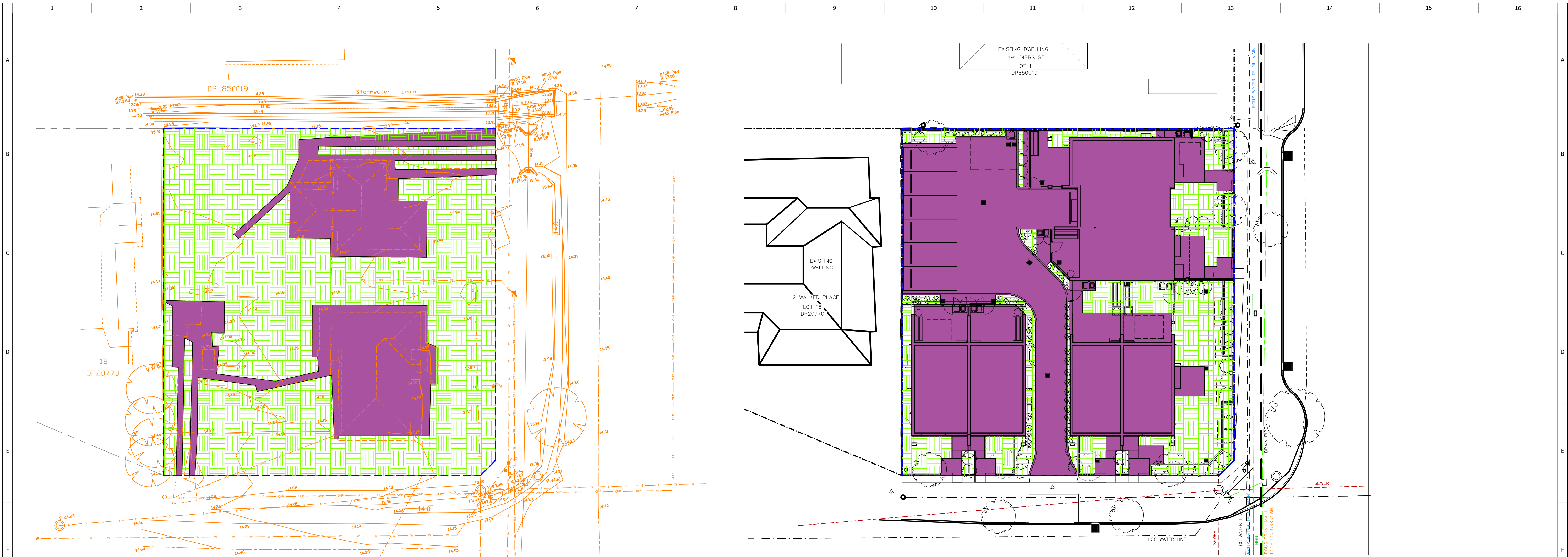


OSD Calculator			
Job Description: 195-197 Dibbs Street LISMORE			
Tributary Area (m ²)	% IMP Existing Conditions	% IMP Developed Conditions	1-1hr, 50yr (mm/hr) read from fig =>
1174	30.0	76.0	82
F1 - 5yr	1.00	1.10	1.20
F1 - 100yr	1.00	1.08	1.19
F2	1.11		
F3		0.08	0.17
F4		0.58	0.58
PSD 5yr (l/s/ha)	243	268	292
PSD 100yr (l/s/ha)	426	461	505
SSR 5yr (m ³ /ha)		23	53
SSR 100yr (m ³ /ha)		40	92

Orifice Discharge Calculations		
Engineer:	MS	
Job Address:	195-197 Dibbs Street EAST LISMORE	Job No.: 8976
Equation:	$Q = CA(2gh)^{0.5}$	
	Discharge, Q _s	0.0314 m ³ /s
	Coefficient of Discharge, C	0.61
	Acceleration to gravity, g	9.81 m ² /s
	Depth of Water, h ₅	0.244 m
	Orifice area, A	0.02353 m ²
Orifice Size:	Diameter of Orifice	173 mm

OSD Requirements	
Flow 5yr (l/s)	31.4
Flow 100yr (l/s)	54.2
Volume 5yr (m ³)	3.59
Volume 100yr (m ³)	6.12

REV.	DESCRIPTION	DRAWN	DESIGNED	VERIFIED	APPROVED	DATE	ARCHITECT	CLIENT	PROJECT TITLE	CLIENT	DRAWING TITLE
1	ISSUED FOR DEVELOPMENT APPROVAL	DK	MS			26.10.2023			LAND AND HOUSING CORPORATION 195 - 197 DIBBS STREET EAST LISMORE NSW 2480	FAMILY & COMMUNITY SERVICES DEVELOPMENT APPROVAL	OSD TANK SECTIONS AND DETAILS
							webber	NSW GOVERNMENT	INDESCO PTY LTD www.indesco.com.au ABN: 37 008 581 066	SCALE AS SHOWN A1	DRAWING NUMBER 8976-DA
										COORDINATE SYSTEM -	DATUM AHD
										SHEET SIZE A1	PROJECT NUMBER 8976-DA
											DRAWING NUMBER 501
											REVISION 1



EXISTING SITE CONDITIONS
SCALE 1:200 AT A1

LEGEND

- SUB CATCHMENT BOUNDARY
- EXISTING IMPERVIOUS AREA
- EXISTING PERVIOUS AREA

PROPOSED SITE CONDITIONS
SCALE 1:200 AT A1

LEGEND

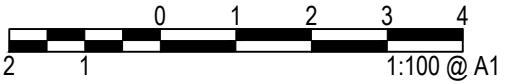
- SUB CATCHMENT BOUNDARY
- PROPOSED IMPERVIOUS AREA
- PROPOSED PERVIOUS AREA

OSD Calculator

Job Description: 195-197 Dibbs Street LISMORE

Tributary Area (m ²)	% IMP Existing Conditions	% IMP Developed Conditions	1 hr. 50yr (mm/hr) read from fig =>
1174	30.0	76.0	82
	Natural	Existing	Post Development
F1 - 5yr	1.00	1.10	1.20
F1 - 100yr	1.00	1.08	1.19
F2	1.11		
F3		0.08	0.17
F4		0.58	0.58
PSD 5yr (l/s/ha)	243	268	292
PSD 100yr (l/s/ha)	426	461	505
SSR 5yr (m ³ /ha)		23	53
SSR 100yr (m ³ /ha)		40	92

OSD Requirements	
Flow 5yr (l/s)	31.4
Flow 100yr (l/s)	54.2
Volume 5yr (m ³)	3.59
Volume 100yr (m ³)	6.12



REV.	DESCRIPTION	DRAWN	DESIGNED	VERIFIED	APPROVED	DATE
1	ISSUED FOR DEVELOPMENT APPROVAL	DK	MS			26.10.2023

ARCHITECT

webber

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE: 1800 738 718
www.dpie.nsw.gov.au/land-and-housing-corporation

CLIENT

INDESCO
INDESCO PTY LTD www.indesco.com.au
ABN: 37 008 581 066

PROJECT TITLE

LAND AND HOUSING CORPORATION
195 - 197 DIBBS STREET
EAST LISMORE NSW 2480

CLIENT

FAMILY & COMMUNITY SERVICES

DRAWING STATUS
DEVELOPMENT APPROVAL

SCALE
AS SHOWN

SHEET SIZE
A1

COORDINATE SYSTEM
-

DATUM
AHD

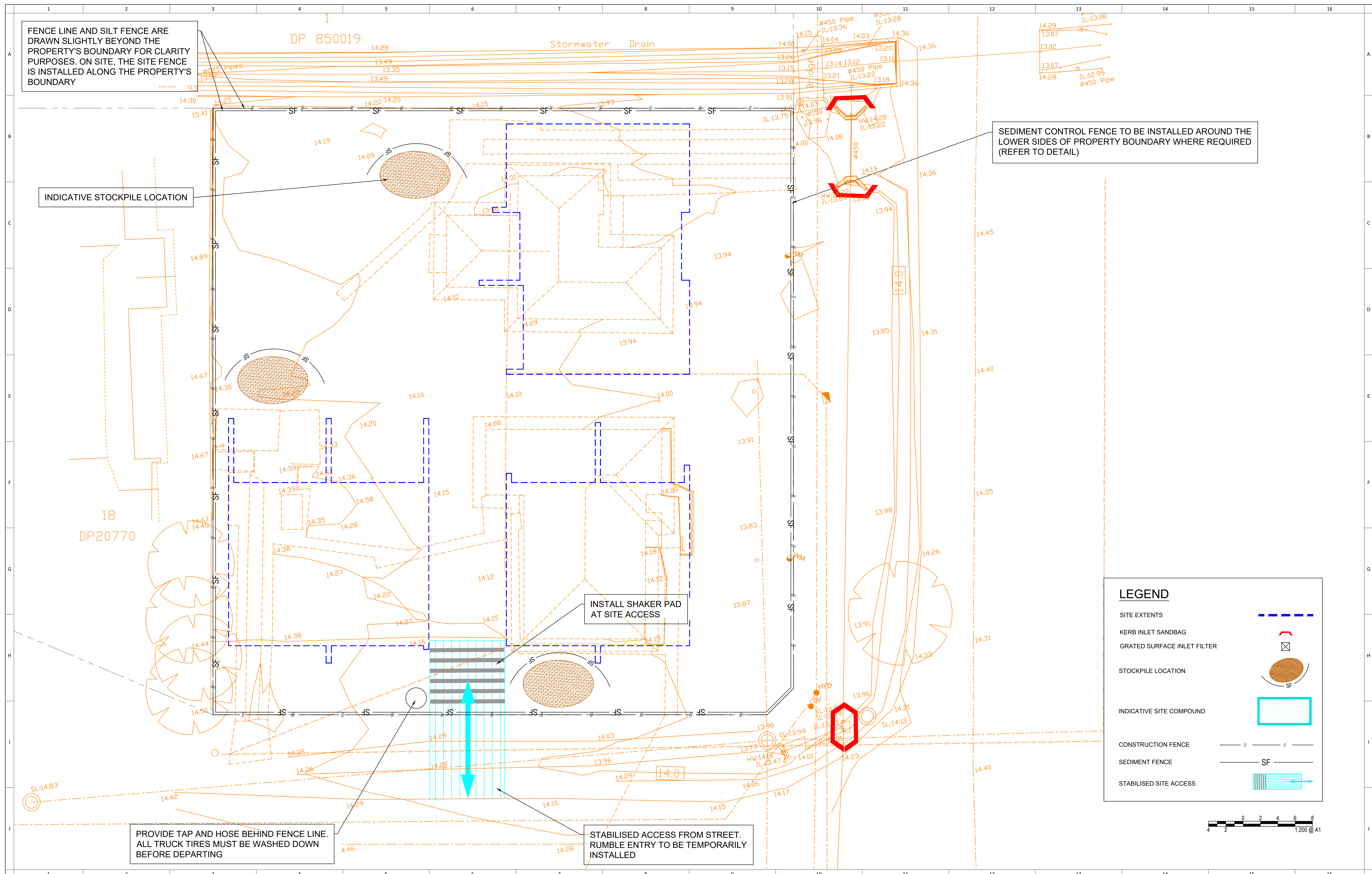
PROJECT NUMBER
8976-DA

DRAWING TITLE

OSD CATCHMENT PLAN AND CALCULATIONS

DRAWING NUMBER
601

REVISION
1



SEDIMENT CONTROL FENCE TO BE INSTALLED AROUND THE LOWER SIDES OF PROPERTY BOUNDARY WHERE REQUIRED (REFER TO DETAIL)

INDICATIVE STOCKPILE LOCATION

INSTALL SHAKER PAD AT SITE ACCESS

PROVIDE TAP AND HOSE BEHIND FENCE LINE. ALL TRUCK TIRES MUST BE WASHED DOWN BEFORE DEPARTING

STABILISED ACCESS FROM STREET. RUMBLE ENTRY TO BE TEMPORARILY INSTALLED

LEGEND

SITE EXTENTS

KERB INLET SANDBAG

GRADED SURFACE INLET FILTER

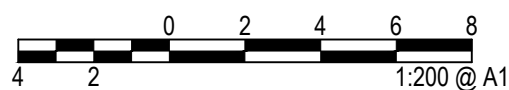
STOCKPILE LOCATION

INDICATIVE SITE COMPOUND

CONSTRUCTION FENCE

SEDIMENT FENCE

STABILISED SITE ACCESS



REV.	DESCRIPTION	DRAWN	DESIGNED	VERIFIED	APPROVED	DATE
1	ISSUED FOR DEVELOPMENT APPROVAL	DK	MS			26.10.2023

ARCHITECT

CLIENT

INDESCO PTY LTD
www.indesco.com.au
ABN: 37 008 581 066

LAND AND HOUSING CORPORATION
195 - 197 DIBBS STREET
EAST LISMORE NSW 2480

CLIENT
FAMILY & COMMUNITY SERVICES

DRAWING STATUS
DEVELOPMENT APPROVAL

SCALE
AS SHOWN
A1

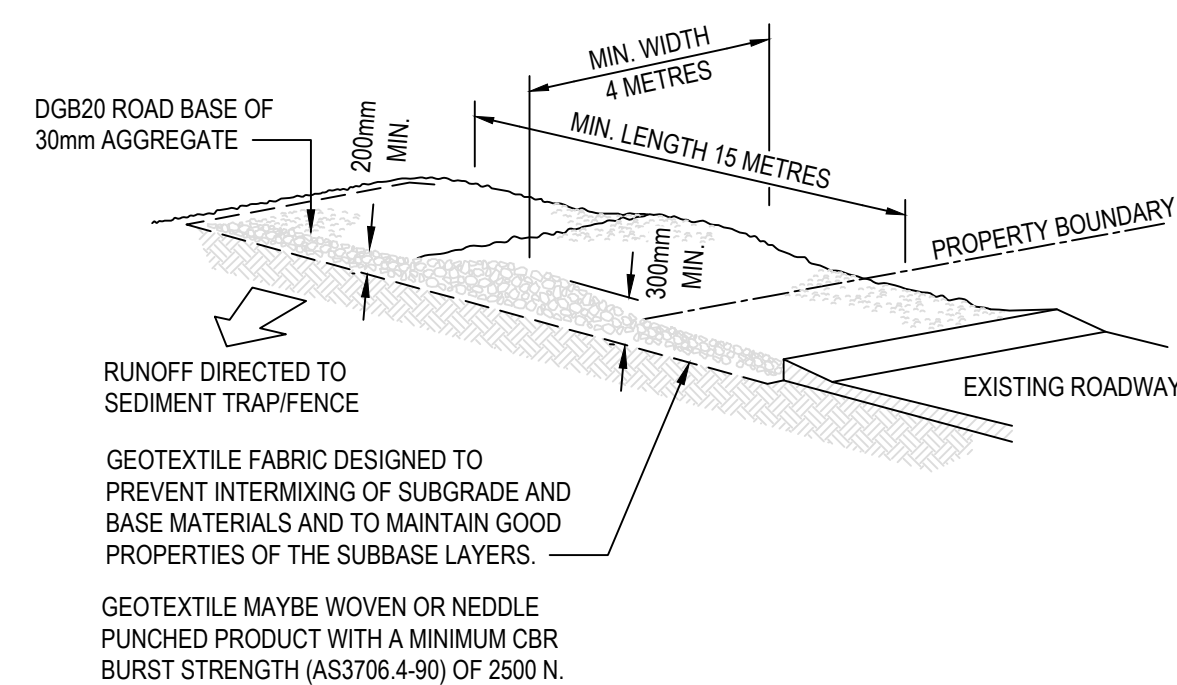
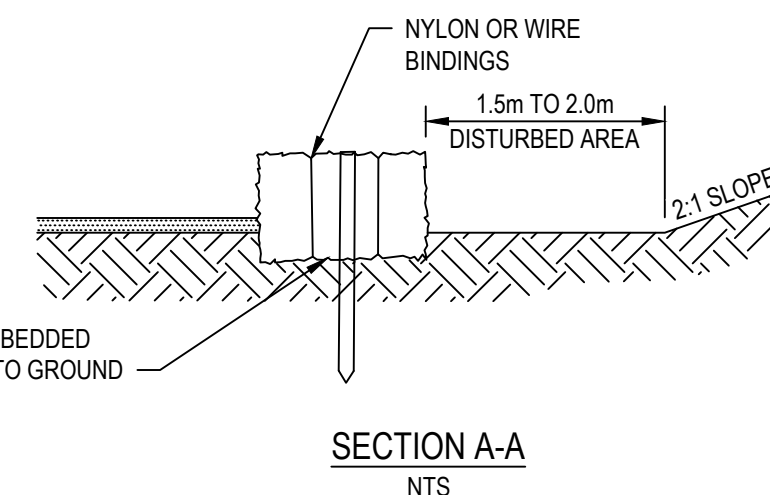
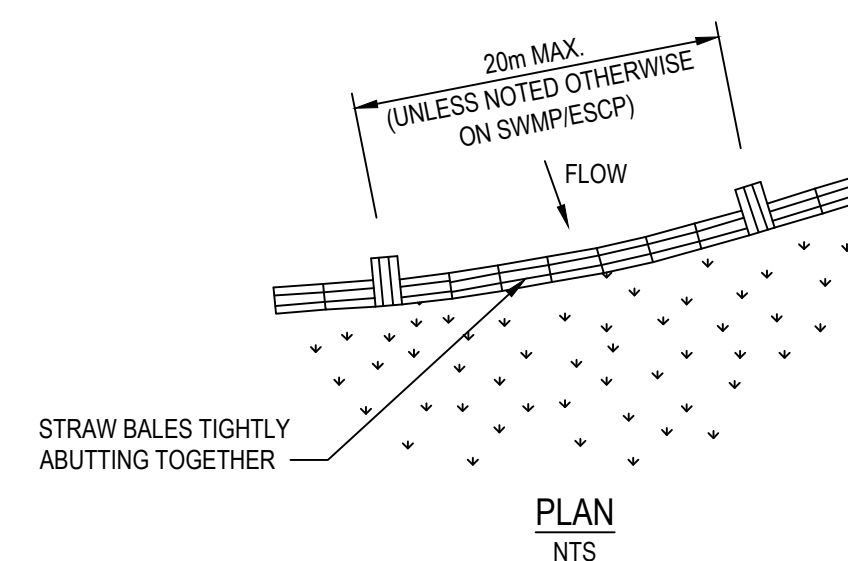
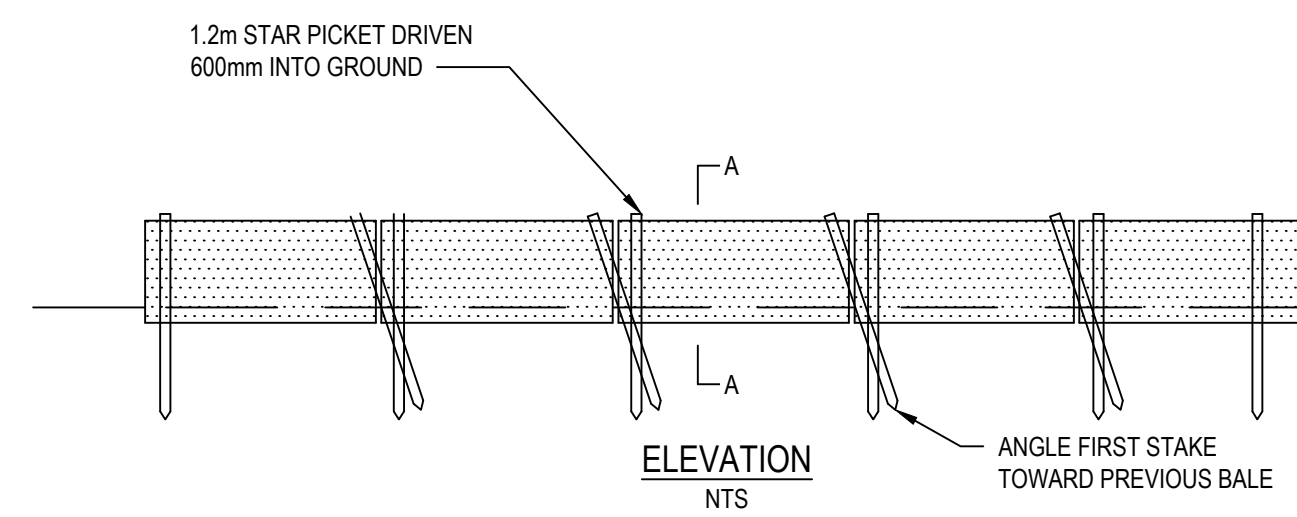
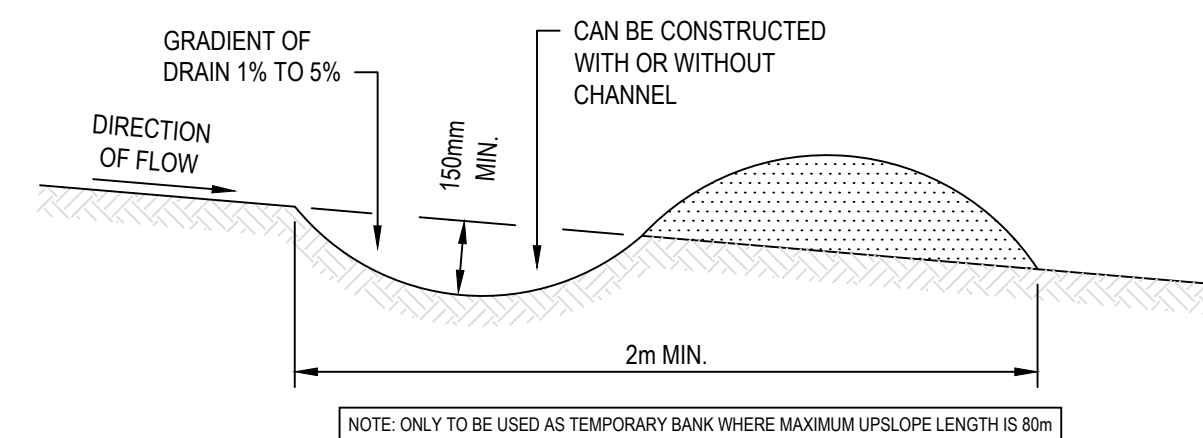
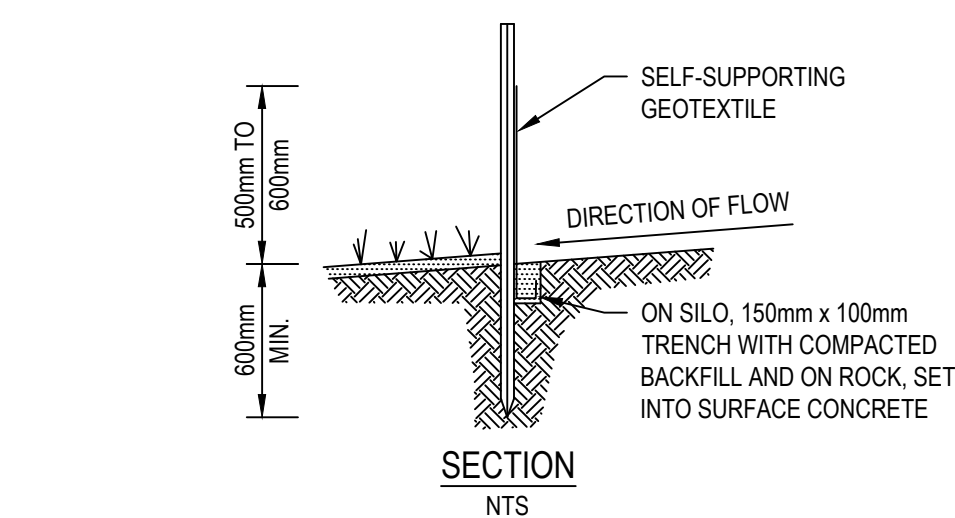
COORDINATE SYSTEM
-

DATUM
AHD

PROJECT NUMBER
8976-DA

DRAWING NUMBER
800

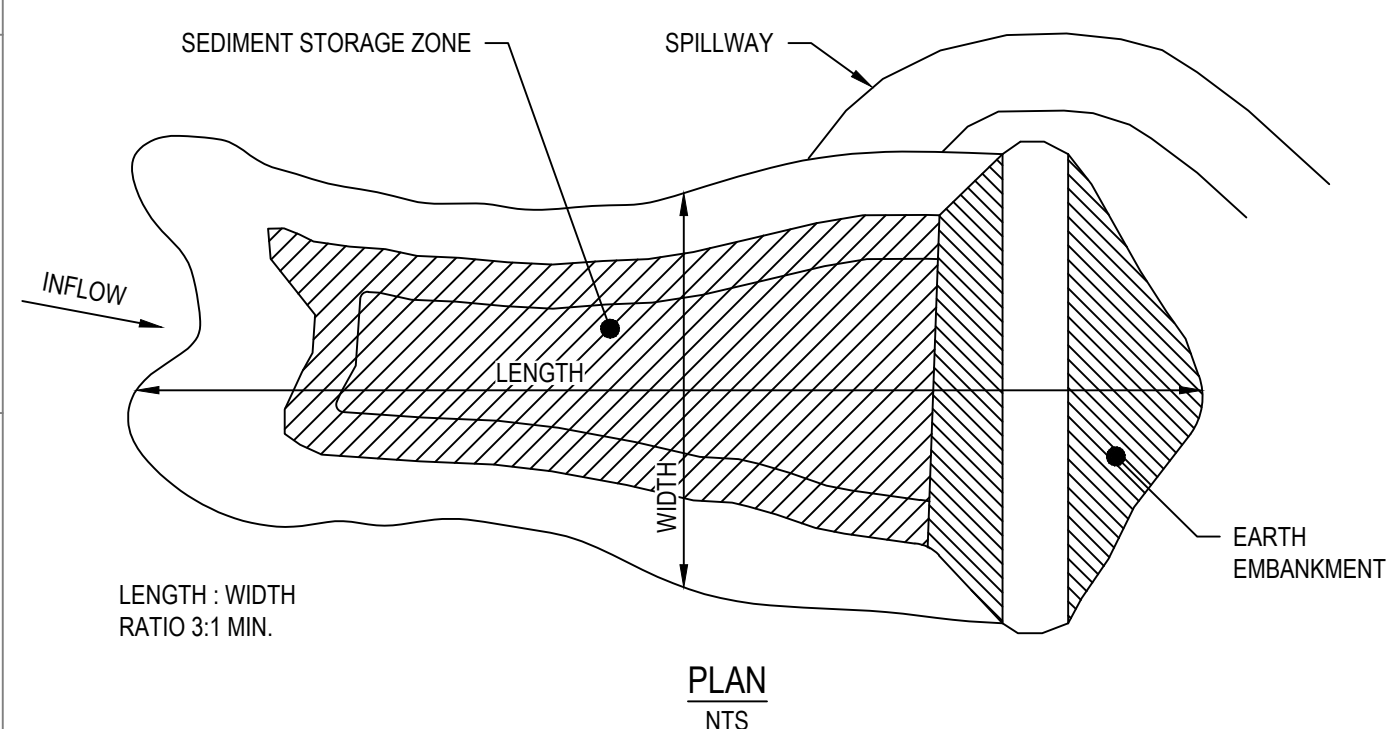
REVISION
1



GENERAL CONSTRUCTION NOTES

1. STRIP THE TOPSOIL. LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE - PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO SEDIMENT FENCE.

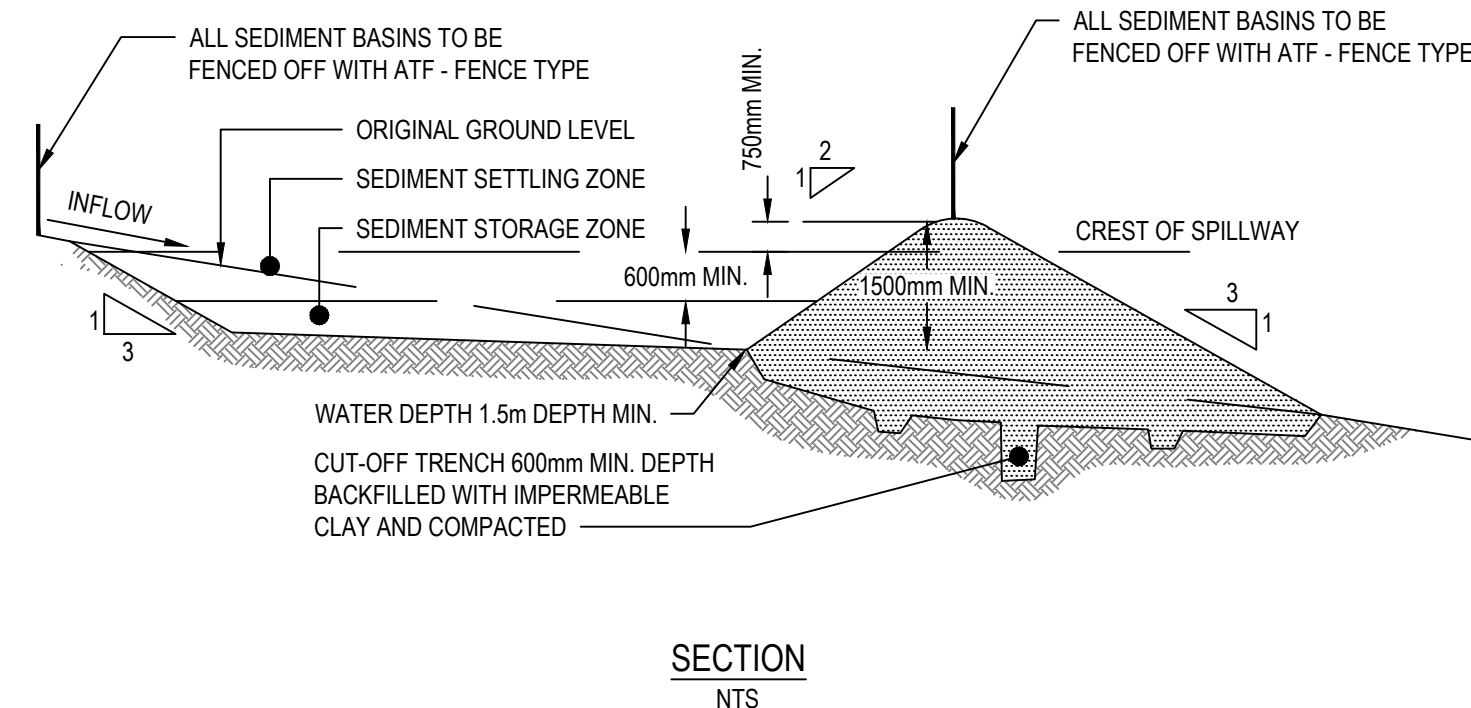
STABILISED SITE ACCESS SD 6-14



GENERAL CONSTRUCTION NOTES

1. CONSTRUCTION SEDIMENT FENCES AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE
2. DIVE 1.5m LONG STAR PICKETS INTO GROUND, 3m APART
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER
6. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP

SEDIMENT FENCE SD 6-8



GENERAL CONSTRUCTION NOTES

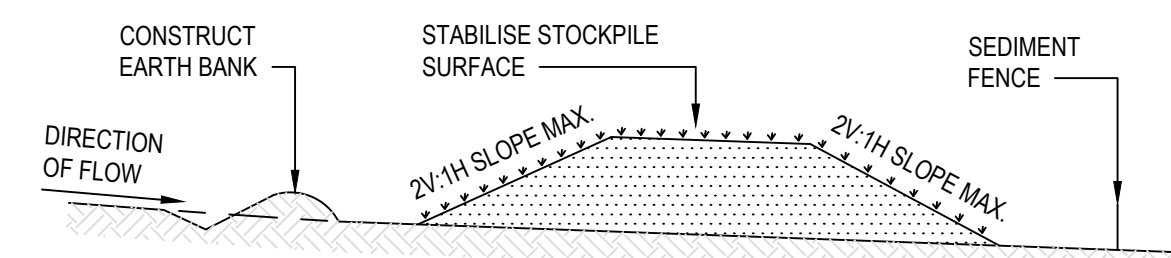
1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA
2. CONSTRUCT A CUT-OFF TRENCH 600mm DEEP AND 1,200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95% STANDARD PROCTOR DENSITY
4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD ROCK LARGE STONE OR FOREIGN MATERIAL
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE
6. SPREAD THE FILL IN 100mm TO 150mm LAYER AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP
7. CONSTRUCT THE EMERGENCY SPILLWAY
8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP

EARTH BASIN SD 6-4

GENERAL CONSTRUCTION NOTES

1. CONSTRUCT WITH GRADIENT OF 1% TO 5%
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE
3. DRAINS TO BE CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED
4. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE
5. PERMANENT OR TEMPORARY STABILISATION OF THE EARTH BANK TO BE COMPLETED WITHIN 10 DAYS OF CONSTRUCTION
6. ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO A SEDIMENT BASIN OR SIMILAR
7. DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL SITE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED
8. COMPACT BANK WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS
9. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDED NORMAL FLOW

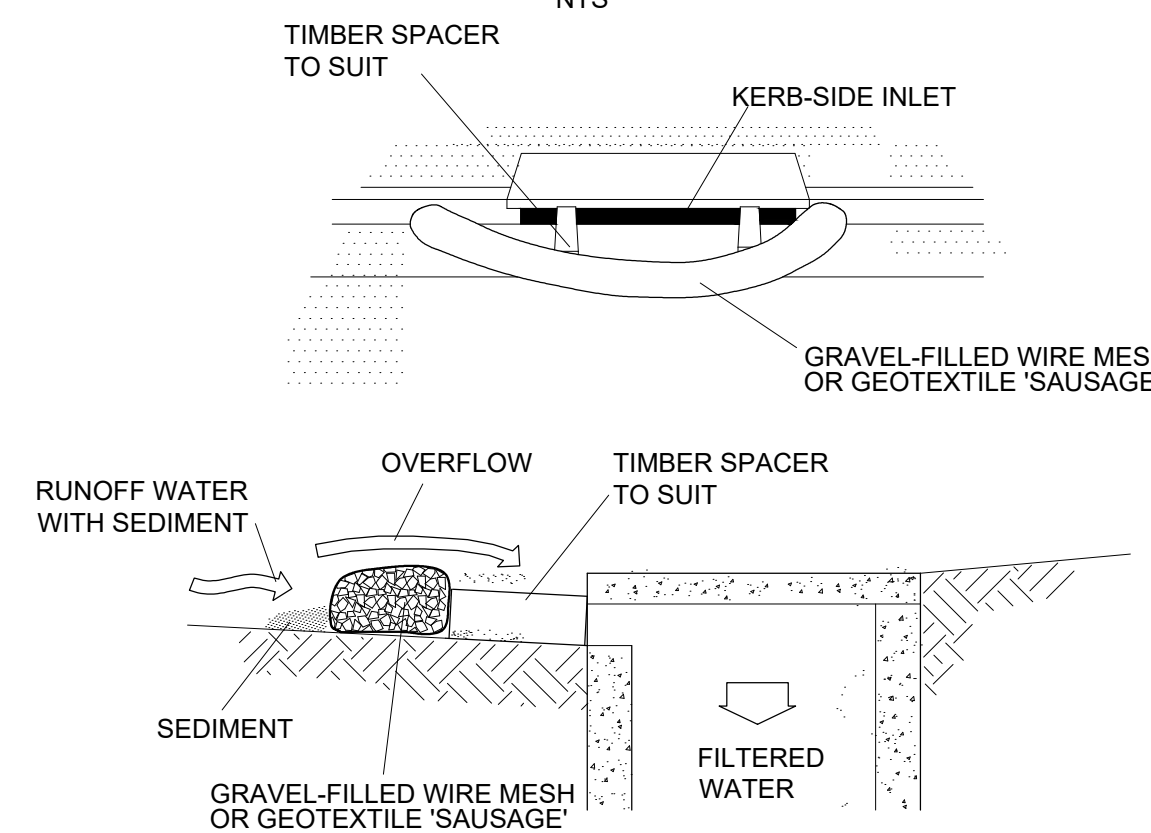
EARTH BANK (LOW FLOW) SD 5-2



GENERAL CONSTRUCTION NOTES

1. LOCATE STOCKPILE AT LEAST 5m FROM EXISTING VEGETATION, CONCENTRATED WATER FLOWS, ROADS AND HAZARD AREAS
2. CONSTRUCT ON THE CONTOUR AS A LOW, FLAT, ELONGATED MOUND
3. WHERE THERE IS SUFFICIENT AREA TOPSOIL, STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT
4. REHABILITATE IN ACCORDANCE WITH THE SWMP/ESCP
5. CONSTRUCT EARTH BANK (SD 5-2) ON THE UPSLOPE SIDE TO DIVERT RUN OFF AROUND THE STOCKPILE AND A SEDIMENT FENCE (SD 6-7) 1 TO 2m DOWNSLOPE OF STOCKPILE

STOCKPILES SD 4-1



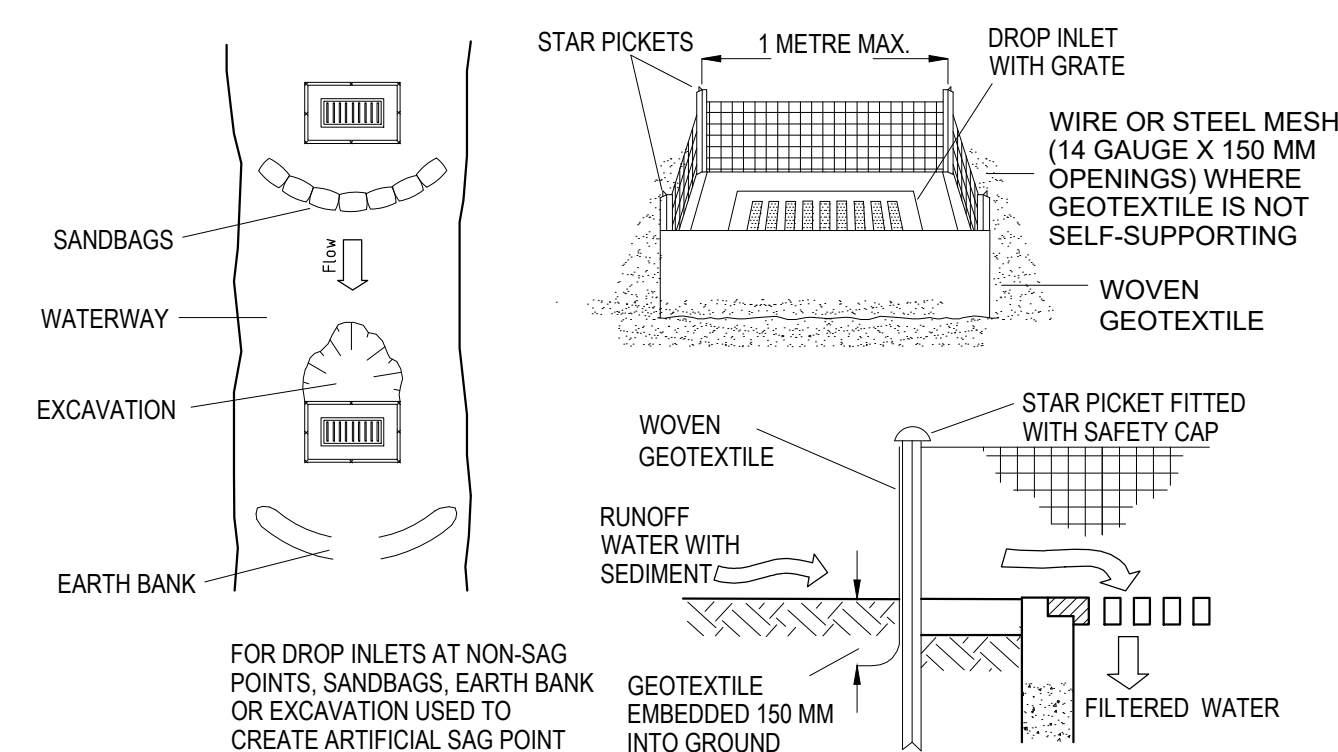
NOTE: THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN AN APPROVED SWMP/ESCP.

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY ON SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25 MM TO 50 MM GRAVEL. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150 MM HIGH X 400 MM WIDE.
3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100-MM SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER SD 6-11

STRAW BALE FILTER SD 6-7



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER SD 6-12

[illegible]

ARCHITECT: **webber**



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE: 1800 738 718
www.dpie.nsw.gov.au/land-and-housing-corporation


INDESCO PTY LTD www.indesco.com.au
ABN: 37 008 581 066

LAND AND HOUSING
CORPORATION
195 - 197 DIBBS STREET
EAST LISMORE NSW 2480

CLIENT		
FAMILY & COMMUNITY SERVICES		

DRAWING STATUS
DEVELOPMENT APPROVAL

SCALE AS SHOWN	COORDINATE SYSTEM -	DATUM AHD
-------------------	------------------------	--------------

DRAWING TITLE	
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	

DRAWING NUMBER
810

REVISION
1