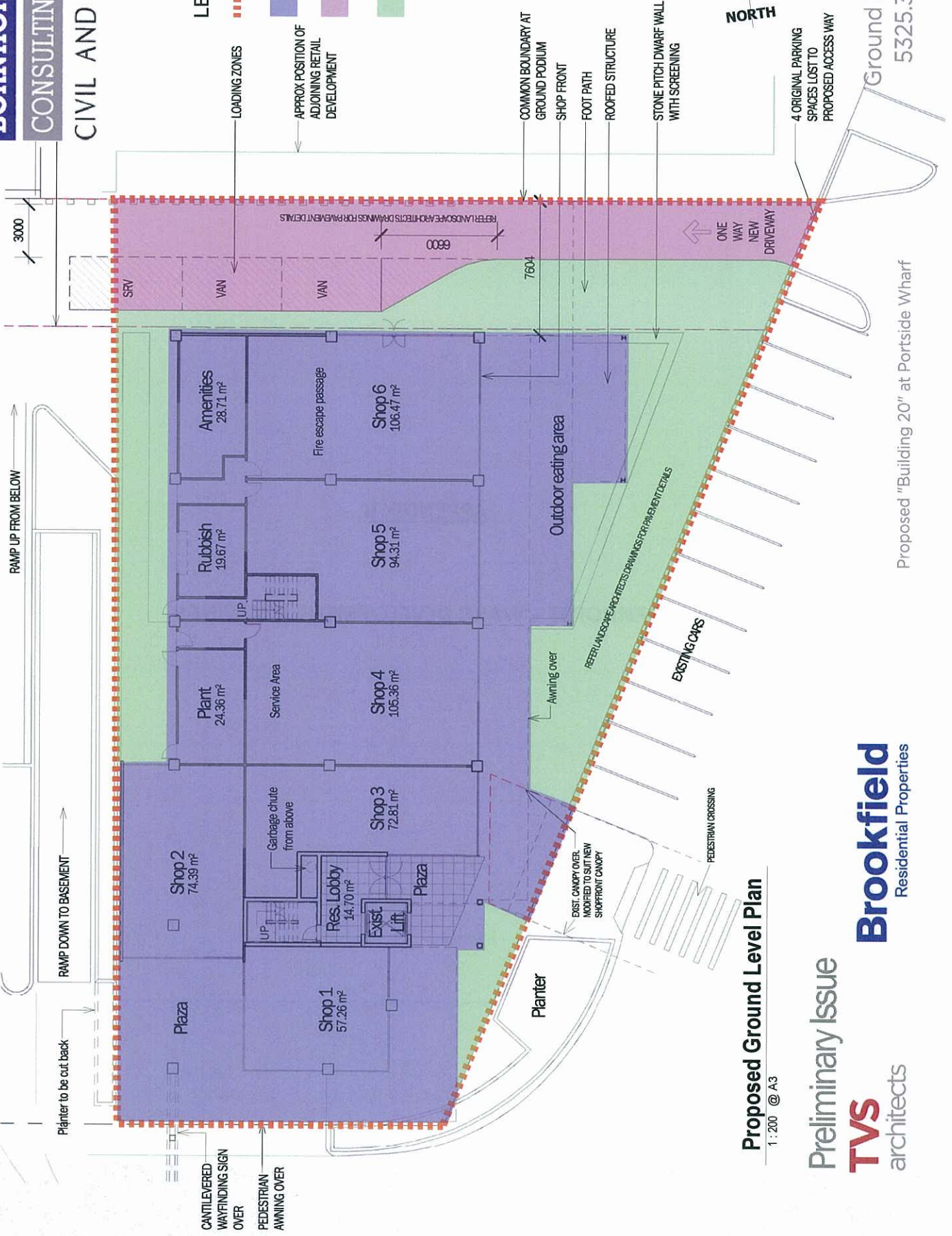


APPENDIX B

BORNHORST + WARD DEVELOPMENT DRAWINGS

SKC-001 - DEVELOPED CATCHMENT PLAN

- LEGEND**
- SITE BOUNDARY
 - LOADING ZONES
 - APPROX POSITION OF ADJOINING RETAIL DEVELOPMENT
 - ROOF CATCHMENT
 - ROAD CATCHMENT
 - GROUND FLOOR CATCHMENT



Proposed Ground Level Plan

1:200 @ A3

Preliminary Issue

TVS architects

Brookfield
Residential Properties

Proposed "Building 20" at Portside Wharf
Ground Level Plan
5325.3S.03 - (8)

APPENDIX C

HYDRAULIC CALCULATIONS

INITIAL PEAK FLOW CALCULATIONS

Based on QUDM 4.00 'Catchment Hydrology'
Written by BB 31/10/08

BORNHORST + WARD
CONSULTING ENGINEERS
CIVIL AND STRUCTURAL

Job Number: **11001A**
Job Name: **Portside Wharf
Building 20**

Designed: **TF**
Checked: **NR**

IFD : Gold Coast

Please note:
User Data to be placed in the
Green Cells only

TOTAL RUNOFF COEFF.						
No.	Sub Catchment Area (Ha)		Runoff Coefficients		Calculated C10	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
1	0.155	0.155	0.88	0.9		
2						
3						
4						
5						
	0.155	0.155			0.88	0.90

EXISTING TIME OF CONCENTRATION					
SHEET FLOW					
Std Inlet Time	5				
Site Slope (%)	0				
Flow Length (m)	0				
Horton's "n"	0				
Travel Time (min)	0.00				
Travel Length (m)	0				
Fall (m)	0				
Travel Time (min)	0				
Multiplier	0				
Travel Time (min)	0				
Total Time (Tc)	5.0				

DEVELOPED TIME OF CONCENTRATION					
SHEET FLOW					
Std Inlet Time	5				
Site Slope (%)	0				
Flow Length (m)	0				
Horton's "n"	0				
Travel Time (min)	0.00				
Travel Length (m)	0				
Fall (m)	0				
Travel Time (min)	0				
Multiplier	0				
Travel Time (min)	0				
Total Time (Tc)	5.0				

PEAK RUNOFF CALCULATIONS

ARI Event yr	Rainfall Intensity (mm/hr)		Coefficient of Runoff		Peak Runoff Rates (m ³ /s)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
1	116	116	0.70	0.72	0.035	0.036
2	143	143	0.75	0.77	0.046	0.047
5	167	167	0.84	0.86	0.060	0.061
10	179	179	0.88	0.90	0.068	0.069
20	197	197	0.92	0.95	0.078	0.080
50	220	220	1.00	1.00	0.095	0.095
100	237	237	1.00	1.00	0.102	0.102

PEAK FLOWS FOR FREQUENT EVENTS

ARI Event yr	% of Q1	Peak discharge (m ³ /s)	
		Existing	Proposed
1mth	25%	0.009	0.009
2mth	40%	0.014	0.014
3mth	50%	0.018	0.018
4mth	60%	0.021	0.021
6mth	75%	0.026	0.027
9mth	90%	0.032	0.032
12mth	100%	0.035	0.036

INITIAL DETENTION SIZING

Based on QUDM 5.05.1 'Flood-Routing - Initial Sizing'
Written by SC 31/10/94
updated by BB 31/10/08

BORNHORST + WARD**CONSULTING ENGINEERS****CIVIL AND STRUCTURAL**

Job Number: **11001A**
Job Name: **Portside Wharf Building 20**

IFD : Gold Coast

Designed: **TF**Checked: **NR**

	Critical Time of Concentration t_c min	10 yr ARI Runoff C_{eff} p307-RR C_v	Total Catchment Area ha
Existing	5.00	0.88	0.155
Post-Develop	5.00	0.90	0.155

Flood Event	Volumetric Coeff. of Runoff		Rainfall Intensity		Inflow Volume	Peak outflow capacity or desired peak outflow	Peak Inflow rate by rational method	Reduction ratio	Storage Volume							Time ratio factor 1.25			
	Existing Cv	Post-D'ment Cv	Existing I	Post-Devel I					Vi m^3	Qo m^3/s	Qi m^3/s	r	Vs						
													CULP m^3	BOYD m^3	CARROL m^3		BASHA m^3	Small Basins m^3	Required Volume m^3
yr																			
3mth	0.70	0.72	58	58	7	0.018	0.018											7	
1	0.70	0.72	116	116	14	0.035	0.036	0.02										0	
2	0.75	0.77	143	143	19	0.046	0.047	0.02										1	
5	0.84	0.86	167	167	25	0.060	0.061	0.02										1	
10	0.88	0.90	179	179	28	0.068	0.069	0.02										1	
20	0.92	0.95	197	197	32	0.078	0.080	0.02										1	
50	1.00	1.00	220	220	38	0.095	0.095	0.00										0	
100	1.00	1.00	237	237	41	0.102	0.102	0.00										0	

assumes $i \leq 4$ or $i \leq T_c / 3$ where i is flow from rational method (QUDM 5.05.1) and T_c is in seconds for this equation only.
ie $C_v \leq 1.33$ or C_v which is conservative or SLD.

APPENDIX D

MUSIC DATA

Table 1: Recommended MUSIC Rainfall-runoff Parameters

Parameter	Commercial
Rainfall Threshold (mm/day)	1
Soil Storage Capacity (mm)	18
Initial Storage (% of Capacity)	10
Field Capacity (mm)	80
Infiltration Capacity Coefficient – a	243
Infiltration Capacity Exponent – b	0.6
Initial Depth (mm)	50
Daily Recharge Rate (%)	0
Daily Drainage Rate (%)	31
Daily Deep Seepage Rate (%)	0

Table 2: Pollutant Export Parameters

Land Use Type	Parameter	TSS (Log ₁₀ mg/L)		P (Log ₁₀ mg/L)		N (Log ₁₀ mg/L)	
		Base Flow	Storm Flow	Base Flow	Storm Flow	Base Flow	Storm Flow
Commercial Roof	Mean	0	1.3	0	-0.89	0	0.37
	Std Dev	0	0.38	0	0.34	0	0.34
Commercial Road	Mean	0.78	2.43	-0.60	-0.30	0.32	0.37
	Std Dev	0.39	0.38	0.50	0.34	0.30	0.34
Commercial Ground Floor	Mean	0.78	2.16	-0.60	-0.39	0.32	0.37
	Std Dev	0.39	0.38	0.50	0.34	0.30	0.34

Table 3: GPT Parameters

Parameter	Input	Output
Low Flow By-pass (m3/s)	0	
High Flow By-pass (m3/s)	100	
TSS (mg/L)	1000	200
TP (mg/L)	10	8
TN (mg/L)	100	80
Gross Pollutants (kg/ML)	10	1

	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.66	1.41	15.1
Peak Flow (m3/s)	58.3E-3	94.4E-3	-62.0
Total Suspended Solids (kg/yr)	190	27.2	85.7
Total Phosphorus (kg/yr)	0.538	0.193	64.2
Total Nitrogen (kg/yr)	5.31	2.83	46.6
Gross Pollutants (kg/yr)	38.4	0.00	100.0



APPENDIX E

COUNCIL CODES

STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
General						
P1 The planning of the stormwater management system must provide for the integrated management of stormwater in order to: • minimise flooding • protect and enhance environmental values of receiving waters • maximise the use of water sensitive urban design principles • maximise the use of natural waterway corridors and natural channel design principles • maximise community benefit • minimise public safety risk	A1.1 The proposal complies with the Subdivision and Development Guidelines .	A1.2 A Site Based Stormwater Management Plan (SBSMP) is prepared for all major and minor stormwater management measures. The SBSMP must provide for the following where applicable: • an underground and/or open drain/overland flowpath network maximising the use of natural channel design and water sensitive urban design principles • make provision for detention/retention storage basins • an Erosion and Sediment Control (ESC) Program where required by Council's Erosion and Sediment Control Standard • retention of natural waterway corridors • public safety factors and risk management measures • an acceptable level of flood immunity	✓	The proposal complies with the Subdivision and Development Guidelines . A Site Based Stormwater Management Plan (SBSMP) has been prepared and submitted as part of this Development Application for all major and minor stormwater management measures.		

1. Solution: ✓ = Acceptable Solution
 A/S = Alternative Solution
 N/A = Not applicable to this proposal

STORMWATER MANAGEMENT CODE

Performance Criteria and Acceptable Solution

Job Ref No.: 12083C

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTIONS ¹		COMMENTS	COUNCIL USE ONLY
		A1.3 The proposal complies with any Stormwater Management Plan (SMP), Local Stormwater Management Plan (LSMP) or Waterways Management Plan (WMP) prepared by Council <i>Note: The Subdivision and Development Guidelines provide guidance on the level of information required for different development types.</i>		N/A			
Flooding							
P1 The proposed stormwater management system or site works must not adversely impact on flooding or drainage of properties that are upstream, downstream or adjacent to the subject site		A1 The proposal meets the requirements of Council's Subdivision and Development Guidelines and does not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties <i>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report (as part of a SBSMP) identifying potential flooding impacts on upstream, downstream or adjacent properties</i>		✓		The proposal meets the requirements of Council's Subdivision and Development Guidelines and does not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties.	

1. Solution: ✓ = Acceptable Solution

A/S = Alternative Solution

N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
P2 The drainage network must provide capacity to safely convey stormwater run-off resulting from relevant design storm events taking into account increased run-off from roof drainage	A2.1 The design demonstrates that a drainage network will be provided that will comply with Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by identifying the conceptual drainage requirements for the proposal in a SBSMP.</i> A2.2 The design allows sufficient area to provide for a drainage network that will comply with Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report (as part of a SBSMP) identifying the area required to accommodate the drainage network</i>	✓ ✓	The design demonstrates that a drainage network will be provided that will comply with Council's Subdivision and Development Guidelines. Conceptual drainage requirements for the proposal are identified in the SBSMP. The design allows sufficient area to provide for a drainage network that will comply with Council's Subdivision and Development Guidelines.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
P3 Development design must reduce property damage and, where applicable, ensure public safety by ensuring that the development levels are set above the relevant design flood level or storm surge level	A3.1 All development is located above minimum flood immunity levels in accordance with Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels (as part of a SBSMP).</i> A3.2 Road access is provided in accordance with the flood immunity levels identified in Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels.</i>	✓ ✓	All development will be located above the minimum flood immunity levels in accordance with Council's Subdivision and Development Guidelines. Road access will be provided in accordance with the flood immunity levels identified in Council's Subdivision and Development Guidelines.	

1. Solution: ✓ = Acceptable Solution

A/S = Alternative Solution

N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Performance Criteria and Acceptable Solution

Job Ref No.: 12083C

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
P4 Any channel works that are part of the development, major drainage works or flood mitigation works must maintain and/or enhance the environmental values of the waterway corridor or drainage corridor	A4 Design and construction of channel works incorporate water sensitive urban design and natural channel design features which will comply with: - Council's Subdivision and Development Guidelines, and - where applicable any SMP, LSMP or WMP prepared by Council <i>Note: Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any channel works (as part of a SBSMP)</i>	N/A		The proposed development does not have any channel works.		
P5 Erosion treatment works along waterway banks and associated drainage structures must maintain or enhance the environmental values of waterways	A5 Design and construction of erosion treatment features incorporate natural channel design features which will comply with: - Council's Subdivision and Development Guidelines, and - Council's Urban Creek Erosion — Guidelines for Selecting Remedial Works <i>Note: Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any erosion treatment works (as part of a SBSMP)</i>	✓		A Detailed Erosion and Sediment Control Program will be prepared and submitted during the Operation Works phase of the development.		

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
P6 Bridges and culverts provided for flood immunity to minimise traffic disruption must improve public safety and allow for fauna movement and recreation corridors where these needs are identified		A6 The design complies with Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any bridge or culvert works (as part of a SBSMP).</i>		N/A	Neither bridges nor culverts are proposed for this development.	
P7 The design and construction of detention and retention storage features must: • achieve acceptable impacts on environmental values • provide for recreational use where possible • achieve acceptable risk to public safety and property		A7 The design complies with Council's Subdivision and Development Guidelines and where applicable any SMP, LSMP or WMP prepared by Council. <i>Note: Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any detention and retention storage features (as part of a SBSMP).</i>		✓	The design complies with Council's Subdivision and Development Guidelines .	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Water Quality and Drainage Low Risk Development					
P1	Water quality impacts must be minimised using best practice techniques	A1.1 The design provides for stormwater quality best management practices that are sufficient to treat the target pollutants and will comply with the Council's Subdivision and Development Guidelines. <i>Note: Compliance with this acceptable solution can be demonstrated by indicating the areas that are to be set aside for water quality best management practices. For most development this can be achieved by determining pollutant loads using hand calculations as set out in Council's Guidelines for Pollutant Export Modelling in Brisbane and identifying the type and size of stormwater quality best management practices based on their efficiencies identified in Council's Subdivision and Development Guidelines.</i>	✓	A Stormwater360 StormFilter (or equivalent) is to be incorporated within the development to treat the target pollutants. The design complies with the Council's Subdivision and Development Guidelines. Refer to the SBSMP for the results of the effectiveness of the stormwater treatment train.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

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Portside Wharf Building 20

STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	A1.2 Stormwater quality best management practices are designed, constructed and maintained in accordance with Council's Subdivision and Development Guidelines <i>Note: Compliance with this acceptable solution can be demonstrated by providing conceptual detail of how stormwater quality will be managed (as part of a SBSMP).</i>	✓		
P2 Release of sediment laden stormwater is minimised	A2 All development complies with Council's Erosion and Sediment Control Standard <i>Note: Compliance with this acceptable solution can be demonstrated by providing conceptual details of how the requirements of Council's Erosion and Sediment Control Standard will be met (conceptual SBSMP). This will generally be conditioned and may require the submission of a subsequent detailed SBSMP for operational works</i>	✓	The proposed development will comply with Council's Erosion and Sediment Control Standard . An Erosion and Sediment Control Plan will be submitted in the detailed design phase of the development. Strategies that will be implemented have been outlined in the SBSMP.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

STORMWATER MANAGEMENT CODE

Performance Criteria and Acceptable Solution

Job Ref No.: 12083C

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
High Risk Developments P3 Environmental values and water quality objectives of receiving waters within or downstream of the proposal are protected or enhanced	A3.1 Relevant water quality objectives for receiving waters are identified and site specific discharge standards met <i>Note: Compliance with this acceptable solution may be demonstrated by following the process outlined in the Management of Urban Stormwater Quality Planning Scheme Policy. This can be documented in a SBSMP.</i> A3.2 The design provides for stormwater quality best management practices that are sufficient to treat the target pollutants and will comply with the Council's Subdivision and Development Guidelines. A3.3 Stormwater quality best management practices are designed, constructed and maintained in accordance with Council's Subdivision and Development Guidelines. <i>Note: Compliance with this acceptable solution can be demonstrated by providing conceptual detail of how stormwater quality will be managed (as part of a SBSMP).</i>	✓	A Site Based Stormwater Management Plan has been prepared for the site. Measures shall be implemented to help provide best management practices for the site.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

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STORMWATER MANAGEMENT CODE

Job Ref No.: 12083C

Performance Criteria and Acceptable Solution

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
P4 Release of sediment laden stormwater is minimised	A4 All development complies with Council's Erosion and Sediment Control Standard <i>Note: Compliance with this Performance Criteria/Acceptable Solution can be demonstrated by providing conceptual details of how the requirements of Council's Erosion and Sediment Control Standard will be met (conceptual SBSMP). This will generally be conditioned and may require the submission of a subsequent detailed SBSMP for operational works</i>	✓	A detailed Erosion Sediment Control Plan will be prepared in accordance with Brisbane City Council Guidelines. The ESCP shall be prepared during the Operational Works phase of the development.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this proposal

Portside Wharf Building 20

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SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTION ¹	COMMENTS	COUNCIL USE ONLY
Road construction						
P1 Land used for urban purposes must be serviced adequately with regard to water, waste disposal, drainage, telecommunication and energy.	A1 The land is provided with: • Reticulated water, sewerage, drainage, electricity and telephone services. • Gas service where reasonable.	✓	Stormwater:- Stormwater infrastructure is present within the vicinity of the site. 600mm dia stormwater drains are present within Hercules Street, north of the site and stormwater drains increasing in size from 2 x 1500mm dia to 2100mm dia drains are located east of the site. This infrastructure discharges into the Brisbane River south-east of the site. It is expected that the piped stormwater drainage network currently draining the site discharges into existing infrastructure constructed for the Portside Wharf precinct. The drainage connection currently servicing the site is to be retained to drain the proposed Building 20. It is not anticipated that the proposed development will increase the rate of flow discharged from the site. Therefore existing infrastructure should have sufficient capacity to drain the proposed development. Stormwater drainage is to be designed and constructed in accordance with Brisbane City Council guidelines. Water:- There is an existing 150mm diameter watermain within Hercules Street. It is expected that the existing infrastructure is adequate to service the proposed development.			
			Electricity:- Energen infrastructure is present north of the Building 20 site, within Hercules Street and Lot 998 on SP169071. It is anticipated that this infrastructure will be utilised to provide power to Building 20. This is to			

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this Proposal

Services Works Infrastructure Code

SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTION ¹	COMMENTS	COUNCIL USE ONLY
P2 Frontage to the site must provide the following to an appropriate urban standard: • an effective, high quality paved roadway • an effective, high quality roadway kerb and channel	A2 The following are provided or already exist at the frontage of the site, to the standard that would have applied if the development formed part of a new subdivision: • concrete kerb and channel • forming and grading to walkways	N/A	be confirmed through discussion with Energex as the project progresses. Telecommunications:- Telstra telephone services are located within Hercules Street. Any future upgrading of services is dependent on the details of future development and this would be considered by Telstra at the time of application for the development. Gas:- A medium pressure natural gas main is located north of the site, within the Hercules Street road reserve. It is anticipated that gas may be provided to the site from this main, if desired. This is to be confirmed through discussions with APA Group as the development progresses. Sewerage:- A 225mm dia gravity sewer is situated within Hercules Street, north of the site. A house connection is available from this sewer to Lot 998 on SP169071. Therefore it is proposed to service the development from this sewer connection via internal plumbing. Discussions are to be held with QUU to determine capacity and if upgrades are required.. Roadworks are not proposed for the development. The site does not front Council land. The proposed development is to be constructed in accordance with Council guidelines.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this Proposal

Services Works Infrastructure Code

SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTION ¹	COMMENTS	COUNCIL USE ONLY
• safe, high quality crossings over channels and walkways • safe, accessible high quality bikeways • a safe, accessible, high quality public walkway compatible and integrated with the surrounding environment • provision of and alteration to required public utilities • effective drainage • appropriate conduits to facilitate the provision of required street lighting systems and traffic signals	• crossings over channels and walkways • a constructed bikeway • a constructed walkway, minimum 1.2m wide and full width from the property line to the kerb in Multi-purpose Centres • reconstruction of any damaged public walkway in concrete • construction of the carriageway • payment of costs for required alterations to public utility mains, services or installations • construction of and required alterations to public utility mains, services or installations • drainage works • installation of electrical conduits			
P3 Building design and layout must provide for additional infrastructure to facilitate future telecommunication services and providers (e.g. fibre optic cable)	A3.1 Conduits, cabling or ducting is provided in all residential, community, commercial and industrial buildings of a sufficient diameter to enable two or more carriers to service the building. An underground access connection pit and "lead in" duct is provided in the footpath, plus a conduit from the property boundary to: • a designated entry point in each building	✓	Conduits, cabling or ducting is provided to the residential and retail building of sufficient diameter to enable two or more carriers to service the building. An underground access connection pit and 'lead in' duct is provided in an appropriate located, plus a conduit from the property boundary to: • a designated entry point • each floor and tenancy in multi-occupancy buildings All work is to be in accordance with relevant Building Codes and Australian Standards.	

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this Proposal

Services Works Infrastructure Code

SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	SOLUTION ¹	COMMENTS	COUNCIL USE ONLY
	- each lot in community title developments - each floor and tenancy in multi-occupancy buildings All work is to be in accordance with relevant Building Codes and Australian Standards <i>Note: An accurate, digital 'as built' three dimensional location plan will need to be supplied for all infrastructure provided in the footpath</i> Additional requirements for Multi-unit Dwellings of more than 4 storeys and 20 units or Centre Activities with a gross floor area of 2500m² or greater:	✓	New buildings are provided with: - a co-located equipment room - a central (vertical) riser duct within the core of the building - a telecommunications closet on each floor - distribution by underfloor or suspended ceiling ducts - designated wireless area on roof with structural capability All work is to be in accordance with relevant Building Codes and Australian Standards.	
	A3.2 New buildings are provided with: - a co-located equipment room - a central (vertical) riser duct within the core of the building - a telecommunications closet on each floor - distribution by underfloor or suspended ceiling ducts - designated wireless area on roof with structural capability			

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this Proposal

Services Works Infrastructure Code

Building 20, Portside Wharf Hamilton

SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS		SOLUTION ¹	COMMENTS	COUNCIL USE ONLY
P4	Major public projects promote the provision of affordable, high bandwidth telecommunication services throughout Brisbane	All work is to be in accordance with relevant Building Codes and Australian Standards <i>Note: A signed statement must be submitted to Council by a competent person (as defined in the Standard Building Regulation 1993) confirming that the premises as built complies with these requirements, when final building certification is issued.</i>				
		A4 Conduits are provided in all major Council and government works projects to enable the future provision of fibre optic cabling: • when the additional expense is unlikely to be prohibitive • when further major work is unlikely or disruption would be a major concern eg limited capacity roads • when there is a clear gap in the telecommunication network • when there is a clear gap in the bandwidth available to the area <i>Note: An accurate, digital 'as built' three dimensional location plans will need to be supplied for all infrastructure provided in the road reserve</i>		N/A	The proposed development is not a major public project.	

1. Solution: ✓ = Acceptable Solution
 A/S = Alternative Solution
 N/A = Not applicable to this Proposal

Services Works Infrastructure Code

SERVICES, WORKS AND INFRASTRUCTURE CODE
Performance Criteria and Acceptable Solutions

1. Solution: ✓ = Acceptable Solution
A/S = Alternative Solution
N/A = Not applicable to this Proposal

Building 20, Portside Wharf Hamilton

Services Works Infrastructure Code

