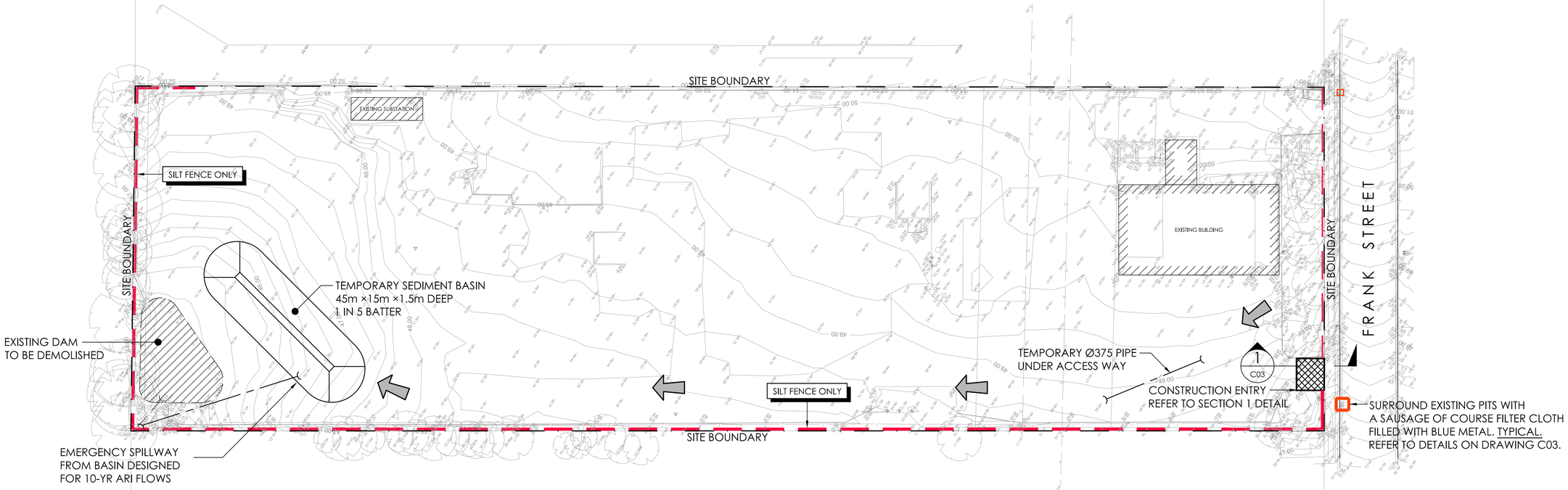
Attachment 16

Triaxial Consulting Plans



STAGE 1
EROSION & SEDIMENT CONTROL PLAN

SCALE 1:500

LEGEND:

- SILT FENCE ONLY
  REFER DETAILS ON DRAWING C03
- Q100 AR1 OVERLAND FLOW PATH

SEDIMENT BASIN DETAILS					
Cv	RAINFALL EVENT (5 DAY 85%)	CATCHMENT AREA (ha)	SETTLING ZONE VOLUME (m^3)	SEDIMENT STORAGE VOLUME (m^3)	TOTAL BASIN STORAGE VOLUME (m^3)
0.51	32.2	2.05	334	167	501

POST STORM DEWATERING NOTES

ON THE DAY IMMEDIATELY FOLLOWING A STORM EVENT:

- ADD GYPSUM TO THE SEDIMENT BASIN AT A RATE OF 30KG PER 100M3
- GYPSUM IS TO BE ADDED EVENLY ACROSS THE SURFACE OF THE BASIN FOLLOWING THE APPLICATION GUIDELINES IN SECTION E4.1 OF THE BLUEBOOK
- NOTE APPROXIMATELY 4 DAYS SETTLING TIME IS REQUIRED

FOLLOWING 4-DAY SETTLING PERIOD:

- WATER TO BE TESTED FOR TURBIDITY. TARGET 50MG/L
- PUMP OUT SEDIMENT BASIN TO COUNCIL STORMWATER SYSTEM

5-DAY FOLLOWING STORM

- SEDIMENT BASIN TO BE EMPTIED IN READY FOR ANY FUTURE STORM EVENTS

CONSTRUCTION STAGING

STAGE 1

- INSTALL SEDIMENT CONTROLS
- FORM NEW TEMPORARY SEDIMENT TRAP
- REMOVE EXISTING SEDIMENT TRAP
- FORM NEW RETAINING WALLS ALONG THE NORTHERN AND WESTERN PERIMETERS OF THE SITE
- INSTALL NEW HARVESTING TANKS
- BULK FILL AND GRADE TO HARVESTING TANKS

STAGE 2

- CONNECT OVERFLOW FROM HARVESTING TANK TO STORMWATER
- REMOVE TEMPORARY SEDIMENT TRAP & BACKFILL
- BULK FILL AND GRADE SITE TO FINISHED LEVELS
- INSTALL SITE STORMWATER SYSTEM
- INSTALL FINAL PAVEMENTS
- CONNECT STORMWATER SYSTEM INTO COUNCIL MAINLINE
- DESLUDGE HARVESTING TANKS

5m 0 10 20 30 40 50m

SCALE 1:500 AT A1 SHEET | 1:1000 AT A3 SHEET

AMENDMENTS	DATE	ISSUE
ISSUED FOR APPROVAL	24/08/2016	0
POST STORM DEWATERING NOTES REVISED	19/08/2016	B
ISSUED FOR APPROVAL	18/08/2016	A

STATUS

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CLIENT

Ahrens

PROJECT

RESOURCE Co.
35-37 FRANK STREET
WETHERILL PARK NSW

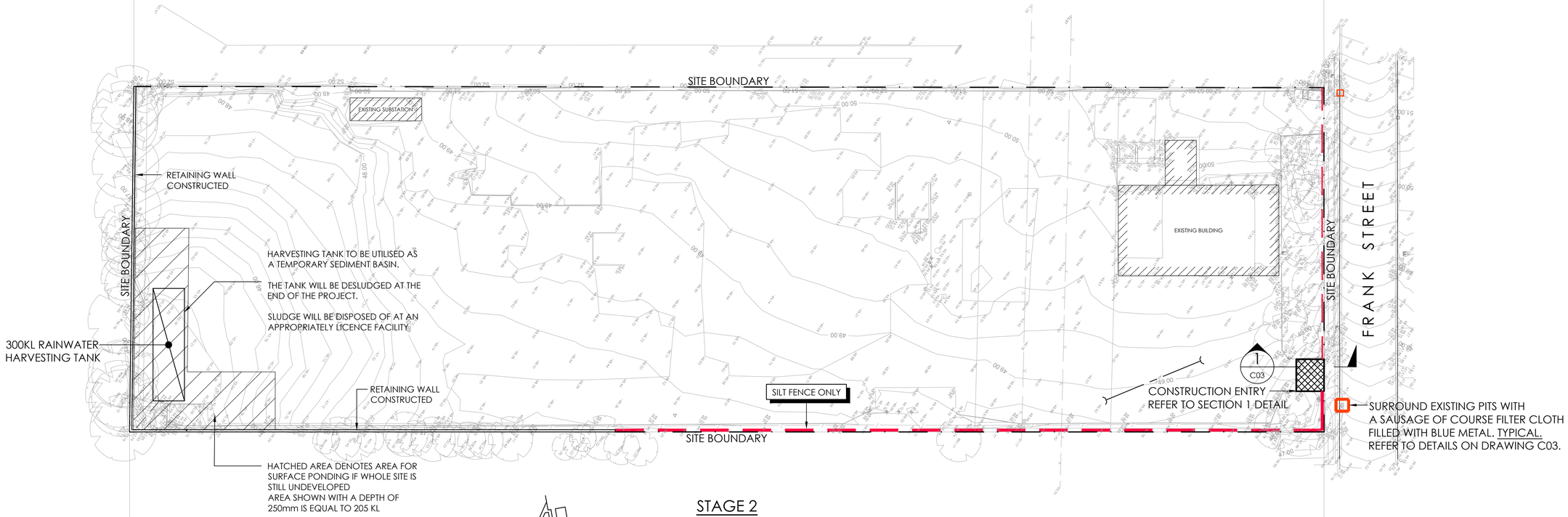
DESIGNED	DRAWN	DATE	SIZE	CAD REF
D.V.	F.N.	17.08.16	A1	TX-11972.00-C01

DRAWING TITLE

STAGE 1
EROSION & SEDIMENT CONTROL PLAN

DRAWING No | ISSUE

TX-11972.00 C01 0



STAGE 2
EROSION & SEDIMENT CONTROL PLAN
SCALE 1:500

LEGEND:

— — SILT FENCE ONLY
REFER DETAILS ON DRAWING C03

SEDIMENT BASIN DETAILS

Cv	RAINFALL EVENT (5 DAY 85%)	CATCHMENT AREA (ha)	SETTLING ZONE VOLUME (m³)	SEDIMENT STORAGE VOLUME (m³)	TOTAL BASIN STORAGE VOLUME (m³)
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- PUMP OUT SEDIMENT BASIN TO COUNCIL STORMWATER SYSTEM

5-DAY FOLLOWING STORM
- SEDIMENT BASIN TO BE EMPTIED IN READY FOR ANY FUTURE STORM EVENTS

CONSTRUCTION STAGING

STAGE 1
- INSTALL SEDIMENT CONTROLS
- FORM NEW TEMPORARY SEDIMENT TRAP
- REMOVE EXISTING SEDIMENT TRAP
- FORM NEW RETAINING WALLS ALONG THE NORTHERN AND WESTERN PERIMETERS OF THE SITE
- INSTALL NEW HARVESTING TANKS
- BULK FILL AND GRADE TO HARVESTING TANKS

STAGE 2
- CONNECT OVERFLOW FROM HARVESTING TANK TO STORMWATER
- REMOVE TEMPORARY SEDIMENT TRAP & BACKFILL
- BULK FILL AND GRADE SITE TO FINISHED LEVELS
- INSTALL SITE STORMWATER SYSTEM
- INSTALL FINAL PAVEMENTS
- CONNECT STORMWATER SYSTEM INTO COUNCIL MAINLINE
- DESLUDGE HARVESTING TANKS

5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SHEET | 1:1000 AT A3 SHEET

AMENDMENTS	DATE	ISSUE
SEDIMENT BASIN TABLE ADDED	27/09/2016	1
ISSUED FOR APPROVAL	24/08/2016	0
POST STORM DEWATERING NOTES REVISED	19/08/2016	B
ISSUED FOR APPROVAL	18/08/2016	A

STATUS: ISSUED FOR APPROVAL

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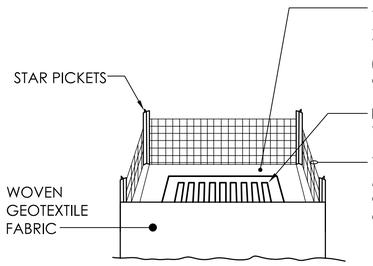
CLIENT: Ahrens

PROJECT: RESOURCE Co.
35-37 FRANK STREET
WETHERILL PARK NSW

DESIGNED	DRAWN	DATE	SIZE	CAD REF
D.V.	F.N.	17.08.16	A1	TX-11972.00-C01

DRAWING TITLE: STAGE 2 EROSION & SEDIMENT CONTROL PLAN

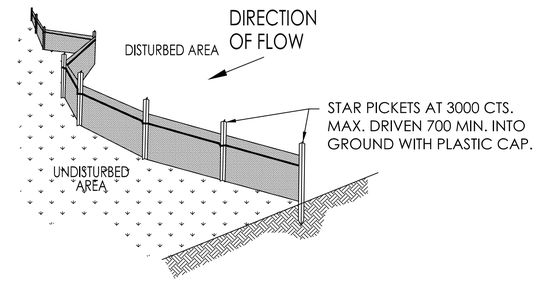
DRAWING No: TX-11972.00 C02 ISSUE: 1



GRATED INLET PIT FILTER DETAIL

N.T.S.

NOTE : ADOPT ABOVE DETAIL AROUND ALL PITS WITHIN AREA ENCOMPASSED BY SILT FENCE.

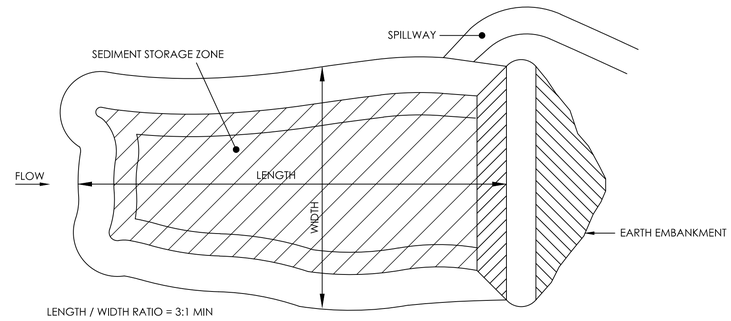


TYPICAL SILT FENCE DETAIL

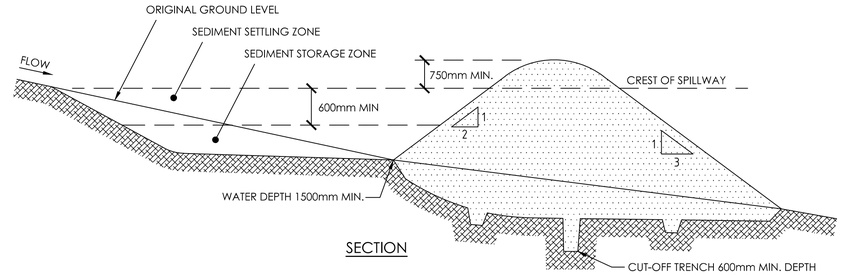
N.T.S.

PROVIDE 1m RETURNS AT 30m INTERVALS.

TYPICAL



PLAN



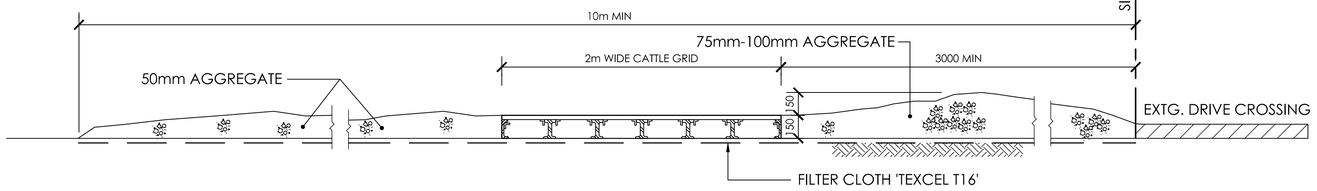
SECTION

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 500mm DEEP AND 1200mm 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 SPECIFIED IN THE SWMP TO 95% STANDARD PROCTOR DENSITY
4. SELECT FILL ACCORDING TO THE DIRECTIONS OF THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING AT LEAST 100mm DEEP TO HELP BOND COMPACTED FILL TO EXISTING SUBSTRATE.
6. SPREAD FILL IN 100mm TO 150mm LAYERS AND COMPACT AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH SWMP.
7. CONSTRUCT EMERGENCY SPILLWAY.
8. REHABILITATE STRUCTURE IN ACCORDANCE WITH THE SWMP.
9. PLACE A "FULL OF SEDIMENT" MARKER TO SHOW WHEN LESS THAN DESIGN CAPACITY OCCURS AND SEDIMENT REMOVAL IS REQUIRED.

TYPICAL TEMPORARY SEDIMENT BASIN DETAIL

N.T.S.



STABILISED CONSTRUCTION ENTRANCE 'TRUCK SHAKER'

NOTE:

TO BE CONSTRUCTED PRIOR TO COMMENCEMENT OF ANY WORKS.

SECTION 1 / C01-2

NOTES:

ALL EROSION & SEDIMENT CONTROL MEASURES TO BE IMPLEMENTED PRIOR TO COMMENCEMENT OF SITE WORKS.

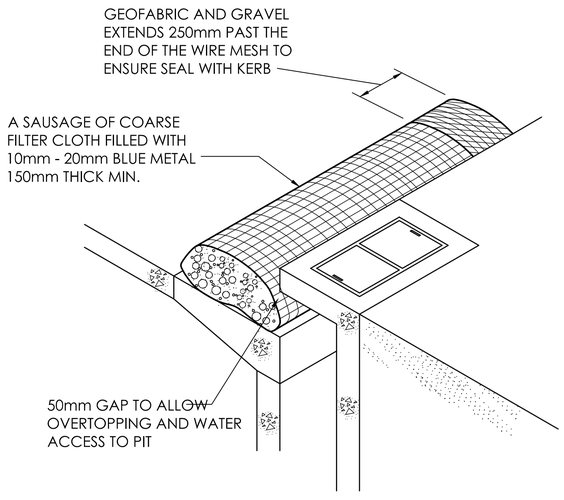
ALL EROSION & SEDIMENT CONTROL MEASURES TO BE INSPECTED & MAINTAINED DAILY BY SITE MANAGER.

MINIMISE DISTURBED AREAS.

ROADS & FOOTPATHS TO BE SWEPT DAILY. NO MUD OR DIRT ALLOWED ON FOOTPATH OR ROAD PAVEMENTS.

BATTERS TO BE STABILISED BY VEGETATING, TURFING OR OTHER APPROVED METHOD WITHIN 30 DAYS OF COMPLETION.

DUST MINIMISATION CONTROL BY WATERING TO BE IMPLEMENTED BY SITE MANAGER AS REQUIRED OR AS PER COUNCIL SPECIFICATIONS.



KERB INLET CONTROL

N.T.S.

AMENDMENTS	DATE	ISSUE
ISSUED FOR APPROVAL	24/08/2016	0
ISSUED FOR APPROVAL	18/08/2016	A

STATUS

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PROJECT

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WETHERILL PARK NSW

DESIGNED	DRAWN	DATE	SIZE	CAD REF
D.V.	F.N.	17.08.16	A1	TX-11972.00-C01

DRAWING TITLE

EROSION & SEDIMENT CONTROL DETAILS

DRAWING No

TX-11972.00 C03

ISSUE

0

HEIGHT OF RETAINING WALL: 0.4m

HEIGHT OF RETAINING WALL: 0.3m

BOUNDARY LINE 188° 50' 41" 267.49 m

HEIGHT OF RETAINING WALL: 0.45m

BOUNDARY LINE 99° 29' 21" 77.62 m

LEGEND:

- <RW DENOTES: ROOF DRAINGE LINE
- <SW DENOTES: STORMWATER DRAINGE LINE
- DENOTES: RETAINING WALL LINE

RL: 49.000

300kL RETENTION TANK
30×5×2m DEEP

HEIGHT OF RETAINING WALL: 1.85m

FFL: 47600

FFL: 48300

FFL: 48300

HEIGHT OF RETAINING WALL: 0.15m

HUMES JELLYFISH FILTER

SEP6

HUMEGARD GPT

HEIGHT OF RETAINING WALL: 3.0m

HEIGHT OF RETAINING WALL: 2.0m

HEIGHT OF RETAINING WALL: 1.4m

BOUNDARY LINE 8° 47' 10" 268.46 m

HEIGHT OF RETA WALL: 0.5m

STORMWATER PLAN

SCALE 1:200

2m 0 5 10 15 20m

SCALE 1:200 AT A1 SHEET | 1:400 AT A3 SHEET

ARCHITECT

AMENDMENTS	DATE	ISSUE
ISSUED FOR APPROVAL	24/08/2016	0
ISSUED FOR APPROVAL	23/08/16	A

STATUS
ISSUED FOR APPROVAL

CLIENT
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PROJECT
RESOURCE CO.
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WETHERILL PARK N.S.W.

DESIGNED	DRAWN	DATE	SIZE	CAD REF
D.V.	D.F.	19/08/16	A1/A3	TX-11972.00-C01

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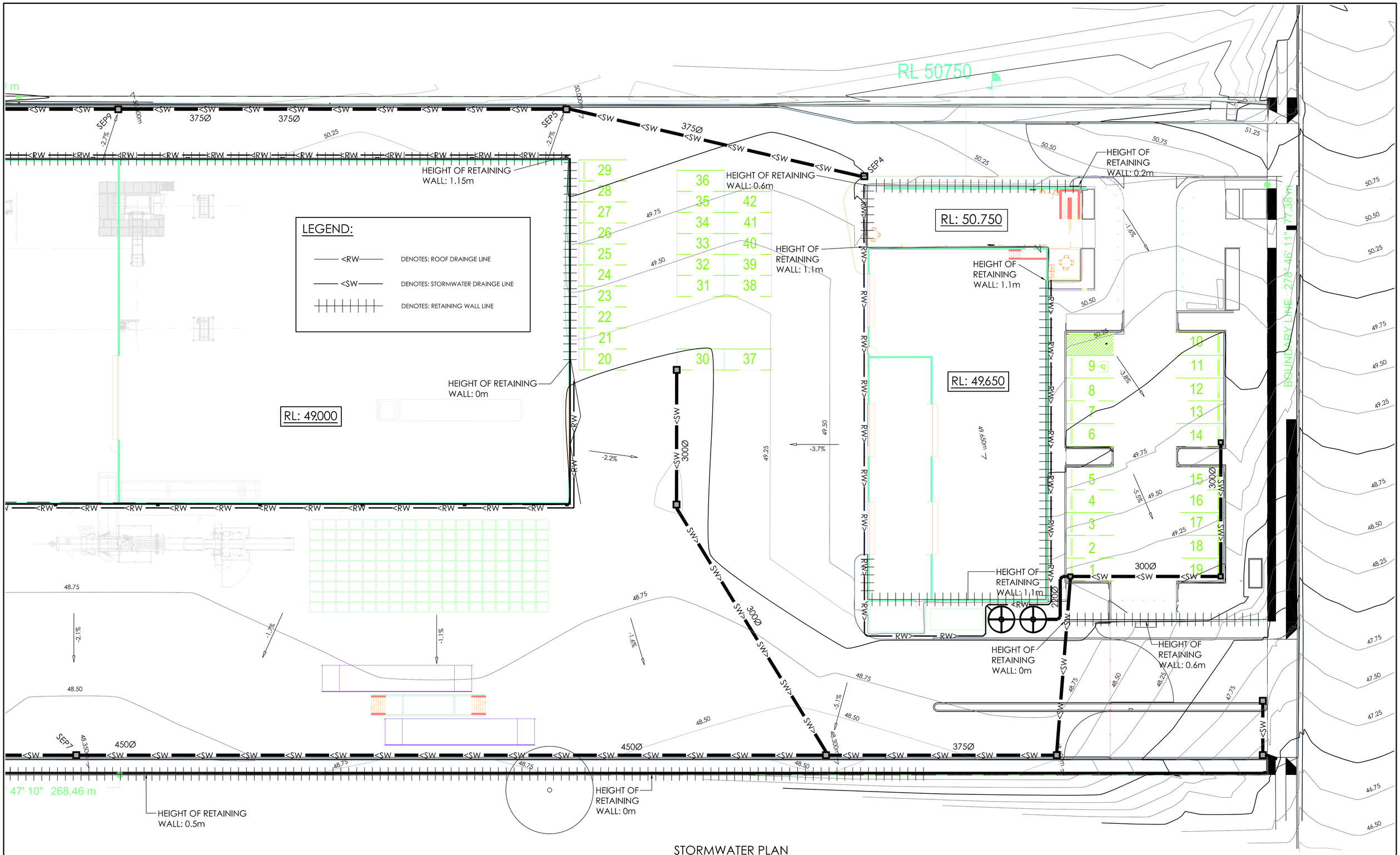
DRAWING TITLE
STORMWATER PLAN

DRAWING No
TX-11972.00 - C10

ISSUE
0



STORMWATER PLAN

SCALE 1:200

2m 0 5 10 15 20m

SCALE 1:200 AT A1 SHEET | 1:400 AT A3 SHEET

ARCHITECT

ISSUED FOR APPROVAL	24/08/2016	0
ISSUED FOR APPROVAL	23/08/16	A
AMENDMENTS	DATE	ISSUE

STATUS

ISSUED FOR APPROVAL

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DESIGNED	DRAWN	DATE	SIZE	CAD REF
D.V.	D.F.	19/08/16	A1/A3	TX-11972.00-C01

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DRAWING TITLE

STORMWATER PLAN

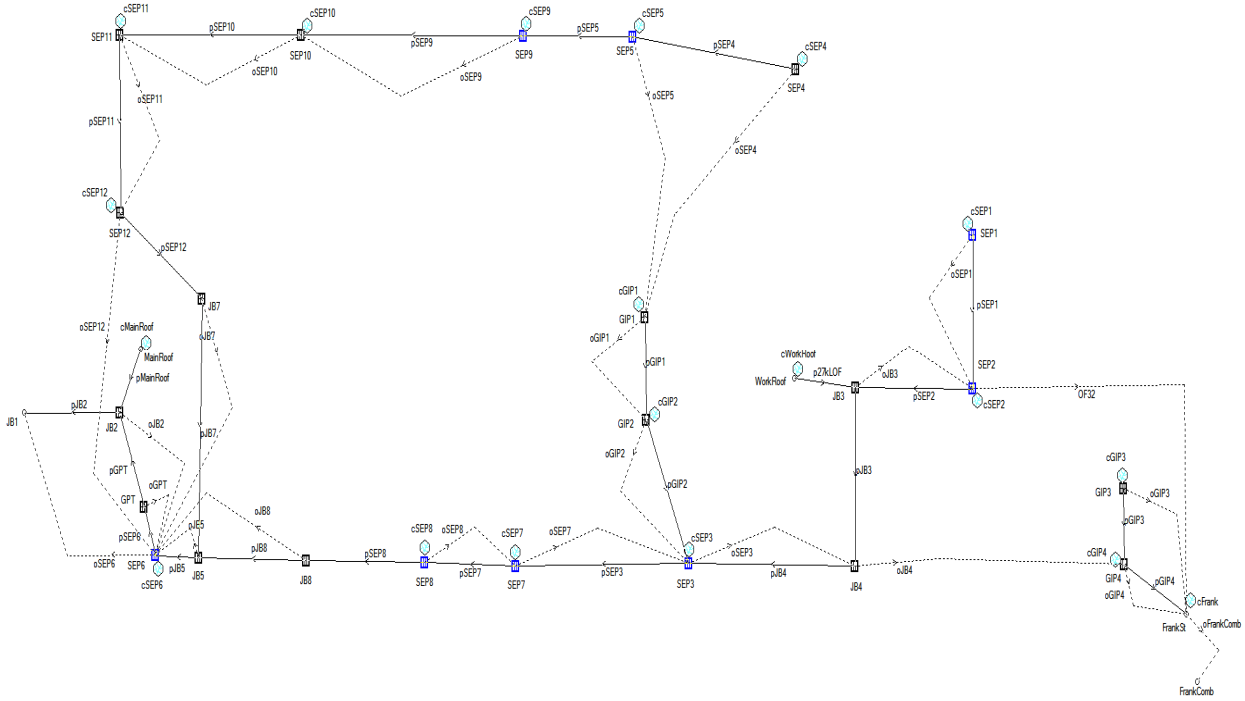
DRAWING No

TX-11972.00 - C11

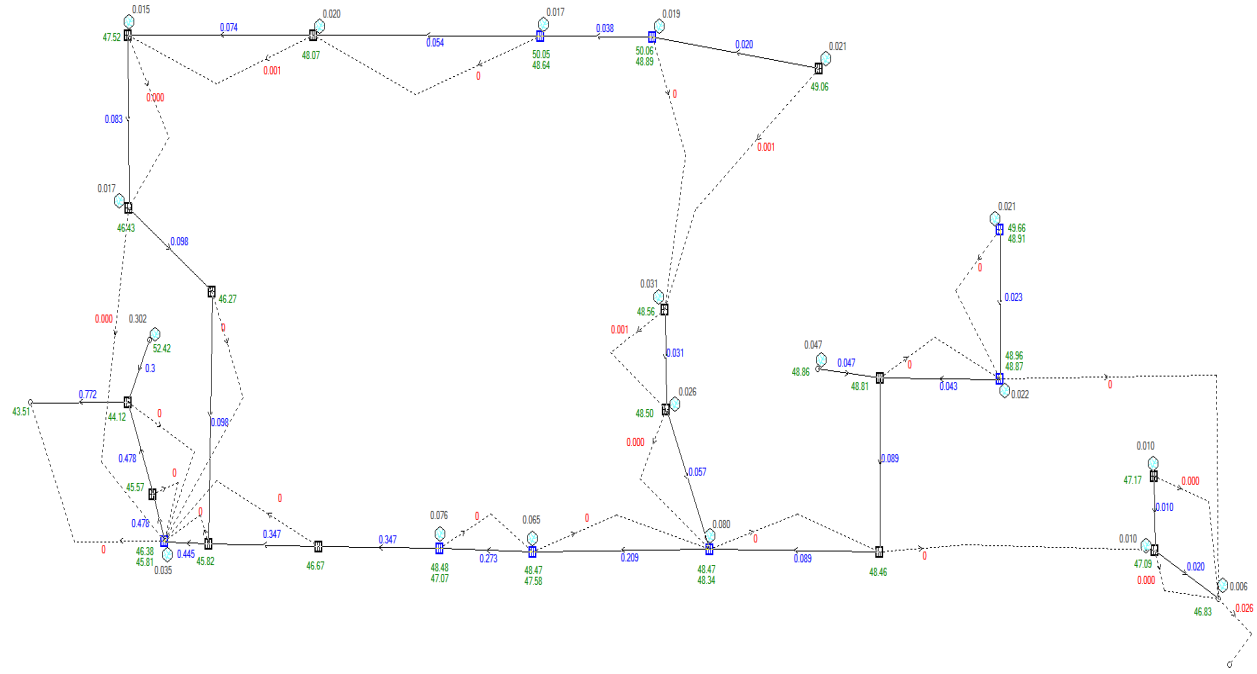
ISSUE

0

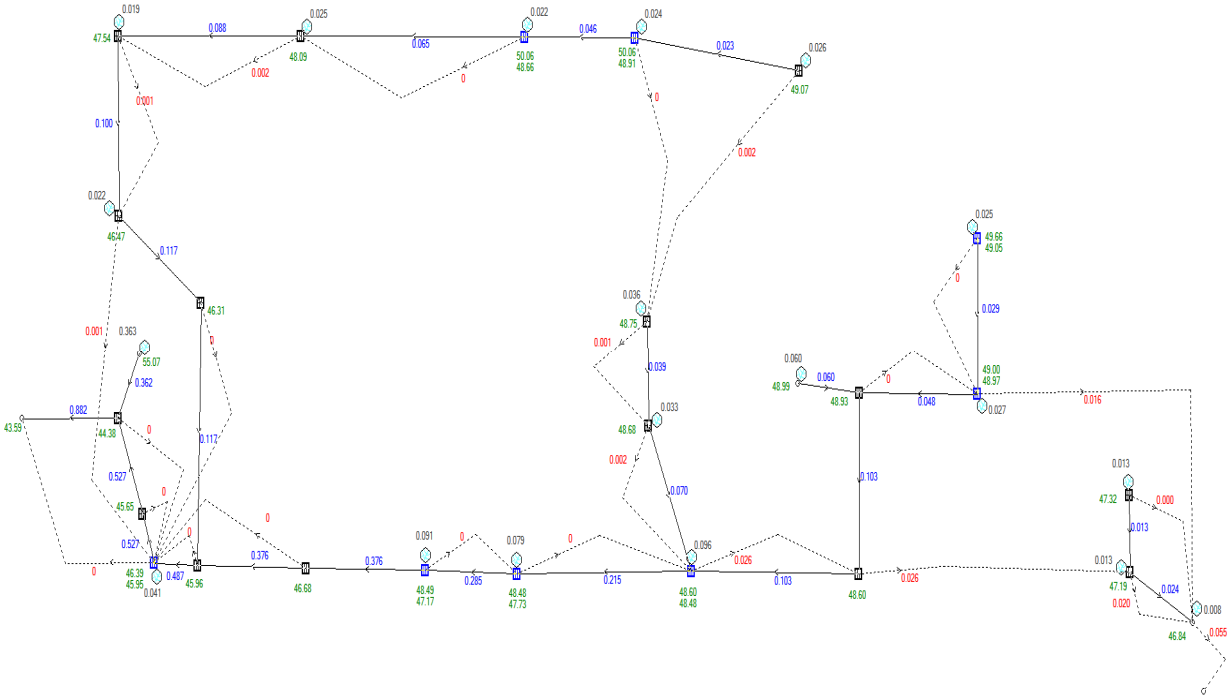
APPENDIX B
DRAINS MODELLING RESULTS



DRAINS Model Setup (above)



20-year ARI DRAINS Modelling Results (above)



100-year ARI DRAINS Modelling Results (above)

APPENDIX C
MUSIC MODELLING RESULTS