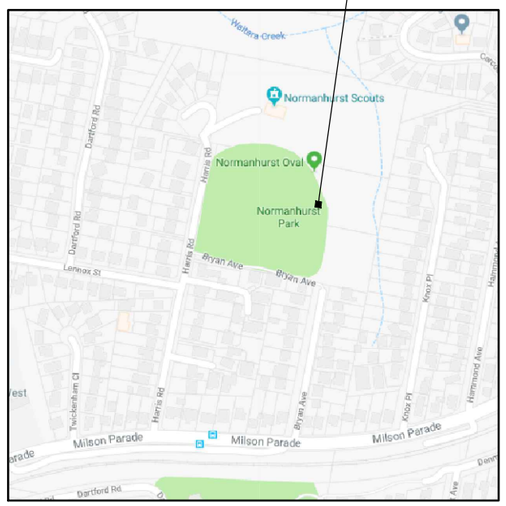
PROPOSED OPTUS BASE STATION



LOCALITY MAP

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PART OF EXISTING LOW CHAINWIRE FENCE TO REMAIN

PROPOSED OPTUS 5 BAY ODU ON NEW CONCRETE SLAB

PROPOSED OPTUS U/G AC POWER RUN TO BE CONFIRMED AT DETAILED DESIGN

PROPOSED OPTUS PANEL ANTENNAS (6 OFF) ON PROPOSED TRIANGULAR HEADFRAME

EXISTING COUNCIL STEEL LIGHT POLE TO BE RECOVERED

PART OF EXISTING LOW CHAINWIRE FENCE TO BE MOVED/ REPLACED (BY COUNCIL)

PROPOSED LOW CHAINWIRE FENCE (BY COUNCIL)

OPTUS INSTALLATION

EXISTING HOUSING (TYP.)

OVERALL SITE PLAN
SCALE 1:2000

DETAIL 1/-
SCALE 1:100

SITE ADDRESS:

20X HARRIS ROAD
NORMANHURST
NSW 2076

NOTES:

1. **BASIS OF DESIGN**
   - SITE INSPECTION 08/01/2020.
2. **PANEL ANTENNAS**
   - 2-OFF PROPOSED PER SECTOR COMMSCOPE RRV4-65D-R6 12 PORT ANTENNA PER SECTOR AT EL 29.20m
   - SECTOR 1 - 60°, SECTOR 2 - 150°, SECTOR 3 - 330°
   - MOUNTED ON PROPOSED TRIANGULAR HEADFRAME WITH MOUNTING POLES
3. **TRANSMISSION**
   - FIBRE SITE - DETAILED FIBRE ROUTE TO BE CONFIRMED BY OPTUS.
4. **EQUIPMENT SHELTER**
   - PROPOSED 5 BAY ODU ON CONCRETE SLAB (TO BE CONFIRMED AT DETAILED DESIGN). PAINT IN PALE EUCALYPT.
5. **OPTUS MONOPOLE**
   - 30.00m HIGH UNPAINTED STEEL MONOPOLE WITH HEADFRAME
   - MONOPOLE SETOUT MAY REQUIRE ADJUSTMENT TO FIT PAD FOUNDATION WITHIN LEASE AREA. ADJUSTMENT EXPECTED <2m. TO BE DETERMINED AT DETAILED DESIGN.
6. **TRUNK CABLES - HYBRID**
   - SIZE: 2 x 6/12 (H&S) TRUNK CABLES PER SECTOR
   - LENGTH: 45m ALL SECTORS
   - TO BE RUN ON UNDERGROUND ϕ100 CONDUIT TO POLE AND VERTICALLY INTERNALLY TO POLE.
7. **SITE ACCESS**
   - SITE ACCESS VIA PROPSOED ACCESS TRACK OFF BRYAN AVE.
8. **ANTENNA ACCESS**
   - EWP BY QUALIFIED RIGGER PERSONNEL ONLY.
9. **POWER SUPPLY**
   - PROPOSED 3-PHASE LV UNDERGROUND POWER SUPPLY TO BE CONFIRMED AT DETAILED DESIGN.
10. **OTHER (PAINTING, LANDSCAPING, SCREENING)**
    - EWP/CRANE HARDSTAND AREA TO BE DESIGNED, INSPECTED AND MAINTAINED BY CONSTRUCTOR PRIOR TO EACH USE
    - EWP/CRANE SETUP AREA TO BE TURFED.

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
06	24.02.20	ISSUE FOR APPROVAL - DETAILED SURVEY	CPS	MN	MN	CT	JD
05	13.01.20	ISSUED FOR APPROVAL - ALTERNATE LOCATION	CPS	MN	MN	CT	JD
04	21.10.19	ISSUED FOR APPROVAL - UNDERGROUND SERVICES REALIGNMENT	CPS	MN	MN	CT	CT
03	15.07.19	ISSUED FOR APPROVAL - 30m MONOPOLE	CPS	MN	MN	JD	SW
02	02.08.18	ISSUED FOR APPROVAL - 40m MONOPOLE	CPS	SG	MM	CT	CT
01	12.03.18	ISSUED FOR APPROVAL	CPS	SG	AD	CT	CT

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CPS GLOBAL
LEVEL 5, 55 GRAFTON STREET
BONDI JUNCTION
NSW 2022
AUSTRALIA
TELEPHONE : + 61 2 9300 1700

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No. S8687
NORMANHURST
HARRIS RD, NORMANHURST, NSW 2076

Drawing Title: DRAFT SITE LAYOUT

Drawing Status: FOR APPROVAL

Drawing No. S8687-P1

Revision 06

CAD File: E:\CPS GLOBAL_Optus Program\PROJECTS\GREENFIELD\Normanhurst (S8687)\Greenfield\Feasibility\DSL\FINAL\S8687.dwg Date: 24.02.2020 3:08 PM

20 10 0 10 20 30 40 50mm

A3

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
05	24.02.20	ISSUE FOR APPROVAL - DETAILED SURVEY	CPS	MN	MN	CT	JD
04	21.10.19	ISSUED FOR APPROVAL - UNDERGROUND SERVICES REALIGNMENT	CPS	MN	MN	CT	CT
03	15.07.19	ISSUED FOR APPROVAL - 30m MONOPOLE	CPS	MN	MN	JD	SW
02	02.08.18	ISSUED FOR APPROVAL - 40m MONOPOLE	CPS	SG	MM	CT	CT
01	12.03.18	ISSUED FOR APPROVAL	CPS	SG	AD	CT	CT

CPS GLOBAL
LEVEL 5, 55 GRAFTON STREET
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Client: OPTUS

Project:
MOBILE NETWORK
AUSTRALIA
SITE No. S8687
NORMANHURST
HARRIS RD, NORMANHURST, NSW 2076

Drawing Status: FOR APPROVAL

Drawing Title: DRAFT SITE ELEVATION

Drawing No. S8687-P2

Revision 05

WESTERN ELEVATION

SCALE 1:125

A3

EROSION AND SEDIMENT CONTROL

ESC1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

- AVOID STRIPPING AND EXCAVATING UNTIL READY TO BUILD
- ESTABLISH A SINGLE STABILISED ENTRY / EXIT POINT
- INSTALL SEDIMENT FENCES
- INSTALL ON SITE WASTE RECEPTACLES (e.g. MINI SKIPS, BINS AND WIND PROOF LITTER RECEPTORS)

ESC2. BULK EARTHWORKS

- TOPSOIL SHOULD BE STOCKPILED ON SITE FOR LATER USE.
- WHERE PRACTICAL MAINTAIN KERB VEGETATION IN A HEALTHY STATE DURING THE CONSTRUCTION PROCESS.
- WHEN UPSTREAM WATER IS DIVERTED AROUND A WORK SITE, WHERE PRACTICABLE, WATER SHALL BE DISCHARGED AS A SHEETFLOW THROUGH A UNDISTURBED AREA BESIDE THE BUILDING.

ESC3. SERVICE TRENCHES

- TO AVOID UNNECESSARY SOIL EROSION, SERVICE TRENCHES SHOULD BE BACK FILLED, CAPPED AND COMPACTED TO A LEVEL AT LEASE 75-100 mm ABOVE THE ADJOINING SURFACE LEVEL.
- ALL UNDERGROUND DRAINAGE TO BE INSTALLED PRIOR TO ERECTION OF THE STRUCTURE. ALL DOWNPIPE CONNECTION STUBS TO BE CAPPED UNTIL ATTACHMENT TO THE DOWNPIPES.

ESC4. BUILDING OPERATIONS

- BUILDING OPERATIONS SUCH AS THE WASHING OF TOOLS AND PAINTING EQUIPMENT, AND THE CUTTING OF BRICKS, TILES OR MASONRY SHOULD BE DONE WITHIN THE PROPERTY BOUNDARIES.
- WHERE PRACTICABLE, CUTTING OF BRICKS, TILES OR MASONRY SHOULD BE DONE ON A PERMEABLE SURFACE (e.g. GRASS, INFILTRATION TRENCHES OR LOOSENED SOIL) WHERE POLLUTANTS CAN BE CONTAINED ON SITE. THIS SPECIALLY APPLIED TO WATER COOLED CUTTING EQUIPMENT THAT CAN GENERATE SIGNIFICANT QUANTITIES OF POLLUTED WASTEWATER.
- ERODABLE MATERIAL MISTAKENLY PLACED WITH THE ROAD RESERVE (INCLUDING ACCIDENTAL SPILLAGE AND TRACKING OF SUCH MATERIALS ON THE ROAD) THAT CANNOT BE PREVENTED THROUGH REASONABLE MEANS SHALL BE:
  1) REMOVED IMMEDIATELY IF RAINFALL IS IMMINENT OR OCCURING.
  2) REMOVED PRIOR TO THE END OF THE DAYS WORK IF RAINFALL IS NOT EXPECTED.
- MATERIALS SHOULD BE SWEPT FROM THE ROAD, NOT WASHED DOWN THE GUTTER.
- ALL SOLID WASTE SHOULD BE STORED ON SITE IN SUCH A MANNER THAT IT IS PREVENTED FROM LEAVING THE SITE EITHER BY THE ACTION OF WIND OR WATER.
- SMALLER MATERIALS, SUCH AS LITTER SHOULD BE CONTAINED IN COVERED BINS OR LITTER TRAPS FORMED ON THREE SIDES BY A GEOTEXTILE WIND BREAKER.
- CONCRETE WASTE OR PERMANENT DOWNPIPES SHOULD BE INSTALLED PRIOR TO THE FRAME INSPECTION AND IMMEDIATELY AFTER THE ROOF IS LAID.

ESC5. SITE REHABILITATION

- ALL GROUND DISTURBED BY THE BUILDING ACTIVITY SHALL BE PROMPTLY AND PROGRESSIVELY STABILISED SO IT CAN NO LONGER ACT AS A SOURCE OF SEDIMENT.
- TO MINIMISE UNNECESSARY SOIL LOSS, MULCH SHOULD BE APPLIED TO OPEN GARDEN BEDS. MULCH PLACED AT A DEPTH OF 75-100mm WILL ASSIST IN PLANT ESTABLISHMENT AND WATER LOSSES.

ESC6. STOCKPILES

- STOCKPILES ARE NOT TO BE STORED ON THE FOOTPATH OR ROAD RESERVE UNLESS APPROVED BY LOCAL AUTHORITIES.
- WHERE NECESSARY STOCKPILE LOSSES CAN BE MINIMISED WITH THE USE OF COVERS.
- ALL STOCKPILES AND BUILDING MATERIAL SHOULD BE LOCATED WITHIN THE SEDIMENT CONTROL ZONE.
- TO MINIMISE EROSION AND THE LOSS OF SAND AND SOILD, STOCKPILES SHOULD NOT BE RELOCATED WITHIN AN OVERLAND FLOW PATH. IF IT IS IMPRACTICABLE TO AVOID STORMWATER RUNOFF BEING DIRECTED TO A STOCKPILE, THEN A PERIMETER BANK SHOULD BE CONSTRUCTED UP SLOPE OF THE STOCKPILE TO DIRECT RUNOFF IN A CONTROLLED MANNER AROUND THE STOCKPILE.

ESC7. SEDIMENT BARRIES

- SEDIMENT FENCE:
  INSTALL SEDIMENT FENCES ALONG THE LOW SIDE OF THE SITE, AND IDEALLY ALONG A LINE OF CONSTANT LAND LEVEL TO PREVENT THE CONCENTRATION OF STORMWATER RUNOFF. IN AREAS WHERE IT IS EITHER UNDESIRABLE OR IMPRACTICAL TO BURY THE LOWER EDGE OF THE EDIMENT FENCE, THE LOWER 200mm MIN PORTION OF THE FABRIC SHOULD BE LAID ON THE GROUND UP SLOPE OF THE FENCE AND BURIED UNDER A 100mm MIN. LAYER OF AGGREGATE.
- STRAW BALE:
  THE USE OF STRAW BALES INSTEAD OF A SEDIMENT FENCE IS USUALLY NOT RECOMMENDED. STRAW BALES MAY BE USED DOWN SLOPE OF SMALL STOCK PILES IF THEY ARE APPROPRIATELY SECURED WITH TWO STAKE PER BALE AND WATER IS PREVENTED FROM FLOWING UNDER THE BALES.
- FIELD INLET GULLIES:
  SEDIMENT CONTROLS FOR STORMWATER INLETS LOCATED WITHIN THE PROPERTY BOUNDARIES MAY CONSIST OF GEOTEXTILE FABRIC PLACED EITHER DIRECTLY OVER THE GRATED INLET OR AROUND THE INLET SUPPORTED BY TIMBER FRAME. FIELD INLET PROTECTION IS NECESSARY WHERE INLET DRAIN AREAS OF BARE AND UNPROTECTED SOIL. DURING STORMS, PONDING SHOULD BE ALLOWED TO OCCUR AROUND THE STORMWATER TO ASSIST IN THE SETTLING OF SEDIMENTS
- PAVEMENT INLET GULLY:
  A ROADSIDE INLET BARRIER IS TO BE INSTALLED, SO THAT IT SHOULD NOT BE ALLOWED TO FULLY BLOCK THE INLET STRUCTURE. ON A HILLSIDE, SEDIMENT BARRIES MAY CONSIST OF A TEMPORARY DAM CONSTRUCTED FROM SAND AND GRAVEL BAGS AT LEAST 4 METER UP SLOP FROM THE GULLY INLET.

ESC8. MAINTENACE

- SEDIMENT FENCES SHOULD BE REPLACED IF THE FABRIC IS RIPPED OR OTHERWISE DAMAGED. THE MAINTENANCE OF THE SEDIMENT FENCES INCLUDES THE REMOVAL OF THE FENCE AND RETRENCHING THE FABRIC WHEN THE FENCE IS 25% FULL.
- FOLLOWING STORM EVENTS, THE ROAD RESERVE AND ALL SEDIMENT BARRIES SHOULD BE INSPECTED AND ANY EXCESSIVE SEDIMENT RESIDUE SHOULD BE APPROPRIATELY REMOVED.

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
01	15.07.19	ISSUED FOR APPROVAL - 30m MONOPOLE	CPS	MN	MN	CT	CT

CPS GLOBAL
LEVEL 5, 55 GRAFTON STREET
BONDI JUNCTION
NSW 2022
AUSTRALIA
TELEPHONE : + 61 2 9300 1700

Client: OPTUS

Project:
MOBILE NETWORK AUSTRALIA
SITE No. S8687
NORMANHURST
HARRIS RD, NORMANHURST, NSW 2076

Drawing Title:
SEDIMENT & EROSION CONTROL PLAN AND DETAILS (SHT 1 OF 2)

Drawing Status: FOR APPROVAL
Drawing No. S8687-P3
Revision 01

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A3

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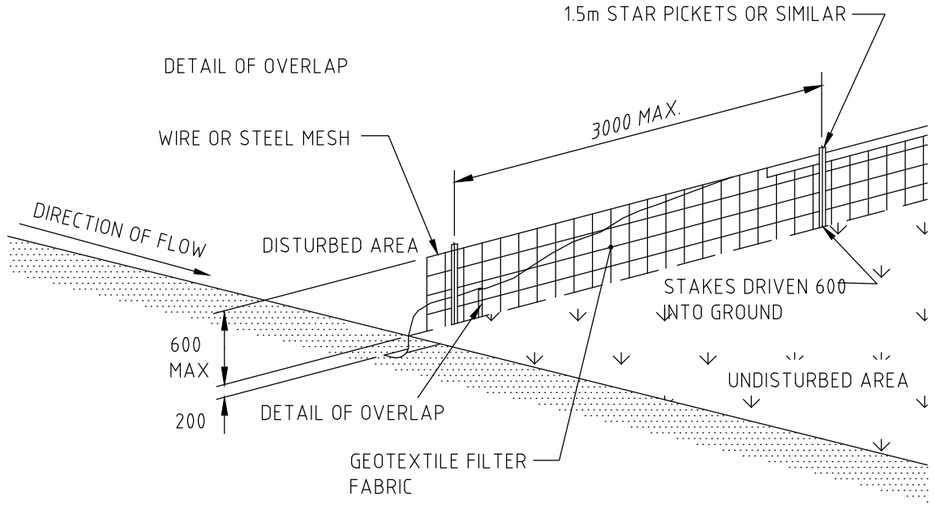
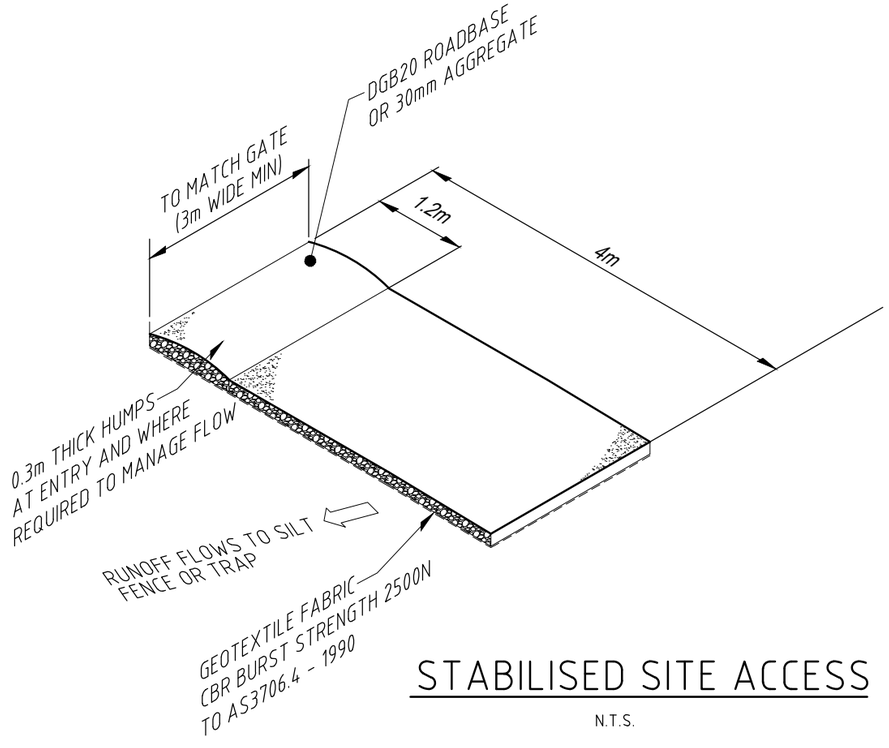


DRAINAGE AREA 0.6HA MAX. SLOPE GRADIENT 1:2 MAX.
SLOPE LENGTH 60m MAX.

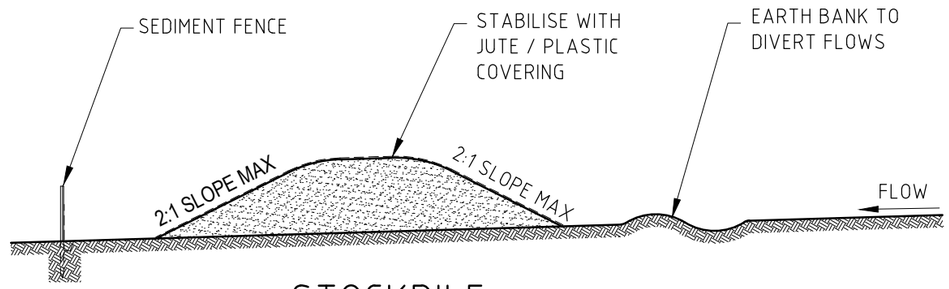
SEDIMENT FENCE

N.T.S.



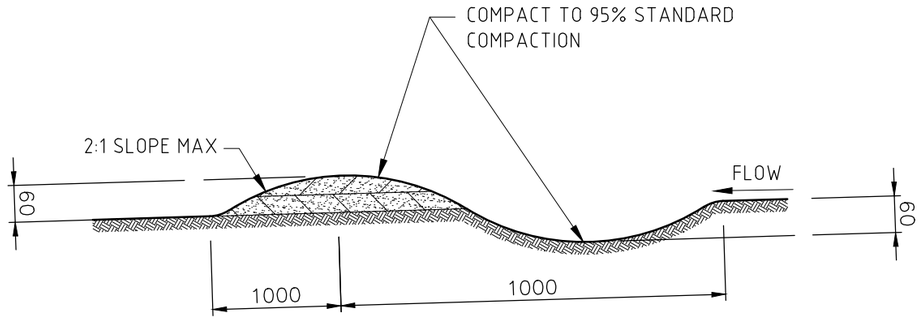
STABILISED SITE ACCESS

N.T.S.



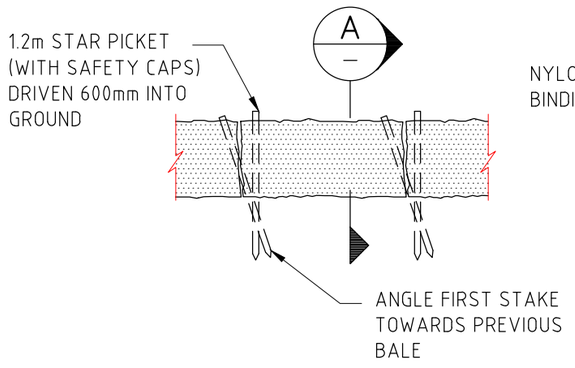
STOCKPILE

SCALE 1:10

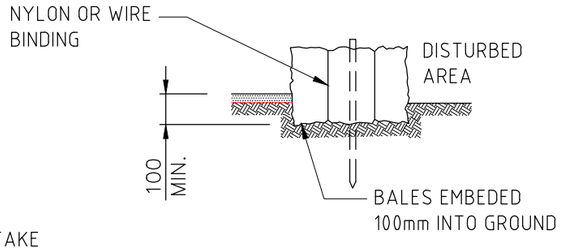


EARTH BANK

SCALE 1:10



ELEVATION



SECTION A

SCALE N.T.S.

STRAW BALE FILTER

NOT TO SCALE

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
01	15.07.19	ISSUED FOR APPROVAL - 30m MONOPOLE	CPS	MN	MN	CT	CT

CPS GLOBAL
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Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No. S8687
NORMANHURST
HARRIS RD, NORMANHURST, NSW 2076

Drawing Title: SEDIMENT & EROSION CONTROL PLAN AND DETAILS (SHT 2 OF 2)

Drawing Status: FOR APPROVAL

Drawing No. S8687-P4

Revision 01

20 10 0 10 20 30 40 50mm

A3

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