Appendix 7
Structure Plans

2. Waihi Beach Structure Plan

(a) Infrastructure Schedule

Project		Funding Source(%)			
		Developer	Council Financial Contributions	Council Rates	Other
Water Supply	Source	0%	0%	0%	0%
	Reservoirs	0%	100%	0%	0%
	Reticulation	37%	63%	0%	0%
Wastewater	Treatment	0%	0%	0%	0%
	Reticulation	12%	88%	0%	0%
Stormwater	Ponds	0%	100%	0%	0%
	Reticulation	0%	100%	0%	0%
Transport	Roads	0%	100%	0%	0%
	Intersections	0%	100%	0%	0%
	Walk/cycleways	0%	100%	0%	0%
	Park n Ride	0%	0%	0%	0%

Note: This schedule is a summary only. Refer to the Plan Change that proposed the structure plan for the original Schedule. In accordance with Rule 11.3.4 the Schedule is updated annually through the LTCCP/Annual Plan process to reflect changes in costs and timing.

Athenree Ecological Protection Requirements

To assist in protecting and maintaining the ecological values of Tauranga Harbour adjoining the Athenree foreshore, properties in the structure plan area and which adjoin the Tauranga Harbour or Esplanade Reserve are required to have a minimum area of 2000m^2.

An additional width Esplanade Reserve is to be set aside along the foreshore to the South of Athenree Road. The reserve is to generally follow the top of the escarpment. On the eastern most property (Lots 4 & 8, DP35041) the esplanade reserve is to be 20m from mean high water spring.

Provision shall be made by the Western Bay of Plenty District Council for a future walkway within the esplanade reserve and its specific location and design shall be supported by an ecological assessment carried out by a suitably qualified and experienced Ecologist. Suitable fencing (1.2 metres high) generally located along the harbours edge and planting of the embankment shall be implemented as part of any future subdivision development to assist in reducing the potential for people and domestic pets from venturing on to the harbour edge.

2. Katikati Structure Plan

(a) Infrastructure Schedule

Project		Funding Source(%)			
		Developer	Council Financial Contributions	Council Rates	Other
Water Supply	Source				
	Reticulation	20%	80%	0%	0%
Wastewater	Reticulation	20%	80%	0%	0%
Stormwater	Ponds	84%	16%	0%	0%
	Reticulation	28%	72%	0%	0%
Transport	Roads				
	Carisbrook Street	0%	100%	0%	0%
	Sheffield Street	0%	100%	0%	0%
	Marshall Road	0%	100%	0%	0%
	Tetley Road	0%	100%	0%	0%
	Wills Road	0%	100%	0%	0%
	Internal Residential	85%	15%	0%	0%
	Internal Industrial	88%	12%	0%	0%
	Intersections				
	Wharawhara/ SH2 Roundabout and link to Bypass	0%	0%	0%	100%
	Marshall Road/SH2 Traffic Lights	0%	0%	0%	100%
	Walk/cycleways	0%	100%	0%	0%

Note: This schedule is a summary only. Refer to the Plan Change that proposed the structure plan for the original Schedule. In accordance with Rule 11.3.4 the Schedule is updated annually through the LTCCP/Annual Plan process to reflect changes in costs and timing.

(b) Waterford Industrial Zone

A close-boarded wooden fence shall be constructed on the boundary of the zone with Flat 1 DPS 31079 and Lot 2 DPS 30458. The fence shall be 2.0m in height with a wooden cap.

The fence is to be constructed prior to Lot 2 DP 30458 being used for industrial purposes.

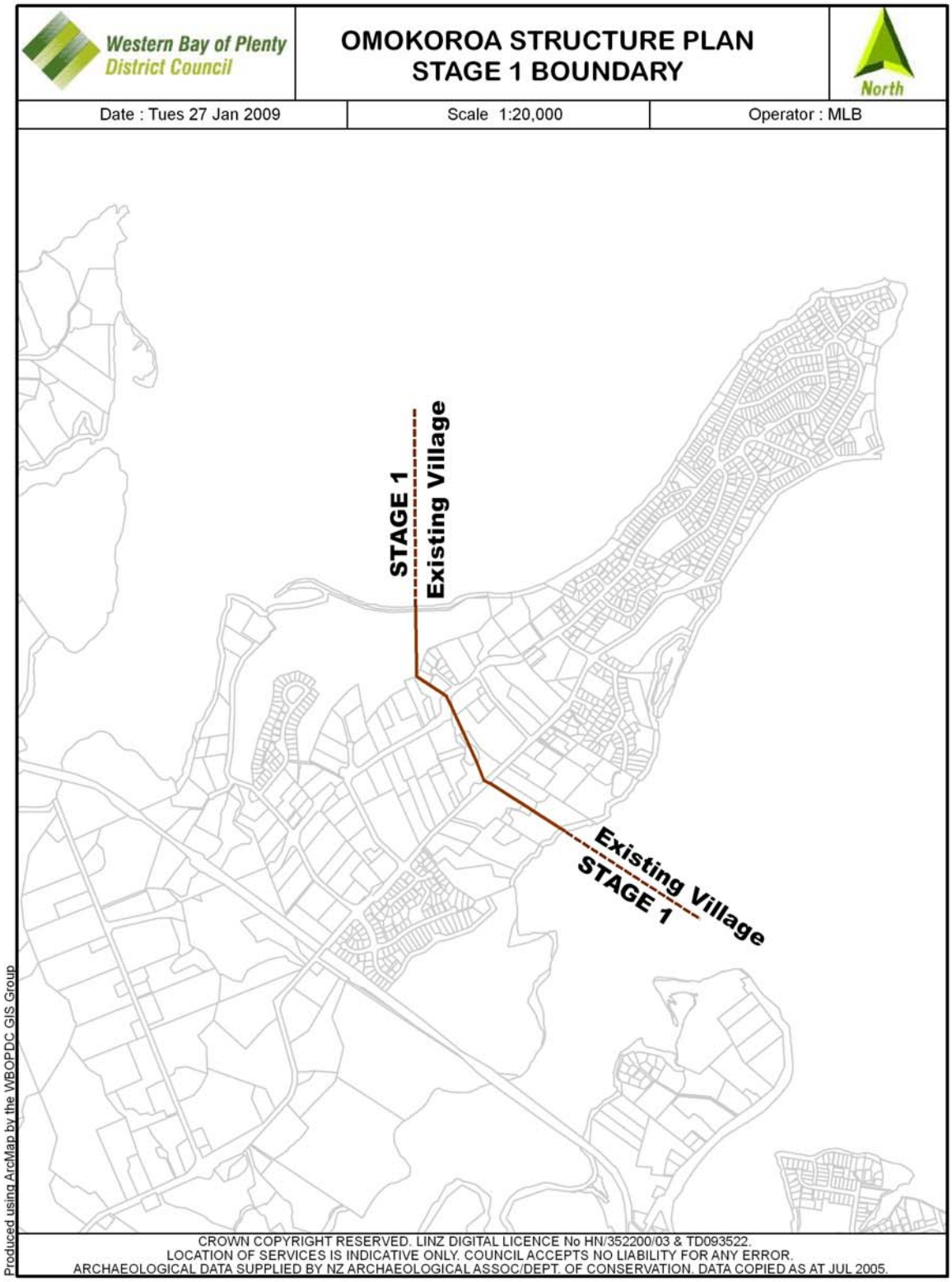
3. Omokoroa Structure Plan

(a) Infrastructure Schedule

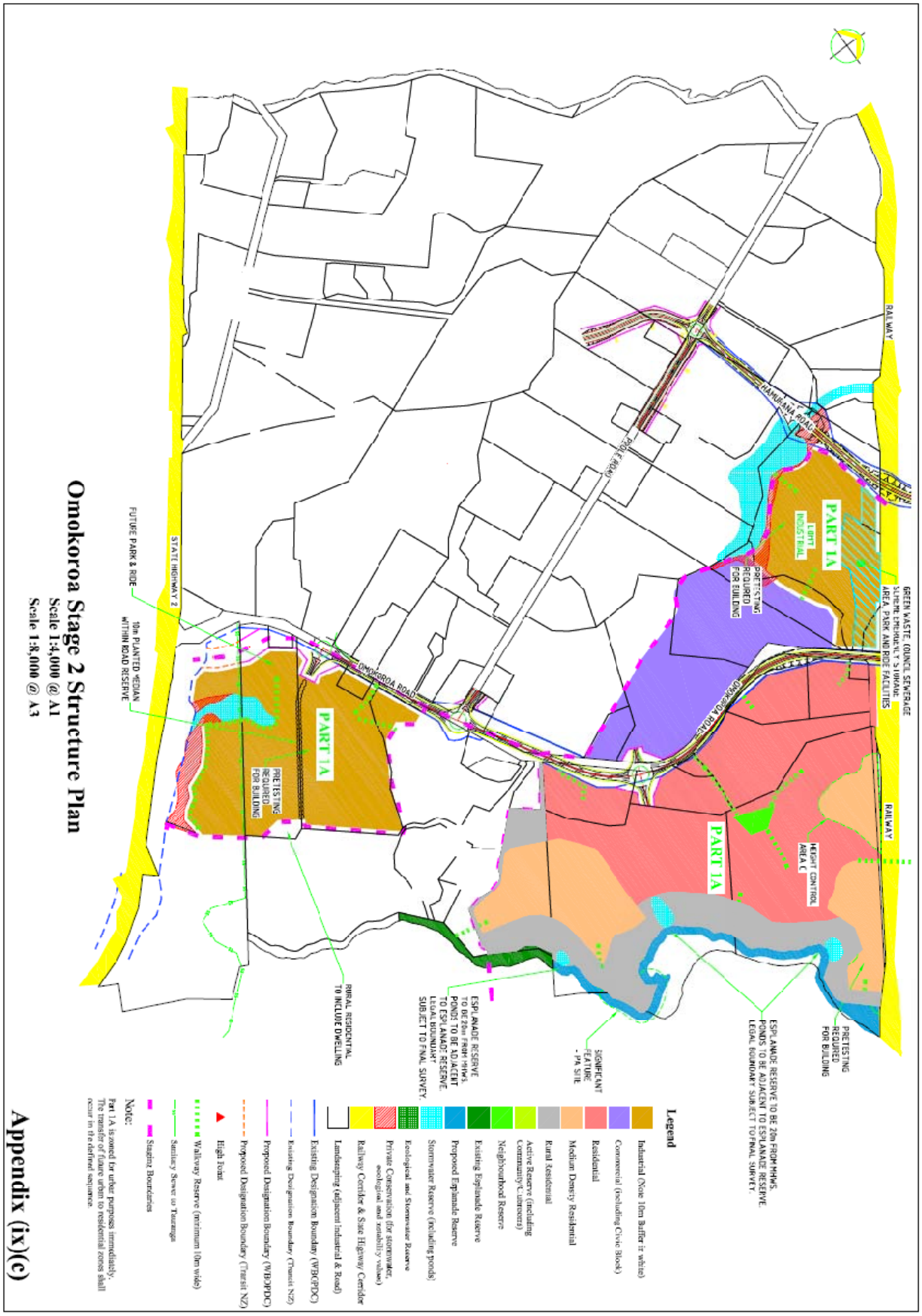
Project		Funding Source(%)			
		Developer	Council Financial Contributions	Council Rates	Other
Water Supply			72.6%	27.4%	
Wastewater	Reticulation		73.0%	11.0%	16.0%
Stormwater	Ponds		93.4%	6.6%	
	Reticulation	100.0%			
Transport	Roads	1.0%	96.0%	4.0%	
	Walk/cycleways	100.0%			
	Park n Ride	100.0%			

Note: This schedule is a summary only. Refer to the Plan Change that proposed the structure plan for the original Schedule. In accordance with Rule 11.3.4 the Schedule is updated annually through the LTCCP/Annual Plan process to reflect changes in costs and timing.

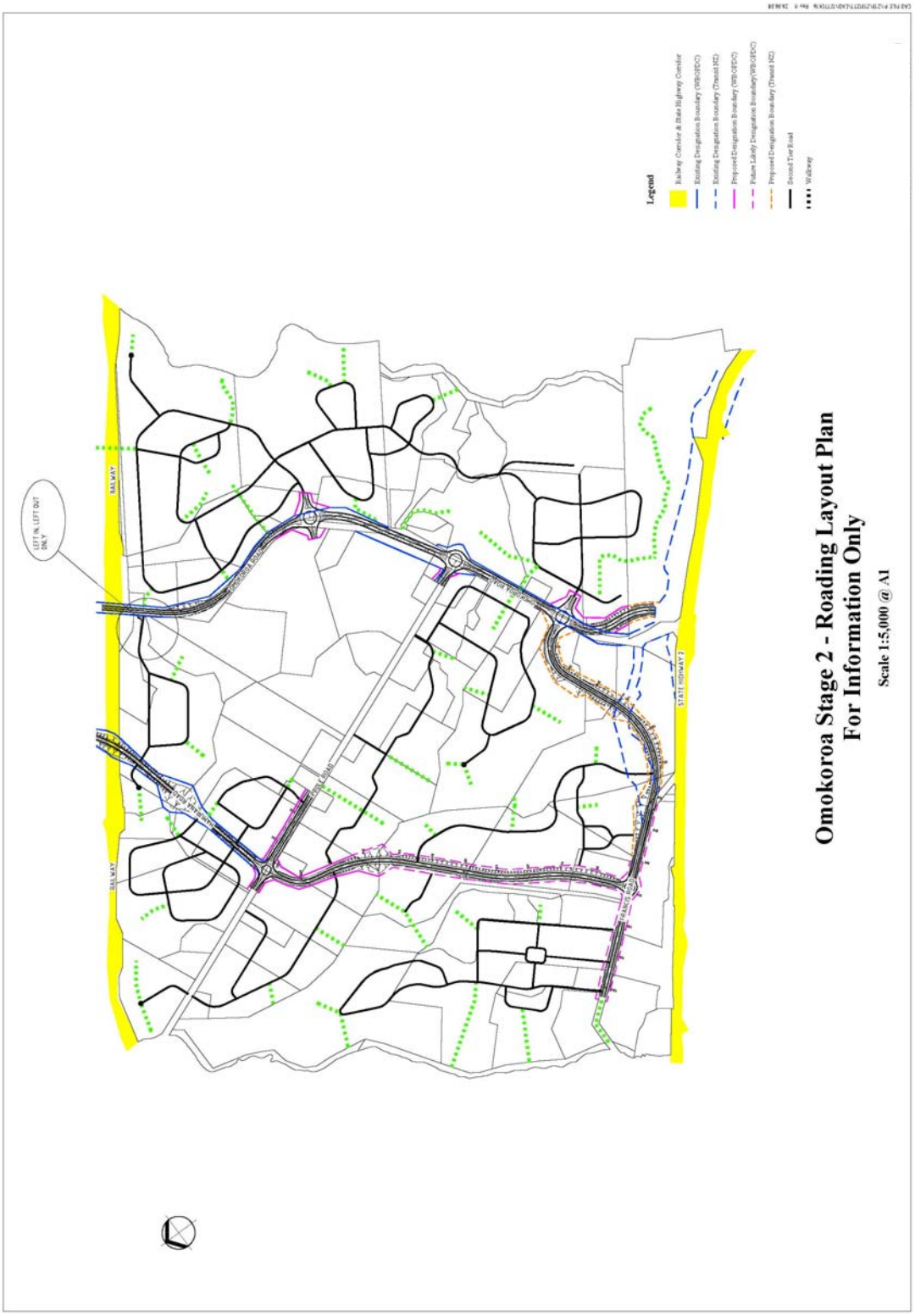
(b) Structure Plan Boundaries



(c) Structure Plan Stage 2



(d) Structure Plan Stage 2 Roading Map



(e) Earthworks Procedures

The following information is provided to give land developers information on good earthworks practice in the Omokoroa Stage 2 Structure plan area.

Generally

1. Contractors involved in earthmoving or who disturb earth as part of their development need to consult with Pirirakau so all parties are aware of protocols surrounding archaeological sites.

Consultation

2. Specifically, at least four weeks prior to significant earthworks on site Pirirakau is to be informed of the upcoming earthworks.

Earthworks

3. Prior to the works starting Pirirakau should be invited to carry out a blessing of the site.

4. All earthworks are to be monitored by a representative of Pirirakau and to this end an agreement between Pirirakau and the developer should be formed to enable site access for monitoring. It will be the developers responsibility to ensure all Occupational Safety and Health requirements and other legal obligations are able to be met by the Pirirakau representative.

5. On discovery of any unrecorded sites of archaeological importance work shall cease immediately until an assessment can be made by a hapu representative. Pirirakau will retain an archaeologist for further opinion or recommendation when or if one is required.

Archaeological

6. On discovering any archaeological find the following process will be instigated:

Koiwi (human remains)

- Site work will stop, and the designated Pirirakau representative will be notified and inspection/ assessment carried out.
- Rahui will be imposed on the site and immediate surrounds.
- Pirirakau and contractors to meet and assess implications and constraints.
- Pirirakau to notify relevant authorities.
- Koiwi site and location to be recorded and inspected by archaeologist.
- Site to be registered as Waahi tapu.
- Exhumation to be carried out according to tikanga and kawa.
- Construction Work may continue in another area until site has been made safe to continue.

Stone Artefacts

- Work in the immediate area will stop and Pirirakau representative to be notified.
- Rahui will be imposed for duration of assessment.
- Location to be recorded.
- Relevant authorities notified.
- Artefacts to be dated and removed from site by Pirirakau.
- Taonga to be vested under mana of Pirirakau.
- Investigation of immediate vicinity to be carried out.
- Work may continue in another area until site has been made safe to continue.

Wooden Artefacts

- Work in immediate area will stop and Pirirakau representative to be notified.
- Rahui will be imposed for duration of assessment.
- Location to be recorded.
- Relevant authorities notified.
- If dry, artefact will need to be protected vacuum-packed and protected from deterioration.
- If wet, artefact needs to be submerged at the site. Artefact cannot be removed until a safe curing process is confirmed.
- Investigation of immediate vicinity to be carried out.
- Work may continue in another area until site has been made safe to continue.

Habitation/Midden/Cooking Sites

- Work in immediate area to stop and Pirirakau representative to be notified.
- Rahui will be imposed for duration of assessment.
- Location to be recorded.
- Relevant authorities to be notified.
- Surface investigation/excavation to determine extent of the site.
- Archaeological investigation to be carried out because of number of artefact remains which may be found.
- If wet, artefact needs to be submerged at the site. Artefact cannot be removed until a safe curing process is confirmed.
- Any significant find to be stored and recorded.
- Work may continue in another area until site has been made safe to continue.

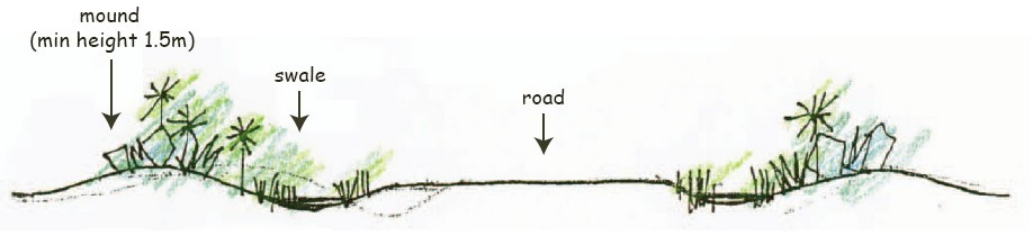
Naming Rights

Pirirakau, as Hapu of the area, retains the right to name any areas or roads resulting from earthworks and/or construction of roads.

4. Te Puna Business Park Structure Plan

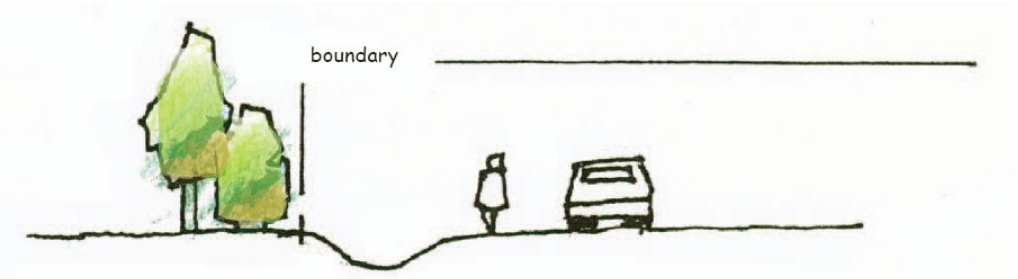
TE PUNA STATION ROAD PLANTING SECTIONS

(Planting to comply with sightline requirements at access points onto Te Puna Station Road)



CENTRAL ROADSCAPE
(20m SETBACK FROM TE PUNA STATION ROAD)

- Mound and swale relates to new ponds and open space pattern
- Wider roadscape contrasts with east and west roadscapes



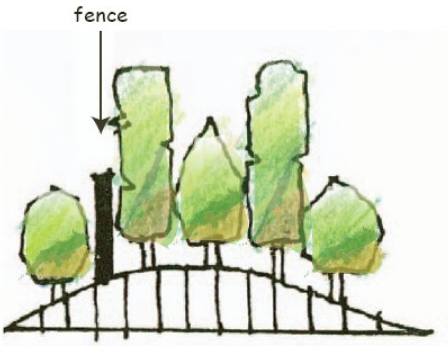
EAST AND WEST ROADSCAPES
(20m SETBACK FROM TE PUNA STATION ROAD)

- Linear planting reinforces local character

ACOUSTIC EARTH BUNDS

2.0 metre high earth bund (landscaped) above finished ground level

DETAIL 1

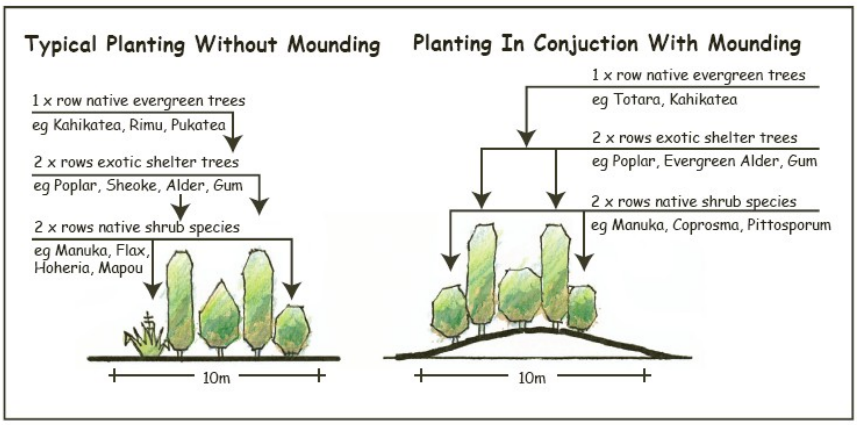


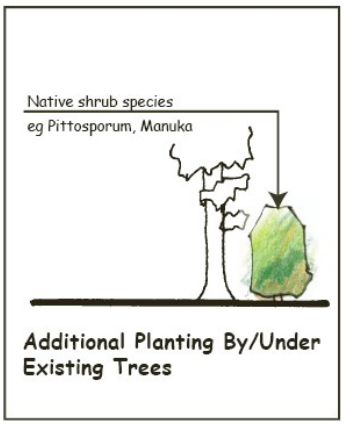
1.5-2.0 metre high earth bund with 1.5-2.0 metre high fence (landscaped) (total height not less than 3.0m above finished G.L.)

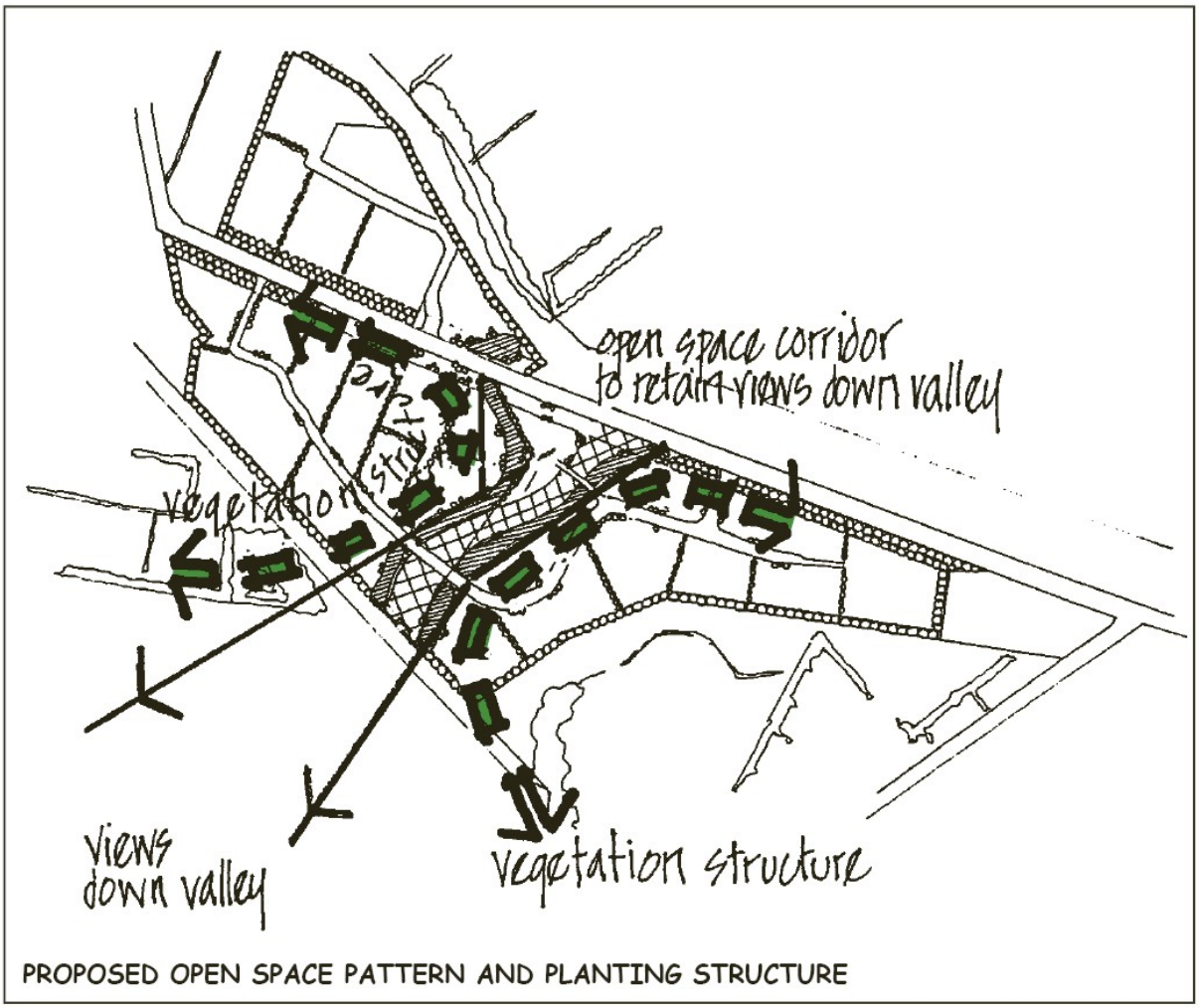
DETAIL 2

SHEET 2 OF 3

PERIMETER PLANTING







TE PUNA RURAL BUSINESS PARK STRUCTURE PLAN

SHEET 3 OF 3

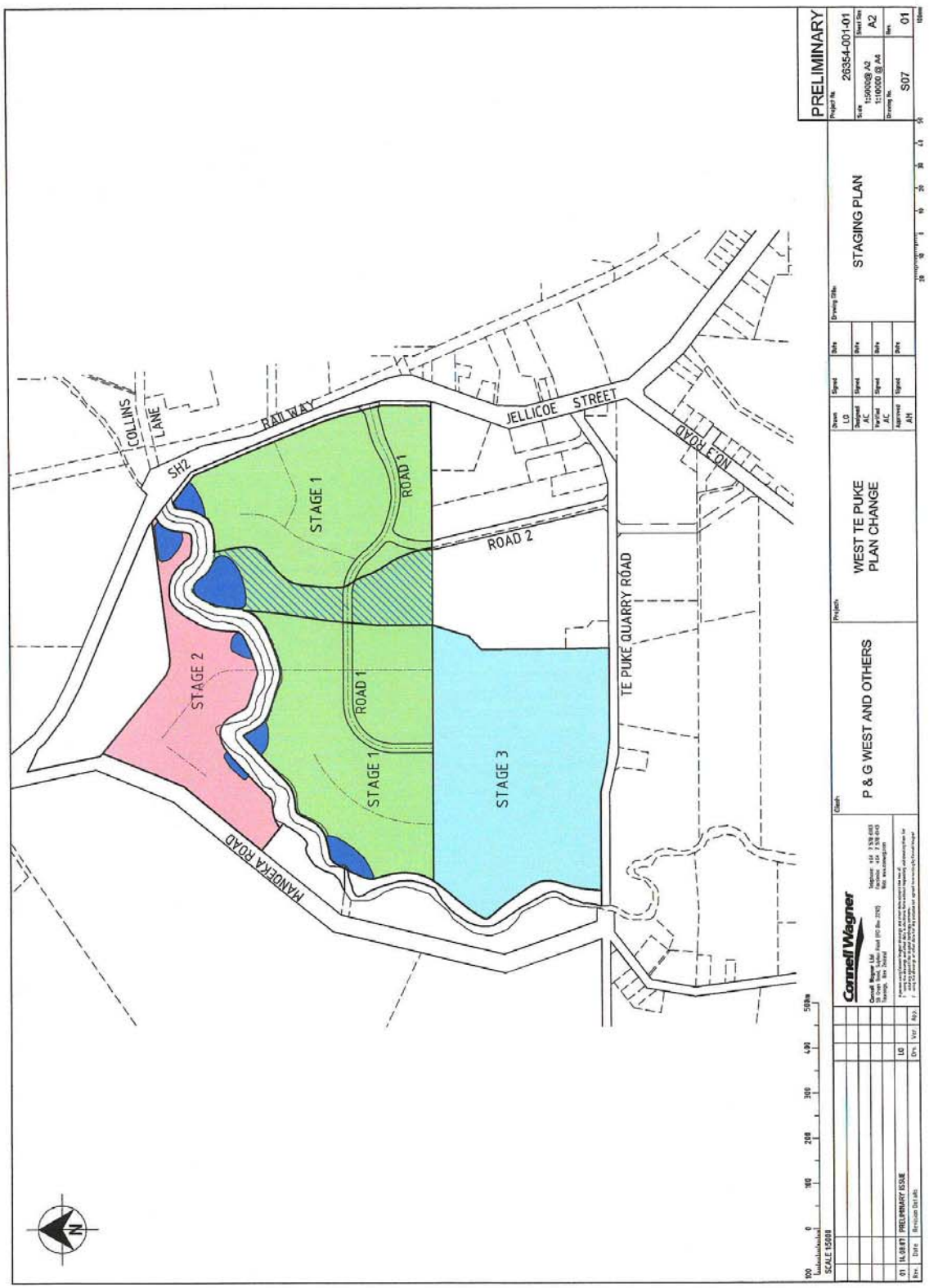
5. Te Puke Structure Plan

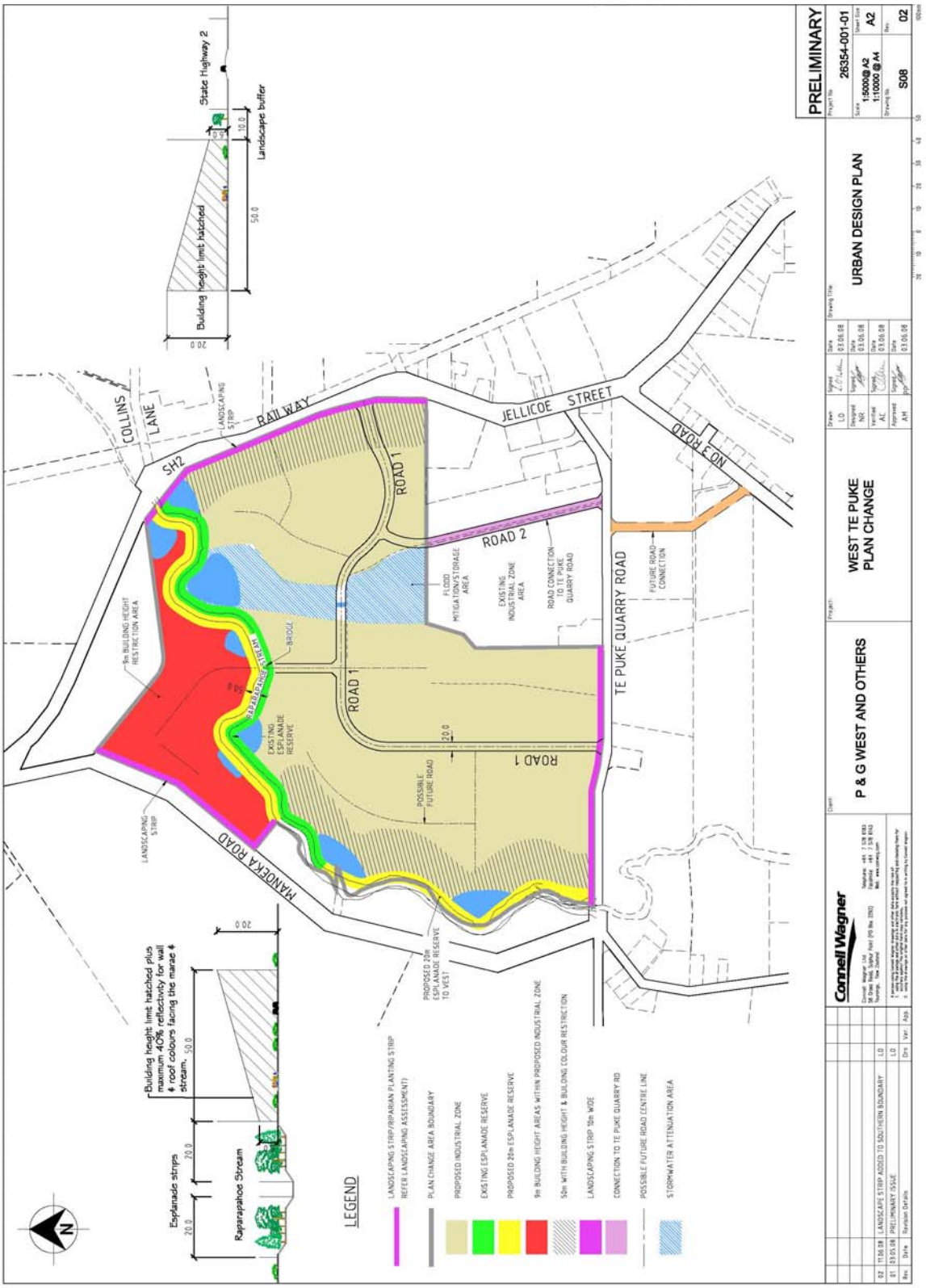
(a) Infrastructure Schedule

Project		Funding Source(%) Developer	Council Financial Contributions	Council Rates	Other
Water Supply	Area 3, 4, 5 - Pongakawa Pipe Upgrade	0%	100%	0%	0%
	Area 3 Macloughlin Drive 150mm pipe	0%	100%	0%	0%
	Area 3 Dunlop Road 100mm pipe	0%	100%	0%	0%
	Area 4 new water pump	0%	100%	0%	0%
	Area 4 - Tynan Street - Dudley Vercoe 200mm pipe	52.50%	47.50%	0%	0%
	Area 5 - Cannell Farm Drive 100mm pipe	100%	0%	0%	0%
Wastewater	Area 3	0%	100%	0%	0%
	Area 4 and Area 5	100%	0%	0%	0%
Stormwater	Area 3	0%	100%	0%	0%
	Area 4 and Area 5	100%	0%	0%	0%
Transport	Roading Area 3 Phase 1, 3, Area 4 and Area 5	85%	15%	0%	0%
	Roading Area 3 Phase 2	75%	25%	0%	0%
	Area 3 No 3 Road Roundabout	0%	80%	20%	0%
	Area 3 No 3 Road link to Te Puke Quarry Road	0%	50%	30%	20%
	Area 3 State Highway Median	0%	0%	0%	100%
	Area 5 No 1 Road / Village Heights Link Road	0%	20%	80%	0%
	Walk/cycleways and Recreational Land				
	Area 3, 4, 5	0%	100%	0%	0%
	MacLoughlin Drive Reserve	0%	100%	0%	0%

Note: This schedule is a summary only. Refer to the Plan Change that proposed the structure plan for the original Schedule. In accordance with Rule 11.3.4 the Schedule is updated annually through the LTCCP/Annual Plan process to reflect changes in costs and timing.

6. Te Puke West Industrial Zone




PRELIMINARY
URBAN DESIGN PLAN
WEST TE PUKE PLAN CHANGE
P & G WEST AND OTHERS
Connell Wagner
26354-001-01
S08
02
A2
1:5000@ A2
1:10000 @ A4
State Highway 2
Landscape buffer
Building height limit hatched
50.0
20.0
10.0
COLLINS LANE
SH2
RAILWAY
LANDSCAPING STRIP
JELLICOE STREET
NO 3 ROAD
ROAD 1
ROAD 2
TE PUKE QUARRY ROAD
FUTURE ROAD CONNECTION
FLOOD MITIGATION/STORAGE AREA
EXISTING INDUSTRIAL ZONE AREA
ROAD CONNECTION TO TE PUKE QUARRY ROAD
9m BUILDING HEIGHT RESTRICTION AREA
RAPARAPAHOE STREAM
BRIDGE
EXISTING ESPLANADE RESERVE
POSSIBLE FUTURE ROAD
MANOEKA ROAD
PROPOSED 20m ESPLANADE RESERVE TO VEST
Building height limit hatched plus maximum 40% reflectivity for wall & roof colours facing the marae & stream.
Esplanade strips
Raparapahoe Stream
LEGEND
LANDSCAPING STRIP/RIPARIAN PLANTING STRIP REFER LANDSCAPING ASSESSMENT)
PLAN CHANGE AREA BOUNDARY
PROPOSED INDUSTRIAL ZONE
EXISTING ESPLANADE RESERVE
PROPOSED 20m ESPLANADE RESERVE
9m BUILDING HEIGHT AREAS WITHIN PROPOSED INDUSTRIAL ZONE
50m WITH BUILDING HEIGHT & BUILDING COLOUR RESTRICTION
LANDSCAPING STRIP 10m WIDE
CONNECTION TO TE PUKE QUARRY RD
POSSIBLE FUTURE ROAD CENTRE LINE
STORMWATER ATTENUATION AREA
02 11.06.08 LANDSCAPE STRIP ADDED TO SOUTHERN BOUNDARY LD
01 03.06.08 PRELIMINARY ISSUE LD

7. Rangiuru Business Park

Metroplex Rangiuru Financial Contribution Schedule

November 2005
Rates include allowance for land purchase, contingencies plus design and supervision
Based on June 2005 costs

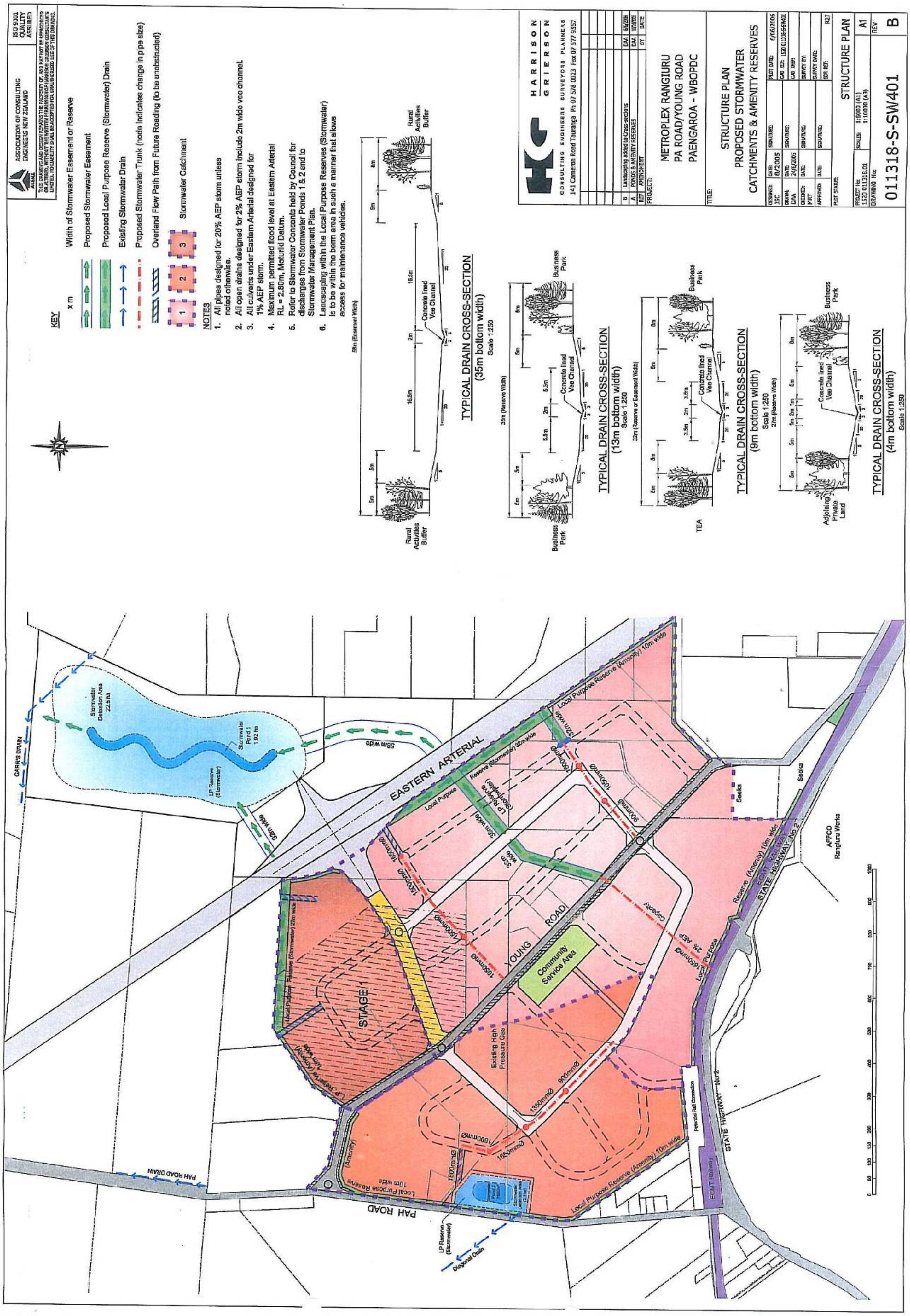
Item	Description	Unit	Quantity	Rate	Amount Total Construction	Percentage of Public/ Network Benefit	Rangiuru Contribution
1.00	**ROADING INFRASTRUCTURE**						
1.01	Eastern Arterial Interchange	LS	1	9,788,000	9,788,000	0%	9,788,000
1.02	SH2/Pah Road Intersection Upgrade	LS	1	2,217,000	2,217,000	0%	2,217,000
1.03	Young Road/Pah Road Roundabout	LS	1	364,000	364,000	0%	364,000
1.04	Young Road Upgrade Within Site	m	1850	2,350	4,347,500	0%	4,347,500
1.05	Young Road Upgrade Outside Site	m	850	700	595,000	0%	595,000
1.06	Pah Road Upgrade	m	1250	800	1,000,000	0%	1,000,000
1.07	Entrance Road	m	520	1,450	754,000	0%	754,000
1.08	Collector roads	m	2420	1,000	2,420,000	0%	2,420,000
1.09	Roundabouts	ea	3	600,000	1,800,000	0%	1,800,000
	Young Road Bylaw		1	10,000	10,000		10,000
					23,295,500		23,295,500
2.00	**STORMWATER**						
2.01	Stormwater Pond 1 (Carrs)	LS	1	4,996,000	4,996,000	0%	4,996,000
2.02	Stormwater Pond 2 (Diagonal)	LS	1	361,000	361,000	0%	361,000
2.03	Walkways/Boardwalks	m	1500	65	97,500	0%	97,500
2.04	Stormwater Reticulation						
	(a) 900 dia	m	330	460	151,800	0%	151,800
	(b) 1050 dia	m	305	545	166,225	0%	166,225
	(c) 1350 dia	m	170	670	113,900	0%	113,900
	(d) 1500 dia	m	397	750	297,750	0%	297,750
	(e) 1650 dia	m	662	830	549,460	0%	549,460
	(f) 1800 dia	m	165	950	156,750	0%	156,750
2.05	Roading related Stormwater						
	Type 3 < 500m	m	2850	330	940,500	0%	940,500
2.06	Open Channel Drainage						
2.06.1	Type A (4m base width)	m	470	1,040	488,800	0%	488,800
2.06.2	Type B1 (9m base width, south of TEA)	m	940	1,240	1,165,600	0%	1,165,600
2.06.3	Type B2 (9m base width north of TEA)	m	180	320	57,600	0%	57,600
2.06.4	Type C (13m base width)	m	250	1,530	382,500	0%	382,500
2.06.5	Type D (35m base width, north of TEA)	m	440	740	325,600	0%	325,600
2.07	Multiple Culverts under TEA						
	7 x 1.5m x 1.5m box culverts	m	595	1,000	595,000	0%	595,000
	2 x 1.2m x 1.2m box culverts	m	170	900	153,000	0%	153,000
2.08	Culverts under internal roads						
	2 x 2m dia	m	170	1,250	212,500	0%	212,500
2.09	Investigation and Preliminary design	LS	1	31,500	31,500	0%	31,500
					11,242,985		11,242,985

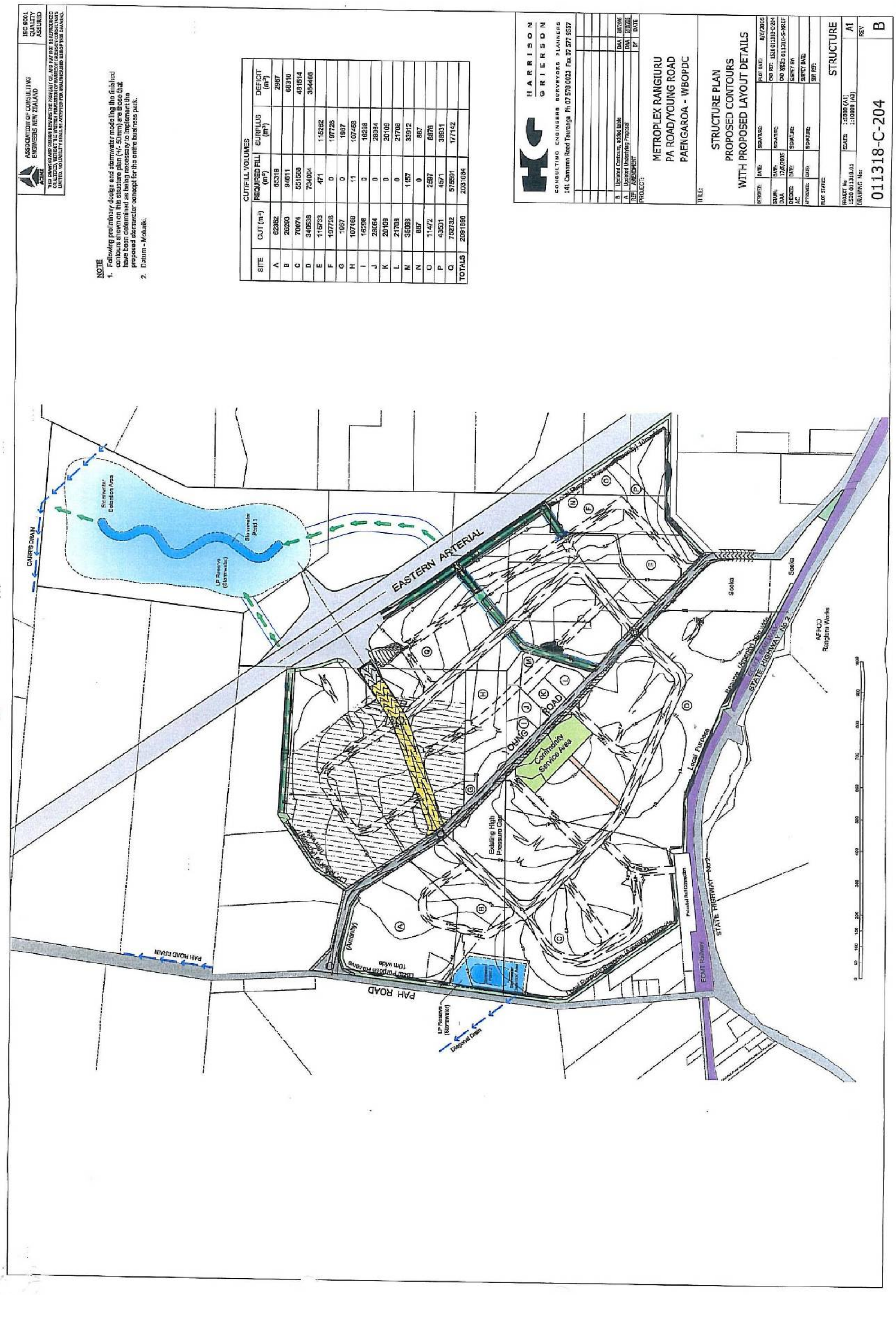
Metroplex Rangiuru Financial Contribution Schedule (cont)

Item	Description	Unit	Quantity	Rate	Amount Total Construction	Percentage of Public/ Network Benefit	Rangiuru Contribution
3.00	**SANITARY SEWER**						
3.01	Sanitary Sewer Pumping Stations	ea	3	250,000	750,000	0%	750,000
3.02	Major Pump Station	ea	1	800,000	800,000	0%	800,000
3.03	Emergency Generator	ea	1	190,000	190,000	0%	190,000
3.04	Emergency Storage, major pumpstation	ea	1	280,000	280,000	0%	280,000
3.05	Emergency Storage, minor pumpstation	ea	3	75,000	225,000	0%	225,000
3.06	Sanitary Sewer Rising Main (400 dia)	m	5800	400	2,320,000	0%	2,320,000
3.07	Kaituna River Thrust	LS	1	380,000	380,000	0%	380,000
3.08	Waiari River Thrust	LS	1	170,000	170,000	0%	170,000
3.09	Internal Trunk Main (225dia)	m	350	145	50,750	0%	50,750
3.10	Internal Trunk Main (300dia)	m	760	160	121,600	0%	121,600
3.11	Internal rising mains (150 dia)	m	910	95	86,450	0%	86,450
3.12	Internal rising mains (200 dia)	m	430	140	60,200	0%	60,200
3.13	Fencing along rising main route	m	900	16	14,400	0%	14,400
3.14	Replace trench spoil with on-site sand	LS	1	38,500	38,500	0%	38,500
3.15	Metal Race on Vercoe property	LM	930	36	33,480	0%	33,480
3.16	Te Puke STP capacity upgrade	LS	1	8,500,000	8,500,000	0%	8,500,000
3.17	Investigation and Preliminary design	LS	1	37,400	37,400	0%	37,400
					14,057,780		14,057,780
4.00	**WATER RETICULATION**						
4.01	Supply and lay 450mm DI/CLMS Gravity Trunk	m	7850	400	3,140,000	0%	3,140,000
4.02	Supply and lay 225mm uPVC pumped main	m	9000	175	1,575,000	0%	1,575,000
4.03	Primary Water Supply Bores adjacent to site	ea	1	1,400,000	1,400,000	0%	1,400,000
4.04	Secondary Water Supply Bores adjacent to site	ea	0	1,000,000	0	0%	-
4.05	Temporary Pump Stage 1	ea	1	300,000	300,000	0%	300,000
4.06	Primary Water Supply Bores adjacent to Rangiuru Road	ea	1	1,400,000	1,400,000	0%	1,400,000
4.07	Secondary Water Supply Bores adjacent to Rangiuru	ea	1	1,000,000	1,000,000	0%	1,000,000
4.08	Treatment Plant adjacent to Rangiuru Road	ea	1	1,500,000	1,500,000	0%	1,500,000
4.09	Reservoir Rangiuru Road 5500m³	ea	1	2,000,000	2,000,000	30%	1,400,000
4.10	Supply and lay 375mm uPVC	m	5250	350.00	1,837,500	0%	1,837,500
4.11	Supply and lay 300mm uPVC	m	3000	235.00	705,000	0%	705,000
4.12	Investigation and Preliminary design	LS	1	47,200.00	47,200	0%	47,200
4.13	Proof testing of supply bore	LS	1	250,000.00	250,000	0%	250,000
					15,154,700		14,554,700
5.00	**RESERVES**						
	LP Reserves and Cycleways						
5.01	Landscaping	ha	3.96	80,000	316,800	0%	316,800
5.02	Walkways/Cycleways	m	820	65	53,300	0%	53,300
5.03	Fencing (Timber board and batten)	m	420	65	27,300	0%	27,300
5.04	Fencing (Post and Wire)	m	6900	15	103,500	0%	103,500
5.05	Land Purchase	ha	4.04	300,000	1,212,000	0%	1,212,000
					1,712,900		1,712,900
	TOTAL				65,463,865		64,863,865
	Development Area (ha)		148.60				

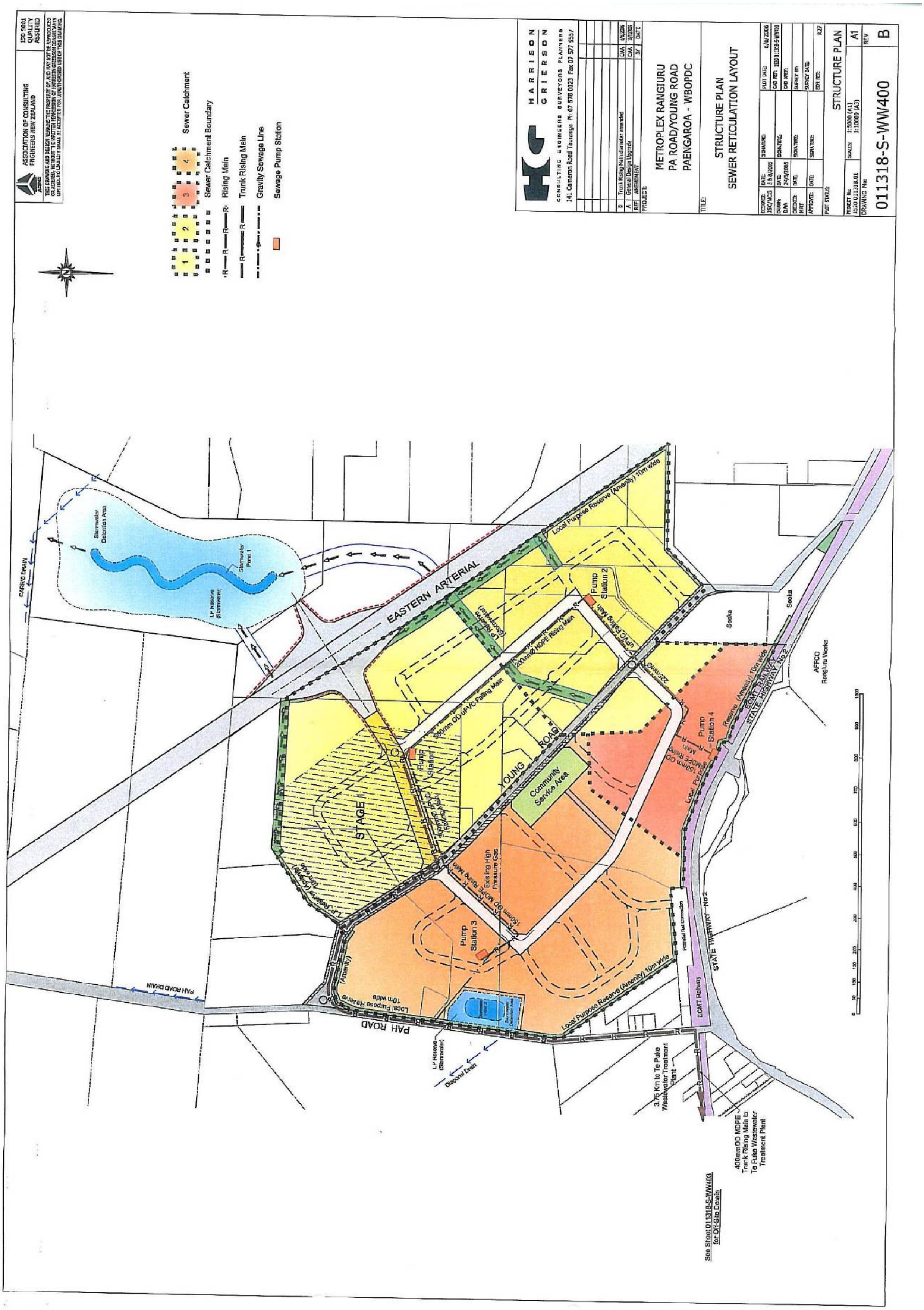
Advice Note
The cost per square meter is based on June 2005 cost
The contrbutions listed are as at June 2005
For cuurent values refer to Councils current Annual Plan

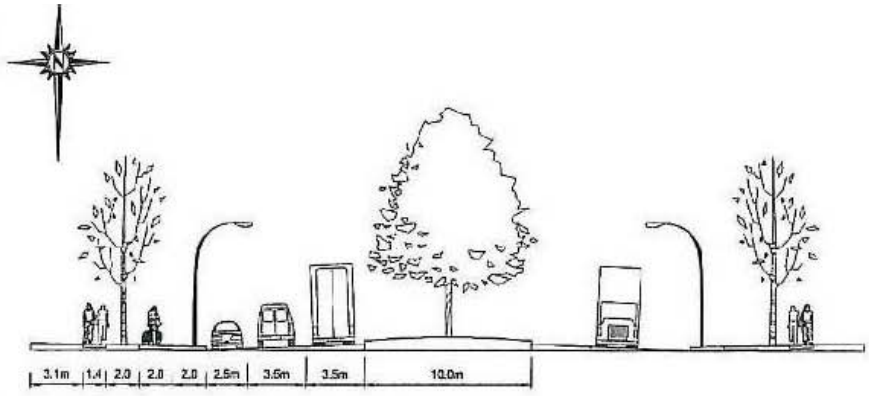
This table will be updated annually thought the LTCCP and Annual Plan Process.


KEY
Width of Stormwater Easement or Reserve
Proposed Stormwater Easement
Proposed Local Purpose Reserve (Stormwater) Drain
Existing Stormwater Drain
Proposed Stormwater Trunk (node indicates change in pipe size)
Overland Flow Path from Future Roading (to be unobstructed)
Stormwater Catchment
NOTES
1. All pipes designed for 20% AEP storm unless noted otherwise.
2. All open drains designed for 2% AEP storm include 2m wide vee channel.
3. All culverts under Eastern Arterial designed for 1% AEP storm.
4. Maximum permitted flood level at Eastern Arterial RL = 2.80m, Moturiki Datum.
5. Refer to Stormwater Consents held by Council for discharges from Stormwater Ponds 1 & 2 and to Stormwater Management Plan.
6. Landscaping within the Local Purpose Reserves (Stormwater) is to be within the berm area in such a manner that allows access for maintenance vehicles.
TYPICAL DRAIN CROSS-SECTION (35m bottom width)
TYPICAL DRAIN CROSS-SECTION (13m bottom width)
TYPICAL DRAIN CROSS-SECTION (9m bottom width)
TYPICAL DRAIN CROSS-SECTION (4m bottom width)
HARRISON GRIERSON
METROPLEX RANGIURU
PA ROAD/YOUNG ROAD
PAENGAROA - WBOPDC
STRUCTURE PLAN
PROPOSED STORMWATER
CATCHMENTS & AMENITY RESERVES
011318-S-SW401
EASTERN ARTERIAL
YOUNG ROAD
PAH ROAD
STAGE 1
Community Service Area
STATE HIGHWAY No 2
CARR'S DRAIN
PAH ROAD DRAIN

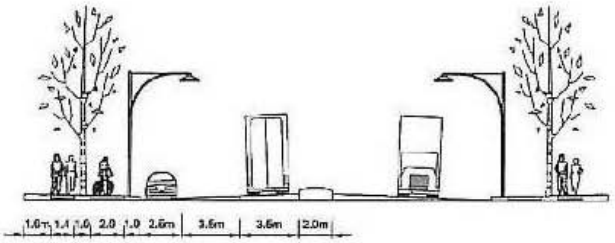


CUT/FILL VOLUMES				
SITE	CUT (m^3)	REQUIRED FILL (m^3)	SURPLUS (m^3)	DEFICIT (m^3)
A	62352	65319		2967
B	26293	94611		68318
C	70074	551588		481514
D	340538	734004		394466
E	115733	471	115262	
F	197728	0	197728	
G	1967	0	1967	
H	107468	11	107459	
I	16298	0	16298	
J	28064	0	28064	
K	20109	0	20109	
L	21708	0	21708	
M	35068	1157	33912	
N	887	0	887	
O	11472	2597	8876	
P	43501	4571	38931	
Q	752732	575591	177142	
TOTALS	2091896	2031084		

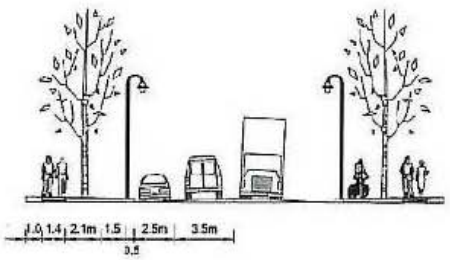

METROPLEX RANGIURU
PA ROAD/YOUNG ROAD
PAENGAROA - WBOPDC
STRUCTURE PLAN
SEWER RETICULATION LAYOUT
STRUCTURE PLAN
011318-S-WW400
B
Sewer Catchment
Sewer Catchment Boundary
Rising Main
Trunk Rising Main
Gravity Sewage Line
Sewage Pump Station
EASTERN ARTERIAL
YOUNG ROAD
PAH ROAD
STAGE 1
Pump Station 1
Pump Station 2
Pump Station 3
Pump Station 4
Community Service Area
STATE HIGHWAY No 2
ECMT Railway
See Sheet 011318-S-WW403 for Off-Site Deals



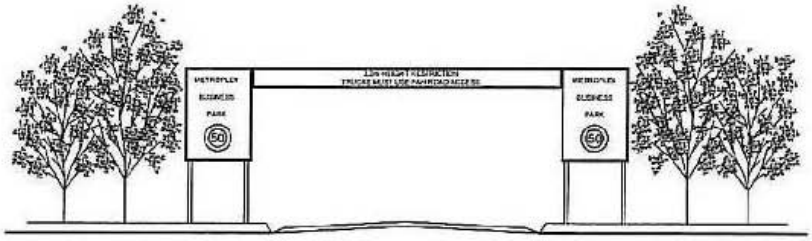
TYPE A
Entrance Road (50m wide)



TYPE B
Collector Road (35m wide)



TYPE C
Local Road (25m wide)



TEMPORARY
'STAGE 1' THRESHOLD FEATURE