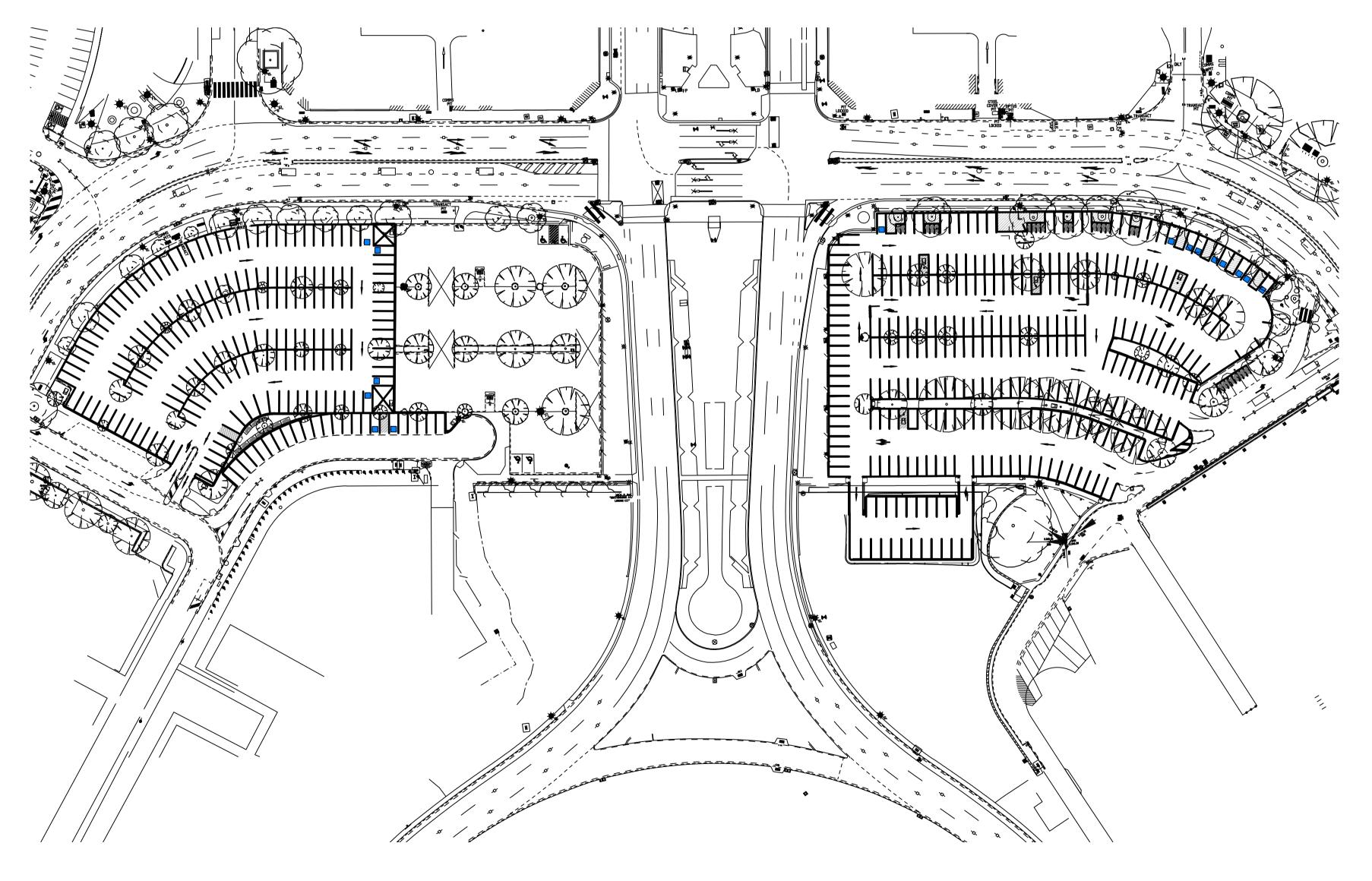
# CAPITAL METRO PROJECT

TEMPORARY CAR PARK
APPENDIX F - WORKS APPROVAL DRAWINGS

Capital Metro
ACT Government

# ARUP HASSELL







Job Title
Capital Metro
Temporary Car Parks
Works Approval

Temporary Car Parks Cover Sheet Scale at A1 NOT TO SCALE

Discipline General

Job No Drawing Status

235067 Works Approval

Drawing No Issue

CLR-CGN-DRG-4001 P02

GENERAL					
CLR-CGN-DRG-4001	TEMPORARY CAR PARKS	COVER SHEET			
CLR-CGN-DRG-4001	TEMPORARY CAR PARKS	DRAWING INDEX			
CEN CON DING 4002	TELLI SIVANT CAN TANKS	DIVAMING INDEX			
CLR-CGN-DRG-4005	TEMPORARY CAR PARKS	GENERAL LEGEND			
CLR-CGN-DRG-4006	TEMPORARY CAR PARKS	NOTES	SHEET 1 OF 2		
CLR-CGN-DRG-4007	TEMPORARY CAR PARKS	NOTES	SHEET 2 OF 2		
CLR-CGN-DRG-4008	TEMPORARY CAR PARKS	LOCALITY PLAN			
SITE PLANS					
CLR-CSP-DRG-4010	TEMPORARY CAR PARKS	DETAILED SITE PLAN	MAGISTRATES COURT CAR PARK		
CLR-CSP-DRG-4011	TEMPORARY CAR PARKS	DETAILED SITE PLAN	THEATRE CAR PARK	SHEET 1 OF 2	
CLR-CSP-DRG-4012	TEMPORARY CAR PARKS	DETAILED SITE PLAN	THEATRE CAR PARK	SHEET 2 OF 2	
CIVIL & EXCAV	ATION				
CLR-CCW-DRG-4040	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	MAGISTRATES COURT CAR PARK	PAVEMENT AND KERBS	
CLR-CCW-DRG-4041	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	THEATRE CAR PARK	PAVEMENT AND KERBS	SHEET 1 OF
CLR-CCW-DRG-4042	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	THEATRE CAR PAR	PAVEMENT AND KERBS	SHEET 2 OF
CLR-CCW-DRG-4043	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	MAGISTRATES COURT CAR PARK	DRAINAGE AND UTILITIES	
CLR-CCW-DRG-4044	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	THEATRE CAR PARK	DRAINAGE AND UTILITIES	SHEET 1 OF
CLR-CCW-DRG-4051	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	THEATRE CAR PARK	DRAINAGE AND UTILITIES	SHEET 2 OF
ST-0014	STANDARD DRAWING	1050 ND MANHOLES			
CLR-CCW-DRG-4049	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	RAMP STRUCTURE DETAILS	SHEET 1 OF 2	
CLR-CCW-DRG-4050	TEMPORARY CAR PARKS	CIVIL & EXCAVATION	RAMP STRUCTURE DETAILS	SHEET 2 OF 2	
EROSION & SE	DIMENT CONTROL				
CLR-CCW-DRG-4045	TEMPORARY CAR PARKS	EROSION & SEDIMENT CONTROL	MAGISTRATES COURT CAR PARK		
CLR-CCW-DRG-4046	TEMPORARY CAR PARKS	EROSION & SEDIMENT CONTROL	THEATRE CAR PARK	SHEET 1 OF 2	
CLR-CCW-DRG-4047	TEMPORARY CAR PARKS	EROSION & SEDIMENT CONTROL	THEATRE CAR PARK	SHEET 2 OF 2	
CLR-CCW-DRG-4048	TEMPORARY CAR PARKS	EROSION & SEDIMENT CONTROL	TYPICAL DETAILS		
LANDSCAPE					
	TEMPODADY CAD DADKO	LANDCCADING	MACICIDATEC COURT CAR DARK		
CLR-LLU-DRG-4031	TEMPORARY CAR PARKS	LANDSCAPING	MAGISTRATES COURT CAR PARK	CHEET 1 OF 2	
CLR-LLU-DRG-4032 CLR-LLU-DRG-4033	TEMPORARY CAR PARKS TEMPORARY CAR PARKS	LANDSCAPING LANDSCAPING	THEATRE CAR PARK THEATRE CAR PARK	SHEET 1 OF 2 SHEET 2 OF 2	
CLN-LLU-DNU-4033	TENEVIANT CAR FARNS	LANDSCAFING	HILAINE CAN FARN	JILLI Z UI Z	
CLR-LLU-DRG-4050	TEMPORARY CAR PARKS	TREE SURVEY PLAN	MAGISTRATES COURT CAR PARK		
CLD LLLL DDC / AE4	TEMPODADY CAD DADKO	TOFF CUDVEY DIAN	THEATDE CAD DADY		

THEATRE CAR PARK

TREE SURVEY PLAN





Capital Metro
Temporary Car Parks
Works Approval

Temporary Car Parks Drawing Index

Do not scale

CLR-LLU-DRG-4051 TEMPORARY CAR PARKS

# SITE PLANS - ROADS AND TRAFFIC

NCA/EPD BOUNDARY

EXISTING PARKING LAYOUT

PROPOSED PARKING LAYOUT

NO PARKING

PARKING FOR PEOPLE WITH DISABILITIES

0-0

MOTORCYCLE PARKING

A

PROPOSED TICKET VENDING MACHINE

PROPERTY BOUNDARY

SURFACE FEATURES

TRAFFIC DIRECTION ARROW

EXISTING TICKET VENDING MACHINE

(PARK)

EXISTING LIGHT POLE

EXISTING BOLLARD

EXISTING SURFACE WATER

FLOW DIRECTION

EXISTING RUBBISH BIN

# SITE PLANS - EARTHWORKS



NEW PAVEMENT (CAR PARK)



RESURFACING



MEDIAN / ISLAND (IF REQUIRED)

# EROSION AND SEDIMENT CONTROL

DIRECTION OF SURFACE FLOW

GRAVEL KERB INLET SEDIMENT TRAP

--- (SF) -

SEDIMENT FENCE

0000000

SANDBAG SEDIMENT TRAP

TEMPORARY CONSTRUCTION ACCESS / EGRESS

SEDIMENT TRAP

# DRAINAGE

TAMS TYPE R KERB INLET PIT

O

TAMS TYPE QS KERB INLET PIT

0

PRECAST CONCRETE MANHOLE

0

EXISTING MANHOLE

PROPOSED PIPE & SIZE DRAINAGE FLOW DIRECTION

# **UTILITIES**

-----HV(D)----HV(D)--- ELECTRICITY – HIGH VOLTAGE UNDERGROUND ELECTRICITY – LOW VOLTAGE UNDERGROUND ELECTRICITY - STREET LIGHTING

GAS - HIGH PRESSURE --- S(D)--- S(D)--- S(D)-

SEWER WATER STORMWATER DRAINAGE TELSTRA ---T(D)---T(D)---T(D)---OPTUS

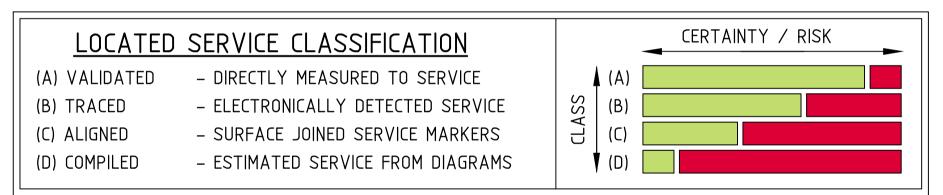
\_\_\_\_\_ ICON \_\_\_\_\_ ———NBN(D)———NBN(D)—

(D)

ICON COMMUNICATIONS NBN Co.

RELOCATED UTILITY (HIGHLIGHTED RED)

DENOTES SERVICE LOCATION CLASSIFICATION (REFER TABLE)

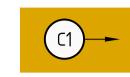


### WARNING

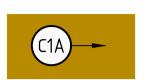
- CLASSIFICATION CHART IS PROVIDED TO INDICATE CERTAINTY OF IDENTIFIED SERVICE SHOWN OR LOCATED.
- REFER TO "AS5488-CLASSIFICATION OF SUBSURFACE UTILITY INFORMATION" 2013
- SERVICES SHOWN CLASS "B", "C" OR "D" MAY BE INACCURATE IN BOTH VERTICAL AND HORIZONTAL POSITION.
- MULTIPLE SERVICES MAY STILL EXIST IN SINGLE TRENCH, THEREFORE, SERVICES SHOWN MAY NOT REFLECT OTHER SERVICES ABOVE OR BELOW.
- SINGLE LINES SHOWN MAY NOT REPRESENT MULTIPLE CONDUITS, PIPES OR CABLES OF SERVICES LOCATED.
- UNKNOWN SERVICES MAY STILL EXIST THAT COULD NOT BE ELECTRONICALLY DETECTED. PLEASE CONSULT SERVICE PROVIDERS DIAGRAMS OR CALL "DIAL-BEFORE-YOU-DIG" SERVICE PROVIDER TO IDENTIFY DUTY OF CARE OBLIGATIONS PRIOR TO ANY EXCAVATION/CONSTRUCTION.

### ARCHITECTURAL / URBAN DESIGN

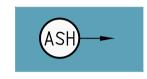
### CONCRETE



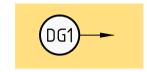
IN-SITU CONCRETE **BROOM FINISHED** PEDESTRIAN



IN-SITU CONCRETE BROOM FINISHED TRAFFICABLE



ASPHALTIC CONCRETE TRAFFICABLE



CEMENT STABILISED DECOMPOSED GRANITE TRAFFICABLE

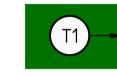
# **KERBS**

(K1) -

CONCRETE KERB

REFER ROAD & CIVIL WORKS DRAWINGS

## PLANTING



TURF ROLLED

## LIGHTING

KIM LIGHTING "THE ARCHETYPE" FULL CUT-OFF LUMINAIRE SINGLE REACH. POWDER COATED FINISH, CHARCOAL COLOUR LIGHTING COLUMNS. (FINAL COLOUR SPECIFICATION TO BE CONFIRMED BY TAMS AND NCA)

KIM LIGHTING "THE ARCHETYPE" FULL CUT-OFF LUMINAIRE DOUBLE REACH POWDER COATED FINISH, CHARCOAL COLOUR LIGHTING COLUMNS. (FINAL COLOUR SPECIFICATION TO BE CONFIRMED BY TAMS AND NCA)

# <u>ACCESS</u>



ROUTE TO ACCESSIBLE CAR PARKING SPACE

# TREE IMPACT PLAN LEGEND



INDICATIVE TREE PROTECTION ZONE (BLUE) AS PER ARBORIST REPORT



EXISTING TREE NOT SURVEYED INDICATIVE LOCATION ONLY



TREE TO BE RETAINED



TREE TO BE REMOVED

Chkd Issue Date Ву Ву Chkd

P02 | 19/01/16 | NB | RA | Issued for Works Approval P01 | 15/01/15 | NB | RA | RA Issued for Works Approval Issue Date By Chkd Appd

ARUP HASSELL



Capital Metro Temporary Car Parks Works Approval

Temporary Car Parks General Legend

Scale at A1 NOT TO SCALE 235067 Works Approval CLR-CGN-DRG-4005

P02

Do not scale

#### GENERAL

- 1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN mAHD UNO.
- 2. NO DIMENSIONS ARE TO BE OBTAINED BY SCALING FROM DRAWINGS.
- 3. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ACT DESIGN STANDARDS FOR URBAN INFRASTRUCTURE STANDARD DRAWINGS AND ALL OTHER DRAWINGS AND SPECIFICATIONS.
- 4. ALL WORKS TO BE IN ACCORDANCE WITH ACT DESIGN STANDARDS FOR URBAN INFRASTRUCTURE.
- 5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND CODES OF PRACTICE EXCEPT WHERE VARIED BY THE DRAWINGS. THE APPLICABLE STANDARDS SHALL BE THE REFERENCED STANDARDS CURRENT AT DATE OF DRAWING ISSUE.

#### EROSION AND SEDIMENT CONTROL

- 1. THE EROSION AND SEDIMENT CONTROL PLAN ADDRESSES THE MANAGEMENT OF ON SITE STORMWATER RUNOFF DURING CONSTRUCTION. IT DOES NOT ADDRESS GROUND WATER MANAGEMENT / DEWATERING REQUIREMENTS. IT IS TO BE READ IN CONJUNCTION WITH ALL OTHER GEOTECHNICAL, ENVIRONMENTAL AND STRUCTURAL DOCUMENTATION. THIS PLAN IS CONCEPT ONLY. SITE CONDITIONS AND PHASING OF WORKS ARE LIKELY TO INFLUENCE CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AMENDING THE SCHEME TO SUIT CONDITIONS AT THE TIME OF WORKS AND CONSTRUCTION PROGRAM.
- 2. THE CONTRACTOR IS TO LIAISE AS NECESSARY WITH THE EPA AND OBTAIN AGREEMENT TO THE ADEQUACY OF THE PROTECTION WORKS. ALL WORKS SHALL COMPLY WITH THE REQUIREMENTS OF THE APPROVED CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (EMP) AND EPA APPROVALS ARE TO BE OBTAINED BEFORE WORKS COMMENCE.
- 3. THE CONTRACTOR IS TO CONSTRUCT AND MAINTAIN PROTECTION WORKS IN ACCORDANCE WITH THE 'ENVIRONMENT PROTECTION GUIDELINES CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT' (2007) AND THE NSW BLUE BOOK AS APPROPRIATE.
- 4. THE CONTRACTOR IS TO INFORM ALL BUILDERS AND SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO ROADWAYS AND WATERWAYS.
- 5. THE CONTRACTOR IS TO IMPLEMENT AN APPROPRIATE ENVIRONMENTAL MANAGEMENT PLAN INCLUDING SPILL/ POLLUTION CONTAINMENT AND TREATMENT PROCEDURES. THE CONTRACTOR IS TO ENSURE THAT ANY SPILL/POLLUTION COLLECTED IS IMMEDIATELY TREATED.
- 6. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR IT HAS BEEN TESTED FOR COMPLIANCE IN ACCORDANCE WITH NOTE 16.
- 7. WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE;
- a. INSTALL SOIL AND WATER MANAGEMENT WORKS
- b. CARRY OUT EARTHWORKS
- c. PROTECT WORKS
- d. UNDERTAKE REMAINING SITE WORKS IN ACCORDANCE WITH ENGINEERING PLANS AND SPECIFICATION
- e. REMOVE SOIL AND WATER MANAGEMENT WORKS NOT REQUIRED FOR OTHER STAGES OF CONSTRUCTION ONCE UPSTREAM SURFACES ARE STABILISED TO THE SATISFACTION OF THE SUPERINTENDENT.
- 8. SAND, CEMENT AND OTHER EASILY WIND-BORNE MATERIAL STOCKPILES ARE TO BE COVERED AND DUST CONTROL MEASURES IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
- 9. STOCKPILE LOCATIONS TO BE DEPENDENT ON THE LOAD OUT LOCATION AND THE POINT OF EXCAVATION. STOCKPILE LOCATIONS TO BE MARKED ON THE SITE PLAN AT THE SITE OFFICE AS THE PROJECT PROGRESSES.
- 10. SHOULD ANY MATERIAL BE WASHED FROM EQUIPMENT, SUCH AS CONCRETE SLURRIES FROM CONCRETE TRUCKS, A WASHING/CLEANING AREA WITH APPROPRIATE SEDIMENT CONTROL MEASURES IS TO BE

SET UP ON A FLAT AREA OF THE SITE.

- 11. THE CONTRACTOR SHALL MAINTAIN A LOG BOOK. THE LOG BOOK SHALL BE MAINTAINED ON A WEEKLY BASIS AND BE MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. THE ORIGINAL LOG BOOK SHALL BE ISSUED TO THE PROJECT MANAGER AT THE COMPLETION OF THE WORKS.
- 12. CONTROL MEASURES AFFECTED BY WORKS ARE TO BE RE-ESTABLISHED PRIOR TO THE COMPLETION OF EACH DAYS WORK.
- 13. ALL CONTROL MEASURES ARE TO BE CLEANED AND MAINTAINED AT LEAST WEEKLY OR AFTER EVERY RAINFALL EVENT.
- 14. FOLLOWING THE COMPLETION AND RESTORATION OF SITE, THE CONTRACTOR IS TO REMOVE ALL CONTROL MEASURES.
- 15. PERMANENT DRAINAGE STRUCTURES INCLUDING PIPES AND PITS ARE TO BE HANDED OVER IN A CLEAN CONDITION AT THE COMPLETION OF THE CONTRACT MAINTENANCE PERIOD.
- 16. PRIOR TO DISCHARGING COLLECTED WATER TO STORMWATER DRAINAGE, IT IS TO BE TESTED TO ENSURE COMPLIANCE WITH THE FOLLOWING WATER QUALITY REQUIREMENTS:
  - TSS < 50mg/L.
  - OILS AND GREASES <10MG/L. A VISUAL ASSESSMENT TO DETERMINE PRESENCE OF OILS & GREASES IS SUFFICIENT.
  - 6.5 < pH < 8.5

SHOULD TESTING GIVE RESULTS THAT DO NOT COMPLY WITH THE ABOVE, TREATMENT MEASURES (SUCH AS THE APPLICATION OF A pH NEUTRAL FLOCCULENT) AND SUBSEQUENT RETESTING IS REQUIRED. DOCUMENTARY RESULTS OF WATER QUALITY TESTING PRIOR TO DEWATERING ARE TO BE KEPT. A FILE IS TO BE KEPT ONSITE OF ALL WATER TESTING/DEWATERING EVENTS. FOLLOWING DEWATERING THE SEDIMENT BASIN IS TO BE CLEARED OF SEDIMENT.

- 17. ALL STORMWATER PITS TO BE COVERED OR DROP INLET SEDIMENT TRAPS SHALL BE PROVIDED. KERB INLET TRAPS ARE TO BE INSTALLED AFTER COMPLETION OF PAVING.
- 18. ALL SERVICE TRENCHES MUST BE FILLED IN AND COMPACTED IMMEDIATELY AFTER SERVICES HAVE BEEN LAID.
- 19. ROADS AND FOOTPATHS AFFECTED BY THE WORKS MUST BE SWEPT CLEAN DAILY. SOILS MUST BE RETAINED BEHIND CONTROL DEVICES.
- 20. CONTRACTOR MUST ENSURE THAT ALL VEHICLES LEAVING SITE ARE HOSED DOWN (OR SIMILAR) TO REMOVE SEDIMENT.
- 21. SITE ENTRY/ EXIT TO BE INSTALLED WITH RUMBLE GRIDS.

#### **EARTHWORKS**

- 1. EXCAVATED SURFACES ARE TO BE CHECKED FOR SOFT OR COMPRESSIBLE ZONES. SUCH ZONES ARE TO BE OVER EXCAVATED TO A MINIMUM DEPTH OF 300mm AND REPLACED WITH COMPACTED SELECTED MATERIAL.
- 2. THE CONTRACTOR SHALL ENSURE THAT THE SUBGRADE IS PROPERLY PREPARED AND COMPACTED.
- 3. UNO, LOCAL BATTERS AT MIN. 1H:1V SHALL BE PROVIDED AT STEPS IN EARTHWORKS LEVEL.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS INCLUDING SHORING AND BATTERS. ALL TEMPORARY WORKS ARE TO BE DESIGNED IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND CODES OF PRACTICE BY A SUITABLY QUALIFIED ENGINEER.
- 5. ALL EARTHWORKS AND DISPOSAL OF MATERIALS IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPERINTENDENT.
- 6. ANY EXCAVATED MATERIAL TO BE REMOVED FROM THE SITE IS TO BE ASSESSED, CLASSIFIED, TRANSPORTED AND DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE'S (DECC) 'WASTE CLASSIFICATION GUIDELINES PART 1: CLASSIFYING WASTE'
- 7. ANY FILL MATERIAL IMPORTED INTO THE SITE IS TO BE VIRGIN EXCAVATED NATURAL MATERIAL OR MATERIAL SUBJECT TO A RESOURCE RECOVERY EXEMPTION THAT IS PERMITTED TO BE USED AS FILL MATERIAL, IN ACCORDANCE WITH THE PROVISIONS OF THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997 AND THE PROTECTION OF THE ENVIRONMENT (WASTE) REGULATION 2005.

- 8. ANY FILL MATERIAL SUBJECT TO A RESOURCE RECOVERY EXEMPTION RECEIVED AT THE SITE MUST BE ACCOMPANIED BY DOCUMENTATION DEMONSTRATING THAT MATERIAL'S COMPLIANCE WITH THE CONDITIONS OF THE EXEMPTION, AND THIS DOCUMENTATION MUST BE PROVIDED TO COUNCIL OFFICERS OR THE PRINCIPAL CERTIFYING AUTHORITY ON REQUEST.
- 9. TOPSOIL OR SOIL CONTAINING A HIGH PROPORTION OF ROOT MATTER MUST BE STRIPPED FROM THE SITE AND DISPOSED OF.

# PAVEMENTS, KERBS, FOOTWAYS AND ANCILLARY ITEMS

- 1. PAVEMENT DESIGNS HAVE BEEN BASED UPON A DESIGN CBR OF 3%. THE CONTRACTOR IS TO CONFIRM THE IN-SITU CBR AND NOTIFY THE SUPERINTENDENT OF ANY DISCREPANCY.
- 2. PAVEMENTS ARE TO BE NEW CONSTRUCTION OR MILLED AND RESURFACED AS INDICATED ON THE PAVEMENT LAYOUT DRAWINGS. PAVEMENT BUILDUP IS TO BE AS PER THE VALUES SHOWN BELOW:

#### NEW PAVEMENTS:

DESIGN TRAFFIC 1X10<sup>3</sup> ESAS

- 35MM AC10-MD SURFACING
- AMCO PRIME @ 1 LITRE/M<sup>2</sup>
- 100MM NGB20-2D, 20MM NOMINAL SIZED NATURAL GRAVEL BASE
- 200MM NGS20, 20MM NOMINAL SIZED NATURAL GRAVEL SUB-BASE
- SUBGRADE CBR 3% MIN.

#### RESURFACING:

- MILL AND SCARIFY NOMINAL 35MM EXISTING ASPHALT SURFACING
- 35MM AC10-MD SURFACING
- CORRECTOR COURSE (PROVISIONAL)
- TACK COAT CRS170/60 @ 0.2 LITRE/M<sup>2</sup>

#### MEDIAN/ISLAND (IF REQUIRED):

- 100MM HAND PLACED CONCRETE, 25 MPA WITH SL62 MESH
- 3. PAVEMENT MATERIALS AND CONSTRUCTION ARE TO BE IN ACCORDANCE WITH THE RELEVANT ACT URBAN SERVICES STANDARD SPECIFICATION FOR INFRASTRUCTURE WORKS.
- 4. THE SUPERINTENDENT MAY REQUEST A PROOF ROLL OF THE SUBGRADE TO DETERMINE THE ACCURACY OF THE COMPACTIVE FEFORT.
- 5. THE PRIME IS TO BE ALLOWED TO CURE AND TURN FROM BROWN TO BLACK PRIOR TO BEING OVERLAID WITH ASPHALT. NO TRAFFIC IS PERMITTED ON THE PRIME.
- 6. THE FINISHED ASPHALT SURFACE SHALL NOT DEVIATE MORE THAN 6mm ON A 3m STRAIGHT EDGE IN ANY DIRECTION.

#### DRAINAGE

- 1. THE LOCATION OF EXISTING DRAINAGE INFRASTRUCTURE SHOWN ON THE DRAWINGS IS BASED UPON AVAILABLE INFORMATION AND IS INDICATIVE ONLY. NO RESPONSIBILITY IS TAKEN FOR ITS ACCURACY OR COMPLETENESS. ANY DISCREPANCY IN THIS INFORMATION MAY AFFECT THE DESIGN.
- 2. DETAILS OF ALL DRAINAGE INFRASTRUCTURE ARE TO BE CONFIRMED PRIOR TO WORKS BEGINNING. IT IS ASSUMED THAT NO UPGRADING OF EXISTING DRAINAGE NETWORKS IS REQUIRED.
- 3. UNMAPPED OR UNKNOWN EXISTING DRAINAGE INFRASTRUCTURE MAY BE PRESENT WITHIN THE PROJECT EXTENTS, WHICH MAY IMPACT ON THE VIABILITY OF THE PROPOSED WORKS SHOWN. THESE ITEMS MAY REQUIRE ADDITIONAL PROTECTION / TREATMENT.
- 4. DRAINAGE COORDINATION WITH EXISTING AND PROPOSED UTILITIES, LANDSCAPE TREATMENTS OR STREET FURNITURE IS BASED ON AVAILABLE SURVEY INFORMATION AND DBYD SEARCH.
- 5. THE CONDITION OF EXISTING DOWNSTREAM DRAINAGE INFRASTRUCTURE IS CURRENTLY UNKNOWN. IT HAS BEEN ASSUMED THAT EXISTING DRAINAGE INFRASTRUCTURE IS IN A GOOD CONDITION AND WILL NOT REQUIRE IMPROVEMENT PRIOR TO UNDERTAKING THE WORKS. THE CONTRACTOR IS TO CONFIRM THIS USING VISUAL

- STRUCTURAL INSPECTION OF ACCESS CHAMBERS / GULLY PITS, AND CCTV SURVEY OF PIPEWORK.
- 6. WHERE EXISTING PERVIOUS CAR PARKING AREA IS SHOWN TO BECOME IMPERVIOUS, ON-SITE DETENTION HAS BEEN CONSIDERED TO LIMIT STORMWATER FLOWS TO EXISTING. AN INDICATION OF POTENTIAL REQUIREMENTS HAS BEEN PROVIDED ON THE DRAINAGE LAYOUT DRAWINGS.
- 7. FOR ALL AREAS WHERE THE URBAN DESIGN TREATMENT INDICATES NEW SURFACING, ALLOWANCE SHOULD BE MADE FOR NEW ACCESS COVERS WITH INFILL OF THE APPROPRIATE SURFACING MATERIAL.
- 8. ALLOWANCE SHOULD BE MADE FOR ADJUSTMENT TO THE LEVEL OF THE MAJORITY OF ACCESS COVERS WITHIN THE AFFECTED PAVEMENT AS A RESULT OF RE-SURFACING WORKS. THIS MAY REQUIRE STRUCTURAL CHANGES TO EXISTING PITS.
- 9. IT IS ASSUMED THAT TREATMENT OF TOTAL SUSPENDED SOLIDS THROUGH APPROPRIATE WATER SENSITIVE URBAN DESIGN (WSUD) MEASURES, INCLUDING PROPRIETARY STORMWATER QUALITY IMPROVEMENT DEVICES (SQIDS), IS NOT REQUIRED. OPPORTUNITIES FOR WSUD SHALL BE CONSIDERED DURING DETAILED DESIGN.
- 10. THE LOCATION AND LEVEL OF ALL SERVICES WHICH CROSS PROPOSED DRAIN LINES MUST BE CONFIRMED PRIOR TO CONSTRUCTION AND BE CHECKED FOR CONFLICT. ANY CONFLICTS ARE TO BE REPORTED TO THE SUPERINTENDENT AND ADVICE SOUGHT PRIOR TO COMMENCING WORKS
- 11. WHERE A CONNECTION IS TO BE MADE TO AN EXISTING DRAINAGE PIPE OR STRUCTURE, THE LEVEL OF THAT PIPE OR STRUCTURE MUST BE CONFIRMED PRIOR TO THE CONSTRUCTION OF THE NEW DRAIN LINE.
- 12. ALL PIPES 300mm OR GREATER ARE TO BE SRCP, RRJ AND PIPE CLASS 4, UNO. PIPE CLASSES HAVE BEEN CHECKED FOR THE PERMANENT DESIGN CASE AND DO NOT ALLOW FOR CONSTRUCTION LOADING. THE CONTRACTOR IS TO CHECK TEMPORARY LOADING CONDITIONS ARE WITHIN THE SPECIFIED PIPE CLASS OR THE PIPE CLASS IS TO BE INCREASED AS NECESSARY.
- 13. ALL PIPES LESS THAN 300mm TO BE uPVC, SEWER GRADE, SOLVENT WELDED UNO.
- 14. DRAINAGE LINES ARE TO BE LAID AT A MINIMUM GRADE OF 0.5% OR AS SHOWN ON THE LONGITUDINAL SECTIONS.
- 15. INSTALLATION, BEDDING AND BACKFILLING OF ALL DRAINAGE PIPES SHALL BE HS3 IN ACCORDANCE WITH AS3725. MARKER LAYERS SHALL BE INSTALLED IN ALL TRENCHES IN ACCORDANCE WITH THE CIVIL SPECIFICATION.
- 16. PIPES SHALL BE CONNECTED TO PITS SUCH THAT THE PIPE IS CENTRED ON THE PIT FACE.
- 17. SETOUT POINTS AND SURFACE LEVELS FOR PITS AND MANHOLES SHALL BE THE CENTRE OF THE STRUCTURES, UNO ON DETAIL PLANS.
- 18. GRATE FRAME MUST PROVIDE FIRM SUPPORT TO ALL SIDES ENSURING GRATES ARE SECURE.
- 19. ALL GRATES ARE TO BE CLASS D, BICYCLE TYRE PENETRATION RESISTANT IN ACCORDANCE WITH CLAUSE 3.3.6 OF AS 3996:2005 AND HEELSAFE, UNO.
- 20. PIPE JOINT TO BE PROVIDED 600mm FROM EXTERNAL FACE OF STORMWATER PITS FOR PIPES ≤ 450mm. FOR PIPES > 450mm, PIPE JOINT IS TO BE PROVIDED 1200mm FROM FACE OF STORMWATER PITS.
- 21. PROVIDE 100mm DIA. SLOTTED SUBSOIL PIPE CONNECTION TO STORMWATER PITS. THE PIPE IS TO BE 3.0m LONG ENCLOSED IN TUBULAR FILTER FABRIC AND LAID ADJACENT TO INLET PIPE/S.
- 22. FLUSHING POINTS ARE TO BE PROVIDED ON ALL SUBSOIL DRAINAGE PIPES AT 30m CENTRES AND END OF PIPES.
- 23. CONCRETE FOR DRAINAGE STRUCTURES TO BE N32.

24. STORMWATER DRAINAGE CRITERIA:

MINOR STORM = 20y ARI MAJOR STORM = 100y ARI

- 25. ALL GRATED DRAINS, WATER QUALITY TREATMENT DEVICES, PITS AND PROPRIETARY PRODUCTS ARE TO BE INSTALLED TO THE MANUFACTURER'S SPECIFICATIONS. DESIGNATED PRODUCTS CAN BE SUBSTITUTED WITH EQUIVALENT PRODUCTS, BUT MUST FIRST BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL.
- 26. THE CONTRACTOR IS TO CARRY OUT A CCTV INSPECTION OF THE COMPLETED DRAINAGE WORKS THAT ARE TO REVERT TO TAMS AND

ARUP HASSELL

Designer



Capital Metro Temporary Car Parks Works Approval

Temporary Car Parks Notes Sheet 1 of 2

Scale at A

Discipline

Job No

2350

Drawing N

Do not scale

A DVD FORWARDED TO TAMS TO SUPPORT THE CERTIFICATION OF WORKS.

## LINEMARKING AND SIGNPOSTING

- 1. LINE MARKING SHOWN IS INDICATIVE ONLY. PAVEMENT MARKING IS TO BE IN ACCORDANCE WITH RELEVANT SPECIFICATION AS DETERMINED DURING DETAILED DESIGN. MARKINGS SHALL BE IN (HOT APPLIED) NON-PROFILED THERMOPLASTIC PAINT.
- 2. ALL SIGNS SHALL COMPLY WITH AS 1906.1 FOR CLASS 1 MATERIAL.
- 3. EXACT LOCATION OF SIGNS IS TO BE CONFIRMED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.
- 4. SIGNPOSTING IS TO BE IN ACCORDANCE WITH AS 1742.2, AS 1742.4, AS 1742.11, AS 1743, AS 1744 AND SIGN SUPPORTS ARE TO BE IN ACCORDANCE WITH AS 1742.2.

### UTILITIES

- 1. ALL EXISTING STRUCTURES, SERVICES AND UTILITIES ARE TO BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS. THE LOCATIONS OF EXISTING SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. THE RESPONSIBILITY FOR LOCATING, AVOIDANCE AND WHERE NECESSARY, TEMPORARY PROTECTION OF THESE EXISTING SERVICES IS THAT OF THE CONTRACTOR. ANY DAMAGE TO EXISTING STRUCTURES, SERVICES AND UTILITIES IS TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- 2. WHERE REQUIRED, THE CONTRACTOR SHALL ARRANGE SERVICE PROTECTION MEASURES WITH THE RELEVANT SERVICE AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE REQUIREMENTS OF SERVICE AUTHORITIES FOR WORKS IN THE VICINITY OF THEIR UTILITIES. WHERE REQUIRED, THE CONTRACTOR SHALL GAIN APPROVAL FROM THE SERVICE AUTHORITIES FOR THE PROPOSED WORKS.
- 3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED WITHOUT PRIOR CONSENT FROM THE SERVICE AUTHORITIES OR ASSET OWNERS.
- 4. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PROTECT ALL EXISTING SERVICES FROM DAMAGE. ANY DAMAGE TO SERVICES IS TO BE REPORTED TO THE PRINCIPAL AND THE RELEVANT SERVICE AUTHORITIES IMMEDIATELY.
- 5. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO ENSURE EXISTING SUPPLY REMAINS IN OPERATION DURING WORKS TO THE SATISFACTION OF THE SERVICE AUTHORITIES. ONCE THE DIVERSION IS COMPLETED AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SERVICE AUTHORITIES.
- 7. SYMBOLS REPRESENTING PHYSICAL STRUCTURES SUCH AS POWER POLES AND PITS ARE DIAGRAMMATIC ONLY AND DO NOT NECESSARILY REPRESENT THE ACTUAL SIZE AND EXTENT OF THESE FEATURES.
- 8. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PROTECT ALL EXISTING SERVICES FROM DAMAGE. ANY DAMAGE TO SERVICES IS TO BE REPORTED TO THE SUPERINTENDENT AND THE RELEVANT SERVICE AUTHORITIES IMMEDIATELY.
- 9. THE CONTRACTOR IS TO NOTE THE LOCATION OF ALL ACTEWAGL CABLES. ALL WORKS IN CLOSE PROXIMITY TO CABLES MUST COMPLY WITH ACTEWAGL GUIDANCE DOCUMENTS.
- 10. THE CONTRACTOR IS NOT TO USE VIBRATORY EQUIPMENT, EXCEPT FOR SMALL HAND HELD COMPACTION PLANT, OVER UNDERGROUND SERVICES. SERVICE PROVIDER REQUIREMENTS TO BE CONFIRMED BY CONTRACTOR PRIOR TO THE WORKS.
- 11. DBYD SEARCH HAS IDENTIFIED GOVERNMENT COMMUNICATIONS ASSETS IN THE AREA. THE LOCATION AND TREATMENT OF THESE ASSETS IS TO BE AGREED WITH THE ASSET OWNER DURING DETAILED DESIGN.
- 12. DETAILED DESIGN OF UTILITIES TO BE SUBJECT TO A SITE INVESTIGATION.

Do not scale

13. UTILITY RELOCATIONS ARE TO BE CONFINED TO THE WORKS AREA.

#### URBAN DESIGN

#### GENERAL

- 1. ALL INFORMATION SHOWN WITHIN THE URBAN DESIGN DRAWING SET HAS BEEN PREPARED FOR THE PURPOSES OF WORKS APPROVAL AND DOES NOT REPRESENT A FULLY CO-ORDINATED SET OF INFORMATION. WHILST EVERY EFFORT HAS BEEN MADE TO ENSURE THAT CIVIL AND STRUCTURAL WORKS CO-ORDINATE WITH THE URBAN DESIGN INTENT, IT HAS NOT BEEN POSSIBLE TO ENSURE THAT ALL AREAS HAVE BEEN FULLY CAPTURED AND CO-ORDINATED.
- 2. PUBLIC DOMAIN MATERIAL TREATMENTS ARE SHOWN INDICATIVELY, AND ARE SUBJECT TO FURTHER CO-ORDINATION WITH NCA, TAMS AND KEY STAKEHOLDERS.

#### SURVEY INFORMATION

3. THE PROPOSED SURFACE LEVELS, TREES TO BE REMOVED AND TREES TO BE TRANSPLANTED HAVE BEEN IDENTIFIED BASED ON SURVEY INFORMATION PROVIDED AT THE TIME OF DESIGN. FURTHER OR MORE DETAILED SURVEY AND UTILITIES INFORMATION MAY ALTER THE DESIGN.

#### **KERBS**

4. GENERALLY, EXISTING KERBS HAVE BEEN AMENDED WHERE THERE IS A REDUCTION OR ADDITION VERTICALLY, HORIZONTALLY OR BOTH TO THE ROAD EDGE. UNLESS OTHERWISE NOTED ANY NEW KERBS WILL REQUIRE REINSTATEMENT OF THE ADJACENT PAVEMENT OR SOFT LANDSCAPING, MAKING GOOD AND MATCHING WITH EXISTING MATERIALS AND FINISHES.

#### TREE IMPACT ASSESSMENT

5. THE TREE IMPACT ASSESSMENT DRAWINGS ARE REPRESENTATIVE OF INFORMATION GAINED FROM AN ARBORICULTURAL TREE ASSESSMENT BY NORCUE P/L. IMPACT ASSESSMENTS HAVE BEEN CONDUCTED IN ACCORDANCE WITH THE TREE PROTECTION ACT 2005 AND UTILISING A MULTI-CRITERIA ANALYSIS WITH REGARDS TO CONSTRUCTION IMPACTS, LOCAL CONDITIONS AND TREE HEALTH. TREES HAVE BEEN IDENTIFIED ACCORDING TO THEIR PROBABILITY FOR RETENTION, AND CLASSIFIED AS HIGH, MEDIUM AND LOW. THE DETERMINATION OF THE REMOVAL OF ANY TREES WILL BE SUBJECT TO FINAL ARBORIST'S ADVICE WHICH MAY REQUIRE DETAILED ROOT INVESTIGATION.

#### POWER, LIGHTING AND COMMUNICATIONS

- 6. EXISTING WIFI NETWORK TO BE REINSTATED IN THE NEW CAR PARK
- 7. PROVIDE POWER AND COMMUNICATIONS SUPPLY TO EACH TICKET VENDING MACHINE (SUPPLIED BY THE TERRITORY). REQUIREMENTS TO BE DETERMINED DURING DETAILED DESIGN.
- 8. CAR PARK LIGHTING TO BE DESIGNED IN ACCORDANCE WITH AS/NZS 1158.3.1 P11(b) CATEGORY AND P12 CATEGORY DURING DETAILED DESIGN.
- 9. KIM LIGHTING "THE ARCHETYPE" LUMINAIRE MOUNTED ON 9m POLE TO BE 250w METAL HALIDE

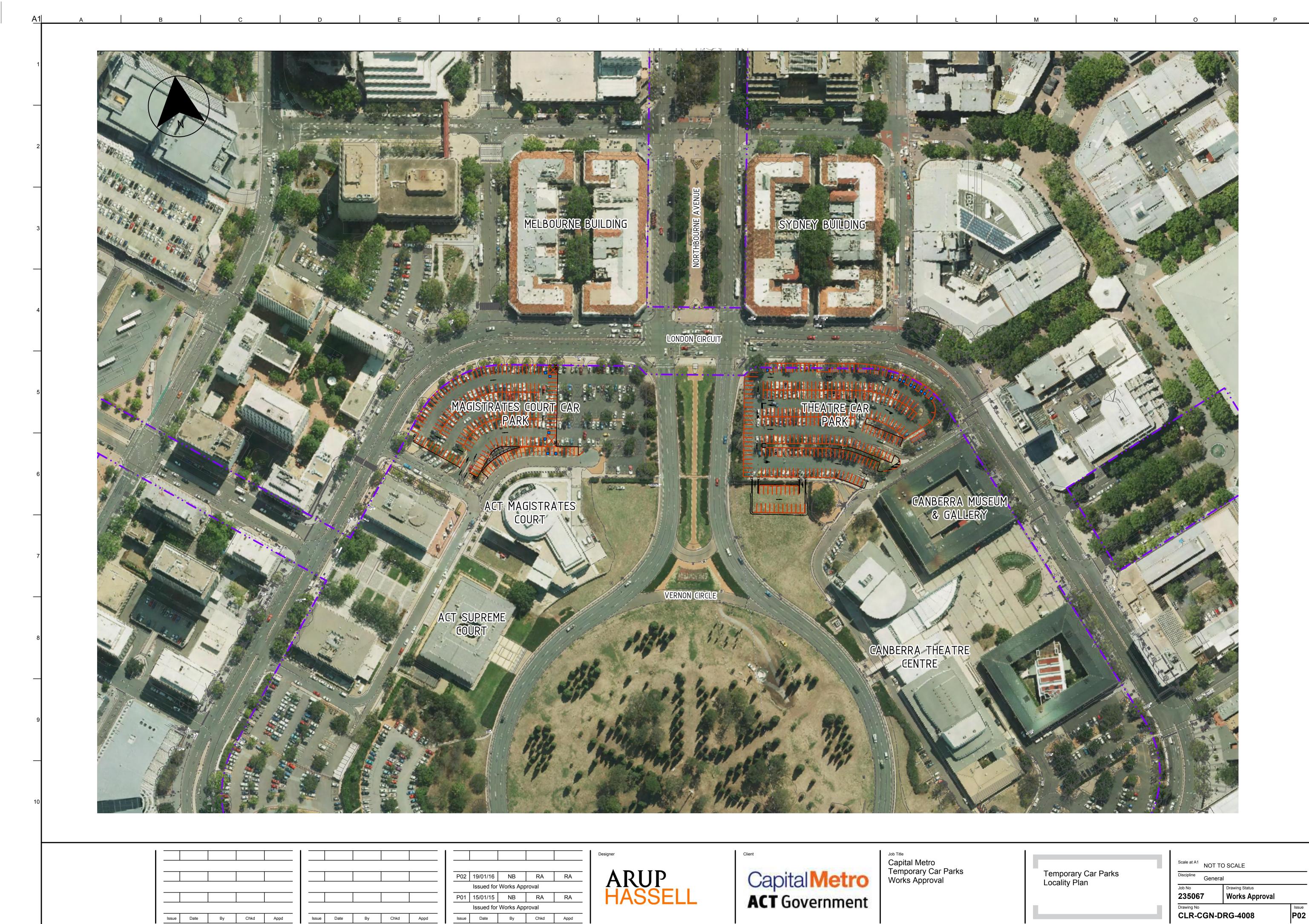
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Capital Metro Temporary Car Parks Works Approval

Temporary Car Parks Notes Sheet 2 of 2

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