ON-SITE MANAGEMENT OF VERGES AND OPEN SPACE

1 GENERAL

- BEFORE COMMENCING WORKS, THE COORDINATOR SHALL ADVISE ASSET ACCEPTANCE (AA) IN WRITING THAT THE PROTECTIVE MEASURES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED LANDSCAPE MANAGEMENT PROTECTION PLAN (LMPP). RANDOM AUDITS WILL BE UNDERTAKEN BY AA TO ENSURE COMPLIANCE. FAILURE TO COMPLY MAY INCUR THE ISSUE OF A STOP WORK NOTICE.
- ALL WORKS SHALL BE CONTAINED WITHIN THE AUTHORISED SITE EXCEPT FOR APPROVED SERVICE CONNECTIONS IN THE VERGE OR OTHER APPROVED EXCEPTIONS
- DURING THE PROGRESS OF THE WORKS ALL EXISTING VERGE GRASS COVER SHALL BE MAINTAINED IN ITS PRE-EXISTING CONDITION. PROTECTIVE MEASURES SHALL INCLUDE REGULAR WATERING TO MAINTAIN GRASS AND TREES IN GOOD CONDITION.
- WHERE THE SURFACE IS GRASS OR BARE SOIL WITHOUT TREES, NO PROTECTION IS REQUIRED. WHERE TOPSOIL AND GRASS OR OTHER APPROVED SURFACES, ARE INSTALLED AT THE COMPLETION OF THE WORKS IN ACCORDANCE WITH THE "STANDARD SPECIFICATION FOR URBAN INFRASTRUCTURE WORKS".

2 SUPERVISION

- FOR ALL WORKS, OTHER THAN MINOR WORKS (I.E. MINOR IN COMPLEXITY AND/OR SCOPE OF WORKS AND CONFIRMED AS MINOR WORKS BY AA), AND UNLESS OTHERWISE APPROVED BY AA, A SUITABLY QUALIFIED LANDSCAPE ARCHITECT OR HORTICULTURIST SHALL BE EMPLOYED TO ENSURE THAT THE WORK IN THE VERGE MEETS THE REQUIREMENTS. THE ARCHITECT/HORTICULTURIST SHALL ALSO BE PRESENT DURING ANY CULTIVATION OR RESTORATION OF THE VERGE WHICH AFFECTS PLANT MATERIAL AND SHALL PROVIDE CERTIFICATION, ENDORSED BY THE COORDINATOR, THAT ALL WORK, CULTIVATION AND RESTORATION HAVE BEEN PERFORMED TO INDUSTRY STANDARDS.

3 STORAGE OF CONSTRUCTION MATERIALS

- THE STORAGE OF CONSTRUCTION MATERIALS AND THE PARKING OF VEHICLES OR EQUIPMENT ON VERGES OR ADJACENT PUBLIC OPEN SPACES ARE NOT PERMITTED WITHOUT PRIOR APPROVAL FROM TaMS. WHERE THERE IS NO ALTERNATIVE AVAILABLE OTHER THAN TO USE THESE AREAS FOR STORAGE AND/OR PARKING, THE COORDINATOR MAY LODGE AN APPLICATION WITH THE LMPP REQUESTING APPROVAL FOR THE USE OF THESE AREAS FOR THE DESIGNATED PURPOSES. APPROVAL MAY BE GIVEN BY TaMS SUBJECT TO CERTAIN TERMS AND CONDITIONS OF USE.

4 SITE ACCOMMODATION

- GENERALLY, SITE SHEDS, STORAGE SHEDS, SITE AMENITIES OR BILLBOARDS ARE NOT TO BE ERECTED ON VERGES OR PUBLIC OPEN SPACES WITHOUT PRIOR APPROVAL. SHOULD THERE BE NO ALTERNATIVE, THE COORDINATOR MAY LODGE AN APPLICATION WITH THE LMPP REQUESTING APPROVAL TO ERECT SUCH A STRUCTURE ON THE AREA. THE ERECTION OF SITE ACCOMMODATION MAY BE APPROVED SUBJECT TO THE COORDINATOR'S AGREEMENT TO COMPLY WITH THE TERMS AND CONDITIONS SPECIFIED BY AA AND OBTAINING A PERMIT UNDER THE ROADS AND PUBLIC PLACES ACT 1937 FROM TaMS PCL.

5 PROTECTIVE FENCING

5.1 EXTENT

- ALL TEMPORARY PROTECTIVE FENCES ERECTED TO PROTECT EXISTING ASSETS SHALL BE IN ACCORDANCE WITH THE APPROVED LMPP DRAWING. FENCING SHALL BE ERECTED BEFORE THE COMMENCEMENT OF ANY SITE WORKS AND REMOVED AT THE COMPLETION OF ALL CONSTRUCTION ACTIVITY EXCEPT DURING VERGE RESTORATION. THE FENCE SHALL REMAIN IN PLACE THROUGHOUT THE CONSTRUCTION PERIOD.
- EXISTING TREES, PLANTINGS AND GRASS SHALL BE FENCED OFF TO ENCLOSE THE STREET VERGE, PUBLIC OPEN SPACE OR UNLEASED TERRITORY LAND AREA. UNLESS OTHERWISE APPROVED BY AA, PROTECTIVE FENCING SHALL BE LOCATED:
  - ALONG THE DRIP-LINE OF EACH TREE (AS A MINIMUM), AND
  - 1.2M FROM THE BACK OF THE KERB FOR THE FULL FRONTAGE OF THE LEASE, ALONG THE PROPERTY BOUNDARY AND ALONG THE APPROVED DRIVEWAY ACCESS TO ENSURE THAT THE VERGE IS COMPLETELY ENCLOSED
- 5.2 MATERIALS
- USE OF TEMPORARY 1800MM TALL CONTINUOUS MESH FENCE SUPPORTED BY STEEL POSTS WITH CONCRETE BASES, OR PREFABRICATED FENCING PANELS WITH CONCRETE BASES, IS MANDATORY. ANY VARIATION FROM THIS REQUIREMENT SHALL BE ACCOMPANIED BY WRITTEN APPROVAL FROM AA.

5.3 PEDESTRIAN AND TRAFFIC CONSIDERATIONS

- EXISTING VERGE FOOTPATHS SHALL BE MAINTAINED. ALL EXISTING VERGE FOOTPATHS AND DRIVEWAYS SHALL REMAIN UNOBSTRUCTED THROUGHOUT THE CONSTRUCTION PERIOD TO PROVIDE SAFE PEDESTRIAN MOVEMENT AT ALL TIMES UNLESS AN ALTERNATIVE IS APPROVED BY TaMS.
- WHERE A CONSTRUCTED FOOTPATH OR CYCLEWAY EXISTS WITHIN THE VERGE, PROTECTIVE FENCING INCLUDING THE CONCRETE PEDESTALS SHALL BE ERECTED TO PROVIDE A CLEAR AND UNOBSTRUCTED SET BACK OF 0.6M FROM EACH SIDE OF THE FOOTPATH/CYCLEWAY IN ALL CASES TO ENSURE SAFE PASSAGE FOR CYCLISTS AND PEDESTRIANS.
- IF THERE IS NO CONSTRUCTED PUBLIC FOOTPATH ON THE VERGE A FENCED CLEARWAY OF 1.8M IN WIDTH SHALL BE MAINTAINED FOR THE ENTIRE FRONTAGE OF THE LEASE TO ALLOW FOR CYCLISTS AND PEDESTRIANS.
- ANY DEVIATIONS FROM THE DISTANCES SPECIFIED IN THIS CLAUSE DEEMED NECESSARY BECAUSE OF LOCAL RESTRAINTS REQUIRE PRIOR APPROVAL FROM AA.
- ACCESS GATES INTO THE SITE SHALL SWING INTO THE SITE AND NOT BE CAPABLE OF BLOCKING PEDESTRIAN ACCESS ALONG THE VERGE OR VEHICULAR TRAFFIC ON THE ROAD.

5.4 ACCESS FOR SERVICE INSTALLATIONS

- FENCING SHALL NOT BE REMOVED FOR SERVICE INSTALLATION ACROSS THE VERGE WITHOUT PRIOR APPROVAL FROM AA FOR THE SERVICE INSTALLATION.
- WHERE APPROVAL HAS BEEN GRANTED, THE FENCE SHALL BE REALIGNED TO PROVIDE A LANE FOR SERVICE TRENCHING BUT FENCES SHALL BE RE-ERECT TO ENCLOSE TREES BEFORE TRENCHING COMMENCES. UPON COMPLETION OF TRENCHING, THE FENCE SHALL BE RETURNED TO ITS ORIGINAL ALIGNMENT.

6 EXISTING TREES

6.1 GENERAL

- ALL TREES LOCATED IN THE ROAD RESERVE, VERGE, PUBLIC OPEN SPACE AND ON UNLEASED TERRITORY LAND, SHALL BE RETAINED AND MUST REMAIN UNDAMAGED. THE LMPP PROCESS REQUIRES THE COORDINATOR TO IDENTIFY ANY TREES THAT MAY BE AFFECTED BY THE WORKS AND TO SUBMIT A REQUEST FOR APPROVAL TO PROCEED WITH THE WORK CLEARLY IDENTIFYING THE NATURE OF THE WORK AFFECTING THE TREE AND PROTECTIVE MEASURES PROPOSED TO MINIMISE DAMAGE TO THE TREE. WRITTEN AUTHORISATION FROM AA IS REQUIRED PRIOR TO ANY WORK AFFECTING THE TREE TAKING PLACE. AUTHORISATION WILL BE SUBJECT TO:
  - EXISTING CANOPY CLEARANCE NOT BEING ALTERED;
  - CROWNS AND APEX OF CANOPIES NOT BEING ALTERED OR REDUCED;
  - LIFTING EQUIPMENT AND LOAD CAPABLE OF OPERATING IN A MANNER THAT IT CLEARS THE HEIGHT AND WIDTH OF THE TREE CANOPY WITHOUT DAMAGING THE CROWN, AND
  - CONSTRUCTION EQUIPMENT CAN PASS BENEATH THE TREES' LOWEST LIMB THROUGH THE DESIGNATED DRIVEWAY ACCESS ROUTE.

6.2 TREE ROOT PROTECTION

- THE MAJORITY OF TREE ROOTS GROW IN THE TOP 300MM OF SOIL. THESE ARE THE FEEDER ROOTS, OFTEN VERY FINE ROOTS THAT PROVIDE THE TREE WITH WATER, OXYGEN AND NUTRIENTS. THESE ROOTS TYPICALLY GROW FROM THE TRUNK OF THE TREE TO WELL BEYOND ITS 'DRIP-LINE' (THE CANOPY EDGE).
- EXCAVATION WITHIN THE DRIP ZONE OF A TREE DOES CONSIDERABLE DAMAGE TO ITS ROOT SYSTEM. IT CAN AFFECT TREE STABILITY AND TREE HEALTH TO SUCH AN EXTENT THAT IT WILL LEAD TO THE DECLINE AND POSSIBLE DEATH OF THE TREE OVER A PERIOD OF YEARS.
- EXCAVATION THAT OCCURS WITHIN THE DRIP ZONE OF A TREE SHALL BE RESTRICTED TO ONE SIDE OF THE TREE ONLY AND SHALL HAVE PRIOR APPROVAL FROM AA.
- WHERE EXCAVATION IS APPROVED, THE FOLLOWING MEASURES SHALL BE ADOPTED FOR TREE PROTECTION:
  - DO NOT SEVER LARGE ROOTS (>30MM DIAMETER) CLOSER THAN HALFWAY FROM THE DRIP-LINE TO THE TRUNK;
  - LOCATE THESE ROOTS BY HAND TRENCHING TO A DEPTH OF 300MM BEFORE ANY MECHANICAL TRENCHING IS UNDERTAKEN;
  - CUT ALL ROOTS CLEANLY WITH EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PURPOSE OR BY SUITABLE PRUNING EQUIPMENT;
  - PROTECT ROOTS EXPOSED FROM DESICCATION BY LIGHTLY WATERED OR COVERING WITH HESSIAN, WHICH MUST BE KEPT MOIST, AND
  - MAINTAIN THE GOOD HEALTH OF THE TREES THAT HAVE HAD DISTURBANCE IN THEIR ROOT ZONE BY CONTINUAL WATERING, AT NO TIME SHALL THE DISTURBED AREA BE ALLOWED TO DRY OUT TO THE DETRIMENT OF THE TREES HEALTH.

7 SITE ACCESS

- SITE ACCESS SHALL BE BY THE EXISTING DRIVEWAY ACCESS POINTS FOR THE WORKS.
- IN SOME CASES CONSIDERATION MAY BE GIVEN TO ALLOWING NEW ACCESS POINTS ACROSS PUBLIC LAND, HOWEVER, ALTERNATIVE OR ADDITIONAL ACCESS POINTS REQUIRE APPROVAL FROM AA. WHERE APPROVAL HAS BEEN GRANTED, THE SITE ACCESS SHALL BE POSITIONED MIDWAY BETWEEN TWO EXISTING TREE TRUNKS DEPENDENT ON THE DISTANCE BETWEEN TREES. ACCESS SHALL NOT OCCUR ON TWO SIDES OF A TREE WITHIN THE APPROVED CLEARANCE DIMENSION.
- CONSTRUCTION TECHNIQUE SHALL MINIMISE THE NEED FOR EXCAVATION ACROSS THE VERGE.
- ACCESS ACROSS ADJOINING PUBLIC OPEN SPACES, PARKS, RECREATIONAL RESERVES, ADJOINING PROPERTIES E.G. SCHOOL PLAYGROUNDS, COMMUNITY HALLS ETC, IS PROHIBITED WITHOUT PRIOR WRITTEN AUTHORISATION FROM TaMS, AND ANY OTHER ASSET OWNER WHERE APPLICABLE.

8 SERVICES AND UTILITIES

8.1 SERVICE CONNECTION TO SITE

- THE COORDINATOR SHALL COORDINATE AND COLLATE ALL APPROVALS FOR PROPOSED SERVICES WITHIN THE AREA.
- APPROVAL FOR TRENCH LOCATIONS AND EXCAVATIONS WITHIN THE VERGE SHALL BE OBTAINED THROUGH THE RELEVANT TaMS AGENCIES AT THE PLANNING AND DESIGN STAGES. APPROVAL IS SUBJECT TO THE FOLLOWING REQUIREMENTS:
  - IF THE PROPOSED EXCAVATION IS WITHIN THE CANOPY SPREAD OF ANY TREE, BORING OR TUNNELING BELOW THE ROOT ZONE MUST BE UNDERTAKEN;
  - SHARED TRENCHING FOR SERVICES IS MANDATORY;
  - THE NUMBER OF VERGE CROSSINGS SHALL BE MINIMISED;
  - EXCAVATION FOR SERVICES ACROSS VERGE (I.E. AT RIGHT ANGLES TO KERB OR PROPERTY LINE) SHALL BE MIDWAY BETWEEN THE TREE TRUNKS
  - ANY SERVICE INSTALLATION WITHIN 5.0M OF AN EXISTING TREE TRUNK, OR WITHIN THE TREE CANOPY, REQUIRES PRIOR APPROVAL.

8.2 SERVICES AND UTILITIES ALONG ROAD RESERVES

- THE COORDINATOR SHALL COORDINATE ALL SERVICE APPROVALS: APPROVAL BY AA FOR TRENCH LOCATIONS SHALL BE OBTAINED AS PART OF THE LMPP PROCESS.
- TO MINIMISE DAMAGE AND/OR DISTURBANCES TO THE ROOTS OR ROOT ZONE AND SUBJECT TO APPROVAL BY AA, ANY NEW OR UPGRADED SERVICES PARALLEL TO THE KERB OR PROPERTY LINE SHALL BE INSTALLED ON THE FOLLOWING ALIGNMENTS:
  - WITHIN ROAD PAVED AREA;
  - BELOW THE ROOT ZONE IF THE EXCAVATION REQUIRED IS WITHIN THE CANOPY SPREAD OF ANY TREE;
  - BELOW THE EXISTING FOOTPATH ON THE PROPERTY LINE, AND
  - IMMEDIATELY BEHIND THE KERB.

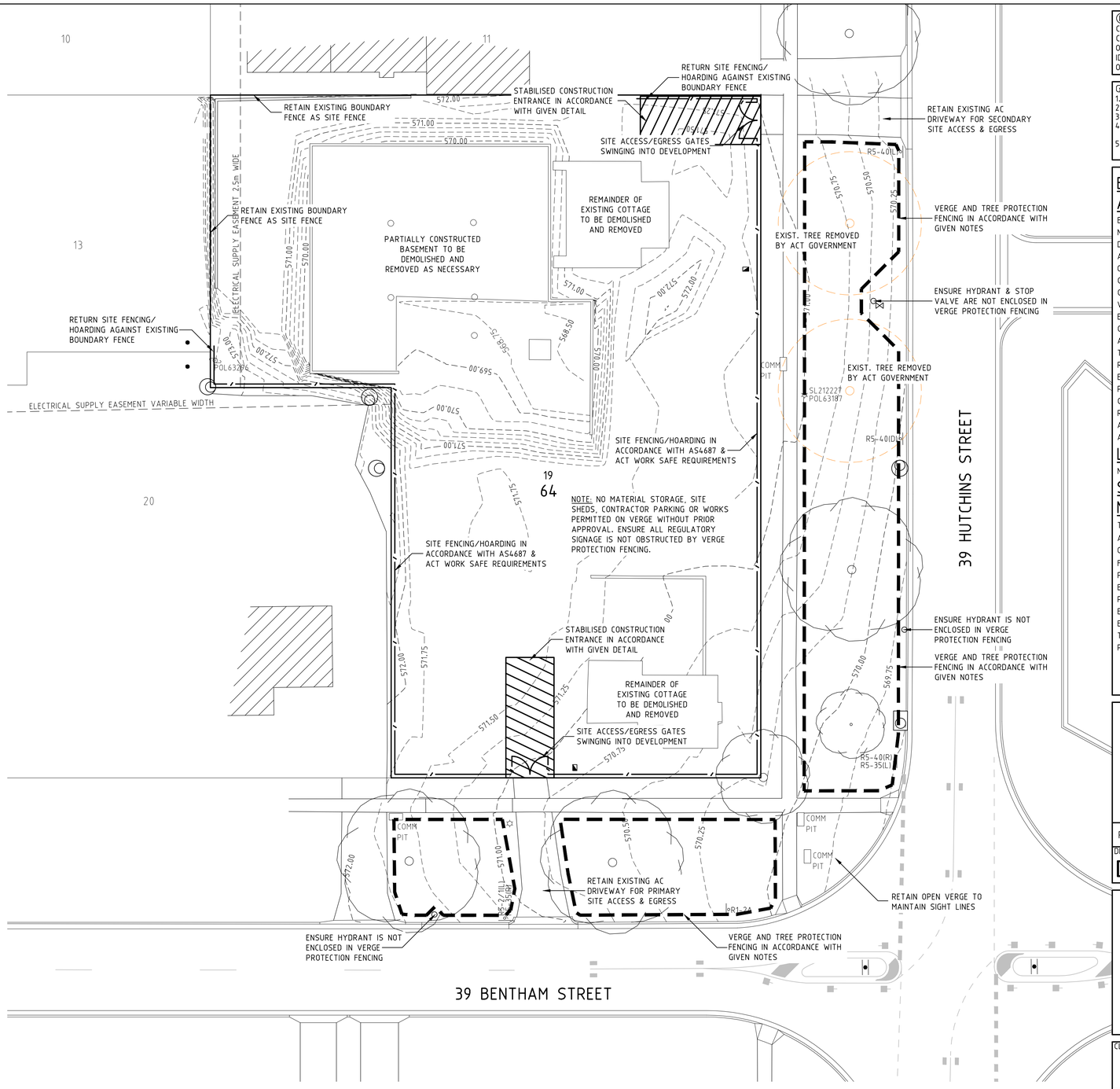
9 IRRIGATION

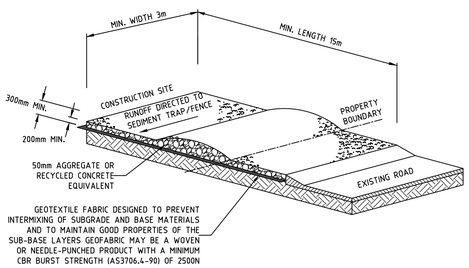
- PARKS CONSERVATION AND LANDS (PCL) ACTIVELY DISCOURAGES THE USE OF IN-GROUND IRRIGATION SYSTEMS AND GENERALLY DOES NOT ENDORSE THEIR INSTALLATION IN THE VERGE. HOWEVER, A SYSTEM OF QUICK-COUPLERS AT THE LEASE EDGE OF THE VERGE MAY BE INSTALLED SUBJECT TO APPROVAL OF THE IRRIGATION PLAN BY PCL. A PREFERRED ALTERNATIVE IS THE PLANTING OF DROUGHT TOLERANT GRASSES AND SHRUBS THAT ARE NOT RELIANT ON WATERING TO SURVIVE.

10 VERGE INFRASTRUCTURE CONDITION AND RESTORATION

- THE COORDINATOR SHALL NOTIFY AA AT THE COMPLETION OF WORK AND OBTAIN APPROVAL PRIOR TO COMMENCEMENT OF ANY VERGE RESTORATION. DURING VERGE RESTORATION, TOPSOIL SHALL NOT BE REMOVED AND THE SOIL LEVEL SHALL NOT BE CHANGED WITHIN THE DRIP ZONE OF TREES OR AS OTHERWISE APPROVED AND, UPON COMPLETION OF THE WORKS, VERGES SHALL HAVE ESTABLISHED APPROPRIATE GRASS COVER AS APPROVED BY PCL, E.G. DRYLAND GRASS, NATIVE GRASS OR COUCH.
- IF THE STANDARD OF GRASS COVER ON THE VERGE NEEDS TO BE IMPROVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:
  - WITHIN THE ROOT ZONE OF TREES, LIGHTLY CULTIVATE THE SOIL IN ONE DIRECTION ONLY TO BETWEEN 25MM TO 50MM DEPTH (50MM MAXIMUM TO MINIMISE DAMAGE TO TREE ROOTS), AVOID MAJOR ROOTS AND KEEP A MINIMUM OF 1M AWAY FROM TREE TRUNKS;
  - OUTSIDE THE ROOT ZONE OF TREES NORMAL CULTIVATION PRACTICE APPLIES;
  - ADD 'B TYPE' TOPSOIL AT 25MM TO 50MM DEPTH. LEVEL THE TOPSOIL AND ADD NPK FERTILISER (EQUIVALENT TO MULTIGRO) AT 40G/M², AND
  - LAY TURF OR SOW SEED OF SUITABLE DROUGHT TOLERANT SPECIES AS SPECIFIED IN THE STANDARD SPECIFICATION FOR URBAN INFRASTRUCTURE WORKS. KEEP MOIST DURING ESTABLISHMENT.

ALL RESTORATION WORK SHALL BE APPROVED BY AA AND CARRIED OUT BY APPROVED OPERATORS.





STABILISED CONSTRUCTION ENTRANCE

NOT TO SCALE

© COPYRIGHT REPRODUCTION OF THIS WHOLE OR PART OF THE DOCUMENT CONSTITUTES AN INFRINGEMENT OF COPYRIGHT. THE INFORMATION, IDEAS AND CONCEPTS CONTAINED IN THIS DOCUMENT ARE CONFIDENTIAL. THE RECIPIENT(S) OF THIS DOCUMENT IS/ARE PROHIBITED FROM DISCLOSING SUCH INFORMATION, IDEAS AND CONCEPTS TO ANY PERSON WITHOUT THE PRIOR WRITTEN CONSENT OF THE COPYRIGHT HOLDER.

GENERAL DRAWING NOTES

1. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OFF THE DRAWING.
2. SETTING OUT DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE.
3. ALL LEVELS TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE.
4. CONSTRUCTION FROM THESE DRAWINGS IS NOT TO COMMENCE UNTIL APPROVAL FROM LOCAL AUTHORITIES IS OBTAINED.
5. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT AS CODES, BUILDING CODE OF AUSTRALIA AND LOCAL GOVERNMENT AUTHORITIES.

EXISTING VERGE CONDITION ASSESSMENT

BENTHAM STREET VERGE DRYLAND GRASSING IS OF MIXED CONDITION, WITH IT NON EXISTENT IN SOME AREAS, OVER GROWN WITH WEEDS IN OTHER AND DYING OFF IN OTHER AREAS DUE TO CURRENT WEATHER CONDITIONS. ADDITIONALLY TRAFFIC TRANSVERSING THE VERGE IS ALSO NOTED AS HAVING OCCURRED. VERGE TREES ARE OF SOUND CONDITION. EXISTING KERB AND GUTTER, AND FOOTPATH ARE OF SOUND CONDITION GIVEN THEIR AGE WITH CRACKING AND UNEVEN SURFACES NOTED TO BE PRESENT. HUTCHINS STREET VERGE DRYLAND GRASSING IS SIMILAR TO THAT OF BENTHAM STREET, I.E NON EXISTENT IN AREAS AND DYING OFF IN OTHERS DUE TO RECENT WEATHER CONDITIONS. ADDITIONALLY, TRAFFIC TANSVERSING THE VERGE IS ALSO NOTED AS HAVING OCCURRED. THE VERGE TREES ARE OF SOUND CONDITION WITH TWO TO THE NORTHERN END OF THE SITE NOTED AS HAVING BEEN RECENTLY REMOVED BY THE ACT GOVERNMENT, THIS HAS RESULTED IN DAMAGE TO EXISTING ASSETS, NAMELY ICON WATER SPRING HYDRANT AND STOP VALVE PATH BOXES AND THE IMMEDIATE VERGE LEVELS. THE FOOTPATH IS OF MIXED CONDITION WITH SEVERAL PANELS SHOWING SIGNIFICANT CRACKING WHILST THE REMAINDER OF THE FOOTPATH IS OF SOUND CONDITION. THE EXISTING KERB AND GUTTER IS OF SOUND CONDITION GIVEN ITS AGE. THE REMAINING ASSETS ARE OF SOUND CONDITION.

LEASING APPLICATION NOTES

NOT APPLICABLE, ALL WORKS TO BE CONTAINED WITHIN THE SITE.

SERVICE CONNECTION/DISCONNECTION NOTES

TWO EXISTING 20Ø WATER SERVICE TIES AND ASSOCIATED WATER METERS ARE TO BE REMOVED WITH ONE NEW 40Ø WATER TIE TO BE PROVIDED OFF OF BENTHAM STREET. NO EXISTING STORMWATER ARE EVIDENT ON SITE NOR FROM EXISTING AVAILABLE RECORDS. A NEW 300Ø STORMWATER TIE IS PROPOSED FROM THE EXISTING KERB SIDE SUMP ON HUTCHINS STREET NEAR BENTHAM STREET. DIVERSION OF EXISTING SEWER INFRASTRUCTURE IS PROPOSED AS PART OF THE DEVELOPMENT, WITH DISCONNECTION AND EXHUMING BOTH ON AND OFF SITE PROPOSED INCLUSIVE OF REMOVAL OF TWO EXISTING SEWER TIES. A NEW SEWER MANHOLE AND MAIN IS PROPOSED ON TERRITORY LAND TO THE NORTH OF THE SITE WITH ONE NEW SEWER TIE PROPOSED TO SERVICE THE DEVELOPMENT.

REV	AMENDMENT	BY	DATE
A	FOR DEVELOPMENT APPROVAL	NT	23.12.19

DRAWING STATUS

DEVELOPMENT APPROVAL

RossardenDesign

CLIENT: MR. ROBERT PASTRELLO

ARCHITECT: THURSDAY ARCHITECTURE

LOCATION: BLOCK 19 SECTION 64 YARRALUMLA ACT

DWG TITLE: LANDSCAPE MANAGEMENT AND PROTECTION PLAN

SCALE: 0m 2 4 6 8 10 — 1:200 @A1 1:400 @A3

CHECKED: NGT

NORTH

DATE	DESIGNED	DRAWN
DEC 2019	NGT	NGT

JOB NO.	DRAWING NO.	REVISION
190096	C001	A