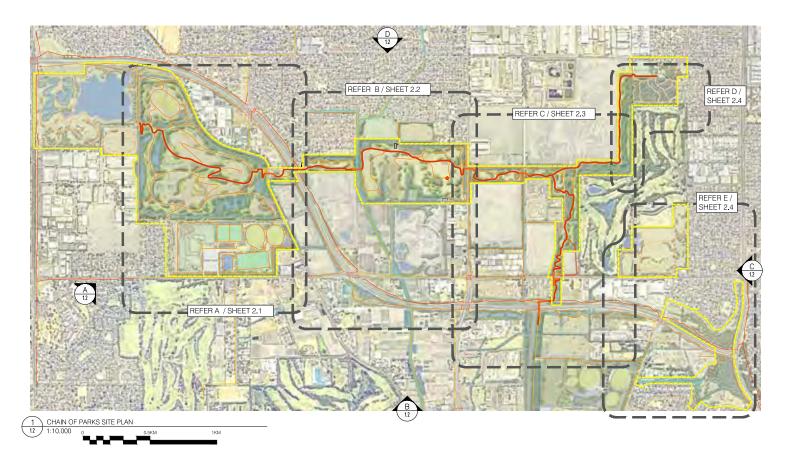




TITLE MUNICIPALITY AERIAL IMAGE











B CHAIN OF PARKS AERIAL PERSPECTIVE (LOOKING NORTH)

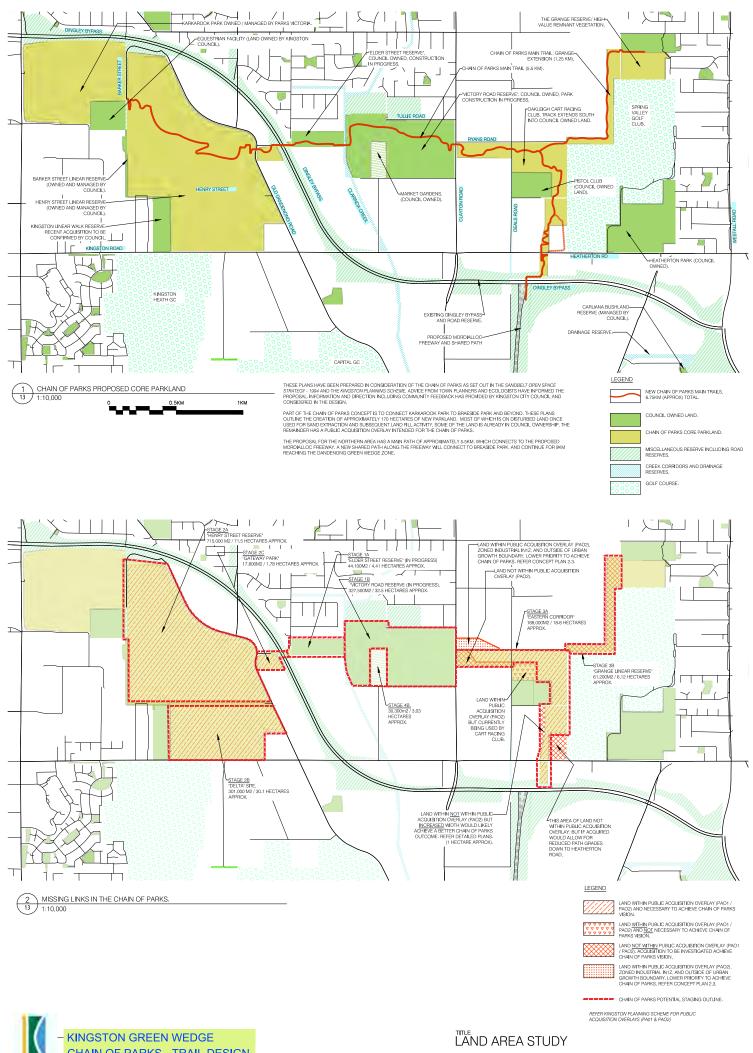


C CHAIN OF PARKS AERIAL PERSPECTIVE (LOOKING WEST TOWARD PORT PHILLIP BAY)

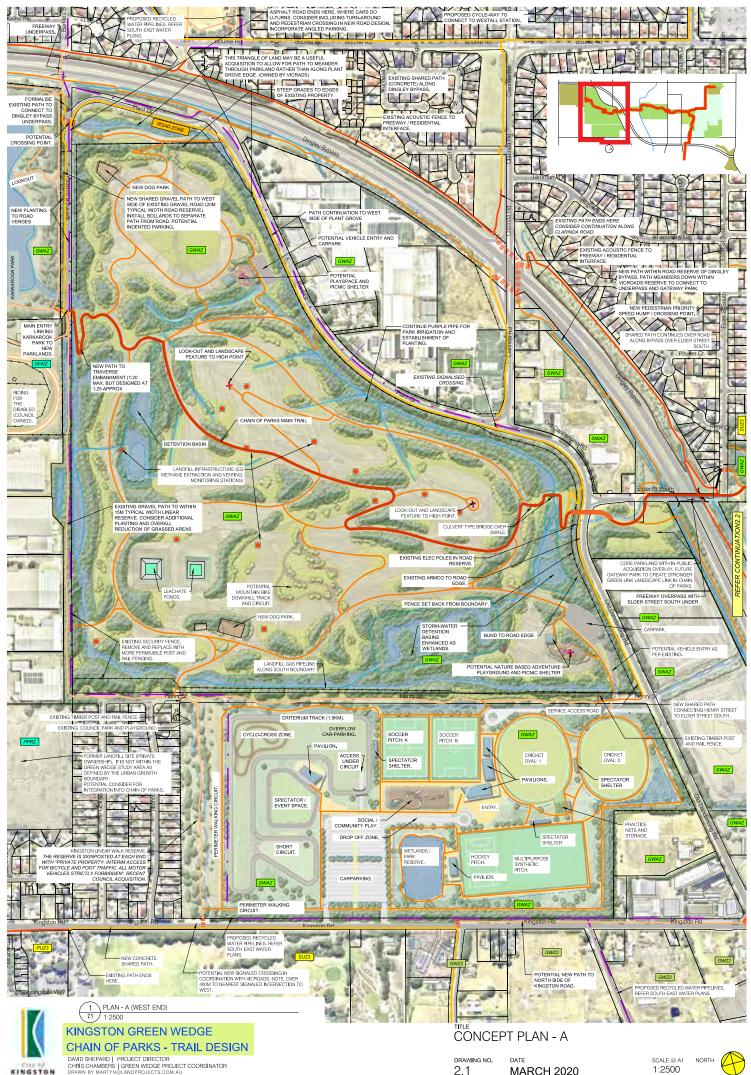


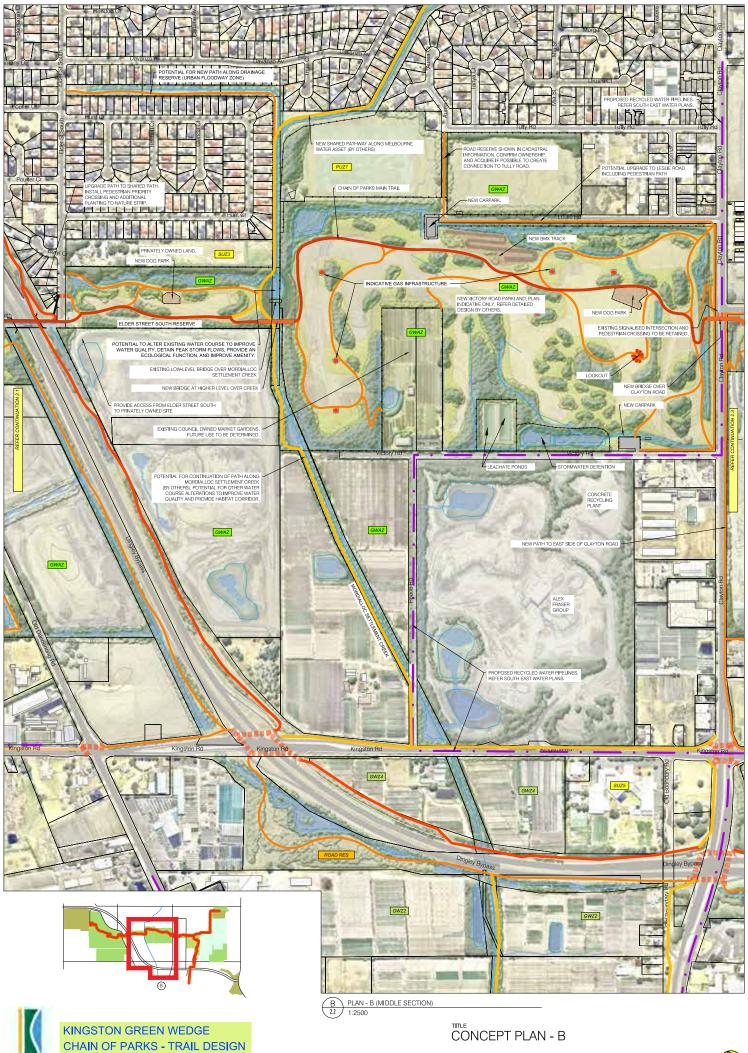
D CHAIN OF PARKS AERIAL PERSPECTIVE (LOOKING SOUTH TOWARDS FRANKSTON)









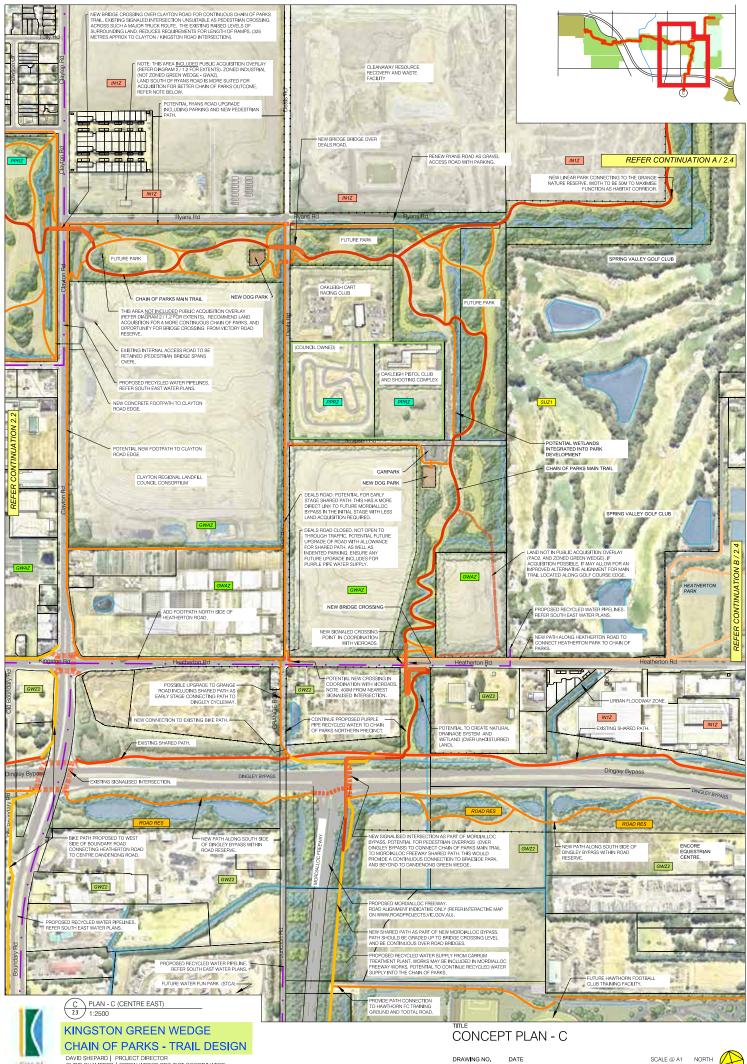


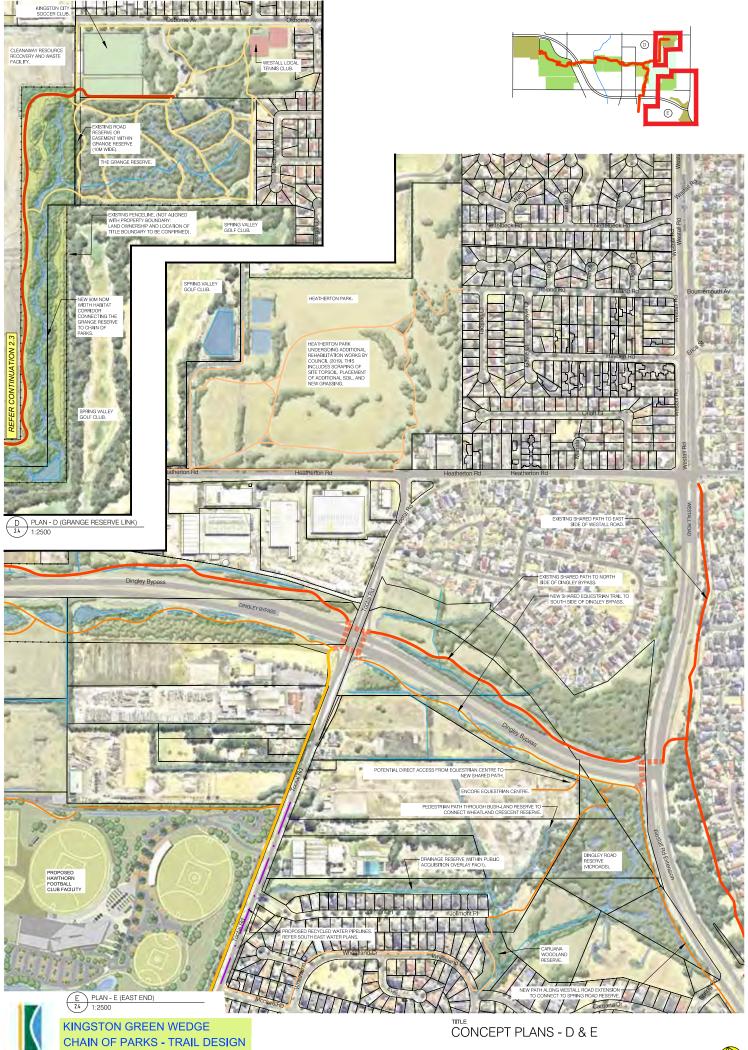
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DRAWING NO.

MARCH 2020

SCALE @ A1 NORTH 1:2500





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CHAIN OF PARKS CONCEPT DESIGN*

THE DESIGN CREATES A LINKED SYSTEM OF OPEN SPACE FROM KARKAROOK PARK TO BRAESIDE PARK AND BALANCES RECREATIONAL AND ECOLOGICAL REQUIREMENTS. THE DESIGN UTILISES EXISTING RESERVES AND OTHER NATURAL SPACES AS HABITAT LINKS AND COMMUNITY REFORATIONAL SPACES AS HABITAT LINKS AND COMMUNITY REFORATIONAL SPACES.

RECREATIONAL

- OFF-ROAD SHARED PATHWAY NETWORK AND TRAILS THAT ARE INTEGRATED WITH EXISTING RECREATIONAL NETWORKS
 FROVIDE LINKAGES WITH NEARBY OPEN SPACE AND ADJOINING URBAN AREAS
 INCLUDE BRIDGES FOR ROAD CROSSINGS.

- · PATHS TYPICALLY CONSTRUCTED OF GRAVEL FOR FLEXIBILITY
- SHARED PATHS FOR PEDESTRIAN, CYCLING, MOUNTAIN BIKING AND EQUESTRIAN USE
 SEPARATE EQUESTRIAN TRAILS AS APPROPRIATE MAY BE PROVIDED.
- FENCED DOG WALKING AREAS, PLAYGROUNDS, PICNIC SHELTERS, BENCH SEATING, DRINKING FOUNTAINS AND WAYFINDING SIGNAGE.

- ECOLOGICAL

 HABITAT CORRIDORS TO CREATE CONNECTIVITY, HABITAT AND PROTECTION FOR NATIVE FAUNA

 USE OF INDICENOUS PLANT SPECIES TO BUILD ON URBAN HABITAT AND IMPROVE CONDITIONS FOR NATIVE FAUNA INTO THE FUTURE.
- THIS DESIGN INCLUDES LAND FROM DISTURBED SITES AT VARIOUS STAGES OF BEHABILITATION.

LINKING EXISTING RESERVES

A NUMBER OF EXISTING RESERVES LOCATED IN THE NORTH-WEST AND NORTH-EAST OF THE STUDY AREA ARE IDENTIFIED AS IMPORTANT PRODUCESTRY JEWELS. THESE RESERVES CONTAIN HIGH BIO-DIVERSITY VALUES AND ARE UTILISED AS RADIAL HABITAT LINKS IN THE CHAIN OF PARKS. THESE ARE:

CHAIN OF PARKS. THESE ARE:

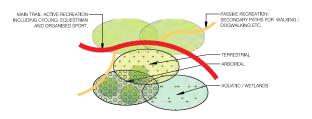
**ARHARADO FARK (CONSTRUCTED WETLANDS)

**THE GRANGE RESERVE (REMNANT BUSHLAND)

**CARDIANA BUSHLAND RESERVE

ADDITIONALLY, ADJOINING CREEKS, GOLF COURSES. HEATHERTON RESERVE (AND BRAESIDE PARK) PROVIDE IMPORTANT HABITAT VALUE
AND ARE INTEGRAL FOR ADHENING GIO-OVERSITY AND HABITAT CONNECTIMITY ACROSS THE CHAIN OF PARKS. THE FOLLOWING CONCEPTUAL DRAWINGS REQUIRE FURTHER DETAILED DESIGN AND DOCUMENTATION

HABITAT CORRIDOR DIAGRAM AND KEY TERMINOLOGY:



HABITAT CORRIDORS AND **TERMINOLOGY**

CIRCULATION PATHS AND ACTIVITY NODES

AREAS, HABITAT CORRIDORS).

- SEPARATION BETWEEN THE PATH NETWORK AND A HABITAT CORRIDOR WILL MAXIMISE HABITAT VALUE NATIVE ANIMALS MAY BE LESS TOLERANT OF HUMA ACTIVITY (E.G. DOGS, HORSES).
- ACIVITY E.G. DOSS. HORSES.

 THE MAN THAN, IROCUDING EQUESTRIANN SHOULD GENERALLY BE OUTSIDE THE HABITAT CORRIDOR AND NOT INTERVIEW.

 WHERE THE MAIN TRAIL, IOR SECONDARY PATHS; CROSS THE HABITAT CORRIDOR, IT SHOULD BE BY THE SHORTEST PATH OF TRAVEL.
 HABITAT CORRIDOR

 COUNCIL HAVE A LONG-TERM MSIGN TO RECREATE A VEGETATION PATERN AND CHARACTER OF THE LOCALITYS FORMER ECOLOGY AND LANDSCAPE.

AND AQUATC. WITHIN THESE THERE IS WILL BE OVERLAP OF VEGETATION TYPES AND REQUIREMENTS FOR FAUNA. THERE ARE LIMITED SUSTRING HIGH-QUALITY HABITAT PATCHES OR CORRIDORS WITHIN THE CHAIN OF PARKS, AS A MAJORITY OF THE SITES ARE

FORMER LANDFILL IN VARIOUS STATES OF REHABILITATION. HENGE, THE HABITAT WILL BE RECREATED TO INCLUDE THE RIGHT ELEMENTS FOR PARTICULAR SPECIES.

BROAD HABITAT TYPES:

- AQUATIC / WETLAND WATERWAYS / RIPARIAN STRIPS
- GRASSY HABITATS
- WOODLANDS HEATHY WOODLANDS

VEGETATION TYPES (ECOLOGICAL VEGETATION CLASSES - "EVC") IN THE

- STUDY AREA:

IT MAY NOT BE POSSIBLE TO FULLY RE-ESTABLISH EACH VEGETATION TYPE, RATHER, PLANTINGS SHOULD CONSIST OF REPRESENTATIONS OF EACH.

AQUATIC HABITATS

HABITAT 'PATCH'

IS A SPECIFIC AREA OF HABITAT WHICH HAS THE RIGHT INDIGENOUS VEGETATION AND HABITAT STRUCTURE FOR FAUNA SPECIES TO UTILISE.

'GAP'

SOMY LAND WITHIN A CORRIDOR THAT DOES NOT CONTAIN HABITAT OR STRUCTURAL CONNECTIVITY ELEMENTS (I.E. A VOID HABITAT SPACE WHICH A SPECIES MAY NEED TO CROSS (IE: AN URBAN DEVELOPMENT OR ROAD.

GAP CROSSING DISTANCE:

THE MAXIMUM DISTANCE AN INDIVIDUAL SPECIES WILL MOVE ACROSS A HABITAT VOID BETWEEN TWO STEPPI STONES STRUCTURAL CONNECTIVITY ELEMENTS.

'STEPPING STONES' / STRUCTURAL CONNECTIVITY ELEMENTS

ARE SMALLER AREAS WITH THE RIGHT STRUCTURE FOR A SPECIES WHICH:

- ARE USUALLY USED TEMPORARIL
- PROVIDE CONNECTION BETWEEN LARGER HABITAT
- INCLUDE ELEMENTS SUCH AS TREES, VEGETATION, ROCKS, LOGS, PONDS AND LONG GRASS.

SPECIES GUILDS

GUILDS ARE GROUPS OF ANIMALS WITH SIMILAR HABITAT NEEDS, HOME RANGES AND ECOLOGICAL REQUIREMENTS THAT ENABLE THEM TO PERSIST WITHIN HABITAT PATCHES AND MOVE SAFELY

THROUGH A LANDSCAPE BETWEEN HABITAT PATCHES.

MAXIMUM DISTANCES

THE FOLLOWING ARE THE MAXIMUM DISTANCES (LONG OR SHORT DISPERSAL) MOST SPECIES IN EACH GUILD CAN TOLERATE OR GROSS IN THE YARPS BETWEEN HABITAT PATCHES AND ESTIMATES OF HOW FAR THEY CAN TRAVEL BETWEEN HABITAT PATCHES USING STEPPING STONES.

AQUATIC HERBLANDS AND URBAN HABITATS - COMMON FROGLET

- HABITAT: PONDS, RIPARIAN STRIPS
- PATCH: 0.1 HA EVERY 100 METRES
 STEPPING STONE EVERY 20M.

HABITAT: NEAR CONTINUOUS RIPARIAN CONNECTIVITY

ALONG WATERWAYS OR LARGE WATERBODIES ADJACENT TO WATERWAYS.

- PATCH: 0.1 HA EVERY 100 METRES
 STEPPING STONE EVERY 20M.
 WETLAND SWAMP HARRIER
- HABITAT: DEEP SWAMPS AND LARGER OPEN WATER BODIES

WETLAND TERRESTRIAL - SOUTHERN BULLFROG

HABITAT: CLUSTERED WETLANDS, LONG GRASS, ROCKS, LOGS, WATERWAYS.
EASTERN SNAKE NECKED TURTLE

- WETLANDS, LONG AND SHORT GRASS, LEAF LITTER, WATERWAYS.

 PATCH: 0.1 HA. EVERY 500 METRES

 STEPPING STONE EVERY 50M.

GRASSY HABITAT / WOODLANDS - TERRESTRIAL SNAKE HABITAT: AQUATIC ENVIRONMENTS INCLUDING LOGS, FALLEN TIMBER, DENSEVEGETATION, DIS-USED ANIMAL BURROWS.

- HABITAT PATCH: 0.5 HA 100 EVERY METRES
 STEPPING STONES EVERY 20M.

WOODLANDS - SHORT-BEAKED ECHIDNA

HABITAT: FORESTS AND WOODLANDS, HEATH AND GRASSLANDS AMONGST

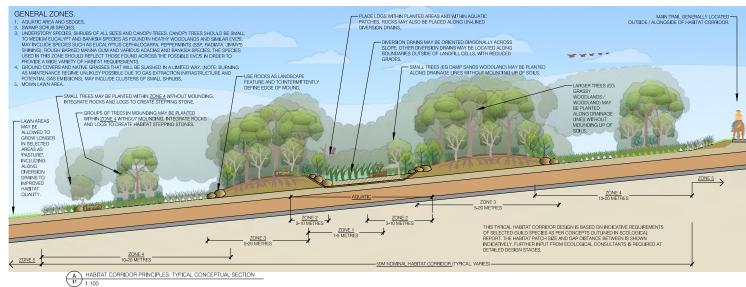
- HOLLOW LOGS, ROCK CREVICES AND LEAF LITTER FEEDING ON ANTS.

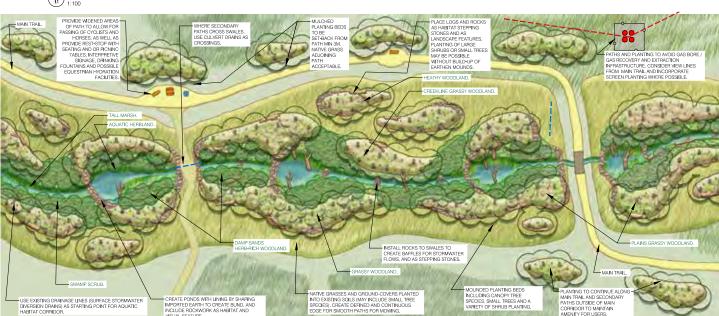
- WOODLANDS YELLOW TAILED COCKATOO
- HABITAT: MAINLY EUCALYPT WOODLAND, TREE PATCHES, SCATTERED TREES.
- HABITAT PATCH: 1.0 HA EVERY 5KM WOODLANDS SWIFT PARROT
- HABITAT: TREE PATCHES, / SCATTERED TREES ESPECIALLY LINEAR TREED CORRIDORS ALONG WATERWAYS.

 HABITAT PATCH: 1.0 HA EVERY SKM

WOODLANDS - SUGAR GLIDER (LONG TERM) HABITAT: TREE PATCHES, SCATTERED TREES ESPECIALLY LINEAR TREED CORRIDORS ALONG WATERWAYS, ARTIFICIAL STEPPING STONES LIKE POLES MAY BE USEFUL.

- PATCH 10 HA
 STEPPING STONES EVERY 30 METRES.







B HABITAT CORRIDOR PRINCIPLES: CONCEPTUAL PLAN NTS

KINGSTON GREEN WEDGE CHAIN OF PARKS - TRAIL DESIGN

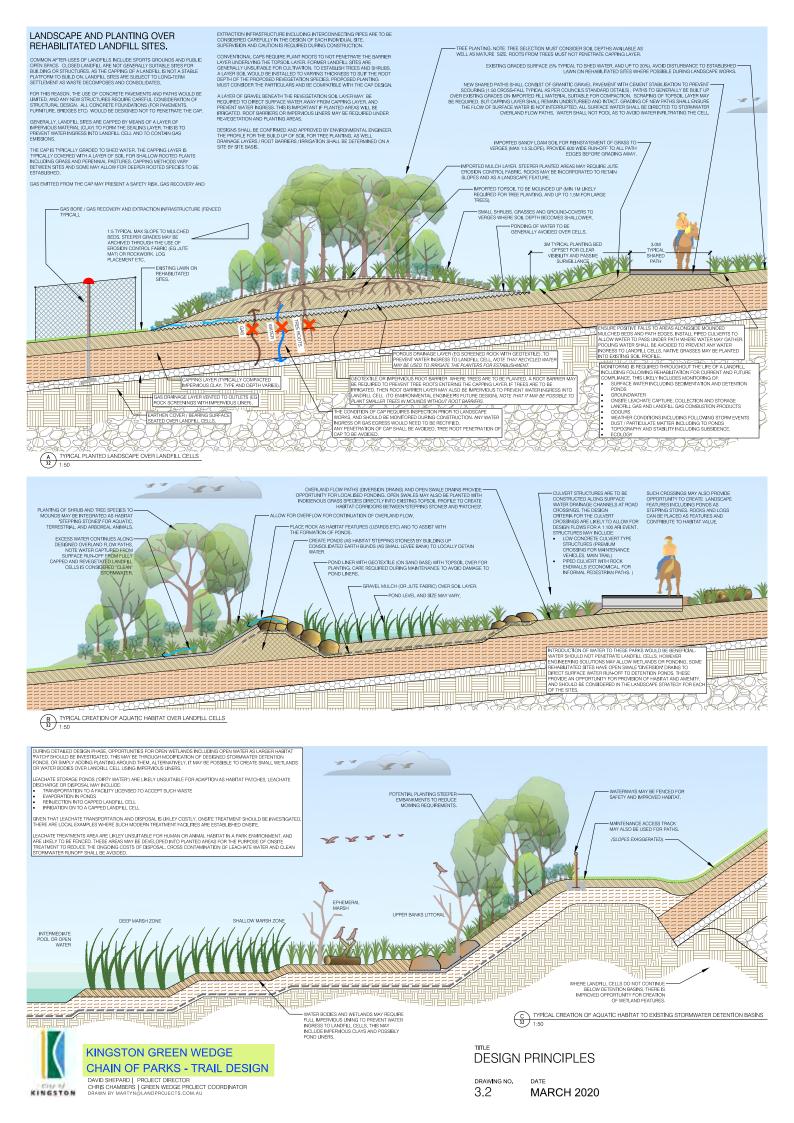
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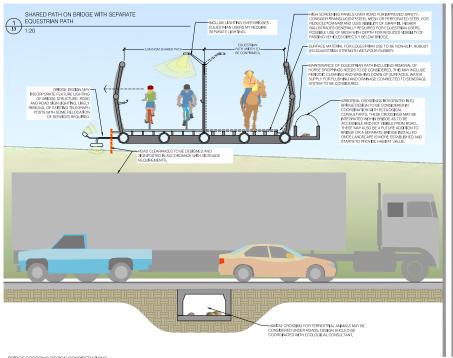
ECOLOGICAL PRINCIPLES

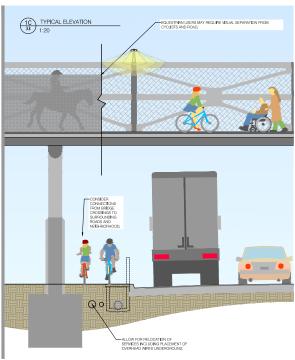
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BRIDGE CROSSING DESIGN CONSIDERATIONS:

BRIDGE DESIGNS SHALL BE COORDINATED WITH VIC-ROADS AND COUNCIL. EMSTING OVERHEAD AND UNDERGROUND SERVICES MAY INFLUENCE DESIGN. SOME SERVICES MAY NEED TO BE MODIFIED ON RELOCATED (BG. OVERHEAD ELECTRICAL MYRASTRUCTURE WILL LIVELY NEED TO BE LOCALLY PLACED UNDERGROUND IN VICINITY OF BRIDGE).

ADDITIONAL STREET LIGHTING WOULD NEED TO BE CONSIDERED. EXISTING AND PROPOSED ROAD INTERSECTION DESIGN AND PEDESTRIAN CROSSINGS AT ROAD LEVEL MAY BE INCLUDED.

THE DESIGNS MUST CONSIDER THAT BRIDGE BUTTRESSES MAY BE OVER CAPPED LANDRILL. IN THIS CASE, FOUNDATIONS MUST NOT PENETRATE THE CAP, AS LANDRILL SITES ARE SUBJECT TO SETTLEMENT, BRIDGE DESIGNS MUST CONSIDER THIS LIMITATION.

WHERE POSSIBLE, BRIDGES SHOULD INCORPORATE HABITAT CROSSINGS (EG LOG CROSSING FOR ARBOREAL FAUNA LIKE POSSUMS, OR TUNNELS UNDER ROADS), BRIDGE DESIGNOS SHOULD BE PREPARED IN CONSULTATION WITH ECOLOGICAL CONSULTANT.

THE ANTICIPATED THAT BRIDGES MAY BE DESIGNED TO ACCOMMODATE EQUISATION LISE. THE WITH OF THE BRIDGE MAY MAIN ARBITLY OF HORSES TO PASS EACH OTHER OR OTHER USERS. SEPARATION OF EQUESTIMAN AND OTHER USERS SHOULD BE CONSIDERED, AS HORSE MAY SPOOK EASTER MAY PROVED THE AUGUST OF THE MAIN AND OTHER USERS AND A SHOULD BE CONSIDERED, AS HORSE MAY SPOOK EASTER AND OTHER USERS GROUPS MAY ALSO BE REQUIRED.

BRIDGES SHALL BE DESIGNED IN COMPLIANCE WITH ALL ACCESSIBILITY REQUIREMENTS FOR SHARED PATHS INCLUDING:

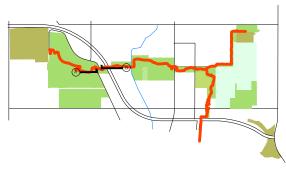
- GRADES AT TO MOM WITH LANDINGS AT REGULAR INTERVALS.

- PROVISION OF HANDRALS, INCLUDING HIGHER BAPRIERS INCLUDING WISJAL BARRIERS FOR EQUESTRIAN USE.

- PASSING BAYS IF REQUIRED.









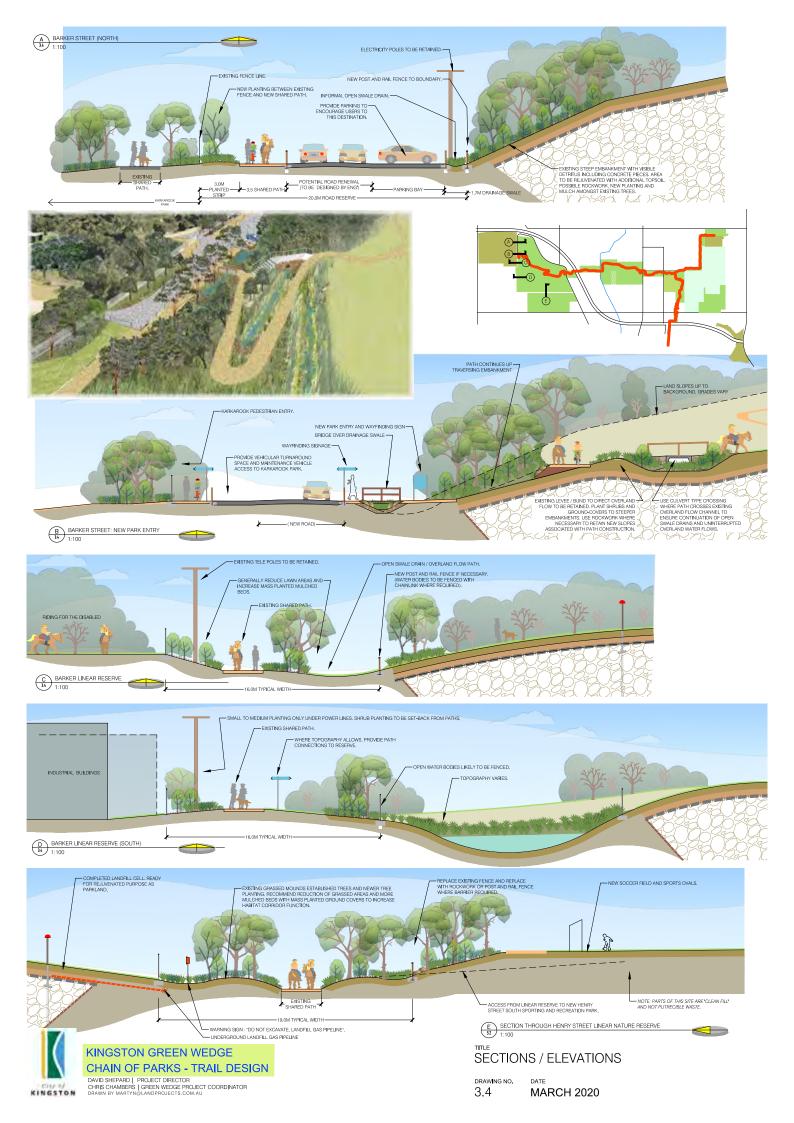
KINGSTON GREEN WEDGE CHAIN OF PARKS - TRAIL DESIGN

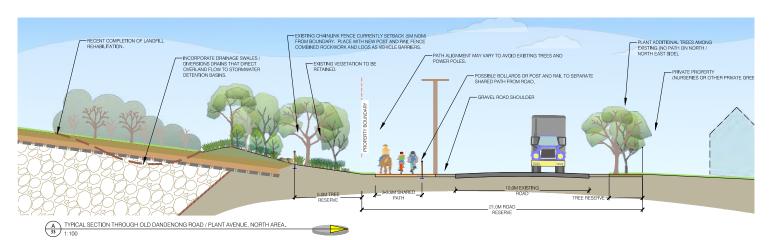
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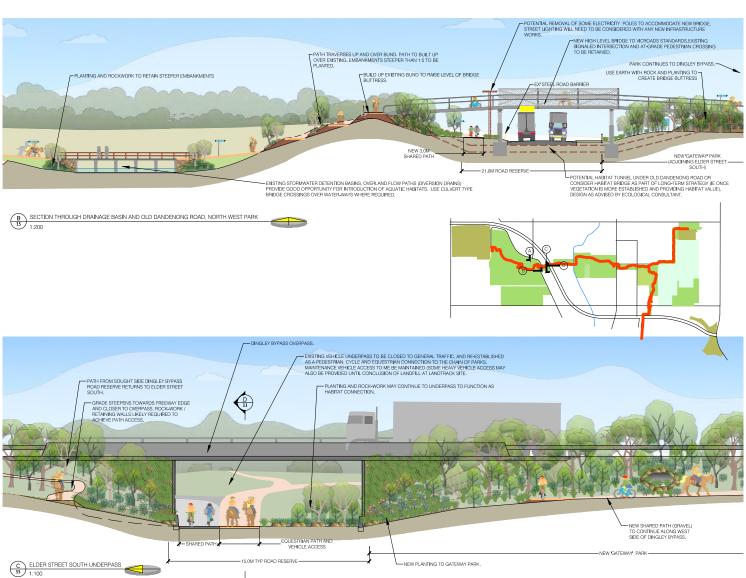
SECTIONS / ELEVATIONS

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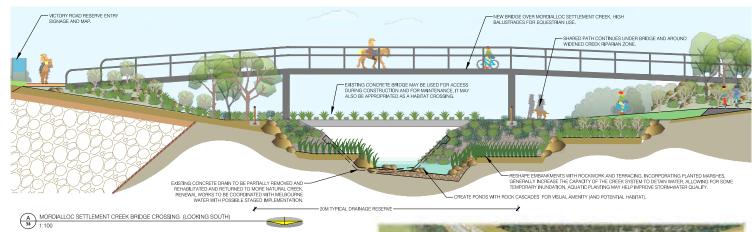








KINGSTON GREEN WEDGE CHAIN OF PARKS - TRAIL DESIGN SECTIONS / ELEVATIONS















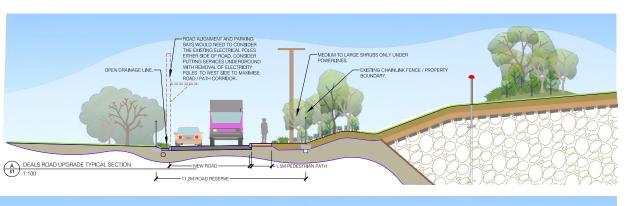


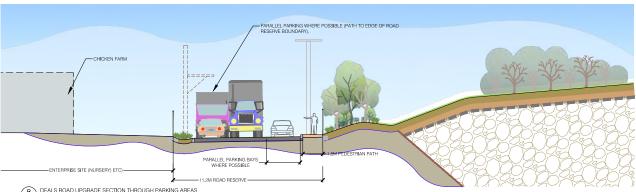
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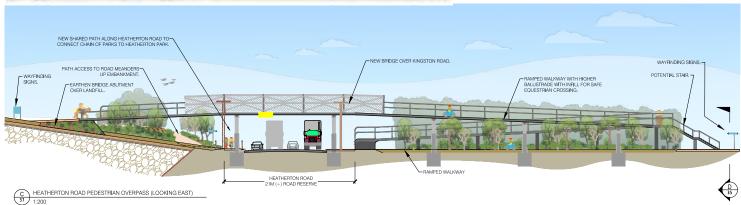




B DEALS ROAD UPGRADE SECTION THROUGH PARKING AREAS 1:100







POSSIBLE STAIRS DOWN TO NEW RESERVE (DESIGN TO CONSIDER DUSTRIAN AND CYCLING SAFETY).

CAPPED LANDRILL SITE TO BACKGROUND.

NEW BRIDGE.

STREET LIGHTING MILL NEED TO BE CONSIDERED WITH ANY NEW INFRASTRUCTURE WORKS.

GRADED GRAVEL PATH AND CONTINUATION OF CHAIN OF PARKS TO BACKGROUND.

PELECTRICAL SERVICES MAY GO UNDERGROUND IN VICINITY OF NEW BRIDGE.

WAYFINDING SIGNS.

D SECTION THROUGH LINEAR RESERVE (LOOKING NORTH)

ST.2M WIDE NEW RESERVE.

KINGSTON GREEN WEDGE
CHAIN OF PARKS - TRAIL DESIGN
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