OAKDALE SOUTH ESTATE

LOT 2A

CIVIL WORKS PACKAGE
DEVELOPMENT APPLICATION

DRAWING LIST

DWG NO.	DRAWING TITLE
20-781-C100	COVER SHEET AND LOCALITY PLAN
20-781-C101	GENERAL NOTES
20-781-C105	GENERAL ARRANGEMENT PLAN
20-781-C106	TYPICAL SECTIONS
20-781-C110	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1
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20-781-C120	SITEWORKS DETAILS
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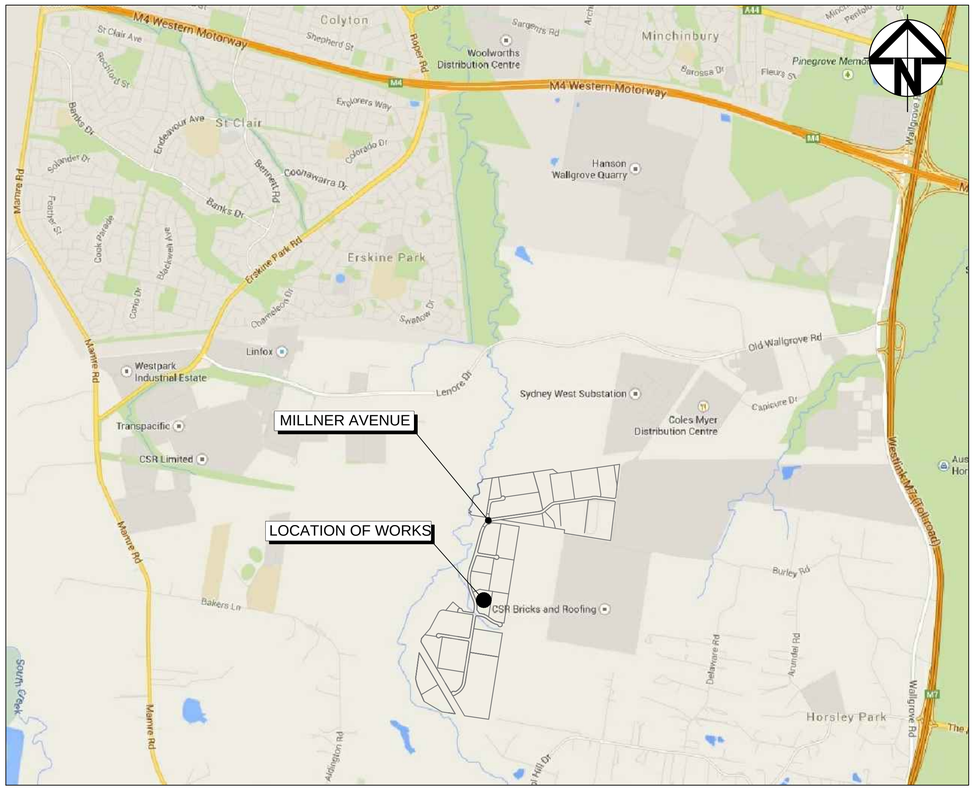
20-781-C130	BULK EARTHWORKS CUT/FILL PLAN
20-781-C135	PAVEMENT PLAN
20-781-C140	EROSION AND SEDIMENT CONTROL PLAN
20-781-C145	EROSION AND SEDIMENT CONTROL DETAILS



LOCALITY PLAN
NTS

Bar Scales

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION
A1

File Name: 20-781-C100.dwg

		Drawn	TK
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Height Datum	AHD	Checked	FX
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Client: Goodman

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
COVER SHEET AND
LOCALITY PLAN

Drawing No.: 20-781-C100
Issue: A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:11PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C100.dwg V1

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KERBING NOTES

1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa. U.N.O IN REINFORCED CONCRETE NOTES.
2. ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
3. EXPANSION JOINTS (E.J) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
4. WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
5. BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
6. IN THE REPLACEMENT OF KERB AND GUTTER :- EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O. EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB AND GUTTER WITH 100mm DIA HOLE. EXISTING KERB AND GUTTER IS TO BE COMPLETELY REMOVED WHERE NEW KERB AND GUTTER IS SHOWN.

OVERALL SITEWORKS LEGEND - COMBINED

EXISTING

- EXISTING BOUNDARY
- 60.0 EXISTING CONTOUR

PROPOSED SITEWORKS

- PROPOSED BOUNDARY
- BATTER
- ● F65.50 PROPOSED SURFACE LEVE
- -65.5- PROPOSED MAJOR CONTOUR (0.5m INTERVAL)
- PROPOSED MINOR CONTOUR (0.25m INTERVAL)
- K&G KERB AND GUTTER (REFER PCC DWG. SD1003/1)
- KO KERB ONLY (REFER PCC DWG. SD1003/2)
- IKO INTEGRAL KERB
- DD DISH DRAIN (REFER PCC DWG. SD1003/2)
- VC VEHICLE CROSSOVER (REFER PCC DWG. SD1004)
- PR PRAM RAMP (REFER PCC DWG. SD1002)
- S SEWER MAIN (BY OTHERS)
- 375ø STORMWATER PIPE WITH SIZE
- KERB INLET PIT (REFER PCC DWG. SD2001 U.N.O.)
- SURFACE INLET PIT (REFER PCC DWG. SD2002 U.N.O)
- JUNCTION PIT (REFER PCC DWG. SD2002 U.N.O)
- DP DOWNPIPES & PIPEWORK. (T.B.C. BY HYDRAULIC ENGINEERS)
- FP SUB-SOIL DRAINAGE AND FLUSH POINT
- D/3 PROPOSED STORMWATER PIT NUMBER
- GD (GRATED DRAIN) RETAINING WALL
- RETAINING WALL

EXISTING SERVICES LEGEND

- E EXISTING ELECTRICAL
- EXISTING LIGHTPOLES
- W EXISTING WATER
- S EXISTING SEWER
- EXISTING SEWER MANHOLE
- T EXISTING TELECOM
- EXISTING STORMWATER LINE
- EXISTING STORMWATER PIT

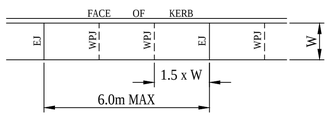
SITEWORKS NOTES

1. ORIGIN OF LEVELS:- REFER SURVEY NOTES.
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
3. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
4. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
5. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1(2017). (OR A DENSITY INDEX OF NOT LESS THAN 75)
6. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
7. ASPHALTIC CONCRETE SHALL CONFORM TO RMS. SPECIFICATION R116.
8. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051 (UNBOUND), RMS. FORM ACCORDANCE WITH AS 1289 5.2.1(2017) FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF BASECOURSE MATERIAL PLACED.
9. ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051, 3051.1 AND COMPACTED FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF SUB-BASE COURSE MATERIAL PLACED.
10. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH RMS. FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
11. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
12. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS. 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1(2017)

JOINTING NOTES

PEDESTRIAN PAVEMENT JOINTS

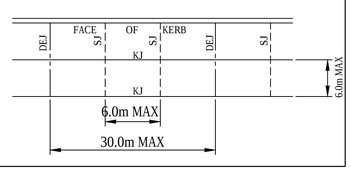
1. ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS. (U.N.O)
2. EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6.0m CENTRES.
3. WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX. SPACING OF 1.5 x WIDTH OF THE PAVEMENT.
4. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
5. PEDESTRIAN PAVEMENT JOINT DETAIL.



NB: CHECK RELEVANT COUNCIL REQUIREMENTS IF IN PUBLIC ROAD.

VEHICULAR PAVEMENT JOINTS

6. ALL VEHICULAR PAVEMENTS TO BE JOINTED AS FOLLOWS. (U.N.O)
7. ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.
8. KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED AT A MAX OF 6.0m CENTRES
9. SAWN JOINTS SHOULD GENERALLY BE LOCATED AT A MAX OF 6.0m CENTRES WITH DOWELED EXPANSION JOINTS AT MAX 30.0m CENTRES
10. VEHICULAR PAVEMENT JOINT DETAIL.



STORMWATER DRAINAGE NOTES

1. STORMWATER DESIGN CRITERIA:
   A) AVERAGE RECURRENCE INTERVAL:
   1:100 YEARS ROOFED AREAS TO SURCHARGE PIT
   1:?? YEARS EXTERNAL PAVEMENTS
   (B) RAINFALL INTENSITIES:
   TIME OF CONCENTRATION: MINUTES 5
   1:100 YEARS= ?? mm/hr
   1:?? YEARS= ?? mm/hr
   (C) RUNOFF COEFFICIENTS:
   ROOF AREAS: C =1.0 100
   EXTERNAL PAVEMENTS: C =1.0 ??
2. PIPES 300 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
3. PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
4. EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED.
5. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
6. PIPES TO BE INSTALLED TO TYPE HS3 (ROAD) HS2 (LOTS) SUPPORT IN ACCORDANCE WITH AS 3725 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
7. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (2006) AND AS/NZS 3500 3.2 (2010).
8. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY AT & L.
9. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
10. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
11. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
12. GRATES AND COVERS SHALL CONFORM TO AS 3996.
13. ALL INTERNAL PIT DIMENSIONS TO CONFORM TO AS3500.3 TABLE 7.5.2.1
14. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
15. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

BULK EARTHWORKS NOTES

1. ORIGIN OF LEVELS: REFER SURVEY NOTES
2. STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
3. EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
4. COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

LOCATION	STANDARD DRY DENSITY (AS 1289 E 5.1.1.)
UNDER BUILDING SLABS ON GROUND	98%
UNDER ROADS AND CARPARKS	98%
LANDSCAPED AREAS UNLESS NOTED OTHERWISE	98%

5. FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.
6. BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
7. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN :-
   (A) 1 TEST PER 200m^2 OF FILL PLACED PER 300 LAYER OF FILL.
   (B) 3 TESTS PER VISIT
   (C) 1 TEST PER 1000m^3 OF EXPOSED SUBGRADE
   TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798 (2007).
8. FILLING TO BE PLACED AND COMPACTED IN MAXIMUM 150mm LAYERS
9. NO FILLING SHALL TAKE PLACE TO EXPOSE SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF AT & L AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600(2018) CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS 3600 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE	32	60	20
KERBS, PATHS, AND PITS	25	80	20

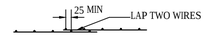
- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.

3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
4. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
5. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
6. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.M.S. SPECIFICATION R83.
7. REINFORCEMENT SYMBOLS:
   N DENOTES GRADE 450 N BARS TO AS/NZS 4671 GRADE N
   R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS/NZS 4671
   SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671

NUMBER OF BARS IN GROUP ┐ ┌ BAR GRADE AND TYPE
17 N 20 250
NOMINAL BAR SIZE IN mm ┘ └ SPACING IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS/NZS 4671.

8. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:



SURVEY NOTES

THE EXISTING SITE CONDITIONS HAS BEING SURVEY AS PART OF THE WORK AS EXECUTED PLANS PREPARED BY BURTON CONTRACTORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT AT & L.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED.
2. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
   a. LOCAL AUTHORITY REQUIREMENT
   b. EPA REQUIREMENTS
   c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
3. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
5. CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

6. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
   (A) INSTALL A WIND FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
   (B) INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
   (C) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
   (D) INSTALL SEDIMENT BASIN AS SHOWN ON PLAN
   (E) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
   (F) UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

9. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
10. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
11. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
14. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
   (A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
   (B) ENSURING THAT NOTHING IS NAILED TO THEM
   (C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
   (I) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
   (II) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
   (III) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

CONTRACTOR SHALL CALL;
DIAL BEFORE YOU DIG 1100
PRIOR TO COMMENCEMENT OF WORK TO OBTAIN ALL CURRENT SERVICE AUTHORITY PLANS

DIAL BEFORE YOU DIG www.1100.com.au

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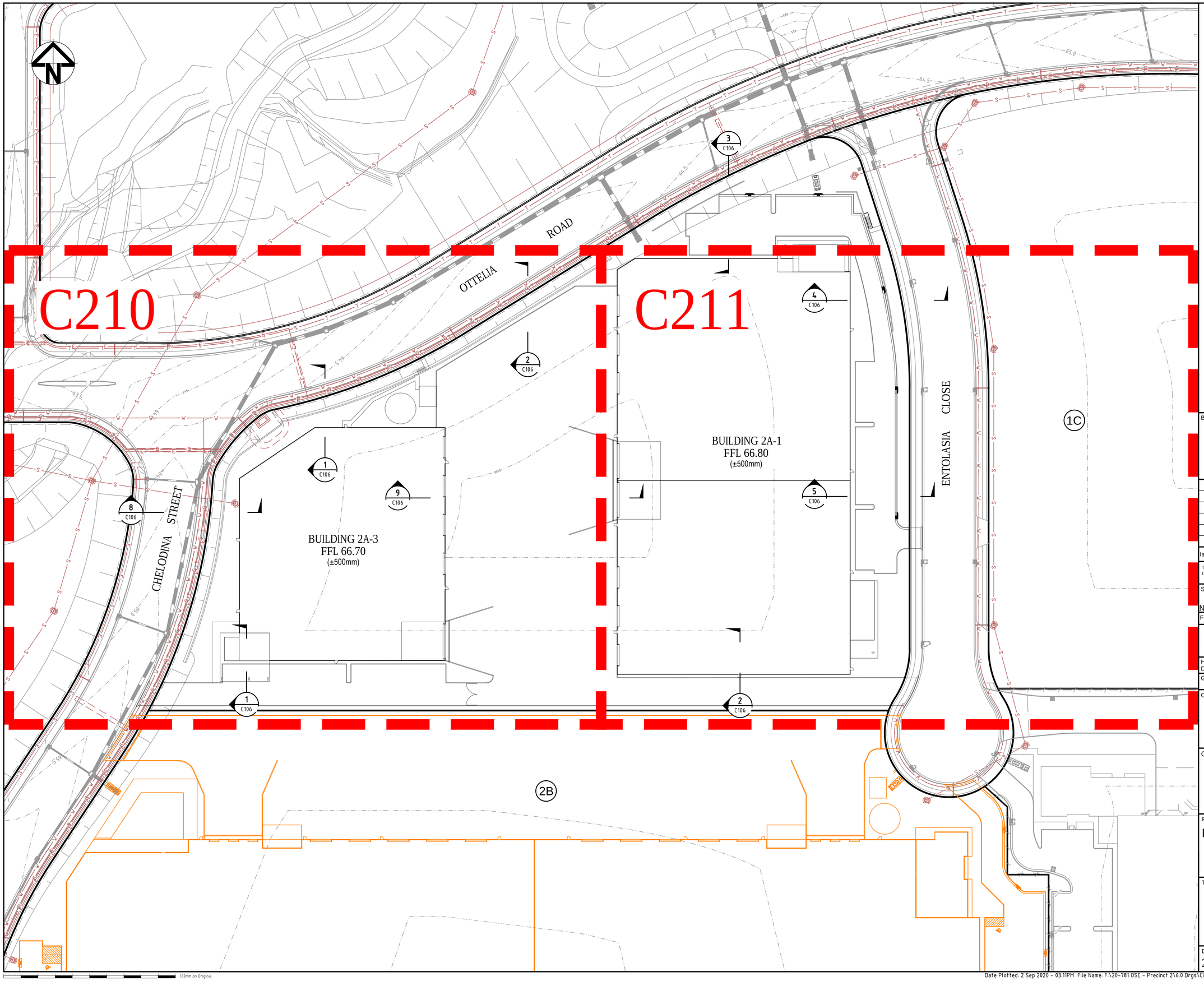
Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
GENERAL NOTES

Drawing No. 20-781-C101
Issue A

100mm on Original



Bar Scales

0 10 20 30 40

1 : 500 @ A1 1 : 1000 @ A3

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
GENERAL
ARRANGEMENT PLAN

Drawing No. 20-781-C105

Issue A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:11PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C105.dwg V1

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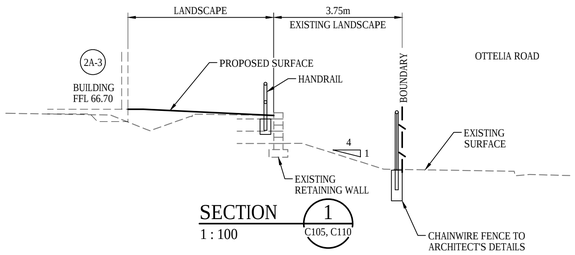
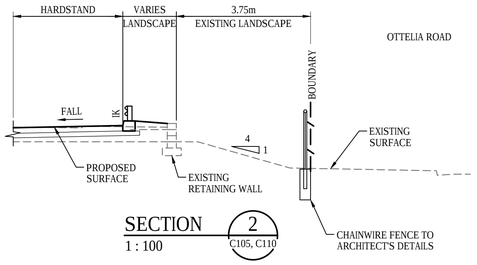
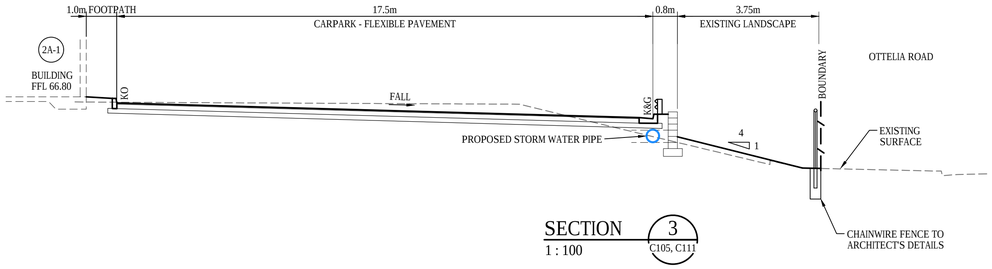


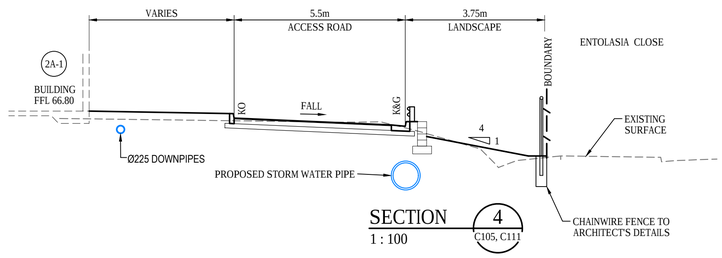
SECTION 1
1 : 100 C105, C110



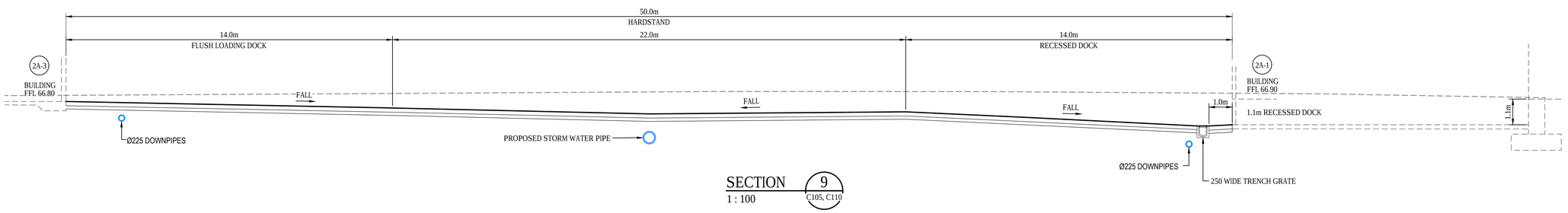
SECTION 2
1 : 100 C105, C110



SECTION 3
1 : 100 C105, C111



SECTION 4
1 : 100 C105, C111



SECTION 9
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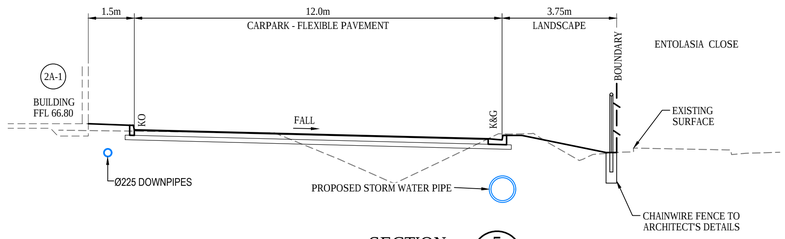

SECTION 5
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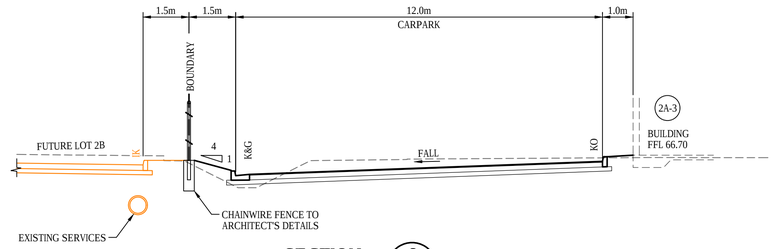

SECTION 6
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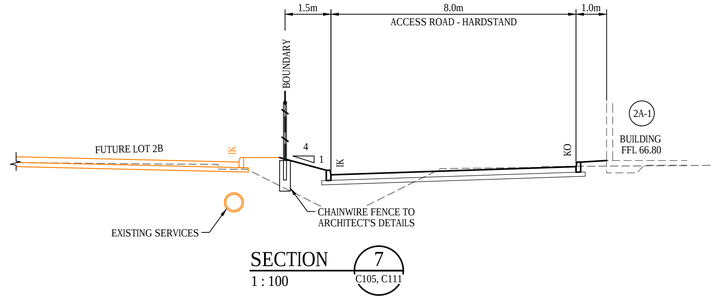
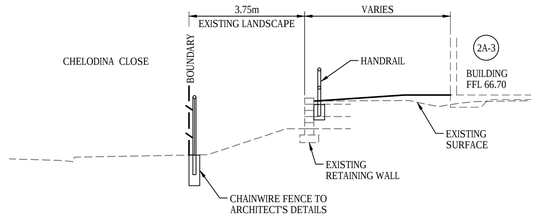


SECTION 7
1 : 100 C105, C111



SECTION 8
1 : 100 C105, C110

Bar Scales

0 2 4 6 8

1 : 100 @ A1 1 : 200 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

File Name 20-781-C106.dwg

		Drawn	TK
		Designed	SM
Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

Client

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
TYPICAL SECTIONS

Drawing No. 20-781-C106

Issue A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:12PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C106.dwg V1

OTTELIA ROAD

CHELODINA STREET

EXISTING SUB STATION

BUILDING 2A-3
FFL 66.70
(±500mm)

NOTE:
DOWNPIPE CONNECTIONS AND SIZING TO BE CONFIRMED AT DETAILED DESIGN

NOTE:
DOWNPIPE CONNECTIONS AND SIZING TO BE CONFIRMED AT DETAILED DESIGN

NOTE:
DOWNPIPE CONNECTIONS AND SIZING TO BE CONFIRMED AT DETAILED DESIGN

PROPOSED RAINWATER TANK (30kL TBC AT DETAILED DESIGN)

PROPOSED RAINWATER TANK (30kL TBC AT DETAILED DESIGN)

1.1m RECESSED LOADING DOCK

1.1m RECESSED LOADING DOCK

CONTINUATION ON DRAWING C211

Bar Scales

0 5 10 15 20

1 : 250 @ A1 1 : 500 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
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A1

File Name: 20-781-C110.dwg

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
SITEWORKS AND STORMWATER DRAINAGE PLAN - SHEET 1

Drawing No.: 20-781-C110
Issue: A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:12PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C110.dwg V1

CONTINUATION ON DRAWING C210

BUILDING 2A-1
FFL 66.80
(±500mm)

BUILDING 2A-2
FFL 66.80
(±500mm)

NOTE:

DOWNPIPE CONNECTIONS AND SIZING TO BE CONFIRMED AT DETAILED DESIGN

ENTOLASIA CLOSE

OTTELIA ROAD

PROPOSED RETAINING WALL

INSET
SCALE 1 : 250

Bar Scales

0 5 10 15 20

1 : 250 @ A1 1 : 500 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

File Name 20-781-C111.dwg

		Drawn	TK
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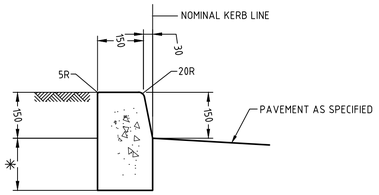
Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
SITEWORKS AND STORMWATER DRAINAGE PLAN - SHEET 2

Drawing No. 20-781-C111

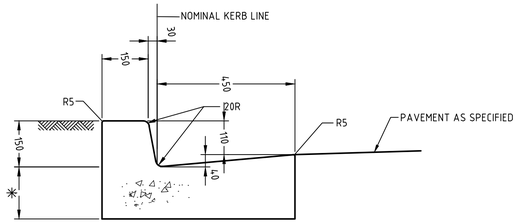
Issue A

100mm on Original



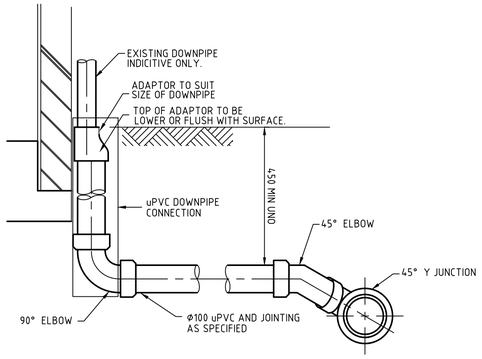
KERB ONLY (KO)
SCALE 1:10

✳ TO SUIT PAVEMENT DEPTH MIN. 150mm

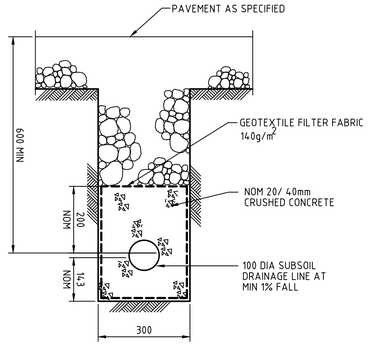


KERB AND GUTTER (K&G)
SCALE 1:10

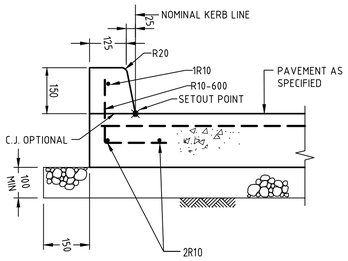
✳ TO SUIT PAVEMENT DEPTH MIN. 150mm



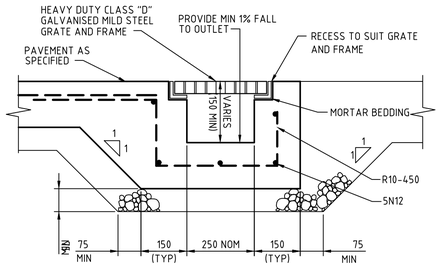
PVC DOWNPIPE CONNECTION
SCALE 1:10



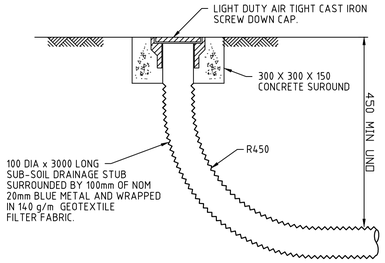
SUBSOIL IN PAVED AREAS
SCALE 1:10



INTEGRAL KERB (IKO)
SCALE 1:10

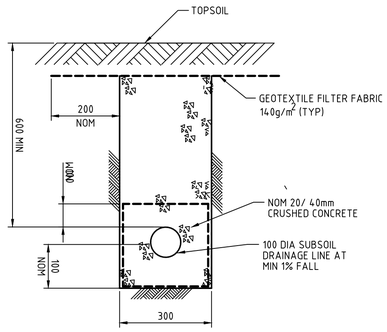


GRATED DRAIN (GD)
SCALE 1:10

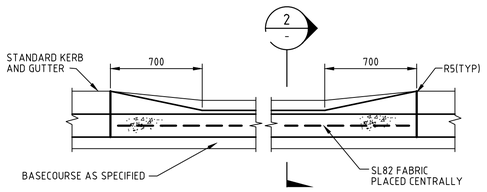


FLUSHING POINT
SCALE 1:10

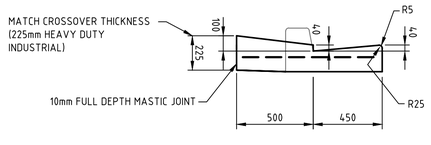
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



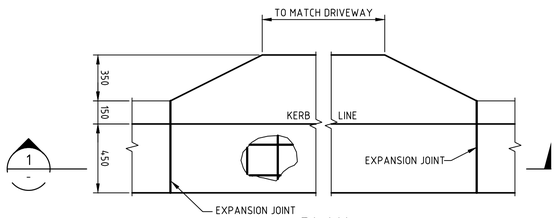
SUBSOIL IN LANDSCAPED AREAS
SCALE 1:10



SECTION 2-2
1 : 20

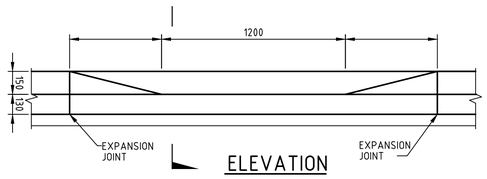


SECTION 1-1
1 : 20

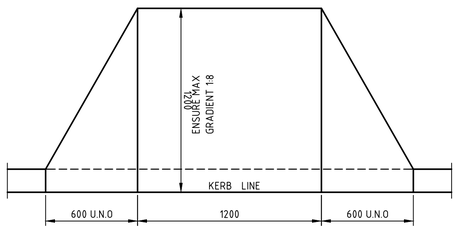


PLAN
VEHICULAR CROSSING
SCALE 1:20

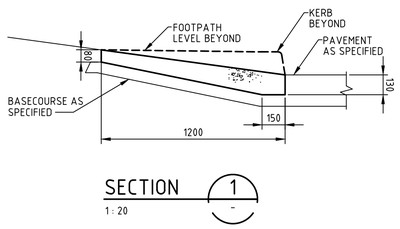
NOTE: VEHICULAR CROSSOVER AND LAYBACKS TO BE CONSTRUCTED IN ACCORDANCE WITH PENRITH CITY COUNCIL SPECIFICATIONS AND GUIDELINES. REFER TO STANDARD DRAWING SD1004 FOR LAYBACK DETAILS.



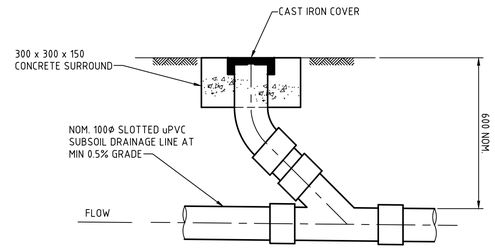
ELEVATION



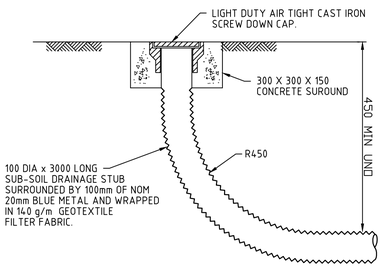
PLAN
RAMPED CROSSING
SCALE 1:20



SECTION 1-1
1 : 20



INTERMEDIATE RISER
SCALE 1:10



FLUSHING POINT
SCALE 1:10

NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED

Bar Scales
0 500 1000 1500
1 : 20 @ A1 1 : 40 @ A3
0 100 200 400 600 800
1 : 10 @ A1 1 : 20 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
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A1

File Name: 20-781-C120.dwg

		Drawn	TK
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Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

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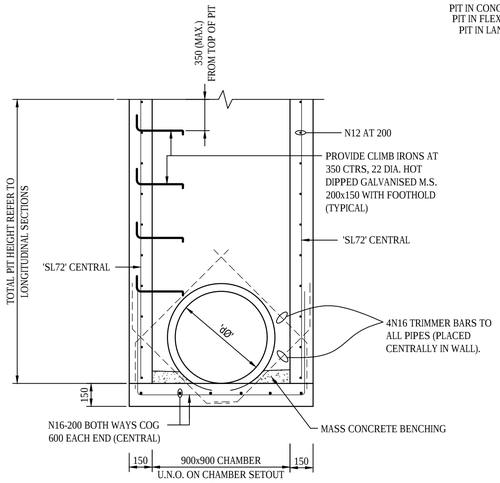
Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

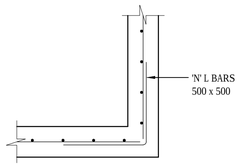
Title
SITEWORKS
DETAILS

Drawing No. 20-781-C120
Issue A



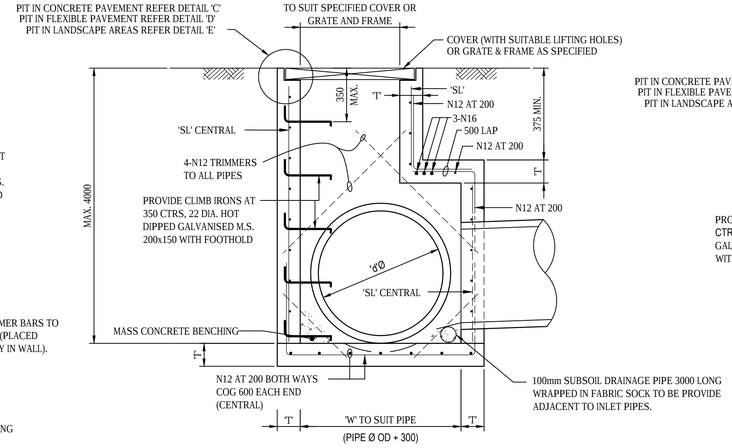
PIT CHAMBER DETAIL FOR PIPES UP TO 525Ø (TYPE 1)

SCALE: 1:20



TYPICAL CORNER DETAIL

SCALE 1:20



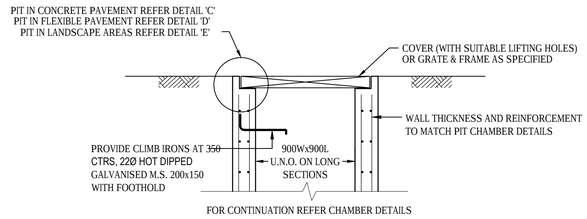
PIT CHAMBER DETAIL FOR PIPES FROM 600Ø TO 1200Ø TYPE 2

(ENLARGED CHAMBER)

SCALE: 1:20

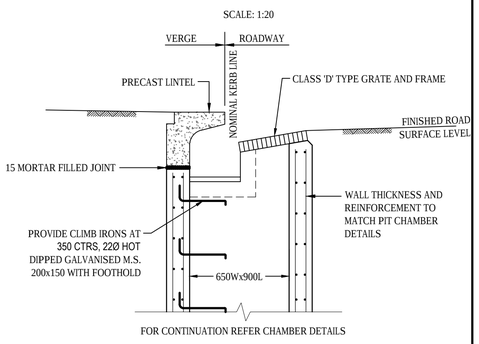
PIPE DIA. 'dØ'	WIDTH 'W' (U.N.O)	WALL 'T'	FABRIC/COV 'SL'
600	900	150	SL82
675	940	150	SL82
750	1020	150	SL82
825	1100	150	SL82
900	1180	200	SL82
1050	1350	200	SL92
1200	1510	200	SL102

CHAMBER DEPTH EXCEEDING 2m IN HEIGHT CERTIFIED APPROVED BY STRUCTURAL ENGINEER.



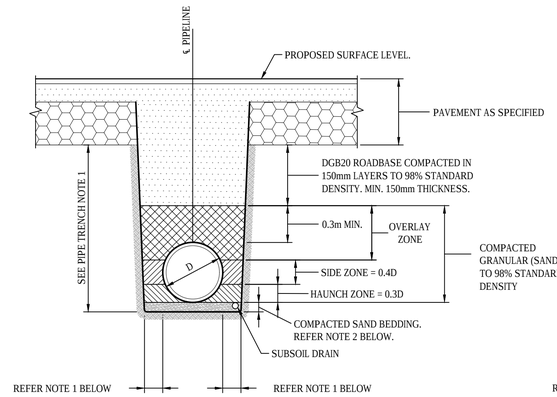
STANDARD SURFACE INLET OR SEALED JUNCTION PIT

SCALE: 1:20



STANDARD GRATED KERB INLET PIT WITH LINTEL

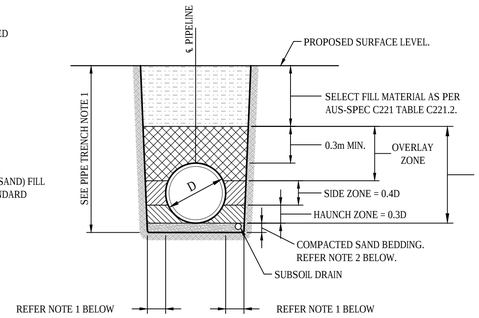
SCALE: 1:20



PIPE TRENCH BELOW PAVEMENT

N.T.S.

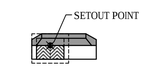
NOTE
1. ≥0.2D OR 0.3m (WHICHEVER IS GREATER)
2. 100mm FOR PIPE DIA. ≤1500



PIPE TRENCH BELOW LANDSCAPING (HS3)

N.T.S.

NOTE
1. ≥0.2D OR 0.3m (WHICHEVER IS GREATER)
2. 100mm FOR PIPE DIA. ≤1500



KERB INLET PIT
SCALE 1 :100

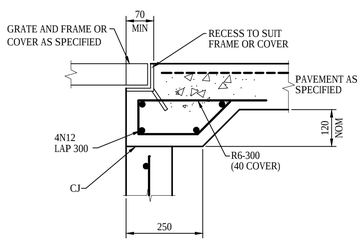
SURFACE INLET PIT
SCALE 1 :100

JUNCTION PIT
SCALE 1 :100

HEADWALL
SCALE 1 :100

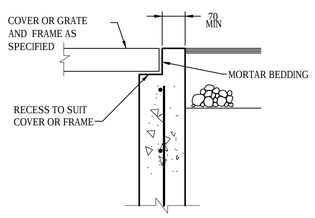
STORMWATER PIT SETOUT POINTS

REFER PIT SETOUT PLANS FOR ENLARGED CHAMBERS



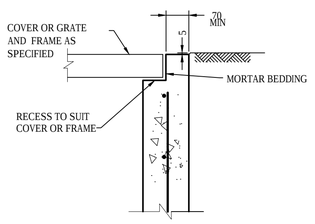
DETAIL "C"

SCALE 1:10



DETAIL "D"

SCALE 1:10



DETAIL "E"

SCALE 1:10

PIPE TRENCH NOTES

1. IN UNDERTAKING TRENCH EXCAVATION, THE CONTRACTOR SHALL PROVIDE ANY SHORING, SHEET PILING OR OTHER STABILISATION OF THE TRENCH NECESSARY TO COMPLY WITH OH&S REGULATION REQUIREMENTS. THE SIDES ARE NOT TO BE LOADED & SHALL BE KEPT CLEAR OF LOOSE MATERIAL ETC. SAFE ACCESS & EGRESS SHALL BE PROVIDED AT ALL TIMES.

2. THE TRENCH SHALL BE EXCAVATED TO A WIDTH 1.4 TIMES THE EXTERNAL DIAMETER OF THE PIPE, OR TO THE EXTERNAL DIAMETER OF THE PIPE PLUS 300mm ON EACH SIDE, WHICHEVER IS THE GREATER.

NOTE

1. STANDARD GULLY PITS REFER TO LIVERPOOL CITY COUNCIL STANDARD DRAWINGS FOR DETAILS

FOR INLET SIZE, PIT CHAMBER SIZE AND SETOUT REFER TO STORMWATER LONGITUDINAL SECTIONS.

2. REINFORCING MESH IS TO BE BENT TO LAP 300 AROUND ALL CORNERS. VERTICAL BARS ARE NOT TO BE CUT. ALTERNATELY PROVIDE N12 "L" BARS (500x500) AT 400 VERTICAL CTS.

3. COMPRESSIVE STRENGTH (F'c) FOR CAST IN SITU CONCRETE SHALL BE A MINIMUM 32 MPa AT 28 DAYS.

4. TOP OF BENCHING SHALL BE $\frac{1}{2}$ OF OUTLET PIPE DIAMETER.

5. 100mm SUBSOIL DRAINAGE PIPE 3000 LONG WRAPPED IN FABRIC SOCK TO BE PROVIDE ADJACENT TO INLET PIPES.

6. ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP.

7. PIT GRATE TO BE 'WELDLOK' GULLY GRATE GG 78-50 OR APPROVED EQUIVALENT.

8. DURING INSTALLATION OF GRATE AND FRAME CONTRACTOR IS TO ENSURE CLEARANCE BETWEEN LINTEL AND OPENED GRATE (REFER TO INSTALLATION TOLERANCE).

9. PROVIDE STEP IRONS AS INDICATED FOR PITS DEEPER THAN 1200.

10. N12 AT 200 CENTRALLY PLACED MAY BE USED IN LIEU OF MESH. LAP 500 AT CORNERS

11. MINIMUM REINFORCEMENT COVER TO BE 45mm UNLESS NOTED OTHERWISE

15. CHAMBER DEPTH EXCEEDING 2m IN HEIGHT WILL BE DESIGNED AND APPROVED BY STRUCTURAL ENGINEER

16. CONCRETE STRENGTH: - UNLESS NOTED OTHERWISE

ELEMENT	f'c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

Bar Scales

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

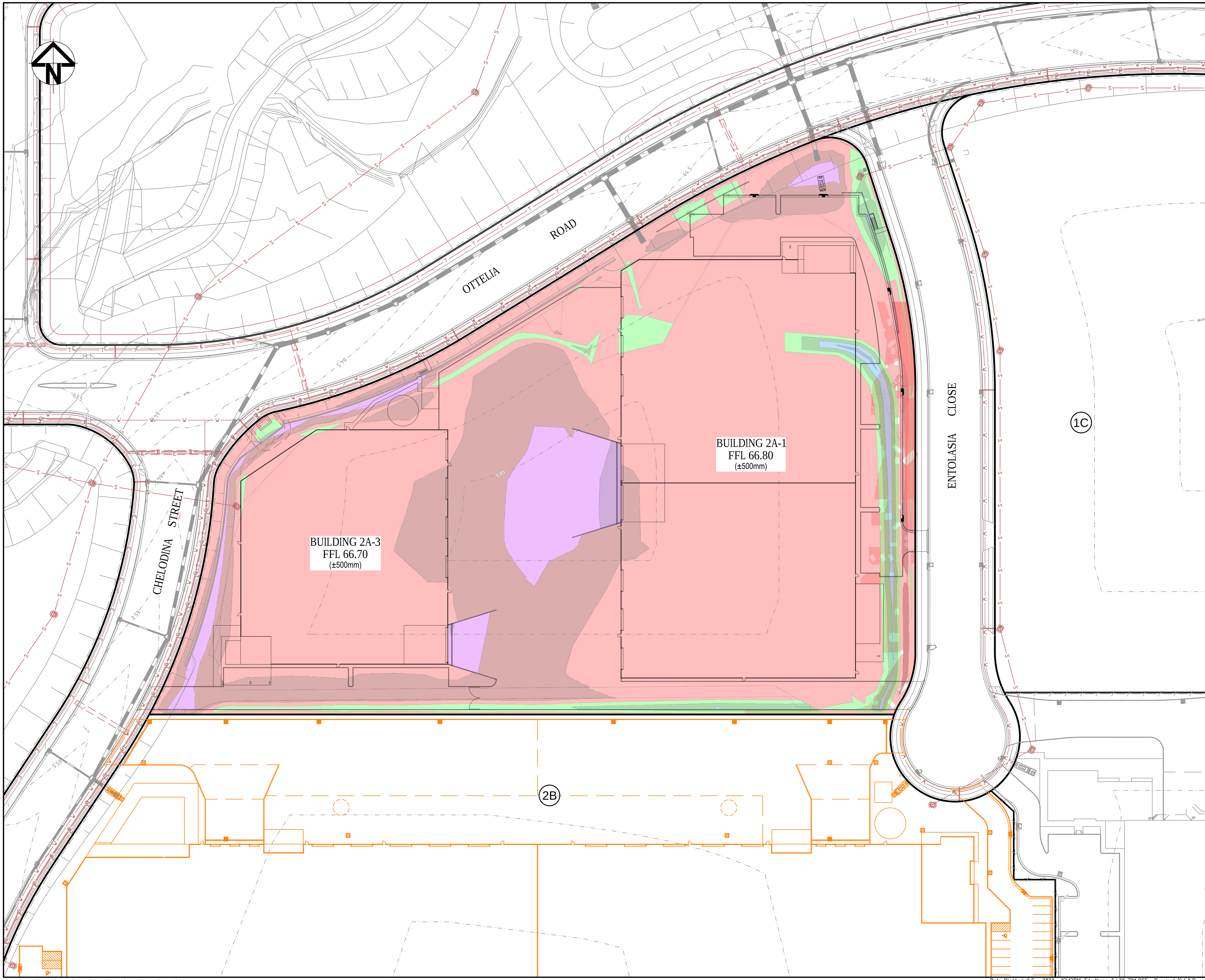
Title
STORMWATER DRAINAGE DETAILS

Drawing No. 20-781-C125

Issue A

100mm on Original

Document Set ID: 9351248
Version: 1, Version Date: 27/10/2020



CUT\FILL DEPTH RANGE LEGEND

Lower_value		Upper_value		Colour
-2.0	to	-1.5	m	
-1.5	to	-1.0	m	
-1.0	to	-0.5	m	
-0.5	to	0.0	m	
0.0	to	0.5	m	
0.5	to	1.0	m	
1.0	to	1.5	m	
1.5	to	2.0	m	
2.0	to	2.5	m	

NOTES

1. ASSUMED NO TOP SOIL STRIPING
2. THE VOLUMES DO NOT TAKE INTO ACCOUNT THE FOLLOWING :-
   - BULKING FACTORS OF REMOVED CUT
   - REMOVAL AND\OR REMEDIATION OF ANY EXISTING UNCONTROLLED FILL
   - PROPOSED LANDSCAPING
3. ASSUMED 300mm PAVEMENT DEPTH

EARTHWORKS VOLUMES

CUT (m³)	FILL (m³)	BALANCE (m³)
-10,000	+800	-9,200 (EXPORT)

Bar Scales

0 10 20 30 40

1 : 500 @ A1 1 : 1000 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION
A1

File Name 20-781-C130.dwg

		Drawn	TK
		Designed	SM
Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

Client
Goodman

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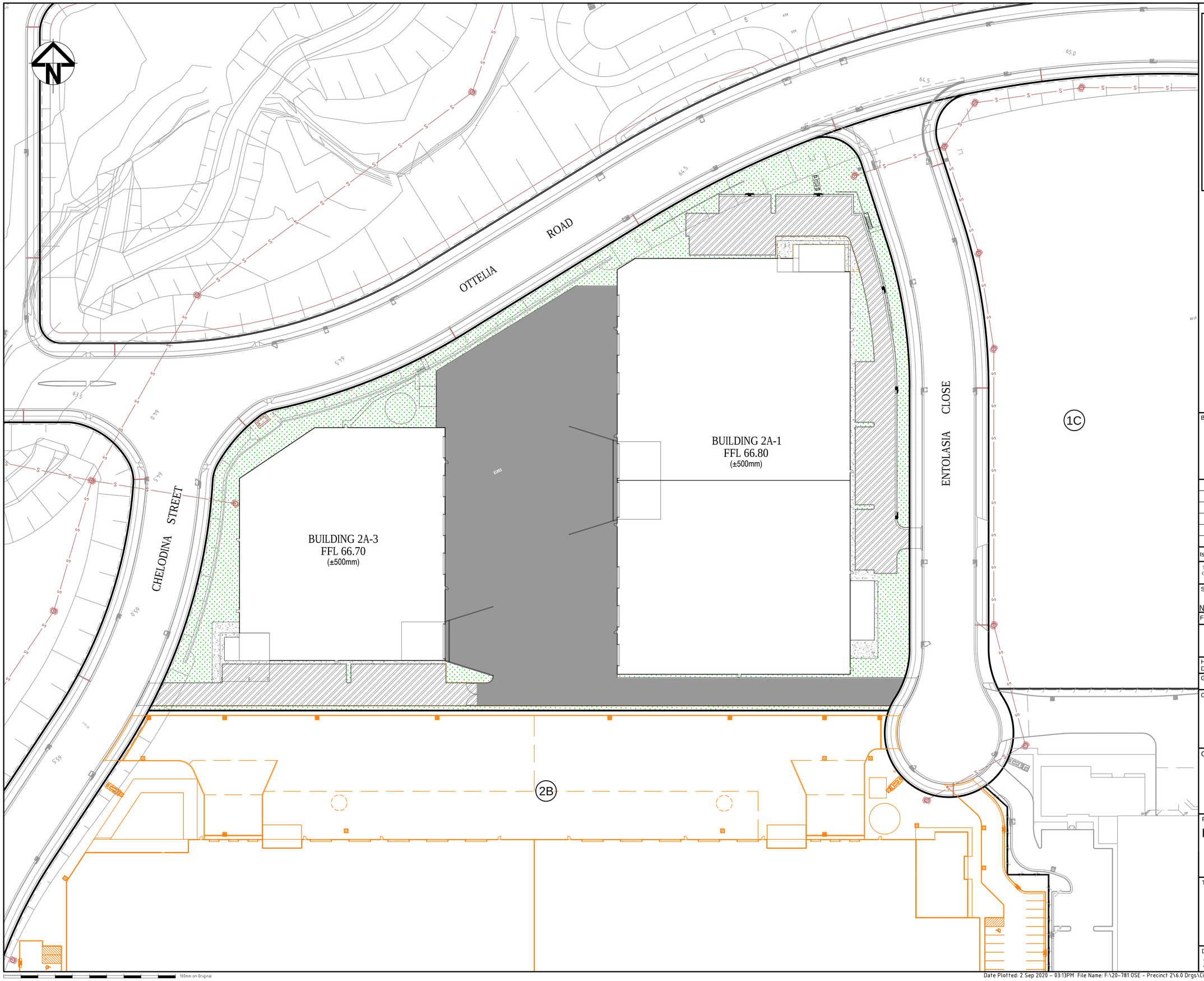
Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
BULK EARTHWORKS CUT/FILL PLAN

Drawing No. 20-781-C130
Issue A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:13PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C130.dwg V1



PAVEMENT LEGEND

- HEAVY DUTY RIGID PAVEMENT
- ASPHALT PAVEMENT
- LANDSCAPE
- FOOTPATH

Bar Scales

0 10 20 30 40

1 : 500 @ A1 1 : 1000 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

File Name: 20-781-C135.dwg

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		Designed	SM
Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

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Project

INDUSTRIAL DEVELOPMENT OAKDALE SOUTH LOT 2A

Title

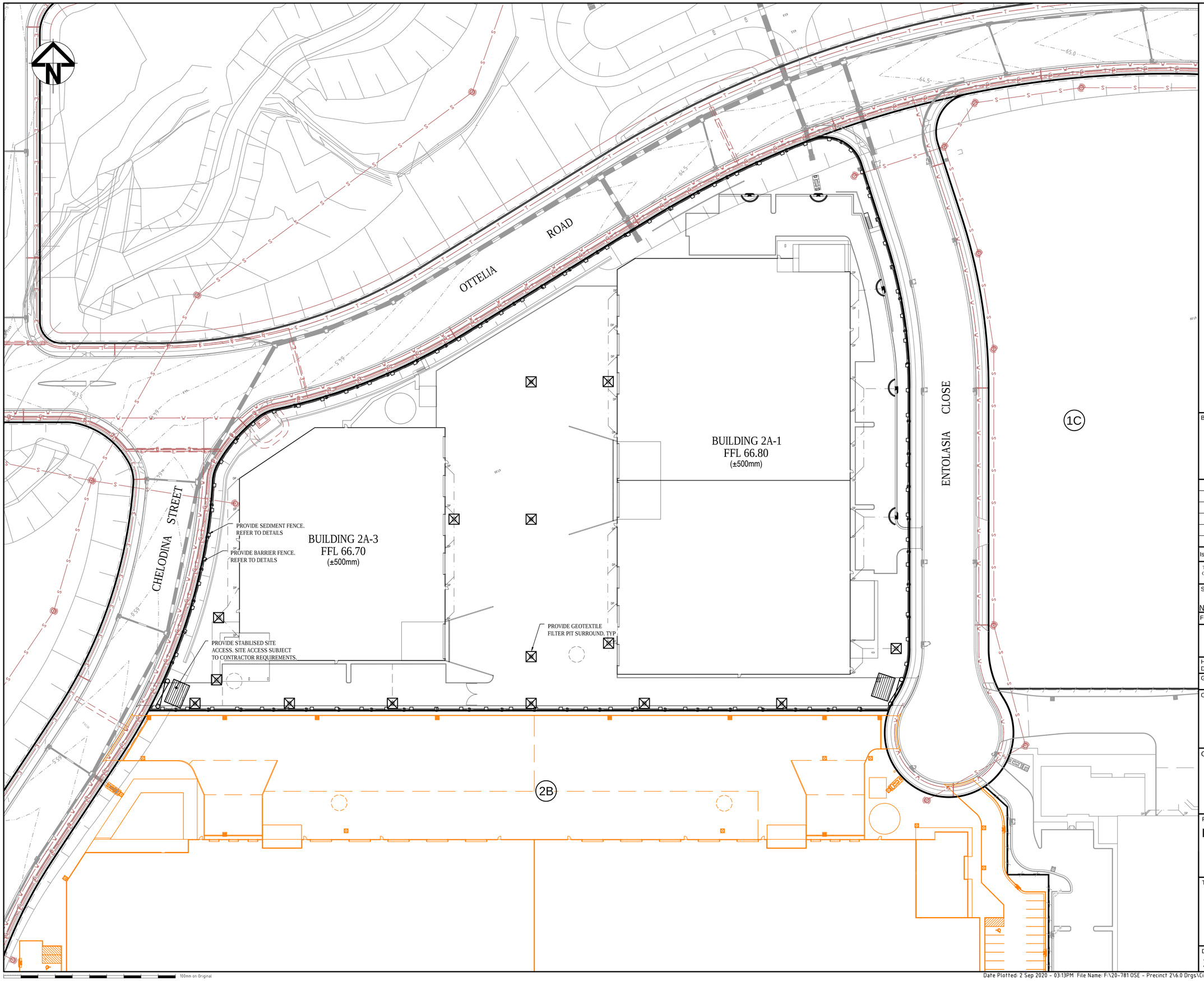
PAVEMENT PLAN

Drawing No. 20-781-C135

Issue A

100mm on Original

Date Plotted: 2 Sep 2020 - 03:13PM File Name: F:\20-781OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C135.dwg V1



Bar Scales

0 10 20 30 40

1 : 500 @ A1 1 : 1000 @ A3

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

File Name: 20-781-C140.dwg

		Drawn	TK
		Designed	SM
Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

Client: Goodman

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Project

INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

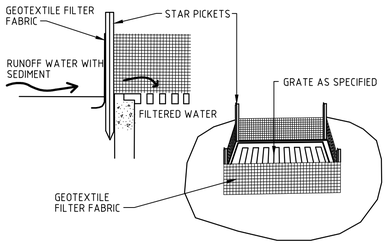
Title

EROSION AND
SEDIMENT CONTROL
PLAN

Drawing No. 20-781-C140

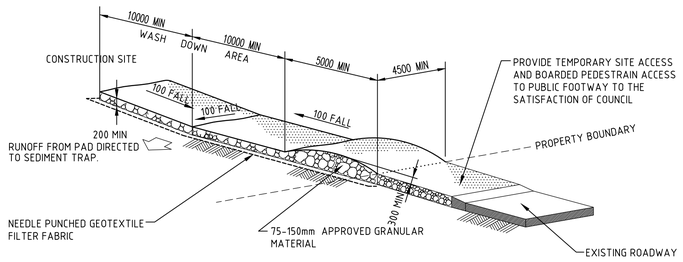
Issue A

Date Plotted: 2 Sep 2020 - 03:13PM File Name: F:\20-781 OSE - Precinct 2\6.0 Drgs\Civil\DA-Drawings\100 Series - Lot 2A\20-781-C140.dwg V1



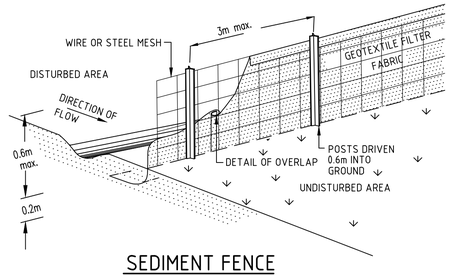
GEOTEXTILE FILTER PIT SURROUND

NTS



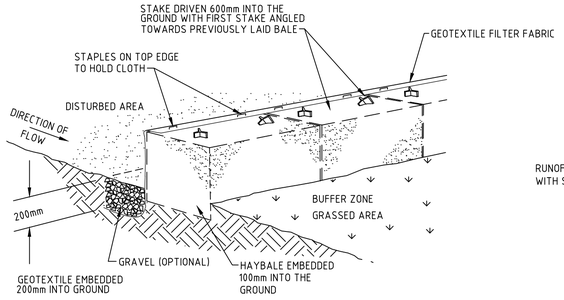
STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA

NTS



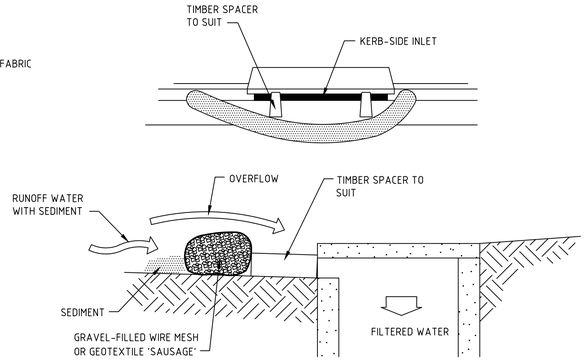
SEDIMENT FENCE

NTS



HAYBALE AND GEOTEXTILE SEDIMENT FILTER

NTS



MESH AND GRAVEL INLET FILTER

NTS

Bar Scales

Issue	Description	Date
A	ISSUED FOR DA APPROVAL	02-09-20

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

File Name: 20-781-C145.dwg

		Drawn	TK
		Designed	SM
Height Datum	AHD	Checked	FX
Grid	MGA	Approved	FX

Client: Goodman

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Project
INDUSTRIAL DEVELOPMENT
OAKDALE SOUTH
LOT 2A

Title
EROSION AND SEDIMENT CONTROL DETAILS

Drawing No.	Issue
20-781-C145	A

100mm on Original