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SHOALHAVEN CITY COUNCIL

9

PREPARED BY TECHNICAL SERVICES

DESCRIPTION OF SHEET

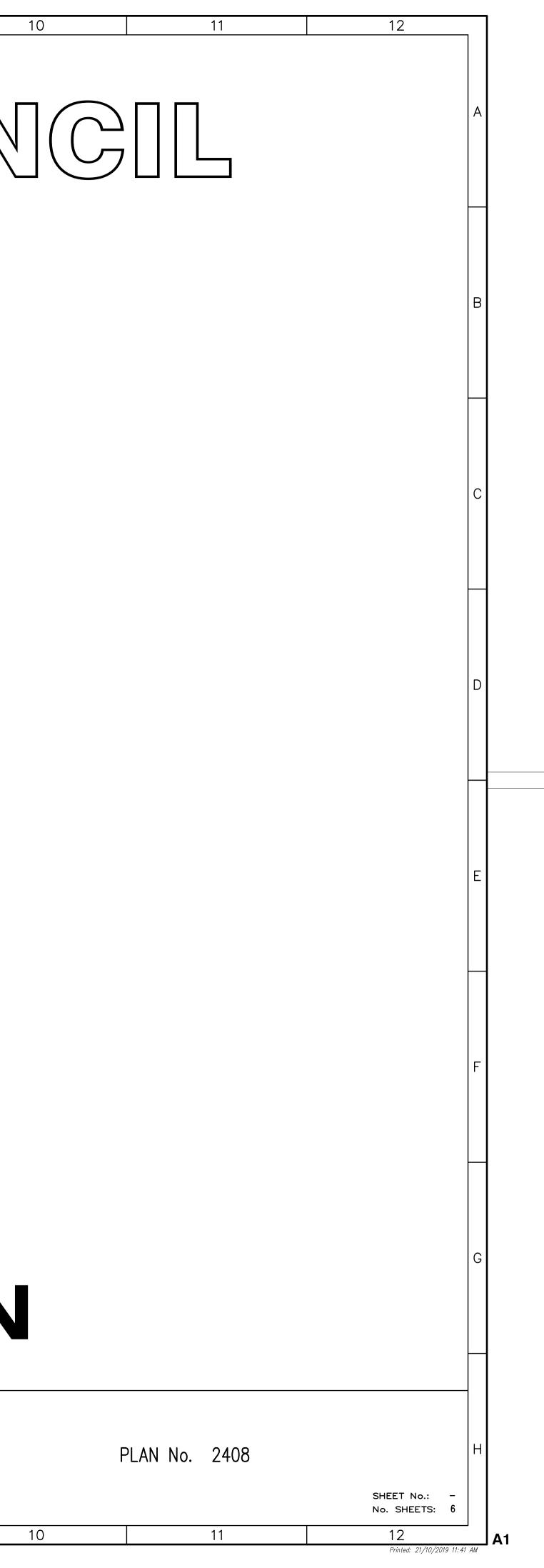
SURVEY AND UTILITY LOCATION PLAN

6

- LAYOUT PLAN AND LONGITUDINAL SECTIONS
- CONSTRUCTION DETAILS
- LINEMARKING AND SIGNAGE PLAN
- CONSTRUCTION NOTES
- VEHICLE TRACKING PATHS

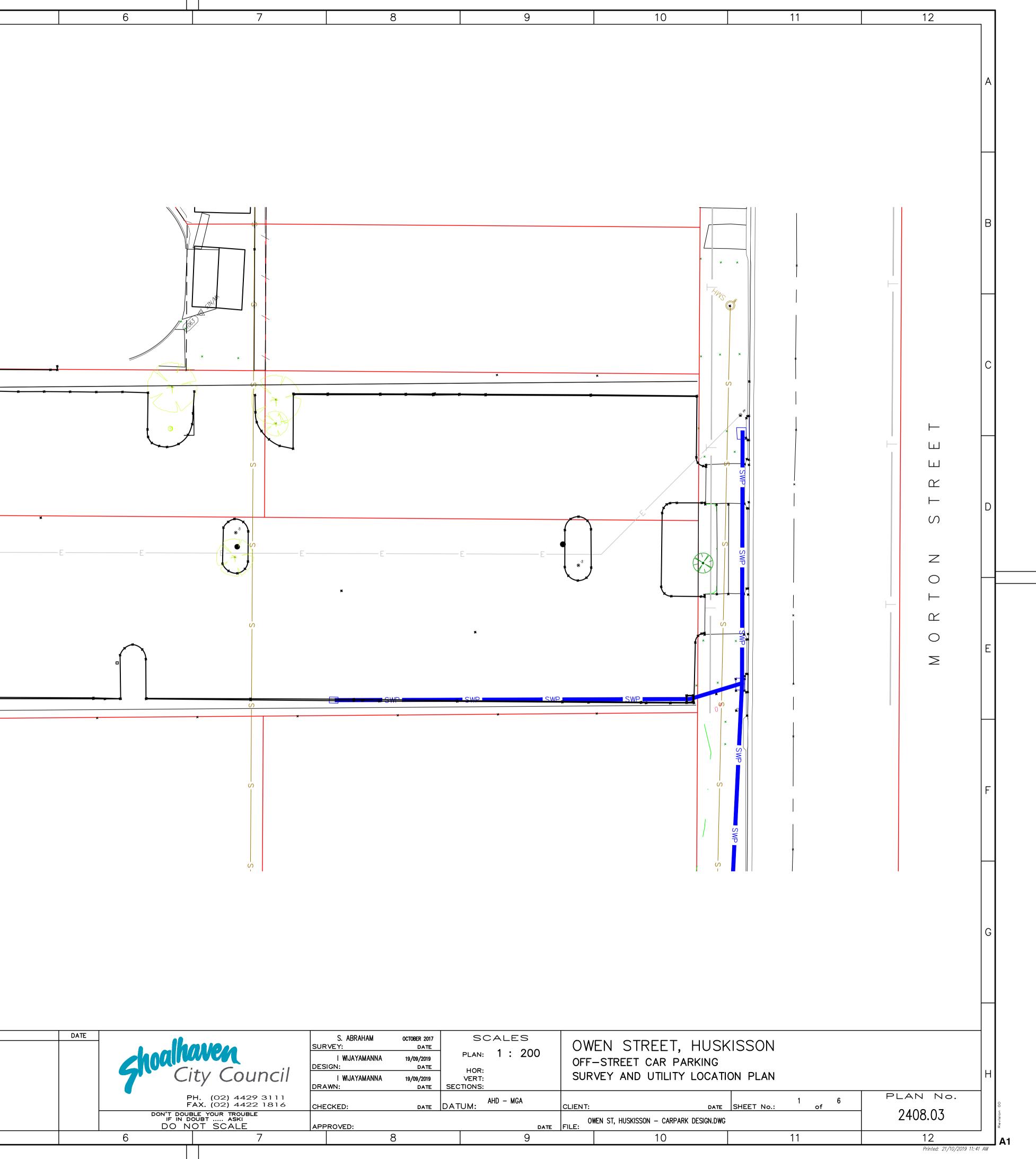
OFF-STREET PARKING Between Owen Street and Morton Street OWEN STREET, HUSKISSON

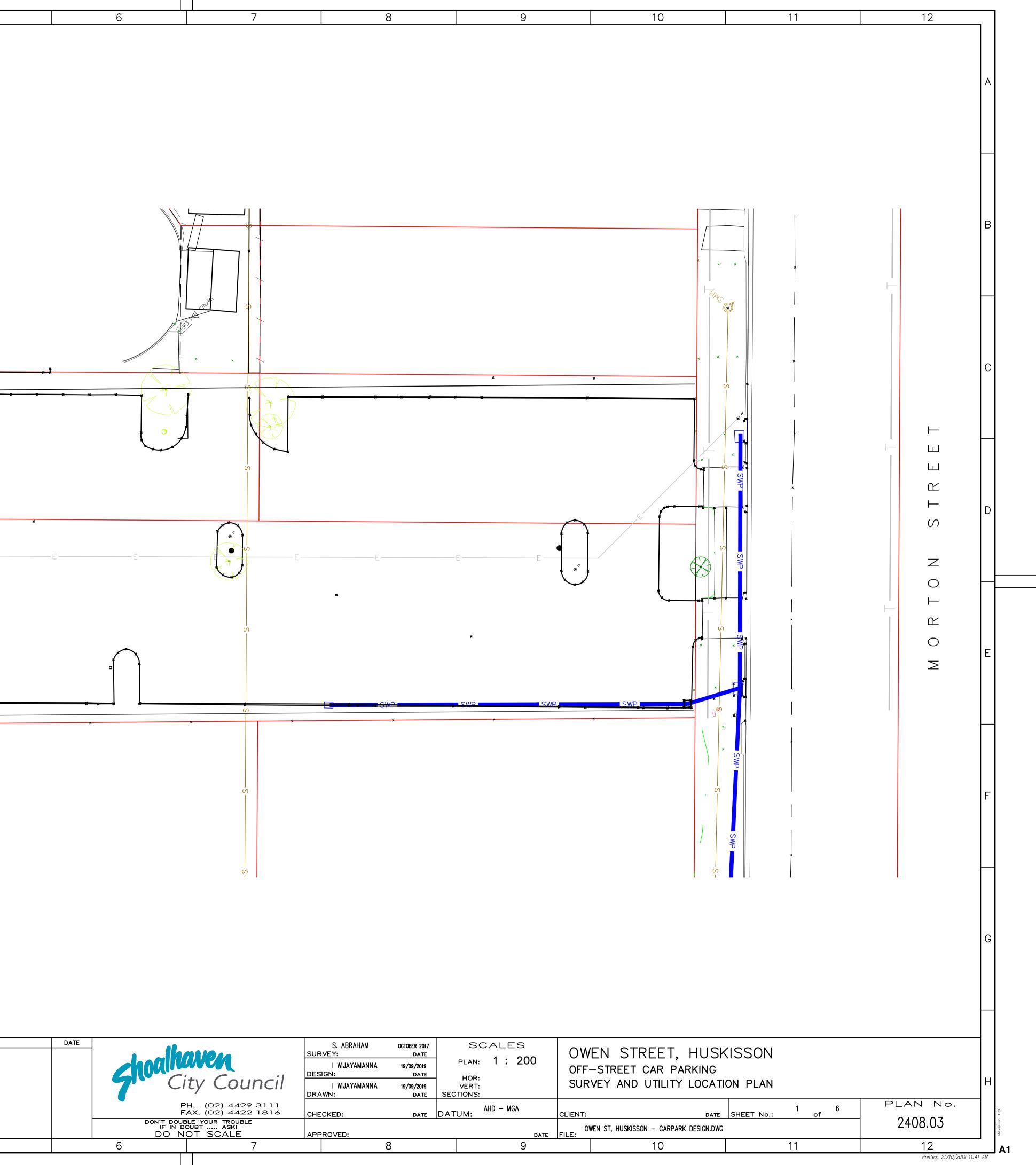
DATE	CHECK	ED BY	CLIEI	NT ACCEPTANCE		APPROVED	
					SIGNED: .		
					MANAGER	TECHNICAL SERVICES SECTION TOM DIMEC	
					DATE:		
	6	7		8	•	9	

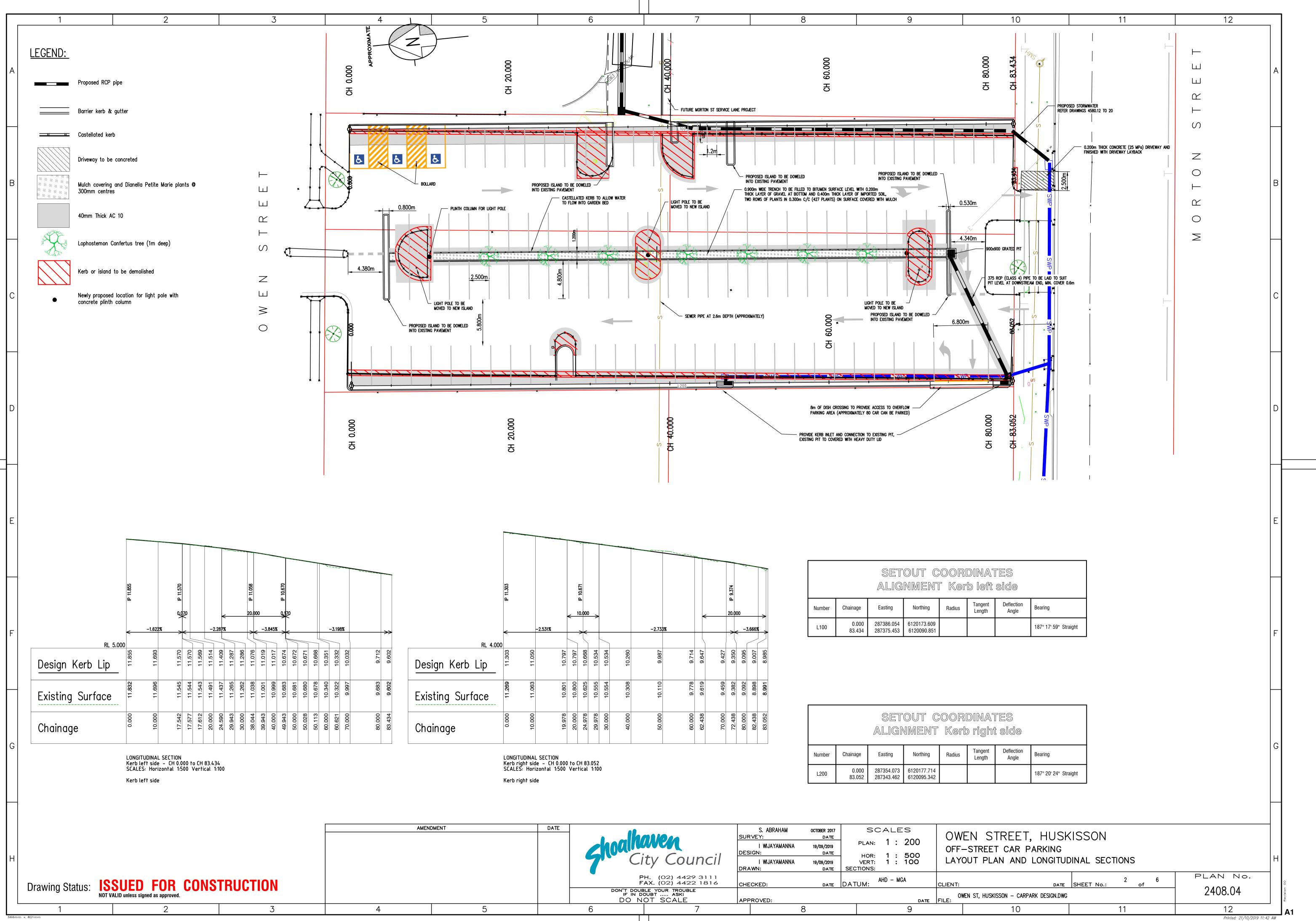


	1				2		3			4			
A							APPROXIMATE						
B	<u>EGEND</u> 	- Undergro Undergro Existing	e) Stormwater Pif Ound Electricit Ound Sewer Gra Telstra Cables On (Bush Line)	y cable Avity main									
c !	<u>EGEND</u> &		- Light Pole						Ť		¥		•
D		STORMWATER	Connection Pit			7		N S T R E E T				•	
E	Point 13 14 475 548 725 819	Easting 287542.856 287471.779 287422.622 287473.598 287318.478 287312.455	6120072.023 6120069.114 6120128.456 6120093.718 6120100.169	Height 12.123 11.746 10.540 11.671 8.016 8.071	Description PM 37873 NAIL DH NAIL NAIL DHW			O W E N					
F	919 994 1031 1063 4002 4003 4150 4183	287441.325 287415.310 287406.740 287388.897 287491.531 287512.553 287532.102 287531.775	6120131.005 6120137.803 6120138.991 6120129.076 6120122.977 6120118.066	11.471 11.336 11.209 11.341 11.256 10.914 10.506 10.552	NAIL NAIL STN/MK NAIL NAIL						*		
G													

Drawing Status: **ISSUED FOR CONSTRUCTION** NOT VALID unless signed as approved.



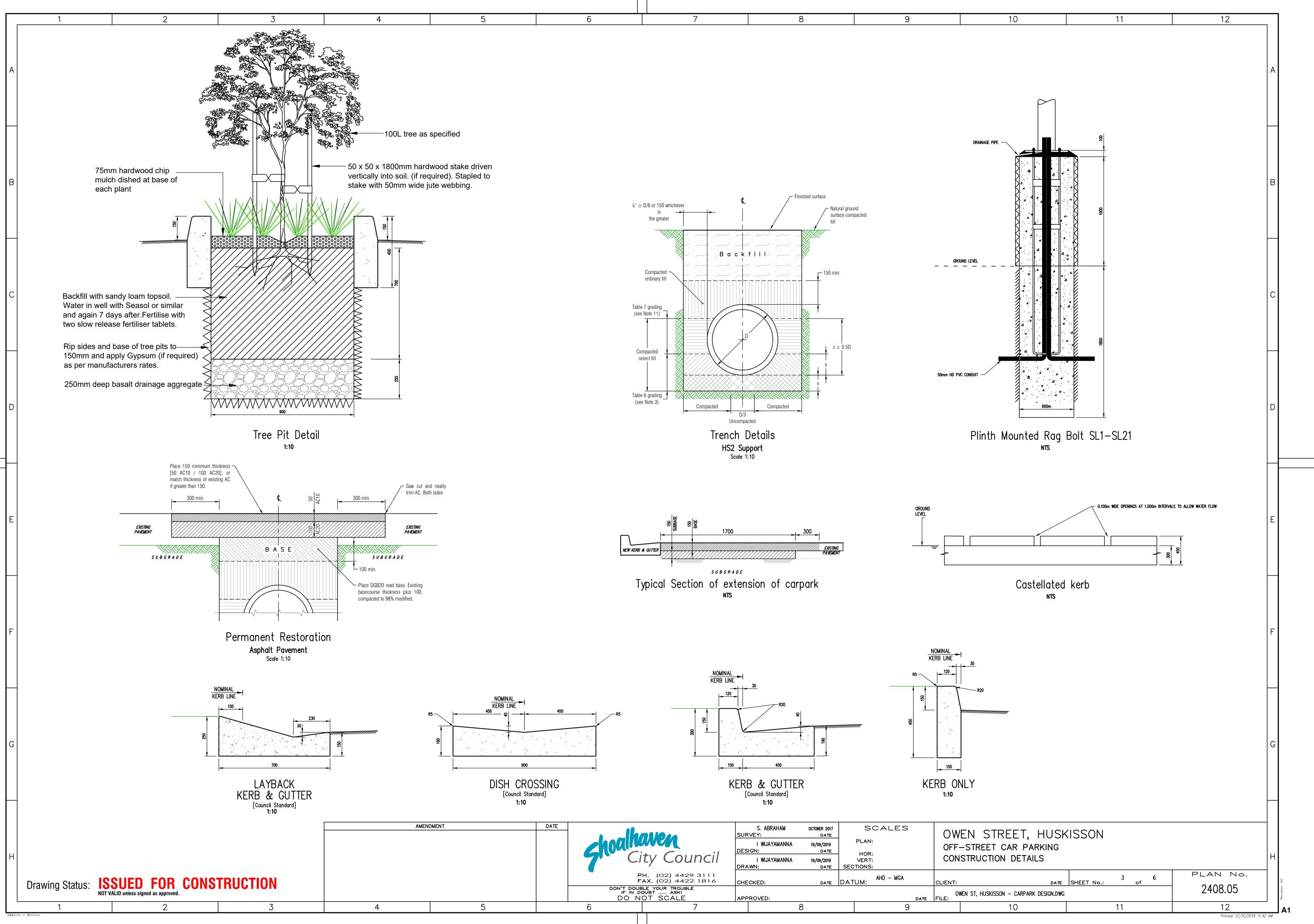




		0	OUT C NMENI	0 0 1 1		
Number	Chainage	Easting	Northing	Radius	Tangent Length	[
L100	0.000 83.434	287386.054 287375.453	6120173.609 6120090.851			

			OUT C NMENT			
Number	Chainage	Easting	Northing	Radius	Tangent Length	
L200	0.000 83.052	287354.073 287343.462	6120177.714 6120095.342			

DATE			SUR	S. ABRAHAM √eƳ:	OCTOBER 2017 DATE			ES		/EN STF
	hoairu		DESI	I WIJAYAMANNA	19/09/2019	PLAN:		: 200		-STREET
	7 Ci	ity Council	DRAN	I WIJAYAMANNA	DATE 19/09/2019	HOR: VERT: SECTIONS:		: 500 : 100	LAY	OUT PLAN
		H. (02) 4429 3111 AX. (02) 4422 1816			DATE DATE		AHD —	MGA	CLIENT:	
	IF IN D	BLE YOUR TROUBLE OUBT ASKI OT SCALE	APPF	ROVED:				DATE	FILE:	WEN ST, HUSKISSO
	6	7		3	8			9		



Existing: 76 spaces

Proposed: | 118 spaces (net gain of 42 spaces)

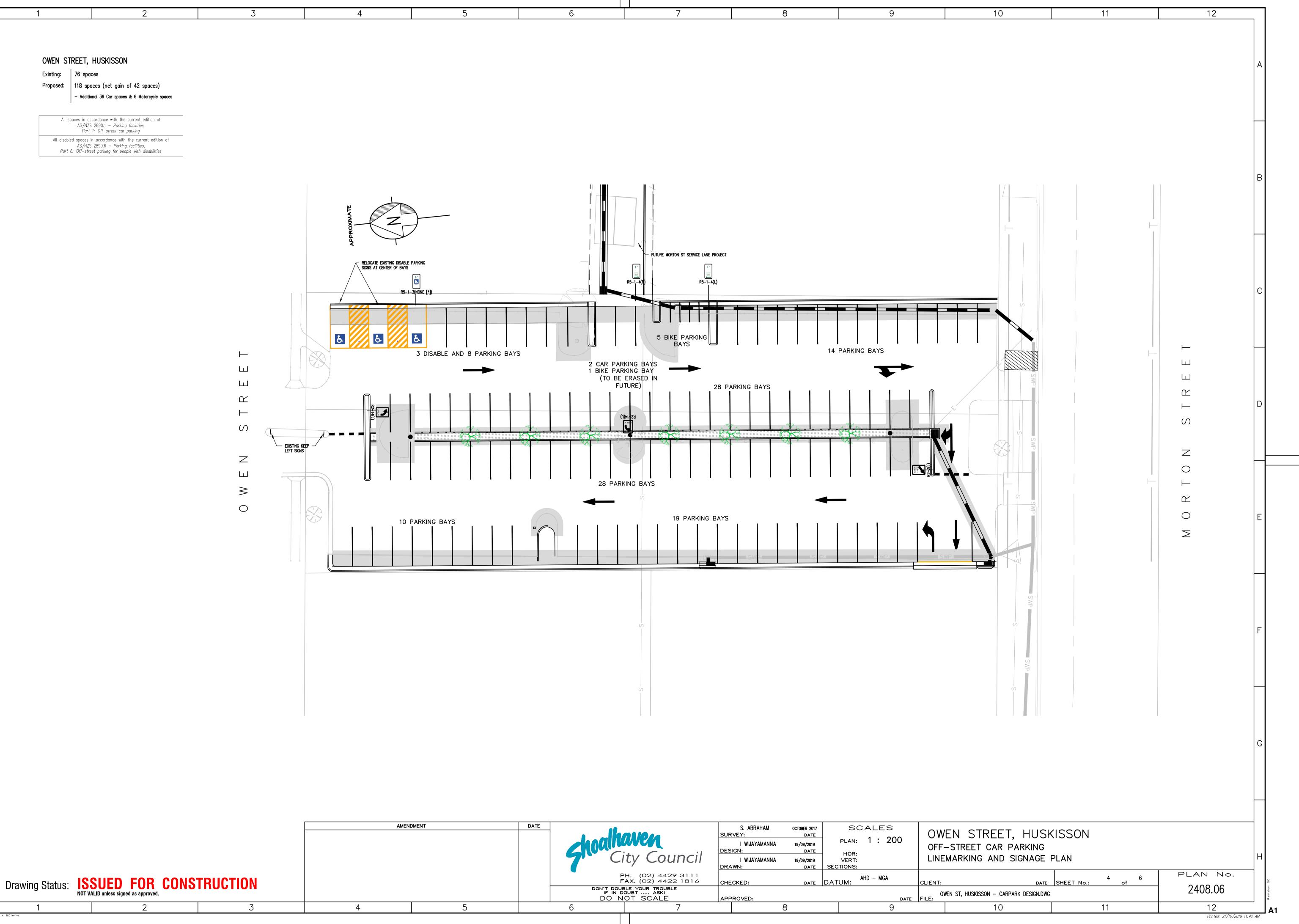
– Additional 36 Car spaces & 6 Motorcycle spaces

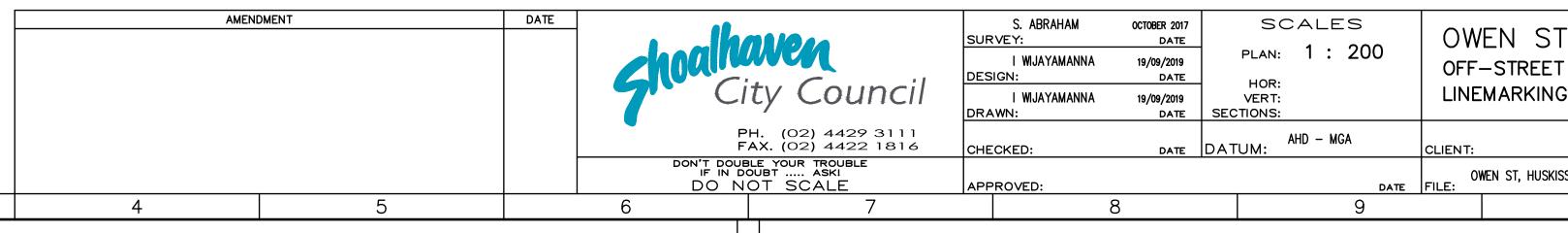
2

2

All spaces in accordance with the current edition of AS/NZS 2890.1 — Parking facilities, Part 1: Off-street car parking

			5		
All disabled	spaces in accordance	with the	current	edition	of
	AS/NZS 2890.6 - F				
Part 6:	Off-street parking fo	r people i	with disc	bilities	





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GENERAL NOTES

- 1. All work is to be carried out in accordance with Council's Development Construction Specification and Supplement to DCP No. 100.
- 2. All works are to be conducted to the requirements of the superintendent.
- 3. Surfaces that lie outside the general limits of works, which are disturbed, are to be restored at least to their pre-construction condition by the contractor.
- 4. Unless otherwise noted, all levels shown are finished surface levels, where applicable the contractor shall allow for the thickness of the varied specified finishes.
- 5. The contractor shall provide all labour, materials and equipment necessary for the accurate setting out of the entire works and shall ensure that all surfaces are constructed to the correct levels.
- 6. All setout, to be approved by Council's superintendent prior to construction.
- 7. The contractor shall not give less notice than that noted in the construction specification when requesting an inspection. The contractor shall arrange for the work to be inspected by the superintendent, or their representatives:
- * following site establishment prior to commencement of any works;
- * following boxing for pavement;
- prior to pavement sealing / asphalting;
- * after final restoration prior to practical completion.
- 8. The superintendent will provide approval under Section 138 of the Roads Act 1993 prior to commencing construction within all road reserves. Traffic control plans are to be submitted to the superintendent prior to construction work commencing.
- 9. Traffic control measures shall be provided in accordance with AS 1742.3 & SCC requirements.
- 10. The contractor is responsible for arranging for inspections by Council's authorised representative at the timing and following the procedure outlined in Council's letter of approval.
- 11. The contractor shall ensure that the residents adjacent to the construction zone are not affected by dust or undue noise during construction and are not deprived of all-weather access nor are subjected to additional stormwater runoff at all times during construction.
- 12. The contractor shall not disturb any survey control marks. Should any survey control mark be disturbed or obliterated, the contractor shall notify the superintendent immediately. The contractor shall have the marks replaced at their own expense.
- 13. Refer any design discrepancies to the Design Engineer for clarification.
- 14. Pedestrians must be protected from hazards at all times. Direct pedestrians & road users away from unsafe construction using approved safety management plan.

UNDERGROUND UTILITY SERVICES

- 1. Not all utility services are shown. Underground utilities have not been physically located & approximate locations only are provided. It is the constructors responsibility to;
 - Identify the location of existing subsurface infrastructure by contacting asset owners including using DIAL BEFORE YOU DIG.
 - Physically locate all subsurface utility services that are likely to conflict with the proposed works.
 - Ensure all utility services are protected from damage during the construction period.
 - Obtain & comply with all utility service authorities requirements, particularly in regards to working near their assets.
 - Adjust service locations as required. Repair any damage to services or Council infrastructure.

EROSION AND SEDIMENT CONTROL PLAN

- 1. Erosion & sediment control measures shall comply with the 4th edition of *Managing* Urban Stormwater: Soils and Construction (Landcom, March 2004).
- All trees must be protected from damage unless shown to be removed. 2.
- 3. Topsoil must be stripped and stockpiled in nominated locations for reuse in accordance with (SD 4-1). Sediment fences must be installed on the downstream side of material stockpiles.
- 4. Topsoil shall generally be stockpiled on the high sides of works for reuse to re-spread on after formation. All stockpiles are to be protected from erosion.
- 5. All disturbed areas shall be revegetated immediately using kikuyu turf following formation.
- 6. For the duration of the construction period all sediment devices shall be maintained and retained in a fully functional condition.
- 7. Any disturbed bare areas where final stabilisation will not commence immediately shall be temporarily stabilised or grass seeded within 15 days.
- 8. Install sediment fences (SD 6-8) downstream of disturbed areas and stockpiles.
- 9. Install mesh and gravel inlet filter (SD 6–11) at kerb inlet pits.
- 10. Install geotextile inlet filter (SD 6-12) at stormwater inlet pits.
- 11. Construct energy dissipater (SD 5-8) at all stormwater outlets / in location shown on drawings.
- 12. All bare areas to be turfed or seeded immediately after finish surface levels have been obtained.
- 13. Refer to Project Plan for standard erosion & sediment control drawings applicable to this project.

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SURVEY NOTES

- 1. Boundaries and improvements have been located with approximate accuracy purpose of this survey.
- 2. Relationships of improvements to boundaries for financial or any other pu should be confirmed by further survey by a registered surveyor.
- 3. The location of underground services between locating marks shown on this indicative only.
- 4. It is your responsibility to locate underground services by careful hand potprior to any excavation and exercise due care during that excavation.

EARTHWORKS

- 1. The contractor shall provide to the superintendent in writing their p construction methodology including details on how the required building pla and compaction requirements will be achieved.
- 2. Strip topsoil, vegetable matter and rubble to expose naturally occurring and stockpile on site as directed by the superintendent.
- 3. Where filling is required to achieve design subgrade, proof roll exposed surface with a minimum of ten passes of a vibrating roller (minimum static of 10 tonnes) in the presence of the superintendent.
- 4. All soft, wet or unsuitable material is to be removed as directed superintendent and replaced with approved material satisfying the require listed below.
- 5. Provide certificates verifying the quality of imported material fo superintendent's approval.
- 6. All fill material shall be placed in maximum 200mm thick layers and compac optimum moisture content $(\pm 2\%)$ to achieve a dry density determine accordance with AS 1289.5.3.1 of not less than the following standard m dry density in accordance with AS 1289.5.1.1.
 - 6.1. Under building slabs 98% SMDD
 - 6.2. Landscaped areas 95% SMDD
 - 6.3. Road and paved areas 98% SMDD
- 7. Testing of the subgrade for buildings shall be carried out by an approved registered laboratory and in accordance with the latest version of AS 3798 building Type 1 operations.
- Allow the following compaction testing by NATA registered laboratory for pla 8. and fill layers. In accordance with the latest version of AS 3798 - for operations. (minimum 3 tests per layer).
- 9. Where test results are below the specified compaction, re-compact and retes specified compaction standard is achieved.
- 10. Allow for excavation in all materials as found U.N.O. No additional payment made for excavation in wet or hard ground.
- 11. Where there is insufficient excavated material suitable for filling or su replacement, the contractor is to allow to import fill. Imported fill shall with the following:
- 11.1. Maximum size 50mm. passing 75µm sieve (< 25%)
- 11.2. Plasticity Index 2 15% and CBR > 8
- 11.3. Free from organic and perishable matter
- 12. Refer to the geotechnical report for general requirements on site preparation reuse of existing site material as enaineered fill.
- 13. The contractor shall program the earthworks operation so that the working are adequately drained during the period of construction. The surface sl graded and sealed off to remove depressions, roller marks and similar which allow water to pond and penetrate the underlying material. Any damage re from the contractor not observing these requirements shall be rectified cost.
- 14. It is the responsibility of the contractor to ensure and maintain the integrity services, conduits and pipes during construction, specifically during the bac and compaction procedure. Any and all damage to new or existing service result of these works shall be repaired by the contractor at no extra cost.
- 15. Testing of the subgrade shall be carried out by an approved NATA reg laboratory at the contractors expense.
- 16. Backfill all trenches under new roads, pavements, paths and buildings with subbase material compacted to 98% SMDD to subarade level.
- 17. Saw cut existing surfaces prior to excavation. Backfill all trenches under roads, pavements and paths with stabilised sand 5% cement or DGS40 mater cement) compacted in 200mm thick layers to 95% MMDD, (top 150mm com to 98% MMDD to underside of pavement).
- 18. Backfill all trenches not under roads, pavements, paths and buildings with ap excavated imported material compacted to 95% SMDD.

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AMENDMENT

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Sieve Size (mm)	19.0	2.36	0.60	0.30	0.15	0.075
% Mass Passing	100	100-50	90-20	60–10	25–0	10–0

ROAD CONSTRUCTION NOTES		ATION – TYPE HS2 SUPPORT e with AS/NZS 3725 – Design for installation of buried	SUBGRADE NOTES		/
1. All work is to be carried out in accordance with Council's Development Con Specification and Supplement to DCP No. 100.	concrete pipes.	, .	dry density, (AS 1289.5.1.1, 5	cted to achieve a minimum 100% standard maxim 5.4.1), at a moisture content within 2% of stand	ndard
 All works are to be conducted to the requirements of the superintendent. All suitable green waste is to be mulched and reused onsite for soil sta 	shall be assessed for den	excavation, the soil type in which the trench is excavated nsity and stiffness, to the satisfaction and approval of the	Engineer.	truction is to be obtained from the Geotechr	
(temporary or permanent). Any green waste not suitable for mulching i removed to an approved site for disposal. No green waste is to be burnt	s to be If it is established that	the natural ground will provide effective side support, the trench condition and embankment condition shall be as	and replace using selected im	et or unsuitable areas identified during proof ro ported fill compacted in layers not exceeding 200 0% standard compaction as specified above.	
4. The depth of pavement material shall be as determined by subgrade testing accordance with pavement design. The type of material is to be appr	g and in shown on the drawings. oved by 2 Excavation shall be to lin	ne and level shown on the drawings, to provide for a pipe	3. Any fill required to raise level	s to underside of pavement formation to be appro in layers not exceeding 200mm measured loose	
Council. All disturbed areas including batters, table drains and footpath a to be topsoiled, fertilised and seeded to the satisfaction of the superintend	ent. bed zone, for the trench			andard maximum dry density at a moisture con	
5. Surfaces that lie outside the general limits of works, which are disturbed be restored at least to their pre-construction condition by the contractor.	, are to or 150mm for pipe	e nominal diameter > 1500mm.		of imported well—graded material with a maxin 30% less than 20mm, and a soaked CBR greater t	
6. Unless otherwise noted, all levels shown are finished surface levels, where a the contractor shall allow for the thickness of the varied specified finishes.	reveal material, which in	the required foundation at the bottom of the bed level the opinion of the Superintendent is unsuitable, the trench to a depth required to remove the unsuitable material and	15% and plasticity index less		
7. The contractor shall provide all labour, materials and equipment necessar the accurate setting out of the entire works and shall ensure that all surf	nces are	naterial conforming to the requirements for the Bed Zone. consist of sand and/or gravel complying with the following	prior approval from the Superi	-	
constructed to the correct levels.8. All setout to be approved by Council's superintendent prior to construction.	grading:	19.0 2.36 0.60 0.30 0.15 0.075	LINEMARKING & SIGNAGE N	IOTES	
9. The contractor shall not give less notice than that noted in the con specification when requesting an inspection. The contractor shall arrange	struction % Mass Passing	100 100-50 90-20 60-10 25-0 10-0 ssing the 0.075mm sieve having low plasticity as described	1. All linemarking and signage	to be in accordance with Shoalhaven City Cou	
work to be inspected by the superintendent, or their representatives: * following site establishment — prior to commencement of any works;	in Appendix D of AS 1726	6.	requirements, RMS guidelines <i>devices</i> .	& AS 1742 – Manual of uniform traffic cor	ntrol
 * following boxing for pavement; * following proof rolling of subbase; 	above grading limits may	is defined in AS 3725 which does not conform with the y be used provided that it is stabilised. Details of the erial shall be approved by the Superintendent prior to		gulatory) to be in accordance with AS 1742.2. g shall be in thermoplastic with retroreflective g	alass (
 * following final trimming of sub-base; * following final trimming of base; 	installation.	placed to the final required thickness of 100mm for pipe	beads.	y shan be in thermoplastic with retrorenective y	
 following trenching and preparation for pipe & culvert extensions (placement); 	prior to nominal diameter less t diameter greater than 15	han or equal to 1500mm or 150mm for pipe nominal 000mm. The bed material shall extend over the full width			
 prior to pouring concrete; prior to pavement sealing; 	of the trench and shall minimum Density Index (D	be compacted by tamping, rolling and/or vibration to a DI) of 60.	PAVEMENT NOTES	be constructed in accordance with SCC specificat	tions
 after final restoration prior to practical completion. Primer seal design shall achieve a minimum of 8 months serviceability. 	Compaction achieved sh Superintendent.	all be monitored by field testing as directed by the	and C242b for a traffic categ	ory 2C. The base material shall meet DGB20. acted to a minimum of 98% modified compaction	
		raded to provide a uniform fall to the discharging end of I level as shown on the drawings.	accordance with the current e		
SUBGRADE NOTES	be dug into the bed and	protruding beyond the barrel outside surface, chases shall d foundation if necessary, in the appropriate positions, so	Davament Thiskness	Decian	
1. The subgrade shall be compacted to achieve a minimum 100% standard n dry density, (AS 1289.5.1.1, 5.4.1), at a moisture content within 2% of	naximum not subjected to point loo standard	·	Pavement Thickness I	Owen Street Car Park Huskisson	[
optimum, or alternative instruction is to be obtained from the Geo Engineer.	Haunch Zone, Overlay Zon	ried out in three stages and these are to be identified as ne, and Backfill or Embankment fill.	Design Traffic (DESA)	N/A	
 Remove any soft, heaving or unsuitable areas identified during proof rol replace using selected imported fill compacted in layers not exceeding measured loose to achieve 100% standard compaction as specified above. 		xtend from the top of the Bed Zone up to 0.3 times pipe all be fill material complying with the requirements shown	Design Subgrade CBR (%) Subbase	3.0 150 (DGS40)	
 Any fill required to raise levels to underside of pavement formation to be granular material compacted in layers not exceeding 200mm measured 	approved 10. The material shall be pla	nced over the full width of the trench either in layers not cted thickness and compacted by conventional methods or	Base	150 (DGB20)	-
granular material compacted in layers not exceeding 200mm measured achieve a minimum 100% standard maximum dry density at a moisture within 2% of standard optimum.		ation by saturation and vibration to achieve a minimum	Primer Seal Wearing Course	- 40 (AC 10)	
4. Imported fill is to consist of imported well—graded material with a m particle size of 75mm, with 80% less than 20mm, and a soaked CBR grea		all be monitored by field testing as directed by the			
15% and plasticity index less than 12%. 5. Do not proceed with any earthworks which will be subject to a variation	without pipe outside diameter and	nd from the top of the Haunch Zone up to 0.7 times the d shall consist of fill material complying with the following			E
prior approval from the Superintendent.	grading: Sieve Size (mm)	75 9.5 2.36 0.60 0.075			
STORMWATER DRAINAGE	•	100 100-50 100-30 50-15 25-0 aced over the full width of the trench either in layers not			
 Stormwater drainage shall be in accordance with Council specifications and Australian standards. 	relevant vibration to a minimum R	acted thickness and compacted by tamping rolling or Relative Density (RD) of 90% or minimum Density Index (DI)			_
 All stormwater pipes within road reserves shall be minimum 375 di reinforced concrete pipe (SRCP), rubber ring jointed (RRJ), class 3, laid at 	væ .	all be monitored by field testing as directed by the			
grade U.N.O. 3. Pipes of 225mm diameter and under shall be uPVC class SN6 laid at 0.	13. The Overlay Zone shall ex	xtend from the top of the Side Zone up to 300mm above			
 grade U.N.O. Minimum cover to pipes 300mm dia. and greater shall be 600mm under c 	shall be fill material con	d around the pipe measured radially from any point and isisting of material from the excavation or elsewhere. It ones larger than 150mm, nor more than 20% with a size			
 and roads U.N.O. Pipes laid at grades over 16% shall have concrete bulkheads at all joints. 	between 75mm and 150m				
6. Hand excavate stormwater pits in the vicinity of tree roots.	the ground surface level of				
7. Compaction testing shall be carried out by a NATA certified laboratory drainage lines laid wholly or in part under the kerb and gutter or pavement	of any available material	up to finished levels as shown on the drawings.			_
B. A minimum 150mm clearance shall be provided between the outside of and the trench wall.	the pipe				
DATE	S. ABRAHAM OCTOBER 2017 SURVEY: DATE	SCALES OWEN S	TREET, HUSKISSO	N	
Ghoalland City Council	I WIJAYAMANNA 19/09/2019 DESIGN: DATE	OFF-STREE	T CAR PARKING		
	I WIJAYAMANNA 19/09/2019 DRAWN: DATE S	VERT: CONSTRUC	TION NOTES		
PH. (02) 4429 3111		ATUM: AHD - MGA CLIENT:	DATE SHEET N	5 6 1	N NO.

