12954 02 - NEW LIVERPOOL PRIMARY SCHOOL

CIVIL WORKS PACKAGE

CIVIL DRAWING REGISTER

DRAWING NUMBER	DRAWING TITLE
FS001	DRAWING REGISTER AND LOCALITY PLAN
FS002	GENERAL NOTES
FS003	GENERAL ARRANGEMENT PLAN
FS005	EROSION AND SEDIMENT CONTROL PLAN SHEET 1
FS006	EROSION AND SEDIMENT CONTROL PLAN SHEET 2
FS007	EROSION AND SEDIMENT CONTROL DETAILS
~~FS010~~	~~BULK EARTHWORKS PLAN SHEET 1~~
~~FS011~~	~~BULK EARTHWORKS PLAN SHEET 2~~
FS030	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1
FS031	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2
FS051	STORMWATER DRAINAGE DETAILS
~~FS061~~	~~PAVEMENT PLAN~~

LOCALITY PLAN

NOT TO SCALE

NOT FOR CONSTRUCTION

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	-
P1	SCHEMATIC DESIGN	12.03.21	MD	-

MEINHARDT BONACCI
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com

Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
DRAWING REGISTER AND LOCALITY PLAN

ISSUE FOR SSD

Designed	AM
Drawn	MD
Scale	NTS
Date	MAR 2021
Sheet	A1

Approved | Date | North

Project Ref	Drawing No	Rev
12954 02	FS001	P2

File: G:\Job\12954\02\03 WIP\02 Civil\01 CAD\01 Autocad\[workstage01]\1295402C-NPS_FS_001.dwg Plotted: 18.03.21 at 10:26 PM By: Maria Dulay

GENERAL NOTES

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.

G2 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT SAA CODES, BUILDING REGULATIONS AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.

G3 THESE DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS ARE IN METERS. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING THOSE SHOWN ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND VERIFIED ON SITE.

G4 ALL SETOUT AND DIMENSIONS OF THE STRUCTURE INCLUDING KERBS AND RETAINING WALLS, AND BULK EARTHWORKS MUST BE TAKEN FROM THE ARCHITECT'S DRAWINGS. SETOUT OF THE STORMWATER PITS BY OTHERS. CONTRACTOR TO CONFIRM SETOUT OF SERVICE TRENCHING INCLUDING SUBSOIL ON SITE.

G5 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORKS. REFER TO GEOTECHNICAL REPORT ON PROPOSED DEVELOPMENT OPPORTUNITIES LIVERPOOL BOYS AND GIRLS SCHOOL BY ASSETGEO REF: 5228-R1 16 OCTOBER 2018.

G6 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.

G7 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION OF A COST VARIATION. THE SUPERINTENDENT MUST APPROVE ANY COST VARIATION INVOLVED BEFORE ANY WORK STARTS.

G8 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM.

G9 SERVICE INFORMATION SHOWN IS APPROXIMATE ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.

G10 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE. GEOTECHNICAL REPORT IDENTIFIES A MAX OF 0.3m OF TOPSOIL ON THE SITE, WHICH HAS BEEN INCLUDED IN THE PROPOSED STRIPPING LAYOUT, HOWEVER, CIVIL DOES IT'S BEST TO REPRESENT THE EXISTING CONDITIONS BUT CANNOT CONFIRM THE DEPTH OF TOPSOIL, FILL OR UNSUITABLE FILL MATERIALS ON-SITE APART FROM WHAT IS REFERENCED IN THE REPORT. THE CONTRACTOR SHALL REVIEW ALL GEOTECHNICAL REPORTS, VISIT SITE AND MAKE THEIR JUDGEMENTS DURING TENDERING.

G11 UNLESS NOTED OTHERWISE, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 150mm UNDER ALL PROPOSED PAVEMENT AND BUILDING AREAS.

G12 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

SITEWORKS NOTES

S1 PRIOR TO THE PLACEMENT OF ANY PAVEMENTS, BUILDINGS OR DRAINS THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1.1' OF A.S. 1289 FOR THE TOP 300mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL TO THE ENGINEERS APPROVAL AND COMPACTED IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS SET OUT BELOW. ON HIGHLY REACTIVE CLAY AREAS SITE EXCAVATED MATERIAL MAY BE USED WITH THE PRIOR AUTHORISATION OF THE ENGINEER.

S2 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH GEOTECHNICAL REPORT ON PROPOSED DEVELOPMENT OPPORTUNITIES LIVERPOOL BOYS AND GIRLS SCHOOL BY ASSETGEO REF: 5228-R1 16 OCTOBER 2018
MOISTURE CONTENT TO BE MAINTAINED AT +/- 2% OMC. MINIMUM COMPACTION REQUIREMENTS ARE DETAILED BELOW FOR (ALL REQUIREMENTS ARE TO VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER):

- LANDSCAPED AREAS — 98% STD.
- FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE TO SUBGRADE LEVEL;
  - FINE CRUSHED ROCK — 98% STD.
  - SELECTED FILL WITHOUT CONSPICUOUS CLAY CONTENT — 98% STD.
- BUILDING BASECOURSE — 98% MOD
- FILL UNDER ROAD PAVEMENTS;
  - TO WITHIN 500mm OF FINISHED SUBGRADE LEVEL — 98% STD.
  - UP TO FINISHED SUBGRADE LEVEL — 98% STD.
- ROAD PAVEMENT MATERIALS;
  - SUB BASE — 98% MOD.
  - BASE COURSE — 98% MOD.

THE MAXIMUM COMPACTION IS TO BE NO GREAT THAN 4% ON TOP OF THE ABOVE MENTION VALUES.

S3 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.

S4 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.

S5 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.

S6 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT

S7 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.

S8 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.

S9 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.

S10 GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
A) COMPLY WITH THE GENERAL PROVISIONS OF PART 3.1 "MANAGING RISKS TO HEALTH AND SAFETY" OF NSW WORK AND HEALTH AND SAFETY REGULATION 2011

B) COMPLY PART 6.3 DIVISION 3 "EXCAVATION WORK" OF NSW WORK HEALTH AND SAFETY REGULATION NSW 2011

S11 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 1.5 METRES THE CONTRACTOR MUST:
A) NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ON THE APPROPRIATE FORM.

STORMWATER DRAINAGE NOTES

SW1 UNLESS NOTED OTHERWISE BY HYDRAULIC ENGINEERS DRAWINGS, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH 225 DIA. UPVC PIPES LAID AT A MINIMUM GRADE OF 1 IN 100. FOR SYPHONIC ROOF DRAINAGE SYSTEMS ALL DOWNPIPES CONNECTION DRAIN SIZES TO BE CONNECTED INTO MAIN STORMWATER DRAINS SHALL BE IN ACCORDANCE WITH HYDRAULIC ENGINEERS DRAWINGS.

SW2 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH THE APPROPRIATE A.S. IF NOT SPECIFIED THEN CLASS 2 RRJ RCP SHALL BE USED FOR DIAMETERS = 225mm. SEWER CLASS SEH UPVC IN ACCORDANCE WITH AS1260 SHALL BE USED FOR Φ225mm OR SMALLER.

SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS3725 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.

SW4 FOR ALL PITS > 1.2m DEEP, STEP IRONS SHALL BE INSTALLED.

SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY BONACCI GROUP.

SW6 ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.

SW7 WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.

SW8 GRATES AND COVERS SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.

SW9 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES ARE NOT TO BE REDUCED WITHOUT APPROVAL.

SW10 AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.

SW11 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.

KERBING NOTES

K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa U.N.O.

K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO A MINIMUM 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.

K3 EXPANSION JOINTS (EJ) 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 SLAB.

K4 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 SLAB.

K5 BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.

K6 IN THE REPLACEMENT OF KERBS:-
- 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 KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

SURVEY NOTES

1. SURVEY DATUM
   THESE PLANS ARE BASED UPON THE EXISTING CONDITIONS SURVEY PREPARED BY THE FOLLOWING
   - SITE SURVEY SUPPLIED BY JOHN LOWE AND ASSOCIATES PTY. LTD. CONSULTING LAND AND ENGINEERING SURVEYORS- JOB No. 97814, DATED 03/12/2018

   LEVELS SHOWN ARE TO A.H.D.

2. SETOUT
   THE CONTRACTOR SHALL SETOUT THE WORKS FROM THE NOMINATED DESIGN LINES, SURVEY BENCHMARKS AND CONTROL POINTS SHOWN ON THE PLANS AND TO THE SPECIFIED DETAILS.

3. REFERENCES PROTECTION
   THE CONTRACTOR SHALL MAINTAIN AND PROTECT THE PEGS AND SURVEY MARKS FOR THE DURATION OF THE WORKS.

JOINTING NOTES

PEDESTRIAN FOOTPATH JOINTS

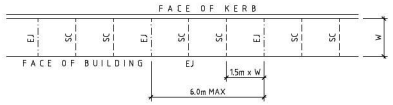
J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.

J2 SAWCUT JOINTS (SC) ARE TO BE LOCATED AT A MAX 1.5m x WIDTH OF PAVEMENT. THE TIMING OF THE SAWCUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED.

J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.

J4 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS.

J5 ALL PEDESTRIAN FOOTPATH JOINTINGS AS FOLLOWS (U.N.O.).



VEHICULAR PAVEMENT JOINTS

J6 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.

J7 LONGITUDINAL WARPING JOINTS (LWJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 3m TO 4.5m MAX CENTERS. ALL LWJ's SHOULD BE TIED UP TO A MAXIMUM TOTAL WIDTH OF 30m.

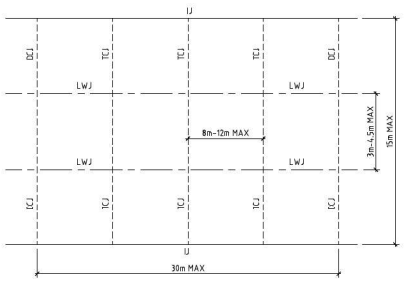
J8 TRANSVERSE CONTRACTION JOINTS (TCJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 8m TO 12m MAX CENTERS. TCJ's CAN BE SPACED AT SUITABLE INTERVALS UP TO A RECOMMENDED MAXIMUM LENGTH OF 15m.

J9 TRANSVERSE DOWELLED CONSTRUCTION JOINTS (DCJ) TO BE PROVIDED FOR PLANNED INTERRUPTIONS SUCH AS AT THE END OF EACH DAY'S OPERATIONS (POUR BREAK), AT BLOCK OUTS FOR BRIDGES AND INTERSECTIONS OR FOR UNEXPECTED DELAYS WHEN THE SUSPENSION OF OPERATIONS IS LIKELY TO CREATE A JOINT.

J10 ISOLATION JOINTS WITH SUB-GRADE BEAM (IJ) TO BE PROVIDED AT INTERSECTIONS OR AT THE JUNCTION OF A POUR BREAK.

J11 ALL VEHICULAR PAVEMENTS TO BE JOINTED IN ACCORDANCE WITH AUSTROADS AGPT02-12 GUIDE TO PAVEMENT TECHNOLOGY PART 2 STRUCTURAL PAVEMENT DESIGN AND SUPPLEMENT AP-T36-06 PAVEMENT DESIGN FOR LIGHT TRAFFIC

J12 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (U.N.O.)



EROSION AND SEDIMENT CONTROL NOTES

1. IT HAS BEEN ASSUMED THAT HOARDINGS/SILT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING SITE (EXCEPT IN THE CASE OF ENTRY/EXIT LOCATIONS WHERE TEMPORARY CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP ARE PROVIDED). IF THIS IS NOT THE CASE, PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE, DIRECT RUNOFF TO SEDIMENT BASIN.
2. ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".
3. MINIMISE CLEARING OUTSIDE BASEMENT EXTENT AND IN ACCORDANCE WITH THE ARBORIST REPORT: "ARBORICULTURAL IMPACT APPRAISAL AND METHOD STATEMENT, EDGELEA, ETON ROAD LINDFIELD, NSW" PREPARED BY NATURALLY TREES DATED 11 DECEMBER 2012
4. SEDIMENT CONTROL FOR LANDSCAPED WORKS DOWNSTREAM OF THE BUILDING TO INCLUDE A SILTFENCE AND SANDBAGS AS REQUIRED. INSTALL BUND TO DIVERT UPSTREAM CATCHMENT AWAY FROM DISTURBED SOIL AREA. TO BE MANAGED AT A RATE OF 166L/S PER HA BY THE CONTRACTOR ON SITE.

SEDIMENT CONTROL CONDITIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARD AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. CONTRACTOR TO DESIGN/SIZE/CONSTRUCT TEMPORARY SEDIMENT BASIN. WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE . ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

SITE INSPECTION & MAINTENANCE CONDITIONS

THE SITE MANAGER WILL INSPECT THE SITE AT LEAST WEEKLY AND WILL:

1. ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
2. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5m FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS & PAVED AREAS.
3. REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE
4. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS APPROPRIATE.
5. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS.
6. MAINTAIN EROSION & SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
7. REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS THE LAST ACTIVITY IN THE REHABILITATION PROGRAM.

AS PART OF THE STATUTORY 'DILIGENCE OF CARE' RESPONSIBILITIES, THE SITE MANAGER WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL.
ENTRIES WILL INCLUDE:

1. THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
2. THE CONDITION OF ANY SOIL & WATER MANAGEMENT WORKS
3. THE CONDITION OF VEGETATION & ANY NEED TO IRRIGATE
4. THE NEED FOR DUST PREVENTION STRATEGIES
5. ANY REMEDIAL WORKS TO BE UNDERTAKEN

THE BOOK WILL BE KEPT ONSITE & MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS.

TREE PROTECTION

REFER TO "ARBORICULTURAL IMPACT APPRAISAL AND METHOD STATEMENT, EDGELEA, ETON ROAD LINDFIELD, NSW" PREPARED BY NATURALLY TREES DATED 11 DECEMBER 2012 FOR THE EXTENT OF TREES PROTECTION ZONE AND THE PROTECTION MEASURES REQUIRED.

RAILCORP

ALL SURFACE WATER TO BE EITHER DIVERTED INTO SWALE OR DIRECTED TOWARDS SEDIMENTATION TANK TO PREVENT ATER INFILTRATION TOWARDS TUNNELS AS DOCUMENTED ON THIS SHEET.

NOT FOR CONSTRUCTION

Rev	Description	Date	By	App
P3	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

NSW GOVERNMENT — SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9299 7510
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com
© Copyright

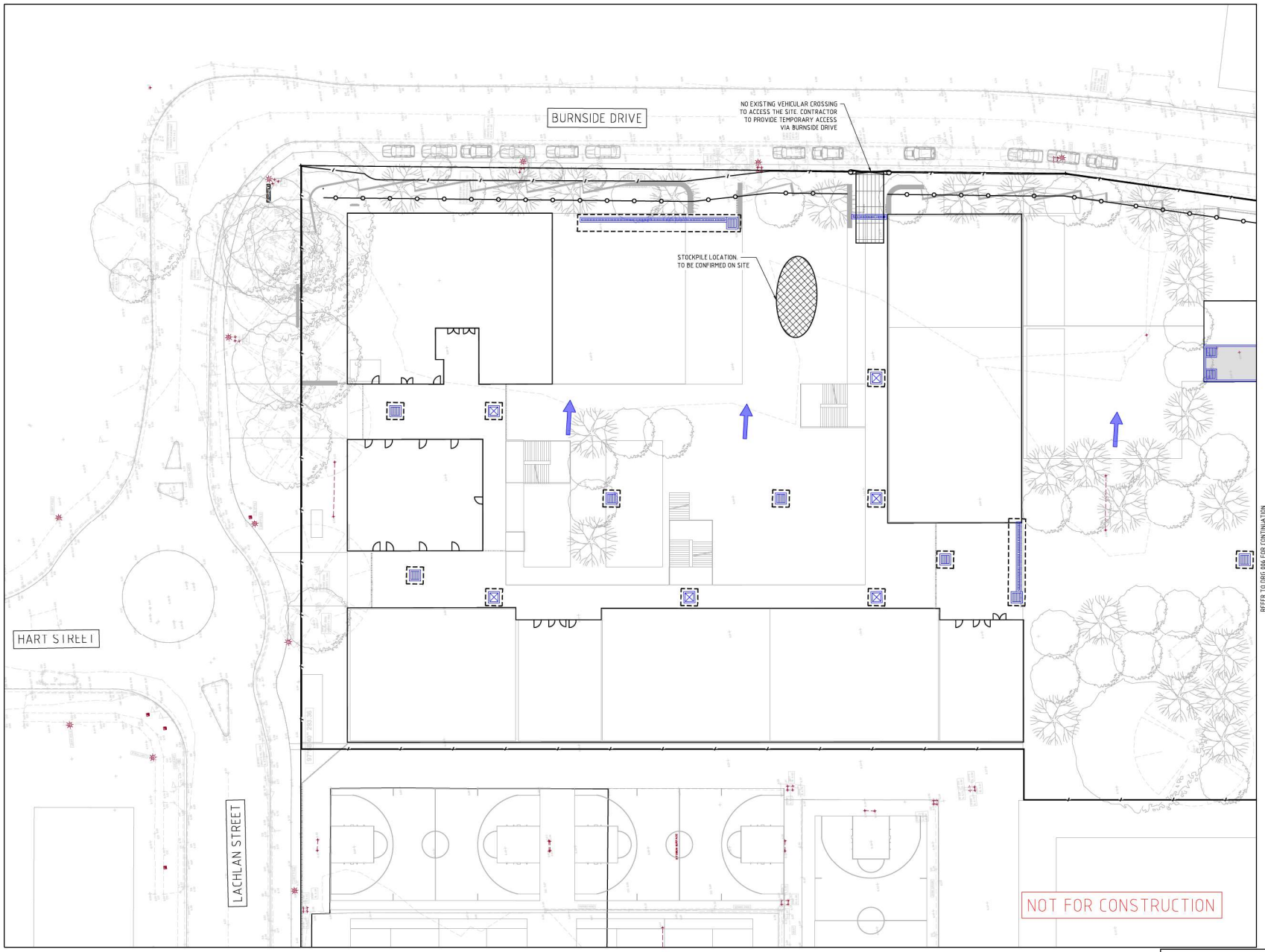
Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
DRAWING REGISTER AND
CONSTRUCTION NOTES

ISSUE FOR SSD

Designed	AM	Approved	
Drawn	MD	Date	North
Scale			
Date	MAR 2021	Project Ref	Drawing No Rev
Sheet	A1	12954 02	FS001 P2

File: G:\Job\12954\02\03 WIP\02\Cad\01 CAD\01 Autocad\[workstage01]12954002C-1#PS_FS_002.dwg Printed: 18.03.21 at 10:26 PM By: Maria Duley



LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EXISTING TREE TO BE RETAINED PENDING ARBORIST CONFIRMATION
- Ex SW — EXISTING STORMWATER DRAINAGE LINE
- HOARDING OR SITE FENCE
- SEDIMENT FENCE
- CD — CATCH DRAIN
- TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- OVERLAND FLOW
- SWALE DRAIN
- STRAW BALE
- SHAKER PAD
- SITE ACCESS GATE
- ONSITE DETENTION TANK

REFER TO SOIL AND WATER MANAGEMENT NOTES ON DRAWING No. FS002.

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

DIAL BEFORE YOU DIG www.1100.com.au The Essential First Step

SCALE 1:250 0m 2.5m 5m 10m 15m

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT — SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9299 7318
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com

Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
EROSION AND SEDIMENT CONTROL PLAN SHEET 1

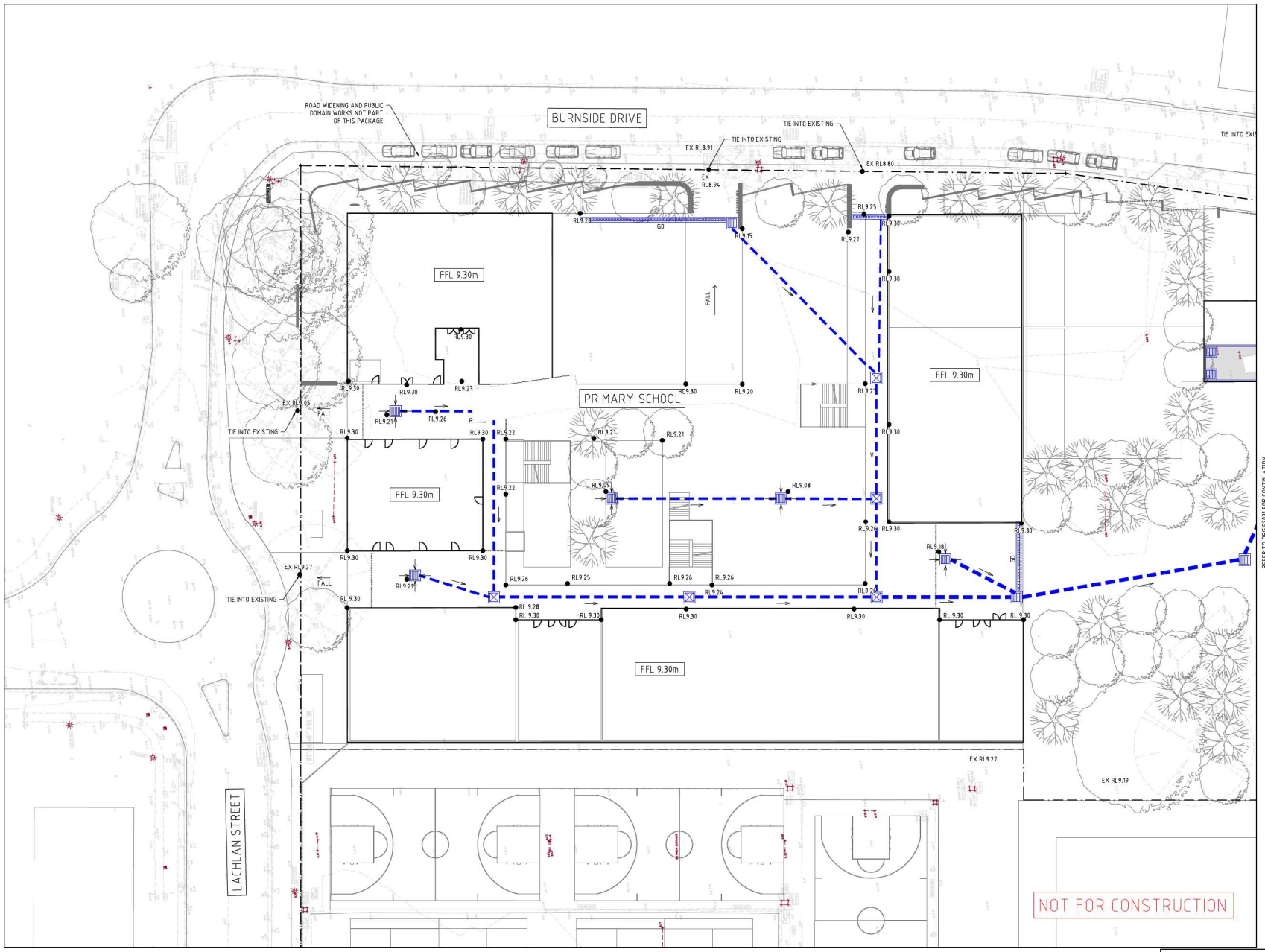
ISSUE FOR SSD

Designed	AM	Approved	Date
Drawn	MD		
Scale	1:250		
Date	MAR 2021		
Sheet	A1		

North

Project Ref: 12954 02 | Drawing No: FS005 | Rev: P2

File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]12954C-NPS_FS_005.dwg Printed: 18.03.21 at 10:26 PM By: Maria Dulay



LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EXISTING TREE TO BE RETAINED PENDING ARBORIST CONFIRMATION
- Ex SW — EXISTING STORMWATER DRAINAGE LINE
- Ex S — EXISTING SEWER LINE
- Ex W — EXISTING WATER MAIN
- Ex G — EXISTING GAS LINE
- Ex T — EXISTING TELECOMMUNICATIONS LINE
- Ex E — EXISTING ELECTRICAL LINE
- EXISTING UNKNOWN SERVICE
- 32.00 — FINISHED SURFACE CONTOUR
- EX RL 7.25 + — EXISTING FINISHED SURFACE LEVEL
- ● F 10.00 — FINISHED SURFACE SPOT LEVEL
- KO — KERB ONLY
- KG — KERB AND GUTTER
- SURFACE INLET PIT
- JUNCTION PIT
- KERB INLET PIT
- IL 0.00 PIPE Ø IL 0.00 — STORMWATER DRAINAGE LINE
- GD — GRATED DRAIN
- DP — DOWNPIPE AND CONNECTION LINE (REFER TO HYDRAULIC DRAWINGS FOR DETAILS)
- FDR SD — FLUSHOUT RISER (max 30m CTRS) WITH SUBSOIL DRAINAGE (100Ø UPVC SLOTTED PIPE UN-SOCKED)
- ONSITE DETENTION TANK

LEVELS AND GRADES ARE UNDER REVIEW AND SUBJECT TO FURTHER COORDINATION

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE. THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

DIAL BEFORE YOU DIG www.1100.com.au The Essential First Step

SCALE 1:250 0m 2.5m 5m 10m 15m

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT — SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9319 7510
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com
© Copyright

Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1

ISSUE FOR SSD

Designed	AM	Approved	Date
Drawn	MD		North
Scale	1:250		
Date	MAR 2021	Project Ref	Drawing No / Rev
Sheet	A1	12954 02	FS030 P2

File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]12954002C-WPS_FS_030.dwg Printed: 19.03.21 at 11:36 AM By: Maria Dukay

NOT FOR CONSTRUCTION

SCALE 1:1000 0m 10m 20m 40m 60m

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT
SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9299 7318
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com

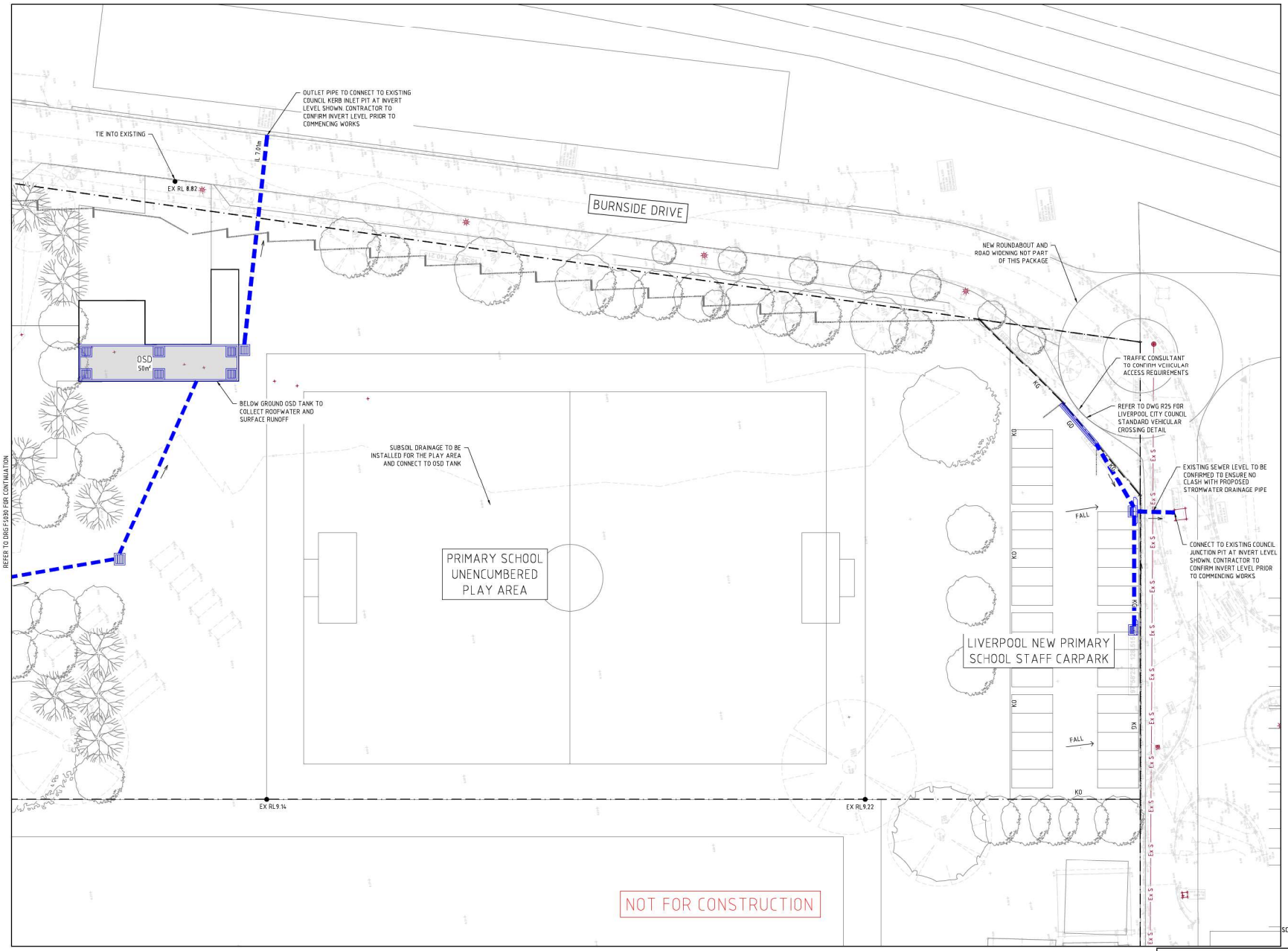
Project Name: LIVERPOOL EDUCATION PRECINCT
NEW PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
SITEWORKS AND STORMWATER DRAINAGE PLAN

ISSUE FOR SSD

Designed	AM	Approved	Date
Drawn	MD		
Scale	1:1000		North
Date	MAR 2021	Project Ref	Drawing No / Rev
Sheet	A1	11422 02	FS003 P2

File: G:\Job\11295402\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]11295402C-NPS_FS_003.dwg Printed: 18.03.21 at 10:26 PM By: Maria Dulay



LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EXISTING TREE TO BE RETAINED PENDING ARBORIST CONFIRMATION
- Ex SW — EXISTING STORMWATER DRAINAGE LINE
- Ex S — EXISTING SEWER LINE
- Ex W — EXISTING WATER MAIN
- Ex G — EXISTING GAS LINE
- Ex T — EXISTING TELECOMMUNICATIONS LINE
- Ex E — EXISTING ELECTRICAL LINE
- EXISTING UNKNOWN SERVICE
- 32.00 — FINISHED SURFACE CONTOUR
- EX RL 7.25 + — EXISTING FINISHED SURFACE LEVEL
- ● F 10.00 — FINISHED SURFACE SPOT LEVEL
- KO — KERB ONLY
- KG — KERB AND GUTTER
- SURFACE INLET PIT
- JUNCTION PIT
- KERB INLET PIT
- IL 0.00 PIPE Ø IL 0.00 — STORMWATER DRAINAGE LINE
- GD — GRATED DRAIN
- DP — DOWNPIPE AND CONNECTION LINE (REFER TO HYDRAULIC DRAWINGS FOR DETAILS)
- FDR — SD — FLUSHOUT RISER (max 30m CTRS) WITH SUBSOIL DRAINAGE (100Ø uPVC SLOTTED PIPE UN-SOCKED)
- ONSITE DETENTION TANK

LEVELS AND GRADES ARE UNDER REVIEW AND SUBJECT TO FURTHER COORDINATION

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE. THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step

SCALE 1:250 — 0m 2.5m 5m 10m 15m

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT — SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9299 7318
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com
© Copyright

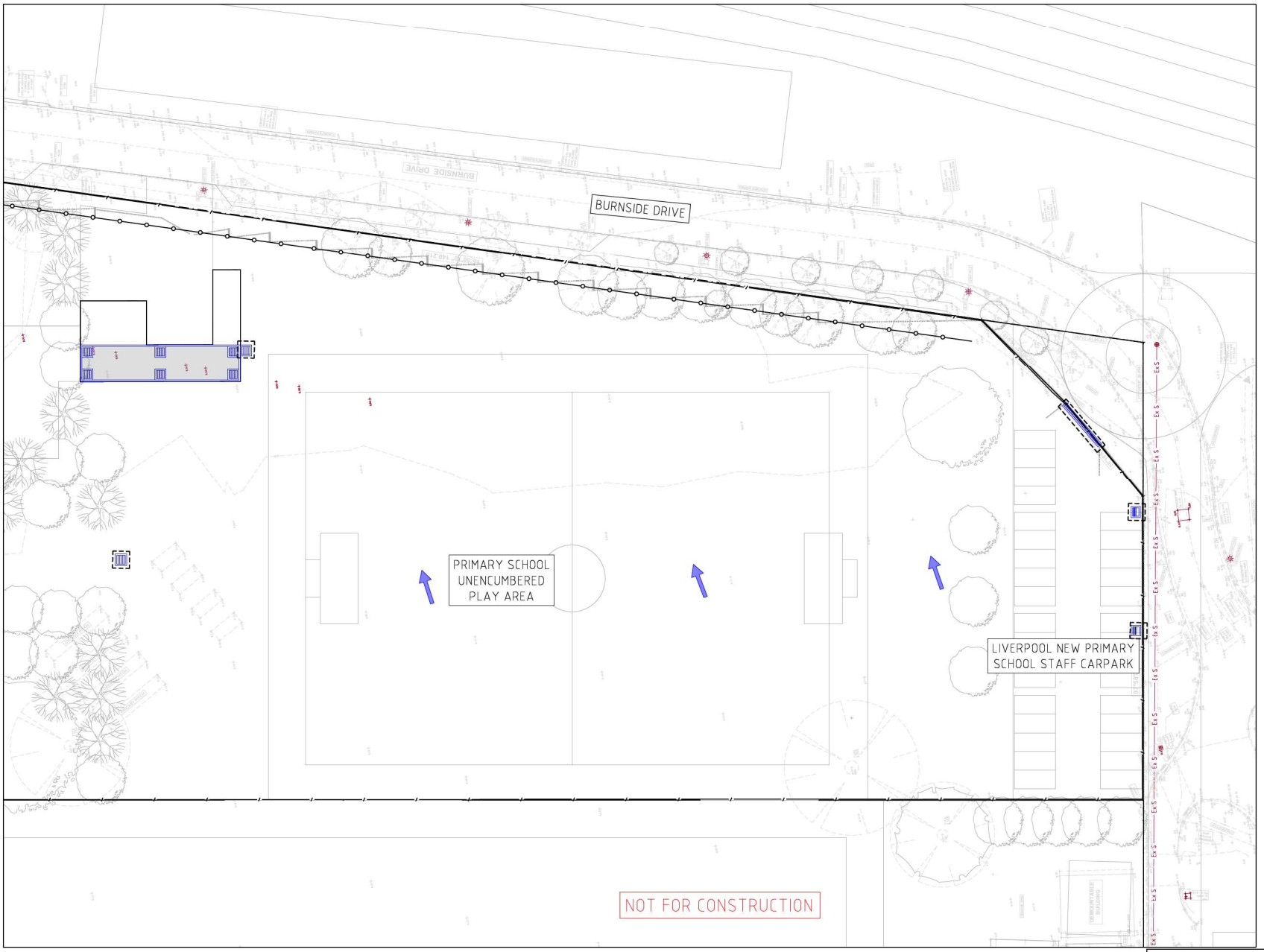
Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2

ISSUE FOR SSD

Designed	AM	Approved	Date
Drawn	MD		North
Scale	1:250		
Date	MAR 2021	Project Ref	Drawing No / Rev
Sheet	A1	12954 02	FS031 P2

File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]12954C-NPS_FS_031.dwg Printed: 18.03.21 at 10:27 PM By: Maria Dulay



LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EXISTING TREE TO BE RETAINED PENDING ARBORIST CONFIRMATION
- Ex SW — EXISTING STORMWATER DRAINAGE LINE
- HOARDING OR SITE FENCE
- SEDIMENT FENCE
- CD — CATCH DRAIN
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- OVERLAND FLOW
- SWALE DRAIN
- STRAW BALE
- SHAKER PAD
- SITE ACCESS GATE
- ONSITE DETENTION TANK

REFER TO SOIL AND WATER MANAGEMENT NOTES ON DRAWING No. FS002.

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

DIAL BEFORE YOU DIG www.1100.com.au The Essential First Step

SCALE 1:250 (0m, 2.5m, 5m, 10m, 15m)

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT — SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9299 7318
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com
© Copyright

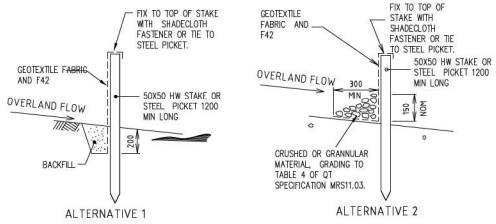
Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

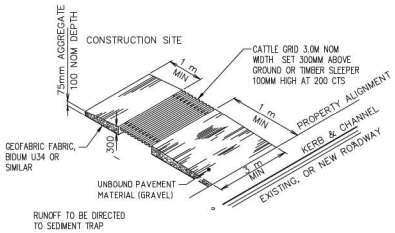
Drawing Title: FULL SCOPE
EROSION AND SEDIMENT CONTROL PLAN SHEET 2

ISSUE FOR SSD

Designed	AM	Approved	Date
Drawn	MD		North
Scale	1:250		
Date	MAR 2021	Project Ref	Drawing No / Rev
Sheet	A1	12954 01	FS006 P2

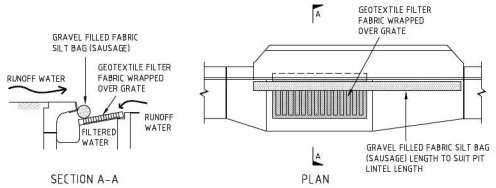
File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]12954C02-NPS_FS_006.dwg Printed: 18.03.21 at 10:26 PM By: Maria Dulay





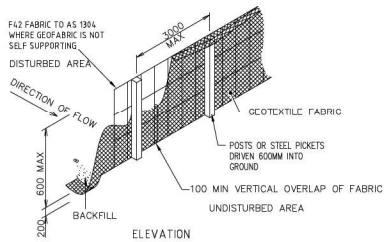
TEMPORARY CONSTRUCTION VEHICLE ENTRY/EXIT SEDIMENT TRAP

NOT TO SCALE



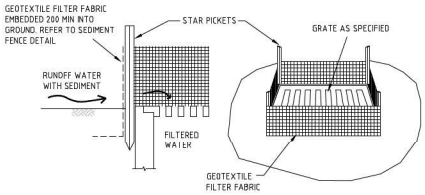
KERB INLET SEDIMENT TRAP

NOT TO SCALE



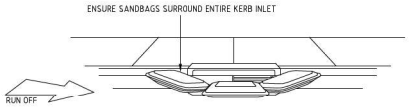
SEDIMENT FENCE

NOT TO SCALE



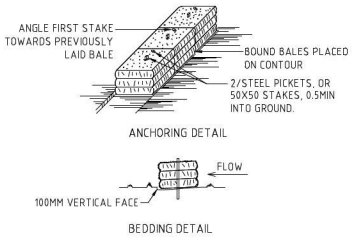
GEOTEXTILE PIT FILTER 1

NOT TO SCALE



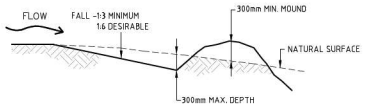
SANDBAG KERB INLET SEDIMENT TRAP

NOT TO SCALE



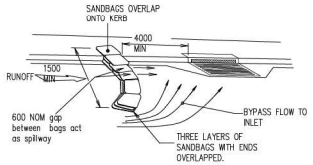
STRAW BALE BANK SEDIMENT CONTROL

NOT TO SCALE



CATCH DRAIN

NOT TO SCALE



ON GRADE KERB INLET SEDIMENT TRAP

NOT TO SCALE

NOT FOR CONSTRUCTION

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT
SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI
Level 4, 66 Clarence Street Sydney NSW 2000 Australia
T: +61 2 9699 3088
F: +61 2 9319 7318
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com

Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

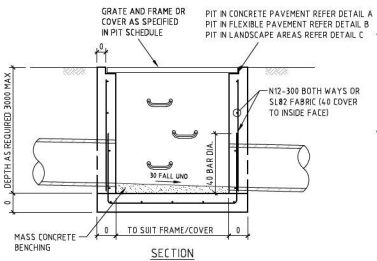
Drawing Title: FULL SCOPE
EROSION AND SEDIMENT CONTROL DETAILS

ISSUE FOR SSD

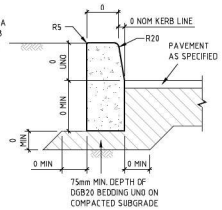
Designed	AM	Approved	
Drawn	MD	Date	
Scale	NTS		North
Date	MAR 2021		
Sheet	A1		

Project Ref: 12954 02
Drawing No: FS007
Rev: P2

File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]\12954\02C-NPS_FS_007.dwg Plotted: 18.03.21 at 10:26 PM By: Maria Duley

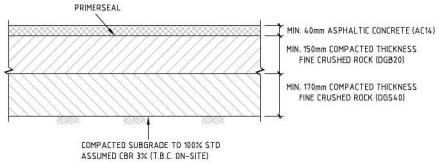


SECTION



KERB ONLY (KO)

SCALE 1:10



PAVEMENT TYPE P2
MEDIUM DUTY ASPHALT PAVEMENT

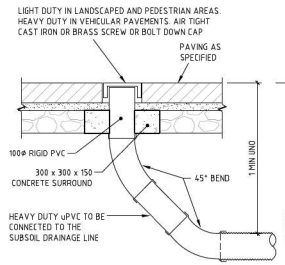
SCALE 1:10

DENOTED ON PLAN

ROAD DESIGN PARAMETERS (FLEXIBLE)

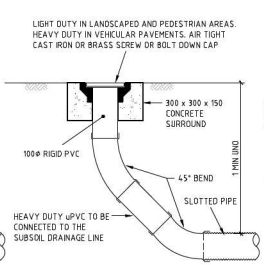
DESIGN TRAFFIC ..... (ESA's OR HVAG)
ASSUMPTIONS:

- AUSTROADS AP-T36-06 STREET TYPE, DESIGN PERIOD (20-40) YEAR DESIGN PERIOD (TABLE 7.9)
- CBR ...%
- PREPARE SUBGRADE AND SELECT FILL IN ACCORDANCE WITH (GEOTECH CONSULTANT AND REPORT REFERENCE)



FLUSHOUT RISER (FOR) IN PAVING BRICKS

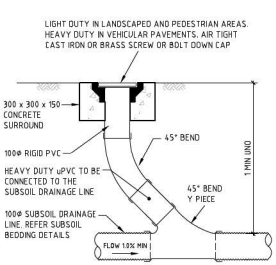
SCALE 1:10



FLUSHOUT RISER (FOR)

SCALE 1:10

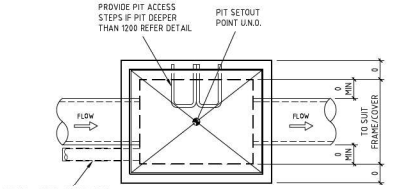
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS WITHIN DRAINAGE LAYER ONLY



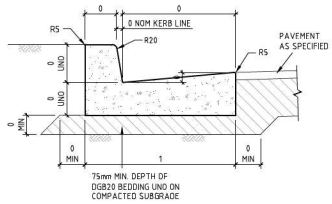
INTERMEDIATE RISER

SCALE 1:10

NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



PLAN



KERB AND GUTTER (K&G)

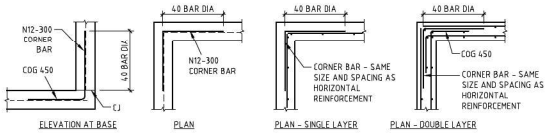
SCALE 1:10

SURFACE INLET/JUNCTION PIT DETAIL

SCALE 1:20

STORMWATER PIT NOTES

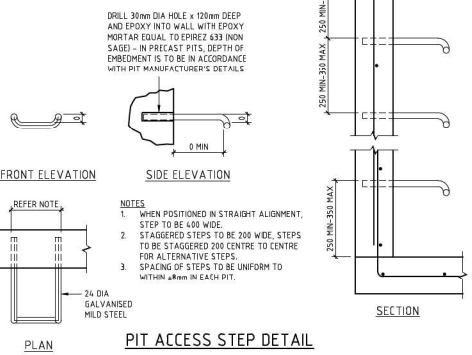
1. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH (F'c) OF 25 MPa AT 28 DAYS.
2. REINFORCEMENT NOT REQUIRED IF DEPTH OF PIT IS LESS THAN 1000mm. PITS GREATER THAN 3000mm DEEP TO HAVE WALL AND BASE 200mm THICK REINFORCED WITH N12-250 EACH WAY EACH FACE WITH CONCRETE STRENGTH F'c = 40 MPa.
3. PROVIDE STEP IRONS AT MAX 350mm CTRS IF DEPTH OF PIT EXCEEDS 1200mm.
4. IF REINFORCING FABRIC IS TO BE USED REFER TO WALL AND CORNER DETAILS
5. PRECAST PITS ARE TO GENERALLY COMPLY WITH THESE DETAILS.
6. PRECAST PIT MAY BE USED SUBJECT TO ENGINEERS APPROVAL.
7. ALL PITS TO BE LOCKABLE.
8. FINAL INTERNAL PIT DIMENSIONS ARE TO COMPLY WITH AS 3500.



PIT CORNER DETAILS

SCALE 1:20

NOTE: DESIGNER TO VERIFY EXTENT OF DETAILING

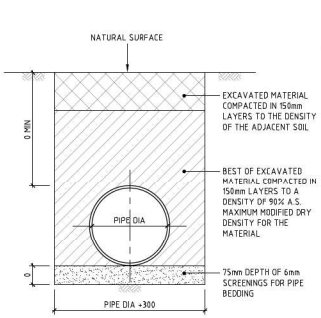


NOTES

1. WHEN POSITIONED IN STRAIGHT ALIGNMENT, STEP TO BE 400 WIDE.
2. STAGGERED STEPS TO BE 200 WIDE, STEPS TO BE STAGGERED 200 CENTRE TO CENTRE FOR ALTERNATIVE STEPS.
3. SPACING OF STEPS TO BE UNIFORM TO WITHIN ±8mm IN EACH PIT.

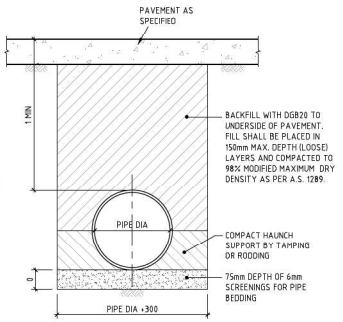
PIT ACCESS STEP DETAIL

SCALE 1:10



PIPE LAYING DETAIL (ALL PIPES) UNDER LANDSCAPED AREAS

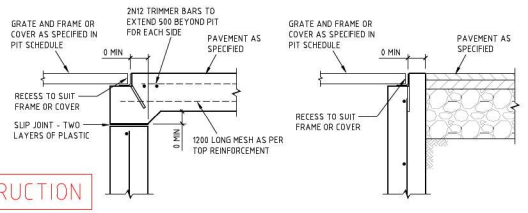
SCALE 1:10



PIPE LAYING DETAILS UNDER ALL PAVEMENTS

SCALE 1:10

NOTE: AVOID RUNNING CONSTRUCTION EQUIPMENT OVER THE PIPES UNTIL BACKFILL MATERIAL IS 300mm MIN. ABOVE CROWN OF PIPE.

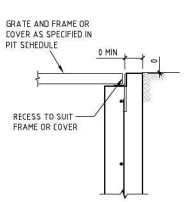


DETAIL A

SCALE 1:10

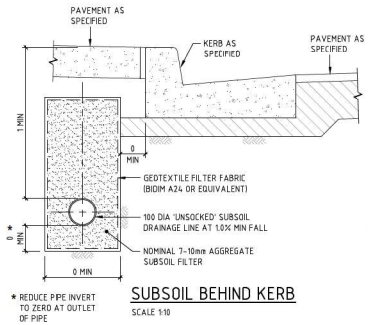
DETAIL B

SCALE 1:10



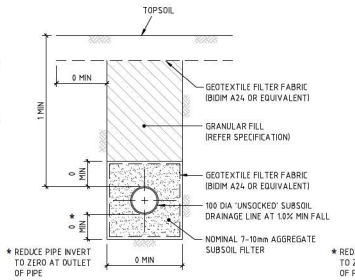
DETAIL C

SCALE 1:10



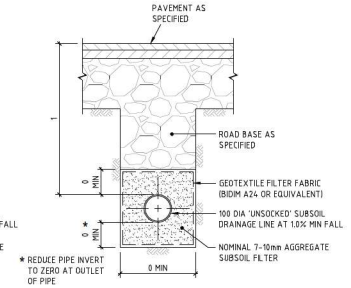
SUBSOIL BEHIND KERB

SCALE 1:10



SUBSOIL IN LANDSCAPED AREAS

SCALE 1:10



SUBSOIL IN PAVED AREAS

SCALE 1:10

NOT FOR CONSTRUCTION

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

Rev	Description	Date	By	App
P2	DRAFT SSD SUBMISSION	19.03.21	MD	–
P1	SCHEMATIC DESIGN	12.03.21	MD	–

NSW GOVERNMENT
SCHOOL INFRASTRUCTURE NSW

MEINHARDT BONACCI

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9299 7510
info@meinhardt-bonacci.com
www.meinhardt-bonacci.com

Project Name: LIVERPOOL EDUCATION PRECINCT
NEW LIVERPOOL PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170

Drawing Title: FULL SCOPE
STORMWATER DRAINAGE DETAILS

ISSUE FOR SSD

Designed	AM	Approved	
Drawn	MD	Date	
Scale	AS SHOWN	North	
Date	MAR 2021		
Sheet	A1	Project Ref	12954 02
		Drawing No	FS051
		Rev	P2

File: G:\Job\12954\02\03 WIP\02\Civil\01 CAD\01 Autocad\[workstage01]\12954002C-WPS_FS_051.dwg Printed: 18.03.21 at 10:27 PM By: Maria Dulay