

3.3 PROPOSED FOOTPATH ASSET FAILURE SOLUTIONS

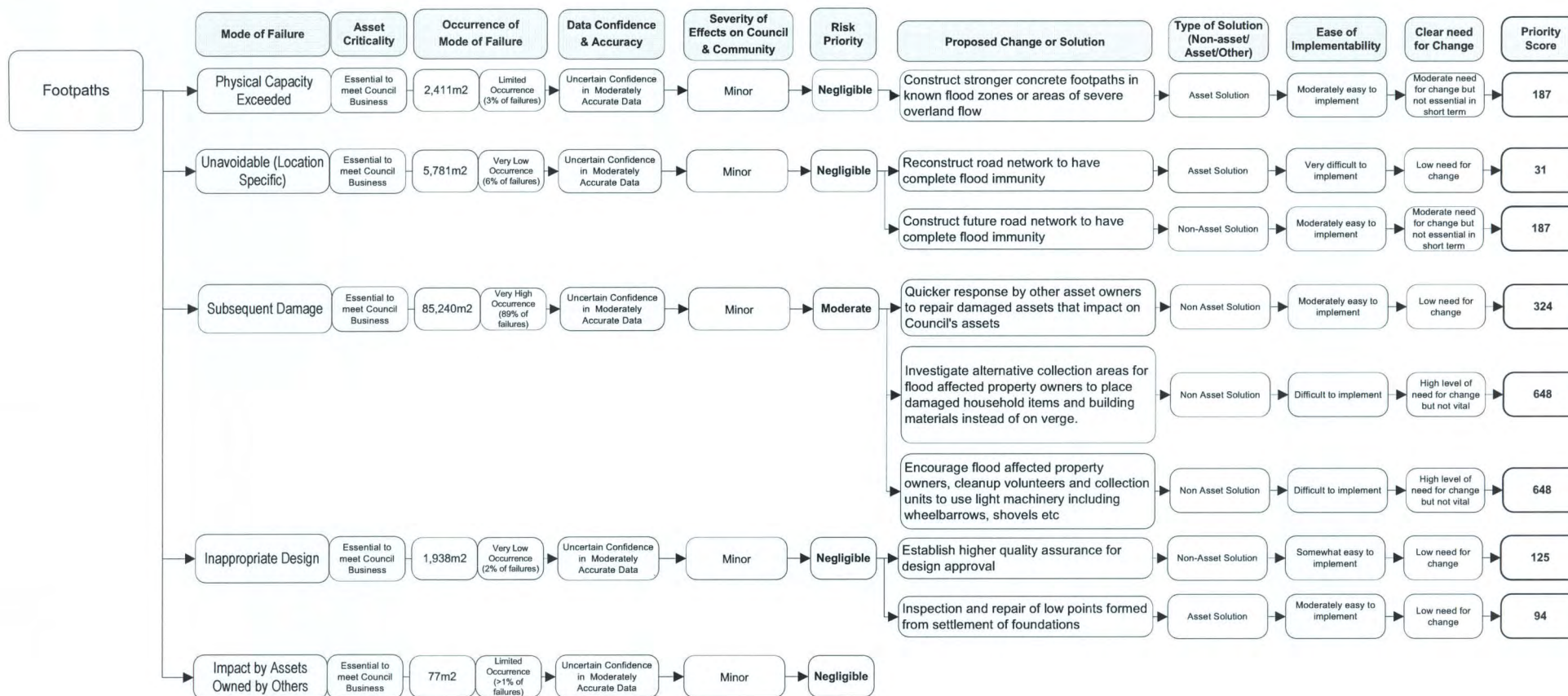


Figure 4: Prioritisation of Proposed Changes and/or Solutions for Footpaths

3.4 PROPOSED TRAFFIC SIGNALS ASSET FAILURE SOLUTIONS

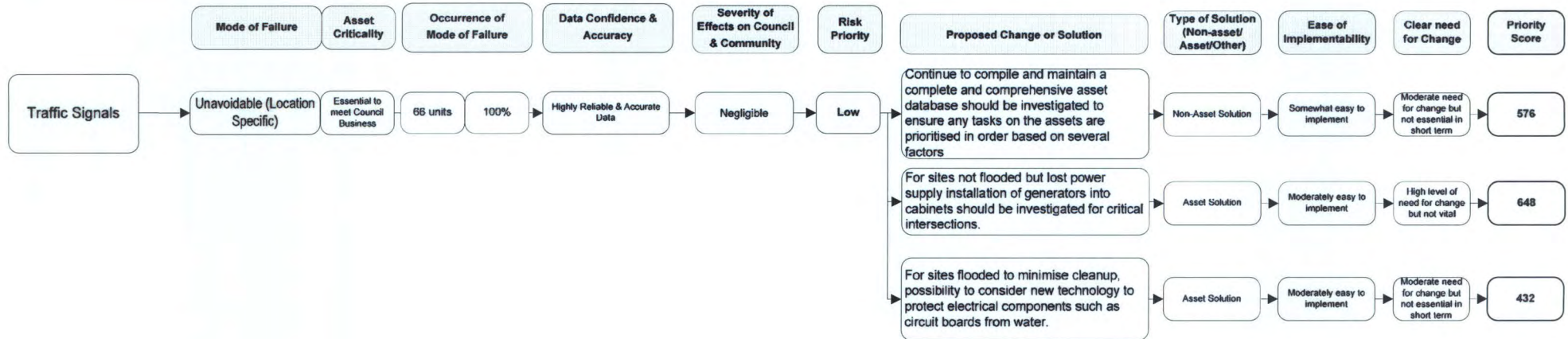
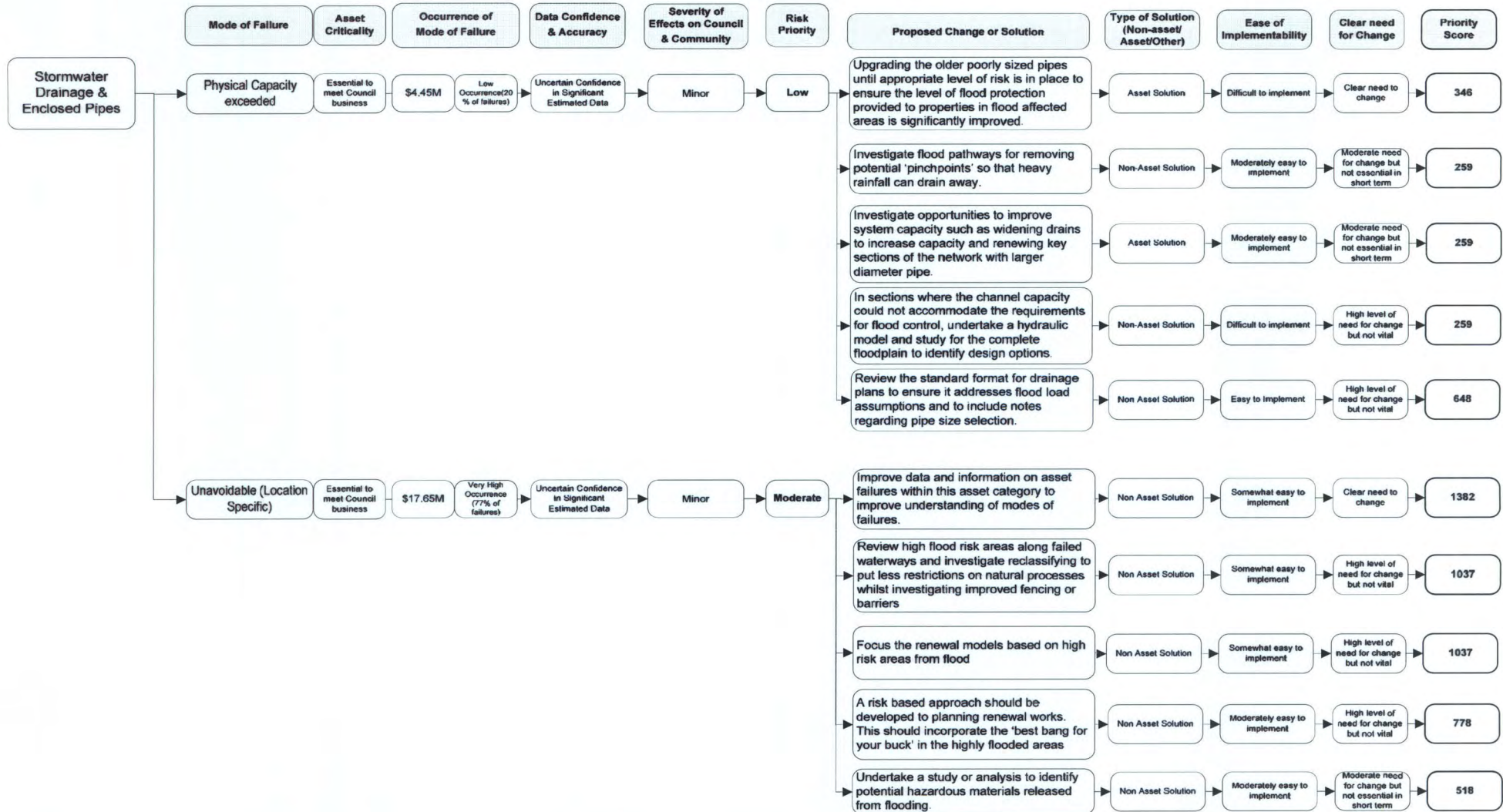


Figure 5: Prioritisation of Proposed Changes and/or Solutions for Traffic Signals

3.5 PROPOSED STORMWATER DRAINAGE & ENCLOSED PIPE ASSET FAILURE SOLUTIONS



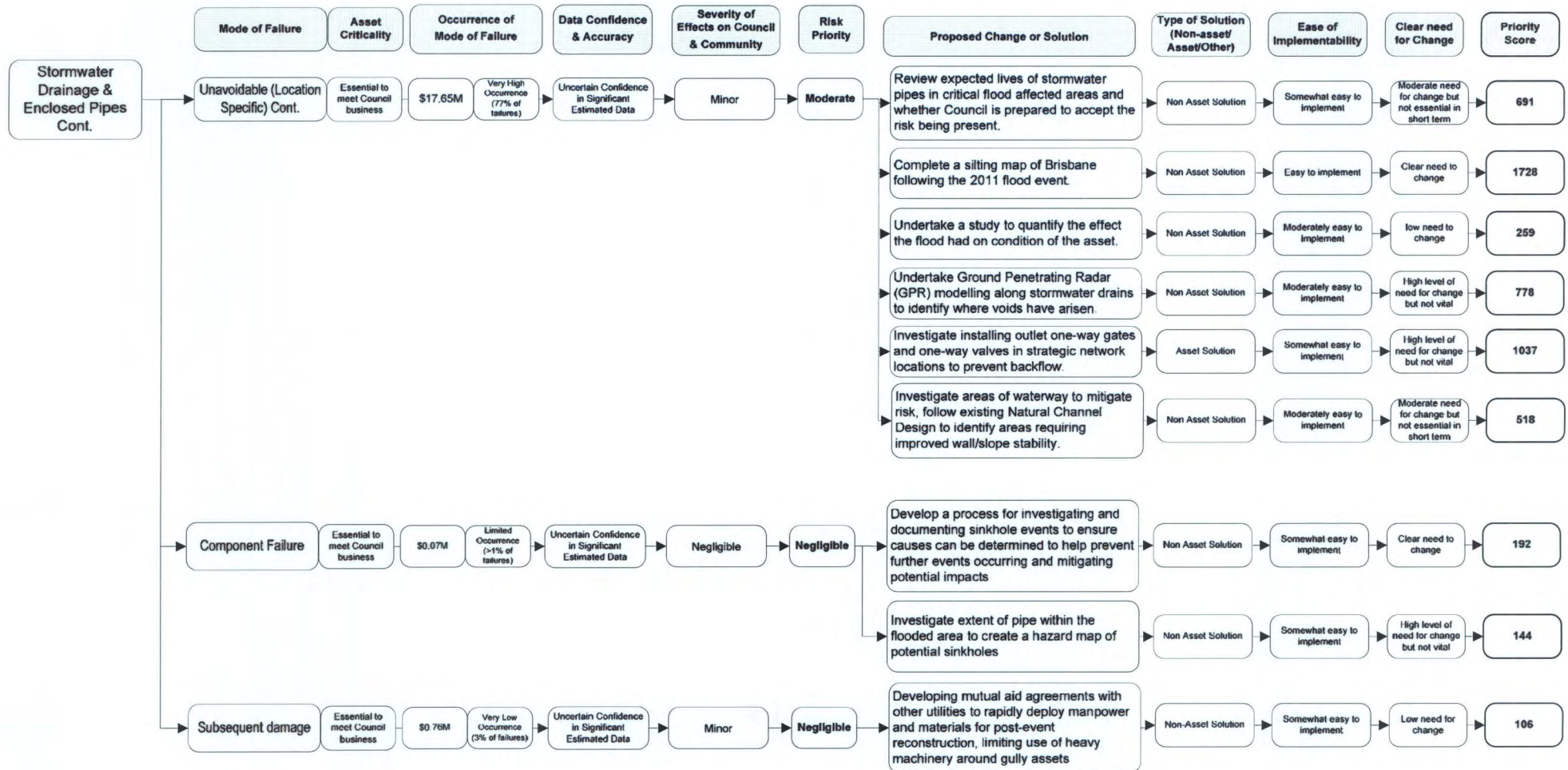
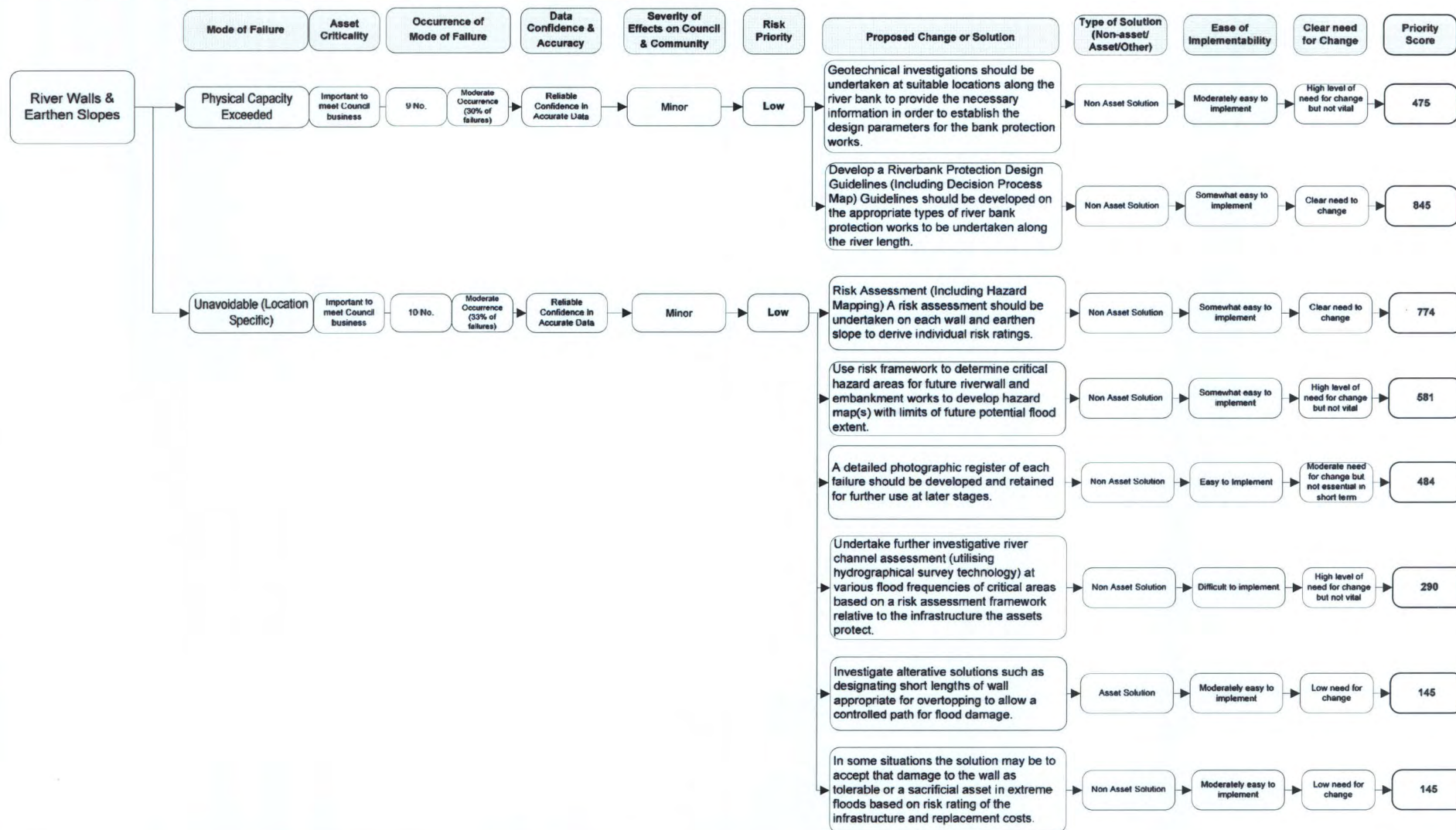


Figure 6: Prioritisation of Proposed Changes and/or Solutions for Stormwater & Enclosed Pipes

3.6 PROPOSED RIVER WALLS & EARTHEN SLOPE ASSET FAILURE SOLUTIONS



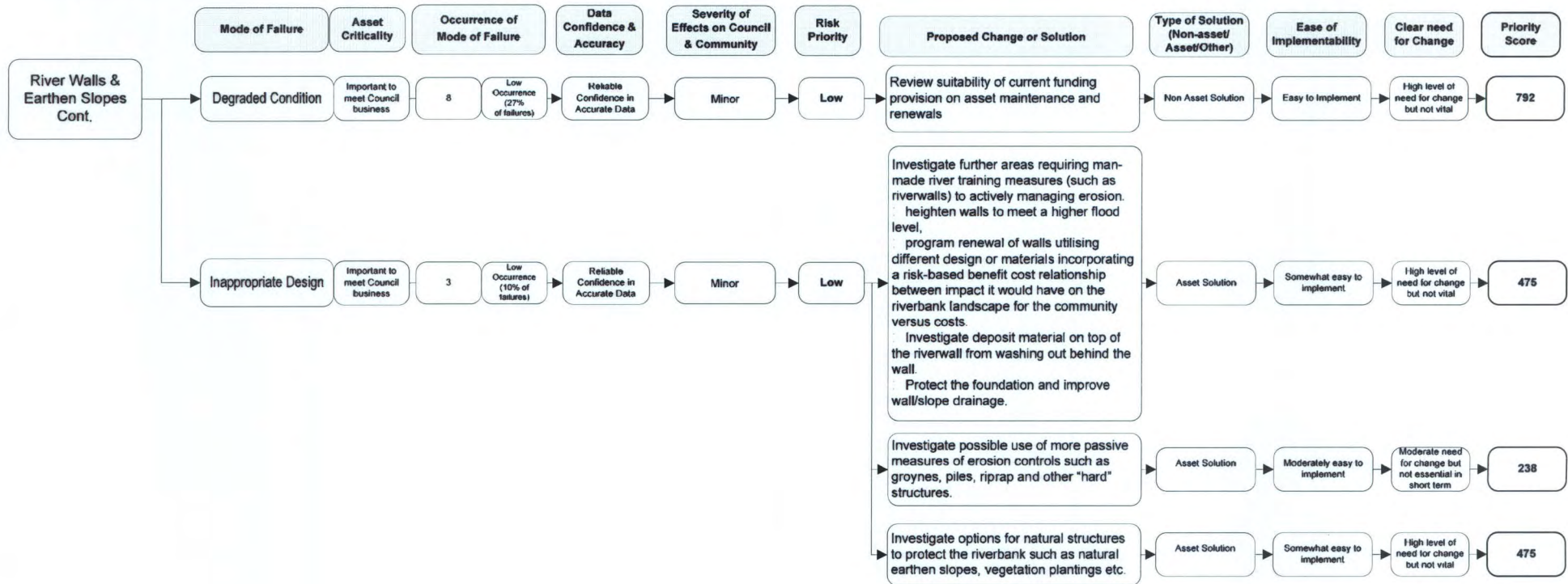


Figure 7: Prioritisation of Proposed Changes and/or Solutions for Stormwater & Enclosed Pipes

3.7 PROPOSED TREES (PARK & STREET) ASSET FAILURE SOLUTIONS

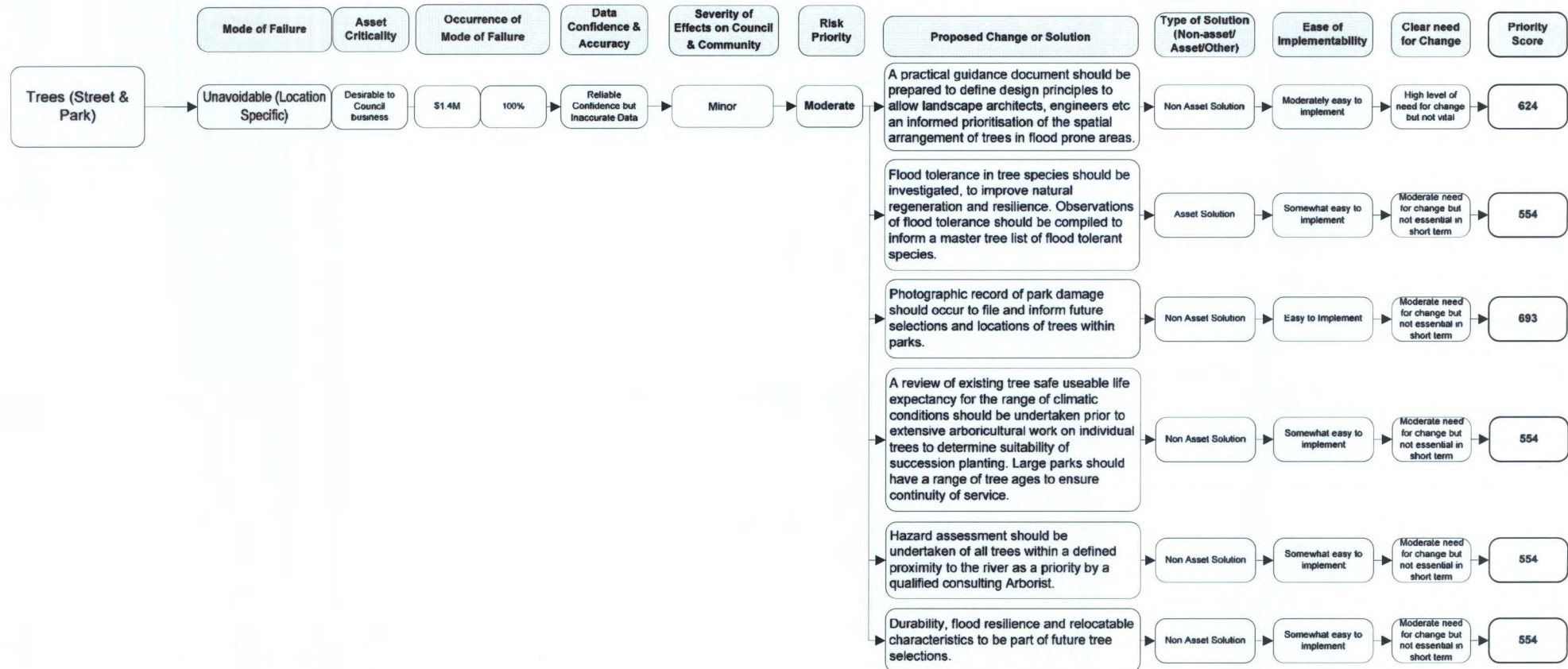


Figure 8: Prioritisation of Proposed Changes and/or Solutions for Trees (Park & Street)

3.8 PROPOSED PARKS (PARK INFRASTRUCTURE & LANDSCAPING) ASSET FAILURE SOLUTIONS

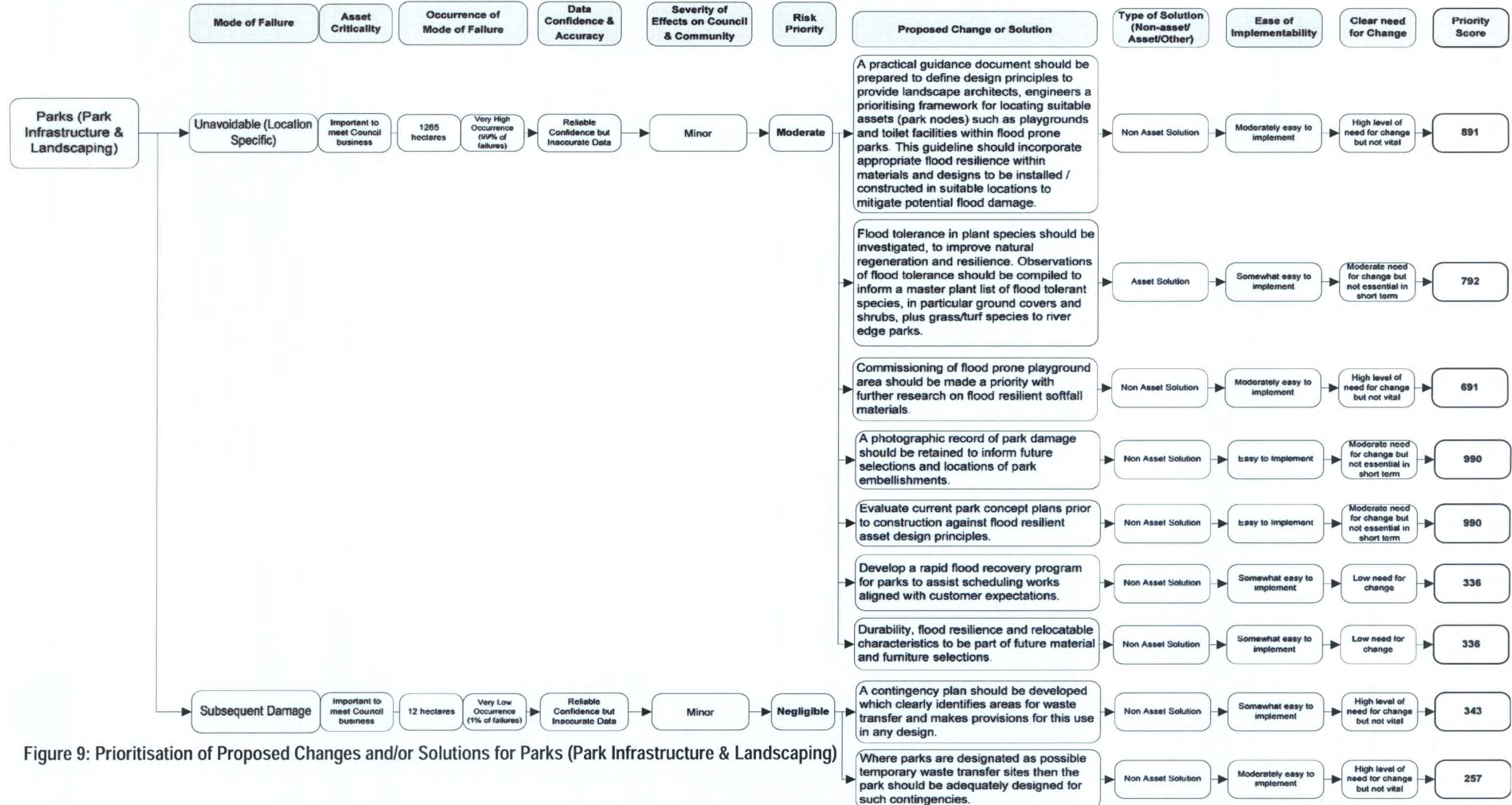
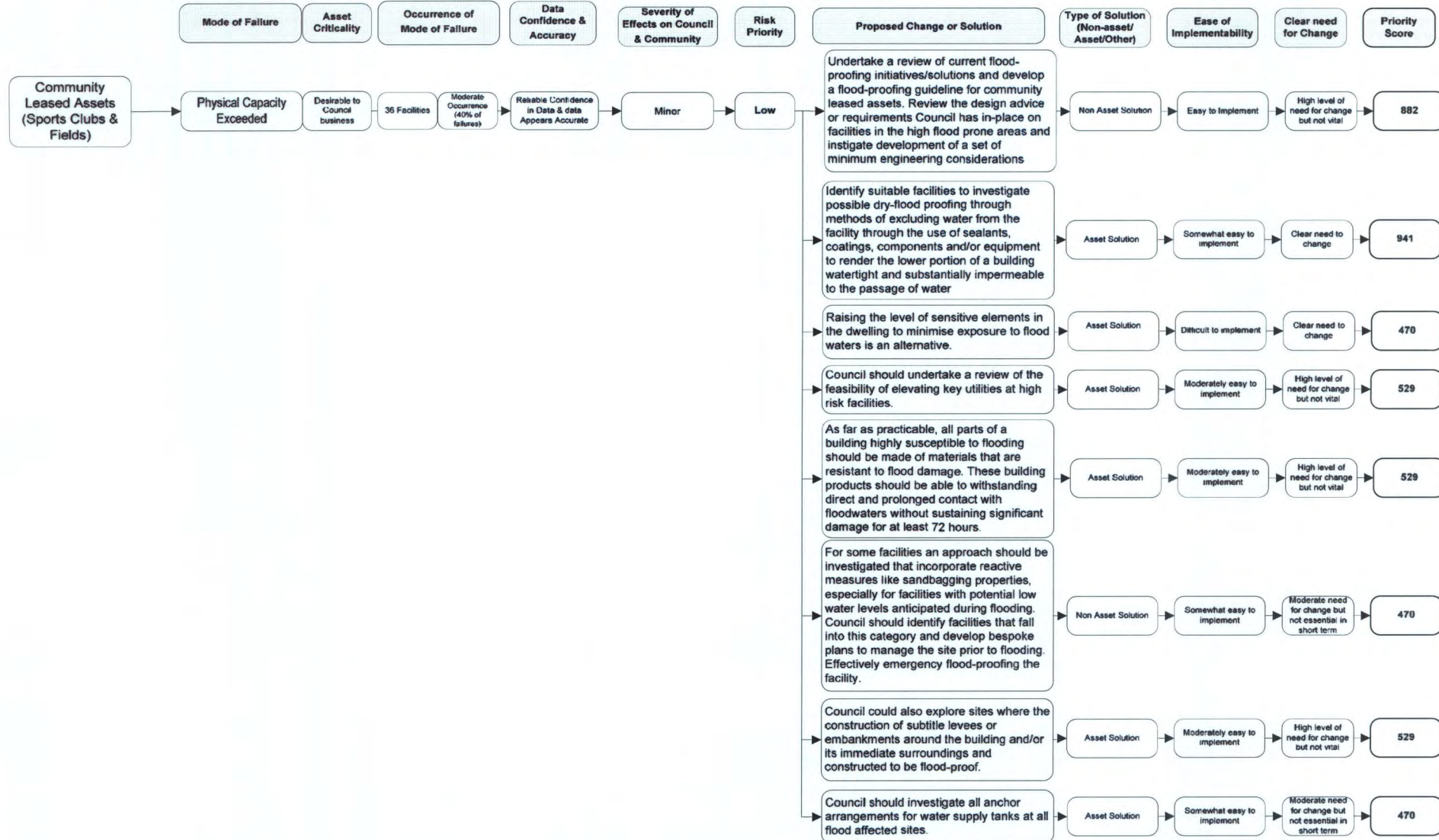


Figure 9: Prioritisation of Proposed Changes and/or Solutions for Parks (Park Infrastructure & Landscaping)

3.9 PROPOSED COMMUNITY LEASED ASSETS (SPORTS CLUBS & FIELDS) ASSET FAILURE SOLUTIONS



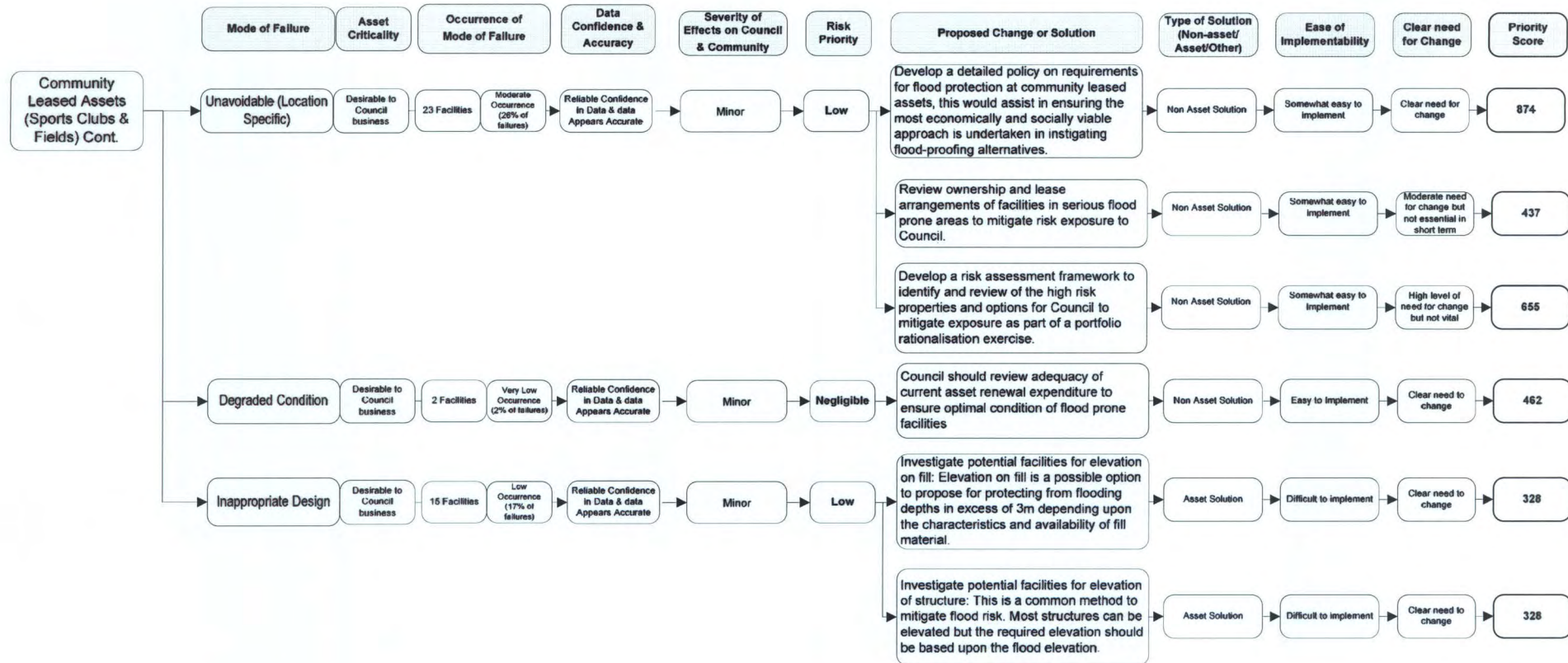
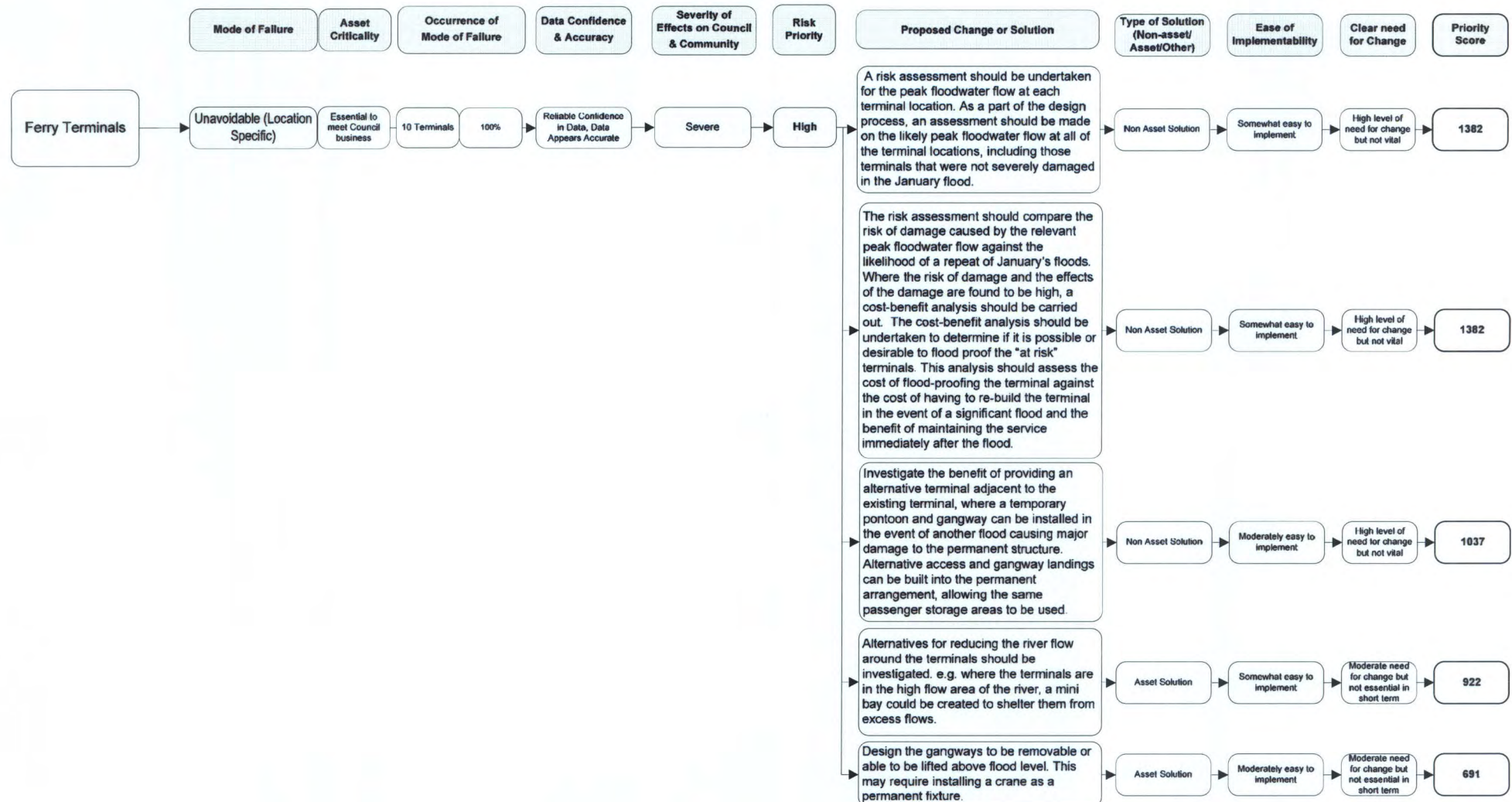


Figure 10: Prioritisation of Proposed Changes and/or Solutions for Community Leased Assets

3.10 PROPOSED FERRY TERMINAL ASSET FAILURE SOLUTIONS



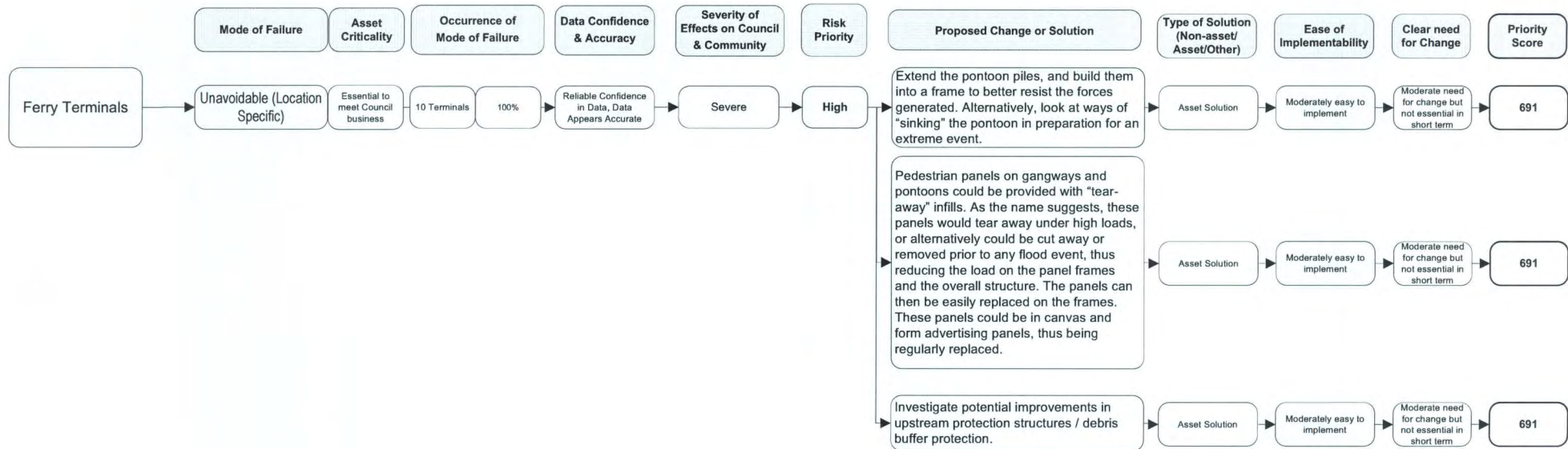
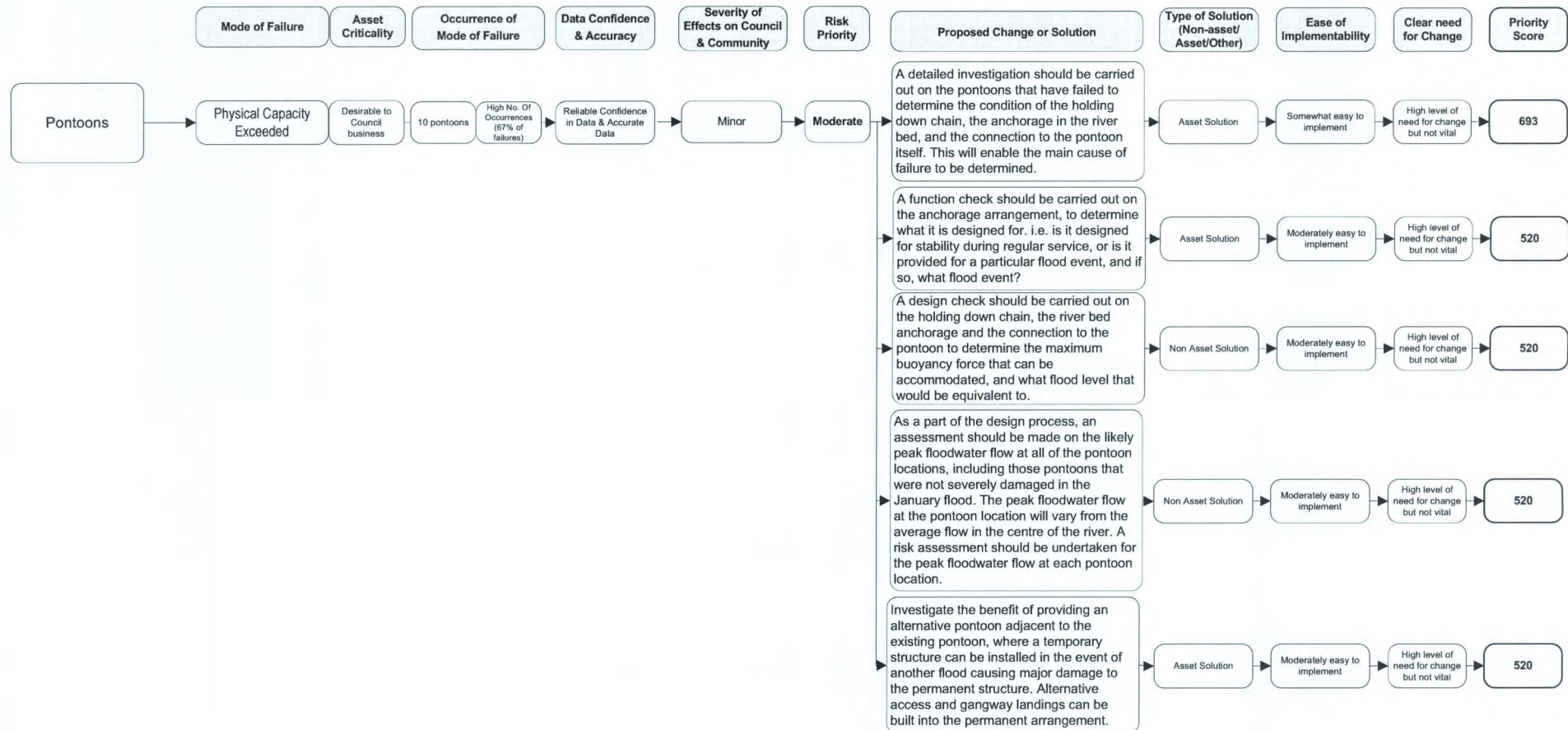


Figure 11: Prioritisation of Proposed Changes and/or Solutions for Ferry Terminals

3.11 PROPOSED PONTOONS ASSET FAILURE SOLUTIONS



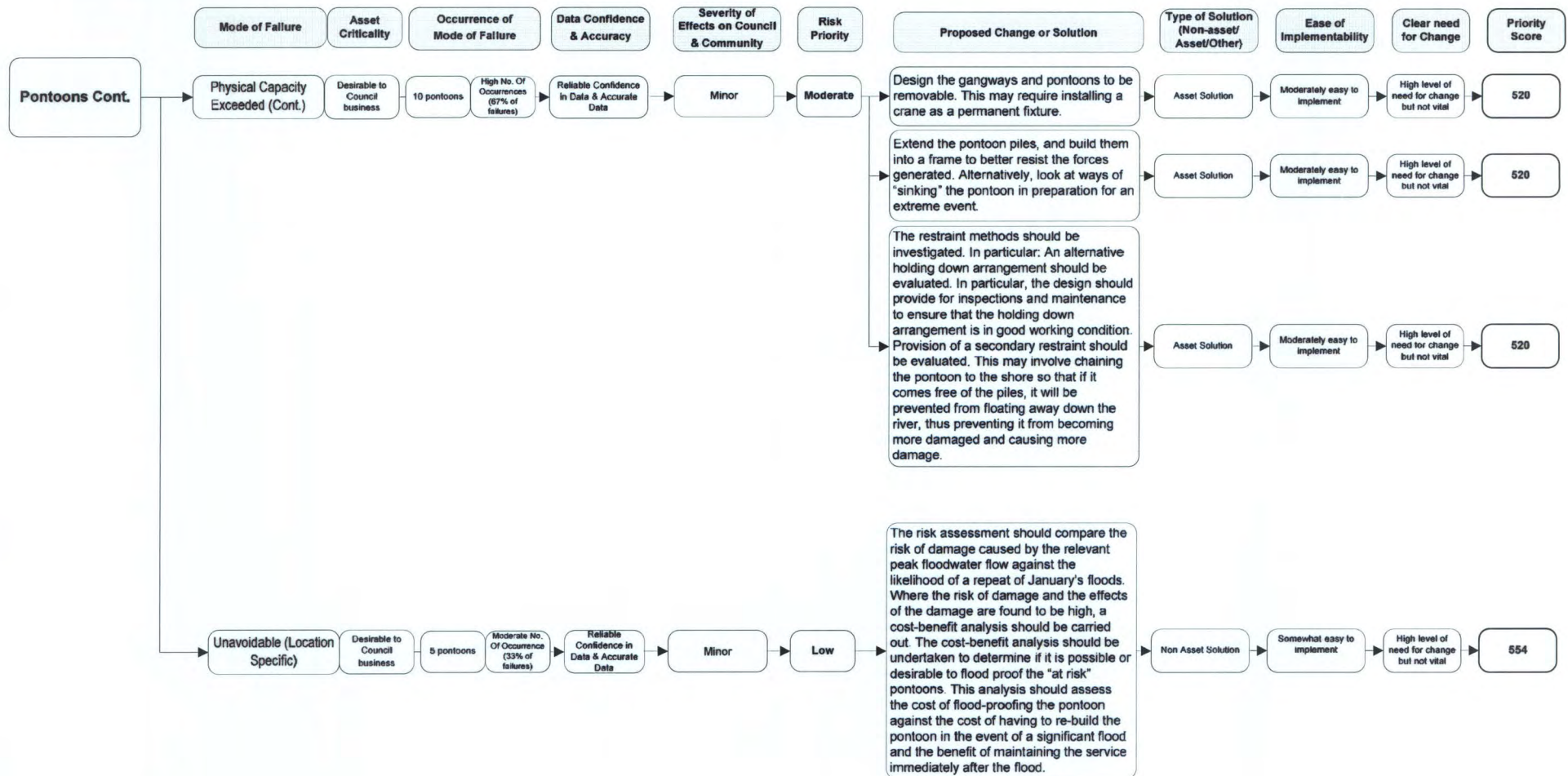


Figure 12: Prioritisation of Proposed Changes and/or Solutions for Pontoons

4 RECOMENDATIONS

As concluded in the proposed solutions / changes section above, the observed failures have a variety of causes. The improvements with the highest criticality based on the analysis are described below, further detail is provided in Annex J:

The recommendations are intended to reduce the chance or severity of the failure mode reoccurring, should Brisbane River again be subject to the severity of flooding endured during January 2011.

4.1.1 Roads, Kerbs & Footpaths Recommendations

- An investigation should be undertaken to identify on a cost/benefit basis in areas of high risk or flood affected areas possible adaption of full depth asphalt pavement for future construction and potential reconstruction of roads within known flood zones;
- Undertake a cost benefit analysis approach to the repair of pavements within the known flood zone with full depth asphalt with the intent of phasing out granular or gravel pavements in these areas; and
- An emergency flood management plan could be prepared for future events like this.

4.1.2 Traffic Signals Recommendations

- Identify critical intersections that did not flood but lost power supply for inclusion in any future flood mitigation plans for potential use of emergency generators or UPS into cabinets; and
- Undertake an investigate study into possible new technology to protect electrical components for sites that flooded.

4.1.3 Stormwater Drainage & Enclosed Pipes Recommendations

- Complete a silting map of Brisbane following the 2011 flood event. This will help forecast the extent of damage for future events;

- Review high flood risk areas along failed waterways and investigate possible reclassification;
- Focus the future development of renewal models to incorporate appropriate resourcing to high risk areas from flood;
- Continue to investigate as and when required the possible installing of outlet one-way gates and one-way valves in strategic network locations to prevent backflow;
- Adopt a risk based approach to planning renewal works to ensure highly flooded areas are identified and appropriate works integrated into forecasting renewal works; and
- Investigate the feasibility on a cost benefit basis the undertaking of Ground Penetrating Radar (GPR) modelling along stormwater drains in flood affected areas to identify where voids have arisen.

4.1.4 River Walls & Earthen Slopes Recommendations

- Undertake risk rating on each river wall along the river. Adopting a similar framework to risk assessing utilised by Brisbane City Council for the slope failures following the 2011 flood event;
- Review standardised designs and develop a Riverbank Protection Design Guidelines (Including Decision Process Map) bespoke to Brisbane; and
- Investigate on a benefit cost basis the undertaking of river dynamics investigations of Brisbane River at suitable locations and complete geotechnical investigations for moderate to high risk earthen slopes.

4.1.5 Park (Park Infrastructure & landscaping) Recommendations

- Undertake an evaluative study of current park concept plans prior to construction against flood resilient asset design principles. Replacement cost of components should be considered when locating these components in flood prone parks. Design consideration should be given to assigning areas to be considered either 'sacrificial' or 'protected' based on local topography and site conditions;

- Develop a rapid flood recovery program for parks to assist scheduling works aligned with customer expectations;
- Develop or refine a material and furniture selections policy to incorporate durability, flood resilience and relocatable characteristics for future material and furniture selections; and
- A contingency plan should be developed which clearly identifies areas for waste transfer and makes provisions for this use in any design. Where parks are designated as possible temporary waste transfer sites then the park should be adequately designed for such contingencies.

4.1.6 Trees (Park & Street) Recommendations

- A review should be undertaken of existing tree life expectancy across a range of climatic conditions prior to extensive arboricultural work on individual trees. Large parks should have a range of tree ages to ensure continuity of service;
- Hazard assessment should be undertaken of all trees within a defined proximity to the river as a priority by a qualified Arborist; and
- Develop or refine a tree selections policy to incorporate durability, flood resilience, drought resistance and relocatable characteristics into future tree selections.

4.1.7 Community Leased Assets Recommendations

- Develop a detailed policy on requirements for flood protection at community leased assets, this would assist in ensuring the most economically and socially viable approach is undertaken in instigating flood-proofing alternatives;
- Undertake a review of current flood-proofing initiatives/solutions and develop a flood-proofing guideline for community leased assets. Review the design advice or requirements Council has in-place on facilities in the high flood prone areas and instigate development of a set of minimum engineering considerations;
- Develop a risk assessment framework to identify high risk properties and develop options for Council to mitigate exposure as part of a portfolio rationalisation exercise. For example, a land lease or ground lease where the tenant rents and

uses the land, but owns the temporary or permanent buildings and other assets. Or investigate rationalising out high risk or high repair cost facilities that do not represent sufficient value to the community; and

- Identify suitable facilities with minimal damage to investigate instigating possible dry flood-proofing solutions. This includes initiatives of excluding water from the facility through the use of sealants, coatings, components and/or equipment to render the lower portion of a building water-tight and considerably water-resistant to the ingress of water.

4.1.8 Ferry Terminals Recommendations

- Undertake an investigation on river flow based on a benefit/cost basis for modelling the varying floodwater velocities across the width of the river. This will identify areas of peak floodwater flow and will provide guidance for any assets that will be exposed to increased debris and impact loads as well as increased floodwater velocities. This can then be extended to private assets such as pontoons as well as ferry terminals and will help to identify riverbanks that may be vulnerable to scour due to flooding. This modelling should be extended to include varying flood levels for lesser and greater flood events in comparison to January's flood;
- Conduct a risk assessment for the ferry terminals to identify those terminals that are "at risk" of excessive damage during a flood event. Note that this risk assessment should be carried out at varying flood levels as suggested for the river flow model above;
- Carry out a Cost-Benefit Analysis for flood proofing those terminals that are considered "at risk" of excessive damage during a flood event; and
- Undertake an investigative study into additional design features that could reduce the risk of excessive damage during a flood event.

4.1.9 Pontoons Recommendations

- Undertake a review to determine the requirement for providing the pontoons. Questions should be asked on whether the Council is the appropriate authority to be providing and maintaining these assets, and whether it provides good value

for the rate-payers dollar. Alternative methods of funding could also be investigated, with implementing a "user pays" style arrangement to ensure better value. Investigations on patronage should also be conducted. For example; how many people use the pontoons, and how often? Is this a service provided for a select few in the local area?;

- Undertake an investigation of alternative models for the pontoons. Would a fixed concrete jetty be a better solution, particularly in areas where high peakwater flows are likely to occur? One issue that would arise from this would be disabled access. It should be established if disabled access is required or warranted at each location, or should special access pontoons be provided that will accommodate the disabled at discrete locations?;
- Undertake an investigation on river flow based on a benefit/cost basis modelling the varying floodwater velocities across the width of the river. This will identify areas of peak floodwater flow and will provide guidance for any assets that will be exposed to increased debris and impact loads as well as increased floodwater velocities;
- Undertake investigation where practicable of the pontoons that have failed to determine in what way and what element of the holding down arrangement failed. This would also involve investigating the river bed anchorage.
- Conduct a risk assessment for the pontoons to identify those pontoons that are "at risk" of excessive damage during a flood event. Note that this risk assessment should be carried out at varying flood levels as suggested for the river flow model above. Carry out a Cost-Benefit Analysis for flood proofing the pontoons.
- Undertake an investigative study into additional design features that could reduce the risk of excessive damage during a flood event, including alternative holding down arrangements and provision for removal of the pontoons prior to a flood event.

PART C

DETAILED

REPORTS

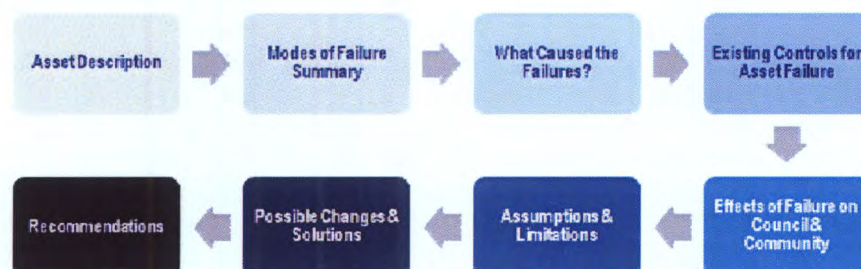


ROADS, FOOTPATHS & KERBS



1 ROADS, FOOTPATHS & KERBS

SECTION CONTENTS:



1.1 ASSET DESCRIPTION

Brisbane's road network forms an essential part of public infrastructure that is vital to the functioning of the community. It provides many tangible and non tangible benefits to society including:

- a medium for transportation (motor vehicles, bicycles and pedestrians);
- distribution of goods and services;
- a reference of location; and
- a corridor for stormwater and other essential services.

The Brisbane road network is made up of a series of local access streets, collector roads and arterial roads. Brisbane City Council is responsible for the majority of roads while the State Government has responsible for some larger arterial roads. Brisbane City Council's typical road corridor is made up of three key assets - the road, kerb and channel (kerb) and footpath. Figure 13 below shows how these three elements along with the essential services make up a typical road corridor profile.

In order for a road network to be functional, each of its key assets must meet a particular level of service.

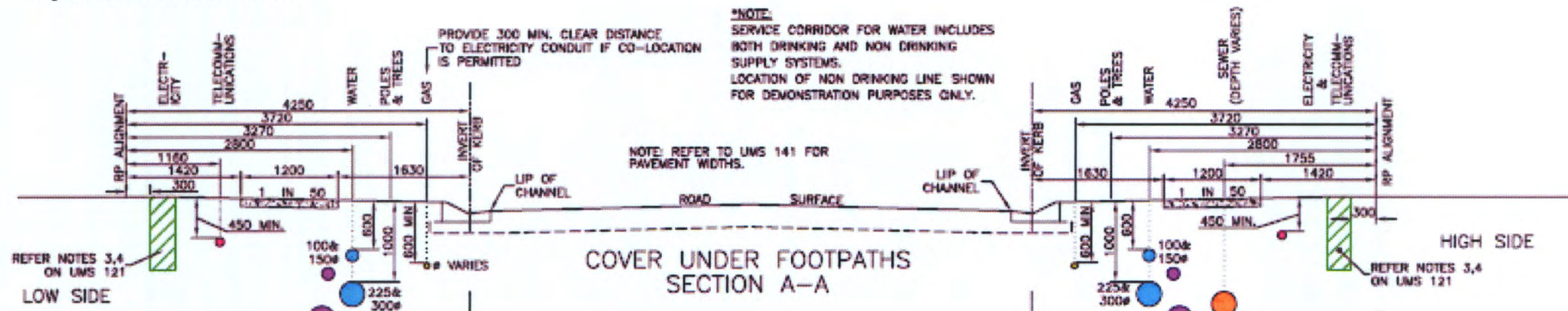
The **road** (carriageway) takes the majority of traffic that travels through the road corridor and consists of an all weather wearing surface supported by a suitable configuration of base and sub-base layers collectively known as a road pavement. A road pavement is generally constructed from, granular material, asphalt, or concrete. The expected level of service for a road requires the wearing surface to be predominately free from cracks, potholes and loose gravel or stone which can cause damage or injury to vehicles, cyclists or pedestrians. The pavement must have sufficient cross fall to allow surface water to drain to the kerb during rainfall and a suitable longitudinal grade to allow sufficient sight distances.

In most local access, collector and arterial roads, a concrete **kerb and channel** (kerb) is constructed at the outer limits of the carriageway. This provides a structural protective edge to the road pavement, restricts vehicular access to verges and forms part of the stormwater drainage system which safely removes surface water flowing off the road surface. The expected level of service for a kerb is generally expected to be similar with the road pavement, free from pollutants, cracks and potholes and drains consistently towards a suitable stormwater drainage system.

In an urban region, the road network often includes a **footpath** within the verge on at least one side of the road corridor. This consists of a concrete or paved surface specifically designed for pedestrians and cyclists. The expected level of service for footpaths requires a regular, even and stable surface free from ponding, pollutants, major cracks, lifting or any other trip hazards.

The in 2007 Strategic Asset Management Plan for road pavements, Brisbane City Council's total road pavement was 5,491 kilometres and was given a replacement value of \$3.345 billion. This significant network requires continuous inspection, maintenance and repair work so as to meet the required level of service for each key asset. 310 kilometres or 6% of the road pavement was considered to have been subject to inundation.

Figure 13: Road Reserve Profile



Source: Brisbane City Council Standard Drawing UMS-122(C)

Brisbane City Council's road network is operated on a combination of 'maintenance' and 'rehabilitation/renewal' method. Regular routine inspections and maintenance is undertaken throughout the entire road network (road carriageway, kerb and footpath) and a 24 hour hotline service is available to the community to report identified existing or potential hazards.

1.2 MODES OF FAILURE SUMMARY

The asset failure analysis has been undertaken at a high-level for each asset category level utilising the available data at the time of the analysis, it is effectively a snapshot in time and as further information becomes available these numbers would likely change. The findings from the analysis are illustrated in the following figures:

Figure 14: Mode of Failure Occurrence for Roads

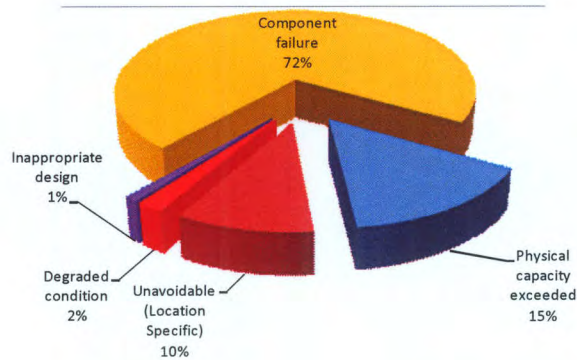
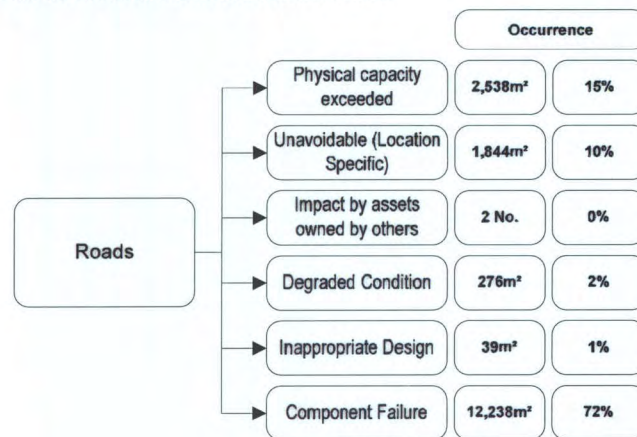


Figure 15: Mode of Failure Occurrence for Kerbs

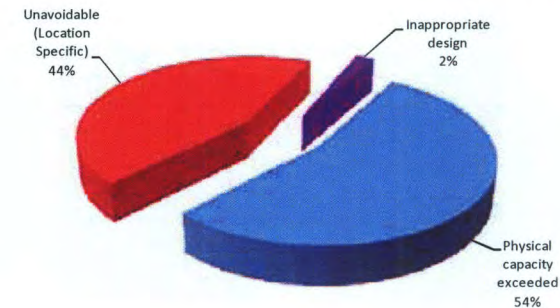
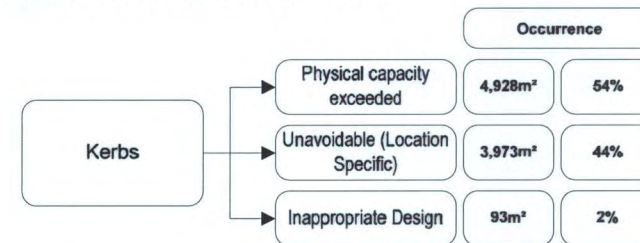
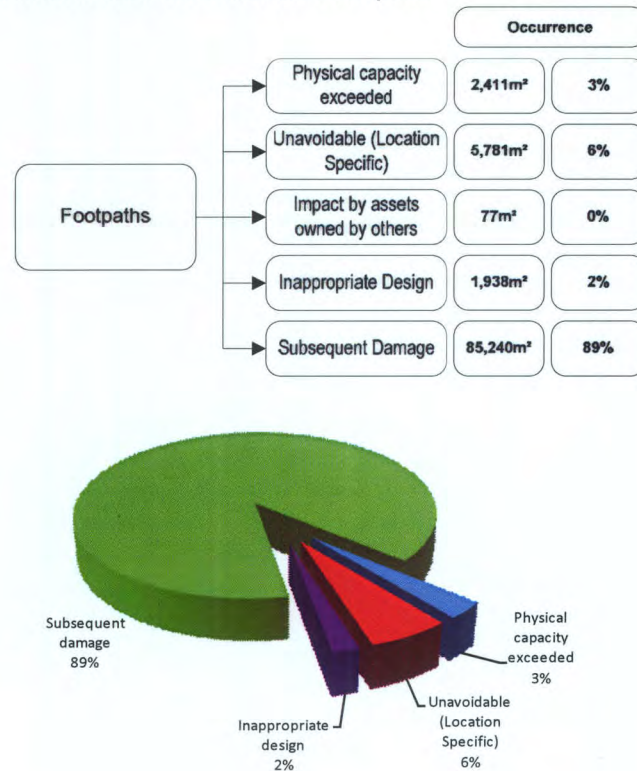


Figure 16: Mode of Failure Occurrence for Footpaths



Through examination of information and data provided by Brisbane City Council and through consultation with Brisbane City Council Road Network Infrastructure staff (Inga Condric and Greg Stephenson) we have made the following conclusions as to the failure modes of each of the asset categories.

Roads

The results presented in Figure 14 show the predominant failure mode to be *Component Failure* with 72% of the total recorded failures. *Component Failure* covers cracking, potholes, rutting, settlement or swelling of the road pavement which is the result of an individual component (i.e. erosion of sub-base material or wearing of the surface) of the road failing. The *Physical Capacity Exceeded* failure mode was applied where it was evident that the severe weather conditions and associated flooding were a direct cause of the asset failure, which would otherwise not have occurred. It covers scouring, pavement displacement and damage to gravel surfaces and accounts for 15% of the total recorded failures. 10% of the failures were deemed to be *Location Specific* and accounted for debris and silt on the road surface left by the receding floodwaters. This is considered practically unavoidable given the need for roads to be located in areas that have the potential to flood.

Other failure modes were identified in the collected data however, combined, these only accounted for 3% of the total recorded failures. *Degraded Condition* was identified where the provided data specifically described the road as having undergone recent resurfacing but still does not meet the expected level of service for this asset. *Inappropriate Design* accounted for items that described the road surface as having evidence of ponding which should be avoided at design level. *Impact by assets owned by others* was identified where failure of utility services (eg: pit coverings or service trench covers) presented a hazard to road users.

Kerbs

Figure 15 shows the majority of asset failures were recorded as being caused when the *Physical Capacity* of the kerb was exceeded. This included kerb that was recorded as chipped, cracked, shattered or lifted and accounted for 54% of the total failures. 44% were identified as *Unavoidable* whereby silt and debris had been left by receding floodwater. A further 2% was deemed as *Inappropriate Design* where ponding was identified.

Footpaths

From Figure 16 it is evident that *Subsequent Damage* was the major contributing failure method to footpath failure, accounting for 89% of the cases. *Subsequent Damage* accounted for failure that was identified as being caused by the cleanup effort and included

contamination (oil, glass, plasterboard and sandbags), returfing and rutting. 6% was identified as unavoidable and again accounted for debris and silt left by receding floodwater. The *Physical Capacity Exceeded* failure mode described footpaths that were recorded as eroded, displaced, potholed or a drop off and accounted for 3% of the failures. 2% of footpath failures were due to *Inappropriate Design* whereby ponding was identified. *Impact by assets owned by others* was identified as a contributing failure mode and accounted for service pit covers that were damaged and presented a tripping or injury hazard to pedestrians. This failure mode however accounted for less than 1% of the total recorded failures.

1.2.1 Confidence in Data

Confidence in the data provided by Brisbane City Council is described as *uncertain*. From the data set provided, some of the asset failures were documented, giving both a failure type and comment, however the descriptions were vague and there were gaps in the data where no detail of the failure type, the unit of measure or descriptive comment was provided.

The accuracy of the data is considered to have a **moderate** level of accuracy (grade of 3 out of 5, where 5 is the lowest accuracy). The data provided appeared to be accurate however interpolation based on engineering judgement was required for almost 30% of the asset failures. The assumptions as outlined in the following paragraph were made to complete the data package for analysis. Further detail is provided in Appendix J.

Data Assumptions

For the **road** asset category, the unit of measure was assumed to be in square meters (m²) when not shown, which accounted for 14% of the data. Any asset failure that was not assigned a mode of failure, which made up 1% of the data, was assumed to fall within *Component Failure* category because this was the next common cause of failure. This assumption has not materially impacted the conclusions drawn.

For the **kerb** asset category, 4% of the provided data was not assigned a unit of measure. Given that Brisbane City Council kerb generally has a consistent width and thickness it was assumed that kerb measurements were taken in metres (m). This matched the remaining

data that did have an assigned unit of measure. The 1% of asset failures that did not have a specified type of failure was assumed to the *Physical Capacity Exceeded* mode of failure.

For the **footpath** asset category, the unit of measure was assumed to be in square metres (m²) when not shown in the data provided, which accounted for 40% of the results. The majority of asset failures were recorded in square meters except for damaged edge drop off failure type which were measured in metres. When analysing the occurrence of failure modes for this asset category, edge drop off was assumed to effect a 1m width of footpath which meant the recorded length in metres (m) gave the equivalent numerical figure for area (in m²) allowing a direct comparison between all failure modes. Changing the edge drop off width from 2m to 0.3m (the likely range of footpath width affected by edge drop off) gave less than 1% variance in occurrence for the failure mode. This accounted for approximately 2% of the recorded data. Less than 1% of data for the footpath asset category had no failure type description and was assumed to have been inundated with debris giving it an *Unavoidable (Location Specific)* mode of failure.

1.3 WHAT CAUSED THE FAILURE?

From the data provided to Cardno, three main failure modes have been identified for the road, footpath and kerb asset categories. These were *Physical Capacity Exceeded*, *Component Failure* and *Subsequent Damage*. A fourth failure mode, *Unavoidable (Location Specific)* was consistently identified to a lesser extent. These are discussed below.

1.3.1 Physical Capacity Exceeded

Failures where the asset's level of service was not expected to withstand the event accounted for

- 15% of failures for roads;
- 54% of failures for kerbs; and
- 3% of failures for footpaths.

Directly flood related causes/mechanisms

The failure of assets in this mode, relating directly to the flood, would likely have been due to erosion and scouring resulting from excessive stormwater. The severe weather led to inundation of stormwater drainage and river systems forcing stormwater to adopt overland flow paths. Turfed verges and footpaths have been subject to continually wet conditions. As rainfall continues, surface water is unable to infiltrate into the already saturated soil and flows downstream carrying soil and silt from the verges, footpaths and weaker pavements. Over time this has led to severe scouring and erosion of many road shoulders and verges.

The act of stormwater moving over saturated road surfaces also causes asphalt and bitumen layers to be peeled off the saturated and weakened pavement.

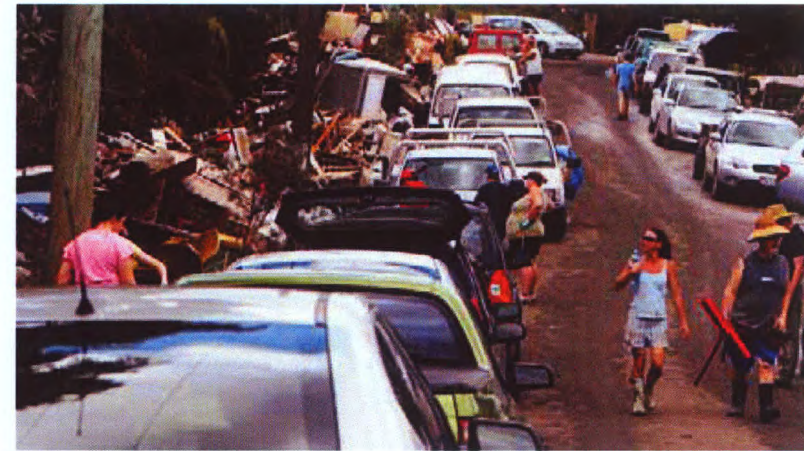


Figure 17: Typical Flood Effected Road During 'Clean-up'

Apparent causes of physical capacity being exceeded

Most kerb failures in the form of cracking and chipping, were attributed to the physical capacity of the kerb being exceeded. The data records do not give any detail as to how the damage occurred however it is unlikely that it was a direct result of the flood water. Instead, it is more likely that the cleanup effort is responsible for a majority of these failures.

Once the floodwaters had receded, flood affected property owners were directed by Government and Council to place all damaged goods and building materials onto their immediate road frontage for bulk collection by Council and the Army. Given the circumstances this was the most efficient and practical course of action however it did mean that during this period kerbing was subject to traffic loading from trucks, cars, bobcats and front end loaders that the kerb would not have been designed. This would have been exacerbated by the saturated sub-grade profile supporting the kerb. Traffic loading applied to the kerb would have, in some places been unevenly supported by the saturated sub-grade, increasing internal stress which would have led to cracking and lifting. Steel buckets of machinery and heavy household items would have also caused chipping and other damage to the kerb.

Underlying causes of physical capacity being exceeded

Continuous hot, dry weather over recent years has meant that a larger than usual number of road component failures have gone unnoticed. A road pavement that has cracked or weakened due to general usage usually becomes evident during periods of normal rainfall, when water seeps into the base layers causing visible failure in the wearing surface, in the form of potholes, cracking or rutting. Due to the extended dry periods experienced in South East Queensland over recent years, the limited rainfall has been unable to infiltrate into the base layers, or has dried out soon after, leaving the wearing course with the appearance of good condition. The regular Council inspections would likely not have identified the need for maintenance or repair, so it is possible that a number of fatigued pavements would have gone without maintenance or repair. It is also possible that the findings from some inspections were not severe enough to activate 'intervention triggers' to undertake repair or replacements in the period preceding the flooding.

When the severe wet season and floods hit towards the end of 2010, the fatigued pavements would have been exposed to exceptionally high rainfall and would have displayed a larger than usual number of pavement failures.

1.3.2 Component Failure

The assets failed due to the failure of a component of the asset accounted for 72% of failures for roads.

Directly flood related causes/mechanisms

As shown in Section 1.2, component failure was the leading cause of recorded road failures. It is difficult to say what percentage of the component failures were a direct result of the severe wet season leading up to the flood and associated flooding however it is probable that the presence of water within the base, sub-base and sub-grade layers would have been extremely detrimental to the integrity of the pavement. Particularly in granular pavements, the excessive moisture content reduces the cohesive forces within the granular material, making it more susceptible to deformation. There would have been no means for

the water to drain away, with the exception of an extensive drainage installation within the pavement which is often unfeasible.



Figure 18: Pavement cracking leading to a pothole

The presence of moisture can also lead more reactive soils in the sub-grade layer to expand and then contract on drying, which can lead to cracking of the overlying pavement.

The act of vehicular loads on the saturated pavement would have exacerbated these effects and would have been compounded further by the higher than usual traffic conditions attributed to the number of volunteers and collection trucks necessary for the recovery effort.

Apparent causes of component failure

Old and cracked infrastructure within and under the pavement would have also helped weaken the roadways. Sediment picked up by water leaking into the cracked stormwater, sewer or conduit pipes would have left voids in the pavement which would have accounted for settlement, cracking and potholes described in the field inspection data.

Underlying causes of component failures

As with the *Physical Capacity Exceeded* failure mode, many of the failures identified during the post flood inspections could have been a result of fatigue and failure going unnoticed over the recent years of drought and dry weather.

1.3.3 Subsequent Damage

The failure was caused by subsequent recovery and clean-up efforts accounted for 89% of failures for footpaths.

Directly flood related causes/mechanisms

Subsequent damage was identified to be the leading failure mode for the footpath asset category. The main cause of this failure mode came about during the cleanup process. Properties inundated by flood water were stripped bare of furnishing and wall panels which left on the verge for collection. The sheer weight of the bulkier items including heavy water laden household furniture could have caused damage to kerbs, footpaths and grassed verges. Given most of the items were being discarded, it is likely that they would have been thrown or dropped, intensifying the effect.

While most of the rubbish was removed during the collection process there was inevitably residual fragments that were left behind. From the inspection data provided to Cardno, this was described as including glass, oils and fragments of building materials which present a hazard to pedestrians and cyclist using the footpaths.

These contaminants also pose a hazard to the environment as they are washed into the stormwater drainage system and eventually the rivers and waterways.



Figure 19: Footpath Debris

Apparent causes of failures from subsequent damage

The apparent cause for this failure mode was the collection of the discarded rubbish. The possible use of heavy machinery including trucks, cars, bobcats and front end loaders in the collection process and need for this equipment to mount the verge to get access to the discarded household items. The weight of the machinery alone combined with the turning and screwing action of the wheels and hard steel buckets may have led to the significant damage identified in the failure data provided to Cardno.

Underlying causes of failures from subsequent damage

The underlying cause of this failure mode may have been instruction given by Brisbane City Council to direct flood affected property owners to dispose of their damaged household goods onto the verge. The use of heavy machinery to then collect the disposed rubbish further compounded the damage to the road, footpath and kerb assets.

1.3.4 Unavoidable (Location Specific)

For assets where there was no practical way of avoiding the failure given the specific location of the asset accounted for:

- 10% of failures for roads;
- 44% of failures for kerbs; and
- 6% of failures for footpaths.

Directly flood related causes/mechanisms

While not identified as a major failure mode, unavoidable failures were consistent through all three asset categories. The damage related to this mode was silting and debris. The cause of this damage is the road network being located within Brisbane River's flood zone. As water flowing down the river exceeded the capacity of the banks, flood water spread out across the natural flood plain, inundating roads in the process. The fast flowing water had picked up silt and debris. The suspended soil particles and debris carried by the water where allowed to settle or became fixed as the floodwater slowly receded.

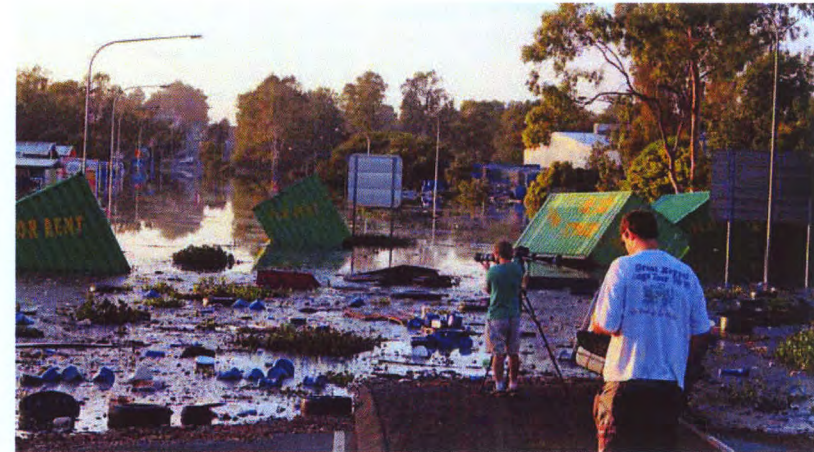


Figure 20: Damage Associated with Unavoidable Mode of Failure

Apparent causes of unavoidable failures

The Brisbane City Council flood maps show isolated patches that were flood affected and yet have no overland link to the main flood region. This could have been caused by floodwater surging backwards up the underground stormwater drainage system. While this would limit the size of debris reaching these areas, siltation would still have occurred.

Underlying causes of unavoidable failures

Construction of road network in a know flood area is the underlying cause of this of this failure mode. Land adjacent to the Brisbane River is a known floodway. However substantial infrastructure and Council assets have been constructed in these areas, therefore it was only a matter of time therefore, before they would again be affected by flood inundation as they have in the past.

1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council have in-place to stop the failure from occurring include: Sealed pavements, subsoil drainage, asphalt pavement, regular inspections and repairs/maintenance to roads, kerbs and footpaths, community informs Council of damaged infrastructure which is then repaired.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

From the analysis and consultation with key Council staff, Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the community to gain an understanding of the severity of this mode of failure. The effects have been assigned in consultation with Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

The following three figures outline the severity of the mode of failure for each of the asset categories.

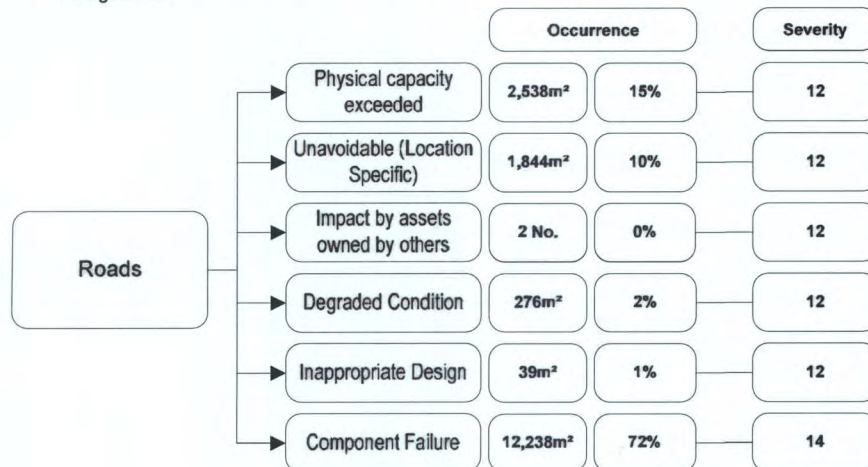


Figure 21: Mode of Failure Severity for Roads

1.5.1 Effects from Physical Capacity Exceeded Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 12 (out of a possible 30). This score has been derived based on the following:

- Damage to the road network would present a low environmental and safety risk. Cracking of roads, kerbs and footpaths is a regular occurrence within most councils and would not affect the corporate image of Brisbane City Council. Damage to the environment would occur in the form of gravel and silt from the exposed base layers entering the waterways and is easily controlled by standard erosion and sedimentation control measures.
- Road closures and roadworks associated with repair of the damaged road surfaces, footpaths and kerb could cause major delays especially on arterial roads such as Coronation Drive during peak hour. This would inevitably cause major inconvenience and distress to the community.

1.5.2 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 12 (out of a possible 30). This score has been derived as in Section 1.5.1.

1.5.3 Effects from Degraded Condition Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 12 (out of a possible 30). This score has been derived as in Section 1.5.1.

1.5.4 Effects from Inappropriate Design Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 12 (out of a possible 30). This score has been derived as in Section 1.5.1.

1.5.5 Effects from Component Failure Mode of failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 14 (out of a possible 30). This score has been derived similar to Section 1.5.1, although the effect on the customer and community was more severe given the higher occurrence and resulting longer impact on the community and the economic effects were more significant.

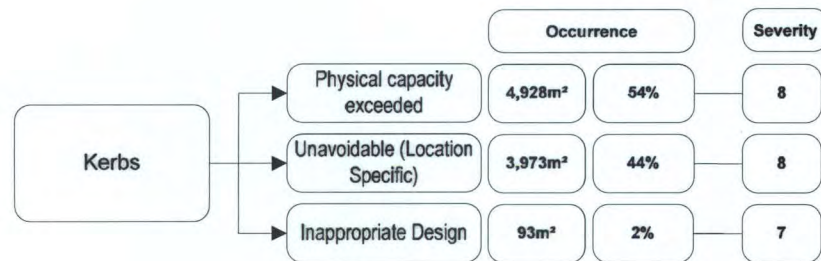


Figure 22: Mode of Failure for Kerbs

1.5.6 Effects from Physical Capacity Exceeded Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 8 (out of a possible 30). This score has been derived based on the following:

- Damage to the kerbs would present a negligible environmental and safety risk. Cracking of kerbs is generally a regular occurrence within most Councils and would not affect the corporate image of Brisbane City Council. Damage to the environment would occur but is considered to be negligible
- There would be negligible effects on customer / community as only a small number of residents across Brisbane experienced minor service disruption and the loss of service is negligible and the majority of these assets would still function.
- The economic impact of repairing these assets would be considered to be severe and likely cost between \$350k-\$3M.

1.5.7 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 8 (out of a possible 30). This score has been derived as in Section 1.5.6

1.5.8 Effects from Inappropriate Design) Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 7 (out of a possible 30). This score has been derived similar to Section 1.5.6, however the economic effects were considered to be lower.

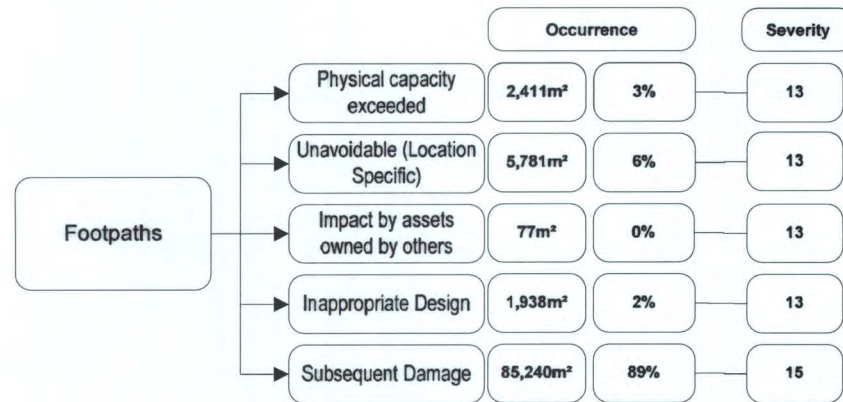


Figure 23: Mode of Failure for Footpaths

1.5.9 Effects from Physical Capacity Exceeded Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 13 (out of a possible 30). This score has been derived based on the following.

- Damage to the footpaths would present a negligible environmental and safety risk. Cracking of kerbs is generally a regular occurrence within most councils and would not affect the corporate image of Brisbane City Council. Damage to the environment would occur but is considered to be negligible
- There would be negligible effects on customer / community as only a small number of residents across Brisbane experienced minor service disruption and the loss of service is negligible and the majority of these assets would still function.
- The economic impact of repairing these assets would be considered to be severe and likely cost between \$350k - \$3M.

1.5.10 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 8 (out of a possible 30). This score has been derived as in Section 1.5.9.

1.5.11 Effects from Impact by Assets Owned by Others Mode of Failure

For this Mode of Failure a severity score, relative to the effects on Council and the community, has been calculated as 8 (out of a possible 30). This score has been derived as in Section 1.5.9.

1.5.12 Effects from Subsequent Damage Mode of Failure

For this Mode of Failure a severity score relative to the effects on Council and the community has been calculated as 7 (out of a possible 30). This score has been derived similar to Section 1.5.9, however the economic effects are substantially higher.

1.6 ASSUMPTIONS & LIMITATIONS

Data obtained post the flood event, was obtained for two main reasons, being:

- To assist the process of working out what assets needed to be repaired and in what priority.
- To enable an analysis to be undertaken at a later date to determine damage causes and costs relevant to repairs.

As a result of collecting data quickly to enable it to be used to prioritise repair works, some information was not obtained and resulted in gaps within the data as mentioned previously above in Section 1.2.

From discussions with Brisbane City Council staff, it is agreed that the floods alone did not cause all the damage. There are two key other drivers, being:

- Months of sustained rainfall prior to the flood event
- The subsequent cleanup efforts and reopening of the road networks to essential emergency, cleanup and repair vehicles and large machinery

In order to undertake the analysis of asset failures for the Road, Kerb and Footpath asset categories, Cardno was supplied with inspection data from Brisbane City Council. The data included a list of asset failures identified by Council inspectors for each of the asset categories. Table 1 below lists each of the headings for the supplied data. The understanding of each heading and a comment as to the completeness of the data is also shown:

Table 1: List of Headings for Investigation Data Supplied to Cardno

Information	Description	Data
POINTID	Unique identification for each asset failure identified	Yes
DATE	Understood to be date of inspection	Yes
CLASS	Description of the ASSET CATEGORY each asset failure belongs to	Yes
TYPE	Brief description of the type of failure	No
MATERIAL	Brief description of the asset material	No
QUANTITY	The quantity of the failed asset identified by the Council inspector	No
UNIT	The unit of measure for the quantity of failed asset	No
COMMENT	Brief comment further describing the condition of the failed asset	No
PRIORITY	Used by Council to coordinate repair work immediately after the flood	No
DATE_SENT_LAS	Unknown	No
DATE_SENT_SAM	Unknown	Yes
DATE_SENT	Unknown	No
HOUSE NUMBER	The house number relevant to the location of the identified asset failure	No
STREET NAME	The relevant street name for the identified asset failure	Yes
SUBURB	The relevant suburb for the identified asset failure	Yes
WARD	The relevant ward for the identified asset failure	Yes
SECTOR	The relevant sector for the identified asset failure	No
DISTRICT	The relevant district for the identified asset failure	No

1.7 POSSIBLE CHANGES & SOLUTIONS

Road

An option for consideration is to allow the road pavement the chance to dry out before vehicular traffic is allowed back on it. This would have a positive effect on the condition of the pavement, giving the saturated sub-grade the chance to dry out and return to a normal state. But the effect this would have on the community would be largely negative, as the road may need to stay closed for anywhere between 10-60 days. A variation on this option could be to regulate vehicular access to properties in the flood affected areas, only allowing property owners to access these areas and essential service vehicles. Volunteers could be organised to meet at a suitable location and dropped off at various sites as necessary. If suitable, the pavement could be given several days to dry before the heavy collection trucks are mobilised. Whether this small time delay is sufficient to limit the delayed damaged would need to be investigated through further studies. This option would require a large amount of planning, organisation and control. The delay in refuse collection could lead to the spread of disease, infection and more pollutants reaching waterways, therefore creating significant disadvantages to the community.

Discussion with key BCC staff suggested that from testing they are currently completing that full depth asphalt pavements hold up better under complete inundation and are less affected by traffic loadings while saturated. It could be an option to construct/repair pavements identified in flood zones with a full depth asphalt pavement. Generally this would only be done when an adjacent development warrants the road construction or upgrade and while the full depth asphalt pavement is more expensive, the higher cost to the developer could be subsidised, for a better long term outcome for the road asset.

Kerb

To avoid damage to kerbs, flood affected property owners could be directed to store damaged goods and building materials on alternative areas. However, this is likely to create significant problems (e.g. restricted access, hazards from moving debris, etc.) that may make the use of alternative sites not cost beneficial.

Footpath

As with kerbs, if property owners are directed to dispose of damaged goods away from footpaths less damage to the verge and footpaths. Wheelbarrows and smaller machinery used to remove rubbish from affected properties would still cause rutting to the verge and damage to the footpath.

Based on analysis of the data provided to Cardno by Brisbane City Council, the following recommendations are made for each asset category and failure mode. The recommendations are intended to reduce the chance or severity of the failure mode, should Brisbane again be subject to the severity of flooding endured during January 2011.

Figure 24: Prioritisation of Proposed Changes and/or Solutions for Roads

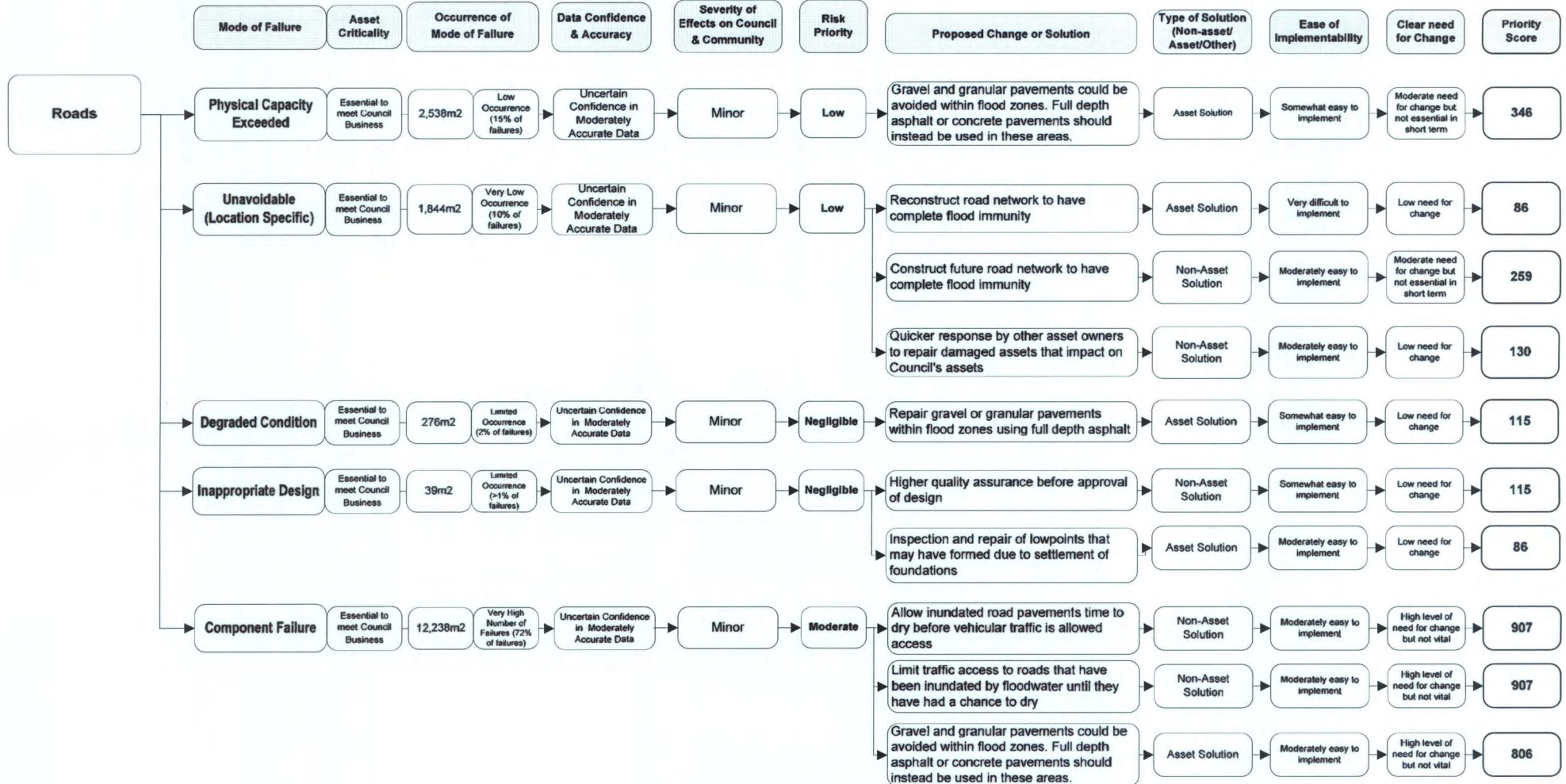


Figure 25: Prioritisation of Proposed Changes and/or Solutions for Kerbs

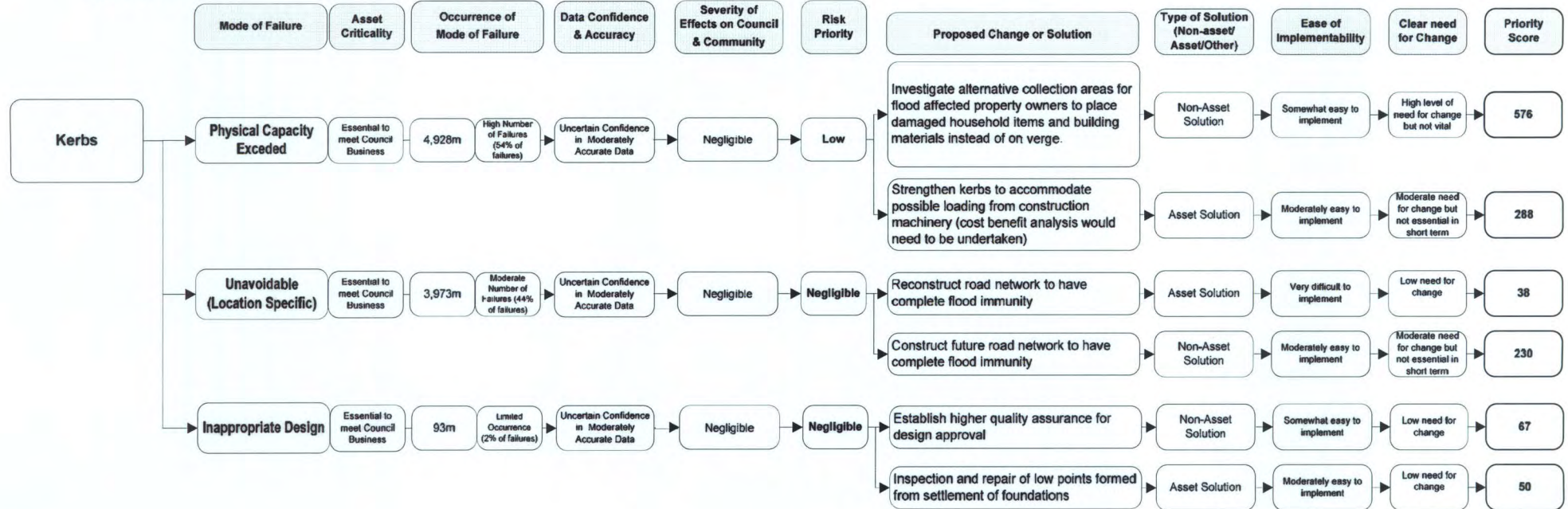
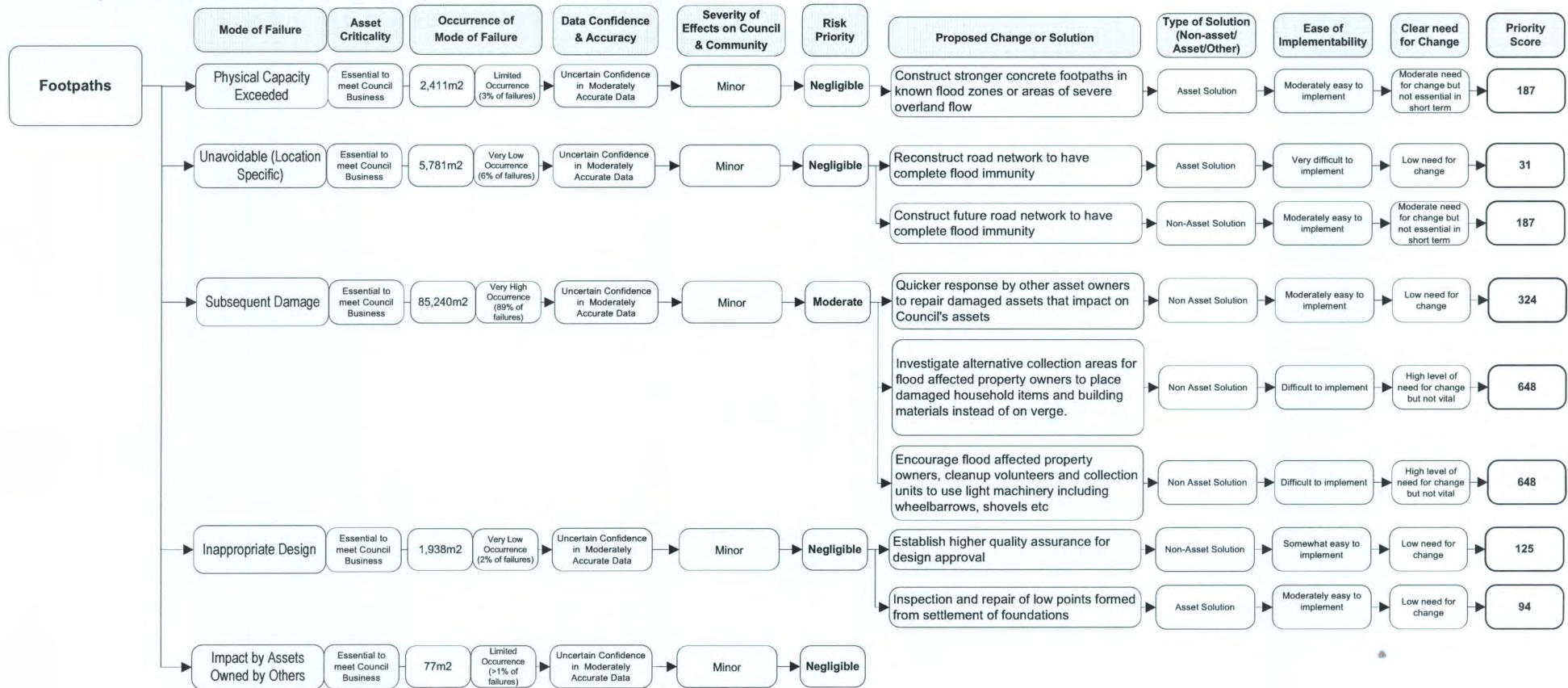


Figure 26: Prioritisation of Proposed Changes and/or Solutions for Footpaths



1.8 RECOMMENDATIONS

As can be seen in the above figures, there are many options that can be adopted by Council to help maintain the vast road network during future severe weather conditions. Each of these options would need to be investigated thoroughly before being implemented however the following recommendations are raised for consideration by Council.

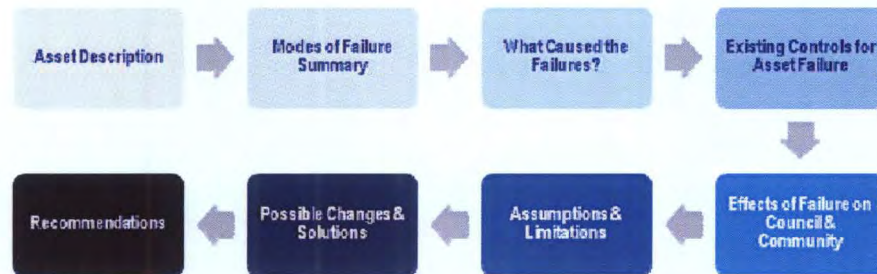
1. An investigation should be undertaken to identify on a cost/benefit basis in areas of high risk or flood affected areas possible adaption of full depth asphalt pavement for future construction and potential reconstruction of roads within known flood zones;
2. Undertake a cost benefit analysis approach to the repair of pavements within the known flood zone with full depth asphalt with the intent of phasing out granular or gravel pavements in these areas;
3. Investigate the practicality of developing a policy for location specific areas on flood prone streets where possible encouragement of section/zoned areas for small localised temporary "Stockpiling" stations of flood damaged material and debris. This must not block the street for emergency access and access to vital underground services; and
4. Following on from the previous note, an emergency flood management plan could be prepared for future events like this.

TRAFFIC SIGNALS



1 TRAFFIC SIGNALS

SECTION CONTENTS



1.1 ASSET DESCRIPTION

This asset category includes the traffic signal controller, lanterns, posts, pushbuttons, conduits, pits, cables and huts. The vehicle loop detectors have not been included as their specific operation is not affected by flooding and will continue to work as required once the other traffic signal components resume normal operation.

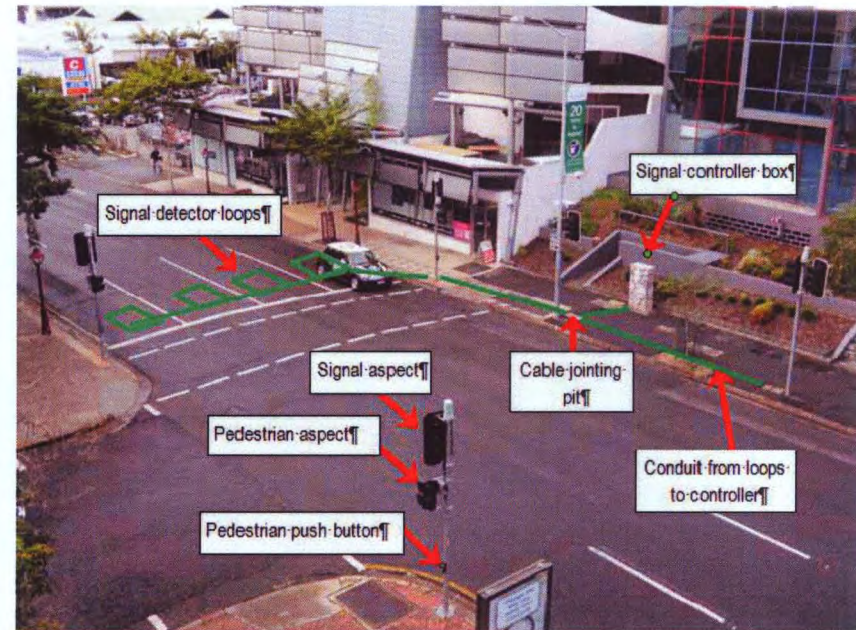


Figure 27: Traffic Signals

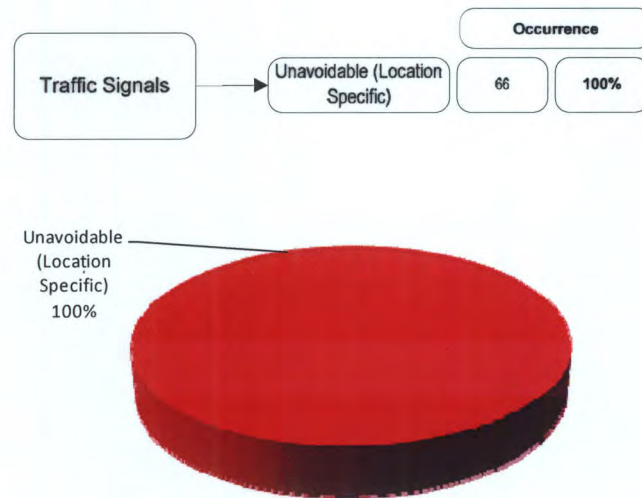
The traffic signals are safety critical assets that are operated continuously. The traffic signals are continually monitored at the Brisbane Traffic Management Centre (BMTMC) by the maintenance providers (Brisbane City Works) on a 24hr x 7day call-out basis. For critical faults at the intersections the maintenance contractor's response time is 1-2 hours on site. Council level of service for the asset category is 95% mean compliance with a KPI over 12 months and never leave intersection unattended if unsafe. Lap runs are undertaken every 3 months for quartz halogen signals aspects and every 6 months for LED signal aspects. They are maintained as required to 1% failure rate.

In the 2009/10 budget the asset value cost for signals and signals network combined was \$186M, capital cost of \$7M plus \$1M for modernising and an annual maintenance budget of \$5.0M.

1.2 MODES OF FAILURE SUMMARY

The asset failure analysis has been undertaken at a high-level for this asset category, utilising only the available information which was collected immediately following the flood event. From data supplied by Council, 66 signals were effected which equates to 7.4% of the total 888 signals. The findings from the analysis are illustrated in the figure below.

Figure 28: Mode of Failure Occurrence for Traffic Signals



From a review of the 66 signal locations affected by flooding, as mentioned earlier, the failure mode for all occurrences was considered to be *Unavoidable (location specific)* as no power supply was the reason for signals failing and no other modes were triggered. The signal equipment can't be located on higher ground as it needs to be appropriately positioned at the intersection. Further, components can't be lifted as they need to be readily accessible for maintenance and repairs. Associated equipment i.e. ducts and pits are also underground in unavoidable locations.

1.2.1 Data Confidence & Accuracy

Confidence in the data available is considered to be **highly reliable** given that all signals within the low lying areas were inspected during or shortly after the flood event and notes recorded if the location and asset was flooded.

1.3 WHAT CAUSED THE FAILURE?

From the data provided to Cardno, one main failure mode has been identified for the traffic signal asset category. This is discussed below.

1.3.1 Mode of Failure: Unavoidable (Location Specific)

It is believed that there was no practical way of avoiding the failures given the specific location of the asset for 100% of the failed traffic signals.

Directly flood related causes/mechanisms

As mentioned earlier, the analysis identified that loss of power supply caused the signals to fail. Whilst no data was supplied on the asset condition, Cardno was also informed that all signal assets were working and operational prior to the flood event. Therefore, it was considered that no other apparent or underlying causes led to failure of the signals.



Figure 29: Flooded Traffic Signals

1.4 EXISTING CONTROLS FOR ASSET FAILURE

Council has no asset controls in place to stop the failure of traffic signals. However, during a meeting with Council, Cardno were informed that prior to the flood to save the signal assets as much as possible, several components (e.g. circuit boards) were removed from a number of locations. It is estimated that at 14 signals, components were removed but the location was not affected by flood. Of these 14 signals only one signal had minor flooding which required the pits and conduits to be cleaned.

Several signals (3) had power supplied by small generators as power supply was cut by the energy supplier as a precautionary measure for the local area. During the recovery effort the energy supplier continually re-routed power to different sections of the network as required. Due to this there would be no point in ensuring two critical intersections were not located on the one power grid as during an incident the power grid can and would be adjusted as needed.

It is understood that Council has a list of critical intersections but it was not clear if this list was used to prioritise the removal of circuit boards. It may have been from staff's local

knowledge not by a Council database. Prioritisation should include factors which are in various Council datasets (e.g. condition, maintenance history, etc) which are currently not in one dataset. Further maintaining and developing the complete and comprehensive asset database should be investigated, including the integration of work management functionality.

Beyond this, once roads at signalised intersections are flooded they should not need signals as no cars should be driving in the flooded water. The issue is only the time to get signals backing up and running once flood water subsides.

Once flooding subsided, the remaining components were cleaned usually by hosing them out and components removed reinstalled. The following lists works completed with percentages shown as total of the 66 signal locations:

- conduits cleaned (water over road, entered conduits through pits) at 35 locations (53%)
- controller cleaned (water entered controller cabinet over terminals) at 43 locations (65%)
- controller replaced at 23 locations (35%).

22 signals (33%) required not cleaning whilst 34 (52%) signals required multiple clean up works.

It is expected however that the washing out of the cabinets and other equipment may lead to an accelerated time of asset failure due to degraded condition – i.e. rusting of circuit boards/ connections/wiring/etc.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

1.5.1 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score has been calculated as all locations having very minor effects on the council and the community as the roads or surrounding intersections were closed due to flood water anyway. Once the flood water subsides, the severity score

would increase based on the location of the signals within the road network and other factors such as traffic volumes and complexity to be control by Police.

Asset Type	Location / Age / Condition	Quantity	Sum Quantity as %	Severity	Severity Score	Risk Priority Number
Signals	Unknown but working order	66	100%	very minor as roads closed due to flood water	2	??

However, of the 14 signals which had components removed as a precaution and not actually flooded, 5 sites were considered to be high to very high severity as they were at key intersections within the network. These intersections locations are as follows:

- Intersection - B0083: Bowen Bridge Rd/Campbell St/Butterfield St at Herston
- Intersection - B0097: Lutwyche Rd/Northey St/Clem/ICB Off Ramp at Windsor
- Intersection - B0163: Sandgate Rd/Frodsham St/Crosby Rd at Albion
- Intersection - B0275: Breakfast Creek Rd/Montpelier Rd/ at Fortitude Valley

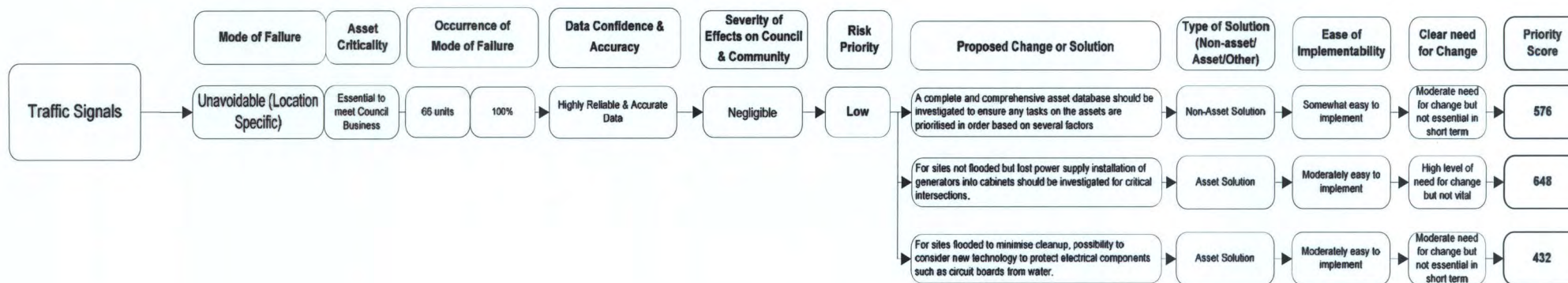
- Intersection - B8053: Bowen Bridge Road/Northern Busway/Northern Access at Herston

1.6 ASSUMPTIONS AND LIMITATIONS

It is assumed for locations where it was recorded that electronic equipment was re-installed that the re-installation was as a result of precautions for the flood and not simply regular maintenance.

1.7 POSSIBLE CHANGES & SOLUTIONS

From the analysis of data available to Cardno at the time of the analysis, consultation with key Council staff and Cardno's technical experience, the following possible changes / solutions are proposed:



1.8 RECOMMENDATIONS

As concluded in the proposed solutions / changes section above, the observed failures have a variety of causes. The improvements with the highest criticality based on the analysis are described below and are scheduled for implementation as outlined in Annex J:

It is recommended that Brisbane City Council:

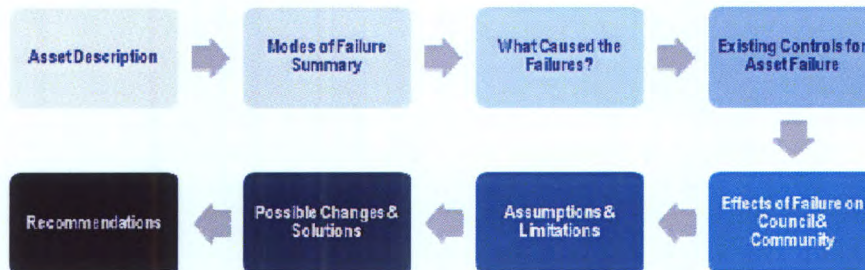
- Identify critical intersections that did not flood but lost power supply for inclusion in any future flood mitigation plans for potential use of emergency generators or UPS into cabinets; and
- Undertake a study into possible new technology to protect electrical components for sites that flooded.

STORMWATER DRAINAGE & ENCLOSED PIPES



1 STORMWATER DRAINAGE & ENCLOSED PIPES

SECTION CONTENTS

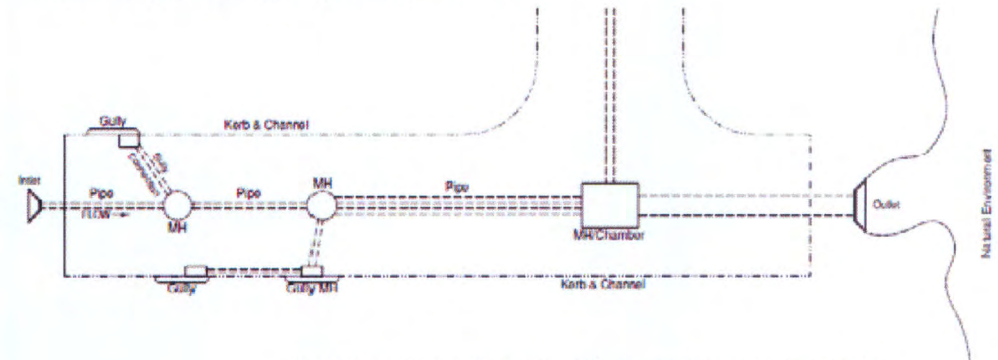


1.1 ASSET DESCRIPTION

This asset category includes the City's failed stormwater enclosed pipe, gullies and waterway infrastructure. These assets form a network of waterways, drains and pipes that transport water collected from surfaces and away from the city. The City's stormwater network has been growing since the establishment of the municipality of Brisbane over one hundred and fifty years ago and the increase in population and places increasing demands on it.

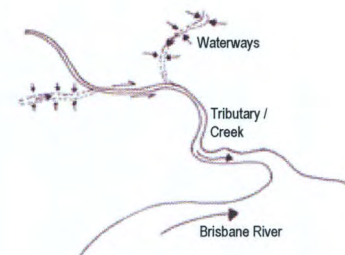
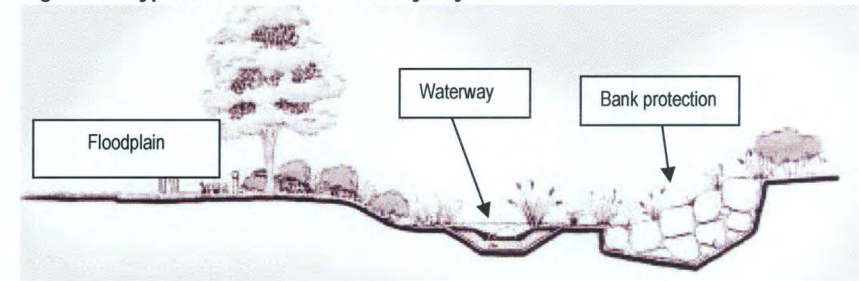
Stormwater infrastructure is intended to stop, impede or direct the flow of stormwater for the purpose of collecting the stormwater, or to extract the stormwater to provide flood prevention and protection, pollution control and the reuse of stormwater. One of the stormwater system's major uses is to mitigate flooding caused by large rainfall events by managing stormwater runoff and preventing local flooding of public spaces, transport corridors and properties. The key assets examined in this section are illustrated in the following figures:

Figure 30: Typical Design Layout for Stormwater



Source: Asset Strategic Plan, enclosed Stormwater Drainage Assets, July 2007

Figure 31: Typical Stormwater Waterway Layout



Source: Brisbane City Council Natural Channel Design Guidelines

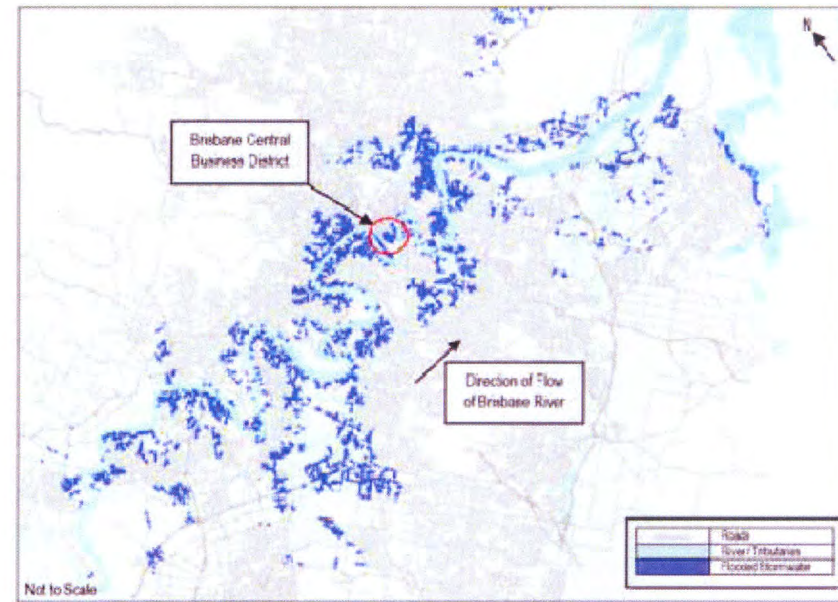
The 2011 flood event exceeded the ability of the network's ability to function in some areas of the city. During flooding the system was unable to drain into the flooded river whilst experiencing continued inundation from both rainwater and river flood water. In many instances floodwater flow backed up the stormwater and exited through gully pits.

Brisbane City Council, is responsible for establishing, maintaining and renewing the stormwater network. The primary function of the network is to prevent flooding to land and property from stormwater run-off. The network is designed in accordance with the Queensland Urban Drainage Manual. The level of service provided by the stormwater system is specified by average recurrence interval (ARI) of rainfall events that the system is designed to accommodate. For property, the design ARI is typically one in one hundred years.

To manage the stormwater assets, Council's City Assets Branch, provides strategic asset management direction, and coordinates the delivery of annual rehabilitation programmes. City Assets Branch also has responsibility for the development and dissemination of Specifications and Standards for these assets. The Local Asset Services group provides operational maintenance management in terms of reactive and programmed maintenance, including project listing, estimating and coordinating design. City Design provides enclosed stormwater drainage design services while Brisbane CityWorks provides stormwater drainage construction, repairs and maintenance. The Geographic Information System (GIS) team carries out data input services to the corporate spatial systems. In addition, a range of external service providers are used as required.

The extent of the flooded stormwater pipes is illustrated in Figure 32:

Figure 32: Brisbane City's Flooded Stormwater Enclosed Pipes



Source: Brisbane City Council Geographic Information System

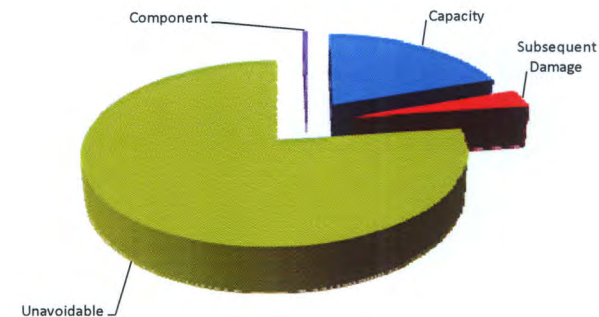
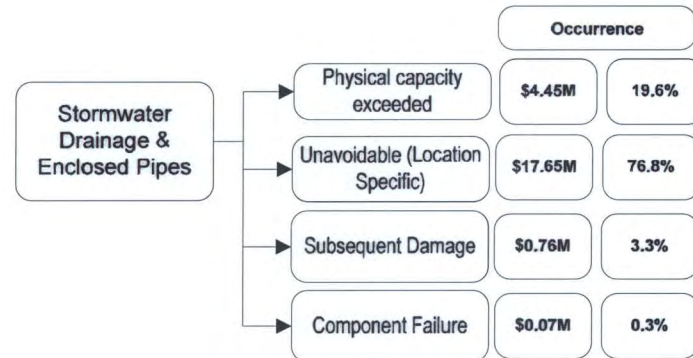
The flooded stormwater network was derived from existing Brisbane City Council flood models with an allowance added to extend the boundary to accommodate the flow of water into the network.

1.2 MODES OF FAILURE SUMMARY

As of 30th April 2006 Council's enclosed stormwater drainage network capital replacement value was \$1.988 billion. The network consists of approximately 2,640km of pipe, 67,440 manholes and 92,400 gullies. It was estimated that 17% of the City's 2,640km enclosed pipe was significantly silted from the flood, 0.2% (199) gullies were substantially damaged and a number of waterways were subject to significant damage. It is not feasible to fully assess the exact extent of the damaged and silted pipe given the scale and associated investigative costs. Following the flood, Council has assessed 451 km as silted to a level that causes failure.

The asset failure analysis has been undertaken at a high-level for this asset category level utilising the available data at the time of the analysis. The findings from the analysis are illustrated in the Figure 33:

Figure 33: Mode of Failure Occurrence for Stormwater Enclosed Pipe & Waterway



It is concluded from interrogating the information and data provided at the time of this exercise and from consultation with key staff from Brisbane City Council that approximately 77% of assets that failed within the asset category have failed due to their unavoidable location, 20% failed through their physical capacity being exceeded, 3% had subsequent damage and less than 1% were likely to be a component failure.

Assigning failures on an individual asset basis proved impractical for stormwater assets given the quality and level of information available. As a result, the failure modes have been nominated in relation to the estimated damage cost. This approach is not ideal as it does not provide an even comparison of the various failed asset types that comprise this asset category. It is recommended that further investigation be undertaken when further detailed information becomes available.

The table below summarises the assigned modes of failure based on estimated repair cost data provided by Brisbane City Council. The data represents a snapshot in time based on the information available at the time of the analysis. As more information becomes available these numbers will change as they are refined.

Damaged Asset Type	Description Provided	Estimated repair costs (\$)	Estimated repair costs %	Nominated mode
Stormwater quality improvement devices (SQUID's)	Debris load during flooding	80,000	0.4	Capacity
Gully inlets	High silt load in flood waters	640,000 80% of 800,000	2.8	Capacity
	Damage from clean up activities	160,000 20% of 800,000	0.7	Subsequent damage
Waterway, channels & flood mitigated creeks	Inundation, debris and velocity of flood waters erosion, scour, damage to concrete and other structures	3,750,000	16.4	Capacity
Creek remediation	Inundation, debris and velocity of flood waters erosion, scour, damage to vegetation and structures, and subsidence	12,160,000	53.0	Unavoidable
Stormwater pipes and outlets	High silt load in flood waters and damage from high velocity of flood waters. Silting of pipes, damage to pipes sink holes	\$5,391,000 90% of 5,990,000 (6,150,000 - 65,000 + 95,000)	23.4	Unavoidable
		\$599,000 10% of 5,990,000 (6,150,000 - 65,000 + 95,000)	2.6	Subsequent damage
	Headwalls	95,000	0.4	Unavoidable
	Sink holes (Sink hole appeared above stormwater pipe)	65,000	0.3	Component
		22,940,000*	100	

* Based on information available at time of analysis

Although the enclosed pipes physical capacity has been exceeded as they could not carry or distribute the flood water, their nature and subsurface location is unavoidable. It is determined that approximately 23% of the enclosed pipes have a failure mode of unavoidable, 3% from damage caused by subsequent recovery and clean-up efforts (washing the silt and debris down the drains) but it must be noted that inappropriate design is also a likely factor in the failure (possibly the wrong size of pipe or lack of one-way flow device).

Waterway infrastructure (waterway, channels & flood mitigated creeks) was subjected to inundation, debris and high velocity flood waters from stormwater run-off causing erosion, scour, and damage to concrete and other structures. These failures were not likely linked directly to the Brisbane River flooding, rather the period of wet weather prior and during the time the Brisbane River flooded.

The data made available for interrogation included assessed ID, name, location, description of damage, cause of damage, estimated repair costs, and a brief description of damage. The July 2007 Asset Strategic Plan for Enclosed Stormwater Drainage Assets was also made available.

Confidence in the data available is considered to be uncertain given the majority of the data is based on incomplete or unsupported records, procedures, investigations or extrapolation from a limited sample reducing the confidence in the analysis inputs. The accuracy of the data that has been provided for Cardno to assign the mode of failure is considered to be poor with significant data estimated.

It must be noted that at the time of the analysis the network had only been partially inspected in detail and as such, the analysis may not represent the full spectrum and quantity of failures. Further, the estimated damage costs may not truly represent the actuality across the portfolio. It is recommended that further investigations are undertaken to better understand the scale and mechanisms of failures for this asset category to ensure the asset base is designed and managed to cope with future flood events.

1.3 WHAT CAUSED THE FAILURES?

The analysis identified a number of the causes of the failed assets within this asset category. Given the function and location of the drainage assets near or below the river's normal water levels they are vulnerable to ingress of flood water and damage by flood events. Waterways endeavour to manage and transport stormwater towards the sea. It is possible that some of the City's waterways that connect to the Brisbane River may have been unable to drain into the river as river levels increased causing stormwater to back-up in the waterway leading to localised flooding around the waterway.

Common damage to these assets included:

- Waterway silted– the waterways are either natural waterways or construction supported waterways,
- Waterway erosion and slope slips/slumps,
- Waterway constructed infrastructure damaged from water flow and erosion,
- Silted enclosed pipes (varying level of silting),
- Sinkholes,
- Broken and damaged inlets – lintel and grates,
- Headwater scour/erosion damage.

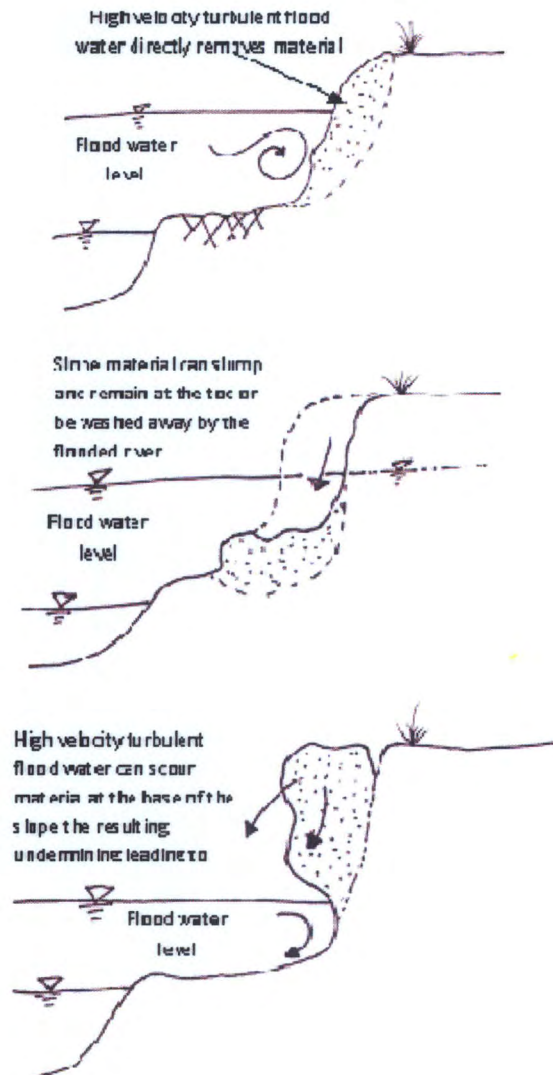
1.3.1 Physical Capacity Exceeded Mode of Failure

The asset's level of service was not expected to withstand the event in approximately 20% of the failed stormwater assets.

Directly flood related causes/mechanisms

The following are causes of failures that were directly attributable to the flood event itself:

- Localised stormwater flooding occurred when the capacity of the network in certain areas of the city was exceeded as a result of the flooded Brisbane River blocking stormwater discharge into the river and causing a back-up of stormwater. This led to silting of the pipes and increased flow to some waterways.
- The headwalls around the pipe outlets were subject to significant damage from the high velocity flows in the flooded Brisbane River increasing the ingress of flood water into the network. Although their location could be considered unavoidable they are designed to account for flood events and yet their physical capacity was exceeded
- It appears that the natural earthen slopes of the waterways predominately failed either from direct erosion and scour from the stormwater flow velocity. Eroded material scoured from the toe of the slope reduces slope stability leading to failure or the exposed slope is unable to support the heavy water laden soils leading to collapse. There are some parts of the waterways that are considered artificial or man-made. These appear to have suffered erosion and scour around their hard edges which compromised their structural integrity. Slumping of waterway banks as a result of rapid reduction in water level may have caused some failure.

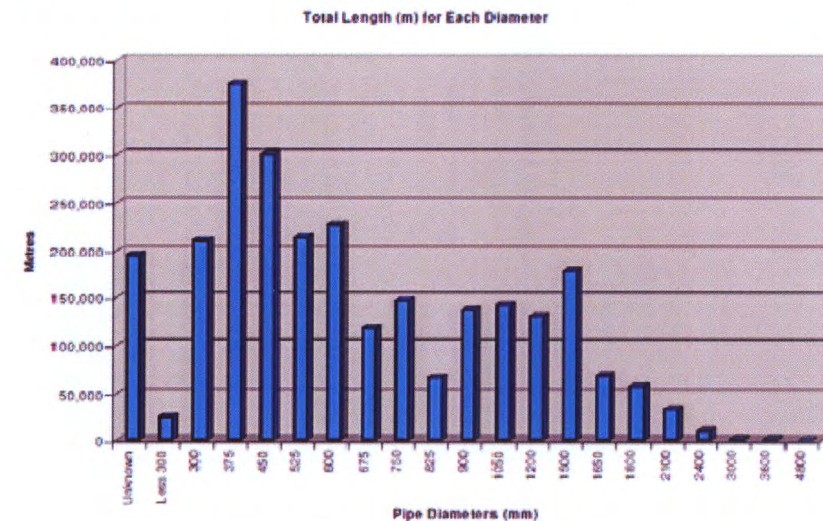


The Council's technical document on Stormwater Outlets in Parks and Waterways (2003, Version 2) recommends acceptable solutions as 'the side slope of mowable channel banks, including grassed swales, must be not steeper than 1V:4H and preferably no steeper than 1V:6H. Bank slopes on non-mowable vegetated slopes must be appropriate for the local conditions and safety risk.'

Apparent causes

Influence of pipe material & diameter on flood damage

The stormwater system capacity is influenced by factors including pipe diameter, slope, length and the interlinked capacity of the network. Based on 2007 figures, of the 2,640km of pipe, the majority of pipes in Brisbane are relatively small in size. Only 10% of pipes are greater than 1200mm in diameter or width. Approximately 39% are between 600mm and 1200mm, and 49% of the network is less than 600mm. The main pipe materials are 90.1% precast reinforced concrete, 1.2% cast in situ concrete and 1.1% brick.



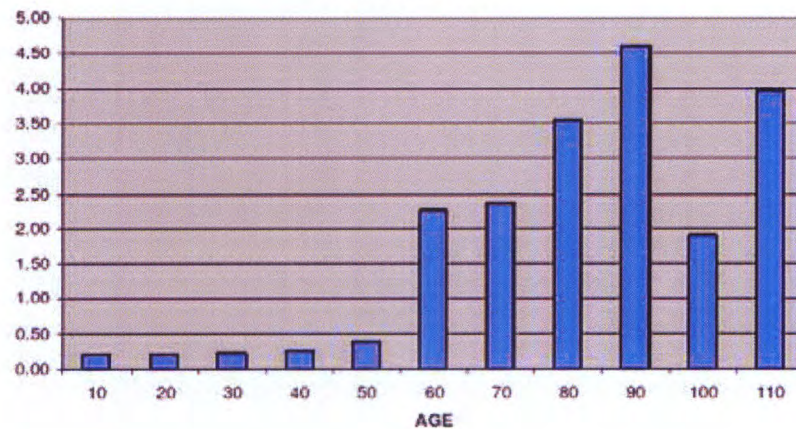
Source: Asset Strategic Plan, enclosed Stormwater Drainage Assets, July 2007

It is very difficult to assess the extent to which the capacity of the stormwater network was exceeded, if at all, without detailed modelling of the network under the rainfall conditions that occurred.

Influence of age and condition issues on flood damage

The condition of a pipe section depends on the number of structural defects found during the pipe survey. The condition is based on the number and severity of these defects as calculated using the Sewrat Computer Programme divided by the length of the pipe. This has then been averaged over a ten-year period. As of June 2005, approximately 60% of pipelines had been surveyed. The graph below shows the condition of the network with age at this time.

Figure 34: Brisbane City Council Stormwater Enclosed Pipe Structural Defect Scores per Metre



Source: Asset Strategic Plan, enclosed Stormwater Drainage Assets, July 2007

From Figure 34 it can be seen that the asset base is ageing and older pipes have a marked increase in the structural defects per metre. Although this profile is based on historical information, it provides a valuable illustration of potential condition issues across the asset base. If this profile is consistent across the failed assets, it is possible that condition was a

contributing factor to the failure of this asset category. Defects can influence the level of silting in the pipes and increase infiltration into the system resulting in reduced capacity of the system.

Without data on the age of failed pipes being available, it is not possible to definitively determine the impact this would have had on the asset category from the flood event. The likelihood of flooding can be impacted by the age of stormwater infrastructure. Older infrastructure, especially that built before 1970's, typically may be unable to accommodate the volume of storm water generated by serious storm events. Since the late 1970s, modern drainage standards ensure stormwater assets can safely contain the overland flows from up to a 100-year storm event.

It was estimated that 33 of the city's 70 stormwater quality improvement devices (SQIDs) failed and were unable to trap stormwater pollutants before entering waterways. SQIDs include trash racks, gully pit, and gross pollutant traps.

Underlying causes

The following are underlying causes of failures that may have influenced the asset physical capacity being exceeded:

- The asset condition may have exacerbated capacity constraints.
- The capacity of the network to withstand design flood events may not be known due to a lack of information about the asset base. E.g. pipe size, location. This may be especially true for older parts of the network.
- The stormwater network outfalls were not all properly protected by non-return devices leading to river water backing up the network. Under free outfall conditions, the network may have had sufficient capacity.

1.3.2 Unavoidable Mode of Failure (Location Specific)

There was no practical way of avoiding the failure given the specific location of the asset for approximately 77% of the failed stormwater assets.



Figure 35: Outlet Pipe Non-return Device

Directly flood related causes/mechanisms

The following are causes of failures that were directly attributable to the flood event itself:

- The underground locations of the enclosed pipe were subject to complete inundation for a significant period of time during the flood. The inundation resulted in significant silting. The scale of inundation may have stretched beyond the boundaries of the surface flooding as the water infiltrated the network of pipes. The main cause of enclosed stormwater pipes failing appears to be from excessive silting.
- It is anticipated that the heavy rain preceding the flood event would have to some degree flushed a proportion of pre-existing silt and debris from the network. Subsequent silting from the clean-up effort may have increased the level of silting in the pipes.

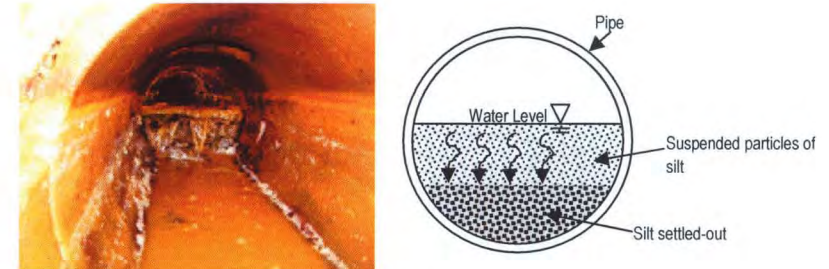


Figure 36: Example of a Silted Enclosed Pipe

- The headwalls of pipe protruding onto the banks of the Brisbane River and its tributaries appear to have been subjected to significant erosion (see Figure 37). Outlet pipes often need to be located at or near river level to ensure they are low enough in the network to provide optimal drainage flow. As such they are considered to be in an unavoidable location.
- Erosion and scouring of the banks of the stormwater waterways from inundation, floating debris and high velocity stormwater has caused the silting, slips, slumps and collapses blocking the waterway from properly transporting stormwater. This is illustrated in Figure 38.



Figure 37: Damaged Headwall

Apparent causes

The following are apparent causes of failures that may not have been directly attributed to the flood itself however, did influence the asset being in an unavoidable location:

- Natural waterways have formed over many thousands of years to drain surface water from catchments into the river. Constructed waterways often follow the natural flow paths but are reinforced to ensure a solid boundary between the banks of the waterway and the properties that surround it. The location of these waterways is unavoidable.

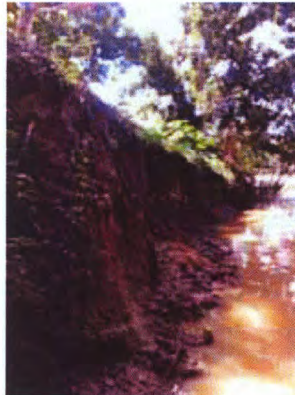


Figure 38: Waterway Scour / Erosion

Underlying causes

The following are underlying causes of failures that may have influenced the asset being in an unavoidable location:

- The erosion of naturally forming waterways is a natural occurrence. However, urban development continuously encroaching onto the boundaries of the waterway can increase the occurrence and severity of damage;
- It is possible planning policies, limitations in appropriate available land could have lead to development of properties and associated stormwater services close to waterways.

1.3.3 Component Failure

The assets that failed due to the failure of a component of the asset accounted for less than 1% of the failed stormwater assets.

Directly flood related causes/mechanisms

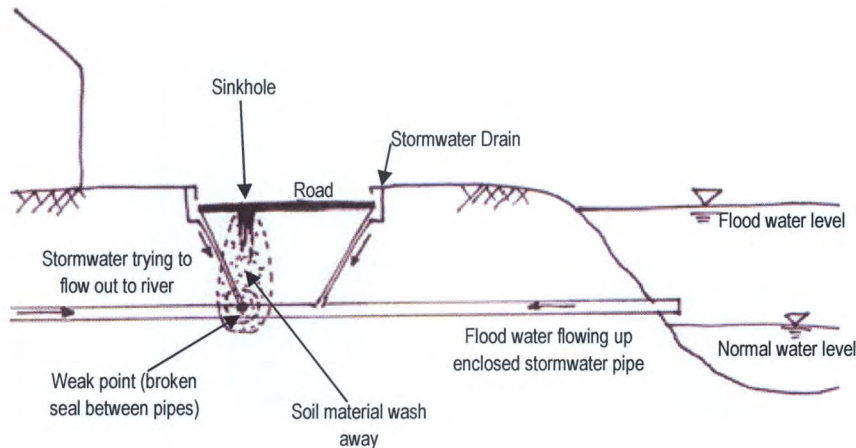
Figure 39: Sinkhole



Sinkholes (see Figure 39) can form when a pipe joint fails/ruptures allowing stormwater to escape and erode the material surrounding the joint or groundwater to draw granular material surrounding the pipe through the pipe joint. Stormwater infiltrates less compacted soils and fills material surrounding either the main pipe or the connector pipe and scouring and carrying it away to the main pipe. A hypothetical formation of a sinkhole is illustrated in Figure 40.

In the cases that occurred following the 2011 flood event it is possible that the pressure arising from flood water entering the pipe and the stormwater flowing down the pipe was dissipated through the weakest part of the system, the pipe joints. Sinkholes can continue to expand even after a collapse as collector pipes continue to carry water down into the main pipe, further eroding the sides of the sinkhole. It is possible that poor construction materials and techniques associated with the joints could result in poorly sealed joints.

Figure 40: Hypothetical Sinkhole Formation



It is possible further sinkholes will appear over the coming months although it is not anticipated to be a common occurrence. These situations are local occurrences.

Apparent causes

The older the pipes and the worse the condition of the pipe the increased likelihood of defects that could lead to pipes rupturing or joint seals breaching.

Underlying causes

- It is possible poor construction techniques may give rise to inferior connection of pipes.
- 3rd party construction near the pipe may have contributed to, or have been fundamental in the sinkhole forming.

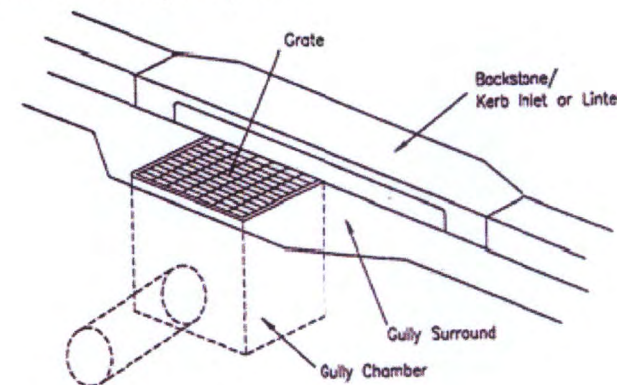
1.3.4 Subsequent Damage

The failures caused by subsequent recovery and clean-up efforts accounted for approximately 3% of the failed stormwater assets.

Directly flood related causes/mechanisms

The flood debris arising from both the natural silt residue left after flood waters receded and the debris from the property clean-up efforts resulted in blocked drainage gullies (see Figure 41). Some Council staff believe the activities associated with the clean-up effort may have caused significant damage to 199 of the city's stormwater gullies. This damage was believed to have been caused by the use of heavy machinery during the clean-up, directly damaged the gully surround, grate or backstone.

Figure 41: Stormwater Gully Components



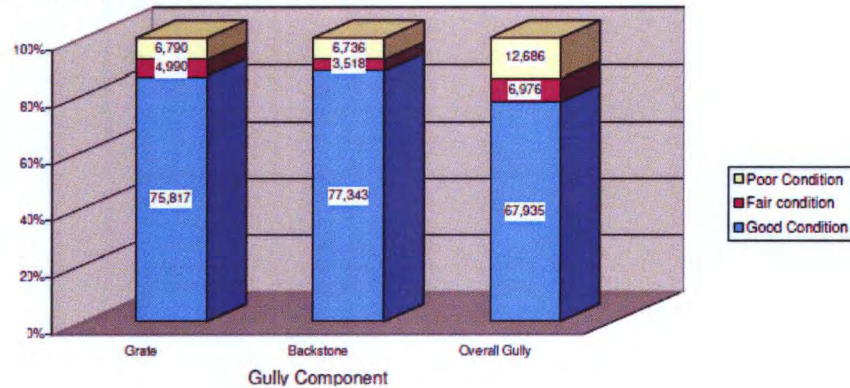
Source: Asset Strategic Plan, enclosed Stormwater Drainage Assets, July 2007

Apparent causes

Across the city there are approximately 92,400 gullies in the network. 95.7% are grated inlets on the roadway, 1.1% are back inlets on the roadway, 2.3% are field inlets and 0.2% are trench gratings. The condition of a gully is based upon the condition of its grates and backstone or lintel, as these are the two most critical elements for both safety and water

capture. A gully with either a backstone or grate in poor condition is considered to be a poor condition gully. At the time of the last condition survey (September 1999 results shown in Figure 42) 12,686 gullies, or 14%, were classified as in poor condition.

Figure 42: Stormwater Gully Condition 1999



Source: Asset Strategic Plan, enclosed Stormwater Drainage Assets, July 2007

From Figure 42 it is reasonable to assume that condition may have had a role in the asset failures but would not have been the primary mode of failure given the majority of the gully assets were in good condition.

It appears that these assets failed as a result of subsequent damage caused by the clean-up efforts. This is based on the assumption that the above profile is representative of the 199 gully assets that failed.

Figure 43: Debris Loaded Stormwater Gully



The clean-up effort introduced more silt into the enclosed pipe network as people cleaned silt and debris from their properties and the street.



Underlying causes

The following are underlying causes that may have influenced the failure due to subsequent damage:

- The desire to clean-up as quickly as possible leading to the use of heavy machinery may have lead to damage. The damage to these gullies may likely be a cost beneficial sacrifice to achieve a quicker clean-up.

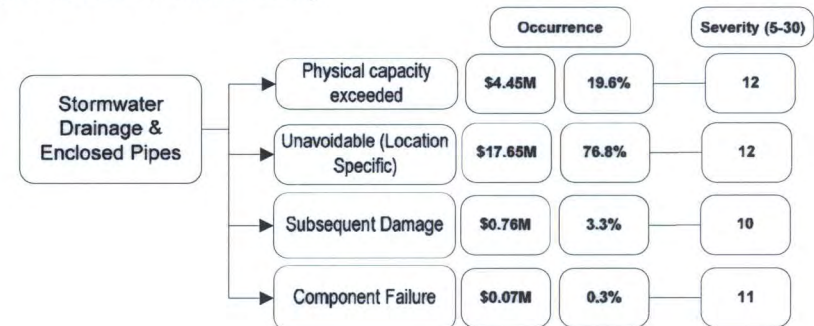
1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council have in place to stop the failure of stormwater assets from occurring include:

- Design standards (Queensland Urban Drainage Manual (QUDM) and Natural Channel Design)
- Stormwater management policies (waterway position)
 - Urban Stormwater Water Management
 - Brisbane City Plan
- If Council undertakes maintenance and asset renewal activities the portfolio should be less susceptible to aspects that contributed to failure, like condition and age related effects.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

Figure 44: Mode of Failure Severity



From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the Community to get an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

Severity of Physical Capacity Exceeded Failures

For this Mode of Failure an average severity score has been calculated as having a minor impact severity on the Council and the Community. The score of 12 has been derived based on the following:

- There is negligible impact on the Council corporate image, severe impact on environment with moderate to serious environmental damage of local importance that is reversible within a month. There is negligible health and safety impact with no injuries currently known to be attributable to the failures.
- There was minor loss of service with service delivery experiencing minor delay although significant service disruption affected a relatively small number of customers. The effect on the council and the community was negligible with low

awareness in the stormwater asset failures and relatively small numbers of customers experienced disruption. The economic impact on Council was major as the initial estimated damage costs for this mode of failure was approximately \$4.5M.

Severity of Unavoidable (Location Specific) Failures

For this Mode of Failure an average severity score has been calculated as having a minor impact severity on the Council and the community. The score of 12 has been derived based on the following:

- There is negligible impact on the Council corporate image, severe impact on environment with moderate to serious environmental damage of local importance that is reversible within a month. There is negligible health and safety impact with no injuries currently known to be attributable to the failures.
- There was minor loss of service with service delivery experiencing minor delay although significant service disruption affected a relatively small number of customers. The effect on the council and the community was negligible with low awareness in the stormwater asset failures and relatively small numbers of customers experienced disruption. The economic impact on Council was major as the initial estimated damage costs for this mode of failure was approximately \$17.5M.

Severity of Component Failures

For this Mode of Failure an average severity score has been calculated as having a negligible impact severity on the Council and the Community. The score of 11 has been derived based on the following:

- There is negligible impact on the Council corporate image, severe impact on environment with moderate to serious environmental damage of local importance that is reversible within a month. There is negligible health and safety impact with no injuries currently known to be attributable to the failures.
- There was minor loss of service with service delivery experiencing minor delay although significant service disruption affected a relatively small number of

customers. The effect on the council and the community was negligible with low awareness in the stormwater asset failures and relatively small numbers of customers experienced disruption. The economic impact on Council was minor as the initial estimated damage costs for this mode of failure was approximately \$0.07M.

Severity of Subsequent Damage Failures

For this Mode of Failure an average severity score has been calculated as having a negligible impact severity on the Council and the Community. The score of 10 has been derived based on the following:

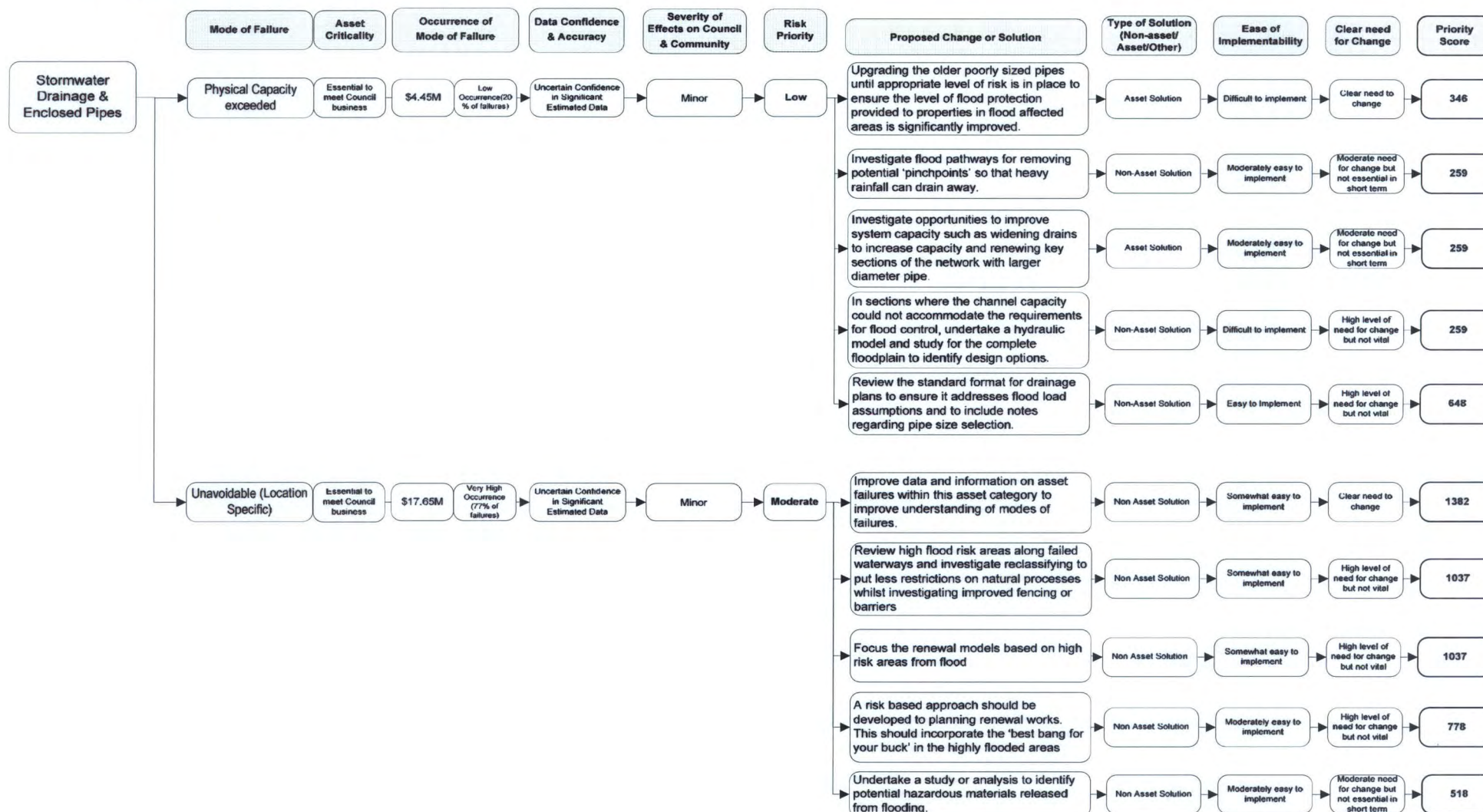
- There is negligible impact on the Council corporate image, severe impact on environment with moderate to serious environmental damage of local importance that is reversible within a month. There is negligible health and safety impact with no injuries currently known to be attributable to the failures.
- There was minor loss of service with service delivery experiencing minor delay although significant service disruption affected a relatively small number of customers. The effect on the council and the community was negligible with low awareness in the stormwater asset failures and relatively small numbers of customers experienced disruption. The economic impact on Council was severe as the initial estimated damage costs for this mode of failure was approximately \$0.76M.

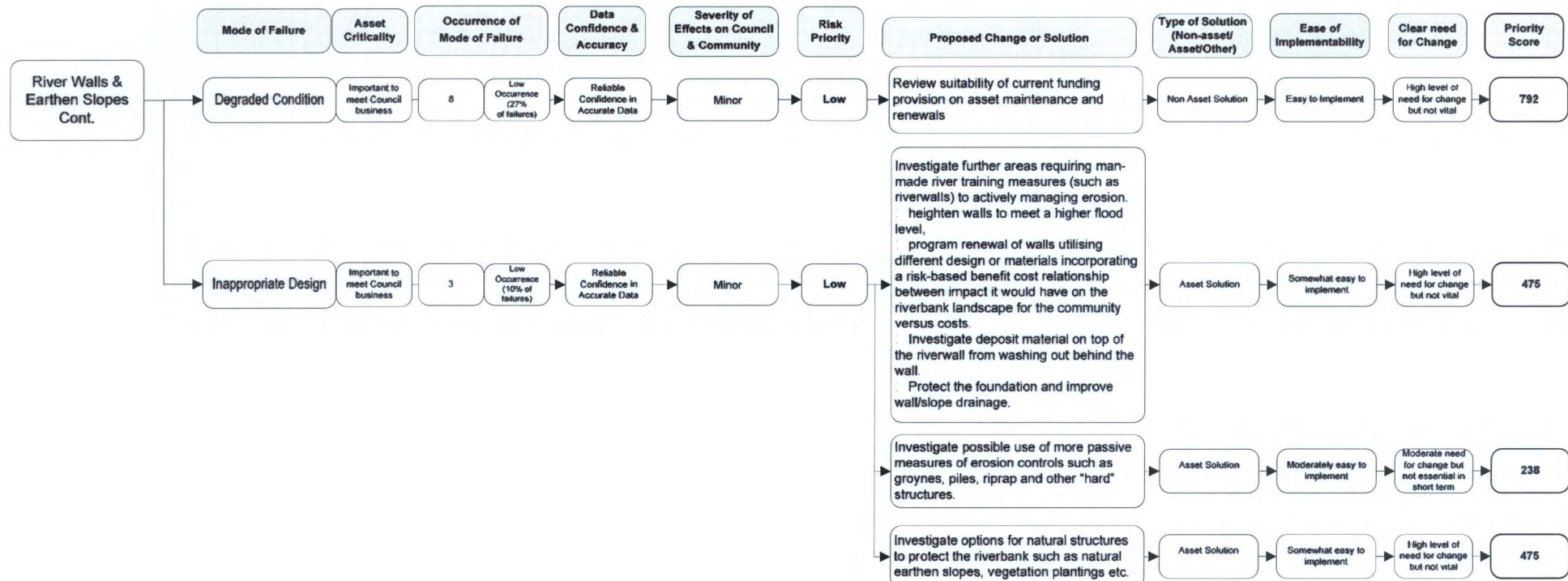
1.6 ASSUMPTIONS & LIMITATIONS

Limited information available at the time of the analysis restricts the accuracy of the assumptions made. Significant assumptions have been made around the estimated damage costs being representative of a type of mode of failure.

Brisbane City Council believes that the gullies failed from subsequent damage. Further detailed information and data would be required to verify the accuracy of this assumption.

1.7 POSSIBLE CHANGES & SOLUTIONS





1.8 RECOMMENDATIONS

As concluded in the proposed solutions / changes section above, the observed failures have a variety of causes. Cardno recommend approaching their solutions in clusters of actions that will address various causes simultaneously. The improvements with the highest criticality based on the analysis are described below and are scheduled for implementation as outlined in Appendix J:

It is recommended that Brisbane City Council

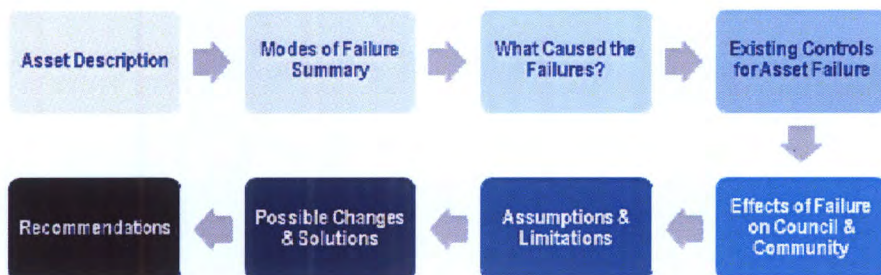
- Complete a silting map of Brisbane following the 2011 flood event. This will help forecast the extent of damage for future events;
- Review high flood risk areas along failed waterways and investigate possible reclassification;
- Focus the future development of renewal models to incorporate appropriate resourcing to high risk areas from flood;
- Continue to investigate as and when required, the possible installing of outlet one-way gates and one-way valves in strategic network locations to prevent backflow;
- Adopt a risk based approach to planning renewal works to ensure highly flooded areas are identified and appropriate works integrated into forecasting renewal works; and
- Investigate the feasibility on a cost benefit basis, the undertaking of Ground Penetrating Radar (GPR) modelling along stormwater drains in flood affected areas to identify where voids have arisen.

RIVER WALLS AND EARTHEN SLOPES



1 RIVER WALLS AND EARTHEN SLOPES

Figure 45: Typical Riverwall



1.1 ASSET DESCRIPTION

This asset category includes the City's river walls and earthen slopes. The Brisbane River and its river banks are one of the most dynamic natural features of the City. Over the years extensive public infrastructure, such as roads and recreational facilities, have been constructed and now dominate the riverbank landscapes. The City's river walls are constructed to protect the riverbank public infrastructure and assets from damage or destruction caused by erosion. These structures are effectively day-to-day river defence and flood defence structures and when they are unable to provide this defence they are considered to have failed.

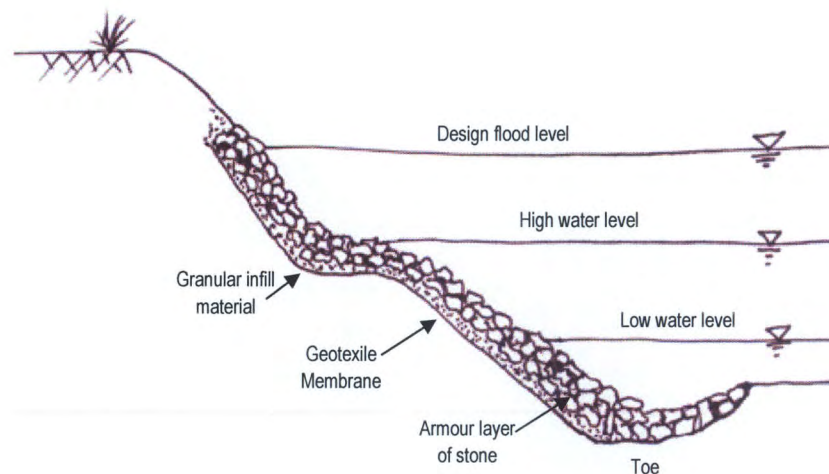
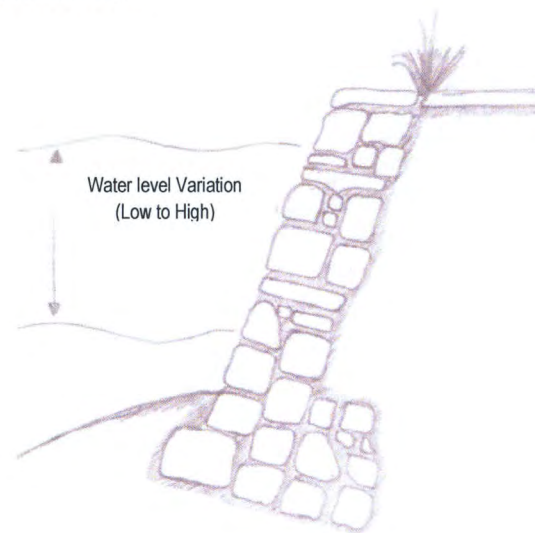
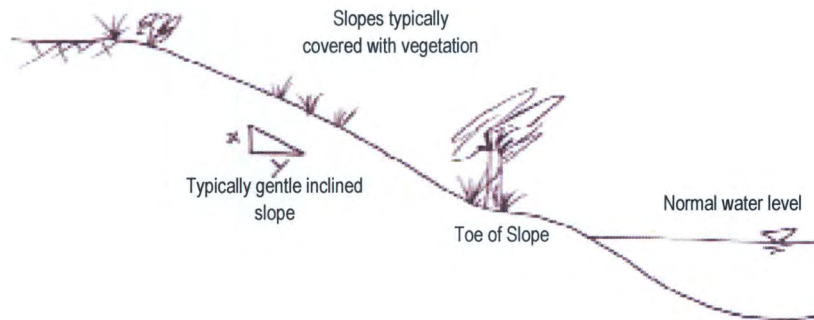


Figure 46: Typical Earthen Slope



The earthen slopes that can dominate the banks of the river are either natural or artificial. These slopes typically consist of the grass-covered sloped riverbank. Some have additional protection against erosion by swiftly flowing water. The slope typically depends on the natural topography.

The Brisbane community expects that the property lines along riverbanks stay defined, defying the natural processes of the river. To ensure the protection of this boundary, Brisbane City Council maintains the river wall assets to ensure the continuous protection of community foreshore assets and infrastructure from erosion.

Council provides and maintains the river walls and earthen slopes to achieve a desired level of service. Key aspects of service desired from these assets are that the river walls are to provide erosion immunity to the adjoining land, infrastructure, structures and natural assets. The presence of river wall structures should not adversely affect the natural environment and natural processes. Wherever possible and practicable the application of “soft” engineering solutions would take a preference over “hard” engineering options, e.g. riprap riverbanks instead of concrete river walls. River wall structures are available, accessible and safe to the public and environment. River walls are utilised as passive recreational facilities and accommodate a public shared path and other facilities. River walls are maintained in a safe, functional and aesthetically pleasing condition and the

maintenance and repairs to the river walls are conducted to minimise inconvenience to the public and environmental impacts.

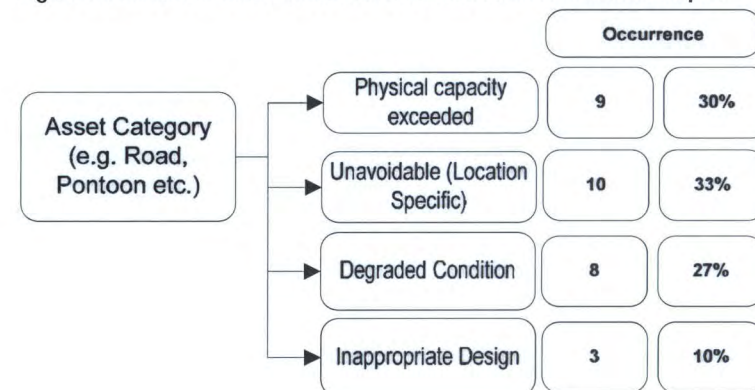
Brisbane City Council City Assets coordinates, oversees, plans and budgets for major maintenance and rehabilitation projects. Most of this maintenance and rehabilitation work is managed in partnership with Brisbane City Works (BCW). Planned and unplanned minor maintenance is carried out by Brisbane City Works.

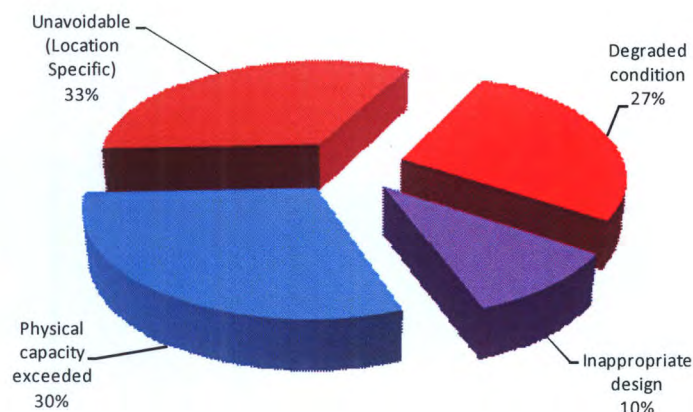
1.2 MODES OF FAILURE

30 of the City's 97 river walls were identified as failing and [10] earthen slope failed as a consequence of the 2011 flood. The city's 97 river walls represent 13,339m of wall of varying size and design with a Depreciated Replacement Value as of September 2010 of \$24.1 million. The exact length of failed wall has not yet been assessed but in the event that the total length of the 30 completely failed this would represent approximately 45% of the total length of riverwalls in the city.

The asset failure analysis has been undertaken at a high-level utilising the available data at the time of the analysis; the findings from the analysis are illustrated in the figure below:

Figure 47: Mode of Failure Occurrence for Riverwalls & Earthen Slopes





Cardno has concluded from interrogating the information and data provided at the time of this exercise and from consultation with key staff from Brisbane City Council that 30% of assets that failed within the asset category have failed due to their physical capacity being exceeded. 33% failed through their location being unavoidable. 27% had degraded condition and 10% were likely to be an inappropriate design.

To derive the occurrence of the above mode of failures the data and information available was discussed with BCC key staff to identify the damage to the assets. This damage was used to derive the associated failure mechanisms. Based on technical judgement Cardno has attributed the failure mechanism of the failed assets to an appropriate mode of failure. The data interrogated included asset ID, Name, Address, Brief Description of Damage. The 16th September 2010 Sea and River Wall Asset Management plan, pre existing condition assessments and some photographs of the damage were also made available.

1.2.1 Data Confidence & Accuracy

Confidence in the data available is considered to be reliable given that the majority of data that was available is based on sound records, procedures and investigations. There are minor shortcomings in post flood condition information, limiting the reliance placed on the unconfirmed reports or extrapolation of damage.

The evaluation of the damage to the river walls and earthen slopes from the flood was undertaken by Brisbane City Council engineers.

The accuracy of the data used in assigning the mode of failure is considered to adequate but has minor inaccuracies as the data is understood to have been derived from limited investigation as part of a drive-by inspection.

It must be noted that at the time of the analysis the river walls had not been inspected in detail and as such the analysis may not represent the full spectrum and quantity of failures. It is envisaged that further investigations are to be undertaken to better understand the scale of failures and to better understand the mechanisms of failures to ensure the asset base is best designed and managed to ensure optimal levels of service.

1.3 WHAT CAUSED THE FAILURES?

The analysis identified a number of events and underlying causes. Given their purpose and location (on or close to the edge of the river) these assets are vulnerable to damage by flood events. River walls should endeavour to prevent erosion of the riverbank but not collapse suddenly in floods given they are typically designed for a one in 100 year event. To understand what caused the failures it is necessary to consider how walls and slopes perform when overtopped, inundated and/or scoured.

Although some of these assets failed it appears that there was minimal loss of actual property due to their failure and no lives were lost due to these failures. The possible causes of failures for this asset category include:

1.3.1 Physical Capacity Exceeded Mode of Failure

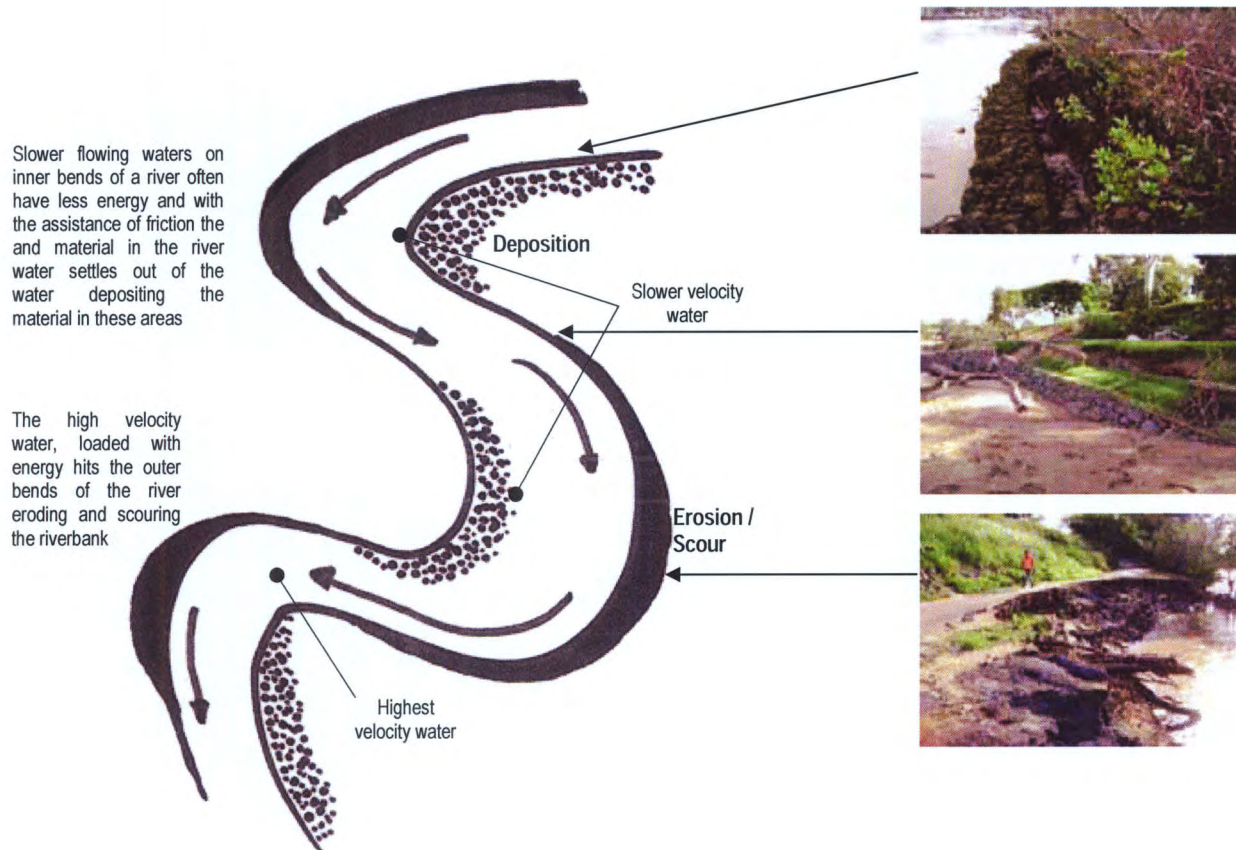
Assets whose level of service was not expected to withstand the event accounted for 30% of the failed river walls and earthen slopes.

Directly flood related causes/mechanisms

Causes of failures that were directly attributable to the flood event itself include:

- Given the location of the river walls the majority of river walls that failed were directly subject to the flow of the river and complete inundation for a significant period of time during the flood;
- Although there may be a number of walls that were damaged during the flood they still protected the public infrastructure and assets on the riverbank from damage or destruction caused by erosion. As such they have not failed;
- Bends in the river and constrictions in the river channel increase potential for scour damage to the riverwall structures. Although river walls may seem less vulnerable than earthen slopes, a wall can destabilise from erosion around the foundation leading to collapse/failure. During the flood, water overtopping the wall may have eroded the material behind the wall exacerbating the scour

damage. Typically the river causes scour in the outer bend and deposition in the inner bend. Riverwalls and earthen slopes on the outer bends were likely to have been subjected to scour leading to failure.



Gabion walls are typically located in the river's calmer waters to protecting riverside vegetation and soft assets

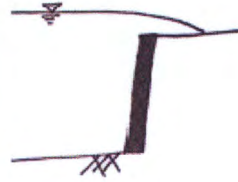
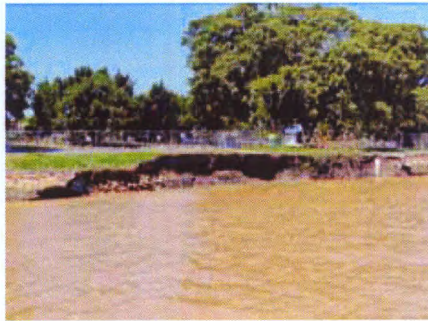
Solid stone pitched walls are typically throughout the river but notably along the straight lengths of the river to protecting riverside infrastructure assets

Damaged walls are often located on river bends.

In general stone pitched walls are brittle structures, less tolerant of movements caused by settlement. In comparison gabion walls are flexible and tolerate movement better but the wire baskets are susceptible to damage from corrosion and abrasion.

River walls

Typical damage to river walls includes the following:



Overtopping and erosion of
backfill material

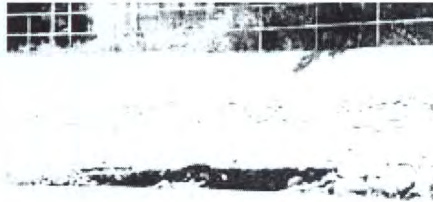
As the flood water exceeds the height of the wall it exceeds the capacity of the wall to protect the infrastructure and assets on the riverbank.

The turbulent nature of high velocity floodwater erodes the material behind the wall reducing the wall's resisting forces against the forces exerted by the flood waters, which may ultimately compromise structural integrity leading to damage or collapse.



Structural failure/wash-away

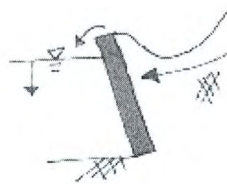
The force of the water impacting the wall has caused damage. This damage may have started as a small incident but the magnitude of the flood event would have rapidly magnified the extent of the damage compromising the integrity of the wall and it has failed.



Scour/erosion/wash-out

Erosion occurs if the driving erosive forces exceed the forces resisting. Resistance is provided by the river wall structure itself and the material it protects. As the bottom of a river wall becomes exposed the river channel, the footing under the wall can rapidly erode. This can lead to the wall to fail.

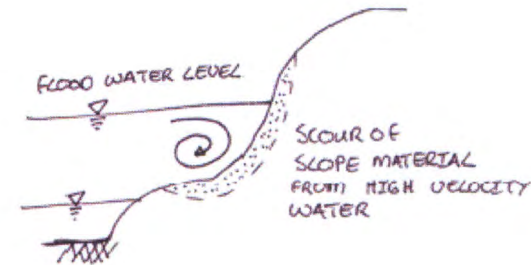
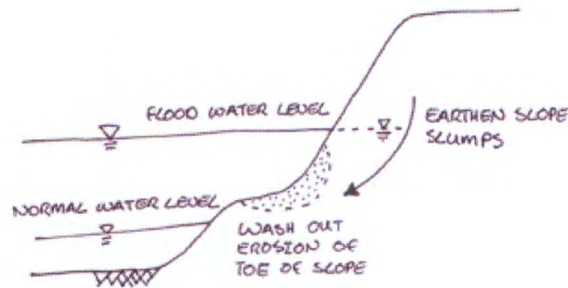
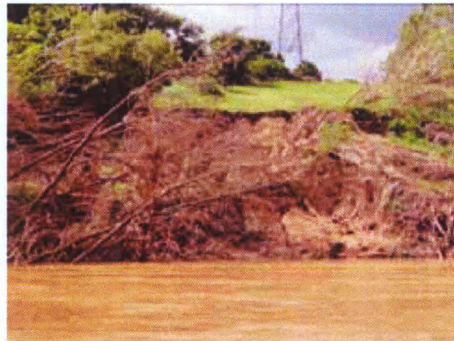
Solid river wall structures often provide greater resistance than earthen slopes that generally rely solely on the soil and its properties to resist the forces exerted by the water.



Rapid drawdown

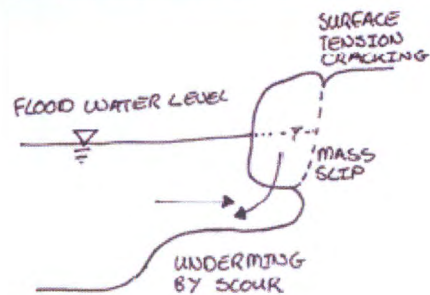
It would appear that one of the ways the river walls may have failed is as part of a slope failure when the flood recedes. The external water level drops quicker than the rate at which water pressures can be dissipated from the material behind the wall ('rapid drawdown'). Damage may include surface tension cracking, and partial or complete wash out/away.

Generally, the causes of damage to earthen slopes can be considered natural events occurring at the riverbanks. However, when the damage occurs in an urban environment it can cause a problem.



The stability of a slope is relative to the soil strength. Soil strength is relative to pressure of water held within the soil in and around the gaps between particles (pores), known as porewater pressure. As flood water infiltrates into a slope the porewater pressures rise, increasing the weight bearing down on the slope or structure increasing its susceptibility of collapse/failure. If the flood waters recedes quicker than the porewater pressures can be dissipated in the soil, a situation often referred to as 'rapid drawdown' occurs.

Erosion occurs if the driving erosive forces exceed the forces resisting. The earthen slope relies on the soil and its properties to resist the forces exerted by the water. Rapid erosion may have occurred as the fast flowing flood water scours material from the slope reducing slope stability leading to failure. The natural or unprotected riverbank may be susceptible to rapid erosion when exposed to the river current.



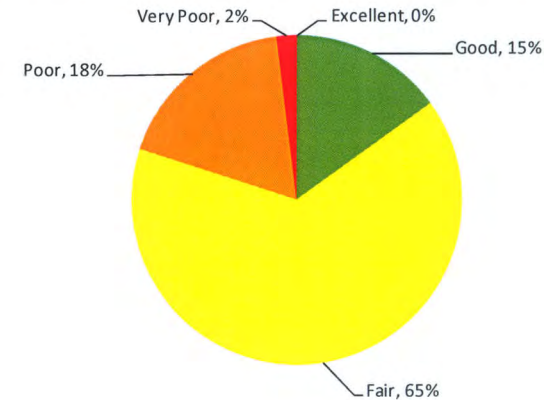
Unprotected lengths of the river bank are susceptible to erosion, sometimes undermining a bank from the increased verosity of the flow. As the flood water levels rise it is likely the increased weight of the unsupported soils becomes too great and leads to collapse.

Apparent causes

Apparent causes of failures that may not have been directly attributed to the flood itself but did influence the physical capacity of the asset being exceeded include:

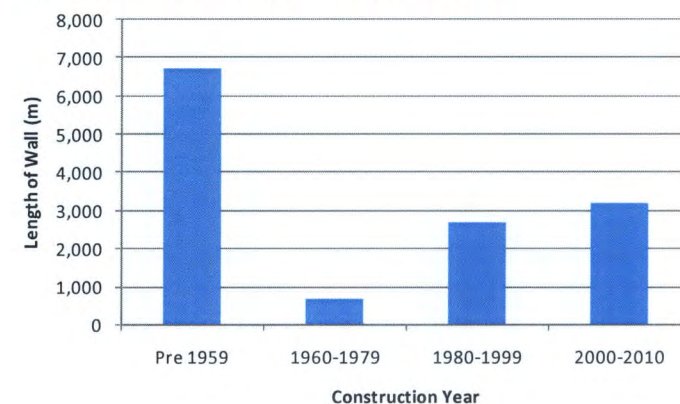
- From the September 2010 Asset Management Plan it is understood that 80% of the river wall asset base was in fair to good condition, with 20% in poor and very poor condition; this is illustrated in the following profile. Assuming that this profile is representative across the assets that failed it would imply that a significant proportion of the assets are in adequate condition with some deterioration evident.

Figure 48: River Wall Portfolio Condition Profile Prior to Flood Event



From an inspection in August 2010, 26 of the 30 walls that failed had condition issues ranging from minor scour through to settlement, dropping down and evidence of erosion and scour. Condition may have influenced the failures. However it is difficult to decisively nominate the existing condition as the dominant issues causing failure.

Figure 49: River wall age profile (September 2010)

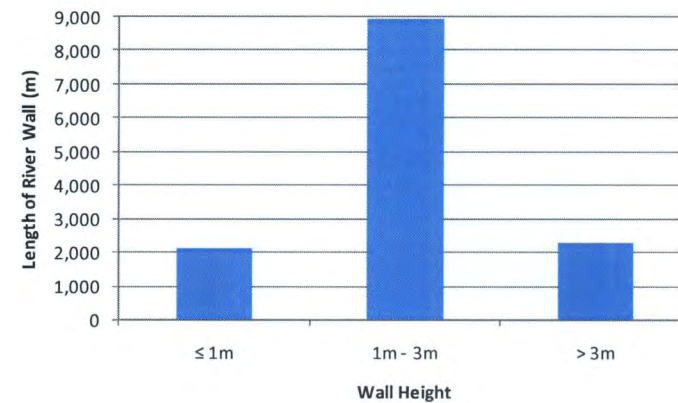
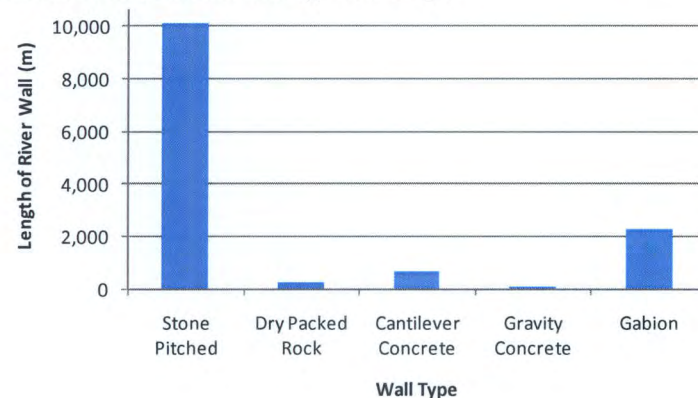


- The age of the assets could have been a cause to the failure as 60% of the river wall assets were installed between 1930 & 1940 making them over 80 and 70 years old respectively at the time of the flood. Further detailed information would be required to understand the reasons why these assets withstood the 1974 flood event but not the 2011 event.

Underlying causes

Brisbane City Council design river walls to satisfy the requirements of AS4678 – 2002 Earth – Retaining structures and other relevant guidelines. The walls are designed to Q100 flood requirements. The river walls across the city are comprised of the following:

Figure 50: River wall Construction Type and Height



From Figure 50 it can be seen that the majority of walls across the city are 1m-3m high stone pitched walls. The height of the walls may have been a contributing cause of failure attributed design, as they may not have been high enough to accommodate modern design flood levels.

68% of stone pitched walls were installed in 1930-1940 making them 80 – 70 years old at the time of the flood and reaching the end of their expected design life.

There may have been weakening in the integrity in some of the river walls and earthen slopes as a consequence of increased loading on the structures from rising soil water pressure from the period of wet weather preceding the flood.

1.3.2 Unavoidable Mode of Failure (Location Specific)

Assets where there was no practical way of avoiding the failure given the specific location of the asset accounted for 33% of the failed river walls and earthen slopes.

Directly flood related causes/mechanisms

For the river walls and earthen slopes to protect the infrastructure and assets on the riverbank their location in and on the river banks is unavoidable. The type of damage caused to the assets is similar to the physical capacity exceeded mode of failure.

As illustrated in Figure 52, the majority of damaged river walls were located on the bends of the river, generally where the flow of the water was impacting the assets with high levels of force compared to the straighter sections. The high risk and very high risk earthen slope failures are approximate locations only. The river wall damage shown in Figure 52 shows numerous river wall locations, however, damaged sections of the same wall are only analysed as one wall.

Apparent causes

Apparent causes of failures that may not have been directly attributed to the flood itself but did influence the unavoidable location:

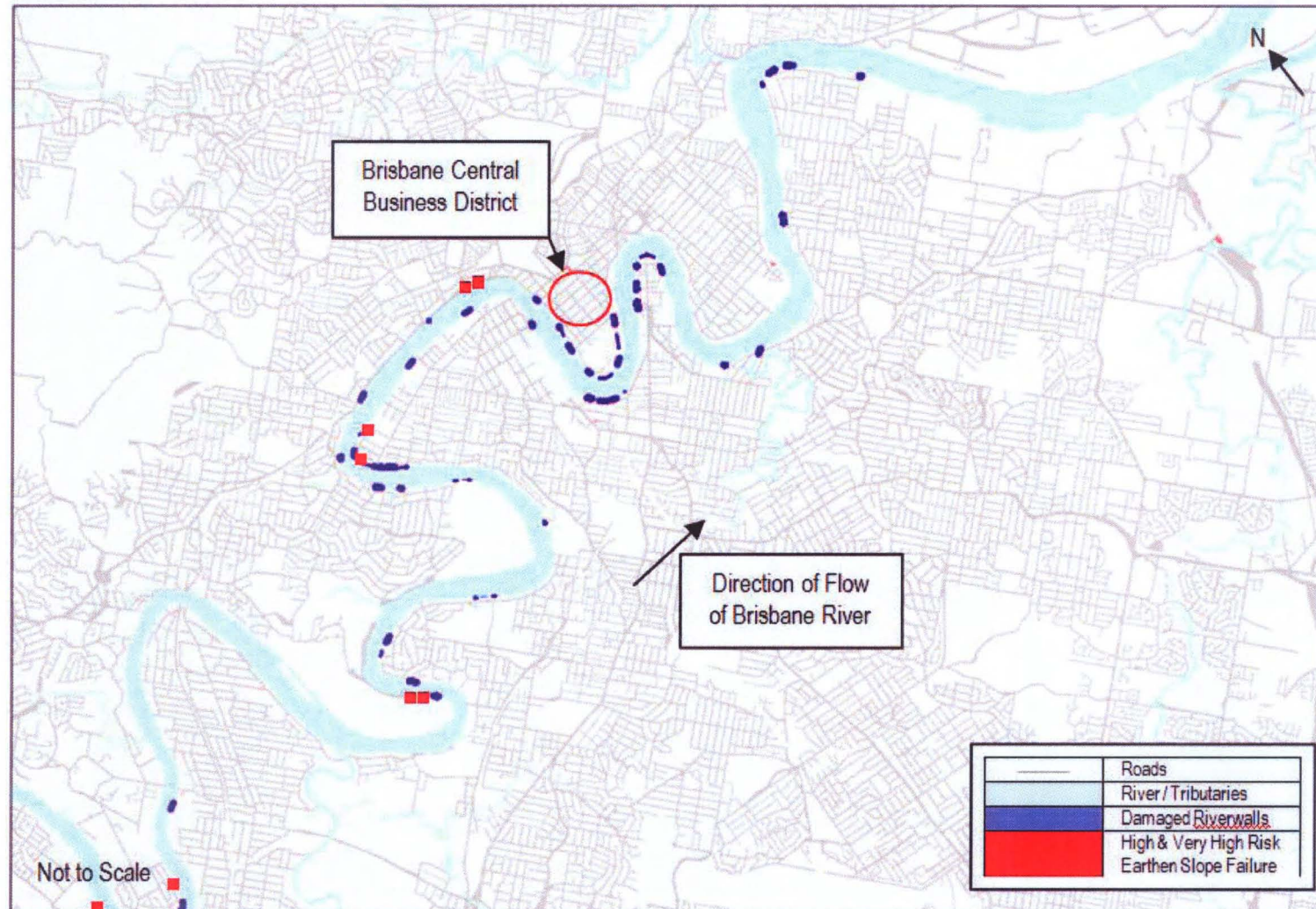
- Some of the failed assets had pre-existing condition issues that may not have been addressed contributing to the scale of the damage. For instance 20% of the walls were assessed to be in poor condition.
- The period of wet weather prior to the flooding increased the saturation of the soils raising the porewater pressures and increasing the weight of the soils behind the walls and in the slopes. This would make them more susceptible to damage.

Underlying causes

The following are underlying causes of failures that may have influenced the asset being in an unavoidable location:

- It would appear from some of the photographs that there may have been some sites that had less desirable designs of walls and slopes given locations high flood risk of the location.
- It appears that although the older stone walls were damaged they suffered less failure than newer walls which may have incorporated easier construction types and less expensive building materials.
- Although it is generally possible to construct river bank protection to withstand significant flood events, it is often not economically viable in areas where risk to public infrastructure is low.

Figure Figure 5251: Location of Failed Riverwalls



1.3.3 Degraded Condition Mode of Failure

Failure caused by the condition and otherwise expected to withstand accounted for 27% of the failed river walls and earthen slopes.

Directly flood related causes/mechanisms

The 2011 flood event would have had a significant impact on the failure of these assets, however, had they been in better condition they may have likely withstood the event.

Apparent causes

It appears, from comparing pre and post flood condition assessments some of the asset failures were due to their poor condition, otherwise the asset would have been expected to withstand the event. If these walls had been in a better condition they may have withstood the flood better.

Figure 52: Prior Condition of Flood Damaged Riverwalls



Gardens Point



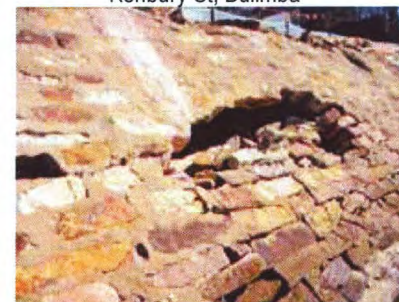
Gardens Point Street



Kenbury St, Bulimba



Laidlaw Street, East Brisbane



Holman St, Kangaroo Point

Underlying causes

- It is possible that there is a maintenance and renewal backlog on some of the river walls.
- It is possible that newer river walls may have shorter economic design lives given their design and construction materials.
- Erosion may have occurred caused by CityCat and other river traffic.
- Blocked drains or broken stormwater pipes leading to atypical flow paths may have contributed to failures.

1.3.4 Inappropriate Design Mode of Failure

Failure caused by inappropriate design and otherwise expected to withstand accounted for 10% of the failed riverwalls and earthen slopes.

Directly flood related causes/mechanisms

In some sites a more appropriate design of river wall would have been more suitable, notably a stronger design for areas of high turbulent flow and softer solutions for less stronger currents. The use of riprap and gabion baskets is not always optimal in areas with high velocity water, such as outer bends.

Apparent causes

Older walls built prior to 1959 were constructed mainly of stone pitched walls. It appears that this types of wall may have fared better than some newer designs.

Underlying causes

The following are underlying causes that may have influenced the failure due to inappropriate design:

- The period of wet weather prior to the flooding could have compromised the design loads as there was an increased weight of material the structures had to restrain.
- Policy on constructing or replacing of walls or earthen slopes may not be prescriptive enough to ensure optimal site-specific consideration is incorporated into works.

1.4 EXISTING CONTROLS THE MODE OF FAILURE

The controls that Council have in-place to stop the failure from occurring include:

- Design to the relevant Australian Standard.
- If the Council undertakes activities as outlined in the Asset Management plan 2010 for sea and river walls the standard of these assets should be maintained.

1.5 EFFECTS OF THIS MODE OF FAILURE

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the community to gain an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

1.5.1 Effects from Physical Capacity Exceeded Mode of Failure

For this Mode of Failure a severity score has been calculated as having a significant local disruption to the community. The score of 12 (out of a possible 30) has been derived as

- There was media coverage of slips and river wall failures and as such it was assessed that the impact on corporate image of the Council was minor. There are minor biological effects of local importance with the environmental damage from these failures being easily contained.
- There was negligible effect on health and safety as there was negligible effect to people and there appears to be no injuries as a direct result of the failure. There was minor service disruption from these failures that represent a loss of service although disruption is limited affecting only a small number of residents. And customer / community effect is minor with residents only experiencing minor inconvenience with only a small number of residents effected.

- The economic effect is considered to severe as it is estimated that the repair cost is between \$350k - \$3M. The estimated repair costs have been provided by Brisbane City Council.

1.5.2 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score has been calculated as having a significant local disruption to the community. The score of 11 (out of a possible 30) has been derived as for Section Annex K, although the economic effects are lower.

1.5.3 Effects from Degraded Condition Mode of Failure

For this Mode of Failure a severity score has been calculated as having a significant local disruption to the community. The score of 12 (out of a possible 30) has been derived as for Section Annex K.

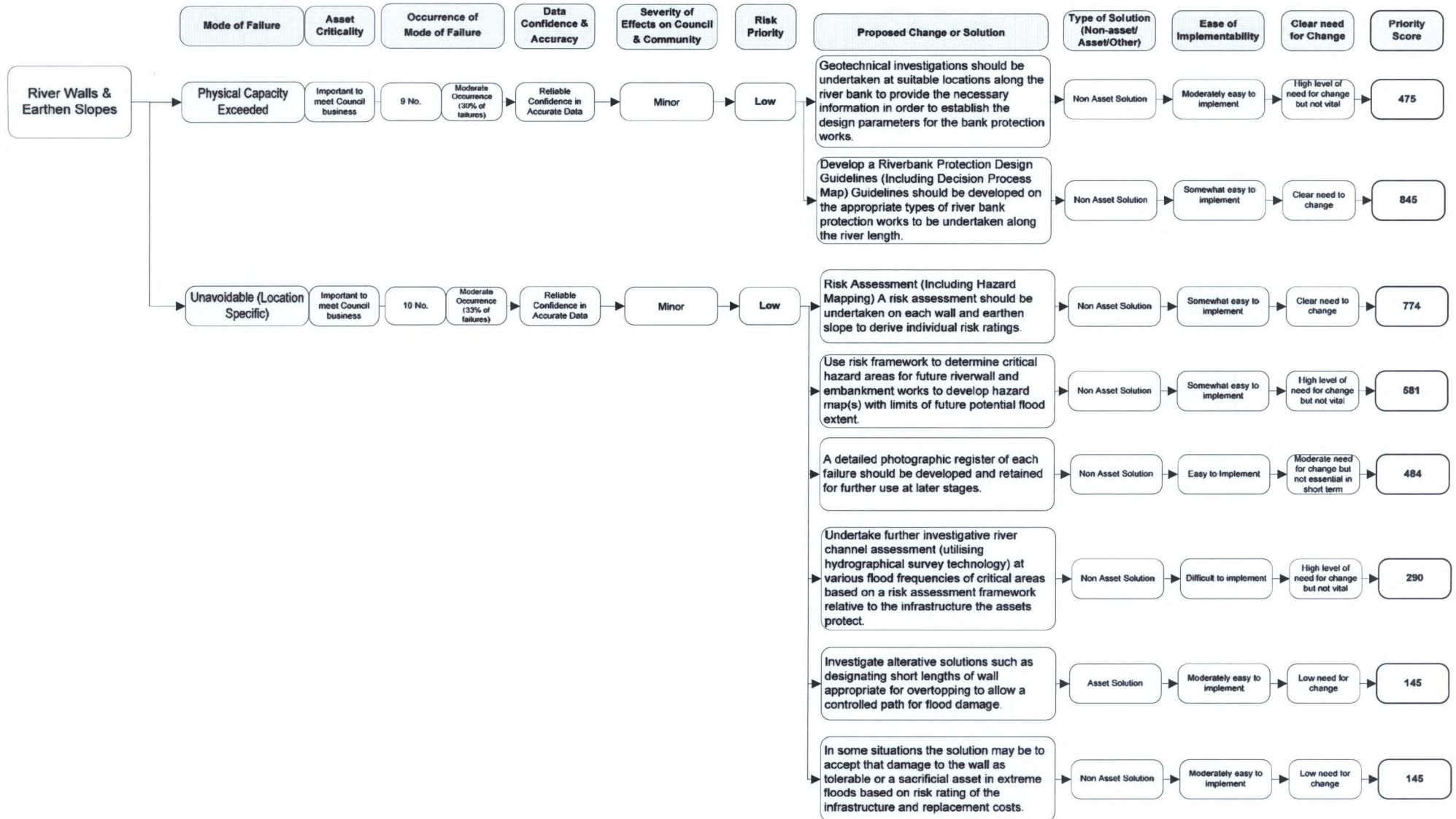
1.5.4 Effects from Inappropriate Design Mode of Failure

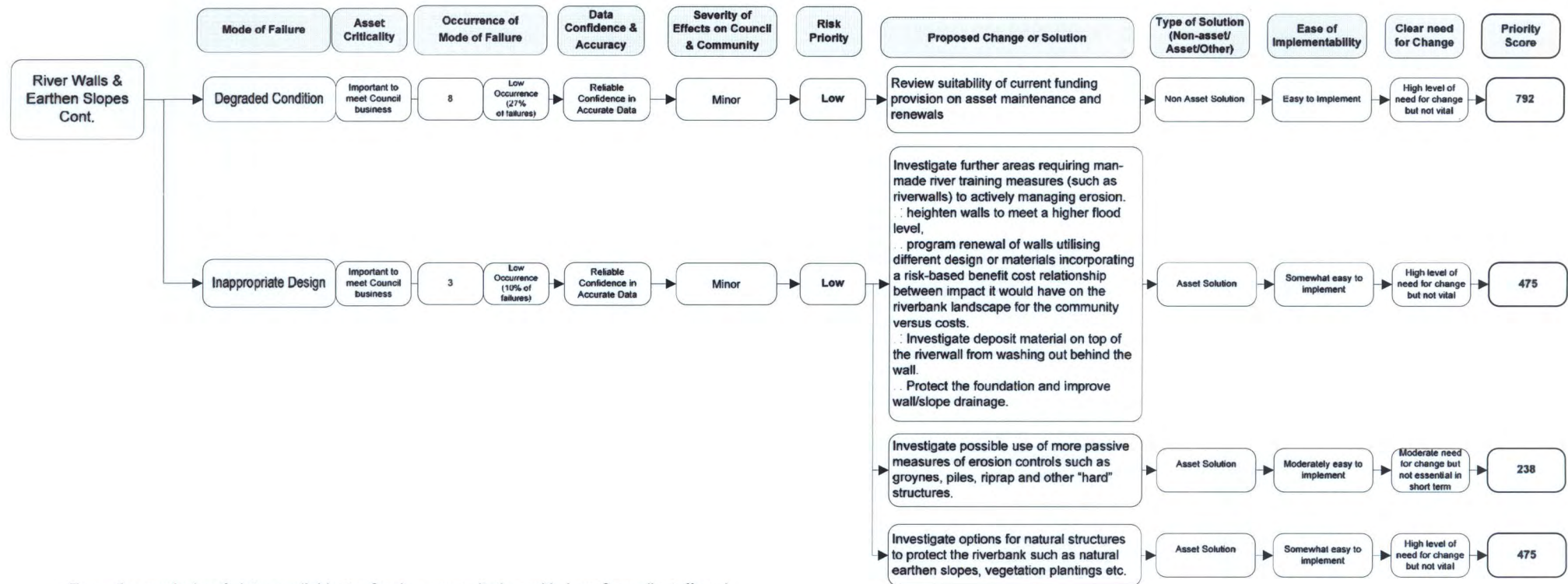
For this Mode of Failure a severity score has been calculated as having a significant local disruption to the community. The score of 12 (out of a possible 30) has been derived as for Annex K.

1.6 ASSUMPTIONS AND LIMITATIONS

- Damaged walls and earthen slopes have been identified by Brisbane City Council, Cardno has not been engaged to undertake any site visits as part of this exercise. As such Cardno is unable to validate the type and extent of damage.
- At the time of the exercise the length of damaged wall was unknown. As such it is difficult to put the quantity of damaged assets into perspective relative to the river wall portfolio as a whole.
- Estimated repair costs provided by Brisbane City Council, Cardno has not been engaged to validate these costs. These costs have only been used for prioritising recommendations.

1.7 PROPOSED CHANGES / SOLUTIONS





From the analysis of data available to Cardno, consultation with key Council staff and technical experience Cardno proposes the following possible changes / solutions:

■ Risk Assessment (Including Hazard Mapping)

It is important to understand and evaluate the levels of risk associated with a river bank protection for future design and replacement and refurbishment works. A risk assessment should be undertaken on each wall and earthen slope to derive individual risk ratings. The current risk framework for earthen slope failures should be applied. Rating should incorporate as a minimum risk of failure by location, and material / design.

A detailed photographic register of each failure should be developed and retained for further use at later stages. This could be through the use of GIS and/or Google Earth mapping software. If possible this should include known failure locations from the 1974 flood event.

The high risk walls should receive greater attention and increased inspection frequency. The risk assessments already undertaken by Council should be applied to all river walls and earthen slopes along the river and tributaries.

Council will need to agree an acceptable level of risk of failure/ damage/ loss of life to determine appropriate design parameters for a river walls and embankments for both for normal and flood conditions.

Once the appropriate risk framework is developed Council can determine critical hazard areas from future river wall and embankment works to develop hazard map(s) with limits of future potential flood extent.

■ River Dynamics Study

Undertake further investigative river channel assessment (utilising hydrographical survey technology) at various flood frequencies of critical areas based on a risk assessment framework relative to the infrastructure the assets protect.

The study should help further improve Council's knowledge of how the Brisbane River functions from both a physical and hydraulic perspective. It will also assist in understanding:

- how the river will react to proposed riverbank protection works;
- General river condition;
- sites along the river that are considered stable and healthy or degraded by river bank erosion; and
- what works will need to be undertaken and their priority, (including resources required to do the works).

The study should be compiled into a reference report and the data will be essential to Council planners and designers, as well as for the planning, monitoring and maintenance activities.

■ Geotechnical Investigations – Earthen slopes

Geotechnical investigations should be undertaken at suitable locations along the river bank to provide the necessary information in order to establish the design parameters for the bank protection works. Detailed geotechnical site investigation and laboratory testing of earthen slope failures along the length of the river will assist in better understanding the mechanisms of slope failure and help establish the general design parameters.

Key information required from geotechnical investigations to establish safe slope design parameters include:

- Identification and establishment of general subsoil characteristics along the river;
- Analysis of slope failures and slope stability to derive recommendations for safe slope angles;
- Recommendations for geotechnical requirements in the guidelines of river bank protection works.

All investigations should be compiled into a reference report and the data will be essential to Council planners and designers, as well as for the planning, monitoring and maintenance activities.

■ Riverbank Protection Design Guidelines (Including Decision Process Map)

Guidelines should be developed on the appropriate types of river bank protection works to be undertaken along the river length. Simplified design guidelines can provide Council with a framework to:

- improve design suitability (avoiding overdesign);
- reduce planning time; and
- minimise reconstruction time and costs.

Alternative design concepts should be generated and standardised where possible. The designs should best meet the boundary conditions of river characteristics, geotechnical constraints and functional requirements for new assets and renewal works as well as emergency remediation work. The studies and investigations identified in this section will assist in understanding the range of expected loadings, the relative importance of the protected area/infrastructure and the risk.

Scenarios for site specific alternatives should be relative to factors like slope, flow velocities (i.e. 0.5 to 3 m/s and never greater than 5 m/s), soil conditions such as grain size characteristics (i.e. between 0.01 and 20.0 mm) and financial

constraints (protecting \$X of critical infrastructure). These should result in a set of possible approaches for specific situations like emergency work and normal conditions.

Ensure a clearly defined decision process map is developed that will identify a framework to carry out appropriate site-specific riverbank protection and stabilisation work. The process should incorporate suitable 'triggers' for the design and construction of new and refurbishment or replacement walls.

Possible Design Considerations

Possible erosion prevention measures include:

- Investigate further areas requiring man-made river training measures (such as river walls) to actively managing erosion.
 - heighten walls to meet a higher flood level,
 - program renewal of walls utilising different design or materials incorporating a risk-based benefit cost relationship between impact it would have on the riverbank landscape for the community versus costs.
 - Investigate deposit material on top of the river wall from washing out behind the wall.
 - Protect the foundation and improve wall/slope drainage.
- Investigate possible use of more passive measures of erosion controls such as groynes, piles, riprap and other "hard" structures. These structures should decrease the impact on the slope or river wall from flood water (and debris) for high risk areas. By situating these structures directly in front and upriver of the slope or river wall, they should help protect the riverbank by deflecting the current away from the bank. Riprap would be generally advisable for protection in situations where soil instability is expected and where maintenance needs to be kept to a minimum.

- Investigate options for natural structures to protect the riverbank such as natural earthen slopes, vegetation plantings etc.
- Investigate alternative solutions such as designating short lengths of wall appropriate for overtopping to allow a controlled path for flood damage. The use of sacrificial components in extreme flood events should be investigated.
- In some situations the solution may be to accept that damage to the wall as tolerable or a sacrificial asset in extreme floods based on risk rating of the infrastructure and replacement costs.

1.8 RECOMMENDATIONS

Council recognises riverbank erosion from the dynamic Brisbane River as a constant issue facing the city. To best protect the infrastructure along the river boundaries, Council will need to continue installing, repairing and managing riverbank protection and stabilisation.

It is recommended that Brisbane City Council;

- Undertake risk rating on each river wall along the river. Adopting a similar framework to risk assessing utilised by Brisbane City Council for the slope failures following the 2011 flood event;
- Review standardised designs and develop a Riverbank Protection Design Guidelines (Including Decision Process Map) bespoke to Brisbane; and
- Investigate on a cost / benefit basis, the undertaking of river dynamics investigations of Brisbane River at suitable locations and complete geotechnical investigations for moderate to high risk earthen slopes.

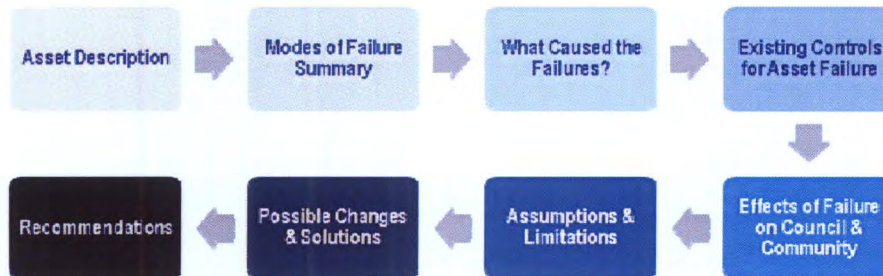


PARKS (PARK INFRASTRUCTURE AND LANDSCAPING)



1 PARKS (PARK INFRASTRUCTURE AND LANDSCAPING)

SECTION CONTENTS



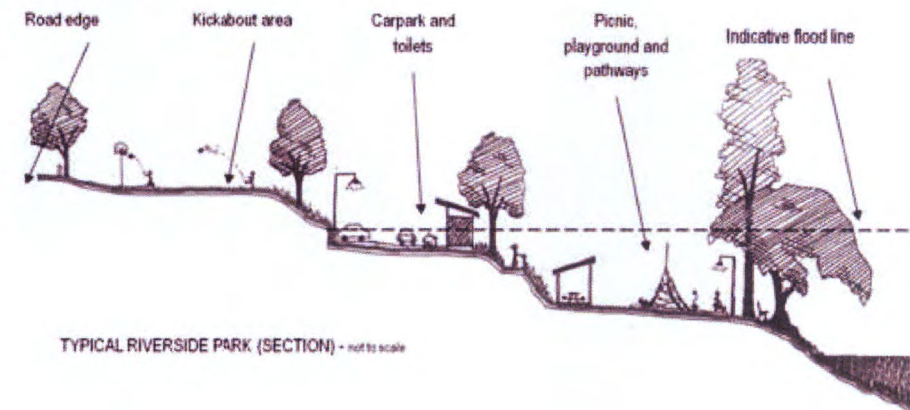
1.1 ASSET DESCRIPTION

Brisbane City Council has 5736 hectares of designated parkland (current July 2010). Many parks occur along the Brisbane River and along drainage corridors or low lying land; these provide valuable sports and recreational opportunities, as well as a valuable cycle and pedestrian links. Riverside parks are generally highly utilised parks and the community has a high expectation as to the level of service to be provided by these parks, but these also experience the most significant failure due to their proximity to high velocity flood water.

Parks assets includes park landscape and infrastructure asset components such as planting and grassed areas, picnic areas, barbeques, seats, bins, dog off leash areas, shelters, toilets, playgrounds, light poles, paths and roads.

See below indicative section of a typical Brisbane riverside park including components.

Figure 53: Typical Park Section



Required Level of Service

Brisbane City Council has established maintenance standards as referenced in the Parks Service Delivery Quality Audit Guide prepared by Local Asset Services. The majority of parks which experienced inundation have not yet returned to business as usual levels of service. In particular, parks with playgrounds have seen significant damage to the softfall material which therefore significantly impacts the utilisation of these parks. See Figure 53, image taken at Hamilton Park 10th April 2011.



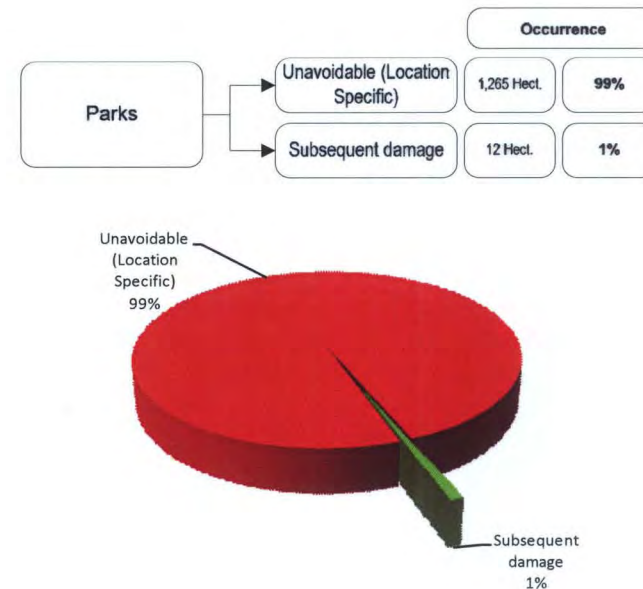
Figure 54: Hamilton Park 10th April 2011

1.2 MODES OF FAILURE SUMMARY

The area of parkland inundated during the January 2011 Flood has been determined as 1,278 hectares. This amounts to 22% of Council's total parkland area of 5736 hectares. Riverside parks have experienced significantly more damage than areas where the flood water has backed up with low velocity water flows. However, all areas of inundation have been damaged to varying extents.

The asset failure analysis has been undertaken at a high-level for this asset category level utilising the available data at the time of the analysis, the findings from the analysis are illustrated in the figure below:

Figure 55: Modes of Failure for Parks



Through consultation with key staff at Brisbane City Council (Graham Heiner and Darryl Airlie) it was concluded that 99% of assets within this asset category have failed due to Unavoidable Location and 1% through subsequent damage.

Many parks are integrated into stormwater drainage infrastructure and as such intrinsically located in low areas vulnerable to inundation given the proximity to Brisbane River and its tributaries. Park areas within the direct flow of the Brisbane River experienced significant damage due to water velocity and debris.

1.2.1 Data Confidence & Accuracy

Confidence in the data available is considered to be Reliable given that the majority of data that was available is based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings; for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation.

The accuracy of the data that has been provided for Cardno to assign mode of failure is considered less than desirable given that a significant proportion (over 30%) of that data is understood to have been estimated based on engineering judgement.

1.3 WHAT CAUSED THE FAILURE?

The analysis identified a number of events and underlying causes. The possible causes of failures for this asset category's modes of failure include:

1.3.1 Mode of Failure: Unavoidable (Location Specific)

It was assessed that there was no practical way of avoiding the failure given the specific location of the asset for 99% the flood damaged parks.

Directly flood related causes/mechanisms

This mode relates to asset proximity to the river, stormwater drainage corridors and/or low lying areas which result in asset failure by function of location. The location of Brisbane City Council's flooded parks is shown in Figure 56. Several substantial parks in Brisbane occur with full river frontage for example; Rocks Riverside Park, New Farm Park, Fig Tree Pocket Park.

Damage to these parks is seen as unavoidable given the characteristics of this land dedicated to parkland. Maintained openspace adjacent to creeklines are also deemed to provide an integrated stormwater and parkland solution, with inundation expected in high intensity rainfall events.

Figure 56 below of Kookaburra Park illustrates the width of river corridor where extensive damage can be expected due to high velocity river flows during major events such as the 2011 flood.



Figure 56: Kookaburra Park

Apparent causes

Of the parks which fall under this Mode of Failure there are various types of damage occurring including, destructive forces of high water and debris velocities result in substantial damage to infrastructure and landscape features in these zones. This is further

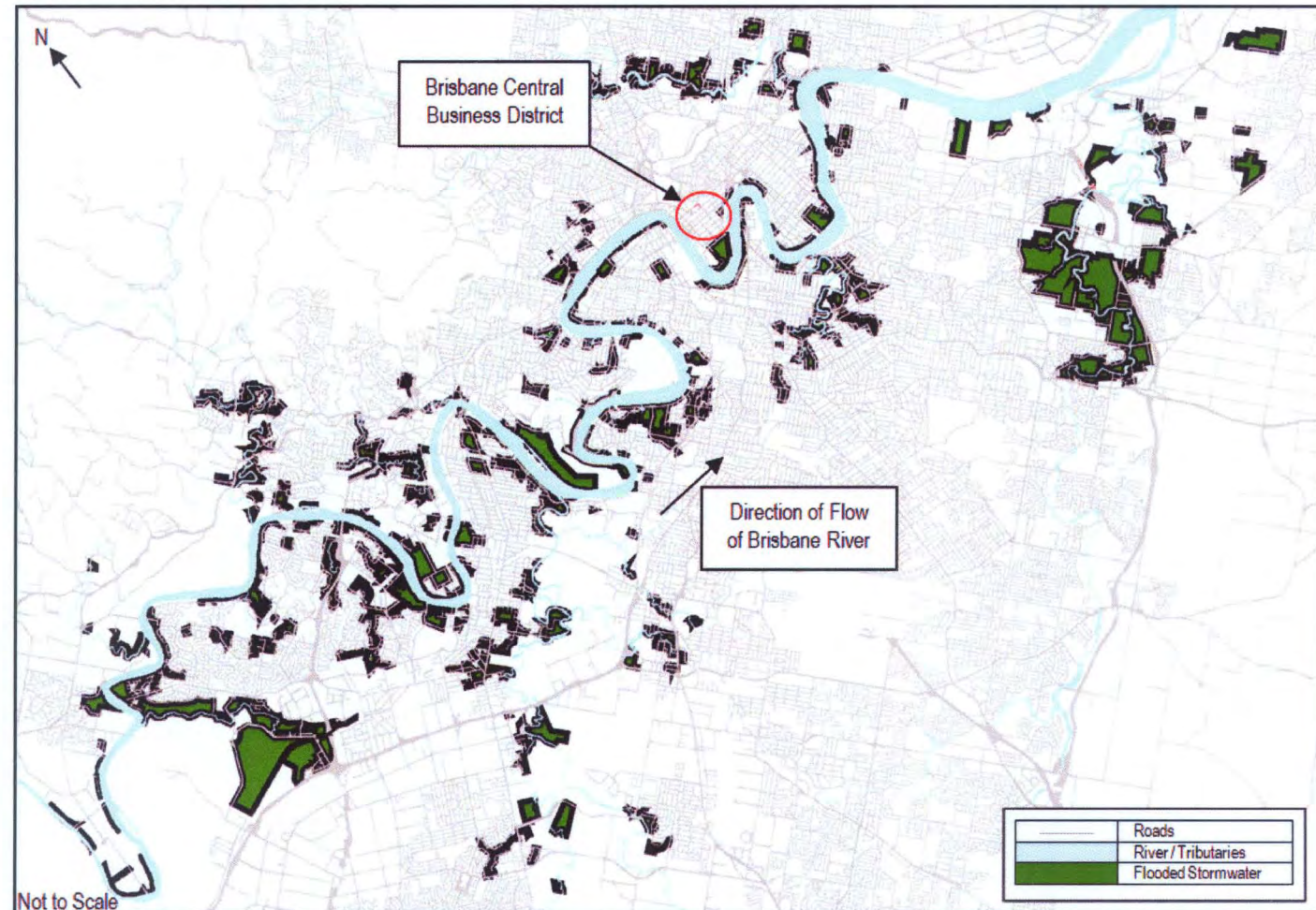
exacerbated by the duration of inundation and toxicity of flood water and silt. Some asset components such as footpaths or grassed areas may appear to have high resilience to inundation, while other components such as playgrounds, barbecues, lightpoles and toilets may require substantial rectifications to become operational.

Parks which have been built over decommissioned landfill sites should have specific monitoring to ensure these sites are stable and resilient to further flooding.

Underlying causes

The underlying cause for this Mode of Failure relates to the integration of parks and openspace with stormwater infrastructure and parkland occupation of low lying land including the iconic riverside areas. It is often understood that particular park areas are vulnerable to major flooding. However, the location of assets within the parks may have contributed to the damage that occurred.

Figure 57: Location of Flooded Parks



1.3.2 Mode of Failure: Subsequent Damage

It was assessed that there was no practical way of avoiding the failure given the specific location of the asset for 1% the flood damaged parks.

Directly flood related causes/mechanisms

This mode relates to asset failure in defined areas which were strategically identified to provide temporary waste transfer points for flood damaged furnishings and building debris, as shown in Figure 58, photograph of Faulkner Park in Graceville. Concrete netball courts damaged as a result of transfer works.



Figure 58: Temporary Waste Transfer Site at Faulkner Park, Graceville

Apparent causes

In order to rapidly deal with the large volumes of flood debris locations for waste transfer were established. These locations included public parks. Should this process be seen as beneficial then locations should be identified in advance with the selection criteria based on ease of access and minimal rectification costs. The areas nominated can be expected to be out of operation for a period of time with surfaces likely to be sacrificial.

Underlying causes

The subsequent damage has occurred during clean up works. It was acknowledged at the time that the park areas would be damaged during the process. Planning and allowance for contingency for future events would assist the coordination of initial flood recovery activities.

Contributing Damage – Component Failure

One specific component of a park, such as a playground may essentially make the park unusable by the virtue of its dominant function. Most inundated parks have playgrounds, these playground were also inundated resulting in the existing softfall being not 'fit for purpose' and therefore presumably not meeting Australian Standards for play equipment (both pinebark and rubber softfall material are significantly affected by inundation). Considering playground equipment is a significant element of park utilisation, many parks with non-functional playgrounds would be deemed as 'out of action'.

1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council has in-place to reduce the risk of the failure from future flood events include:

- The park planning policy is currently under review; and
- Reinstatement of assets is being considered for flood reliance in flood prone areas.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the community to gain an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.



Figure 59: Playground Softfall

1.5.1 Effects from Unavoidable (Location specific) Mode of Failure

For this Mode of Failure a severity score has been calculated as having a significant local disruption to the community. The score of 15 (out of a possible 30) has been derived as

- Given the minor non-critical nature of the loss of service to the public, the effect on the corporate image of the council is negligible.
- The environmental effect of the damage is severe with significant impacts particularly along the river. The effect on Health and Safety from the failures has a negligible effect on the local community.
- The loss of service is severe, resulting in local services being disrupted for an extended period. This relates to access to playgrounds and the continuity of footpaths. Although residents will generally only experience minor inconvenience. Community reaction is likely to be small, provoking some queries only.
- The economic cost is major, as it will result in significant costs to re-build the damaged park areas.

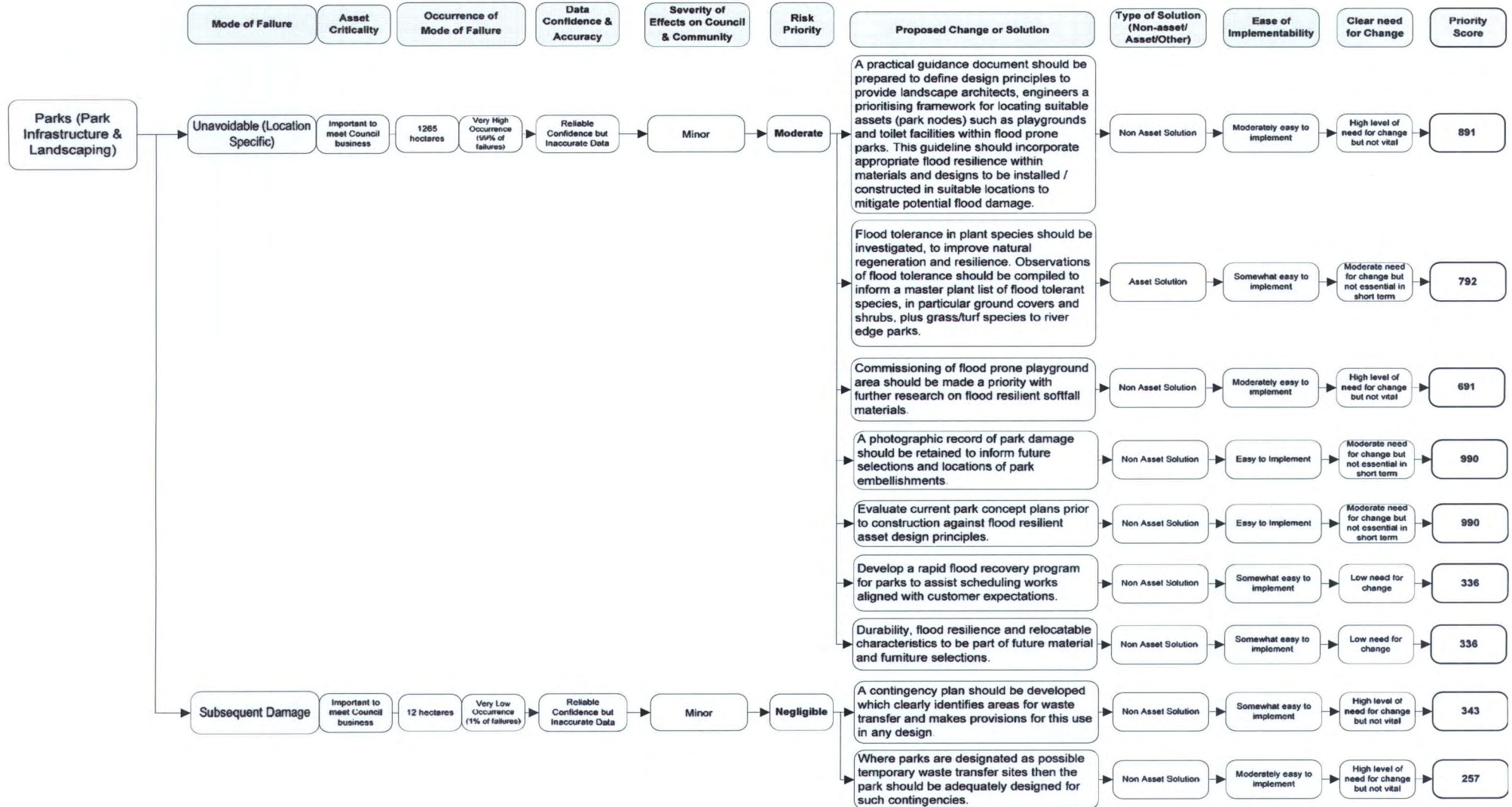
1.5.2 Effects from Subsequent Damage Mode of Failure

For this Mode of Failure a severity score has been calculated as having a significant local disruption to the Community. The score of 13 (out of a possible 30) has been derived as Annex K although the economic effects are significantly lower.

1.6 ASSUMPTIONS AND LIMITATIONS

The conclusions drawn in this report are high level conclusions based on the reports, policies and guides provided and discussions with Council officers. This is a desktop study and while site investigations have been carried out, these have only been to inform the typical scenarios occurring.

1.7 POSSIBLE CHANGES & SOLUTIONS



1.8 RECOMMENDATIONS

- Undertake an evaluative study of current park concept plans prior to construction against flood resilient asset design principles. Replacement cost of components should be considered when locating these components in flood prone parks. Design consideration should be given to assigning areas to be considered either 'sacrificial' or 'protected' based on local topography and site conditions;
- Develop a rapid flood recovery program for parks to assist scheduling works aligned with customer expectations;
- Develop or refine a material and furniture selections policy to incorporate durability, flood resilience and relocatable characteristics for future material and furniture selections; and
- A contingency plan should be developed which clearly identifies areas for waste transfer and makes provisions for this use in any design. Where parks are designated as possible temporary waste transfer sites then the park should be adequately designed for such contingencies.

1.9 REFERENCE DOCUMENTS

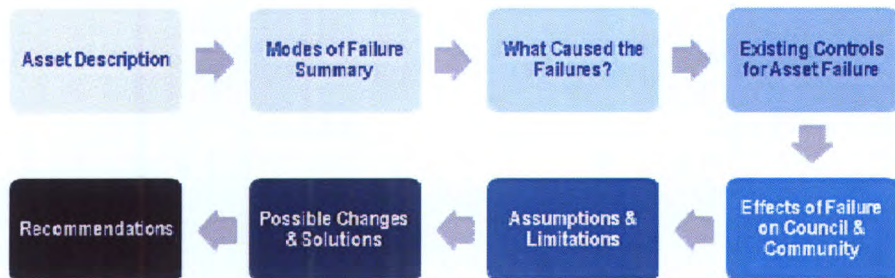
- Joint Flood Taskforce Report March 2011
- Brisbane Priority Infrastructure Plan – Desired Standards of Service for Public Parks (v2)
- Park Classification System Guide – June 2006
- Parks Service Delivery Quality Audit Guide (Local Asset Services)
- 2011 Brisbane Flood: riverbank Rehabilitation Terms of Reference
- NES Riverside Parks Recovery 2011 – NES Branch Project Management Plan (v2)
- Brisbane City Council Draft Asset Management Plan: Parks
- Typical landscape concept plans eg. Fig Tree Pocket Parks
- Review of park planning policy and procedures in flood prone areas - summary
- Park planning policy review for flood prone areas

TREES (PARK AND STREET)



1 TREES (PARK AND STREET)

SECTION CONTENTS



1.1 ASSET DESCRIPTION

Trees provide significant ecological services and define character and identity within urban environments. For example the Jacaranda Avenue in New Farm Park or large shade-giving figs along the river are both significant Brisbane icons. Council infrastructure assets (2007/2008) identified 630,000 trees to a total replacement value of nearly \$4 billion, based on these figures, the average value of a tree is in the order of \$6,000.

Figure 60: Typical Street Tree (Section View)

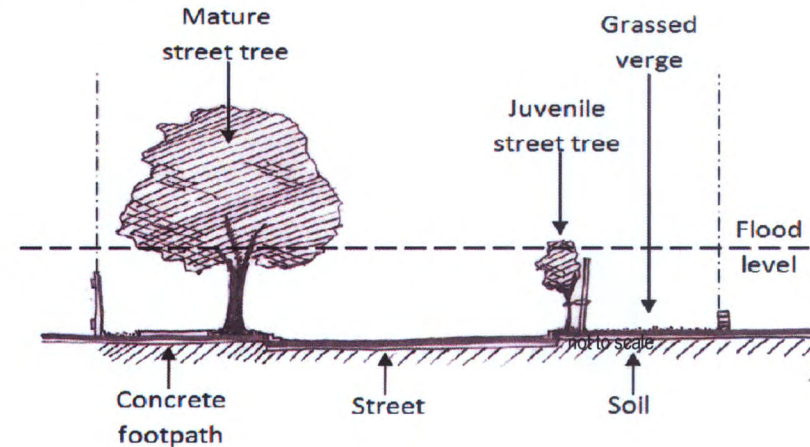
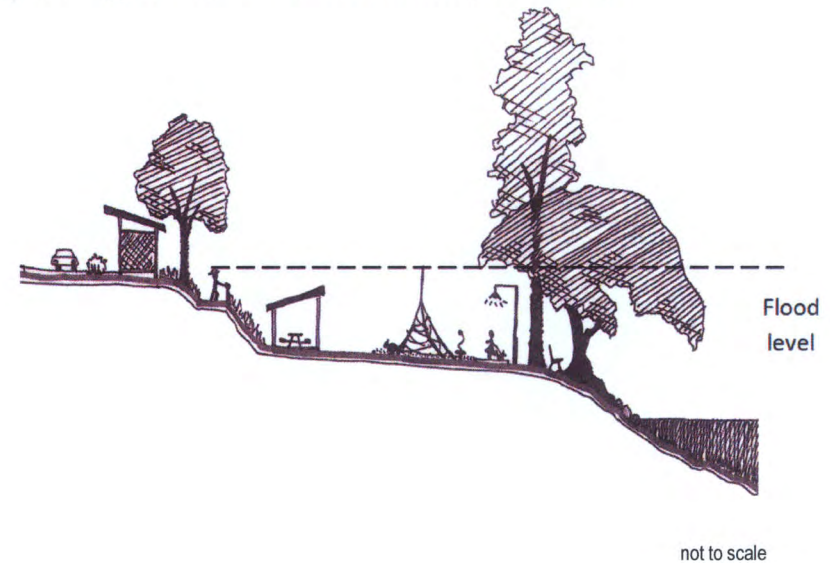


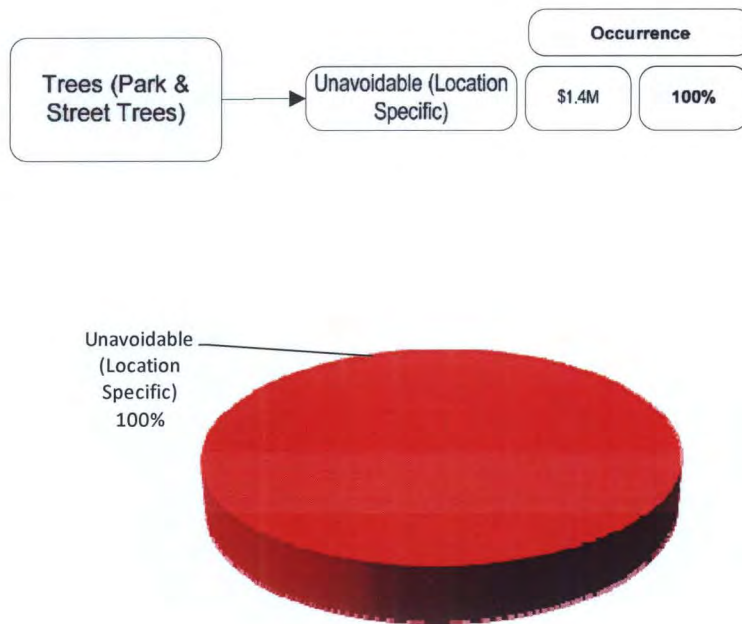
Figure 61: Typical Park Tree – In Riverside Park (Section View)



1.2 MODES OF FAILURE SUMMARY

Brisbane City Council recognises the tree asset value to be in the order of nearly \$4 billion with an annual maintenance budget of \$8.6 Million (2007/2008). The total damage costs provided to date for street and park trees approximately equates to 17% (approximately \$1.4 million) of the annual maintenance expenditure and 0.04% of the asset value.

Figure 62: Modes of Failure for Park & Street Trees



Through consultation with key staff at Brisbane City Council (Graham Heiner and Darryl Airlie) it has been concluded that 100% of assets within this asset category have failed due to Unavoidable Location.

Street tree locations are significantly constrained by positioning between back of kerb and footpaths in a typical streetscape scenario. The photograph in Figure 64 indicates a range of street tree sizes, the mature tree to the rear will be less effected than the juvenile street tree to the centre of the photo. Usually where flood waters are in contact with the tree canopy this area is defoliated, the higher the proportion of canopy inundated the more substantial damage caused. This will determine the viability of the future form and structural integrity of the tree into maturity. Areas of high silt deposits should be removed as this will inhibit the tree's vigour and cause tree health issues over time due to degraded soil and undesirable rootzone conditions.



Figure 63: Inundated Street Trees

Park trees experience different flooding characteristics but the location factors are dominant in cause of failure. Trees in parks may experience inundation as indicated in Figure 64. Riverside parks experience high velocity water flows which, combined with a saturated and or eroded root zone eventuates into instability and failure.

A strong relationship is formed between the velocity of water, riverbank stability and debris within the river. It would be desirable to investigate whether particular tree species are more desirable or resilient in particular areas of parkland. The photograph in Figure 64



Figure 64: Kookaburra Park West Flood Damage

Photograph above demonstrates the direct river impact on vegetation to the rivers adjacent to river edges.

demonstrates some of the physical principles and conditions which contribute to the failure of trees within riverside parks such as gradient of bank, soil type, riverbend characteristics, tree species and enduring health and vigour of impacts on existing trees.

1.2.1 Data Confidence & Accuracy

Confidence in the data available is considered to be reliable given that the majority of data available was based on sound records, investigations however the data is based extrapolation from the flood models which may not accurately quantify the real extent. The

lack of spatial information has limited the determination of mode of failure to the most dominant possible mode of failure.

The accuracy of the data that has been provided for Cardno to undertake the analysis is considered to be less than desirable given that a significant proportion (over 30%) of that data is understood to have been estimated based on engineering judgement.

1.3 WHAT CAUSED THE FAILURE?

1.3.1 Mode of Failure: Unavoidable (Location Specific)

It was assessed that there was no practical way of avoiding the failure given the specific location of the asset for 100% of the assets within this asset category.

Directly flood related causes/mechanisms

This mode relates to asset proximity to the river, stormwater drainage corridors and low lying suburbs which result in asset failure by function of location. Several substantial parks in Brisbane occur with full river frontage for example; Rocks Riverside Park, New Farm Park, Fig Tree Pocket Park. Damage to trees within these parks could be seen as unavoidable given the characteristics of this land dedicated to parkland, however damage to trees in river park areas has been substantial.

Given that Rocks Riverside Park was only constructed a few years ago, recognition should have been given at that time to the selection of tree and shrub species in flood prone areas.

Trees are also maintained in openspace adjacent to creeklines which are also deemed to provide an integrated stormwater and parkland solution, with inundation expected in high intensity rainfall events. Damage to these street and park trees with sufficient distance from the river generally experience failure based on foliage contact with toxic flood water.

Following the flood Brisbane City Council undertook an assessment of the flooded street and park trees across the city. The following results were identified:

Figure 65: Distribution of Street & Park Tree Damage by Electoral Ward

From Figure 65 it can be seen that the electoral wards of Pullenvale, Walter Taylor and Jamoree had the greatest number of fallen trees. This may be as a result of trees being subject to high velocity flood water. It is possible that these trees are located in parks adjacent to the flooded Brisbane River. The wards of Richlands, Tennyson and Moorooka had the greatest amount of tree canopy maintenance that is indicative of significant inundation that was common in these wards.



Apparent causes

This Mode of Failure occurs with various types of damage represented, destructive forces of high water and debris velocities result in substantial damage to trees these zones. Riverbank stability, proximity to main river flows and slope gradient could be seen as key influences on substantial damage.

Offset further from the river damage is caused generally by the duration of inundation and toxicity of flood water and silt. Juvenile trees which have lower, less developed, canopies are usually significantly inundated, whilst mature trees will have a significant volume of canopy not inundated and a higher resilience. It should also be noted that tree senescence (the final stage in the life cycle of a tree, leading to the death of part or all of the tree) could be a factor in reduced resilience to flood impacts.

Underlying causes

The underlying cause for this Mode of Failure relates to the integration of parks and openspace with stormwater infrastructure and parkland occupation of low lying land including the iconic riverside areas. It is often understood that particular park areas are vulnerable to major flooding. Park areas inundated may have capacity for further flood resilience by specifically site specific responses and tree selection.

A contributing mode of failure is the failures caused by subsequent recovery and clean-up efforts. Subsequent damage contributed to asset failure in streets trees where the street verges were used to stock pile damaged furniture and building linings etc. It has been suggested that juvenile trees have been removed and larger existing trees experience considerable disturbance to root zones. Evidence of this damage is not always immediately obvious but may impact on tree health over time and likely to reduce the safe life expectancy of the trees.

1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council have in-place to stop the failure from occurring include:

- The park planning policy is currently under review;

- Reinstatement of trees by more flood resistant are being considered for flood reliance in flood prone areas. It is important to ensure that these species also need to be drought resistant as well.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the Community to get an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

Unavoidable (Location specific)

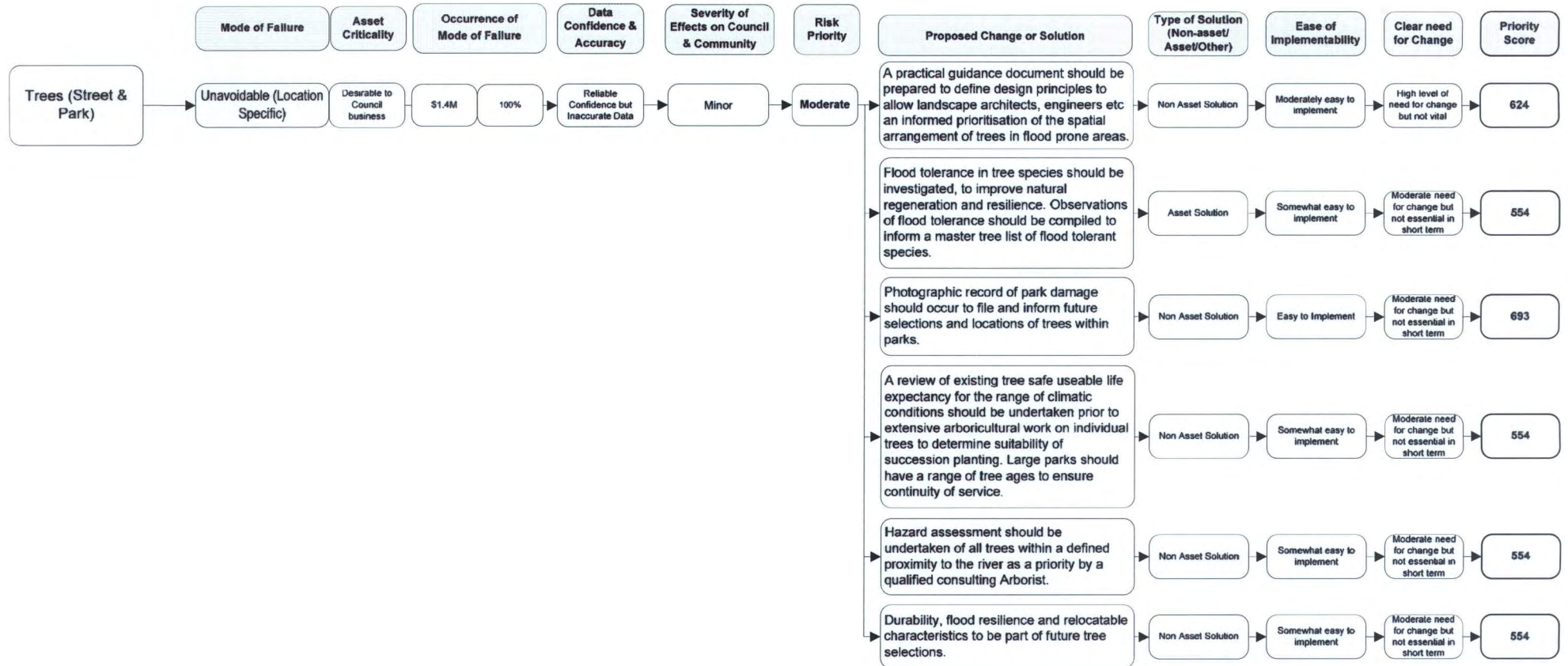
For this Mode of Failure a severity score has been calculated as having a significant local disruption to the Community. The score of 11 out of a possible 30 has been derived as

- Given the minor non-critical nature of the loss of service to the public, the effect on the corporate image of the council is minor, and Health and Safety impact was negligible. The environmental effect of the damage is severe with significant impacts particularly along the river.
- The loss of service is minor, resulting in some local services being disrupted. The environmental and local community effects are also minor. The customers experience minor inconvenience. Community reaction is likely to be small, provoking some queries only. The economic cost is negligible in the context of the annual maintenance costs of trees.

1.6 ASSUMPTIONS AND LIMITATIONS

The conclusions drawn in this report are high level conclusions based on the reports, policies and guides provided and discussions with Council officers. This is a desktop study while site investigations have been carried out this has been to inform the typical scenarios occurring.

1.7 POSSIBLE CHANGES & SOLUTIONS



1.8 RECOMMENDATIONS

It is recommended that Brisbane City Council;

- A review should be undertaken of existing tree life expectancy across a range of climatic conditions prior to extensive arboricultural work on individual trees. Large parks should have a range of tree ages to ensure continuity of service;
- Hazard assessment should be undertaken of all trees within a defined proximity to the river as a priority by a qualified Arborist; and
- Develop or refine a tree selections policy to incorporate durability, flood resilience, drought resistance and relocatable characteristics into future tree selections.

1.9 REFERENCE DOCUMENTS

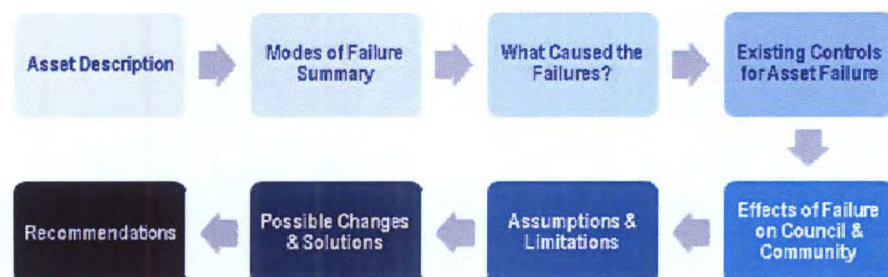
- Joint Flood Taskforce Report March 2011
- Brisbane Priority Infrastructure Plan – Desired Standards of Service for Public Parks (v2)
- Park Classification System Guide – June 2006
- Parks Service Delivery Quality Audit Guide (Local Asset Services)
- 2011 Brisbane Flood: riverbank Rehabilitation Terms of Reference
- NES Riverside Parks Recovery 2011 – NES Branch Project Management Plan (v2)
- Brisbane City Council Draft Asset Management Plan: Parks
- Typical landscape concept plans eg. Fig Tree Pocket Parks
- Review of park planning policy and procedures in flood prone areas - summary
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COMMUNITY LEASED ASSETS (SPORTS CLUBS & FIELDS)

1 COMMUNITY LEASED ASSETS (SPORTS CLUBS & FIELDS)

SECTION CONTENTS



1.1 ASSET DESCRIPTION

Brisbane City Council makes a range of its properties available for not-for-profit community organisations to rent through lease or licence agreements. The properties provide affordable facilities to meet the accommodation needs of sporting and community groups. The City's leased property assets represent a substantial investment by the community and are of vital importance to the quality of life of the city's residents.

The community leased facility asset has failed when it is no longer able to facilitate use by its tenants. 16% (89) of the Council's 552 community leased facilities failed during the 2011 flood event. The vast majority are under lease arrangements to the following groups of tenants as illustrated in Figure 66:

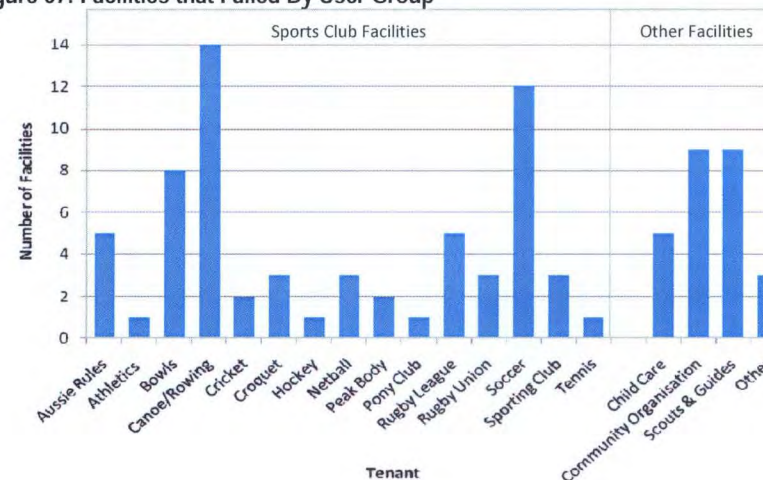
Approximately three quarters of the damaged facilities were sports based groups that use a sports field on a reserve or public open space and an adjacent building, such as clubrooms, sheds, and grandstands. These tenants primarily include sporting clubs for

Aussie Rules FL, Athletics, Bowls, Canoe/Rowing, Cricket, Croquet, Hockey, Netball, Peak Body, Pony Club, Rugby League, Rugby Union, Soccer, and Tennis.

Figure 66: Typical Leased Facility



Figure 67: Facilities that Failed By User Group



The remaining quarter of damaged facilities accommodated community groups such as Child Care, Community Organisation, Scouts and Guides and other Community Groups.

Council only acts as a landlord and facilitator and is not responsible for the direct delivery of the services. Most facilities are leased and are only licensed on a temporary basis if the asset or service is being reviewed. Minor differences exist under the individual lease arrangements but in general the following applies:

- Tenants, in the vast majority of cases are responsible for the day to day maintenance and cleanliness of the assets under the terms and conditions of their lease.
 - The maintenance responsibilities are defined in each individual lease/licence. Maintenance activities are required to be undertaken to a standard that meets Workplace Health and Safety, Building Code of Australia and Development Approval requirements. Tenants are typically responsible for the facilities fit-out including fixtures and fittings and equipment such as kitchen appliances, and any improvements tenants have made to the site.
 - Tenants must attend to daily cleanliness of items such as light globes, garbage disposal, cleaning floors, cleaning toilets, line markings, and graffiti removal unless otherwise negotiated.
 - Tenants must pay their rent, rates, including water consumption and sewerage, electricity, building insurance and public liability insurance.
 - User groups of the facility require a lease to enable tenancy improvements, utilising the lease as security.
- As landlord, Council generally is responsible for ensuring tenants are meeting all their statutory obligations to mitigate potential risks and that the structural

integrity of the building and building fabric is maintained. Replacing those elements that have reached the end of their economic life, including repairing damage caused by storms and other unusual events.

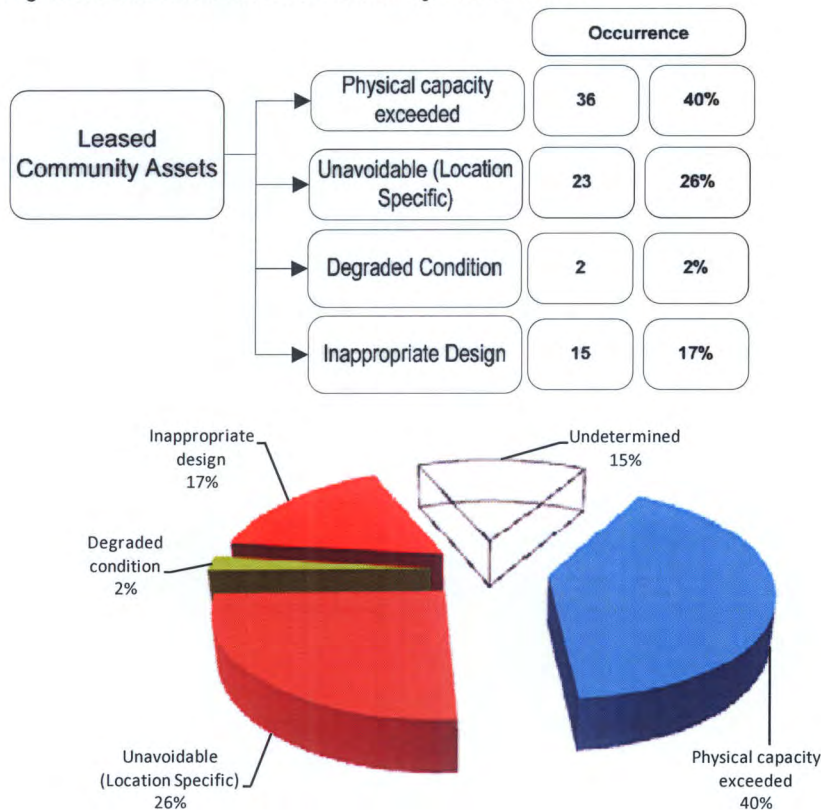
- This typically includes the foundations, substructure, structural framing, internal walls, doors and partitions, floors, ceilings, standard electrical wiring, basic plumbing and mechanical equipment such as air conditioning, chiller units and hot water systems.
- The rent that Council receives offsets the administrative and set up costs of the lease/licence.

To meet the Council's commitment to the suburban lifestyle and fulfil its legal obligations as a landlord, Council endeavours to make available appropriate facilities that meet a required standard based on customer expectations, as well as strategic and corporate goals and statutory requirements (Environmental standards, Regulations, Acts and Council By-laws that impact of the way assets are managed (i.e. resource consents, building regulations, health and safety legislation). These requirements set the minimum level of service that should be provided. It is currently understood that these standards were being achieved prior to the flood event. To continue to deliver the desired standard Council has actively approached the rebuilding of these facilities in cooperation with the tenants utilising a grant based system.

1.2 MODES OF FAILURE SUMMARY

The 89 of the City's 552 leased facilities that failed during the flood represent an estimated repair cost of approximately 5% (\$13M) of the 2007/08 current replacement value of \$272M. The findings from the high-level asset failure analysis for this asset category (utilising the available data at the time) are illustrated in Figure 68 below:

Figure 68: Modes of Failure for Community Leased Assets



It has been concluded from interrogating the information and data provided at the time of this exercise and from consultation with key staff from Brisbane City Council that 40% of assets that failed within the asset category have failed due to their physical capacity being exceeded, 26% failed through their location being unavoidable, 2% had degraded condition and 17% were likely to be an inappropriate design. 13 facilities were undetermined.

Basis for Nominating the Modes of Failure

To derive the occurrence of the above mode of failures the data and information available was discussed with key Council staff to identify the damage inflicted on the assets. This enabled an understanding of the various failure mechanisms associated with the damage to be attributed, using technical judgement, to an appropriate mode of failure. The mode of failure was assigned for each failed facility and added up to get the occurrences of the relevant modes for the asset category as a whole.

Typically the modes of failure for this asset category have been nominated based on the following criteria:

Physical capacity exceeded

- The physical capacity of a facility is considered to have been exceeded if, from interrogating damage cost estimates, available photos of the damage, Google Street View images and the Queensland Recover Authority's interactive flood maps of the facility, that:
 - the height of the water was high enough to cause damage through inundation,
 - was generally surrounded at least by 10m of flood water as seen from the flood maps,
 - from Google Street View the location appears to be appropriate given restraints of the site and that its general design and approximate construction age appear not to have been dominant factors in the failure

Inappropriate design

- If the facility flooded, and from the information provided, the design does not seem optimal for the location given the flood risk. This is based on engineering judgement from visual inspection of the information available and would need to be investigated further in greater detail on a site-by-site basis to refine the assigned mode of failure.

Unavoidable (location specific)

- If the location of the facility requires it to be situated adjacent to the river bank for the facility to adequately fulfil its function and suitable alternative locations were not available on the site. The typical examples are the rowing clubs which need to be on the riverside for the facility to be functional for the users, enabling appropriate access to the river with their equipment.

Degraded condition

- Degraded condition is assigned if evidence of prior condition issues has been identified from the provided condition assessment in 2006 and the issues appear evident in the post flood inspections information and it could have, if not in degraded condition reasonably withstood the effects of the flood. Further investigation of more up-to-date detailed condition information would be required to further quantify the facilities in this mode of failure.

Undetermined

- At the time of the analysis thirteen of the sites could not be assigned a mode of failure as it was difficult to associate damage, if provided, to the 2011 flood event.

Modes of failure do not often occur in isolation, however for the high-level purpose of this exercise and the limited time and information available the most dominant mode of failure is assigned to the individual facility. It is anticipated that as more information becomes available further detailed analysis could be undertaken using a fault tree analysis or equivalent techniques utilising primary and secondary tangible and intangible modes of failures.

Confidence and Reliability in the Data

It must be noted that at the time of the analysis the damaged facilities had been inspected in detail following the flood event and as such the information provides a good level understanding of the failures. The data interrogated included Assessed ID, Asset Name, Location Address, and Summary Damage Cost Estimate. The 2006 condition assessments (for a number of the facilities), post-flood inspections including damage cost models and photographs of the damage were also made available.

Confidence in the data available is considered to be reliable given that the majority of data that was available is based on sound records and procedures. However investigations enabling the analysis to be properly undertaken has minor shortcomings; for example the data is five years old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation.

The accuracy of the data that has been provided for Cardno to assign the mode of failure is considered to be adequate but has minor inaccuracies as the data is understood to have been derived from brief investigation as part of a drive by estimated based on engineering judgement.

1.3 WHAT CAUSED THE FAILURES?

The analysis identified a number of causes of failures arising from the flood event. The flooding from the Brisbane River and its' tributaries damaged the facilities and their contents in many ways, but the most common flood damage appears to have arisen from:

- direct damage during a flood from inundation, high velocity flow, erosion, silting and/or floating debris,
- degradation of building materials, either during the flood or sometime after the flood, and
- contamination of the building due to flood-borne substances or mould.

The resilience and susceptibility of a facility to flood damage is often influenced by factors such as the relatively simple and solid designs that are common to the facilities, the location of these assets so often being on the least economically viable land (like overland

flow paths, waterways, low-lying land) and the need for some of the facilities (like canoe clubs to be adjacent or close to the edge of the river makes them very vulnerable to damage from flood events. The damage attributed to the modes of failure for this asset category are described in the following sections.

1.3.1 Physical Capacity Exceeded Mode of Failure

Failures that arose when the asset's level of service was not expected to withstand the event accounted for 40% of the failed facilities.

Directly flood related causes/mechanisms

Damage attributed to the physical capacity of a facility being exceeded is predominately due to water damage from inundation. The inundation is directly attributable to the rising water levels in river and tributaries overtopping their banks and entering the facility. The amount of capacity exceeded is relative to the water level and duration of inundation, generally the greater the inundation the greater the cost of damage. Some of the most prevalent damage that was caused from inundation is described in the following section.

Typically facilities that were exposed to river velocities have been nominated as an unavoidable mode of failure given their location.

Building foundations have generally not been affected greatly due to their construction type and material mainly consisting of either solid concrete foundation slabs or concrete piles.

Substructures and subfloor spaces can hold moisture that could cause future rotting and mould problems, although there does not appear to be many structures that are affected apart from two level structures that flooded to the second level.

Damage to facilities is related to the water depth inside the facility. From Brisbane City Council's post flood estimated damage costs, the estimated cost per square metre for substantially inundated buildings is 15-30% higher than partially flooded facilities. The value of the structure, its components and contents combined with their sensitivity to flood damage influences the cost of the damage.

Figure 69: Typical Internal Cladding Flood Damage



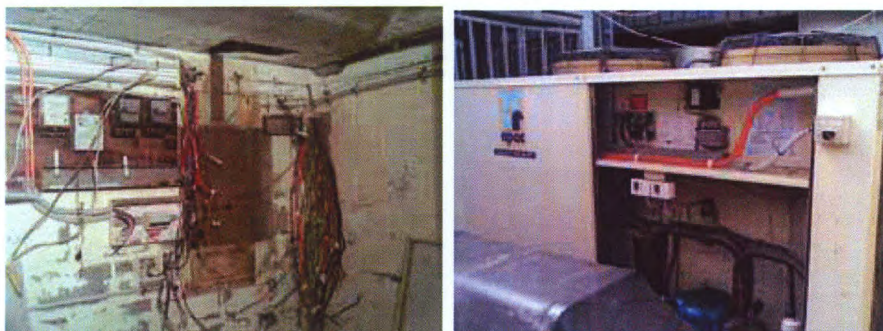
Partially inundated flood damage to internal cladding and frame Fully inundated flood damage to internal cladding and frame

Damage was extensive to internal building material such as gypsum plasterboard, composite wood materials such as (MDF – medium density fibreboard) or particleboard that have low tolerance to water. These materials in almost all inundated facilities have had to be removed and replaced if it has been immersed in water and are often removed to allow the framing or substructure to dry before reinstating can begin.

Timber structures normally have day-to-day moisture contents of between 12%-20%, after inundation timber will absorb moisture that may take many months to return to normal conditions. If restoration work is undertaken too quickly before the moisture content drops to 12-16% before replacing the wall linings, ongoing issues may arise due to degradation of materials from moisture. Additionally health and safety issues may arise from mould and moisture damage. Symptoms of damage may not become evident for many months or years as a result and a number of facilities could potentially fail at a later stage.

Damage to electrical systems and heating, ventilation and air conditioning (HVAC) mechanical plant items such as air conditioning, chillers and hot water cylinders appear to be common where installed.

Figure 70: Typical Mechanical and Electrical Flood Damage



Typical flood damage to electrical systems and HVAC equipment

Apparent causes

Obvious causes of failures that may not have been directly attributed to the flood itself but did influence the physical capacity of the asset being exceeded include:

Condition Issues: It is understood that overall condition of the portfolio is considered to be fit for purpose and as such in an acceptable standard however some facilities were considered to be in a less functional condition prior to the flood.

At the time of this exercise, information on the prior condition of 23 facilities was available. It is recommended that Council undertake further analysis to quantify the effects of age, condition and location on the assets that failed.

The condition profile in shows 1 facility was in excellent prior to the flood, 18 facilities were in good or fair condition and 4 were in poor condition. Facilities in good and fair condition would have a level of deteriorated condition and impaired serviceability. For facilities in poor condition there would be obvious deterioration in condition, with asset serviceability affected and maintenance cost would be rising.

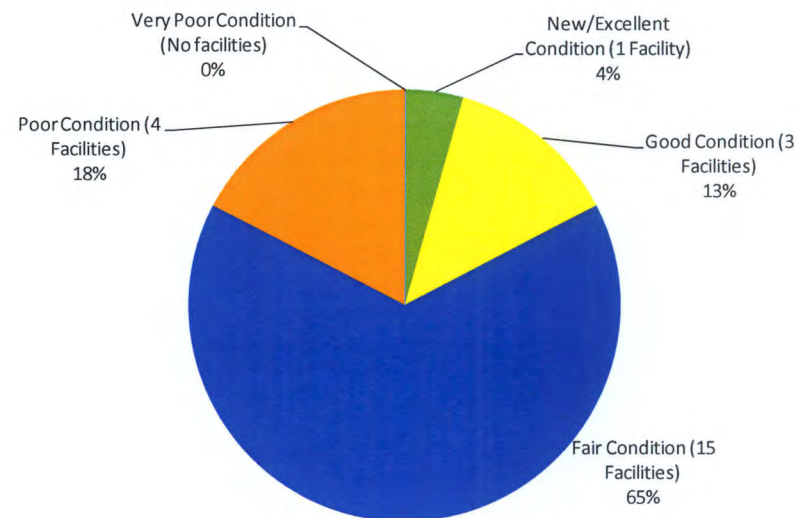


Figure 71: Condition Profile for 23 of the Failed Community Leased Assets

Further investigations would be required to quantify the adequacy of funding provisions to better understand if Brisbane City Council is meeting requirements of the lease obligations for maintaining the building fabric.

Brisbane City Council's pro-active approach to monitoring the tenant's statutory obligations under their leases to operate and maintain the facilities has likely resulted in an acceptable standard across the properties. However although undertaking a proactive approach it is possible that some tenants may neglect to undertake key maintenance activities influencing asset failure.

At some properties it is understood that minor additions and extensions may have been constructed over the years, possibly in an ad-hoc way, as such it is a reasonable assumption that these assets could be more susceptible to damage from flood events. This may skew the scale of the damage as it is unlikely these facilities could be reconstructed like-for-like to current building code requirements.

No two facilities are identical and the range of ages appears to vary from very recent to post 1960's. As such, older assets could have been more vulnerable to damage as their building components may be less resilient as they reach the end of their useful economic life.

The age, floor area and estimated damage costs were provided for of 18 of the damaged facilities. The estimated damage costs were developed through inspections by Brisbane City Council specialist following the flood. The following graph (Figure 72) includes estimated damage costs to both building works and fixtures and fittings.

Figure 72: Average Estimated Repair Cost (Building Works & Fixtures) per Square Metre by Age of Facilities

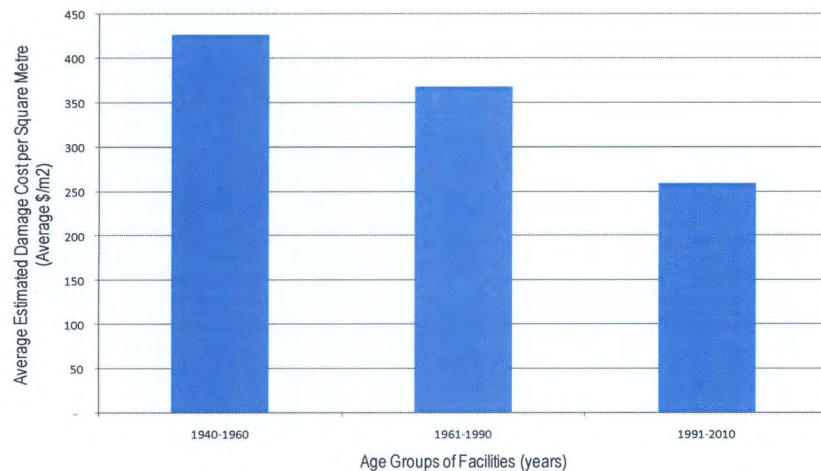


Figure 72 illustrates the older facilities generally had higher estimated damage costs per square metre than newer facilities. The oldest facilities had smallest average floor areas at 196 square metres, then 563 square metres for those aged between 1961 and 1990, and finally 867 square metres for the newest facilities. All but one of the 18 facilities in Figure 72 were located within 500 metres from the Brisbane River and the average condition in each age band was "fair" condition.

The total estimated repair cost for a facility includes a component of building work and building fixture repair costs and for each age group the amounts vary. The oldest buildings typically having the highest building fixture repair costs and the least building work costs. This is opposite for the newest facilities as shown in

Age group	Percentage of total estimated repair cost attributed to building works	Percentage of total estimated repair cost attributed to building fixtures
1940-1960	29%	71%
1961-1990	63%	37%
1991-2010	70%	30%

Table 2: Percentage of Estimated repair Costs for Building Work and Fixture

Underlying causes

"Underlying" causes typically have their roots in the management of the facilities. If tenants do not meet their lease obligations to undertake basic maintenance such as gutter clearing the damage to the facility may have been exacerbated.

Although Council is dedicated to ensuring optimal lessee / landlord relationships, if a less amicable relationship were to exist or inadequate resources are available within the tenant's organisation it may prove difficult to ensure the tenant meets their obligations. If this eventuated, basic maintenance may have not have been undertaken increasing some asset's susceptibility to flood damage.

Inaccuracies in flood models may lead to some facilities not being identified as potential risk and may have experienced higher than anticipated flood levels

Building regulations and designs that may not have necessarily best incorporated flood events increases the vulnerability of the facility to exceed its physical capacity.

The extended period of wet weather preceding the flood may have also contributed to the failure in some circumstances.

1.3.2 Unavoidable Mode of Failure (Location Specific)

For 26% of the facilities, there was no practical way of avoiding the failure given the specific location of the asset.

Directly flood related causes/mechanisms

The location of 16 of the community leased facilities required direct access to the river (canoe/kayak, rowing and sailing clubs) and as such their location, adjacent to the river, made them more susceptible to flood damage. These 16 facilities were directly exposed to the flow of the river or tributary flood water and were inundated for a significant period of time, as such they failed due to an unavoidable (location specific) mode of failure.



Figure 73: South Brisbane Sailing Club Located on Riverbank

Damage caused by flow velocity, depth and duration

The velocity of floodwaters, the turbulent nature of the water and the debris it carried in combination with the depth, resulted in significant structural damage to number of these buildings. The forces on the buildings from the rivers' flood water were more than the ability of the structure to withstand and resist them. These forces are particularly high on the upstream side of the facility as the water velocity results on increased height of water pushing against this side of the facility.

Figure 74: Impact of Flood Water Flowing onto a Building

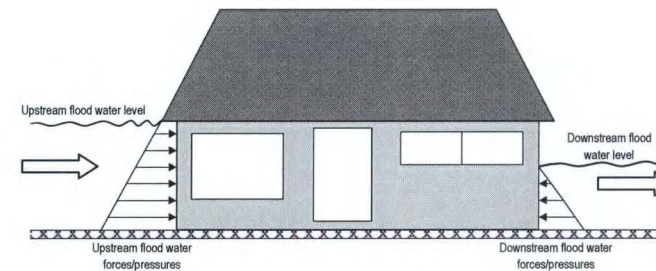


Figure 75: Flood Damaged Buildings



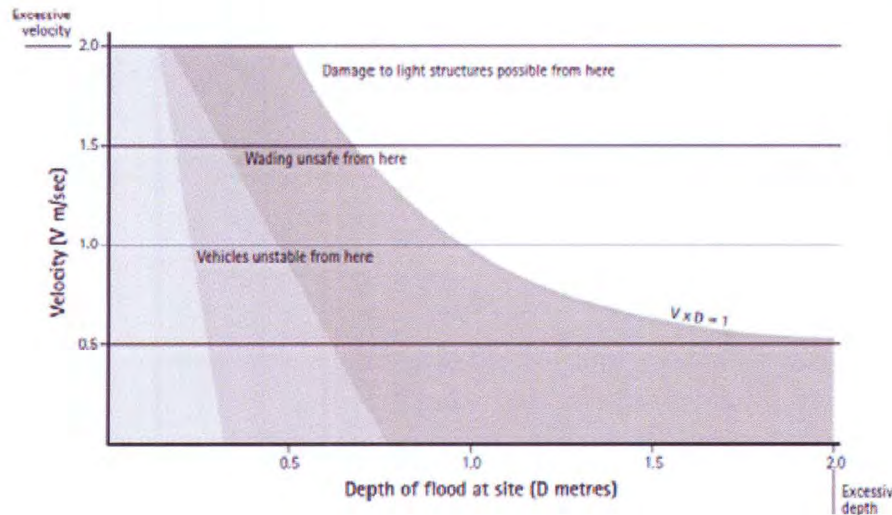
Karana District Kayak and Canoe Club



Centenary Rowing Club was fully inundated

It would likely be unviable to provide comprehensive flood proofing at facilities in areas where flood velocities exceed 2.5 m/s, as illustrated in the velocity-depth relationship developed for the New South Wales Government 2001, Floodplain Management Manual: the management of flood liable land, Sydney, Figure 76.

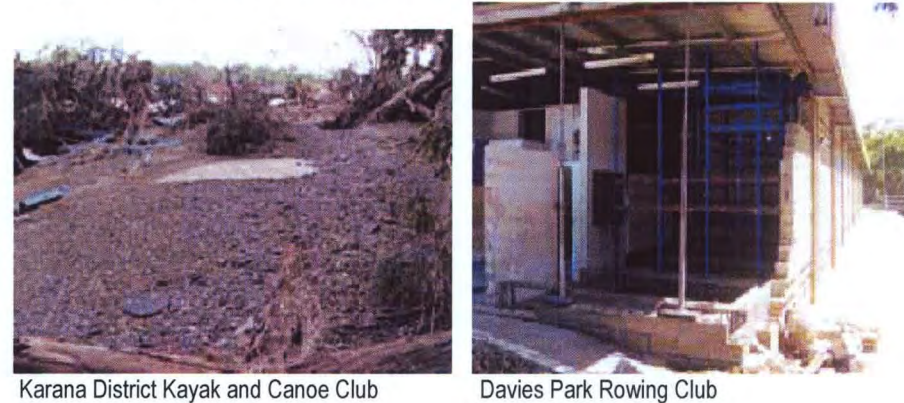
Figure 76: Critical Depth-Velocity Relationship



Reproduced from the New South Wales Government 2001, Floodplain Management Manual: the management of flood liable land, Sydney.

The majority of facilities that were subject to this mode of failure were exposed to the full velocity of the water of over 2m/sec and the flood water height was often at least to the roof height (typical stud height of 3m). This indicates damage to the structure was inevitable on these facilities as they were subject to excessive flow velocities in excessive depths. Examples of damage are illustrated in Figure 77 below:

Figure 77: High Velocity Flood Water Damaged



The hydraulic nature of rivers in flood is dynamic throughout the length of the river, with the turbulent characteristics of the flows varying the velocity and severity of the flood water in different areas of the river. The local velocities of the water at the individual sites are not known at this stage but variations in velocity at certain sites may have increased the risk and scale of damage. In some situations the impact of the flow was elevated somewhat by trees and vegetation planted upstream of the facility and/or earthen embankments deviating the direct flow path of the water.

It is difficult to quantify if damage to buildings was from impacts by other structures or assets but it is a reasonable assumption that debris has assisted in causing damage to the structural integrity to a number of these facilities.

Apparent causes

The general age, condition, construction material, and design of the facilities varied but appears to generally not be the main cause of failure. The river dynamics at the individual sites and the lack of upstream protection from vegetation or river training features may have influenced the extent of the damage.

Underlying causes

The following are underlying causes of failures that may have influenced the asset being in an unavoidable location:

Although some facilities need to be located close to the water's edge to allow easy access to the river, the location should account for flood risk and specifically the flow velocity that it could potentially be subjected to. The following illustration shows the typical flow pattern of the river during normal flows. In floods the volume of water and flow velocities increase, magnifying risk of direct flow related damage to certain area.

The water flows fastest on the outer bends of the river, often where the channel is deeper and has less friction. Erosion and scouring is greatest here due to the water hurled towards it deepening the channel, the deeper channel has less friction to reduce the energy within the water resulting in greater erosion when it hits full force into the riverbank. Often the undercutting nature of the erosion on the outer bends of the river forms steep sided riverbanks, however to allow for easy access to the water the facilities are built low on the riverbank increasing the susceptibility of damage from high velocity flood water.

The relative slow flowing water on the inner bends of the river arises from a lower energy area in the river flow and deposition occurs creating a shallower channel. The shallower channel offers more friction to resist the flowing water, reducing the velocity of the water and consequently reducing its energy that promotes further deposition. Facilities built on these more gentle slopes are still vulnerable to flood inundation but are less likely to completely be washed from the ferocity of the flow.

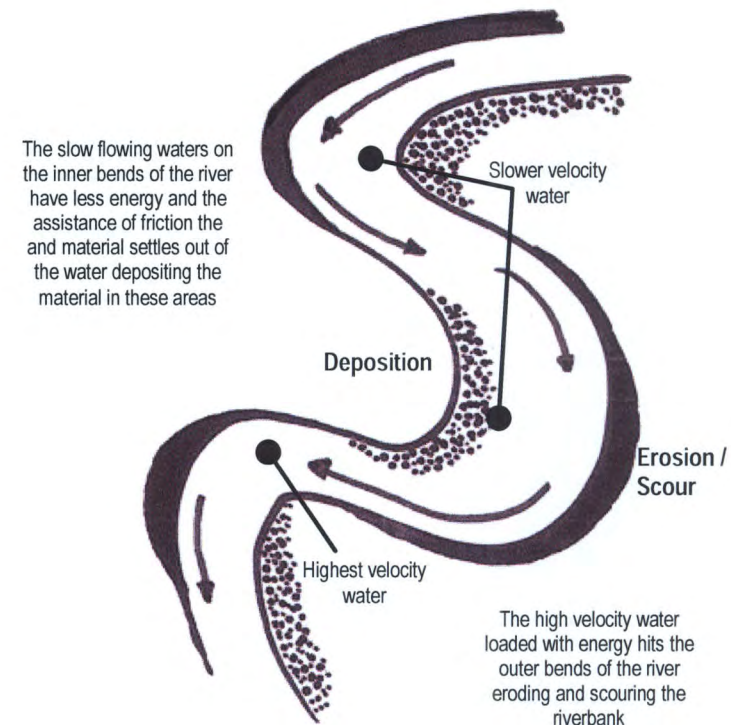


Figure 78: River Erosion & Deposition

1.3.3 Degraded Condition Mode of Failure

Failures caused by the condition that if not present would have otherwise enabled the facility to withstand accounted for 2% of the failed facilities.

Directly flood related causes/mechanisms

The flood water rising and fully or partially inundating the facility has pushed the facility in degraded condition to fail.

Apparent causes

Although the flood water was a major component in the asset failure the main cause of failure in a very small number of the facilities was attributable to the condition of the assets being in a less than desirable condition and this comprised the facility's ability to withstand the flood waters.

Four of the facilities were identified to be in poor condition prior to the flood event but only two of these predominately failed as a consequence of degraded condition. Further information would be required on the prior condition of the facilities to refine the number of facilities attributed to this mode of failure.

It is possible condition issues are an apparent cause of damage leading to failure of a facility and/or its components, it is however difficult to definitively distinguish if it was the main cause of failure.

Given the high-level nature of this exercise, limitations in time and available information the analysis does not explore primary and secondary failure modes of indirect or indirect mechanisms. It is anticipated a more detailed approach be undertaken as further information becomes available to utilise more accurate details and asset information on the failures and applying techniques like fault tree analysis.

Underlying causes

Lack of monitoring provisions to ensure tenants obligations are being fulfilled under their lease agreement to maintain the facility has helped lead to the condition of the facility

degrading and vulnerable to failure. It is likely that the usual maintenance issue of gutter clearing could have lead to gutters filling up and leaking back into the roof cavity causing water damage.

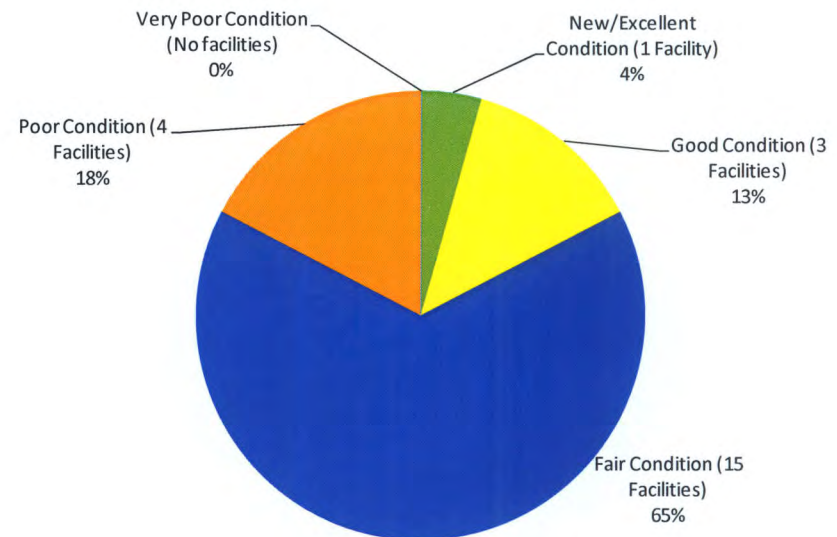


Figure 79: Condition Profile for 23 of the Failed Community Leased Assets

1.3.4 Inappropriate Design Mode of Failure

For 17% of the failed facilities the failure was caused by inappropriate design, had the design been more flood resilient it would have otherwise likely withstood flooding.

Directly flood related causes/mechanisms

As the flood waters rose a number of facilities flooded that had little to no flood proofing incorporated within their design. Often the location was considered not to be optimal and the layout, materials and elevation were not sufficient to defend against the rising water and as such they were inundated and failed to be used by tenant.

Apparent causes

Apparent causes of failures that may not have been directly attributed to the flood itself but did influence the failure due to an inappropriate design:

Inappropriate design for the location with some facilities having adequate consideration to flood risk, often resulting in the building being situated in less than optimal location on the site. This is compounded if the building layout and elevation is insufficient to accommodate a basic flood level. A number of the facilities nominated under this mode of failure had limited elevation above flood levels increasing its susceptibility to flood damage.

Building materials and components appear to have limited 'flood proofing' in the design to offer adequate protection from flooding. Building trends since the 1970's have moved away from the classic Queensland style of building and its associated solid construction materials. This has led to facilities that are more prone to damage from flood events.

Underlying causes

The current Building Code of Australia does not have any specific provision to flooding to protect buildings from unnecessary damage. It is anticipated that the 2013 code will have new provisions to better accommodate flood considerations. These changes will inevitably increase construction and refurbishment costs however Cardno believes that indicative costs to provide a level of flood resistance to a building could be in the range of 3 - 7% more than standard designs. Further investigations would be required to validate this but flood proofing could be considered a feasible one-off flood insurance payment.

There may potentially be underlying resistance from the building industry to change the building code, notably in the event restrictions are placed on certain building materials. Leaving the code as status-quo will only perpetuate or increase the damage if another similar or worse flood event occurred.

It is understood new buildings are required to have a minimum floor level above a flood level relating to a flood that has a one in 100 chance of occurring.

Figure 80: Flood Resilient Design (Northern St, City Farm)



1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council has in-place to stop the failure from occurring include:

- Active approach to monitoring conformance of tenants with their obligations under their lease agreements to ensure the day-to-day maintenance and cleaning of the facilities is to an acceptable standard. These activities reduce the likelihood of condition related failures compounding the damage.
- Appropriate lease arrangements, in themselves, share the responsibility to ensure the facilities are maintained to an appropriate level.
- In many situations the facilities have insurance provisions to mitigate financial consequences on Council and tenant.
- Building consent for new buildings require adequate design consideration in accordance with Council requirements. Following the flood event Council has changed building height restrictions to allow residents affected by the January 2011 floods to rebuild their homes beyond the height restrictions of current planning controls.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

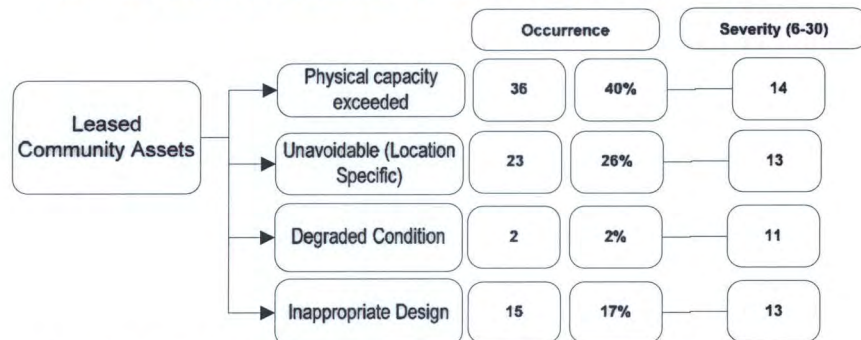


Figure 81: Severity of Modes of Failure on the Council & Community

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the Community to get an understanding of the severity of this mode of failure. The effects have been assigned using the Brisbane City Council's Risk Management Framework tailored for this analysis.

1.5.1 Effects from Physical Capacity Exceeded mode of Failure

For this Mode of Failure a severity score has been calculated as having a major impact severity on the Council and the Community. The score of 14 has been derived as:

- The failures had some minor adverse impact on corporate image and there was some minor environmental damage from damaged building materials. Health and safety impacts were negligible.
- The loss of service has been minor as caused significant service disruption to a small number of the Council's customers but the effects on the community is severe as there is significant localised disruption that will occur over an extended period.
- Based on the total estimated damage costs the economic impact is considered to be major with costs falling in the range of \$3M to \$35M.

1.5.2 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score has been calculated as having a major impact severity on the Council and the Community. The score of 13 has been derived as based on similar impacts identified in the physical capacity exceeded although the economic impacts are less.

1.5.3 Effects from Degraded Condition Mode of Failure

For this Mode of Failure a severity score has been calculated as having a major impact severity on the Council and the Community. The score of 11 has been derived as based on similar impacts identified in the physical capacity exceeded although the economic impacts are substantially less.

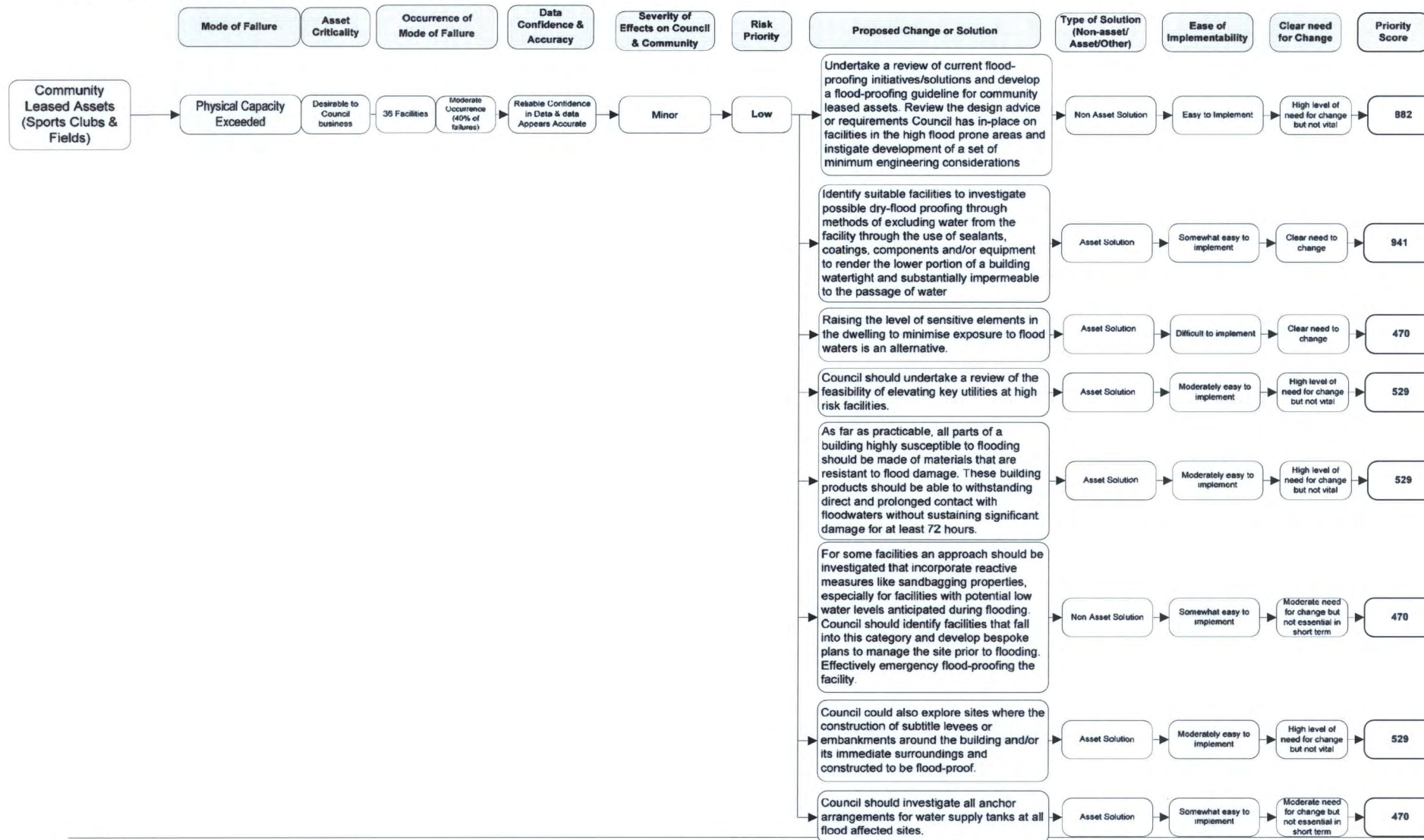
1.5.4 Effects from Inappropriate Design Mode of Failure

For this Mode of Failure a severity score has been calculated as having a major impact severity on the Council and the Community. The score of 13 has been derived as based on similar impacts identified in the physical capacity exceeded although the economic impacts are less.

1.6 ASSUMPTIONS AND LIMITATIONS

Assumptions used for nominating of the modes of failures are outlined in Section 1.2

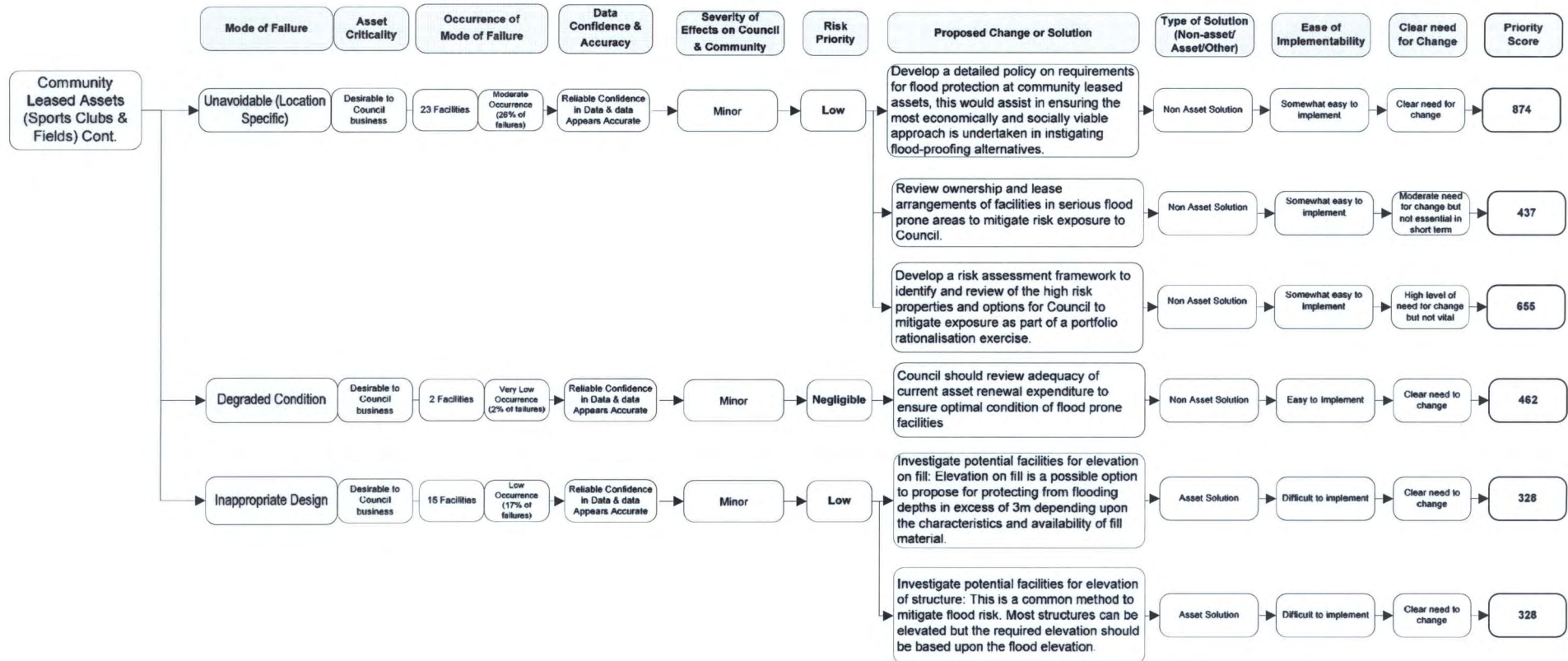
1.7 POSSIBLE CHANGES & SOLUTIONS



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Commercial in Confidence

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From the analysis of data available to Cardno at the time of the analysis, consultation with key Council staff and technical experience Cardno proposes the following possible changes / solutions:

a. Potential easy and relatively inexpensive changes to the assets (or their management) Council can investigate further to improve flood resilience includes:

- Developing a detailed policy on requirements for flood protection at community leased assets, would assist in ensuring the most economically and socially viable approach is undertaken in instigating flood-proofing alternatives.

The policy should identify parameters for identifying, based on risk, properties, construction works and materials for both immediate restoration and moving forward with routine Council landlord obligatory duties. The aim would be to ensure a consistent approach to deciding appropriate activities for flood-proofing alternatives at the facilities. This approach could align with the Criticality, Utilisation and Functionality (CUF) pilot project currently underway. For developing flood-proofing programs, activities could be assigned similar to following examples:

- If a facility is subject to risk of flooding of less than 0.5m relative to 2011 flood levels and the estimated flood damage cost is less than X% of the current replacement cost then Council should adopt an approach of accepting this risk.
- If the facility is located on river side within 50m of the river the design and materials used in construction are to reflect the susceptibility of the site.
- If the facility is subject to potential flooding of between 0.5m-1.5m and estimated damage is less than X% of the current replacement value then dry flood-proofing measures should be investigated.
- If facility is subject to flooding in excess of 1.5m and the estimated damage costs is greater than X% Council should investigate wet flood-proofing measures.

■ Etc..

- Undertake an exercise to derive the duration and depth of flooding at the individual sites. This will help analyse and quantify the damage further to enable better understanding of the interaction of the duration and damage for future planning exercises.

b. Possible asset changes that should be considered that could mitigate future impacts of floods on Council.

- Review ownership and lease arrangements of facilities in serious flood prone areas to mitigate risk exposure to Council.
- Develop a risk assessment framework to identify and review of the high risk properties and options for Council to mitigate exposure as part of a portfolio rationalisation exercise. For example, a land lease or ground lease where the tenant rents and uses the land, but owns the temporary or permanent buildings and other assets. Or investigate rationalising out high risk or high repair cost facilities the portfolio that do not satisfy sufficient value to the community.

c. Proposed solutions or changes to council assets, designs, policies, procedures that should have otherwise been different include:

- Undertake a review of current flood-proofing initiatives/solutions and develop a flood-proofing guideline for community leased assets. Review the design advice or requirements Council has in-place on facilities in the high flood prone areas and instigate development of a set of minimum engineering considerations, similar to those discussed below:

Flood-proofing Community Leased Facilities

The intention behind flood-proofing any facility is to make the building as resistant as possible to damage from flooding. There a number of ways to make buildings more flood resilient such as situating and elevating it out of potential contact with floodwaters or by making the building resistant to any potential damage resulting from contact with floodwaters.

Some flood-proofing concepts for possible changes or solutions to potentially make the facilities less susceptible when the next flood event occurs are discussed in the following categories:

Dry-flood-proofing aims to exclude water from a building through the use of sealants, coatings, components and/or equipment to render the lower portion of a building watertight and substantially impermeable to the passage of water. The cost of dry-flood-proofing some facilities may be prohibitive and Council should determine criteria that would instigate undertaking this approach, for example properties subjected flood velocities between of 0.5-1.5 metres per second or flood depths of 0.5m – 1m.

Methods include applying a waterproof coating or membrane to the exterior walls, installing watertight shields over openings, and strengthening walls so that they can withstand the pressures of floodwater and the impacts of floating debris.

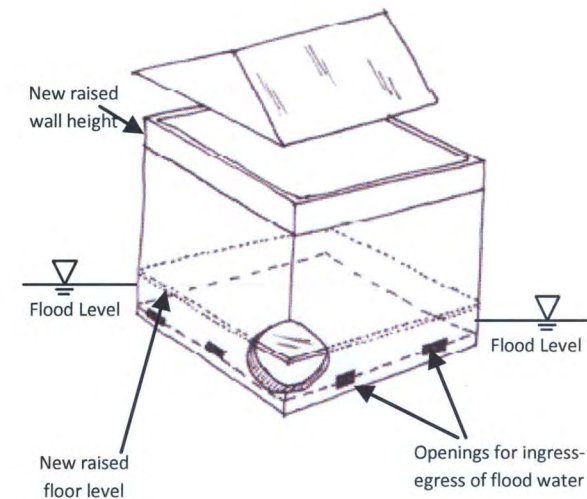
Wet Flood-Proofing for Community Leased Facilities

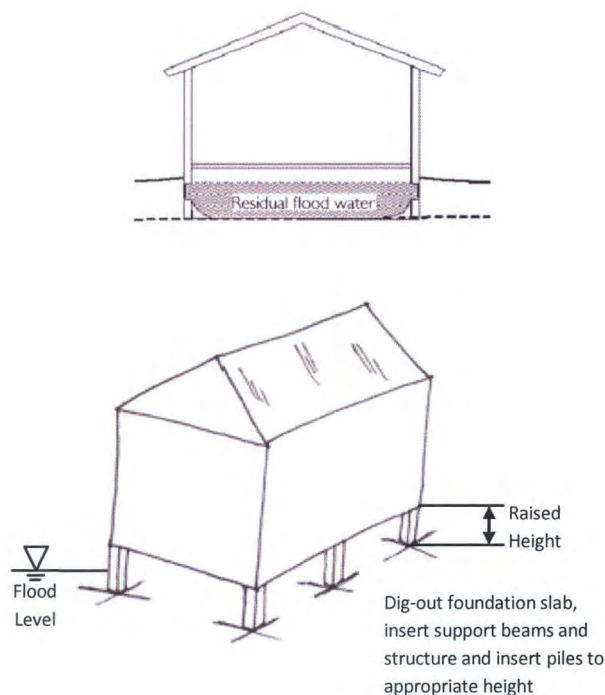
Wet flood-proofing allows the lower portion of a building to flood ('sacrificial design'), but uses materials that don't damage easily by flooding. Allowing floodwater to enter portions of the house (such as a crawl space or unfinished basement) equalizes the interior and exterior pressures on the wall during a flood. Equalized pressures reduce the likelihood of structural damage during a flood event, options include:

- Raising the level of the dwelling or sensitive elements in the dwelling to minimise exposure to flood waters is an alternative. The most severe damage from the recent flood appears to have occurred to ground dwellings built straight on the foundation slab, with less damage occurring to raised dwellings. Generally, elevating a building reduces future potential flood damage, lowers insurance premiums, increases value to the building, and increases usable space. Prescribed parameters on flood proofing techniques and methods should be refined to accommodate the findings from the 2011 floods.

- Elevation on fill: Elevation on fill is a possible option to propose for protecting from flooding depths in excess of 3m depending upon the characteristics and availability of fill material.
- Elevation of structure: This is a common method to mitigate flood risk. Most structures can be elevated but the required elevation should be based upon the flood elevation. The limitation on height is generally influenced by Council regulations and cost considerations. The cost of elevation varies based upon the size of the structure, type of foundation (e.g. concrete slab, pile, basement) and market factors. Council may need to review the restrictions on the elevation for the top of the lowest floor required (i.e. the expected elevation of floodwater during the 1% of the annual-chance flood event) In general, the higher the elevation above the required flood elevation requirements, the greater the likelihood to prevent future flood damages, which may reduce flood insurance premiums.

Figure 82: flood-resistant "sacrificial spaces"





Protecting the Utilities at Community Leased Facilities

The building's utilities including heating, air conditioning, electrical, water supply, and sanitary sewage services, must consider the minimum flood levels. A number of facilities that failed had significant damage to these components of the building. Council should undertake a review of the feasibility of elevating key utilities at high risk facilities.

Although elevating services is costly, it can protect from the inconvenience and substantial costs of repeated future flood damages. The location of mechanical, plumbing, and electrical systems should be above the flood protection level.

These systems would include heating, ventilating, air conditioning, duct systems, and electrical equipment (service switchboard panels, meters, switches, and outlets). Locating equipment on a higher floor or on elevated concrete slabs or frame should provide the needed protection to significantly reduce its exposure to flooding.

If these components are at a lower level, their design should prevent damage from flooding. This may involve waterproof enclosures, barriers, protective coatings, or other techniques to protect vulnerable components. This often is relatively inexpensive, but the effectiveness depends on a number of factors including the anticipated depth of flooding in the location.

In general, essential building systems should be elevated relative to a minimum flood level aligned to the annual chance of flooding and higher if it is practicable to do so. Given the accuracy of the data arising from the flood, accurate flood level boundaries will be available to determine feasible breakeven points for elevating utilities relative to risk, utilities should be elevated to at least 600 mm above the 1-percent-annual-chance flood elevation.

Council should require certification from a licensed professional that the standards for resistance to flood damage are met.

Flood Damage-Resistant Building Materials

Flood duration affects the level of saturation building materials experience. Flood-proofed structures exposed to long periods of flooding should be carefully designed to reduce the risk of failure resulting from building material saturation, internal electrical and mechanical systems, or similar problems related to extended flood duration. As far as practicable, all parts of a building highly susceptible to flooding should be made of materials that are resistant to flood damage. These building products should be able to withstand direct and prolonged contact with floodwaters without sustaining significant damage for at least 72 hours.

Council should undertake further review of the information available to identify significantly damaged components and building materials and identify suitable

flood resistant alternatives. Damage that requires no more than just cleaning or low-cost superficial repair is not significant compared to the need to replace flood damaged drywall or other material. Components not inundated should be resistant to excessive humidity. These materials should be installed if practical as part of the recover or during Council's routine activities under lease agreements.

Reactive Procedures for Protecting the Community Leased Facilities

For some facilities an approach should be investigated that incorporate reactive measures like sandbagging properties, especially for facilities with potential low water levels anticipated during flooding. Council should identify facilities that fall into this category and develop bespoke plans to manage the site prior to flooding. Effectively emergency flood-proofing the facility. This requires human intervention to implement actions that will protect a building and its contents from flooding. Given the slow rising nature of the flood waters in this event there was opportunity to use this technique on some facilities given ample warning time was available to mobilize people and equipment to temporarily flood proof the facility.

Other Potential Protection for Community Leased Facilities

Council could also explore sites where the construction of subtitle levees or embankments around the building and/or its immediate surroundings and constructed to be flood-proof.

Council should investigate all anchor arrangements for water supply tanks at all flood affected sites. Ideally the tank should be anchored by attaching it to a concrete slab that is heavy enough to resist the force of flood waters or by running straps over it and attaching them to ground anchors.

1.8 RECOMMENDATIONS

As concluded in the proposed solutions / changes section above, the observed failures have a variety of causes. Cardno recommends approaching their solutions in clusters of actions that will address various causes simultaneously. The improvements with the highest criticality based on the analysis are described below and are scheduled for implementation as outlined in Annex J:

It is recommended that Brisbane City Council

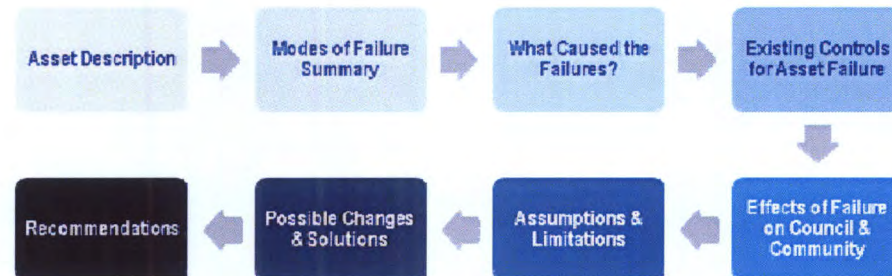
- Develop a detailed policy on requirements for flood protection at community leased assets. This would assist in ensuring the most economically and socially viable approach is undertaken in instigating flood-proofing alternatives;
- Undertake a review of current flood-proofing initiatives/solutions and develop a flood-proofing guideline for community leased assets. Review the design advice or requirements Council has in-place on facilities in the high flood prone areas and instigate development of a set of minimum engineering considerations;
- Develop a risk assessment framework to identify high risk properties and develop options for Council to mitigate exposure as part of a portfolio rationalisation exercise. For example, a land lease or ground lease where the tenant rents and uses the land, but owns the temporary or permanent buildings and other assets. Or investigate rationalising out high risk or high repair cost facilities that do not represent sufficient value to the community; and
- Identify suitable facilities with minimal damage to investigate instigating possible dry flood-proofing solutions. This includes initiatives of excluding water from the facility through the use of sealants, coatings, components and/or equipment to render the lower portion of a building water-tight and considerably water-resistant to the ingress of water.

FERRY TERMINALS



1 FERRY TERMINALS

SECTION CONTENTS

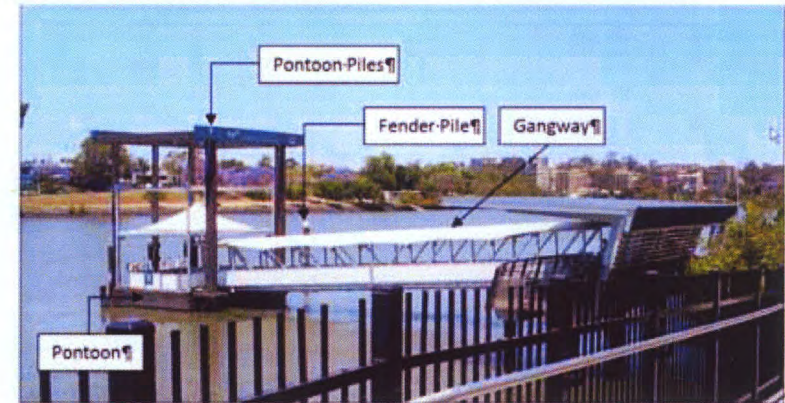


1.1 ASSET DESCRIPTION

This asset category includes the ferry terminals and the ferry mooring/refuelling facilities. There are 23 ferry terminals overall, with an additional 4 moorings/refuelling stations. Eight of the ferry terminals and two of the moorings were found to be significantly damaged after the floods.

As shown in the picture below, the ferry terminals basically consist of a pontoon which the ferry loads and unloads passengers from, pontoon piles to support the pontoon, fender piles to protect the pontoon and a gangway connecting the pontoon to the passenger waiting area/shore.

Figure 83: Components of a Typical Ferry Terminal



North Quay Terminal (picture taken prior to January flood)

The ferry terminals are a required element of the Rivercat/River Ferry service that is operated by Brisbane City Council. This service is considered to be an essential service of BCC. Without the terminals in fully operational capacity, the ferry service has been running at a reduced operational capacity.

The ferry terminals are maintained in accordance with the BCC CityCat – CityFerry Operations Vessel and Terminal Assets Asset Management Plan, a new version of which was issued in Draft form in March 2011. As the Contracted Service Provider, TransdevTSL Brisbane Ferries operates and provides inspection and routine maintenance services for the ferry service. As the owner of the terminals, BCC provides major maintenance works for the terminals.

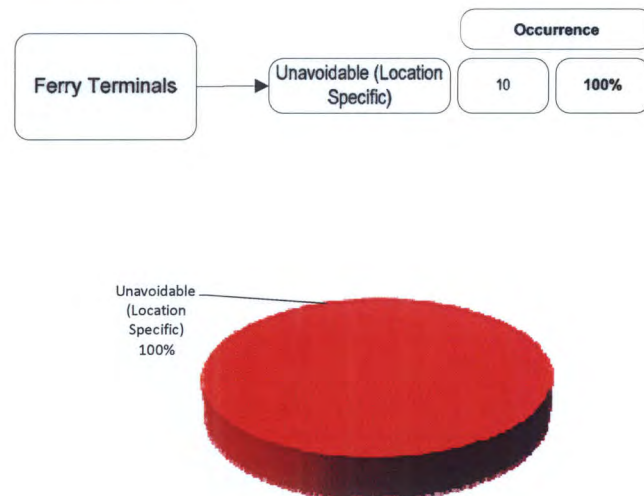
For the proposed expenditure program, refer to the Appendix 3 in the Asset Management Plan.

1.2 MODES OF FAILURE SUMMARY

Eight of the ferry terminals and two of the moorings were found to be significantly damaged after the floods. This accounts for 37% of the ferry terminal assets.

The asset failure analysis has been undertaken at a high-level for this asset category level utilising the available data at the time of the analysis, the findings from the analysis are illustrated in Figure 84 the below:

Figure 84: Modes of Failure for Ferry Terminals



While several factors can be attributed to the damage caused at each of the ferry terminals, it is considered that the main reason that some of the terminals were severely damaged and others were quickly able to be re-opened with minor maintenance works, is the locations of the terminals. For example; at the QUT Gardens Point Terminal the pontoon was never recovered and two spans of the gangway were damaged. However at the South Bank Terminal 3 located directly over the river, there was little damage and it was re-opened with only minor works required. Refer to Photos 1 and 2 below.

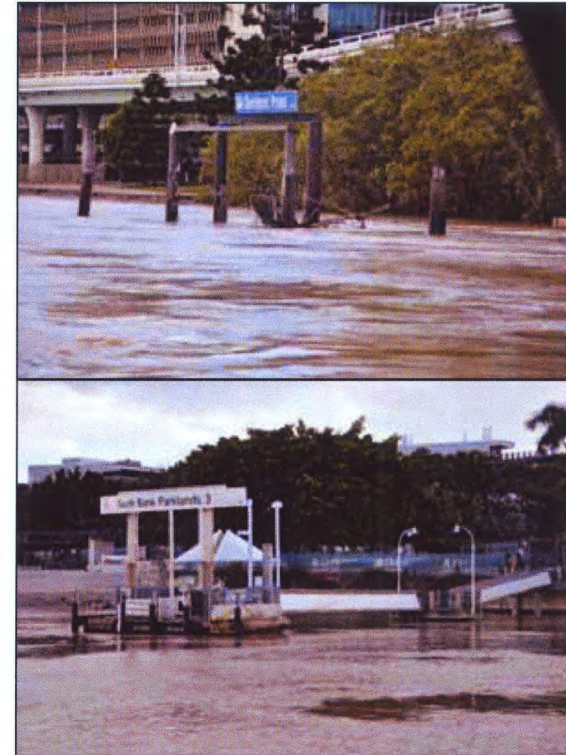


Photo 1: QUT Gardens Point

Photo 2: South Bank 3

This is similar for Holman Street against Riverside, West End against Guyatt Park, North Quay against South Bank Terminals 1 and 2 and Sydney Street against Mowbray Park.

Breaking damage down to component level, it would appear that where a gangway is missing, the physical capacity of the connections has been exceeded due to impact and debris loading. Similarly where piles have been damaged, it is generally due to impact. However, the impact and the debris loads are high due to the location of the facility and this is the main reason why some terminals were severely affected, where adjacent ones had minor damage.

1.2.1 Data Confidence & Accuracy

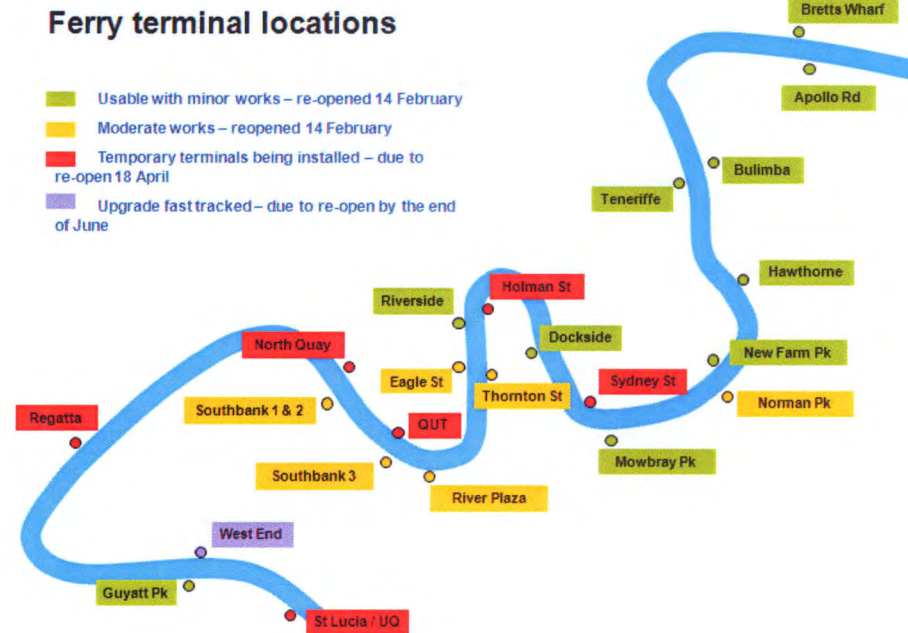
Confidence in the data available is considered to be reliable given that the majority of data that was available is based on sound records, procedures, investigations and analysis which is properly documented but had only minor shortcomings; for example the investigation reports are basic due to lack of access and reliance is placed on unconfirmed verbal reports.

The accuracy of the data that has been provided for Cardno to assign the mode of failure is considered to be reasonable given that a significant proportion (over 30%) of that data is understood to have been based on observation. However, given the ultimate conclusion of the assessment, it is not considered critical.

1.3 WHAT CAUSED THESE FAILURES?

The analysis identified a single overriding cause of the failures for this asset category; the location of the asset. As discussed above, the components of the different terminals failed due to, for example, debris loads causing the capacity of the element to be exceeded. However, the debris load was concentrated over certain areas of the river, where the water speed was highest, resulting in excess damage to those terminals that were located in the high flow region of the river. So while the damage was specifically caused by the debris loading, the debris loading was high due to the location of the terminal. It can be seen that where the terminals are not located in the high flow regions of the river, they have not been subject to the same severity of damage. Refer to Figure 85.

Figure 85: Ferry Terminal Locations



It should also be noted that those terminals located in the upper regions of the river were subject to more damage than those in the lower regions. This is obviously another aspect of the location of the terminals and can be attributed to the water losing some of its inertia as the river widens out on the lower stretches, which also allows a wider distribution of the debris.

1.3.1 Mode of Failure: Unavoidable (Location Specific)

There was no practical way of avoiding the failure given the specific location of the failed ferry terminal assets.

Directly flood related causes/mechanisms

The failed assets were found to be in the main flow of the flooded river, resulting in concentration of debris loads and impacts from large items such as trees, pontoons, boats etc. that were trapped within this flow. Generally the river does not flow at a high speed, and it is relatively clear of debris. During the floods, a large amount of debris was captured by the water, and this included large items that were washed downstream. Those assets that were in the main flow of the floodwater were subjected to significant amounts of debris load and impact, exacerbated by the higher speed of the river flow at that location. It should be noted that on ferry terminals that were not significantly damaged, there does not appear to be a build-up of debris. Refer Figure 86.

Figure 86: Failed Dockside Ferry Terminal



Debris can be seen in Figure 87 and Figure 88.

Figure 87: Failed UQ Ferry Terminal



Figure 88: Failed Sydney Street Ferry Terminal



While there does not appear to be a significant amount of debris in the above pictures, it must be remembered that the elements that were worst affected have been totally washed away. What remains is a small amount on the edge of the flow.

Apparent causes

Of the damaged terminals, the West End Terminal was the oldest and was scheduled for upgrade this year. This terminal was purchased in 1967 and appears to be the oldest in the network, with Apollo Rd being the next oldest, purchased in 1968. The QUT Terminal is also proposed to be relocated in the next year or so. This terminal was purchased in 1973, similar to the River Plaza and Holman Street terminals, which were also severely damaged. It should be noted that the Hawthorne and Bulimba Terminals were also purchased in 1973 and they did not suffer excessive damage during the floods.

Notwithstanding the above, it would appear that age is not a factor in the damage suffered by the terminals, although it may have contributed to the extent of damage. While the West End Terminal was purchased in 1967, the Regatta Terminal was purchased in 2003. Also, as mentioned earlier, The QUT, River Plaza and Holman Street Terminals were purchased in 1973 but North Quay was purchased in 1997 and Sydney Street in 2002. From this spread of ages, it can be concluded that the age of the terminals was not a significant factor in the asset failure.

Following the above reasoning, the design of the structures can also be ruled out as a contributing factor. Terminals that were constructed/purchased at similar times can be assumed to be of similar designs, as they would have been designed to the same or similar standards, with the same requirements for design issues such as durability. In the Asset Management Plan, BCC has outlined expenditure for capital works to upgrade the existing terminals over the next 10 years.

It should also be noted that the design life for the older terminals is not available, however the required design life for the more recent terminals and any new/upgraded terminals should be 50 years. It should be noted that the flood levels for the 2011 flood event were greater than the Q100 levels as defined by SKM in 2004. However, given the statistical nature of these figures, the probability of another similar level flood within the design life of the terminals could be stated as low, but not zero.

Underlying causes

There does not appear to be any significant underlying causes for the damage to the terminals that are within BCC control. Assuming that the Asset Management Plan was followed, and that regular maintenance was undertaken, there is no indication that anything could be done by BCC to prevent damage to these terminals.

The main underlying causes for the damage to the terminals would be:

- The condition of the riverbanks upstream, and the amount of vegetation that the river was able to pick up when the water level was high.
- The design and capacity of pontoons upstream, and the location of private assets close to the riverbank in flooded areas.

These are generally considered to be outside the control of BCC, although it may be beneficial to look at planning controls for items that could become flood debris stored on property within the flood plain, e.g. sheds and water tanks. Pontoon inspection and maintenance requirements and mooring controls for private pontoons and boat moorings should also be evaluated.

1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council have in-place to stop the failure from occurring include:

- The pontoons are designed to float, and the gangway is a light structure that would not impede the pontoon when it floats, thus allowing for high water levels.
- Fender piles have been provided at some of the terminals to provide some protection from large objects impacting.

These controls are essentially design controls and are obviously not sufficient at those terminals that suffered significant damage.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the Community to get an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

Unavoidable (Location Specific)

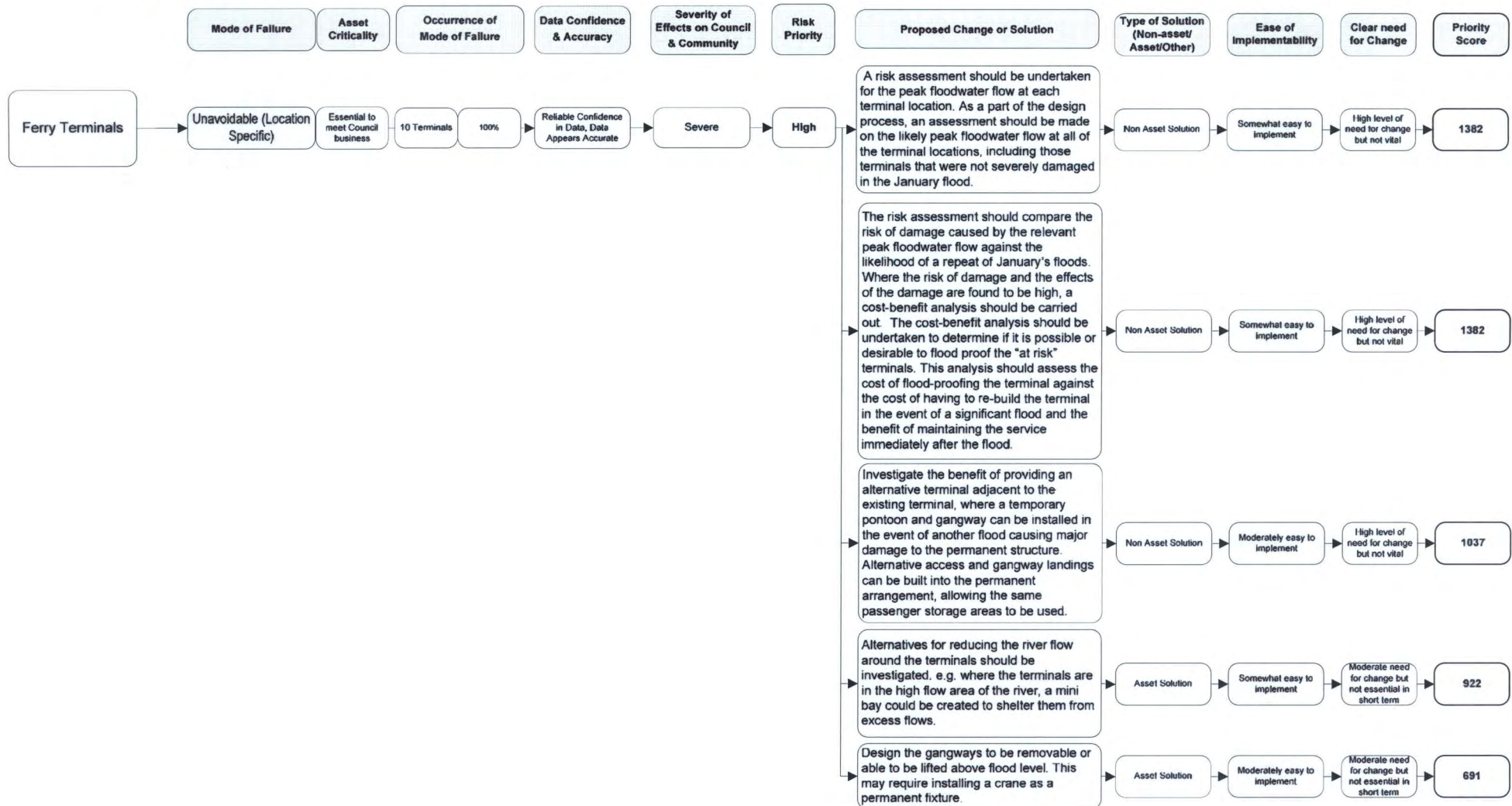
For this Mode of Failure a severity score has been calculated as having a severe impact severity on the Council and the Community. The score of 16 (out of a possible 30) has been derived as

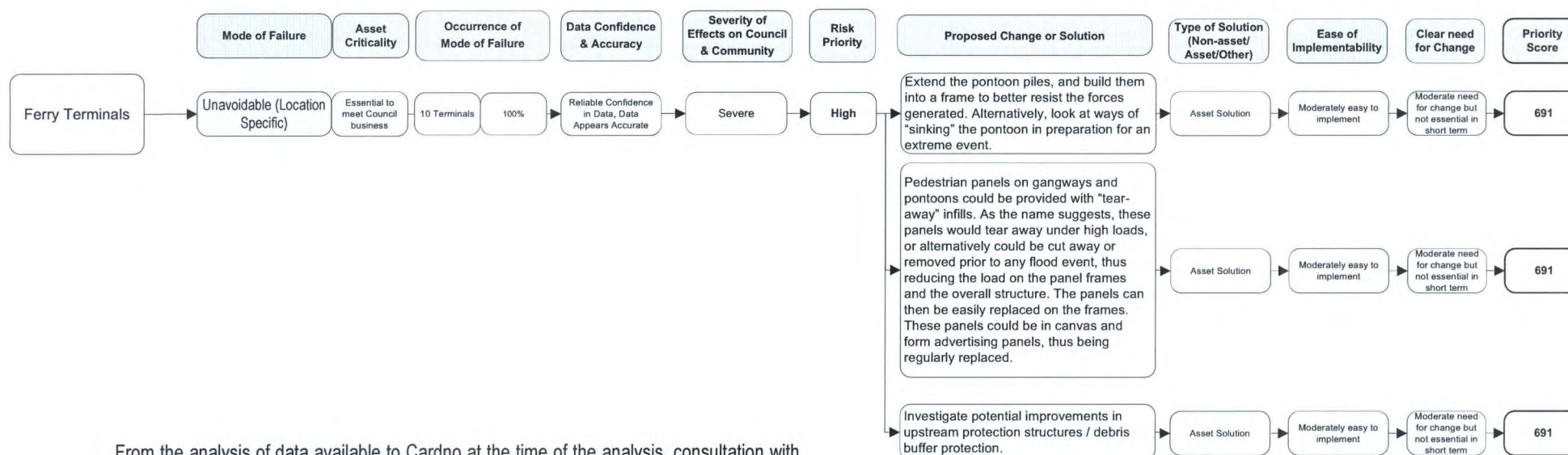
- Given the loss of service to the public, the effect on the corporate image of the council is severe resulting in a public demand for action.
- The environmental effect of the damage is negligible, as is the Health and Safety as there were no injuries as a result of the damage.
- The loss of service is major, resulting in major delays and major localised disruption over an extended period.
- The customers experience moderate inconvenience at a localised level over an extended period. community reaction is likely to provoke Councillor involvement.
- The economic cost is major, as it is resulting in significant funding to re-build the damaged terminals to restore the service to pre-flood levels. Council is also suffering a loss of revenue due to reduced service.

1.6 ASSUMPTIONS & LIMITATIONS

The conclusions drawn in this report are high level conclusions based on the inspection reports provided and discussion with Council officers. No engineering calculations have been carried out. Cardno was unable to inspect the damage to the terminals as Council had progressed clean up to reinstate the service as quickly as possible.

1.7 POSSIBLE CHANGES & SOLUTIONS





From the analysis of data available to Cardno at the time of the analysis, consultation with key Council staff and technical experience Cardno proposes the following possible changes / solutions:

- As a part of the design process, an assessment should be made on the likely peak floodwater flow at all of the terminal locations, including those terminals that were not severely damaged in the January flood. The peak floodwater flow at the terminal location will vary from the average flow in the centre of the river. A risk assessment should be undertaken for the peak floodwater flow at each terminal location.
- The risk assessment should compare the risk of damage caused by the relevant peak floodwater flow against the likelihood of a repeat of January's floods. Where the risk of damage and the effects of the damage are found to be high, a cost-benefit analysis should be carried out.

- The cost-benefit analysis should be undertaken to determine if it is possible or desirable to flood proof the "at risk" terminals. This analysis should assess the cost of flood-proofing the terminal against the cost of having to re-build the terminal in the event of a significant flood and the benefit of maintaining the service immediately after the flood.
- Additional design features could be built into the terminals that are identified as being "At risk" of high floodwater flows. For example:
 - Investigate the benefit of providing an alternative terminal adjacent to the existing terminal, where a temporary pontoon and gangway can be installed in the event of another flood causing major damage to the permanent structure. Alternative access and gangway landings can be built into the permanent arrangement, allowing the same passenger storage areas to be used.

- Alternatives for reducing the river flow around the terminals should be investigated. e.g. where the terminals are in the high flow area of the river, a mini bay could be created to shelter them from excess flows.
- Design the gangways to be removable or able to be lifted above flood level. This may require installing a crane as a permanent fixture.
- Extend the pontoon piles, and build them into a frame to better resist the forces generated. Alternatively, look at ways of “sinking” the pontoon in preparation for an extreme event.
- Pedestrian panels on gangways and pontoons could be provided with “tear-away” infills. As the name suggests, these panels would tear away under high loads, or alternatively could be cut away or removed prior to any flood event, thus reducing the load on the panel frames and the overall structure. The panels can then be easily replaced on the frames. These panels could be in canvas and form advertising panels, thus being regularly replaced.
- Investigate potential improvements in upstream protection structures / debris buffer protection.

1.8 RECOMMENDATIONS

It is recommended that Brisbane City Council:

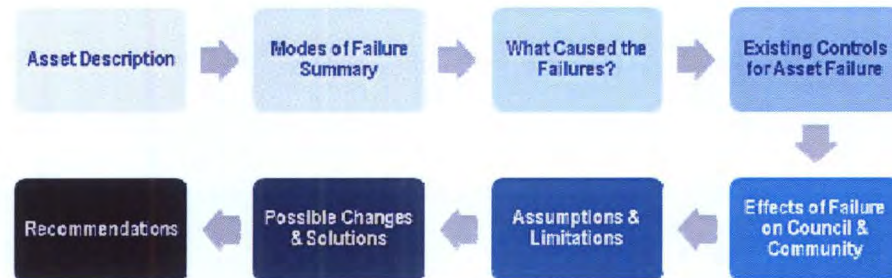
- Undertake an investigation on river flow based on a cost/benefit basis for modelling the varying floodwater velocities across the width of the river. This will identify areas of peak floodwater flow and will provide guidance for any assets that will be exposed to increased debris and impact loads as well as increased floodwater velocities. This can then be extended to private assets such as pontoons as well as ferry terminals and will help to identify riverbanks that may be vulnerable to scour due to flooding. This modelling should be extended to include varying flood levels for lesser and greater flood events in comparison to January’s flood;
- Conduct a risk assessment for the ferry terminals to identify those terminals that are “at risk” of excessive damage during a flood event. Note that this risk assessment should be carried out at varying flood levels as suggested for the river flow model above;
- Carry out a Cost-Benefit Analysis for flood proofing those terminals that are considered “at risk” of excessive damage during a flood event; and
- Undertake an investigative study into additional design features that could reduce the risk of excessive damage during a flood event.

PONTOONS



1 PONTOONS

SECTION CONTENTS



1.1 ASSET DESCRIPTION

The pontoons are included under the Waterway Assets category. This asset category includes boat ramps and canoe ramps (28 No.), jetties and fishing platforms (12 No.) and the pontoons (25 No.). There are 65 assets in this category overall. Fifteen of the pontoons were found to be significantly damaged after the floods.

As shown in the picture below, the pontoons assets consist of a pontoon which boats can be tied up to and accessed from, pontoon piles to support the pontoon and a lightweight gangway connecting the pontoon to the shore.

Figure 89: PT2002 Park Avenue (picture taken prior to January flood)



The pontoons are provided by Brisbane City Council for the public to moor boats on the Brisbane River. This service is considered to be a desirable service of Brisbane City Council. The unavailability of some pontoons will cause inconvenience to some residents, mainly in reference to recreational activities.

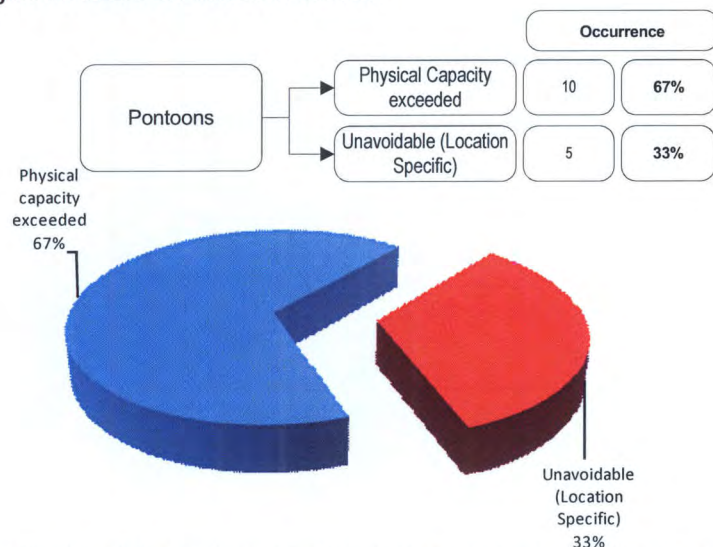
The pontoons are maintained in accordance with the BCC Asset Management Plan ST-07 Waterway Access Assets, the latest version of which was issued on the 11th October 2010. Of the 25 pontoons in the Council area, 23 are owned by BCC and 2 are owned by the State (the Queensland Department of Transport and Main Roads, TMR). The pontoons that have been damaged as a result of the floods in January are all owned by Brisbane City Council. The pontoons are managed by Council. This includes maintenance, operation and rehabilitation activities and expenditure.

1.2 MODES OF FAILURE SUMMARY

Fifteen of the twenty-five pontoons were found to be significantly damaged after the floods. This accounts for 67% of the failed pontoon assets.

The asset failure analysis has been undertaken at a high-level for this asset category level utilising the available data at the time of the analysis, the findings from the analysis are illustrated in the figure below:

Figure 90: Modes of Failure for Pontoons



Classification of the pontoons into the above categories is difficult, as in most cases, sections of the pontoons have been washed away. From the post-flood inspection reports that have been provided for 13 of the 15 damaged pontoons, 4 are showing lost gantries and 7 are showing damaged gantries, one has no comment and one is intact. Eleven of the pontoons themselves have been lost, one is intact and the other is damaged. Four sites have lost piles five are showing damage to piles. The remaining two gantries were not inspected as one is currently under design to be replaced anyway, and the other is recommended to not be replaced by Brisbane City Council, due to a lack of public access.

Where elements have been lost, potential causes include:

Mode of Failure	Examples	Comment
Impact by Assets owned by others	Impact from boats, other pontoons or debris.	Not verifiable as recovered elements not inspected.
Degraded Condition	Holding down chain and anchorage in poor condition.	Not verifiable as holding down chain and anchorage is not inspectable, and recovered elements not inspected.
Inappropriate Design	Holding down chain and anchorage not strong enough for buoyancy of pontoon.	Probably not designed for January's flood levels, therefore classified under "Physical capacity exceeded"
	Piles not adequate for flood level.	Probably not designed for January's flood levels, therefore classified under "Physical capacity exceeded"
Component Failure	Holding down chain and anchorage failed.	Not verifiable as recovered elements not inspected, and probably not designed for January's flood levels, therefore classified under "Physical capacity exceeded"
Subsequent Damage	None applicable	
Management & Operations	Holding down chain and anchorage not inspected or maintained.	Holding down chain and anchorage is not inspectable.

From the above table, it can be seen that failure of the elements, in particular with the pontoons floating away, can be attributed to several of the possible modes of failure. However, the modes specified are considered over-riding modes. Either the pontoon is located in such a location that the debris and impact loads are excessive and therefore the location of the pontoon can be attributed as the major cause of failure, or in other cases, the design capacity of the pontoon and/or the gangway anchorage has been exceeded and therefore the major cause of failure can be attributed to "Physical capacity Exceeded".

1.2.1 Data Confidence & Accuracy

Confidence in the data available is considered to be Reliable given that the majority of data that was available is based on inspection records which are properly documented but have minor shortcomings; for example the inspection reports are basic due to lack of access and inspections have not been conducted on recovered pontoons and gangways.

The accuracy of the data that has been provided for Cardno to assign the mode of failure is considered to be reasonable given that a significant proportion (over 30%) of that data is understood to have been based on observation.

1.3 WHAT CAUSED THESE FAILURES?

The analysis identified two potential over-riding causes of the failures for this asset category; the location of the asset or that the physical capacity has been exceeded.

1.3.1 Mode of Failure: Physical Capacity Exceeded

The asset's level of service was not expected to withstand the event for 67% of the failed pontoons.

Directly flood related causes/mechanisms

A part of the pontoon design includes a holding down chain that anchors the pontoon from the soffit of the deck to an anchorage point in the river bed. In all cases of the damaged pontoons, this holding down chain appears to have failed, although it is not certain whether

the chain, the connection between the chain and the pontoon, or the anchorage point in the river bed has failed.

As the flood level rises, the chain would have extended to its maximum length and gone into tension, leading to the failure of one of the elements mentioned above. This is an example of a particular element where the physical capacity has been exceeded. As the now unrestrained pontoon has continued to rise with the rising floodwaters, it has either floated off the top of the piles, or overloaded them causing them to deflect. In either way, the height of the pontoon on the floodwaters has exceeded the piles physical capacity.

As the pontoon has risen on the floodwaters, the gangway has either come off the edge as the pontoons height exceeded its extension, or succumbed to the force of the floodwater and was washed away.



Figure 91: PT2008 – Part of Gangway, pontoon and piles washed away

In some cases, all of these elements have been washed away, at others only the gantry or the pontoon have been washed away, refer Figure 91.

Figure 92: PT2017 – Gangway washed away, piles damaged



Apparent causes

Of the assets that failed under this failure mode, eight of them (80%) have resulted in the pontoon being lost, with another where it has worked free of one pile, but is held in place by another. This suggests that the pontoons have not been provided with sufficient anchorage to retain them in place. Note that the other pontoon has lifted on the piles and suffered damage when the water levels have fallen.

Note that the condition of the anchorages on the pontoons that have remained in place is unknown and should be established.

Underlying causes

The underlying cause for this failure mode appears to be a design issue where the anchorage is not sufficient for the flood levels arising from this event. As discussed above, it is unsure exactly how the anchorage has failed, but Brisbane City Council should investigate this.

Also as noted above, the anchorages in their current configuration cannot be inspected or maintained. It would be difficult to replace them without complete removal of the pontoon while maintaining safety requirements.

Brisbane City Council should investigate other methods of restraining the pontoons, including secondary restraints. Consideration should also be given to detailing restraints that can be inspected and maintained and are easily replaced.

1.3.2 Mode of Failure: Unavoidable (Location Specific)

There was no practical way of avoiding the failure given the specific location of the asset for 33% of the failed pontoons.

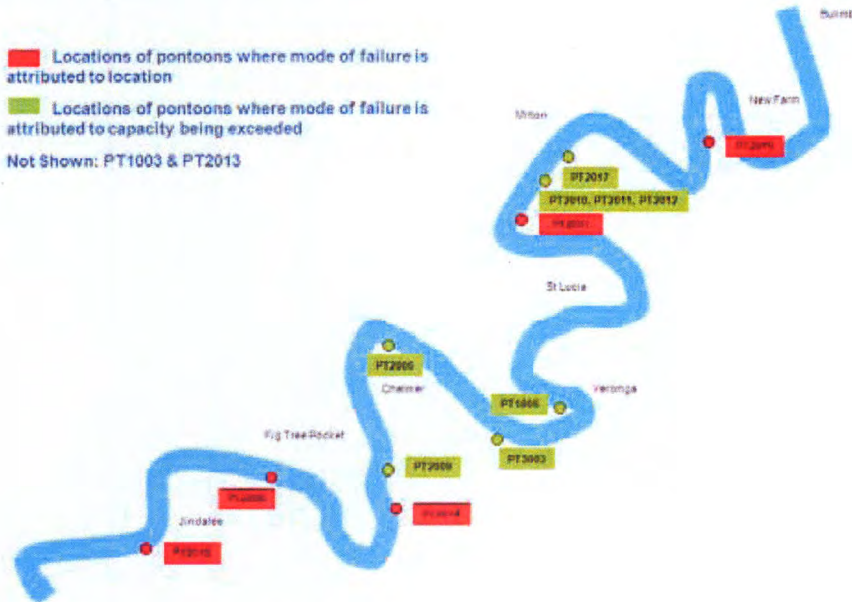
Directly flood related causes/mechanisms

As discussed above, the exact cause of the failure of the pontoons is difficult to establish as the main components have been washed away and, where they have been recovered, they have not been inspected. It can be safely assumed that five of the pontoons have failed due to debris loads and/or impacts causing the capacity of the element to be exceeded. However, the debris or impact load was concentrated over certain areas of the river, where the water speed was highest, resulting in excess damage to those pontoons that were located in the high flow region of the river. So while the damage was specifically caused by the debris loading, the debris loading was high due to the location of the pontoon. Note that while this is not the case for all of the pontoons, for those in certain locations it is considered to be a major contributing factor. Refer to Figure 93 below, which identifies those pontoons assumed to be in high flow areas:

Figure 93: Locations of Failed pontoons

Failed pontoon locations

- Locations of pontoons where mode of failure is attributed to location
- Locations of pontoons where mode of failure is attributed to capacity being exceeded
- Not Shown: PT1003 & PT2013



The highlighted pontoons were found to be in the main flow of the flooded river, resulting in concentration of debris loads and impacts from large items such as trees, other pontoons, boats etc. that were trapped within this flow. Generally the river does not flow at a high speed, and it is relatively clear of debris. During the floods, a large amount of debris was captured by the water, and this included large items that were washed downstream. Those assets that were in the main flow of the floodwater were subjected to significant amounts of debris load and impact, exacerbated by the higher speed of the river flow at that location.

Note that the direct flood related causes outlined in the previous section can also be applied to the pontoons that have been assumed to have failed due to location.

Apparent causes

Of the assets that failed under this failure mode, all of them have resulted in the pontoon being lost. This suggests that the pontoons have not been provided with sufficient anchorage to retain them in place.

Underlying causes

The underlying cause for this failure mode is the same as that outlined previously, i.e. that it appears to be a design issue where the anchorage is not sufficient for the flood levels arising from this event. The anchorage would also be insufficient for the increased floodwater velocity and debris and impact loads.

1.4 EXISTING CONTROLS FOR ASSET FAILURE

The controls that Council have in-place to stop the failure from occurring include:

- The pontoons are designed to float, and the gangway is a light structure that would not impede the pontoon when it floats, thus allowing for high water levels.
- The pontoons are provided with an anchorage to restrain them from floating off the piles.

These controls are essentially design controls and are obviously not sufficient at the pontoons that suffered significant damage.

1.5 EFFECTS OF FAILURE ON COUNCIL & COMMUNITY

From the analysis and consultation with key Council staff Cardno has extrapolated the effects that this mode of failure for this asset category has had on Council and the Community to get an understanding of the severity of this mode of failure. The effects have been assigned in consultation with key Council staff using the Brisbane City Council's Risk Management Framework tailored for this analysis.

1.5.1 Effects from Physical Capacity Exceeded Mode of Failure

For this Mode of Failure a severity score has been calculated as having a minor impact severity on the Council and the Community. The score of 11 (out of a possible 30) has been derived as

- Given the minor non-critical nature of the loss of service to the public, the effect on the corporate image of the council is negligible.
- The environmental effect of the damage is negligible, as is the Health and Safety as there were no injuries as a result of the damage.
- The loss of service is catastrophic, resulting in services being suspended indefinitely.
- The customers experience minor inconvenience. Community reaction is likely to be small, provoking some queries only.
- The economic cost is major, as it is resulting in significant funding to re-build the damaged pontoons to restore the service to pre-flood levels. There is no loss of revenue due to reduced service.

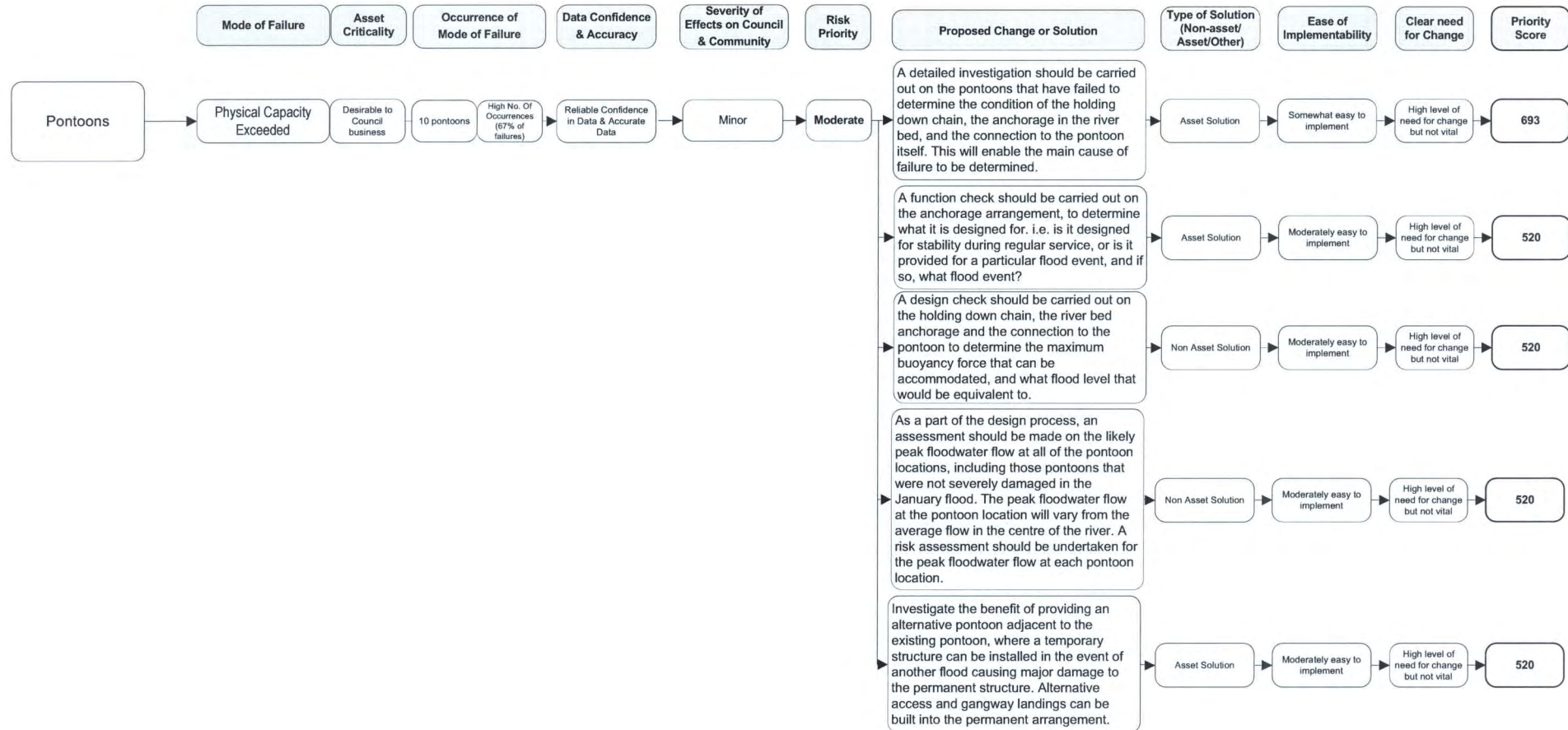
1.5.2 Effects from Unavoidable (Location Specific) Mode of Failure

For this Mode of Failure a severity score has been calculated as having a minor impact severity on the Council and the Community. The score of 11 (out of a possible 30) has been derived as for Physical Capacity Exceeded.

1.6 ASSUMPTIONS & LIMITATIONS

The conclusions drawn in this report are high level conclusions based on the inspection reports provided and discussion with Council officers. No engineering calculations have been carried out. Cardno was unable to inspect the damage to the pontoons as most of the damaged elements had in fact been washed away. Those that had been recovered are in storage and have not been inspected.

1.7 POSSIBLE CHANGES & SOLUTIONS



From the analysis of data available to Cardno at the time of the analysis, consultation with key Council staff and technical experience Cardno proposes the following possible changes / solutions:

- A detailed investigation should be carried out on the pontoons that have failed to determine the condition of the holding down chain, the anchorage in the river bed, and the connection to the pontoon itself. This will enable the main cause of failure to be determined.
- A function check should be carried out on the anchorage arrangement, to determine what it is designed for. i.e. is it designed for stability during regular service, or is it provided for a particular flood event, and if so, what flood event?
- A design check should be carried out on the holding down chain, the river bed anchorage and the connection to the pontoon to determine the maximum buoyancy force that can be accommodated, and what flood level that would be equivalent to.
- As a part of the design process, an assessment should be made on the likely peak floodwater flow at all of the pontoon locations, including those pontoons that were not severely damaged in the January flood. The peak floodwater flow at the pontoon location will vary from the average flow in the centre of the river. A risk assessment should be undertaken for the peak floodwater flow at each pontoon location.
- The risk assessment should compare the risk of damage caused by the relevant peak floodwater flow against the likelihood of a repeat of January's floods. Where the risk of damage and the effects of the damage are found to be high, a cost-benefit analysis should be carried out.
- The cost-benefit analysis should be undertaken to determine if it is possible or desirable to flood proof the "at risk" pontoons. This analysis should assess the cost of flood-proofing the pontoon against the cost of having to re-build the pontoon in the event of a significant flood and the benefit of maintaining the service immediately after the flood.
- Additional design features could be built into the pontoons. For example:

- Investigate the benefit of providing an alternative pontoon adjacent to the existing pontoon, where a temporary structure can be installed in the event of another flood causing major damage to the permanent structure. Alternative access and gangway landings can be built into the permanent arrangement.
- Design the gangways and pontoons to be removable. This may require installing a crane as a permanent fixture.
- Extend the pontoon piles, and build them into a frame to better resist the forces generated. Alternatively, look at ways of "sinking" the pontoon in preparation for an extreme event.
- The restraint methods should be investigated. In particular:
 - An alternative holding down arrangement should be evaluated. In particular, the design should provide for inspections and maintenance to ensure that the holding down arrangement is in good working condition.
 - Provision of a secondary restraint should be evaluated. This may involve chaining the pontoon to the shore so that if it comes free of the piles, it will be prevented from floating away down the river, thus preventing it from becoming more damaged and causing more damage.

1.8 RECOMMENDATIONS

It is recommended that Brisbane City Council:

- Undertake a review to determine the requirement for providing the pontoons relative to Council's recreational objectives. Questions should be asked on whether the Council is the appropriate authority to be providing and maintaining these assets, and whether it provides good value for the rate-payers dollar. Alternative methods of funding could also be investigated, with implementing a "user pays" style arrangement to ensure better value. Investigations on patronage should also be conducted. For example; how many people use the pontoons, and how often? Is this a service provided for a select few in the local area?;
- Undertake an investigation of alternative models for the pontoons. Would a fixed concrete jetty be a better solution, particularly in areas where high peakwater flows are likely to occur? One issue that would arise from this would be disabled access. It should be established if disabled access is required or warranted at each location, or should special access pontoons be provided that will accommodate the disabled at discrete locations?;
- Undertake an investigation on river flow based on a cost/benefit basis modelling the varying floodwater velocities across the width of the river. This will identify areas of peak floodwater flow and will provide guidance for any assets that will be exposed to increased debris and impact loads as well as increased floodwater velocities;
- Undertake an investigation where practicable of the pontoons that have failed to determine in what way and what element of the holding down arrangement failed. This would also involve investigating the river bed anchorage.
- Conduct a risk assessment for the pontoons to identify those pontoons that are "at risk" of excessive damage during a flood event. Note that this risk assessment should be carried out at varying flood levels as suggested for the river flow model above. Carry out a Cost-Benefit Analysis for flood proofing the pontoons.
- Undertake an investigative study into additional design features that could reduce the risk of excessive damage during a flood event, including alternative holding down arrangements and provision for removal of the pontoons prior to a flood event.

ANNEX J

Results of Analysis & Prioritisation

Asset Failure Analysis Results

Asset Category	Asset Criticality	Mode of Failure	Occurrence of mode of Failure for the asset category				Confidence		Accuracy of Data (1-5)	Severity						Risk Priority Number	Confidence Low Range	Confidence High Range
			Quantity	Unit	Percentage of Assets that failed in this Mode of Failure (%)	Occurrence Rating	Rating (A-D)	Score		Corporate Image	Environmental	Health and Safety	Loss of Service	Customers / Community Effect	Economic Revenue/ Business Costs			
Roads	Essential to meet Council business.	Physical capacity exceeded	2538	m2	15%	C	C	3		1	1	1	3	3	3	LOW	LOW	LOW
		Unavoidable (Location Specific)	1844	m2	10%	C	C	3		1	1	1	3	3	3	LOW	NEGLECTIBLE	LOW
		Degraded condition	276	m2	2%	B	C	3		1	1	1	3	3	3	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Inappropriate design	39	m2	1%	B	C	3		1	1	1	3	3	3	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Component failure	12238	m2	72%	F	C	3		1	1	1	3	3	4	MODERATE	MODERATE	MODERATE
Kerbs	Essential to meet Council business.	Physical capacity exceeded	4928	m	54%	E	C	3		1	1	1	1	1	3	LOW	NEGLECTIBLE	LOW
		Unavoidable (Location Specific)	3973	m	44%	D	C	3		1	1	1	1	1	3	NEGLECTIBLE	NEGLECTIBLE	LOW
		Inappropriate design	93	m	2%	B	C	3		1	1	1	1	1	3	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
Footpaths	Essential to meet Council business.	Physical capacity exceeded	2411	m2	3%	B	C	3		2	3	2	2	2	2	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Unavoidable (Location Specific)	5781	m2	6%	B	C	3		2	3	2	2	2	2	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Impact by assets owned by others	77	m2	0%	A	C	3		2	3	2	2	2	2	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Inappropriate design	1938	m2	2%	B	C	3		2	3	2	2	2	2	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Subsequent damage	85240	m2	89%	F	C	3		2	3	2	2	2	4	MODERATE	MODERATE	MODERATE
Traffic Signals	Essential to meet Council business.	Unavoidable (Location Specific)	66	units	100%	F	A	1		1	1	3	2	2	2	LOW	LOW	LOW
Stormwater Drainage & Enclosed Pipes	Essential to meet Council business.	Physical capacity exceeded	4.45	\$Million	20%	C	C	4		1	3	1	2	1	4	LOW	LOW	LOW
		Unavoidable (Location Specific)	17.65	\$Million	77%	F	C	4		1	3	1	2	1	4	MODERATE	MODERATE	MODERATE
		Component failure	0.07	\$Million	0%	A	C	4		1	3	1	2	1	2	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE
		Subsequent damage	0.76	\$Million	3%	B	C	4		1	3	1	2	1	3	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE

Asset Category	Asset Criticality	Mode of Failure	Occurrence of mode of Failure for the asset category				Confidence Rating (A-D)	Accuracy of Data (1-5)	Severity						Risk Priority Number	Confidence Low Range	Confidence High Range
			Quantity	Unit	Percentage of Assets that failed in this Mode of Failure (%)	Occurrence Rating			Corporate Image	Environmental	Health and Safety	Loss of Service	Customers / Community Effect	Economic / Revenue / Business Costs			
River Walls and Earthen Slopes	Important to meet Council business.	Physical capacity exceeded	9	No.	30%	D	B	2	2	2	1	2	2	3	LOW	LOW	LOW
		Unavoidable (Location Specific)	10	No.	33%	D	B	2	2	2	1	2	2	2	LOW	LOW	LOW
		Degraded condition	8	No.	27%	D	B	3	2	2	1	2	2	3	LOW	LOW	LOW
		Inappropriate design	3	No.	10%	C	B	2	2	2	1	2	2	3	LOW	NEGLECTABLE	LOW
Parks (park infrastructure and landscaping)	Important to meet Council business.	Unavoidable (Location Specific)	1265	Hect.	99%	F	B	4	2	3	1	3	2	4	MODERATE	MODERATE	MODERATE
		Subsequent damage	12	Hect.	1%	B	B	4	2	3	1	3	2	2	NEGLECTABLE	NEGLECTABLE	NEGLECTABLE
Trees (Park and Street)	Desirable to Council business.	Unavoidable (Location Specific)	1.4	\$Million	100%	F	B	4	2	3	1	2	2	1	MODERATE	MODERATE	MODERATE
Community Leased Assets (Sports Clubs & Fields)	Desirable to Council business.	Physical capacity exceeded	36	No.	40%	D	B	2	2	2	1	2	3	4	LOW	LOW	LOW
		Unavoidable (Location Specific)	23	No.	26%	D	B	2	2	2	1	2	3	3	LOW	LOW	LOW
		Degraded condition	2	No.	2%	B	B	3	2	2	1	2	3	1	NEGLECTABLE	NEGLECTABLE	NEGLECTABLE
		Inappropriate design	15	No.	17%	C	B	2	2	2	1	2	3	3	LOW	LOW	LOW
Ferry Terminals (10 failed)	Essential to meet Council business.	Unavoidable (Location Specific)	10	No.	100%	F	B	2	3	1	1	4	3	4	HIGH	HIGH	HIGH
Pontoon (15 failed)	Desirable to Council business.	Physical capacity exceeded	10	No.	67%	E	B	2	1	1	1	3	2	3	MODERATE	MODERATE	MODERATE
		Unavoidable (Location Specific)	5	No.	33%	D	B	2	1	1	1	3	2	3	LOW	LOW	LOW

Prioritised Proposed Changes and Solutions

Asset Category	Mode of Failure		Ref #	Proposed Solutions (insert description)	Type of Solution (Non-Asset Solution, Asset Solution, Other)	Asset Criticality	Weighting	Risk Priority Number	RPN Low Range	RPN High Range	Ease of Implementation (Easy - Very Difficult)	Clear Need to Undertake the Solution ()	Criticality Score	+ / -	Level of Inaccuracy		
Roads	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	1	Gravel and granular pavements could be avoided within flood zones. Full depth asphalt or concrete pavements should instead be used in these areas.	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	346	25%	346	346
Roads	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	2	Reconstruct road network to have complete flood immunity	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Very difficult to implement	1 Moderate need for change but not essential in short term	2	86	25%	86	86
Roads	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	3	Construct future road network to have complete flood immunity	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	259	25%	259	259
Roads	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	4	Quicker response by other asset owners to repair damaged assets that impact on Council's assets	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Low need for change	1	130	25%	130	130
Roads	Degraded condition	The failure was caused by the condition and otherwise expected to withstand.	5	Repair gravel or granular pavements within flood zones using full depth asphalt	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Somewhat easy to implement	4 Low need for change	1	115	25%	115	115
Roads	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	6	Higher quality assurance before approval of design	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Somewhat easy to implement	4 Low need for change	1	115	25%	115	115
Roads	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	7	inspection and repair of lowpoints that may have formed due to settlement of foundations	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Low need for change	1	86	25%	86	86
Roads	Component failure	The asset failed due to the failure of a component of the asset.	8	Allow inundated road pavements time to dry before vehicular traffic is allowed access	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	907	25%	907	907
Roads	Component failure	The asset failed due to the failure of a component of the asset.	9	Limit traffic access to roads that have been inundated by floodwater until they have had a chance to dry	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	907	25%	907	907
Roads	Component failure	The asset failed due to the failure of a component of the asset.	10	Gravel and granular pavements could be avoided within flood zones. Full depth asphalt or concrete pavements should instead be used in these areas.	Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	806	25%	806	806
Kerbs	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	11	Have flood affected property owners place damaged household items and building materials on roadway instead of on verge, ensuring a trafficable area is maintained for residents and collection vehicles	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	3	576	25%	576	576
Kerbs	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	12	Strengthen kerbs to accommodate possible loading from construction machinery (cost benefit analysis would need to be undertaken)	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	288	25%	288	288
Kerbs	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	13	Reconstruct road network to have complete flood immunity	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Very difficult to implement	1 Low need for change	1	38	25%	38	38
Kerbs	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	14	Construct future road network to have complete flood immunity	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	230	25%	230	230
Kerbs	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	15	Establish higher quality assurance for design approval	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Somewhat easy to implement	4 Low need for change	1	67	25%	67	67
Kerbs	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	16	Inspection and repair of low points formed from settlement of foundations	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Low need for change	1	50	25%	50	50
Footpaths	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	17	Construct stronger concrete footpaths in known flood zones or areas of severe overland flow	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	187	25%	187	187
Footpaths	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	18	Reconstruct road network to have complete flood immunity	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Very difficult to implement	1 Low need for change	1	31	25%	31	31
Footpaths	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	19	Construct future road network to have complete flood immunity	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	187	25%	187	187
Footpaths	Subsequent damage	The failure was caused by subsequent recovery and clean-up efforts.	20	Quicker response by other asset owners to repair damaged assets that impact on Council's assets	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 Low need for change	1	324	25%	324	324
Footpaths	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	21	Establish higher quality assurance for design approval	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Somewhat easy to implement	4 Low need for change	1	125	25%	125	125
Footpaths	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	22	Inspection and repair of low points formed from settlement of foundations	Asset Solution	1 Essential to meet Council business.	1.2	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	Moderately easy to implement	3 Low need for change	1	94	25%	94	94
Footpaths	Subsequent damage	The failure was caused by subsequent recovery and clean-up efforts.	23	Have flood affected property owners place damaged household items and building materials on roadway instead of on verge, ensuring a trafficable area is maintained for residents and collection vehicles.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Difficult to implement	2 High level of need for change but not vital	3	648	25%	648	648
Footpaths	Subsequent damage	The failure was caused by subsequent recovery and clean-up efforts.	24	Encourage flood affected property owners, cleanup volunteers and collection units to use light machinery including wheelbarrows, shovels etc	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Difficult to implement	2 High level of need for change but not vital	3	648	25%	648	648
Traffic Signals	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	25	A complete and comprehensive asset database should be investigated to ensure any tasks on the assets are prioritised in order based on several factors.	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	576	0%	576	576
Traffic Signals	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	26	For sites not flooded but lost power supply installation of generators into cabinets should be investigated for critical intersections. Aldridge has product for UPS for up to 8 signal group	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 High level of need for change but not vital	3	648	0%	648	648
Traffic Signals	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	27	For sites flooded to minimise cleanup, possibility to consider new technology to protect electrical components such as circuit boards from water. An example is in laptops which have a gel like membrane for heat dissipation not a fan which creates a water resistant barrier.	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	2	432	0%	432	432
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	28	Improve data and information on asset failures within this asset category to improve understanding of modes of failures.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Clear need to change	4	1382	35%	1382	1382
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	29	Review high flood risk areas along failed waterways and investigate reclassifying to put less restrictions on natural processes whilst investigating improved fencing or barriers	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 High level of need for change but not vital	3	1037	35%	1037	1037
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	30	Focus the renewal models based on high risk areas from flood	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 High level of need for change but not vital	3	1037	35%	1037	1037
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	31	A risk based approach should be developed to planning renewal works. This should incorporate the 'best bang for your buck' in the highly flooded areas	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	778	35%	778	778
Stormwater Drainage & Enclosed Pipes	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	32	Upgrading the older poorly sized pipes until appropriate level of risk is in place to ensure the level of flood protection provided to properties in flood affected areas is significantly improved.	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Difficult to implement	2 Clear need to change	4	346	35%	346	346

2011 Brisbane Flood: Asset Failure Analysis Analysis & Recommendations

DETAILED REPORTS



Asset Category	Mode of Failure	Ref #	Proposed Solutions (insert description)	Type of Solution (Non-Asset Solution, Asset Solution, Other)	Asset Criticality	Weighting	Risk Priority Number	RPN Low Range	RPN High Range	Ease of Implementation (Easy - Very Difficult)	Clear Need to Undertake the Solution ()	Criticality Score	+ / -	Level of Inaccuracy
Stormwater Drainage & Enclosed Pipes	Subsequent damage	33	The failure was caused by subsequent recovery and clean-up efforts.	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGIGIBLE	NEGIGIBLE	NEGIGIBLE	Somewhat easy to implement	4 Low need for change	106	35%	106
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	34	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 Moderate need for change but not essential in short term	518	35%	518
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	35	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	691	35%	691
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	36	Complete a silt map of Brisbane following the 2011 flood event. Undertake a study on the video inspection of flood inspected pipes to quantify the relationship of the internal network flood reach, i.e. is it currently 10% greater than the flood model. This will help forecast the extent of damage for future events.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Easy to Implement	5 Clear need to change	1728	35%	1728
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	37	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 Low need for change	259	35%	259
Stormwater Drainage & Enclosed Pipes	Component failure	38	The asset failed due to the failure of a component of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGIGIBLE	NEGIGIBLE	NEGIGIBLE	Somewhat easy to implement	4 Clear need to change	192	35%	192
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	39	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	778	35%	778
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	40	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 High level of need for change but not vital	1037	35%	1037
Stormwater Drainage & Enclosed Pipes	Component failure	41	The asset failed due to the failure of a component of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	NEGIGIBLE	NEGIGIBLE	NEGIGIBLE	Somewhat easy to implement	4 High level of need for change but not vital	144	35%	144
Stormwater Drainage & Enclosed Pipes	Physical capacity exceeded	42	The asset's level of service was not expected to withstand the event.	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	259	35%	259
Stormwater Drainage & Enclosed Pipes	Unavoidable (Location Specific)	43	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 Moderate need for change but not essential in short term	518	35%	518
Stormwater Drainage & Enclosed Pipes	Physical capacity exceeded	44	The asset's level of service was not expected to withstand the event.	Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	259	35%	259
Stormwater Drainage & Enclosed Pipes	Physical capacity exceeded	45	The asset's level of service was not expected to withstand the event.	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Difficult to implement	2 High level of need for change but not vital	259	35%	259
Stormwater Drainage & Enclosed Pipes	Physical capacity exceeded	46	The asset's level of service was not expected to withstand the event.	Non Asset Solution	1 Essential to meet Council business.	1.2	LOW	LOW	LOW	Easy to Implement	5 High level of need for change but not vital	648	35%	648
River Walls and Earthen Slopes	Unavoidable (Location Specific)	47	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Somewhat easy to implement	4 Clear need to change	774	10%	774
River Walls and Earthen Slopes	Unavoidable (Location Specific)	48	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	581	10%	581
River Walls and Earthen Slopes	Unavoidable (Location Specific)	49	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Easy to Implement	5 Moderate need for change but not essential in short term	484	10%	484
River Walls and Earthen Slopes	Unavoidable (Location Specific)	50	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Difficult to implement	2 High level of need for change but not vital	290	10%	290
River Walls and Earthen Slopes	Physical capacity exceeded	51	The asset's level of service was not expected to withstand the event.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Moderately easy to implement	3 High level of need for change but not vital	475	10%	475
River Walls and Earthen Slopes	Physical capacity exceeded	52	The asset's level of service was not expected to withstand the event.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Somewhat easy to implement	4 Clear need to change	845	10%	845
River Walls and Earthen Slopes	Inappropriate design	53	The failure was caused by inappropriate design and otherwise expected to withstand.	Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	475	10%	475
River Walls and Earthen Slopes	Inappropriate design	54	The failure was caused by inappropriate design and otherwise expected to withstand.	Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Moderately easy to implement	3 Moderate need for change but not essential in short term	238	10%	238
River Walls and Earthen Slopes	Inappropriate design	55	The failure was caused by inappropriate design and otherwise expected to withstand.	Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	475	10%	475
River Walls and Earthen Slopes	Unavoidable (Location Specific)	56	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Moderately easy to implement	3 Low need for change	145	10%	145
River Walls and Earthen Slopes	Unavoidable (Location Specific)	57	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Moderately easy to implement	3 Low need for change	145	10%	145

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Asset Category	Mode of Failure		Ref #	Proposed Solutions (insert description)	Type of Solution Asset Solution, (Non-Asset Solution, Other)	Asset Criticality	Weighting	Risk Priority Number	RPN Low Range	RPN High Range	Ease of Implementation (Easy - Very Difficult)	Clear Need to Undertake the Solution {	Criticality Score	+ / -	Level of Inaccuracy		
River Walls and Earthen Slopes	Degraded condition	The failure was caused by the condition and otherwise expected to withstand	58	Review suitability of current funding provision on asset maintenance and renewals	Non Asset Solution	2 Important to meet Council business.	1.1	LOW	LOW	LOW	Easy to Implement	5 High level of need for change but not vital	3	792	10%	792	792
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	59	A practical guidance document should be prepared to define design principles to allow landscape architects, engineers etc an informed prioritisation of the spatial arrangement of trees in flood prone areas.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	624	25%	624	624
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	60	Flood tolerance in tree species should be investigated, to improve natural regeneration and resilience. Observations of flood tolerance should be compiled to inform a master tree list of flood tolerant species.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	554	25%	554	554
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	61	Photographic record of park damage should occur to file and inform future selections and locations of trees within parks.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Easy to Implement	5 Moderate need for change but not essential in short term	2	693	25%	693	693
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	62	A review of existing tree safe useable life expectancy for the range of climatic conditions should be undertaken prior to extensive arboricultural work on individual trees to determine suitability of succession planting. Large parks should have a range of tree ages to ensure continuity of service.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	554	25%	554	554
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	63	Hazard assessment should be undertaken of all trees within a defined proximity to the river as a priority by a qualified consulting Arborist.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	554	25%	554	554
Trees (Park and Street)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	64	Durability, flood resilience and relocatable characteristics to be part of future tree selections.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	554	25%	554	554
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	65	A practical guidance document should be prepared to define design principles to provide landscape architects, engineers a prioritising framework for locating suitable assets (park nodes) such as playgrounds and toilet facilities within flood prone parks. This guideline should incorporate appropriate flood resilience within materials and designs to be installed / constructed in suitable locations to mitigate potential flood damage.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	891	25%	891	891
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	66	Flood tolerance in plant species should be investigated, to improve natural regeneration and resilience. Observations of flood tolerance should be compiled to inform a master plant list of flood tolerant species, in particular ground covers and shrubs, plus grass/turf species to river edge parks.	Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	792	25%	792	792
Parks (park infrastructure and landscaping)	Subsequent damage	The failure was caused by subsequent recovery and clean-up efforts.	67	A contingency plan should be developed which clearly identifies areas for waste transfer and makes provisions for this use in any design.	Non Asset Solution	2 Important to meet Council business.	1.1	NEGIGIBLE	NEGIGIBLE	NEGIGIBLE	Somewhat easy to implement	4 High level of need for change but not vital	3	343	25%	343	343
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	68	Commissioning of flood prone playground area should be made a priority with further research on flood resilient softfall materials.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3	891	25%	891	891
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	69	A photographic record of park damage should be retained to inform future selections and locations of park embellishments. This could be undertaken utilising GIS location or use of overlaying GIS tagged photographs onto a Google-Earth map.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Easy to Implement	5 Moderate need for change but not essential in short term	2	990	25%	990	990
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	70	Evaluate current park concept plans prior to construction against flood resilient asset design principles. Replacement cost of components should be considered when locating. For example areas could be considered either 'sacrificial' or 'protected' based on local topography and site conditions.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Easy to Implement	5 Moderate need for change but not essential in short term	2	990	25%	990	990
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	71	Develop a rapid flood recovery program for parks to assist scheduling works aligned with customer expectations.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Low need for change	1	396	25%	396	396
Parks (park infrastructure and landscaping)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	72	Durability, flood resilience and relocatable characteristics to be part of future material and furniture selections.	Non Asset Solution	2 Important to meet Council business.	1.1	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 Low need for change	1	396	25%	396	396
Parks (park infrastructure and landscaping)	Subsequent damage	The failure was caused by subsequent recovery and clean-up efforts.	73	Where parks are designated as possible temporary waste transfer sites then the park should be adequately designed for such contingencies.	Non Asset Solution	2 Important to meet Council business.	1.1	NEGIGIBLE	NEGIGIBLE	NEGIGIBLE	Moderately easy to implement	3 High level of need for change but not vital	3	257	25%	257	257
Community Leased Assets (Sports Clubs &)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	74	Develop a detailed policy on requirements for flood protection at community leased assets, this would assist in ensuring the most economically and socially viable approach is undertaken in instigating flood-proofing alternatives.	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 Clear need to change	4	874	10%	874	874
Community Leased Assets (Sports Clubs &)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	75	Review ownership and lease arrangements of facilities in serious flood prone areas to mitigate risk exposure to Council.	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2	437	10%	437	437
Community Leased Assets (Sports Clubs &)	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	76	Develop a risk assessment framework to identify and review of the high risk properties and options for Council to mitigate exposure as part of a portfolio rationalisation exercise. For example, a long lease or ground lease where the tenant rents and uses the land, but owns the temporary or permanent buildings and other assets. Or investigate rationalising out high risk or high repair cost facilities the portfolio that do not satisfy sufficient value to the community.	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	3	655	10%	655	655
Community Leased Assets (Sports Clubs &)	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	77	Undertake a review of current flood-proofing initiatives/solutions and develop a flood-proofing guideline for community leased assets. Review the design advice or requirements Council has in place on facilities in the high flood prone areas and instigate development of a set of minimum engineering considerations	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Easy to Implement	5 High level of need for change but not vital	3	882	10%	882	882
Community Leased Assets (Sports Clubs &)	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	78	Identify suitable facilities to investigate possible dry flood proofing through methods of excluding water from the facility through the use of sealants, coatings, components and/or equipment to render the lower portion of a building watertight and substantially impermeable to the passage of water	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 Clear need to change	4	941	10%	941	941
Community Leased Assets (Sports Clubs &)	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	79	Raising the level of sensitive elements in the dwelling to minimise exposure to flood waters is an alternative. The most severe damage from the recent flood appears to have occurred to ground dwellings built straight on the foundation slab, with less damage occurring to raised dwellings. Generally, elevating a building reduces future potential flood damage, lowers insurance premiums, increases value to the building, and increases usable space. Prescribed parameters on flood proofing techniques and methods should be refined to accommodate the findings from the 2011 floods.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Difficult to implement	2 Clear need to change	4	470	10%	470	470
Community Leased Assets (Sports Clubs &)	Inappropriate design	The failure was caused by inappropriate design and otherwise expected to withstand.	80	Elevation on fill. Elevation on fill is a possible option to propose for protecting from flooding depths in excess of 3m depending upon the characteristics and availability of fill material.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Difficult to implement	2 Clear need to change	4	328	10%	328	328

Asset Category	Mode of Failure	Ref #	Proposed Solutions (insert description)	Type of Solution (Non-Asset Solution, Asset Solution, Other)	Asset Criticality	Weighting	Risk Priority Number	RPN Low Range	RPN High Range	Ease of Implementation (Easy - Very Difficult)	Clear Need to Undertake the Solution (Criticality Score	+ / -	Level of Inaccuracy
Community Leased Assets (Sports Clubs & ...)	Inappropriate design	81	The failure was caused by inappropriate design and otherwise expected to withstand.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Difficult to implement	2 Clear need to change	4 328	10%	328 328
Community Leased Assets (Sports Clubs & ...)	Physical capacity exceeded	82	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Moderately easy to implement	3 High level of need for change but not vital	3 529	10%	529 529
Community Leased Assets (Sports Clubs & ...)	Physical capacity exceeded	83	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Moderately easy to implement	3 High level of need for change but not vital	3 529	10%	529 529
Community Leased Assets (Sports Clubs & ...)	Physical capacity exceeded	84	The asset's level of service was not expected to withstand the event.	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2 470	10%	470 470
Community Leased Assets (Sports Clubs & ...)	Physical capacity exceeded	85	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Moderately easy to implement	3 High level of need for change but not vital	3 529	10%	529 529
Community Leased Assets (Sports Clubs & ...)	Physical capacity exceeded	86	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2 470	10%	470 470
Community Leased Assets (Sports Clubs & ...)	Degraded condition	87	The failure was caused by the condition and otherwise expected to withstand.	Non Asset Solution	3 Desirable to Council business.	1.05	NEGLECTABLE	NEGLECTABLE	NEGLECTABLE	Easy to implement	5 Clear need to change	4 462	10%	462 462
Ferry Terminals	Unavoidable (Location Specific)	88	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Somewhat easy to implement	4 High level of need for change but not vital	3 1382	10%	1382 1382
Ferry Terminals	Unavoidable (Location Specific)	89	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Somewhat easy to implement	4 High level of need for change but not vital	3 1382	10%	1382 1382
Ferry Terminals	Unavoidable (Location Specific)	90	There was no practical way of avoiding the failure given the specific location of the asset.	Non Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Moderately easy to implement	3 High level of need for change but not vital	3 1037	10%	1037 1037
Ferry Terminals	Unavoidable (Location Specific)	91	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Somewhat easy to implement	4 Moderate need for change but not essential in short term	2 922	10%	922 922
Ferry Terminals	Unavoidable (Location Specific)	92	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Moderately easy to implement	3 Moderate need for change but not essential in short term	2 691	10%	691 691
Ferry Terminals	Unavoidable (Location Specific)	93	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Moderately easy to implement	3 Moderate need for change but not essential in short term	2 691	10%	691 691
Ferry Terminals	Unavoidable (Location Specific)	94	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Moderately easy to implement	3 Moderate need for change but not essential in short term	2 691	10%	691 691
Ferry Terminals	Unavoidable (Location Specific)	95	There was no practical way of avoiding the failure given the specific location of the asset.	Asset Solution	1 Essential to meet Council business.	1.2	HIGH	HIGH	HIGH	Moderately easy to implement	3 Moderate need for change but not essential in short term	2 691	10%	691 691
Pontoons	Physical capacity exceeded	96	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Somewhat easy to implement	4 High level of need for change but not vital	3 693	10%	693 693
Pontoons	Physical capacity exceeded	97	The asset's level of service was not expected to withstand the event.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520 520
Pontoons	Physical capacity exceeded	98	The asset's level of service was not expected to withstand the event.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520 520
Pontoons	Physical capacity exceeded	99	The asset's level of service was not expected to withstand the event.	Non Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520 520

Asset Category	Mode of Failure		Ref #	Proposed Solutions (insert description)	Type of Solution (Non-Asset Solution, Asset Solution, Other)	Asset Criticality	Weighting	Risk Priority Number	RPN Low Range	RPN High Range	Ease of Implementation (Easy - Very Difficult)	Clear Need to Undertake the Solution (Criticality Score	+ / -	Level of Inaccuracy	
Pontoons	Unavoidable (Location Specific)	There was no practical way of avoiding the failure given the specific location of the asset.	100	The risk assessment should compare the risk of damage caused by the relevant peak floodwater flow against the likelihood of a repeat of January's floods. Where the risk of damage and the effects of the damage are found to be high, a cost-benefit analysis should be carried out. The cost-benefit analysis should be undertaken to determine if it is possible or desirable to flood proof the "at risk" pontoons. This analysis should assess the cost of flood-proofing the pontoon against the cost of having to re-build the pontoon in the event of a significant flood and the benefit of maintaining the service immediately after the flood.	Non Asset Solution	3 Desirable to Council business.	1.05	LOW	LOW	LOW	Somewhat easy to implement	4 High level of need for change but not vital	3 554	10%	554	554
Pontoons	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	101	Investigate the benefit of providing an alternative pontoon adjacent to the existing pontoon, where a temporary structure can be installed in the event of another flood causing major damage to the permanent structure. Alternative access and gangway landings can be built into the permanent arrangement.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520	520
Pontoons	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	102	Design the gangways and pontoons to be removable. This may require installing a crane as a permanent fixture.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520	520
Pontoons	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	103	Extend the pontoon piles, and build them into a frame to better resist the forces generated. Alternatively, look at ways of "sinking" the pontoon in preparation for an extreme event.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520	520
Pontoons	Physical capacity exceeded	The asset's level of service was not expected to withstand the event.	104	The restraint methods should be investigated. In particular, an alternative holding down arrangement should be evaluated. In particular, the design should provide for inspections and maintenance to ensure that the holding down arrangement is in good working condition. Provision of a secondary restraint should be evaluated. This may involve chaining the pontoon to the shore so that if it comes free of the piles, it will be prevented from floating away down the river, thus preventing it from becoming more damaged and causing more damage.	Asset Solution	3 Desirable to Council business.	1.05	MODERATE	MODERATE	MODERATE	Moderately easy to implement	3 High level of need for change but not vital	3 520	10%	520	520

ANNEX K

Analysis Parameters

Occurrence Score

Occurrence of mode of Failure for the asset category

Percentage of Failures for Mode of Failure of asset category	Occurrence Level Description	Rating
0% - 1%	Limited Occurrence	A
1% - 9%	Very Low (relatively very few failures)	B
10% - 24%	Low (relatively few failures)	C
25% - 44%	Moderate Number of Failures	D
45% - 69%	High Number of Failures	E
70% - 100%	Very High Number of Failures	F

Confidence & Reliability

Confidence & Reliability in the data provided for us to Nominate & Assign Modes of failures

General Meaning		Confidence Grade
Highly reliable	Data based on sound records, procedures, investigations and analysis which is properly documented and recognised as the best method of assessment.	A
Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings; for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation.	B
Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available.	C
Very uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis.	D

Accuracy Rating

Accuracy	Description	Accuracy Grade
1	Accurate	1
+ or - 5%	Minor inaccuracies	2
+ or - 10%	50% estimated	3
+ or - 20%	Significant data estimated	4
+ or - 30%	All data estimated	5

Severity Scores

Severity								
IMPACT SEVERITY LEVELS	Financial Impact (for each effect on Council from the Mode of Failure occurring)		Corporate Image	Environmental	Health and Safety	Loss of Service	Customers / Community Effect	Economic Revenue/ Business Costs
Negligible	Less than \$100,000	1	Minor community interest Local media report	Negligible impact on physical environment. Reversible within 1 day.	Negligible effect to people.	No impact for services.	Negligible effects on customers. Very low awareness or interest created. Small number of customers experiencing minor service disruption. Public interest very low with little awareness or interest created	Negligible effect on finances. Total direct revenue loss & cost to restore service are negligible.
Minor	\$100,000 to \$350,000	2	Public community discussion. Broad adverse media coverage	Environment damage easily contained. Minor biological effects of local importance. Prosecution possible. Impact fully reversible within 1 week.	Injuries require first aid. Negligible injury, no medical treatment required.	Service delivered with minor delays. Significant service disruption affecting small number of customers.	Customers experience minor inconvenience. Minor awareness or interest created. Small number of customers experiencing minor service disruption causing interest as the Community reaction that generates enquiries by some community members	Total direct revenue loss & cost to restore service are small.
Severe	\$350,000 to \$3,000,000	3	Public investigation. National/ international publicity. Public demand for action.	Environmental damage is moderate but responds to internal procedures. Serious damage of local importance. Prosecution expected. Impact fully reversible within 1 month.	Injuries require expert medical treatment. Moderate reversible injury requiring hospitalisation.	Services delivered with moderate delays. Significant localised disruption over extended period.	Customers experience moderate inconvenience. Significant localised disruption over extended period. Community reaction is concern provoking councillor involvement	Total direct revenue loss & cost to restore service are moderate
Major	\$3,000,000 to \$35,000,000	4		Environmental damage is major requiring outside assistance. Serious damage of national importance. Prosecution. Impact fully reversible within 1 year.	One or more persons with severe injuries requiring hospitalisation. Serious injury (not fully reversible) to less than 1 persons. Hospitalisation required.	Service delivered with major delays. Major localised disruption over extended period.	Customers experience major inconvenience and some losses causing distress as the Community reaction resulting in Lord Mayor taking control	Total direct revenue loss & cost to restore service major
Catastrophic	Greater than \$35,000,000	5		Environmental damage is extensive and has long term or permanent effects. Very serious damage of national importance. Prosecution likely. Long term study. Impact not fully reversible.	Fatalities or multiple fatalities. Multiple loss of life and/ or significant irreversible effects to more than 25 people.	Services suspended indefinitely. Major long term service disruption.	Customers suffer hardship and substantial loss causing outrage as a community reaction provoking State or Federal Govt intervention	Total direct revenue loss & cost to restore service huge.

Our ref: Doc 1775011

9 November 2011

[REDACTED]
Partner
DLA Piper Australia
GPO Box 7804
WATERFRONT PLACE QLD 4001

Dear [REDACTED]

CGU Insurance Limited – Requirements to Provide Information

Please find enclosed two Requirements for written statements directed to Mr James Merchant and Mr Dion Gooderham, respectively, pursuant to section 5 of the *Commissions of Inquiry Act 1950* (Qld).

In accordance with section 5(2) of the Act, Mr Merchant and Mr Gooderham must comply with the respective Requirements by 4 pm, Thursday, 17 November 2011 (being the end of the prescribed periods for the purposes of section 5(2)).

Please contact M [REDACTED] on telephone [REDACTED] should you have any queries.




Yours sincerely

[REDACTED]
Jane Moynihan
Executive Director

Encl.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.




	On track		Risk of moderate delay		Risk of major delay / risk of not delivering
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As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Infrastructure1	Bridges rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> Minor repairs completed by 30 June 2011. Completed Major repairs completed by 30 August 2011 (was June 2012). Completed. 	On Track	Bridges; There were 17 individual structures identified as damaged, <ul style="list-style-type: none"> All works complete. 	The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.
Infrastructure1a	Park Bridges and boardwalks rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> Minor repairs completed by 30 June 2011. Completed Major repairs completed by 30 June 2011 (was June 2012). Completed. Additional Major Project identified at 2 June 2011 to be completed by 30 September 2011 (included 7 June 2011). Completed. 	On Track	Boardwalks; there were 6 individual structures. <ul style="list-style-type: none"> All works complete. <p>Note - Fig Tree Pocket Park boardwalk was washed away. Proposal to be submitted to IRSC to replace with a fishing platform.</p>	The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.
Infrastructure2	Culverts rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> Minor repairs completed by 30 June 2011. Completed Major repairs completed by 30 June 2011 (was June 2012). Completed Additional major project identified at 3 June 2011 to be completed by 30 September 2011 (included 7 June 2011). 	On Track	<ul style="list-style-type: none"> Culverts; There were 19 individual structures identified as damaged. Works remaining – 1 No change since last report— <p>Additional Project - Bukulla St, Wacol originally repaired in March 2011 now showing signs of further deterioration and requires design for reconstruction. Construction preparation underway. To be completed end September 2011.</p>	The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.
Infrastructure3	Ferry Terminals affected by January 2011 Flood Event rehabilitated to acceptable condition.	<ul style="list-style-type: none"> 75% of terminals operational by 14 Feb 2011. Completed 25% or 6 additional terminals (with major damage) will be operational within 90 days using temporary facilities (excluding River Plaza and West End). Completed Permanent rebuild/upgrade of West End by end July 2011. Completed Interim rebuild of River Plaza by end July 2011. Completed Permanent infrastructure to be designed and built for 6 terminals and 2 moorings. 	On Track	<ol style="list-style-type: none"> West End ferry terminal opened on 1st August. River Plaza ferry terminal opened as Maritime Museum ferry terminal also on 1st August. Geotechnical riverbed onsite surveys completed and analysis is now underway. 3D flood modelling of Brisbane River progressing well. Design competition winner was announced on the 29 July – winner was Cox Raynor SPAP to approve design procurement and updating the construction panel for permanent terminals will be submitted to Stores Board on the 23rd August. 	The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.




		
On track	Risk of moderate delay	Risk of major delay / risk of not delivering

As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments										
Infrastructure4	Replace Floating Riverwalk.	<ul style="list-style-type: none">Remove washed away sections and remaining sections by end of June. Completed.Development of Concept Options by 30 April 2011. Completed.Decision on preferred option late 2011.Current timing approved by Lord Mayor:<ul style="list-style-type: none">Start Design end 2011Start Construction 2013Open 2014	On Track	<ul style="list-style-type: none">Consultation with directly affected landowners commenced on 3 August 2011. Ten meetings with these landowners have occurred up to the 15th August 2011.	<ul style="list-style-type: none">The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations. The construction time is also dependant on the availability of NDRRA funding.										
Infrastructure5	Parks rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none">80% of Parks operational by June 2011 (was 50%). CompletedRemaining 20% of Parks operational by June 2012 (was 50%).Updated target set in July 2011 – all parks to have a playground and toilet by Dec 2011.	On Track	<p>As at 15 August 2011</p> <ul style="list-style-type: none">95% of Concept plans completed and approved for detailed design for 12 re-build projects; 10 projects have been issued to panels for quoting.94.8% of parks initially flood affected are now fully open <p>3 Parks are fully closed – No change from last update.</p> <p>18 parks have some aspect of their facility/amenity closed (4.4%). Changes from last update: re-opening of 7 parks:</p> <ol style="list-style-type: none">Gordon Thomson Park, ChelmerChelmer Recreation Reserve, ChelmerStrickland Terrace Park, GracevilleCliveden Park, Fig Tree PocketMilton Park, MiltonFairfield Park, FairfieldRotary International Presidents Park, St Lucia <p>The following is the breakdown by type of the facilities/amenities across all parks that are closed/affected. 36 nodes remain affected:</p> <table><tr><td>RECREATION NODE</td><td>8</td></tr><tr><td>PLAYGROUND NODE</td><td>15</td></tr><tr><td>PICNIC NODE</td><td>8</td></tr><tr><td>DOG OFF LEASH</td><td>2</td></tr><tr><td>PUBLIC TOILETS</td><td>3</td></tr></table> <p>Notes:</p> <p>1. recreation nodes = BMX tracks, basketball courts, boat ramps, skate parks, bikeways through parks, fitness equipment/trails, climbing cliffs.</p>	RECREATION NODE	8	PLAYGROUND NODE	15	PICNIC NODE	8	DOG OFF LEASH	2	PUBLIC TOILETS	3	<p>The times nominated assume that sufficient resources will be available and there is no delay with approvals, permits and community consultations.</p>
RECREATION NODE	8														
PLAYGROUND NODE	15														
PICNIC NODE	8														
DOG OFF LEASH	2														
PUBLIC TOILETS	3														

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.




		
On track	Risk of moderate delay	Risk of major delay / risk of not delivering

As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Infrastructure6	Property rehabilitated to condition existing prior to January 2011 Flood Event.	<p>Offices and Depots</p> <ul style="list-style-type: none"> Operational with temporary repairs by 28 February 2011. Completed Major repairs completed by June 2011. <p>Entertainment Venues</p> <ul style="list-style-type: none"> Operational with temporary repairs by 28 February 2011. Completed Major repairs completed by June 2011. Completed. Additional project identified (Powerhouse) 20 July 2011 to be completed by end August 2011. <p>Golf Courses</p> <ul style="list-style-type: none"> Operational with temporary repairs by 28 February 2011. Completed Library (Fairfield) & Ward Office Major repairs completed and operational by 31 August 2011. Completed <p>Pools</p> <ul style="list-style-type: none"> Operational with temporary repairs by 4 March 2011. (Jindalee Pool reopened 1 March, Bellbowrie reopened 5 March) Completed Major repairs completed by June 2012 <p>Temporary Waste Sites</p> <ul style="list-style-type: none"> Return to original functionality by end of September 2011. 	On Track	<ul style="list-style-type: none"> Additional Project – Powerhouse stage lift box repaired by end August 2011. Jindalee Pool Learn to Swim – Work commenced on site and estimated to be completed by December 2011. Bellbowrie Pool business case approved by Cr Knapp (Chairman) and Development Approval documentation being developed for submission in August 2011 (can coincide with community consultation). DA approval expected in December 2011, with work completed in June 2012. Temporary waste site restoration works identified and scoped, restoration underway. Total waste sites identified 41, work remaining on 18 sites. On track for all to be completed by Sept 2011. 	<ul style="list-style-type: none"> The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMR TG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.




	On track		Risk of moderate delay		Risk of major delay / risk of not delivering
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As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Infrastructure7	Recreational Pontoons and Waterway Access rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> Two pontoons requiring minor works operational by June 2011. 7 pontoons requiring major repairs completed by Dec 2011 (was June 2012) 3 pontoons requiring replacement or washed away reinstated by May 2012. 1 boat ramps requiring repair to be completed by Dec 2011 1 boat ramps requiring repair to be completed by Jan 2012 2 boat ramps and 1 fishing platform to be replaced by June 2012 	Risk of moderate delay in delivery of first 2 pontoons	<p>Pontoons: There were 12 pontoons identified as damaged. Work remaining - 11</p> <ul style="list-style-type: none"> 2 pontoons requiring repairs will be completed by Aug 2011 (Kangaroo Pt, South Brisbane). Contract awarded. 6 pontoons requiring major repairs will be completed by Dec 2011 (West End, Sherwood, Jindalee, Newstead, Corinda, Amazons Park) 1 pontoon at Indooroopilly will be completed by May 2012 2 pontoons at Chelmer, Graceville are under investigation. <p>Boat Ramps</p> <ul style="list-style-type: none"> 1 ramp at Jindalee Boat Ramp Park – further repair to be completed by Dec 2011, in River Embankment Rehabilitation Program. 1 ramp at Fig Tree Pocket (owned by TMR and managed by Council) to be repaired in River Embankment Rehabilitation Program by Jan 2012 1 ramp at Kookaburra Park. Will be repaired in park rehabilitation program to be completed by June 2012. 1 ramp at Meires Rd (owned by TMR and managed by Council) - Replacement of ramp will be carried out within River Embankment Rehabilitation Program will be replaced by Apr 2012 <p>Fishing platform</p> <ul style="list-style-type: none"> 1 platform at Kookaburra Park requires major repairs to be completed by June 2012 (in park rehabilitation program). 	<ul style="list-style-type: none"> The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations. City Project's Office (CPO) is managing this program. Work will be performed under the specialist panel for riverine work set up by Strategic Procurement.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

		
On track	Risk of moderate delay	Risk of major delay / risk of not delivering




As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Infrastructure8	Road Network rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> 50% of Footpaths reinstated by 30 June 2011. Completed. Remaining 50% by end Sep 2011 (was end 2011/12 financial year). Completed 50% of Kerb and Channel reinstated by 30 June 2011 Completed. Remaining 50% by end Sep 2011 (was end 2011/12 financial year). Completed 50% of Minor road repairs reinstated by 30 June 2011. Completed Remaining 50% by end Sep 2011 Major road repairs completed by 30 June 2012. 50% of Fences reinstated by 30 June 2011. Completed. Remaining 50% by end Sep 2011 (was end 2011/12 financial year). Completed Orleigh Park Shared Pathway reinstated by 30 June 2011. Public lighting fully reinstated by 31 May 2011 (was end 2011/12 financial year). Completed (First pass) Signs and lines repaired by 30 April 2011. 	On Track	<ul style="list-style-type: none"> Total estimated area 34,630 sq m (1,067 sq m concrete, 33,563 sq m topsoil and turf). All Completed. Total estimated length of K&C damaged 655 m. All Completed Total estimated area of minor road repairs is 19,982 sq m. Completed area 18,337.1 sq m. All packages of work for minor road repairs have been let to external contractors - work on track to meet targets. <p>Specific Major projects</p> <ul style="list-style-type: none"> Kholo Rd – works underway. Contractor established on site 1st August. Estimated construction period of 14 weeks. Brisbane Corso – construction completed. Radnor St – opened one-way, permanent repair options selected. Design underway. Slip repair construction to commence in October 2011 and be completed by end of December. Meiers Rd – review of options underway Coronation Drive Pavement – Investigating rehabilitation options. All packages of work for repairs to fences have been completed. Orleigh Park Shared Pathway – will be restored as part of Park Recovery and River Bank stabilisation work. Timeframe being assessed. Temporary diversion has been established. Street lighting repair work – Completed. Note that there are some recurring faults (ie lights fixed and then go out again) which are being checked and fixed under the Field Services maintenance program. 	<ul style="list-style-type: none"> The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMR TG

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As at: 19 August 2011

		
On track	Risk of moderate delay	Risk of major delay / risk of not delivering

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
		<ul style="list-style-type: none"> Completed All traffic signals now operational as of 30 January 2011. Completed ITS - 155 intersections – temporary repairs complete and all intersections operational. Completed Intelligent Transport Systems long term repairs completed by 30 September 2011. Road rehabilitation and resurfacing – 23% repairs completed in 2011/12 and remaining 77% repairs completed in 2012/13 (milestones altered with release of 11/12 budget) 		<ul style="list-style-type: none"> ITS Condition Survey to be carried out at 6 months after event (in July) (similar to DTMR approach) to identify water damage impact. Assessment of accelerated network pavement deterioration started, to be completed. Report finalised. Currently listing works for 11/12 	
Infrastructure 9	Stormwater Drainage Network and waterways rehabilitated to condition existing prior to January 2011 Flood Event.	<ul style="list-style-type: none"> Enclosed pipe drainage – new target is 95% cleaned by end of August 2011 (new target set 14 June 2011 – old target – 250km cleaned by 30 June 2011 and additional 200km cleaned by 30 September 2011). Open Waterways (drainage) cleaned by 30 September 2011 (was 31 March 2012). Complete Open Waterways (drainage) repaired by 30 June 2012. 	On Track	<ul style="list-style-type: none"> Systematic inspection and desilting of stormwater drainage pipes is underway in all sectors and as of 11 August is complete in sectors A, D, E, F, G, H, I, P, Q, R and T. As at 11 August - 13 CCTV units and 25 educting units undertaking cleansing works. As at 11 August, 309.3 km has been inspected; contractors estimate that 357.3 km has been surveyed. Approximately 260.4 km of inspected lines are now clear. 17.8 km of lines are deemed inaccessible and work will be scoped to inspect and clean these in September 2011. 10,239,500 litres of sludge has been removed (to 4 August). Progress of clearing High priority lines is at 81%. GHD assessment of repairs required on open drainage received – being reviewed and prioritised. 	
Infrastructure 10	River Embankments rehabilitated.	<ul style="list-style-type: none"> Initial assessment completed by 1 March 2011. Completed Listing and Prioritisation of works by 31 March 2011. Completed Complete rehabilitation by 30 June 2012. 	On Track	<p>Designs have commenced and a full program and estimate by site is now available. All designs for high risk sites have been completed and currently being packaged with parks works. This project has also been coordinating with CPO Parks Projects.</p> <p>The list of river walls and embankments to be repaired are:</p> <p>Jindalee Boat Ramp Park</p>	The times nominated assume that sufficient resources will be available and there is no issue with approvals, permits and community consultations.

INFRASTRUCTURE RECOVERY SUB COMMITTEE REPORT TO LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

	On track		Risk of moderate delay		Risk of major delay / risk of not delivering
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As at: 19 August 2011

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
				Fig Tree Pocket Riverside Reserve (including Mandalay St and Botteccelli St Rocks Riverside Park Sir John Chandler Park / Melrs Rd Spinkbrae Street Park Kookaburra West Park Priors Pocket Park Moggill Ferry Reserve Taylor Bridge Park Wall Near Mervale Bridge Laidlaw st, East Brisbane Holman St, Kangaroo Point Lower River Toe, South Brisbane	State permit approvals are delaying delivery of these works.
Infrastructure11	Asset Failure Analysis	<ul style="list-style-type: none"> Independent report on learnings of asset failure analysis from flood event by mid May 2011. Final Draft Completed 	On Track	Final report drafted. Asset Management currently liaising with asset owners regarding Council's position on the reports recommendations.	

Authorisation:

Chairman:

Name:

Signature

23/8/11

Divisional Manager:

Name:



Signature

23/8/11

Finance & Economic Recovery Sub-Committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of Sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011

SUCCESSFUL ACHIEVEMENT OF SUB-COMMITTEE RECOVERY OUTCOMES.					
Legend:  On track  Risk of moderate delay  Risk of major delay / risk of not delivering					
Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Finance - Funding 1	Optimise grant funding to Council for flood	<p>Provide initial estimates to State - completed Feb 2011</p> <p>Review & develop appropriate cost collection processes & systems - completed Feb 2011</p> <p>Submit response Claims to State - by 30 June 11</p> <p>Submit restoration of asset claims to State - ongoing</p> <p>Tasks:</p> <p>Provide initial estimates to State - completed Feb 2011</p> <p>Review & develop appropriate cost collection processes & systems - completed Feb 2011</p> <p>Submit response Claims to State - by 30 June 11</p> <p>Submit restoration of asset claims to State - ongoing</p>	On Track	<ul style="list-style-type: none">• Total claims for CDO and emergent works lodged with QRA now total \$37.9 million (181 claims). Change from last report is \$3.5m with a further \$1.5m currently being reviewed by Grants team. To date, \$17.4m (97 claims) have been approved against the advance of \$85M.• It is anticipated that REPA claims totalling \$49M must be approved by QRA in order to utilise the full \$85M advance funds (after all CDO/EW claims have been lodged). Therefore, costs incurred on restoration projects to date must be submitted for approval as a priority	The Restoration Portfolio Coordination Group, a sub committee of the Infrastructure & Grants Working Group have agreed an integrated approach to the approval, completion & claiming of restoration of essential public asset (REPA) costs over the next 2 years. Without QRA Approval of restoration projects, recovery of costs will be delayed.
Finance - Funding 2	Optimise insurance funding to Council for flood	<p>Develop strategy on allocation of cap between QUU and BCC - ongoing</p> <p>Tasks:</p> <p>Address QUU insurance arrangements</p> <p>Allocation of Cap between QUU & BCC</p> <p>Sub Tasks:</p> <p>Late declaration of Non-BCC assets owned by QUU. QUU to provide declaration of non-BCC assets showing values by location.</p> <p>Agree Governance arrangements between BCC & QUU</p> <p>Determine insurance coverage</p> <p>Tasks:</p> <p>Determine whether more than one flood event occurred</p> <p>Differentiate between assets damaged by Flood or Storm</p> <p>Sub Tasks:</p> <p>Commission hydrological assessment</p> <p>Agree insurance claim with Insurance company - ongoing</p> <p>Task:</p> <p>Prepare & submit claims</p>	On Track	<p>Correspondence to QRA proposing a division of proceeds between QUU and Council has been submitted. A response is awaited.</p> <p>QUU has indicated that it may have sustained approximately \$6m of damage from a Bremer River flood (separate to the damage caused by the Brisbane River flood water).</p>	<p>Work to accelerate the pipeline of projects put forward for Approval by QRA continues in BCCity Projects</p> <p>Council has advised QUU that any division of claims proceeds will be contingent upon the agreement of QRA, as Council will be seeking QRA support for its uninsured losses to be covered by NDRRA funding. In the interim, QUU has been provided with the \$10m advance provided by Insurers.</p> <p>This may trigger an additional flood event under the insurance policy, providing an additional cap of up to \$50m for QUU's Western Service Area (WSA) assets which have been damaged by this separate event. QUU must prove to insurers' satisfaction that a separate event has occurred. At this stage, the former Lead Insurer- Charis - has not confirmed cover for QUU's WSA assets, which may result in QUU receiving only 70% of any separate claim event for its WSA assets.</p>
		<p>Riverwalk claim negotiation - ongoing</p> <p>Task:</p> <p>Assessor considers that existing Riverwalk structure should not be removed. Need to assert Council's position using supporting engineering documentation.</p>	On Track	Council has submitted City Design estimates to reinstate the Riverwalk on a like for like basis (ie replacement as it was prior to damage - as this is the basis of the insurance cover). The assessor is currently reviewing cost estimates in the lead up to negotiating a settlement.	Council estimates the Riverwalk insurance claim in the range \$32.5 - \$35m.

Finance & Economic Recovery Sub-Committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011

	On track
	Risk of moderate delay
	Risk of major delay / risk of not delivering

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
		Claims submissions for asset repairs greater than \$500,000 to be submitted by 15/2/11 Task: Prepare claims submissions for major insured assets SubTasks: Differentiate between flood repairs and enhancement (which is not insured) to expedite assessment of insurance claim. Agree Ferry Terminal Damage claim with Insurance Company. Target date for receipt of funds is now 30/4/2011 Task: Prove to Insurers that Ferry Terminal losses exceed Policy Flood Limit of \$6.5m	On Track		see separate tab for details of claims
Finance - Funding 3	Manage councils borrowings and cash impacts	Ongoing Tasks: Monitor impact of flood on cashflows Determine if additional borrowings are required Monitor impact of QUT on revenue stream Sub Tasks: Council originally had approval to increase working capital facility to \$200m to 30 June 2011. A proposal is in progress to maintain the limit for a further three years to assist with flood recovery.	On Track		Completed. Council has received full insurance policy payout for Ferry Terminals.
Finance - Funding 4	Assist community and sporting groups using donations to a trust fund	Establish trust, bank account and Board of Management - completed Feb 2011 Obtain ATO approval - completed Establish donation channels - completed Feb 2011 Prepare communication strategy - completed Establish supporting processes and systems - completed Establish grant assessment frameworks - completed Evaluate and disburse funding - ongoing	On Track	<ul style="list-style-type: none"> A total of \$305,707 in donations received since 14 July. As at 15 August 2011: <ul style="list-style-type: none"> Donations received \$1,089,134 plus interest \$2,975 Payments made to organisations \$735,000 plus bank fees \$114 Funds available for disbursement are \$356,995 	
Finance - Budget 1	Revise 2010-11 budget	Undertake special budget review in response to flood - Completed 18 Feb 2011 Undertake 3rd budget review - 14 Feb to 17 May 2011 Tasks: Determine impacts on revenue and expenditure Make budget decisions Communicate	On Track		Outcome Complete
Finance - Budget 2	Prepare 2011-12 budget	Develop budget - Feb to June 2011 Budget debate & adoption - by 30 June 2011 Tasks: Revise timetable Develop 11-12 budget to reflect flood impacts	On Track		Outcome Complete
Finance - Budget 3	Update Long term financial sustainability (FS) model	Update FS model - 30 June 2011 Tasks: Revise 10-11 budget Prepare 11-12 budget Revise FS model	On Track		Outcome Complete
Finance - Other 1	Agree responsibility for funding toll free period for Clem 7 / 688	Liase with Clem 7 - During Feb 2011 Reach decision - March 2011	On Track		Complete
Finance - Other 2	Account for impairment of Council's assets	Agree accounting treatment - April 2011 Identify impaired assets - May 2011 Account for impaired assets - July 2011	On Track		Complete

Finance & Economic Recovery Sub-Committee Report to LMRTG




Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Finance - Other 3	Prepare DLGP Asset Return (i.e. Financial Sustainability Return) in light of flood damage	Contact DLGP - Jan 2011 - Complete Reach decision - Feb 2011 - Complete	On Track		Complete
Finance - Other 4	Provide \$100 water rebate to flood affected ratepayers	Identify recipients - Complete Establish systems and processes - by 25 Feb 2011 Process payment - by 31 March 2011	On Track	<ul style="list-style-type: none"> 19,163 cheques issued. Approximately 8,040 of the 13,000 properties that received Letter 2 but have not yet contacted Council to claim. 1,414 respondents in total have declined the cheque. 431 of the 4,960 people who responded to the 2nd letter have declined the cheque. 	
Finance - Other 5	Deliver State credit rating review	Contact DLGP - Feb 11 Reach decision - 31 March 11	On Track		Complete
Economic - 1	Understand the issues of industry, commerce and small business in successfully returning to business as normal and assess the impact of the flood on the Brisbane economy and the implications for future planning and investment to improve the city's flood resilience.	Completion of peak industry body interviews by end February 2011 Completion of Flooding Economic Impact Report by end March 2011 Completion of Report on On-line Business Survey results and recommendations arising by end-April.	On Track		Milestones Complete
Economic 2	Facilitate industry, commerce and small business returning to business as normal	Attend weekly DEEDI business recovery tasking and coordination meetings commencing week of 7 February	On Track		<ul style="list-style-type: none"> Funding contract for two Jobs and Skills Development Officers contract for two positions for 13 months signed by Council and Skills Queensland and Council proceeding to advertise to fill these positions. The functions of which are to build capability within affected business communities and industries to maximise employment and skills development activities through the rebuilding process.
Economic - 3	Build a consistent message in the media that Brisbane is "back to business"	Commencing 1 Feb 2011 End date of campaign 31 Jan 2012 Establish "Media Forum" by 11 February 2011 Refresh the Brisbane Marketing website to portray "Brisbane back to business"; immediate and on-going Incorporate articles in the "Living in Brisbane" newsletter to portray "Brisbane back to business"	On Track		<ul style="list-style-type: none"> Meetings held with Brisbane Festival to discuss production of a "Hero installation" piece to exhibit Together Brisbane user generated content during the Festival (3 - 24 September) Meetings held with Brisbane Festival Hub stakeholders (Brisbane Powerhouse, South Bank Corp, OPAC and QSM) re public exhibition of user generated content within these spaces. News Queensland confirmation to include Come Together Brisbane logo lock up on Bridge to Brisbane finish t-shirts (approx. 50,000 participants) Initial meeting and project scope held with BCC for the development of sub-campaign to collectively leverage the Together Brisbane campaign alongside the BCC schools EKKA project. Business to business (SME) marketing concept under development as a sub-campaign to increase awareness of the Together Brisbane campaign, add greater local business focus. Brisbane Marketing has sent a message to members and partners encouraging them to: <ol style="list-style-type: none"> 1. Download the Together Brisbane campaign guidelines and apply their own business' messages to the campaign and publish via own marketing, event and point of sale materials; 2. Encourage your staff and family members to add their personal messages as to why they believe Brisbane is better than ever here. The campaign includes comprehensive television, radio, print, outdoor, cinema and online advertising which will run locally, nationally and internationally from April to September 2011, thanks to the generous pro bono support of the advertising media industry. Together Brisbane campaign to be completed with the Brisbane Festival in Sept 2011
Economic - 4	Maximise the recovery of Brisbane businesses while capitalising on the flood-related international awareness of Brisbane to promote inbound investment opportunities where appropriate.	Assemble a list of rebuilding projects and procurement requirements with which to engage business by end February Mount an information campaign for Brisbane enterprises on opportunities from the rebuilding program by mid-March Brisbane Marketing to make contact with international companies concerning appropriate investment opportunities arising from the rebuilding program by mid-March	On Track		Milestones Complete

Finance & Economic Recovery Sub-Committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.




Activity and Project
Flash Report
As at: 22 August 2011

Legend:  On track  Risk of moderate delay  Risk of major delay / risk of not delivering					
Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Comments
Economic - 5	Restore CBD retail trading to pre flood levels	Commence CBD post-flood "light-back" promotion campaign by 7 February 2011 End date of campaign 30 June 2011 Adapt established CBD activation and marketing campaign for post flood circumstances - immediate and on-going	On Track		<ul style="list-style-type: none"> a radio campaign was conducted in the first weeks following the flood other elements have been integrated into a cbd campaign
Economic - 6	Ensure that Brisbane's international and domestic tourism markets that Brisbane is open for visitors and that Brisbane's tourist operators are able to return to business as soon as possible	Updating of Visiting Friends and Relatives (VFR) promotion campaign for post-flood effectiveness by 4 February 2011	On Track		Milestones Complete
Economic - 7	Ensure that Brisbane is seen as an exciting destination whose convention business is viable and little impacted by floods	Updating APCS messaging for APCS, convention trade shows and campaigns by 11 February 2011	On Track		Milestones Complete
Economic - 8	Ensure that Brisbane is seen as an exciting location for sporting and cultural events little impacted by floods	Finalise Winter campaign by end March Finalise Summer campaign by end of September	On Track		<ul style="list-style-type: none"> status on winter campaign Iba Brisbane Marketing
Economic - 9	Demonstrate that Brisbane is open for International Education and that the flood issue has been dealt with	Web and social media campaign to the international student marketplace has commenced and is on-going	On Track		Milestones Complete
Authorisation:					
Chairman & Deputy Mayor		Cr Adrian Schirmer			
Divisional Manager		Greg Evans			

Environmental Recovery Sub-Committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011

Legend:				
 On track		 Risk of moderate delay		 Risk of major delay / risk of not delivering
Code	Outcome	Key Milestones and Dates	Risk Status	Key changes since last report
ERSC 01	Environmental impacts from the flood event of January 2011 on the city's natural areas and waterway corridors were assessed and restorative action plans were implemented.	<ul style="list-style-type: none"> Affected habitat sites prioritised for assignment to volunteers by 11/02/2011. (Completed) Water corridors assessed by 03/03/2011. (Extended to 31/03/2011) (Completed) 50% of sites have a restoration plan and are slotted into volunteer work schedule, as appropriate, by 28/02/2011. (Completed) 100% of sites have a restoration plan and are slotted into volunteer work schedule, as appropriate, by 31/03/2011. (Completed) 50% of site restoration plans begun by 30/04/2011. (Completed) 100% of site restoration plans begun by 31/07/2011. (Completed) 		<ul style="list-style-type: none"> Restoration plans have begun on all identified sites. (No change from last week). Waterway Assessment Pass 2 Inspection program completed. Response work being conducted by LAS
ERSC 02	Council officers, community environmental groups and other volunteers assigned to and engaged in prioritised rehabilitation and recovery tasks	<ul style="list-style-type: none"> Logistics to coordinate and assign volunteers to jobs in place by 18/02/2011. (Conservation Volunteers Australia) Marketing to promote volunteer program commenced by 11/02/2011. (Completed) Volunteers assigned to all identified tasks by 11/02/2011 (iterative process). (Completed) 		<ul style="list-style-type: none"> Action closed and managed as business as usual for the life of the contract
				<p>Lead: Shane MacLeod and Margaret Jacobson</p> <ul style="list-style-type: none"> Overall 100% of Sites Assessed Overall 100% of Restoration Plans in place Overall 100% of Restoration Plans have begun <p>Waterway Assessment Pass 2</p> <p>No issues.</p>
				<p>Lead: Dennis Gannaway</p> <ul style="list-style-type: none"> CVA continues to coordinate volunteers in the flood recovery efforts

Environmental Recovery Sub-Committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011

Legend:		On track	Risk of moderate delay	Risk of major delay / risk of not delivering
ERSC 03	<p>Hazardous materials identified and restorative action plans implemented, in conjunction with relevant state authorities and agencies, to ensure community and environmental safety.</p>	<p>Intergovernmental Hazardous Material response organised (in place). (Completed)</p> <p>Air survey of sites by 9 Feb. Audits completed by 9 March. (Completed)</p> <p>Cleanup contractor appointed to address sites and impacts as they emerge (in place starting with Oxley Creek) by 14 Feb. (Completed)</p> <p>Initial clean up beyond Oxley Creek (source pollution contained, containers etc removed) starts 14 Feb. complete across all sites 31 March. (Completed)</p> <p>Flood debris (large items only) cleaned up from 100% of impacted waterways by 30 April 2011 (Completed)</p> <p>Flood debris (large and smaller items) cleaned up from 100% of impacted waterways by 30 June 2011 (Completed)</p>	<p>Closed, all hazardous materials and general waste removed from waterways</p>	<p>Lead: Shane MacLeod and John Jordan Hazardous Waste (DERM) - Hazardous material container removal is complete.</p> <p>Hazardous and Waste beyond Oxley Creek (LAS) - General waste removal is complete</p> <ul style="list-style-type: none"> All regions will continue to undertake coastal and river tidal maintenance Pontoon and large items removal at Kedron Brook - Contractor has indicated 4-5 weeks for removal. LAS has requested a detailed works program. <p>General Waste (LAS)</p> <ul style="list-style-type: none"> All regions will continue to undertake coastal and river tidal maintenance
ERSC 04	<p>Public health risks in Council owned or operated recreational waters were assessed and action plans implemented</p>	<p>Council operated recreational waters safe for use by 30 April 2011 (Completed)</p>	<p>Closed, Council operated recreational waters safe for use</p> <p>Risk status changes from orange to green</p>	<p>Lead: Pat Bourke</p> <ul style="list-style-type: none"> Water quality testing and programs to continue as business as usual by Water Resources
ERSC 05	<p>Public health risks in Council owned or operated recreational land were assessed and action plans implemented</p>	<p>Council operated recreational land safe for use by 31 March 2011 (Completed)</p>		<p>Lead: Shane MacLeod and Frances Hudson</p> <ul style="list-style-type: none"> Council operated recreational land safe for use provided people follow QLD Health hygiene advice.
ERSC 06	<p>All waste materials disposed of and managed in accordance with State laws and Council procedures. Remediation of all temporary disposal sites in accordance with Environmental regulations.</p>	<p>Cease operations at all temporary disposal sites by Monday 14 February 2011. (Completed)</p> <p>By 31 March 2011, complete all remediation works. (Completed)</p>		<p>Lead: Aaron Lee</p> <ul style="list-style-type: none"> Closed temporary dump sites referred to Infrastructure Sub-committee for remediation.
Authorisation:		Chairman	Cr Malic	
		Divisional manager	Andrew Chesterman	

Community Recovery Coordination Sub-committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes. Note that clubs and pontoons were already recorded separately in the 136 for all other sites

Activity and Project Flash Report

As at: 18 August 2011

Legend:  On track  Risk of moderate delay  Risk of major delay / risk of not delivering

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report		Comments
				This Report	Last Report	
1	Identification of community facilities that have been affected, including extent of damage, public safety issues and the level of insurance cover.	Develop list of affected facilities and estimates of costings by 7/2/11 Total affected facilities - 114 - 79 Sporting groups/facilities - 30 Non Sporting groups - 5 Kindergartens	On Track	Initial number of clubs identified: 120 Current total number of clubs/facilities that were flood affected: 114	114	No Change

Community Recovery Coordination Sub-committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes. Note that clubs and pontoons were already recorded separately in the 136 for all other sites

Activity and Project
Flash Report

As at: 18 August 2011

Legend:	 On track	 Risk of moderate delay	 Risk of major delay / risk of not delivering
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
Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report		Comments
				This Report	Last Report	
2	Determination of priorities amongst community assets to enable decisions to be made regarding repair work.	First round of prioritisation to be completed by 14/2/11 All groups have been categorised 0-5 (5 being highest level of damage)	On Track	0 are Category 0 46 are category 1 24 are category 2 18 are category 3 12 are category 4 14 are category 5	No Change	
3	Assessment of the future resilience of community facilities and the provision of advice as appropriate	Initial assessment complete by 25/2/11	On Track	No change	No Change	Work with impacted groups is continuing to identify and implement strategic outcomes to build future resilience. This work will continue with the LGAQ funding for two community development positions.

Community Recovery Coordination Sub-committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes. Note that clubs and pontoons were already recorded separately in the 136 for all other sites

Activity and Project Flash Report

As at: 18 August 2011

Legend:	 On track	 Risk of moderate delay	 Risk of major delay / risk of not delivering
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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report		Comments
				This Report	Last Report	
4	Assist and collaborate with Community Groups, including Sporting Clubs, to rebuild their capacity to continue their activities and functions.	Ongoing work with all groups with the target of returning them to full operations - see specific targets below:	On Track	No Change	see below	NDRRRA funding for community facility recovery has been rejected. Discussions are ongoing as to options for pursuing the case with NDRRA.
	Tracking Progress of Community Groups	TARGETS		No. of clubs / facilities impacted by floods - 114	Last week was 114	
		90% of Pontoon Infrastructure replaced by Oct 2011 (total 10)		6 (67% of KPI)	No Change	
		90% of Building Works completed by Oct 2011 (total 120)	On Track	88 (81% of KPI)	No Change	
		60% of Building Fit out replaced by Oct 2011 (total 120)		61 (85% of KPI)	No Change	
		100% of Field/Court Remediation completed by Oct 2011 (total 303)	On Track	262 (86% of KPI)	No Change	
		90% of Field/Court Infrastructure remediated by Oct 2011 (total 303)		253 (93% of KPI)	No Change	
		100% Sporting equipment replaced by July 2011 (total 97)	On Track	74 (76% of KPI)	No Change	

Community Recovery Coordination Sub-committee Report to LMRTG

Purpose: Weekly progress update from the Sub-committee identifying status, changes and hot issues for escalation to the Lord Mayor's Recovery Task Group for resolution and decision making to assist in the successful achievement of sub-committee recovery outcomes. Note that clubs and pontoons were already recorded separately in the 136 for all other sites

Activity and Project
Flash Report

As at: 18 August 2011

Legend:	 On track	 Risk of moderate delay	 Risk of major delay / risk of not delivering
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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report		Comments
				This Report	Last Report	
5	Ensure community groups are educated as to accessing financial support provided by all levels of government, and incorporating building techniques to build flood resilience.	All groups have a Client Manager in BCC by 31/1/11	On Track	Number of clubs who have received \$5,000 donation: 107. Recovery Grants approved TOTAL - 57 - \$4,760,526	No Change	64 grant applications were received. 64 have been assessed with 57 being approved and 7 not approved or withdrawn.
6	Provide advice, as required, to The Lord Mayor's Community Disaster Relief Appeal Fund	Criteria and processes for application confirmed by 25/2/11	On Track		Round 1, 2, 3 and 4 funding combined is now 19 clubs totaling \$785,000.	Further recommendations will be made to the LMCDR Board for allocation of further funding once confirmed.

Authorisation:

Chairman

A/Divisional Manager





Name

Signature

Town Planning LMRTG report

Purpose: Weekly project progress update identifying status, changes and hot issues to the relevant sub-committee for escalation and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011





Legend	 On track	 Risk of moderate delay	 Risk of major delay / risk of not delivering	 Completed/rolled into Business as usual
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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
TPSC1	Support the Joint Flood Taskforce investigating the interim flood height for planning and development purposes. (Completed)	<ul style="list-style-type: none"> Through the Joint Flood Taskforce identify an interim flood height for Development Assessment purposes - E&C - 14 March 2011 Task Force Tele-conference - 14th Feb 2011 Technical Working Group meeting - 15 Feb 2011 Industry Reference Group meeting - 15 Feb 2011 Joint meeting of Industry and Technical Reference Groups 28 February 2011 			<ul style="list-style-type: none"> None (completed)
TPSC2	Apply the interim flood height for planning and development purposes within the Brisbane City Council local government area (Completed)	<ul style="list-style-type: none"> Update Building & Development webpage and fact sheet - 11 March 2011 Brief QLD Government by 11 March 2011 Draft TLPI to E&C - 21 March 2011 Apply the interim flood height for development assessment processes effective as soon as practical following Council resolution - Week ending 6 May 2011 Go live date now confirmed for 16 May 2011 TLPI adopted 10 May 2011 		<ul style="list-style-type: none"> TLPI presentation given at the Planning Institute of Australia (PIA) meeting on 20 June 2011. 	

Town Planning LMRTG report

Purpose: Weekly project progress update identifying status, changes and hot issues to the relevant sub-committee for escalation and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011





Legend	<div>  On track </div> <div>  Risk of moderate delay </div> <div>  Risk of major delay / risk of not delivering </div> <div>  Completed/rolled into Business as usual </div>
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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
TPSC3		<ul style="list-style-type: none"> ● Presentation to E&C strategy/ Planning Guidance on JFT - 7 March 2011 ● TPSC to consider and prepare recommendations for implementation of the QLD Government Commission of Inquiry recommendations - August 2011 ● TPSC to consider Flood Response Review Board and Jan 2012 findings 		<ul style="list-style-type: none"> ● Project Management plans for FRRB recommendations forwarded to CDRO - 3 June 2011 	
	Develop short term planning amendments, to assist reconstruction in flood affected areas	Building heights (review and recommend new maximum building height limits/provisions) - 3 March 2011 <ul style="list-style-type: none"> ● Meeting with development Industry Representatives (Ken Ryan/Anna Havill) to be held Thursday 10th March 2011 (Completed) 		<ul style="list-style-type: none"> ● Meeting with Marine Safety Qld re: pontoon code of practice - 25/5/11 	

Town Planning LMRTG report

Purpose: Weekly project progress update identifying status, changes and hot issues to the relevant sub-committee for escalation and decision making to assist in the successful achievement of sub-committee recovery outcomes.

Activity and Project
Flash Report
As at: 22 August 2011

Legend			
	On track		Risk of moderate delay
	Risk of major delay / risk of not delivering		Completed/rolled into Business as usual

Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
		<ul style="list-style-type: none"> Provide the owners of pontoons with a fact sheet detailing support available for reinstatement - 18 Feb 2011 Owners of pre-1998 pontoons to be contacted by separate letter via key pontoon/jetty organisations - 4 March 2011 To develop a Code of Practice relating to tethering, identification, pylon design and maintenance of jetties (including diagrams) - 25 Feb 2011 		<ul style="list-style-type: none"> Lachlan Carkeet to attend the Brisbane Boat Show 25-28th August with Marine Qld, to promote the Code of practice for pontoons 	
		Building Basements - Prepare draft code with design requirements that reduce susceptibility to flooding <ul style="list-style-type: none"> Present draft to TPSC by 25 March 2011 Complete industry engagement by 29 April 2011 		<ul style="list-style-type: none"> Symposium arranged for 2 September 2011 at the BCC conference centre 	

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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
		Building services locations - recommend mandatory design requirements that reduce susceptibility to flooding ● Present Draft to TPSC by 25 March 2011 ● Complete industry engagement by 29 April 2011		● TLPI presentation given at the Planning Institute of Australia (PIA) meeting on 20 June 2011.	
TPSC4	Develop longer term planning amendments as required	● Kerry Doss to incorporate version 3 of the "DERM" mapping into the Flood Overlay Mapping from June 30, 2011 (as business as usual) ● Kerry Doss to prepare interim flood overlay mapping prior to release of the Commission findings prior Jan 2012 (as business as usual) ● Kerry Doss to incorporate the recommendations as appropriate of the Commission into the final maps - June 2012 (as business as usual)		Project on track - Joint Working Group/CPED Working Group developing mapping methodology.	

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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
		<ul style="list-style-type: none"> ● Kerry Doss to prepare interim flood code prior to release of the Commission findings in Jan 2012 (as business as usual) ● Kerry Doss to incorporate the recommendations of the JFT into the final flood code for inclusion in the New City Plan - June 2012 (as business as usual) ● Kerry Doss to incorporate the recommendations of the Commission as appropriate into the final flood code for inclusion in the new City Plan - June 2012 (as business as usual) 		Project on track - Joint Working Group/CPED Working Group are currently developing draft code provisions.	
		<ul style="list-style-type: none"> ● Kerry Doss to draft Critical Infrastructure Plan by Dec 2011 (as business as usual) ● Kerry Doss to prepare Critical Infrastructure Plan (as business as usual) plan to be included in the New City Plan - June 2012 		Project on track - C.I.P being drafted following engagement with Emergency Management QLD.	
TPSC5	Engage planning and building peak bodies and key stakeholders in the development of planning amendments.	<ul style="list-style-type: none"> ● Utilise the Joint Flood Task Force Industry Reference Group to inform the TPSC - ongoing ● Distribute draft report to group - 25 Feb 2010 ● Group to feedback response - 28 Feb 2010 		<ul style="list-style-type: none"> ● TLPI presentation given at the Planning Institute of Australia (PIA) meeting on 20 June 2011. ● Symposium arranged for 2 September 2011 at the BCC conference centre 	

Town Planning LMRTG report

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Code	Outcome	Key Milestones and Dates			Risk Status	Key Changes since last report	
TPSC6	Develop new resilient building designs	<ul style="list-style-type: none">● Prepare draft design code for resilient building design - interim June 2011, final Feb 2012 - with input from IDAP● Organise a design charrette with Development Industry Peak Bodies - May 2011				<ul style="list-style-type: none">● Implement FRRB recommendations No FRRBAFF0014 (CBD/High Rise Residential Flood Resilience Symposium) by September 2011● Symposium arranged for 2 September 2011 at the BCC conference centre	
TPSC7	Develop and distribute planning information about flooding to the general community.	<ul style="list-style-type: none">● Deliver an extended 'Be Floodwise/Early Warning Alert System' campaign (scoped by 11 March 2011, delivery commenced by 30 June 2011). This includes:<ul style="list-style-type: none">● Flood markers● Early warning network● Improved FloodWise property report● Annotated rates notices				<ul style="list-style-type: none">● In the 10 days to the 27 May there were 5,000 downloads of the maps showing the extent of the flood by customers● Draft PMP for flood markers forwarded to CDRO w/e 3 June 2011● Historical Flood Markers Project currently being redesigned prior to implementation.	

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Code	Outcome	Key Milestones and Dates		Risk Status	Key Changes since last report		
TPSC8	Make interim recommendations relating to the flood buy-back scheme.	<ul style="list-style-type: none">● To map and calculate the number and locations of properties affected by flood event thresholds - mapping of Q2, Q5 and Q10 inundation areas and properties affected - due by 18 Feb 2011● Request assistance from State and Federal Governments - Letter to Premier and Federal Minister to be drafted for Lord Mayor's signature by 18 Feb 2011			<ul style="list-style-type: none">● Letter sent to Premier 19/5/2011● Incorporate recommendations from F.R.R.B into future VHPS expansion● Accelerate the implementation roll out of the VHPS following the increase in internal funding from \$5.0 to \$10M		

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Code	Outcome	Key Milestones and Dates	Risk Status	Key Changes since last report	Issues for resolution
TPSC9	Implement the recommendations of the Joint Flood Taskforce	<ul style="list-style-type: none"> ● Gather and archive all data relating to the January 2011 flood event from all sources so that further analysis can make use of all data available.(ongoing) ● Access the bathymetry (river bed and banks) of the Brisbane River and its tributaries and the characteristics of the bed material from Wivenhoe dam to the mouth as soon as possible ● Commission a comprehensive flood study to review flood flows and levels within Brisbane River catchment making full use of the data relating to the January 2011 flood event. ● Conduct a study of the effects of morphological (river bed level and across section) changes due to sediment erosion and deposition during flood events for a range of flood magnitudes to determine their effects on flood levels. ● Conduct a "Monte Carlo" assessment of the flood risk for the Brisbane Catchment. ● Complete a Flood Risk Management analysis for the area of Brisbane affected by flooding by Brisbane River and its tributaries be carried out. Moving from the Q100 mentality to a risk management approach inline with National Flood Risk Advisory Group (NFRAG) and other relevant guidelines. The risk management approach will include a detailed assessment of the benefits and costs of a full range of flood mitigation options. 		<ul style="list-style-type: none"> ● Letter received from the Premier - Follow up response being prepared. ● Water Resources to support the action of the implementation of the JFT 2-6 (further technical work) in line with agreed project management plan and funding availability (as business as usual) ● WR/CPED to part implement JFT7 (Flood Risk Management) (as business as usual) ● Utilise 2011/12 funding allocation (\$2.5M) to support the Queensland Government implementation of recommendations 2-7 of the JFT report ● Budget approved for next F/Y of \$150,000, allocated to TPSC secretariat ● JFT Recommendations are now being reported in detail as part of the Flood Response Review Board recommendations 	

Authorisation:

Chairman

Cr Cooper

Divisional manager

Andrew Chesterman

Signed version sighted by CDRO

Site	Address	Suburb	Ward	Tenure Type	Activity	Activity Type	No. Buildings	No. Field/Courts	No. Pontoons	First Contact Jan 2011	Second Contact 15/02/2011	Operational Status	Recovery Category	Original BCC Total estimate 07/02/10	Building Works 15/02/11	Field/Court Remediation Estimate 15/02/11	Field/Court Infrastructure Estimate 15/02/11	Pontoon Infrastructure Estimate 15/02/11	Building Fittings Estimate 15/02/11	Sport/ Building Equipment 15/02/11	Estimated Total Costs of Damage	State Government Flood Relief Eligibility	Other Funding Sources	Potential Funding Sources Available	Estimated Unallocated Costs
BCC LEASES NON-SPORT																									
Toowong Bridge Club Inc	22 Roy St		TOOWONG	BCC Lease	Non Sport	Community Organisation	1				Contacted	Partly Operational	4	\$250,648	\$145,648				80,000	25,000	\$250,648	\$0		\$0	\$250,648
Bellbowrie Kindergarten & Preschool Association	47 Birkin Rd	Bellbowrie	PULLENVALE	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	4	\$213,329	\$135,000		25,000		60,000	35,000	\$255,000	\$0	\$185,000	\$185,000	\$70,000
Benarawa Community Development Association Inc.	79 Waratah Ave, Graceville	GRACEVILLE	TENNYSON	BCC Lease	Non Sport	Community Organisation	1				Completed	Partly Operational	4	\$92,500					80,000	12,500	\$92,500	\$0	\$92,500	\$92,500	\$0
Indooroopilly Senior Citizens Club Inc.	60 Stamford Rd, Indooroopilly	INDOOROOPILLY	WATER TAYLOR	BCC Lease	Non Sport	Community Organisation	1				Contacted	Partly Operational	3	\$112,500					100,000	12,500	\$112,500	\$0		\$0	\$112,500
Queensland Jewish Kindergarten Association Inc.	691-695 Fig Tree Pocket Rd, Fig Tree Pocket	FIG TREE POCKET	WATER TAYLOR	BCC Lease	Non Sport	Child Care	1				Contacted	Partly Operational	3	\$110,000			25,000		60,000	25,000	\$110,000	\$0		\$0	\$110,000
Chelmer Graceville Kindergarten Association Inc.	40 Acacia Ave	Graceville	TENNYSON	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	3	\$158,700	\$68,700		25,000		40,000	25,000	\$158,700	\$0	\$120,000	\$120,000	\$38,700
Queensland Association Of Four Wheel Drive Clubs Inc.	90 Muriel St	Moorooka	MOOROOKA	BCC Lease	Non Sport	Community Organisation	1				Completed	Partly Operational	3	\$22,500					20,000	12,500	\$32,500	\$0		\$0	\$32,500
St Thomas's Riverview Kindergarten Inc.	186 Macquarie Street	St Lucia	WALTER TAYLOR	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	3	\$140,735	\$30,735		25,000		60,000	25,000	\$140,735	\$0	\$120,000	\$120,000	\$20,735
Northey Street City Farm Association Inc.	16 Victoria Street	Windsor	CENTRAL	BCC Lease	Non Sport	Community Organisation	1				Completed	Full Operational	1	\$64,319							\$0	\$0		\$0	\$0
Jamboree Community Kindergarten & Pre-School Association Inc.	61 Bearland St	Jindalee	JAMBOREE	BCC Lease	Non Sport	Child Care	1				Completed	Full Operational	1	\$90,000							\$0	\$0		\$0	\$0
Total BCC Leases Non-Sport																					\$1,162,583			\$517,500	\$635,083
BCC LEASES SPORT																									
Toowong Bowls Club Inc	59 Gailey Rd	Taringa	WALTER TAYLOR	BCC Lease	Sport	Bowls	1				Completed	Not Operational	5	283,593	\$151,093	\$40,000			\$80,000	\$12,500	\$283,593	\$72,500		\$72,500	\$211,093
Centenary Rowing	Summers Rd, Riverhills	RIVERHILLS	JAMBOREE	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	282,500				250,000	20,000	12,500	\$282,500	\$72,500		\$72,500	\$210,000
GPS Old Boys Rowing	10 Hill End Tce	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	81,500	\$49,000			200,000	20,000	12,500	\$281,500	\$72,500		\$72,500	\$209,000
Brisbane Grammar School Rowing Facility	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Not Operational	5	188,500	\$106,000			50,000	20,000	12,500	\$188,500			\$0	\$188,500
Australian Hellenic Sports & Cultural Association	230 Cansdale Street	Yeronga	TENNYSON	BCC Lease	Sport	Soccer	1				Completed	Not Operational	5	254,500	\$112,000	20,000	30,000		80,000	12,500	\$254,500	\$72,500		\$72,500	\$182,000
Jindalee Districts Australian Football Club Inc	48 Wongaburra St	Jindalee	JAMBOREE	BCC Lease	Sport	AFL	1	1			Completed	Not Operational	5	254,000	\$119,000	20,000	30,000		60,000	25,000	\$254,000	\$72,500		\$72,500	\$181,500
Yeronga Football Club Inc/AFLQ	Cansdale St	Yeronga	TENNYSON	BCC Lease	Sport	AFL	2	1			Completed	Not Operational	5	181,000	\$11,000	20,000	25,000		100,000	25,000	\$181,000	\$72,500		\$72,500	\$108,500
Oxley Sailing Club	142 Leybourne St	Chelmer	TENNYSON	BCC Lease	Sport	Canoe/Rowing	1				Completed	Not Operational	5	174,273	\$1,773			\$100,000	60,000	12,500	\$174,273	\$72,500		\$72,500	\$101,773
Carrington Boating Club Corinda Inc	Hilda St	Corinda	JAMBOREE	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Operational Status	5	112,500	\$60,000			50,000	40,000	12,500	\$162,500	\$72,500		\$72,500	\$90,000
Indooroopilly Canoe Club	209 Witton Rd	Indooroopilly	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	262,017	\$19,517			100,000	20,000	12,500	\$152,017	\$72,500		\$72,500	\$79,517
Jindalee Bowls Club Inc	Cnr. Simmamoon and Yallambee Rds	Jindalee	JAMBOREE	BCC Lease	Sport	Bowls	1				Completed	Partly Operational	4	1,206,500	\$1,074,000	\$20,000			\$100,000	\$12,500	\$1,206,500	\$72,500		\$72,500	\$1,134,000
Western Districts Netball Association Inc	18 Waratah Ave	Graceville	TENNYSON	BCC Lease	Sport	Netball	1				Completed	Partly Operational	4	442,500	\$150,000	440,000			80,000	12,500	\$682,500	\$72,500		\$72,500	\$610,000
Brisbane Basketball Inc	16 Dixon St	Auchenflower	TOOWONG	BCC Lease	Sport	Other	1				Contacted	Partly Operational	4	516,500	\$354,000				150,000	12,500	\$516,500	\$72,500		\$72,500	\$444,000
Bellbowrie Sports & Recreation Club	Sugarwood St	Bellbowrie	PULLENVALE	BCC Lease	Sport	Sporting Club	1				Completed	Partly Operational	4	456,500	\$244,000	50,000	50,000		100,000	12,500	\$456,500	\$72,500		\$72,500	\$384,000
Jindalee Golf Course	62 Yallambee Road	Jindalee	JAMBOREE	BCC Lease	Sport	Other	1				Contacted	Partly Operational	4	429,000	\$64,000	\$200,000	\$40,000		\$100,000	\$25,000	\$429,000	\$72,500		\$72,500	\$356,500
Sherwood Football Club Ltd	41 Chelmer St East	Chelmer	TENNYSON	BCC Lease	Sport	AFL	2	1			Completed	Partly Operational	4	412,500	\$260,000	20,000	20,000		100,000	12,500	\$412,500	\$72,500		\$72,500	\$340,000
South Brisbane Sailing Club	69 Hill End Tce	West End	THE GABBA	BCC Lease	Sport	Other	1		1		Completed	Partly Operational	4	594,000	\$69,000			200,000	80,000	25,000	\$374,000	\$72,500		\$72,500	\$301,500
Brothers St Brendans Rugby League Football Club	619-622 Beaudesert Rd	Rocklea	CENTRAL	BCC Lease	Sport	Rugby League	1				Contacted	Partly Operational	4	309,362	\$106,862	\$80,000	\$30,000		\$80,000	\$12,500	\$309,362	\$72,500		\$72,500	\$236,862
South Brisbane District Cricket Club Inc	269 Vanner Rd	Fairfield	TENNYSON	BCC Lease	Sport	Cricket	1				Completed	Partly Operational	4	288,100	\$125,600	\$40,000	\$50,000		\$60,000	\$12,500	\$288,100	\$72,500		\$72,500	\$215,600
Oxley Bowls Club Inc	24-30 Englefield Rd	Oxley	RICHLANDS	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	247,110	\$134,610	20,000			80,000	12,500	\$247,110	\$72,500		\$72,500	\$174,610
Eastern Suburbs Soccer Club Ltd	48 Hilton St	Coorparoo	THE GABBA	BCC Lease	Sport	Soccer	1				Contacted	Partly Operational	4	218,500	\$76,000	20,000	30,000		80,000	12,500	\$218,500	\$72,500		\$72,500	\$146,000
Brisbane Rugby League Referees Association Inc	Cnr Fairfield Rd/Brougham St	Fairfield	THE GABBA	BCC Lease	Sport	Peak Body	1				Completed	Partly Operational	4	205,500	\$93,000	\$20,000	\$20,000		\$60,000	\$12,500	\$205,500	\$72,500		\$72,500	\$133,000
Centenary Combined Sporting Association Inc	141 Horizon Drive	Middle Park	JAMBOREE	BCC Lease	Sport	Sporting Club	1				Completed	Partly Operational	4	165,000					40,000	125,000	\$165,000	\$72,500		\$72,500	\$92,500
Davies Park Rowing Shed (Brisbane State High)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Contacted	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700			\$0	\$34,700
Davies Park Rowing Shed (All Hallows / Nudgee College)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700			\$0	\$34,700
Davies Park Rowing Shed (Commercial Rowing Club)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700	\$34,700		\$34,700	\$0
Toowong Rowing Club & Pontoon	37 Keith St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Partly Operational	4	231,049	\$18,549			180,000	20,000	12,500	\$231,049	\$51,049	\$180,000	\$231,049	\$0

Davies Park Rowing Shed (Rowing Queensland)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Peak Body	1			Completed	Partly Operational	4	34,700	\$2,200			20,000	12,500	\$34,700	\$34,700		\$34,700	\$0													
Western Districts Community & Sporting Club Ltd. (including Kenmore Bears, Bulldogs)	55 Queencroft St, Chelmer	CHELMER	TENNYSON	BCC Lease	Sport	AFL	3	1		Completed	Partly Operational	4	112,500	\$241,671	20,000	30,000	100,000	12,500	\$404,171	\$72,500		\$72,500	\$331,671													
Strikers, Sport, Recreation and Welfare Association Limited	96 Abbotsford Rd	Mayne	HAMILTON	BCC Lease	Sport	Soccer	1				Partly Operational	3	286,500	\$84,000	80,000	50,000	60,000	12,500	\$286,500	\$72,500		\$72,500	\$214,000													
Spanish Centre Ltd.	244 Mortimer Rd, Acacia Ridge	ACACIA RIDGE	MOOROOKA	BCC Lease	Sport	Soccer	1				Partly Operational	3	112,500		20,000		80,000	12,500	\$112,500			\$0	\$112,500													
Churchie (Hazel Milman Tennis)	Hilton St	Coorparoo	THE GABBA	BCC Lease	Sport	Tennis	1	4			Partly Operational	3	155,523	\$18,023	80,000	25,000	20,000	12,500	\$155,523	\$72,500		\$72,500	\$83,023													
Merthyr Bowls Club Inc (Norman Park)	43 Norman Ave	Norman Park	MORNINGSIDE	BCC Lease	Sport	Bowls	1			Completed	Partly Operational	3	149,500	\$32,000	40,000	25,000	40,000	12,500	\$149,500	\$72,500		\$72,500	\$77,000													
Toowong Football Club	Cnr Roy St & Lang Pde	Auchenflower	TOOWONG	BCC Lease	Sport	Soccer	1			Contacted	Partly Operational	3	145,391	\$7,891	20,000	25,000	80,000	12,500	\$145,391	\$72,500		\$72,500	\$72,891													
El Salvador Soccer Club Queensland Inc	Candale St	Yeronga	TENNYSON	BCC Lease	Sport	Soccer	1			Completed	Partly Operational	3	132,500	\$40,000	20,000	20,000	40,000	12,500	\$132,500	\$72,500		\$72,500	\$60,000													
Lions Rugby Union Club Inc	37 Ilawong Way	Karana Downs	PULLENVALE	BCC Lease	Sport	Rugby Union	1				Operational Status	3	129,000	\$11,500	\$40,000	\$25,000	\$40,000	\$12,500	\$129,000	\$72,500		\$72,500	\$56,500													
Kenmore Churches Soccer Club Inc.	Gem Rd	Kenmore	PULLENVALE	BCC Lease	Sport	Soccer	1				Partly Operational	3	119,200	\$1,700	20,000	25,000	60,000	12,500	\$119,200	\$72,500		\$72,500	\$46,700													
BBC Rowing	37 Keith St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1			Completed	Partly Operational	3	40,597	\$8,097			20,000	12,500	\$40,597			\$0	\$40,597													
Souths Graceville Rugby League Club Inc. (formerly Southern Cross Rugby League Football Club Inc.)	247 Graceville Rd	Graceville	TENNYSON	BCC Lease	Sport	Rugby League	1				Partly Operational	3	113,000	\$28,000	\$20,000		\$40,000	\$25,000	\$113,000	\$72,500		\$72,500	\$40,500													
Brisbane Lions AFL Club	Birubi St, Coorparoo	COORPAROO	THE GABBA	BCC Lease	Sport	AFL	1	1		Contacted	Partly Operational	3	112,500				100,000	12,500	\$112,500	\$72,500		\$72,500	\$40,000													
Toombul Bowls Club	70 Flower St, Northgate	NORTHGATE	NORTHGATE	BCC Lease	Sport	Bowls	1			Completed	Partly Operational	3	112,500		20,000		80,000	12,500	\$112,500	\$72,500		\$72,500	\$40,000													
New Farm United Junior Soccer Club Inc	Cnr Sydney & Brunswick Sts	New Farm	CENTRAL	BCC Lease	Sport	Soccer	1				Partly Operational	3	109,500	\$12,000	20,000	25,000	40,000	12,500	\$109,500	\$72,500		\$72,500	\$37,000													
Metropolitan Districts Netball Association Inc.	Cnr Burke & Robinson Sts, Coorparoo	COORPAROO	THE GABBA	BCC Lease	Sport	Netball	1				Partly Operational	3	105,000		80,000	25,000			\$105,000	\$72,500		\$72,500	\$32,500													
Booroodabin Bowls Club Inc.	126 Breakfast Creek Rd, Newstead	NEWSTEAD	HAMILTON	BCC Lease	Sport	Bowls	1				Partly Operational	3	92,500				80,000	12,500	\$92,500	\$72,500		\$72,500	\$20,000													
West's (Brisbane) Junior Rugby League Football Club Inc.	Carwoola St, Bardon	BARDON	TOOWONG	BCC Lease	Sport	Rugby League	1				Partly Operational	3	92,500		\$20,000		\$60,000	\$12,500	\$92,500	\$72,500		\$72,500	\$20,000													
Windsor Bowls Club	69 Blackmore St	Windsor	HAMILTON	BCC Lease	Sport	Bowls	1			Contacted	Partly Operational	3	77,577	\$45,077			20,000	12,500	\$77,577	\$72,500		\$72,500	\$5,077													
Toowong Harriers Amateur Athletic Club Inc	86 Indooroopilly Rd	Toowong	WALTER TAYLOR	BCC Lease	Sport	Athletics	1	1		Completed	Partly Operational	3	22,500				10,000	12,500	\$22,500	\$22,500		\$22,500	\$0													
St Lucia Bowls Club Inc	Carr St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Bowls	1			Contacted	Partly Operational	3	65,410	\$7,910	25,000		20,000	12,500	\$65,410	\$65,410		\$65,410	\$0													
Karana District Kayak & Canoe Club Inc	Kookaburra Park	Karana Downs	PULLENVALE	BCC Lease	Sport	Canoe/Rowing	1			Completed	Operational Status	3	40,500	\$8,000			20,000	12,500	\$40,500	\$40,500		\$40,500	\$0													
Gold Crest Cricket Club	Finsbury St, Newmarket	NEWMARKET	CENTRAL	BCC Lease	Sport	Cricket	1			Completed	Partly Operational	3	72,500				\$60,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0													
Windsor Croquet Club Inc	47 Blackmore St	Windsor	HAMILTON	BCC Lease	Sport	Croquet	1			Contacted	Partly Operational	3	42,500	\$10,000			20,000	12,500	\$42,500	\$42,500		\$42,500	\$0													
Merthyr Croquet Club	Brunswick St	New Farm	CENTRAL	BCC Lease	Sport	Croquet	1			Completed	Partly Operational	3	37,500	\$5,000			20,000	12,500	\$37,500	\$37,500		\$37,500	\$0													
McIlwraith Croquet Club Inc	1 Auchenflower Tce	Auchenflower	TOOWONG	BCC Lease	Sport	Croquet	1			Contacted	Partly Operational	3	40,715	\$8,215			20,000	12,500	\$40,715	\$40,715		\$40,715	\$0													
Downey Park Netball Assoc Inc.	Green Tce	Windsor	CENTRAL	BCC Lease	Sport	Netball	1			Contacted	Partly Operational	3	52,500				40,000	12,500	\$52,500	\$52,500		\$52,500	\$0													
Corinda Horse and Pony Club Inc	Rinora St	Corinda	TENNYSON	BCC Lease	Sport	Pony Club				Completed	Partly Operational	3	57,000	\$4,500	\$20,000		\$20,000	\$12,500	\$57,000	\$57,000		\$57,000	\$0													
Southside Eagles Soccer Club Inc	Godwin St	Bulimba	MORNINGSIDE	BCC Lease	Sport	Soccer	1				Partly Operational	3	46,000	\$6,000			40,000		\$46,000	\$46,000		\$46,000	\$0													
Queensland Gaelic Football Association Inc.	318 Bowhill Rd, Willawong	WILLAWONG	RICHLANDS	BCC Lease	Sport	Sporting Club	1			Completed	Partly Operational	3	72,500				\$60,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0													
West Inala Junior Rugby League Football Club Inc.	289 Freeman Rd, Inala	INALA	RICHLANDS	BCC Owner	Sport	Rugby League	1			Contacted	Partly Operational	3	92,500		\$20,000		\$40,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0													
Queensland Canoeing	32A Argyle St	Albion	HAMILTON	BCC Lease	Sport	Canoe/Rowing				Completed	Full Operational	2	22,500				10,000	12,500	\$22,500	\$22,500		\$22,500	\$0													
Somerville House Rowing Facility	217 Brisbane Corso	Yeronga	TENNYSON	BCC Lease	Sport	Canoe/Rowing	1		1	Completed	Partly Operational	2	90,500	\$58,000		40,000	20,000	12,500	\$130,500		\$130,500	\$130,500	\$0													
West's Junior Rugby Union Club Inc	Sylvan Rd	Toowong	TOOWONG	BCC Lease	Sport	Rugby Union	1			Completed	Partly Operational	2	52,500						\$0	\$0		\$0	\$0													
Western Districts Rugby Football Club Ltd	Sylvan Rd	Toowong	TOOWONG	BCC Lease	Sport	Rugby Union	1			Completed	Partly Operational	2	52,500						\$0	\$0		\$0	\$0													
Eastern Suburbs District Rugby League Football Club Inc.	Main Ave, Coorparoo	COORPAROO	HOLLAND PARK	BCC Lease	Sport	Rugby League	1			Completed	Full Operational	1	112,500						\$0			\$0	\$0													
Newmarket Soccer Football Club Inc.	Badger St, Newmarket	NEWMARKET	CENTRAL	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	92,500				0	0	\$0	\$0		\$0	\$0													
Brisbane Force Soccer Club Inc.	289 Freeman Rd, Inala	INALA	RICHLANDS	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	72,500				0	0	\$0	\$0		\$0	\$0													
Kenmore Lions Soccer Inc.	38 Hepworth St, Kenmore	KENMORE	WATER TAYLOR	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	92,500				0	0	\$0	\$0		\$0	\$0													
Total BCC Leases Sport																															\$11,360,388				\$3,830,574	\$7,529,814
Non-BCC Groups																																				
Rocklea Soccer Club			TENNYSON	Non BCC	Sport	Soccer					Not Operational	5		\$60,000	20,000	30,000		60,000	12,500	\$182,500	\$72,500		\$72,500	\$110,000												
BRISBANE JAZZ CLUB			THE GABBA	Non BCC	Non Sport	Community Organisation	1				Partly Operational	4	172,500	\$100,000				60,000	12,500	\$172,500	\$0		\$0	\$172,500												

Chelmer Community Centre			TENNYSON	Non BCC	Non Sport	Community Organisation					Partly Operational	3					60,000	12,500	\$72,500	\$0		\$0	\$72,500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Oxley Senior Citizens Centre			RICHLANDS	Non BCC	Non Sport	Community Organisation					Partly Operational	3					60,000	12,500	\$72,500	\$0		\$0	\$72,500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Queensland Catholic Tennis Centre			MORNINGSIDE	Non BCC	Sport	Tennis					Partly Operational	3		\$20,000	20,000		20,000	12,500	\$72,500	\$72,500		\$72,500	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
NEW FARM NEIGHBOURHOOD CENTRE	New Farm Park, Dixon Street	New Farm	CENTRAL	Non BCC	Non Sport	Community Organisation	1				Full Operational	1	112,500						\$0	\$0		\$0	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Site	Address	Suburb	Ward	Tenure Type	Activity	Activity Type	No. Buildings	No. Field/Courts	No. Pontoons	First Contact Jan 2011	Second Contact 15/02/2011	Operational Status	Recovery Category	Original BCC Total estimate 07/02/10	Building Works 15/02/11	Field/Court Remediation Estimate 15/02/11	Field/Court Infrastructure Estimate 15/02/11	Pontoon Infrastructure Estimate 15/02/11	Building Fittings Estimate 15/02/11	Sport/ Building Equipment 15/02/11	Estimated Total Costs of Damage	State Government Flood Relief Eligibility	Other Funding Sources	Potential Funding Sources Available	Estimated Unallocated Costs
BCC LEASES NON-SPORT																									
Toowong Bridge Club Inc	22 Roy St		TOOWONG	BCC Lease	Non Sport	Community Organisation	1				Contacted	Partly Operational	4	\$250,648	\$145,648				80,000	25,000	\$250,648	\$0		\$0	\$250,648
Belbowrie Kindergarten & Preschool Association	47 Birkin Rd	Belbowrie	PULLENVALE	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	4	\$213,329	\$135,000		25,000		60,000	35,000	\$255,000	\$0	\$185,000	\$185,000	\$70,000
Benarawa Community Development Association Inc.	79 Waratah Ave, Graceville	GRACEVILLE	TENNYSON	BCC Lease	Non Sport	Community Organisation	1				Completed	Partly Operational	4	\$92,500					80,000	12,500	\$92,500	\$0	\$92,500	\$92,500	\$0
Indooroopilly Senior Citizens Club Inc.	60 Stamford Rd, Indooroopilly	INDOOROOPIILLY	WATER TAYLOR	BCC Lease	Non Sport	Community Organisation	1				Contacted	Partly Operational	3	\$112,500					100,000	12,500	\$112,500	\$0		\$0	\$112,500
Queensland Jewish Kindergarten Association Inc.	691-695 Fig Tree Pocket Rd, Fig Tree Pocket	FIG TREE POCKET	WATER TAYLOR	BCC Lease	Non Sport	Child Care	1				Contacted	Partly Operational	3	\$110,000			25,000		60,000	25,000	\$110,000	\$0		\$0	\$110,000
Chelmer Graceville Kindergarten Association Inc.	40 Acacia Ave	Graceville	TENNYSON	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	3	\$158,700	\$68,700		25,000		40,000	25,000	\$158,700	\$0	\$120,000	\$120,000	\$38,700
Queensland Association Of Four Wheel Drive Clubs Inc.	90 Muriel St	Moorooka	MOOROOKA	BCC Lease	Non Sport	Community Organisation	1				Completed	Partly Operational	3	\$22,500					20,000	12,500	\$32,500	\$0		\$0	\$32,500
St Thomas's Riverview Kindergarten Inc.	186 Macquarie Street	St Lucia	WALTER TAYLOR	BCC Lease	Non Sport	Child Care	1				Completed	Partly Operational	3	\$140,735	\$30,735		25,000		60,000	25,000	\$140,735	\$0	\$120,000	\$120,000	\$20,735
Northey Street City Farm Association Inc.	16 Victoria Street	Windsor	CENTRAL	BCC Lease	Non Sport	Community Organisation	1				Completed	Full Operational	1	\$64,319							\$0	\$0		\$0	\$0
Jamboree Community Kindergarten & Pre-School Association Inc.	61 Bearland St	Jindalee	JAMBOREE	BCC Lease	Non Sport	Child Care	1				Completed	Full Operational	1	\$90,000							\$0	\$0		\$0	\$0
Total BCC Leases Non-Sport																					\$1,162,583			\$517,500	\$635,083
BCC LEASES SPORT																									
Toowong Bowls Club Inc	59 Galleys Rd	Taringa	WALTER TAYLOR	BCC Lease	Sport	Bowls	1				Completed	Not Operational	5	283,593	\$151,093	\$40,000			\$80,000	\$12,500	\$283,593	\$72,500		\$72,500	\$211,093
Centenary Rowing	Summers Rd, Riverhills	RIVERHILLS	JAMBOREE	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	282,500				250,000	20,000	12,500	\$282,500	\$72,500		\$72,500	\$210,000
GPS Old Boys Rowing	10 Hill End Tce	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	81,500	\$49,000			200,000	20,000	12,500	\$281,500	\$72,500		\$72,500	\$209,000
Brisbane Grammar School Rowing Facility	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Not Operational	5	188,500	\$106,000			50,000	20,000	12,500	\$188,500			\$0	\$188,500
Australian Hellenic Sports & Cultural Association	230 Cansdale Street	Yeronga	TENNYSON	BCC Lease	Sport	Soccer	1				Completed	Not Operational	5	254,500	\$112,000	20,000	30,000		80,000	12,500	\$254,500	\$72,500		\$72,500	\$182,000
Jindalee Districts Australian Football Club Inc	48 Wongaburna St	Jindalee	JAMBOREE	BCC Lease	Sport	AFL	1	1			Completed	Not Operational	5	254,000	\$119,000	20,000	30,000		60,000	25,000	\$254,000	\$72,500		\$72,500	\$181,500
Yeronga Football Club Inc/AFLQ	Cansdale St	Yeronga	TENNYSON	BCC Lease	Sport	AFL	2	1			Completed	Not Operational	5	181,000	\$11,000	20,000	25,000		100,000	25,000	\$181,000	\$72,500		\$72,500	\$108,500
Oxley Sailing Club	142 Leybourne St	Chelmer	TENNYSON	BCC Lease	Sport	Canoe/Rowing	1				Completed	Not Operational	5	174,273	\$1,773			\$100,000	60,000	12,500	\$174,273	\$72,500		\$72,500	\$101,773
Carrington Boating Club Corinda Inc	Hilda St	Corinda	JAMBOREE	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Operational Status	5	112,500	\$60,000			50,000	40,000	12,500	\$162,500	\$72,500		\$72,500	\$90,000
Indooroopilly Canoe Club	209 Winton Rd	Indooroopilly	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Not Operational	5	282,017	\$19,517			100,000	20,000	12,500	\$152,017	\$72,500		\$72,500	\$79,517
Jindalee Bowls Club Inc	Cnr. Simmamoon and Yallambee Rds	Jindalee	JAMBOREE	BCC Lease	Sport	Bowls	1				Completed	Partly Operational	4	1,206,500	\$1,074,000	\$20,000			\$100,000	\$12,500	\$1,206,500	\$72,500		\$72,500	\$1,134,000
Western Districts Netball Association Inc.	18 Waratah Ave	Graceville	TENNYSON	BCC Lease	Sport	Netball	1				Completed	Partly Operational	4	442,500	\$150,000	440,000			80,000	12,500	\$682,500	\$72,500		\$72,500	\$610,000
Brisbane Basketball Inc	16 Dixon St	Auchenflower	TOOWONG	BCC Lease	Sport	Other	1				Contacted	Partly Operational	4	516,500	\$354,000				150,000	12,500	\$516,500	\$72,500		\$72,500	\$444,000
Belbowrie Sports & Recreation Club	Sugarwood St	Belbowrie	PULLENVALE	BCC Lease	Sport	Sporting Club	1				Completed	Partly Operational	4	456,500	\$244,000	50,000	50,000		100,000	12,500	\$456,500	\$72,500		\$72,500	\$384,000
Jindalee Golf Course	62 Yallambee Road	Jindalee	JAMBOREE	BCC Lease	Sport	Other	1				Contacted	Partly Operational	4	429,000	\$64,000	\$200,000	\$40,000		\$100,000	\$25,000	\$429,000	\$72,500		\$72,500	\$356,500
Sherwood Football Club Ltd	41 Chelmer St East	Chelmer	TENNYSON	BCC Lease	Sport	AFL	2	1			Completed	Partly Operational	4	412,500	\$260,000	20,000	20,000		100,000	12,500	\$412,500	\$72,500		\$72,500	\$340,000
South Brisbane Sailing Club	69 Hill End Tce	West End	THE GABBA	BCC Lease	Sport	Other	1		1		Completed	Partly Operational	4	594,000	\$69,000			200,000	80,000	25,000	\$374,000	\$72,500		\$72,500	\$301,500
Brothers St. Brendans Rugby League Football Club	619-622 Beaudesert Rd	Rocklea	CENTRAL	BCC Lease	Sport	Rugby League	1				Contacted	Partly Operational	4	309,362	\$106,862	\$80,000	\$30,000		\$80,000	\$12,500	\$309,362	\$72,500		\$72,500	\$236,862
South Brisbane District Cricket Club Inc	269 Vanner Rd	Fairfield	TENNYSON	BCC Lease	Sport	Cricket	1				Completed	Partly Operational	4	288,100	\$125,600	\$40,000	\$50,000		\$60,000	\$12,500	\$288,100	\$72,500		\$72,500	\$215,600
Oxley Bowls Club Inc	24-30 Englefield Rd	Oxley	RICHLANDS	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	247,110	\$134,610	20,000			80,000	12,500	\$247,110	\$72,500		\$72,500	\$174,610
Eastern Suburbs Soccer Club Ltd	48 Hilton St	Coorparoo	THE GABBA	BCC Lease	Sport	Soccer	1				Contacted	Partly Operational	4	218,500	\$76,000	20,000	30,000		80,000	12,500	\$218,500	\$72,500		\$72,500	\$146,000
Brisbane Rugby League Referees Association Inc	Cnr Fairfield Rd/Brougham St	Fairfield	THE GABBA	BCC Lease	Sport	Peak Body	1				Completed	Partly Operational	4	205,500	\$93,000	\$20,000	\$20,000		\$60,000	\$12,500	\$205,500	\$72,500		\$72,500	\$133,000
Centenary Combined Sporting Association Inc	141 Horizon Drive	Middle Park	JAMBOREE	BCC Lease	Sport	Sporting Club	1				Completed	Partly Operational	4	165,000					40,000	125,000	\$165,000	\$72,500		\$72,500	\$92,500
Davies Park Rowing Shed (Brisbane State High)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Contacted	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700			\$0	\$34,700
Davies Park Rowing Shed (All Hallows / Nudgee College)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700			\$0	\$34,700
Davies Park Rowing Shed (Commercial Rowing Club)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Canoe/Rowing	1				Completed	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700	\$34,700		\$34,700	\$0
Toowong Rowing Club & Pontoon	37 Keith St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1		1		Completed	Partly Operational	4	231,049	\$18,549			180,000	20,000	12,500	\$231,049	\$51,049	\$180,000	\$231,049	\$0

Davies Park Rowing Shed (Rowing Queensland)	150 Jane St	West End	THE GABBA	BCC Lease	Sport	Peak Body	1			Completed	Partly Operational	4	34,700	\$2,200				20,000	12,500	\$34,700	\$34,700		\$34,700	\$0
Western Districts Community & Sporting Club Ltd. (including Kenmore Bears, Bulldogs) Strikers, Sport, Recreation and Welfare Association Limited	55 Queencroft St, Chelmer	CHELMER	TENNYSON	BCC Lease	Sport	AFL	3	1		Completed	Partly Operational	4	112,500	\$241,671	20,000	30,000		100,000	12,500	\$404,171	\$72,500		\$72,500	\$331,671
	96 Abbotsford Rd	Mayne	HAMILTON	BCC Lease	Sport	Soccer	1				Partly Operational	3	286,500	\$84,000	80,000	50,000		60,000	12,500	\$286,500	\$72,500		\$72,500	\$214,000
Spanish Centre Ltd.	244 Mortimer Rd, Acacia Ridge	ACACIA RIDGE	MOOROOKA	BCC Lease	Sport	Soccer	1				Partly Operational	3	112,500		20,000			80,000	12,500	\$112,500			\$0	\$112,500
Churchie (Hazel Milman Tennis)	Hilton St	Coorparoo	THE GABBA	BCC Lease	Sport	Tennis	1	4			Partly Operational	3	155,523	\$18,023	80,000	25,000		20,000	12,500	\$155,523	\$72,500		\$72,500	\$83,023
Merthyr Bowls Club Inc (Norman Park)	43 Norman Ave	Norman Park	MORNINGSIDE	BCC Lease	Sport	Bowls	1			Completed	Partly Operational	3	149,500	\$32,000	40,000	25,000		40,000	12,500	\$149,500	\$72,500		\$72,500	\$77,000
Toowong Football Club	Cnr Roy St & Lang Pde	Auchenflower	TOOWONG	BCC Lease	Sport	Soccer	1			Contacted	Partly Operational	3	145,391	\$7,891	20,000	25,000		80,000	12,500	\$145,391	\$72,500		\$72,500	\$72,891
El Salvador Soccer Club Queensland Inc	Candale St	Yeronga	TENNYSON	BCC Lease	Sport	Soccer	1			Completed	Partly Operational	3	132,500	\$40,000	20,000	20,000		40,000	12,500	\$132,500	\$72,500		\$72,500	\$60,000
Lions Rugby Union Club Inc	37 Illawong Way	Karana Downs	PULLENVALE	BCC Lease	Sport	Rugby Union	1				Operational Status	3	129,000	\$11,500	\$40,000	\$25,000		\$40,000	\$12,500	\$129,000	\$72,500		\$72,500	\$56,500
Kenmore Churches Soccer Club Inc.	Gem Rd	Kenmore	PULLENVALE	BCC Lease	Sport	Soccer	1				Partly Operational	3	119,200	\$1,700	20,000	25,000		60,000	12,500	\$119,200	\$72,500		\$72,500	\$46,700
BBC Rowing	37 Keith St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Canoe/Rowing	1			Completed	Partly Operational	3	40,597	\$8,097				20,000	12,500	\$40,597			\$0	\$40,597
Souths Graceville Rugby League Club Inc. (formerly Southern Cross Rugby League Football Club Inc.)	247 Graceville Rd	Graceville	TENNYSON	BCC Lease	Sport	Rugby League	1				Partly Operational	3	113,000	\$28,000	\$20,000			\$40,000	\$25,000	\$113,000	\$72,500		\$72,500	\$40,500
Brisbane Lions AFL Club	Birubi St, Coorparoo	COORPAROO	THE GABBA	BCC Lease	Sport	AFL	1	1		Contacted	Partly Operational	3	112,500					100,000	12,500	\$112,500	\$72,500		\$72,500	\$40,000
Toombul Bowls Club	70 Flower St, Northgate	NORTHGATE	NORTHGATE	BCC Lease	Sport	Bowls	1			Completed	Partly Operational	3	112,500		20,000			80,000	12,500	\$112,500	\$72,500		\$72,500	\$40,000
New Farm United Junior Soccer Club Inc	Cnr Sydney & Brunswick Sts	New Farm	CENTRAL	BCC Lease	Sport	Soccer	1				Partly Operational	3	109,500	\$12,000	20,000	25,000		40,000	12,500	\$109,500	\$72,500		\$72,500	\$37,000
Metropolitan Districts Netball Association Inc.	Cnr Burke & Robinson Sts, Coorparoo	COORPAROO	THE GABBA	BCC Lease	Sport	Netball	1				Partly Operational	3	105,000		80,000	25,000				\$105,000	\$72,500		\$72,500	\$32,500
Booroodabin Bowls Club Inc.	126 Breakfast Creek Rd, Newstead	NEWSTEAD	HAMILTON	BCC Lease	Sport	Bowls	1				Partly Operational	3	92,500					80,000	12,500	\$92,500	\$72,500		\$72,500	\$20,000
West's (Brisbane) Junior Rugby League Football Club Inc.	Carwoola St, Bardon	BARDON	TOOWONG	BCC Lease	Sport	Rugby League	1				Partly Operational	3	92,500		\$20,000			\$80,000	\$12,500	\$92,500	\$72,500		\$72,500	\$20,000
Windsor Bowls Club	69 Blackmore St	Windsor	HAMILTON	BCC Lease	Sport	Bowls	1			Contacted	Partly Operational	3	77,577	\$45,077				20,000	12,500	\$77,577	\$72,500		\$72,500	\$5,077
Toowong Harriers Amateur Athletic Club Inc	66 Indooroopilly Rd	Toowong	WALTER TAYLOR	BCC Lease	Sport	Athletics	1	1		Completed	Partly Operational	3	22,500					10,000	12,500	\$22,500	\$22,500		\$22,500	\$0
St Lucia Bowls Club Inc	Carr St	St Lucia	WALTER TAYLOR	BCC Lease	Sport	Bowls	1			Contacted	Partly Operational	3	65,410	\$7,910		25,000		20,000	12,500	\$65,410	\$65,410		\$65,410	\$0
Karana District Kayak & Canoe Club Inc	Kookaburra Park	Karana Downs	PULLENVALE	BCC Lease	Sport	Canoe/Rowing	1			Completed	Operational Status	3	40,500	\$8,000				20,000	12,500	\$40,500	\$40,500		\$40,500	\$0
Gold Crest Cricket Club	Finsbury St, Newmarket	NEWMARKET	CENTRAL	BCC Lease	Sport	Cricket	1			Completed	Partly Operational	3	72,500					\$80,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0
Windsor Croquet Club Inc	47 Blackmore St	Windsor	HAMILTON	BCC Lease	Sport	Croquet	1			Contacted	Partly Operational	3	42,500	\$10,000				20,000	12,500	\$42,500	\$42,500		\$42,500	\$0
Merthyr Croquet Club	Brunswick St	New Farm	CENTRAL	BCC Lease	Sport	Croquet	1			Completed	Partly Operational	3	37,500	\$5,000				20,000	12,500	\$37,500	\$37,500		\$37,500	\$0
McIlwraith Croquet Club Inc	1 Auchenflower Tce	Auchenflower	TOOWONG	BCC Lease	Sport	Croquet	1			Contacted	Partly Operational	3	40,715	\$8,215				20,000	12,500	\$40,715	\$40,715		\$40,715	\$0
Downey Park Netball Assoc Inc.	Green Tce	Windsor	CENTRAL	BCC Lease	Sport	Netball	1			Contacted	Partly Operational	3	52,500					40,000	12,500	\$52,500	\$52,500		\$52,500	\$0
Corinda Horse and Pony Club Inc	Rinora St	Corinda	TENNYSON	BCC Lease	Sport	Pony Club				Completed	Partly Operational	3	57,000	\$4,500	\$20,000			\$20,000	\$12,500	\$57,000	\$57,000		\$57,000	\$0
Southside Eagles Soccer Club Inc	Godwin St	Bulimba	MORNINGSIDE	BCC Lease	Sport	Soccer	1				Partly Operational	3	46,000	\$6,000				40,000		\$46,000	\$46,000		\$46,000	\$0
Queensland Gaelic Football Association Inc.	318 Bowhill Rd, Willawong	WILLAWONG	RICHLANDS	BCC Lease	Sport	Sporting Club	1			Completed	Partly Operational	3	72,500					\$80,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0
West Inala Junior Rugby League Football Club Inc.	289 Freeman Rd, Inala	INALA	RICHLANDS	BCC Owner	Sport	Rugby League	1			Contacted	Partly Operational	3	92,500		\$20,000			\$40,000	\$12,500	\$72,500	\$72,500		\$72,500	\$0
Queensland Canoeing	32A Argyle St	Albion	HAMILTON	BCC Lease	Sport	Canoe/Rowing				Completed	Full Operational	2	22,500					10,000	12,500	\$22,500	\$22,500		\$22,500	\$0
Somerville House Rowing Facility	217 Brisbane Corso	Yeronga	TENNYSON	BCC Lease	Sport	Canoe/Rowing	1		1	Completed	Partly Operational	2	90,500	\$58,000			40,000	20,000	12,500	\$130,500		\$130,500	\$130,500	\$0
West's Junior Rugby Union Club Inc	Sylvan Rd	Toowong	TOOWONG	BCC Lease	Sport	Rugby Union	1			Completed	Partly Operational	2	52,500							\$0	\$0		\$0	\$0
Western Districts Rugby Football Club Ltd	Sylvan Rd	Toowong	TOOWONG	BCC Lease	Sport	Rugby Union	1			Completed	Partly Operational	2	52,500							\$0	\$0		\$0	\$0
Eastern Suburbs District Rugby League Football Club Inc.	Main Ave, Coorparoo	COORPAROO	HOLLAND PARK	BCC Lease	Sport	Rugby League	1			Completed	Full Operational	1	112,500							\$0			\$0	\$0
Newmarket Soccer Football Club Inc.	Badger St, Newmarket	NEWMARKET	CENTRAL	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	92,500					0	0	\$0	\$0		\$0	\$0
Brisbane Force Soccer Club Inc.	289 Freeman Rd, Inala	INALA	RICHLANDS	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	72,500					0	0	\$0	\$0		\$0	\$0
Kenmore Lions Soccer Inc.	38 Hepworth St, Kenmore	KENMORE	WATER TAYLOR	BCC Lease	Sport	Soccer	1			Completed	Full Operational	1	92,500					0	0	\$0	\$0		\$0	\$0
Total BCC Leases Sport																				\$11,360,388			\$3,830,574	\$7,529,814
Non BCC Groups																								
Rocklea Soccer Club			TENNYSON	Non BCC	Sport	Soccer					Not Operational	5		\$60,000	20,000	30,000		60,000	12,500	\$182,500	\$72,500		\$72,500	\$110,000
BRISBANE JAZZ CLUB			THE GABBA	Non BCC	Non Sport	Community Organisation	1				Partly Operational	4	172,500	\$100,000				60,000	12,500	\$172,500	\$0		\$0	\$172,500

Chelmer Community Centre			TENNYSON	Non BCC	Non Sport	Community Organisation						Partly Operational	3					60,000	12,500	\$72,500	\$0		\$0	\$72,500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Oxley Senior Citizens Centre			RICHLANDS	Non BCC	Non Sport	Community Organisation						Partly Operational	3					60,000	12,500	\$72,500	\$0		\$0	\$72,500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Queensland Catholic Tennis Centre			MORNINGSIDE	Non BCC	Sport	Tennis						Partly Operational	3		\$20,000	20,000		20,000	12,500	\$72,500	\$72,500		\$72,500	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
NEW FARM NEIGHBOURHOOD CENTRE	New Farm Park, Dixon Street	New Farm	CENTRAL	Non BCC	Non Sport	Community Organisation	1					Full Operational	1	112,500						\$0	\$0		\$0	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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CONFIDENTIAL BCC BOARD MATERIAL

Site	Ward	Activity Type	Operational Status	Estimated Total Costs of Damage	Funding Sources	Estimated Unallocated Costs
Jindalee Bowls Club Inc	JAMBOREE	Bowls	Partly Operational	\$922,500	432,500	490,000
Toowong Bowls Club Inc	WALTER TAYLOR	Bowls	Partly Operational	\$769,000	345,000	424,000
Scouts (Head Office)	TOOWONG	Scouts	Not Operational	\$469,000	180,000	289,000
Rocklea Agriculture & Industrial Association	MOOROOKA	Other	Partly Operational	362,500	175,000	187,500
Metropolitan Districts Netball Association Inc.	THE GABBA	Netball	Partly Operational	\$280,000	115,000	165,000
Brothers St. Brendans Rugby League Football Club	MOOROOKA	Rugby League	Partly Operational	\$442,500	297,500	145,000
Brisbane Basketball Inc	TOOWONG	Sporting Club	Partly Operational	\$612,500	482,500	130,000
Toowong Football Club	TOOWONG	Soccer	Partly Operational	\$228,400	136,415	91,985
Croatian Community Centre (Rocklea United Soccer Club)	TENNYSON	Soccer	Partly Operational	\$550,000	497,500	52,500
Jindalee Districts Australian Football Club Inc	JAMBOREE	AFL	Full Operational	\$338,500	297,500	41,000
Brisbane Jazz Club	THE GABBA	Community Organisation	Partly Operational	\$238,000	197,936	40,064
South Brisbane District Cricket Club Inc	TENNYSON	Cricket	Partly Operational	\$453,100	422,500	30,600
Yeronga Football Club Inc/AFLQ	TENNYSON	AFL	Partly Operational	252,500	227,500	25,000
Windsor Bowls Club	HAMILTON	Bowls	Partly Operational	\$45,077	27,100	17,977
Toowong Bridge Club Inc	TOOWONG	Other	Partly Operational	\$173,450	165,162	8,288

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Obedience Dog Club of Brisbane Inc.	RICHLANDS	Community Organisation	Partly Operational	\$44,596	37,410	7,186
New Farm United Junior Soccer Club Inc	CENTRAL	Soccer	Full Operational	\$12,000	5,000	7,000
Qld Russian Community Centre Inc.	The Gabba	Community Organisation		\$11,500	5,000	6,500
Ukrainian Association Queensland Ltd.	RICHLANDS	Community Organisation	Not Operational	\$70,000	63,705	6,295
McIntyre Centre Riding for Disabled Assoc.	PULLENVALE	Pony Club	Partly Operational	90,461	88,385	2,076
Kenmore Churches Soccer Club Inc.	PULLENVALE	Soccer	Full Operational	\$76,700	75,311	1,389
Oxley Bowls Club Inc	RICHLANDS	Bowls	Partly Operational	\$247,110	245,950	1,160
Karana District Kayak & Canoe Club Inc	PULLENVALE	Canoe/Rowing	Partly Operational	73,000	72,470	530
Queensland Association Of Four Wheel Drive Clubs Inc	MOOROOKA	Community Organisation	Partly Operational	\$21,000	20,600	400
St Margarets Anglican Girls School (Kedron Little Athletics)	HAMILTON	Athletics	Partly Operational	\$70,000	70,000	0
Centenary Combined Sporting Association Inc	JAMBOREE	Sporting Club	Full Operational	\$5,000	5,000	0
Merwood Football Club Ltd	TENNYSON	AFL	Partly Operational	\$312,500	312,500	0
Bellbowrie Sports & Recreation Club	PULLENVALE	Sporting Club	Partly Operational	\$366,500	366,500	0
Oxley Scouts	RICHLANDS	Scouts	Not Operational	\$5,000	5,000	0
Little Athletics Qld Inc	TENNYSON	Peak Body	Full Operational	\$5,000	5,000	0
Australian Hellenic Sports & Cultural Association	TENNYSON	Soccer	Partly Operational	\$175,000	175,000	0
Eastern Suburbs Football Club Ltd	THE GABBA	Soccer	Partly Operational	\$232,500	232,500	0

CONFIDENTIAL BCC BOARD MATERIAL

Chelmer Graceville Kindergarten Association Inc	TENNYSON	Child Care	Full Operational	\$125,000	125,000	0
YMCA (Strikers, Sport, Recreation and Welfare Association Limited)	HAMILTON	Soccer	Partly Operational	\$25,000	25,000	0
Western Districts Community & Sporting Club Ltd. (including	TENNYSON	Sporting Club	Not Operational	\$292,500	292,500	0
Kenmore District Junior Australian Football Club Inc	WALTER TAYLOR	AFL	Full Operational	\$6,388	6,388	0
BBC Rowing	WALTER TAYLOR	Canoe/Rowing	Full Operational	41,097	41,097	0
Bellbowrie Kindergarten & Preschool Association	PULLENVALE	Child Care	Full Operational	\$240,000	240,000	0
Benarrawa Community Development Association Inc.	TENNYSON	Community Organisation	Partly Operational	\$92,500	92,500	0
Booroodabin Bowls Club Inc.	HAMILTON	Bowls	Full Operational	\$5,000	5,000	0
Brisbane Grammar School Rowing Facility	THE GABBA	Canoe/Rowing	Not Operational	\$188,500	188,500	0
Brisbane Inner City Scouts	TOOWONG	Scouts	Not Operational	\$55,000	55,000	0
Brisbane Lions AFL Club	THE GABBA	AFL	Partly Operational	\$5,000	5,000	0
Brisbane Rugby League Referees Association Inc	TENNYSON	Peak Body	Partly Operational	205,500	213,530	0
Brisbane Softball	CENTRAL	Softball	Full Operational	0	5,000	0
Brisbane Womens Hockey Association Inc.	CENTRAL	Hockey	Full Operational	45,000	45,000	0
Bulimba Guides	MORNINGSIDE	Guides	Full Operational	\$0	5,000	0
Bulimba Senior Citizens Club	MORNINGSIDE	Community Organisation	Full Operational	\$0	5,000	0
Carrington Boating Club Corinda Inc	JAMBOREE	Canoe/Rowing	Not Operational	\$78,140	78,140	0

CONFIDENTIAL BCC BOARD MATERIAL

Centenary Rowing	JAMBOREE	Canoe/Rowing	Not Operational	277,500	277,500	0
Corinda Horse and Pony Club Inc	TENNYSON	Pony Club	Partly Operational	197,657	197,657	0
Davies Park Rowing Shed (All Hallows / Nudgee College)	THE GABBA	Canoe/Rowing	Full Operational	\$5,000	10,000	0
Davies Park Rowing Shed (Brisbane State High)	THE GABBA	Canoe/Rowing	Full Operational	\$5,000	5,000	0
Davies Park Rowing Shed (Commercial Rowing Club)	THE GABBA	Canoe/Rowing	Full Operational	5,000	5,000	0
Davies Park Rowing Shed (Rowing Queensland)	THE GABBA	Peak Body	Full Operational	5,000	5,000	0
Downey Park Netball Assoc Inc.	CENTRAL	Netball	Full Operational	0	5,000	0
East Brisbane Guides	EAST BRISBANE	Guides	Partly Operational	\$0	5,000	0
El Salvador Soccer Club Queensland Inc	TENNYSON	Soccer	Partly Operational	102,500	105,500	0
GPS Old Boys Rowing	THE GABBA	Canoe/Rowing	Not Operational	\$266,231	397,500	0
Graceville Sea Scouts	TENNYSON	Scouts	Not Operational	\$155,000	155,000	0
Guides Queensland (Loggill)	Pullenvale	Guides	Not Operational	\$53,017	53,197	0
Indooroopilly Canoe Club	WALTER TAYLOR	Canoe/Rowing	Full Operational	\$109,725	109,725	0
Jamboree Community Kindergarten & Pre-School Association Inc	JAMBOREE	Child Care	Full Operational	\$0	5,000	0
Kenmore Lions Soccer Inc.	WATER TAYLOR	Soccer	Full Operational	\$0	5,000	0
Lions Rugby Union Club Inc	PULLENVALE	Rugby Union	Partly Operational	\$67,959	67,959	0
McIlwraith Croquet Club Inc	TOOWONG	Croquet	Full Operational	\$77,150	82,150	0

CONFIDENTIAL BCC BOARD MATERIAL

Merthyr Bowls Club Inc (Norman Park)	MORNINGSID E	Bowls	Full Operational	\$71,834	71,834	0
Merthyr Croquet Club	CENTRAL	Croquet	Partly Operational	\$25,211	30,211	0
Milton Park Scouts	TOOWONG	Scouts	Not Operational	\$105,000	105,000	0
New Farm Neighbourhood Centre	CENTRAL	Community Organisation	Full Operational	\$0	5,000	0
Northey Street City Farm Association Inc	CENTRAL	Community Organisation	Full Operational	\$5,000	5,000	0
Oxley Sailing Club	TENNYSON	Canoe/Rowing	Full Operational	\$12,732	12,732	0
Queensland Canoeing	HAMILTON	Canoe/Rowing	Full Operational	\$0	5,000	0
Queensland Gaelic Football Association Inc.	RICHLANDS	Sporting Club	Partly Operational	\$122,530	127,529	0
Queensland Jewish Kindergarten Association Inc.	WATER TAYLOR	Child Care	Full Operational	\$0	5,000	0
Scouts Queensland Jindalee	JAMBOREE	Scouts	Not Operational	59,100	59,100	0
Somerville House Rowing Facility	TENNYSON	Canoe/Rowing	Partly Operational	130,500	130,500	0
South Brisbane Sailing Club	THE GABBA	Other	Partly Operational	\$135,900	135,900	0
Souths Graceville Rugby League Club Inc. (formerly Southern	TENNYSON	Rugby League	Partly Operational	\$242,500	242,500	0
Souths Leagues Club	THE GABBA	Rugby League		30,355	30,355	0
Southside Eagles Soccer Club Inc	MORNINGSID E	Soccer	Partly Operational	\$170,000	170,000	0
St Lucia Bowls Club Inc	WALTER TAYLOR	Bowls	Full Operational	\$9,216	14,216	0
St Thomas's Riverview Kindergarten Inc.	WALTER TAYLOR	Child Care	Partly Operational	\$120,000	120,000	0

CONFIDENTIAL BCC BOARD MATERIAL

Tennyson Scout Hut	TENNYSON	Scouts	Not Operational	\$80,000	80,000	0
Toowong Harriers Amateur Athletic Club Inc	WALTER TAYLOR	Athletics	Partly Operational	\$78,500	78,500	0
Toowong Rowing Club & Pontoon	WALTER TAYLOR	Canoe/Rowing	Partly Operational	236,098	236,098	0
Western Districts Netball Association Inc	TENNYSON	Netball	Partly Operational	682,500	684,000	0
Western Districts Rugby Football Club Ltd (seniors)	TOOWONG	Rugby Union	Full Operational	\$25,000	25,000	0
Windsor Croquet Club Inc	HAMILTON	Croquet	Full Operational	\$6,751	11,751	0
Brisbane Canoeing	TENNYSON	Canoe/Rowing	Partly Operational	5,000	8,104	0
Brothers Rugby Union	HAMILTON	Rugby Union	Full Operational	\$5,000	5,000	0
Centenary Archers Club Inc	RICHLANDS	Other	Partly Operational	5,000	8,768	0
Darra Community Group	RICHLANDS	Community Organisation	Partly Operational	\$13,500	13,500	0
Fig Tree Pocket Equestrian Club	WALTER TAYLOR	Pony Club	Partly Operational	9,800	9,800	0
Pankoakos Association Hippocratis of Qld Inc	MOOROOKA	Community Organisation	Partly Operational	5,546	7,750	0
Rocks Community Gardens Inc	JAMBOREE	Community Organisation	Partly Operational	\$30,000	30,000	0
Underwater Research Club	TENNYSON	Other	Partly Operational	18,900	23,900	0
West's Junior Rugby Union Club Inc	TOOWONG	Rugby Union	Full Operational	\$25,000	25,000	0
Yarawa Pony Club	PULLENVALE	Pony Club	Partly Operational	22,260	22,260	0
Davies Park Jetty1 (Commercial Rowing)	THE GABBA	Canoe/Rowing	Full Operational	\$95,000	100,000	0

CONFIDENTIAL BCC BOARD MATERIAL

Davies Park Jetty2	THE GABBA	Canoe/Rowing	Not Operational	\$200,000	340,000	0
Davies Park Jetty3 (Qld Rowing)	THE GABBA	Canoe/Rowing	Full Operational	\$104,000	110,000	0
Queensland Volleyball Association	The Gabba	Other	Full Operational	52,847	52,847	0
Ridgewood Heights Pony Club	TENNYSON	Pony Club	Full Operational	56,400	56,400	0
Bald Hills Lawnton Lions Cricket Club Inc	BRACKEN RIDGE	Cricket	Full Operational	\$5,000	5,000	0
The Following sites suffered flood damage & have not been monitored due to commerciality, asset relocation or responsibility of other part of Council.						
RSPCA	TENNYSON	Community Organisation	Partly Operational	\$163,588	5,000	158,588
Queensland Maritime Museum Assoc.	THE GABBA	Community Organisation	Partly Operational	\$0	5,000	0
BRIC Units 1,2&3	HAMILTON	Other	Full Operational	\$4,130	0	4,130
4Walls	THE GABBA	Other	Full Operational	\$3,215	0	3,215
Spirius/Anglican Womens	HAMILTON	Other	Full Operational	\$673	0	673
Mangrove	DOBOY	Other	Full Operational	\$407	0	407
Oxley Golf Club	RICHLANDS	Golf	Partly Operational	\$479,000	85,000	394,000
Indooroopilly Golf Club	WALTER TAYLOR	Golf	Partly Operational	\$392,500	166,727	225,773
Jindalee Golf Course	JAMBOREE	Golf	Partly Operational	\$269,000	177,500	91,500

CONFIDENTIAL BCC BOARD MATERIAL

Wolston Park Golf Club	RICHLANDS	Golf	Partly Operational	\$231,000	205,156	25,844
Gailes Golf Club Inc.	RICHLANDS	Golf		150,000	151,100	0
The McLeod Country Club	JAMBOREE	Golf	Partly Operational	85,000	85,000	0

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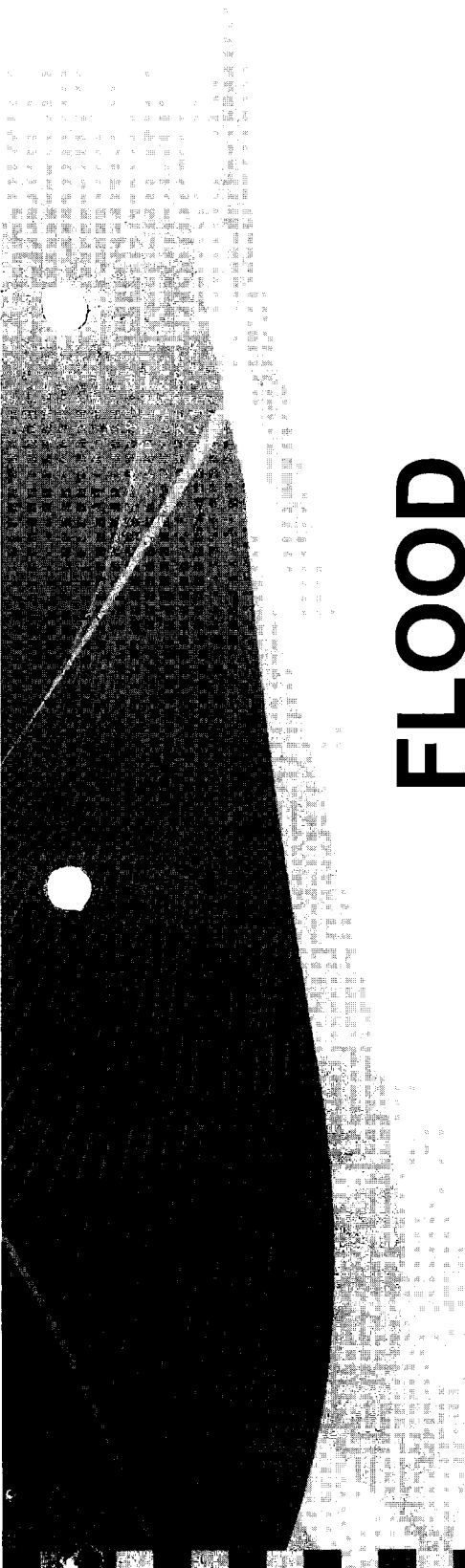
Grant ID	Name of Organisation	Grant Amount
FRG00001	Brothers Saint Brendans Rugby League Football Club	\$170,000
FRG00012	Brisbane Basketball Incorporated	\$170,000
FRG00010	Bellbowrie Sport and Recreation Club	\$170,000
FRG00002	Obedience Dog Club of Brisbane Inc.	\$19,490
FRG00005	Pankoakos Association O'Hippocratis of Qld Inc.	\$2,750
FRG00017	Sherwood Australian Football Club	\$170,000
FRG00024	AFL Queensland Ltd. (Yeronga AFL Club Inc.)	\$150,000
FRG00006	Corinda Horse and Pony Club Inc.	\$90,157
FRG00027	Indooroopilly Canoe Club Inc.	\$42,225
FRG00031	Oxley Golf Club	\$20,000
FRG00021	South Brisbane Cricket Club Inc.	\$170,000
FRG00029	Toowong Bowls Club	\$170,000
FRG00035	Croatian Community Centre Ltd. (Rocklea United Soccer Club Inc.)	\$170,000
FRG00004	Eastern Suburbs Football Club Ltd.	\$79,995

Grant ID	Name of Organisation	Grant Amount
FRG00013	Jindalee Districts Australian Football Club Inc.	\$170,000
FRG00042	Darra Community Group Inc.	\$7,500
FRG00025	Indooroopilly Golf Club Ltd.	\$89,727
FRG00030	Jindalee Bowls Club Inc.	\$170,000
FRG00040	Toowong Bridge Club Inc.	\$72,162
FRG00038	Western Districts Netball Association Inc.	\$150,000
FRG00018	Brisbane Rugby League Referees Association Inc.	\$107,767
FRG00028	Jindalee Golf Club Inc.	\$100,000
FRG00050	Metropolitan Districts Netball Association Inc.	\$20,000
FRG00036	Pony Riding for the Disabled Association Inc. (McIntyre Centre)	\$83,385
FRG00011	Toowong Football Club Inc.	\$77,000
FRG00047	Ukrainian Association of Queensland Ltd.	\$53,705
FRG00048	Western Districts Rugby Football Club Ltd.	\$20,000
FRG00041	West's Junior Rugby Union Club Inc.	\$20,000

Grant ID	Name of Organisation	Grant Amount
FRG00044	Windsor Bowls Club Inc.	\$22,100
FRG00057	Carrington Boating Club Corinda Inc.	\$73,140
FRG00073	Fig Tree Pocket Equestrian Club Inc.	\$4,800
FRG00070	Girl Guides Queensland (Moggill)	\$30,147
FRG00055	Oxley Bowls Club Inc.	\$170,000
FRG00068	McLeod Country Golf Club Ltd.	\$20,000
FRG00051	McIlwraith Croquet Club Inc.	\$23,500
FRG00075	Queensland Association of Four Wheel Drive Clubs Inc.	\$15,600
FRG00039	Queensland Gaelic Football Association Inc.	\$23,279
FRG00054	Rocklea Agricultural & Industrial Association Inc.	\$170,000
FRG00061	Scout Association of Australia QLD Branch Inc. (Brisbane Inner-city)	\$50,000
FRG00043	South Brisbane Sailing Club Inc.	\$58,400
FRG00076	St Thomas's Riverview Kindergarten Inc.	\$31,354
FRG00064	Toowong Harriers Branch Little Athletics Centre Inc.	\$47,000

Grant ID	Name of Organisation	Grant Amount
FRG00060	Western Districts Community & Sporting Club Ltd.	\$150,000
FRG00052	Windsor Croquet Club Inc.	\$6,751
FRG00072	Brisbane Boys' College Rowing Club Inc.	\$13,000
FRG00065	Centenary Rowing Club Inc.	\$150,000
FRG00034	Gailes Golf Club Inc.	\$75,000
FRG00071	Underwater Research Group of Queensland Inc.	\$18,900
FRG00007	Wolston Park Golf Club Inc.	\$127,656
FRG00053	Brisbane Jazz Club Inc.	\$149,936
FRG00067	Rocks Community Garden Inc.	\$30,000
FRG00056	Souths Graceville Rugby League Club Inc.	\$165,000
FRG00022	Southside Eagles Football Club Inc.	\$20,000
FRG00045	Scout Association of Australia QLD Branch Inc. (Pamphlett Sea Scout Group)	\$150,000
FRG00046	Scout Association of Australia QLD Branch Inc. (Milton)	\$100,000
FRG00062	Scout Association of Australia QLD Branch Inc. (Tennyson)	\$75,000

Grant ID	Name of Organisation	Grant Amount
FRG00063	Scout Association of Australia QLD Branch Inc. (West Centenary Scout Group - Jindalee)	\$54,100



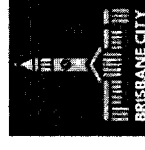
FLOOD SPECIAL BUDGET REVIEW

Joint LMERC / CHAIR / EMT

MEETING

Funding strategies

11 February 2011



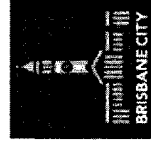
Dedicated to a better Brisbane

Preliminary Flood and Rain Impact

Summary	Last Week \$m	@ 7 Feb (Media) \$m
Road network (incl broader deluge impacts)	29.6	137.3
Floating riverwalk	50.0	75.0
Ferry terminals	100.0	70.0
Parks	14.4	38.8
Other structures	20.4	29.1
Property	14.2	14.2
Stormwater	1.0	9.1
IT Assets	0.4	0.4
Asset Impact	230.0	373.9
Response cost	61.3	61.3
Lost revenue	5.4	5.4
Total	296.7	440.6

Note:

- 1) Does not include increased flood resilience standards (other than Floating Riverwalk)
- 2) Does not include the Volunteering effort which has saved the City, its residents and insurers \$M's



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Summary Position Summary - combining impact and funding strategies

Summary - Preliminary Position 14/2/11

Approved Budget 30/6/2011

Less: Special Budget (flood) Submissions

	2010-11 \$,000	2011-12 \$,000	2012-13 \$,000	2013-14 \$,000	2014-15 \$,000	Total \$,000
Response Costs	-50,325	-10,975	0	0	0	-61,300
Reduced revenue	-6,400	1,034	0	0	0	-5,366
Capital - ASC damage (broad estimate in submissions)	-58,974	0	0	0	0	-58,974
Less: Restoration works identified by ASC	0	-275,026	-40,000			-315,026
Less: Contingency for as yet unquantified operational impacts	-10,000	-5,000				-15,000
Sub total	-125,339	-289,967	-40,000	0	0	-455,666

Less: Funding Strategies (total)

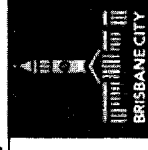
Expense	28,565	43,593	17,277	14,154	11,611	115,200
Revenue	-725	-45,131	-65,762	-35,518	68,076	-79,060
Capital	36,963	176,319	190,934	72,542	-135,615	341,143
Sub total- Funding Gap	-60,536	-115,186	102,449	51,178	-55,928	-78,383

Less: Income targets under threat

Bus Depot (timing)	0	0	0	0	0	0
Significant disposal proceeds - Incl S2026	-65,000	40,000	25,000			0
Subsidies and Grants - aggressive KPI's	-32,000					-32,000
QUU income	0	0				0
Sub total	-157,536	-75,186	127,449	51,178	-55,928	-110,383

Funding Sources

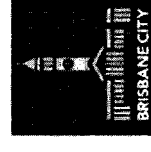
EMQ - Grants	15,000	15,000	6,000	0	0	36,000
Insurance (assumes QUU fully funded via NDRRA)	21,000	30,000	5,000			56,000
NDRRA Claims	38,000	235,000	35,000	0		308,000
Total	-83,536	204,814	173,449	51,178	-55,928	289,617



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NDRRA Risks / Options

	Total	Risks	Options
Ferry Terminals	70	63.5	<ul style="list-style-type: none"> - All terminals - Private donation - Borrow
Floating Riverwalk	75	75	<ul style="list-style-type: none"> - Replace as is - Not do
Roads Degredation	90	90	<ul style="list-style-type: none"> - Defer - Reprioritise
QUU	50	50	<ul style="list-style-type: none"> - Dividend hit - Increased water rates
Property / Community Assets	9	9	<ul style="list-style-type: none"> - Donations - Insurance
Stormwater	9	9	<ul style="list-style-type: none"> - Reprioritise
	303	296.5	



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Funding Strategies

Increase borrowings



Credit downgrade risk



Future financial risk

Use Reserves

(use this year but have replacement plan)

Cut Programs / Core



Achieve Operating Margin



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MEMORANDUM

Brisbane City Council

Colin Jensen, Chief Executive Officer

To: [REDACTED] City

CC: [REDACTED]

Date: 25 March 2011

From: [REDACTED] A/Financial Performance Manager

Re: 2010-11 Third Budget Review

Corporate Finance Branch
Corporate Services Division

Level 20, 266 George Street
GPO Box 1434
Brisbane Qld 4001

Phone: [REDACTED]
Facsimile: [REDACTED]
Email: [REDACTED]
Internet: www.brisbane.qld.gov.au

EMT will meet to consider the 2010-11 Third Budget Review at the meeting scheduled for Friday 1 April 2011.

Overview

The purpose of the Third Budget Review is to:

- address funding strategies to accommodate Counter Disaster Recovery (CDR), Emergent Works and loss of Revenue that resulted from the January Flood impact for the 2010-11 financial year and forward years
- endorse E&C budget submissions and additional requests for 2010-11 and forward years funding
- forecast the anticipated position at the end of June to determine the opening surplus and cash position for the 2010-11 budget.

Snapshot of Financial Position:

(\$000)

Approved Budget 30/6/11	Opex	Capital	360
Program Submissions			
Flood Impacts	-81,082	-37,693	-118,775
Funding Strategies	25,864	38,488	64,352
Other Third Budget Review submissions	136,855	17,561	-119,294
REVISED SURPLUS 30/6/11			-173,357
Adjustment to Loan repayments	2,186		2,186
QRA payment for Damaged Assessment	54,000		54,000
Late submission (not in pack):			
- PHS33	-70		-70
- PT05	-2,000		-2,000

FORECAST CLOSING BALANCE 30/6/11 -119,241

At a joint LMERC / EMT / CHAIR meeting 14th February 2011, the value of the estimated Flood Impacts and Funding Strategies were \$115.7m and \$64.8m respectively, making the net impact of the Flood event at -\$50.9m for 2010-11.

The above Impacts and Funding Strategy submissions now net to -\$54.4m, a variance -\$3.5m from 14 February 2011 Meeting.

The additional Third Budget Review submissions, totalling -\$119.2m, include:

1. Carryover of asset sales of \$55m to 2011-12
2. Reduction to the General Grant target - \$30.8m
3. Reduction in QUU interest revenue - \$23.3m

Items one (1) and two (2) above were flagged as income targets under threat during the 14th February meeting.

Net Carryovers to 2011-12

Net carryovers of approx. \$64m mainly comprise:

- Moving Brisbane \$36.7m
 - \$3m - Inala Ave - King Ave Stage 1 - Blunder Rd to Sherbrooke Rd
 - \$2m - Kingsford Smith Drive - Future Upgrade
 - \$1.5m - Wacol Station Road Interim Upgrade
 - \$2m - Blunder Stage 6
 - \$27.6m - TransApex - Legacy Way
- City Governance \$11.2m
 - \$6m - Howard Smith Wharves
 - \$2.6 - CityDocs - Document Management System
- Your Brisbane \$10.1m
 - \$8.9m - City Hall Rebuilding Program

More detailed information on Carryovers will be provided during the Corporate Finance overview presentation prior to the meeting.

Link to YTD Performance

At the end of February, our operating capability is \$58.4m unfavourable to budget. This variance is mainly driven by a shortfall in revenue totalling \$76.3m (\$50m Legacy Way – timing), partially offset by lower than budgeted expenses of \$17.9m.

Significant revenue variances include the Federal Government funds for Legacy Way construction \$50m received in March 2011; Penalty infringement income \$11.3m and reimbursements expected from Queensland Urban Utilities \$12.3m under budget. Interest revenue is trailing budget by \$10.5m. Donated assets are \$8.8m more than budget.

Expenditure is over in employee costs mainly due to the January floods. Other expenses are lower than budget with the start of Legacy Way construction delayed and key change agenda projects rescheduled after the floods.

The full year capital expenditure of \$718.9m (adjusted to exclude \$229.3m for Legacy Way and \$38.5m for flood funding strategies) has a balance of \$326.9m for March to June to achieve budget. This is an average monthly target of \$81.7m. It still remains an ambitious target considering that for the first 8 months of the year capitalised expenses have averaged \$49m per month.

Action Required

In preparation for next Friday's meeting would you please reconsider your submissions, and rigorously review your Divisional/Program and Business Unit forecasts to identify funding strategies that we can build into the Third Review. Please concentrate on:

- *The identification of savings*
- *Reprioritisation of projects (where possible)*
- *Review revenue forecasts*
- *Carryover of additional projects – note that this ultimately impacts negatively on the opening position for the 2011-12 Financial Year.*

Refer to **Attachment 1** – this provides a summary of the Third Review by Program/Business. This 'decision pack' includes the 2010-11 Third Budget Review submissions received from all Programs and Businesses. Each Program and Business has provided a summary overview of its submissions, transfers and recommended funding strategies where available. The pack consists of two sections. The first section shows 2010-11 changes and the second section shows changes for forward years.

Colour A3 sized papers have been used to denote types of submissions: green= flood impacts, yellow = funding strategies and white = other Third Budget Review submissions.

A more detailed analysis of the impact of the Review will be presented to EMT at the meeting on Friday 1 April 2011. In the interim, should you have any queries please contact me on [REDACTED] or [REDACTED]

[REDACTED]
A/Financial Performance Manager

Attachment 1

Third Budget Review - Consolidated

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-12,659	1,529	0	-1,378	8,782	-3,727
Program 2 WaterSmart City	-5,875	0	0	1,943	6,716	2,784
Program 3 Moving Brisbane	-8,847	129	-5,155	-17,722	2,265	-19,020
Program 4 Future Brisbane	6,914	0	0	-6,083	-3,531	-2,700
Program 5 Your Brisbane	-279	653	0	-12,339	7,342	-4,623
Program 6 Subtropical City - Parks and Recreation	-4,280	0	0	-387	2,687	-1,990
Program 7 Public Health and Safety	-35,486	0	0	0	33,135	-2,351
Program 8 Economic Development	39	0	0	0	-39	0
Program 9 Customer Focus	713	0	0	3,822	-4,635	-100
Program 10 City Governance	-112,427	-1,200	-55,100	14,078	-6,499	-50,948
Subtotal Programs	-172,188	1,111	-60,255	-18,076	46,223	-82,676
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	-1,118	-72	0	-168	18,783	17,425
Brisbane Transport	1,409	0	0	-75	-9,307	-7,973
City Business	-1,820	-196	0	-37	-1,926	-3,979
City Design	0	0	0	0	0	0
Subtotal Business Units	-1,528	-268	0	-280	7,550	5,473
Total	-173,717	842	-60,255	-18,356	53,773	-77,202

Third Budget Review – Flood Impacts

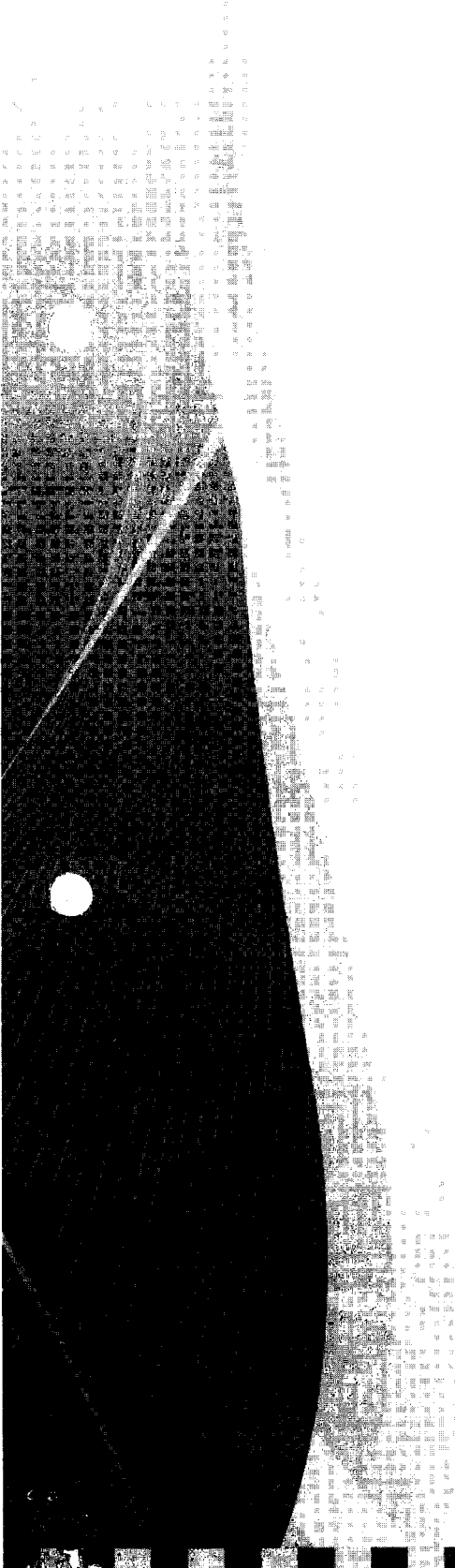
Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-16,120	0	0	0	15,081	-1,029
Program 2 WaterSmart City	-10,921	0	0	3,400	7,521	0
Program 3 Moving Brisbane	-36,159	0	0	30,760	1,427	-3,972
Program 4 Future Brisbane	0	0	0	0	0	0
Program 5 Your Brisbane	-9,881	0	0	2,683	7,010	-188
Program 6 Subtropical City - Parks and Recreation	-4,415	0	0	950	3,465	0
Program 7 Public Health and Safety	-32,606	0	0	0	32,165	-441
Program 8 Economic Development	0	0	0	0	0	0
Program 9 Customer Focus	-530	0	0	0	530	0
Program 10 City Governance	-6,498	0	0	-100	6,598	0
Subtotal Programs	-117,130	0	0	37,693	73,807	-5,630
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	0	0	0	0	0	0
Brisbane Transport	0	0	0	0	0	0
City Business	-1,645	0	0	0	654	-991
City Design	0	0	0	0	0	0
Subtotal Business Units	-1,645	0	0	0	654	-991
Total	-118,775	0	0	37,693	74,461	-6,621

Third Budget Review – Funding Strategies

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	4,011	0	0	-1,674	-2,437	-100
Program 2 WaterSmart City	5,802	0	0	-4,602	-1,200	0
Program 3 Moving Brisbane	19,269	0	0	-17,094	-2,175	0
Program 4 Future Brisbane	5,272	0	0	-4,221	-1,051	0
Program 5 Your Brisbane	1,640	0	0	-470	-1,170	0
Program 6 Subtropical City - Parks and Recreation	3,223	0	0	-2,327	-896	0
Program 7 Public Health and Safety	175	0	0	0	-175	0
Program 8 Economic Development	0	0	0	0	0	0
Program 9 Customer Focus	215	0	0	0	-215	0
Program 10 City Governance	24,745	0	0	-8,100	-16,585	60
Subtotal Programs	64,352	0	0	-38,488	-25,904	-40
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	0	0	0	0	0	0
Brisbane Transport	0	0	0	0	0	0
City Business	0	0	0	0	0	0
City Design	0	0	0	0	0	0
Subtotal Business Units	0	0	0	0	0	0
Total	64,352	0	0	-38,488	-25,904	-40

Third Budget Review – Other

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-551	1,529	0	296	-3,872	-2,596
Program 2 WaterSmart City	-756	0	0	3,145	395	2,784
Program 3 Moving Brisbane	8,043	129	-5,155	-31,368	3,013	-15,048
Program 4 Future Brisbane	1,642	0	0	-1,862	-2,480	-2,700
Program 5 Your Brisbane	7,962	653	0	-14,552	1,502	-4,435
Program 6 Subtropical City - Parks and Recreation	-3,088	0	0	951	118	-1,990
Program 7 Public Health and Safety	-3,055	0	0	0	1,145	-1,910
Program 8 Economic Development	39	0	0	0	-39	0
Program 9 Customer Focus	1,028	0	0	3,822	-4,950	-100
Program 10 City Governance	-130,674	-1,200	-55,100	22,278	3,488	-51,008
Subtotal Programs	-119,410	1,111	-60,255	-17,261	-1,680	-77,006
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	-1,118	-72	0	-168	18,783	17,425
Brisbane Transport	1,406	0	0	-75	-9,307	-7,973
City Business	-175	-196	0	-37	-2,580	-2,988
City Design	0	0	0	0	0	0
Subtotal Business Units	117	-268	0	-280	6,896	6,464
Total	-119,294	842	-60,255	-17,561	5,216	-70,541



2010-11 THIRD BUDGET REVIEW EMT MEETING

1 April 2011

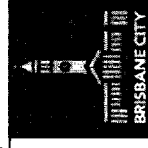


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Preliminary Position Summary - combining impact and funding strategies

Summary - Preliminary Position 14/2/11	2010-11 \$,000	2011-12 \$,000	2012-13 \$,000	2013-14 \$,000	2014-15 \$,000	Total \$,000
Approved Budget 30/6/2011	360					
Less: Special Budget (flood) Submissions						
Response Costs	-50,325	-10,975	0	0	0	-61,300
Reduced revenue	-6,400	1,034	0	0	0	-5,366
Capital - ASC damage (broad estimate in submissions)	-58,974	0	0	0	0	-58,974
Less: Restoration works identified by ASC	0	-275,026	-40,000			-315,026
Less: Contingency for as yet unquantified operational impacts	-10,000	-5,000				-15,000
Sub total	-125,339	-289,967	-40,000	0	0	-455,666
Less: Funding Strategies (total)						
Expense	28,565	43,593	17,277	14,154	11,611	115,200
Revenue	-725	-45,131	-65,762	-35,518	68,076	-79,060
Capital	36,963	176,319	190,934	72,542	-135,615	341,143
Sub total- Funding Gap	-60,536	-115,186	102,449	51,178	-55,928	-78,383
Less: Income targets under threat						0
Bus Depot (timing)	0	0	0	0	0	0
Significant disposal proceeds - Incl S2026	-65,000	40,000	25,000			0
Subsidies and Grants - aggressive KPI's	-32,000					-32,000
QUU income	0	0				0
Sub total	-157,536	-75,186	127,449	51,178	-55,928	-110,383
Funding Sources						
EMQ - Grants	15,000	15,000	6,000	0	0	36,000
Insurance (assumes QUU fully funded via NDRRA)	21,000	30,000	5,000			56,000
NDRRA Claims	38,000	235,000	35,000	0		308,000
Total	-83,536	204,814	173,449	51,178	-55,928	289,617

This was the forecast preliminary position at 14 February 2011.....



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January Flood

Approved Budget 30/6/2011	2010-11 \$,'000	2010-11 \$,'000
Flood Impact costs	-115,699	-118,775
Flood Funding strategies	64,803	64,352
Less contingency	-10,000	0
Less: Income targets under threat		
Significant disposal proceeds - Incl S2026	-65,000	-55,000
Subsidies and Grants - aggressive KPI's	-32,000	-30,800
QUU income	0	-23,300
Funding Sources		
EMQ - Grants	15,000	21,700
Insurance (assumes QUU fully funded via NDRRA)	21,000	7,350
NDRRA Advance	38,000	54,000
Total	-83,536	-80,113
Other 3BR Submissions		
Mix of Carryovers, Bring Forwards, Savings, scope changes - see next slides		2,572
Forecast Total	-83,536	-77,541



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MEMORANDUM

Brisbane City Council

To: Councillor Graham Quirk, A/Lord Mayor
Colin Jensen, Chief Executive Officer
Councillor Adrian Schinner
Deputy Mayor, Chairman Economic,
Finance & Administration Committee
Councillor Ian McKenzie
Deputy Chairman Finance &
Administration Committee

Date: 7 April 2011

CC: [Redacted]

From: [Redacted]

Re: 2010-11 Third Budget Review

Corporate Finance Branch Corporate Services

Level 20, Brisbane Square
266 George Street
GPO Box 1434
Brisbane Qld 4001

Phone: [Redacted]
Facsimile: [Redacted]
Email: [Redacted]
Internet: [Redacted]

The LMERC Budget Review Committee will meet on Wednesday 13th April to consider the draft Third Budget Review. Committee Chairmen and Program Managers will also attend to discuss and advise on their respective Program/s.

The attached Information Pack includes the 2010-11 Third Review submissions received from all Programs and Businesses.

A summary of the Revised Third Review impact by Program/Business is outlined in **Attachment 1** of the pack.

A copy of the EMT Workshop minutes is included in **Attachment 2**.

The Agenda is at **Attachment 3**.

Information Pack

All EMT changes have been marked as EMT changes in the submissions. LMERC feedback and endorsement will subsequently be sought prior to submission of the Third Review to E&C.

Third Review Position

(i) Pre-EMT position

The Third Review was presented to EMT on Friday 1st April 2011. The estimated impact of the Review (including late submissions) was a proposed budget deficit of \$99.2m.

A snapshot of the Financial Position pre EMT:

(\$000)

Approved Budget 30/6/11	Opex	Capital	360
Program Submissions			
Flood Impacts	-81,082	-37,693	-118,775
Funding Strategies	25,864	38,488	64,352
Other Third Budget Review submissions	- 136,855	17,561	-119,294
REVISED SURPLUS 30/6/11			-173,357
Adjustment to Loan repayments	2,186		2,186
QRA payment for Damaged Assessment	54,000		54,000
Late submission (not in pack):			
- PHS33	-70		-70
- PT05	-2,000		-2,000
Transfer from Emergent /Inflation Reserve			20,000

FORECAST CLOSING BALANCE 30/6/11 -99, 241

(ii) Post-EMT position

EMT has recommended changes to the Third Review. These recommendations have been made in consultation with Program / Business Managers in the context of Council's year to date financial performance and forecast delivery levels. This strategy has been based on:

- The identification of **savings**
- **Reprioritisation** of projects (where possible)
- Review **revenue** forecasts - especially around possibility of **GRANT FUNDING**
- **Carryover** of additional projects – noting that this ultimately impacts **negatively** on the opening position for the 2011-12 Financial Year.

EMT requested changes that effectively found an additional \$59.6m (Refer Minutes Attachment 2). This additional \$59.6m moved the position from a deficit of \$99.2m to a deficit of \$39.6m

The current position is as follows:

Approved Budget 30/6/11	Opex	Capital	360
Program Submissions			
Flood Impacts	-78,692	-37,543	-116,235
Funding Strategies	26,212	38,635	64,847
Other Third Budget Review submissions	-69,642	58,846	-10,797
REVISED SURPLUS 30/6/11			-61,824
Adjustment to Loan repayments	2,186		2,186
Transfer from Emergent /Inflation Reserve			20,000

FORECAST CLOSING BALANCE 30/6/11 -39, 639

(iii) Link to Year-to-date Performance

At the end of February, our operating capability is \$58.4m unfavourable to budget. This variance is mainly driven by a shortfall in revenue totalling \$76.3m (\$50m Legacy Way – timing), partially offset by lower than budgeted expenses of \$17.9m.

Significant revenue variances include the Federal Government funds for Legacy Way construction \$50m received in March 2011; Penalty infringement income \$11.3m and reimbursements expected from Queensland Urban Utilities \$12.3m under budget. Interest revenue is trailing budget by \$10.5m. Donated assets are \$8.8m more than budget.

Expenditure is over in employee costs mainly due to the January floods. Other expenses are lower than budget with the start of Legacy Way construction delayed and key change agenda projects rescheduled after the floods.

The full year capital expenditure of \$718.9m (adjusted to exclude \$229.3m for Legacy Way and \$38.5m for flood funding strategies) has a balance of \$326.9m for March to June to achieve budget. This is an average monthly target of \$81.7m. It still remains an ambitious target considering that for the first 8 months of the year capitalised expenses have averaged \$49m per month.

Draft impact on 2011-12 Budget

The draft impact on the 2011-12 Budget is an overall deficit of **\$41.9m** made up as follows:

Closing deficit	-\$39.6m
Carryover funding	-\$62.3m
Carryover of Proceeds	+\$60.0m
<u>TOTAL</u>	<u>-\$41.9m</u>

To ensure there is no impact on 2011-12 Budget, we need to find \$41.9m (savings, extra revenue, but not carry over funds, etc).

If you have any queries on this review, please contact [REDACTED] or [REDACTED]

Yours sincerely

[REDACTED]
A/CHIEF FINANCIAL OFFICER

Third Budget Review – Consolidated

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-12,109	1,529	0	-1,378	8,232	-3,727
Program 2 WaterSmart City	-4,440	0	0	-876	5,298	-18
Program 3 Moving Brisbane	18,036	129	-8,155	-51,917	-1,277	-26,874
Program 4 Future Brisbane	6,614	0	0	-5,403	-3,911	-2,700
Program 5 Your Brisbane	1,481	653	0	-12,939	8,182	-4,623
Program 6 Subtropical City - Parks and Recreation	-3,455	0	0	-2,342	2,039	-3,758
Program 7 Public Health and Safety	-35,386	0	0	0	33,035	-2,351
Program 8 Economic Development	39	0	0	0	-39	0
Program 9 Customer Focus	870	0	0	3,822	-4,635	57
Program 10 City Governance	-32,708	-1,200	-55,100	11,578	-7,739	25,031
Subtotal Programs	-61,059	1,111	-63,255	-59,455	37,185	-18,964
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	-1,118	-72	0	-168	18,783	17,425
Brisbane Transport	1,812	0	0	-278	-9,507	-7,973
City Business	-1,820	-196	0	-37	-1,926	-3,979
City Design	0	0	0	0	0	0
Subtotal Business Units	-1,125	-268	0	-483	7,350	5,473
Total	-62,185	842	-63,255	-59,938	44,535	-13,490

Third Budget Review – Flood Impacts

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-15,570	0	0	0	14,541	-1,029
Program 2 WaterSmart City	-10,771	0	0	3,400	7,371	0
Program 3 Moving Brisbane	-36,159	0	0	30,760	1,427	-3,972
Program 4 Future Brisbane	0	0	0	0	0	0
Program 5 Your Brisbane	-8,631	0	0	2,533	5,910	-188
Program 6 Subtropical City - Parks and Recreation	-4,115	0	0	950	3,165	0
Program 7 Public Health and Safety	-32,606	0	0	0	32,165	-441
Program 8 Economic Development	0	0	0	0	0	0
Program 9 Customer Focus	-530	0	0	0	530	0
Program 10 City Governance	-6,208	0	0	-100	6,308	0
Subtotal Programs	-114,590	0	0	37,543	71,417	-5,630
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	0	0	0	0	0	0
Brisbane Transport	0	0	0	0	0	0
City Business	-1,645	0	0	0	654	-991
City Design	0	0	0	0	0	0
Subtotal Business Units	-1,645	0	0	0	654	-991
Total	-116,235	0	0	37,543	72,071	-6,621

Third Budget Review – Funding Strategies

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	4,011	0	0	-1,674	-2,437	-100
Program 2 WaterSmart City	5,897	0	0	-4,672	-1,225	0
Program 3 Moving Brisbane	19,269	0	0	-17,094	-2,175	0
Program 4 Future Brisbane	5,272	0	0	-4,221	-1,051	0
Program 5 Your Brisbane	1,640	0	0	-470	-1,170	0
Program 6 Subtropical City - Parks and Recreation	3,623	0	0	-2,404	-1,219	0
Program 7 Public Health and Safety	175	0	0	0	-175	0
Program 8 Economic Development	0	0	0	0	0	0
Program 9 Customer Focus	215	0	0	0	-215	0
Program 10 City Governance	24,745	0	0	-8,100	-16,585	60
Subtotal Programs	64,847	0	0	-38,635	-26,252	-40
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	0	0	0	0	0	0
Brisbane Transport	0	0	0	0	0	0
City Business	0	0	0	0	0	0
City Design	0	0	0	0	0	0
Subtotal Business Units	0	0	0	0	0	0
Total	64,847	0	0	-38,635	-26,252	-40

Third Budget Review – Other

Program	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	10-11 Change		
				Capital \$000	Net Expense \$000	External Revenue \$000
Program 1 City Smart	-551	1,529	0	296	-3,872	-2,596
Program 2 WaterSmart City	434	0	0	396	-548	-18
Program 3 Moving Brisbane	34,926	129	-8,155	-65,583	-529	-22,902
Program 4 Future Brisbane	1,342	0	0	-1,182	-2,860	-2,700
Program 5 Your Brisbane	8,472	653	0	-15,002	1,442	-4,435
Program 6 Subtropical City - Parks and Recreation	-2,963	0	0	-888	93	-3,758
Program 7 Public Health and Safety	-2,955	0	0	0	1,045	-1,910
Program 8 Economic Development	39	0	0	0	-39	0
Program 9 Customer Focus	1,185	0	0	3,822	-4,950	57
Program 10 City Governance	-51,245	-1,200	-55,100	19,778	2,538	24,971
Subtotal Programs	-11,316	1,111	-63,255	-58,363	-7,980	-13,294
Business Units	2010-11 Impact on Surplus \$000	Depreciation Change \$000	Other Surplus Adjustment eg proceeds, disposal \$000	Capital \$000	Total Expense \$000	Total Revenue \$000
Brisbane CityWorks	-1,118	-72	0	-168	18,783	17,425
Brisbane Transport	1,812	0	0	-278	-9,507	-7,973
City Business	-175	-196	0	-37	-2,580	-2,988
City Design	0	0	0	0	0	0
Subtotal Business Units	520	-268	0	-483	6,696	6,464
Total	-10,797	842	-63,255	-58,846	-1,284	-6,829

2010-11 THIRD BUDGET REVIEW LMERC MEETING

13 April 2011



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Current position

Approved Budget 30/6/11

	Opex	Capex	360
Program Submissions			
Flood Impacts	-78,692	-37,543	-116,235
Funding Strategies	26,212	38,635	64,847
Other Third Budget Review subs	-69,642	58,846	-10,796
REVISED SURPLUS 30/6/11			-61,824
Adj to loan repayments			2,186
Tfr from Emergent / Inflation Reserve			20,000
FORECAST CLOSING BALANCE 30/6/11			-39,638

Funding gap \$51m

Includes:

- Flood impacts and funding strategies – aligned to forecast 14/2/11
- \$54m NDRRA advance
- \$21.7m QRA funding for initial Flood & Emergent works
- \$7.3m Insurance



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Summary Position Summary - combining impact and funding strategies

Summary - Preliminary Position 14/2/11

Approved Budget 30/6/2011

Less: Special Budget (flood) Submissions

	2010-11 \$,'000	2011-12 \$,'000	2012-13 \$,'000	2013-14 \$,'000	2014-15 \$,'000	Total \$,'000
Response Costs	-50,325	-10,975	0	0	0	-61,300
Reduced revenue	-6,400	1,034	0	0	0	-5,366
Capital - ASC damage (broad estimate in submissions)	-58,974	0	0	0	0	-58,974
Less: Restoration works identified by ASC	0	-275,026	-40,000			-315,026
Less: Contingency for as yet unquantified operational impacts	-10,000	-5,000				-15,000
Sub total	-125,339	-289,967	-40,000	0	0	-455,666

Less: Funding Strategies (total)

Expense	28,565	43,593	17,277	14,154	11,611	115,200
Revenue	-725	-45,131	-65,762	-35,518	68,076	-79,060
Capital	36,963	176,319	190,934	72,542	-135,615	341,143
Sub total- Funding Gap	-60,536	-115,186	102,449	51,178	-55,928	-78,383

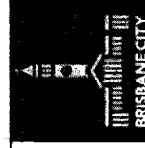
Less: Income targets under threat

Bus Depot (timing)	0	0	0	0	0	0
Significant disposal proceeds - Incl S2026	-65,000	40,000	25,000			0
Subsidies and Grants - aggressive KPI's	-32,000					-32,000
QUU income	0	0				0
Sub total	-157,536	-75,186	127,449	51,178	-55,928	-110,383

Funding Sources

EMQ - Grants	15,000	15,000	6,000	0	0	36,000
Insurance (assumes QUU fully funded via NDRRA)	21,000	30,000	5,000			56,000
NDRRA Claims	38,000	235,000	35,000	0		308,000
Total	-83,536	204,814	173,449	51,178	-55,928	289,617

This was the forecast preliminary position at 14 February 2011



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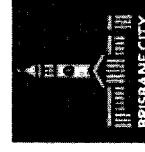
Flood 2010-11 Position (3BR)

2010-11 Comparison between 14/2/11 & 3BR	Forecast 14/2/11	3BR Position
Approved Budget 30/6/2011	360	360
Flood Impact costs	-115,699	-116,235
Flood Funding strategies	64,803	64,847
Less contingency	-10,000	0
Sub Total	-60,896	-51,388
Less: Income targets under threat		
Significant disposal proceeds - Incl S2026	-65,000	-55,000
Subsidies and Grants - aggressive KPI's	-32,000	-30,800
Sub Total	-97,000	-85,800
Funding Sources		
EMQ - Grants	15,000	21,700
Insurance	21,000	7,350
NDRRA Advance	38,000	54,000
Sub Total	74,000	83,050
Total	-83,536	-53,778
Other 3BR Submissions		-23,300
QUU interest income		-55,000
Reductions in revenue		6,800
Increases in revenue		65,639
Mix of Carryovers, Bring Forwards, Savings, scope changes		20,000
Transfer from Reserve		
Sub Total		14,139
Forecast Total	-83,536	-39,639

Forecast closely aligned to Budget

Income targets under threat eventuated

Uncertainty around timing of future funding



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Programs have worked to minimise the impact....but we have a way to go

1.0 FILE NUMBER: 134/135/86/16

SUBMISSION TO THE ESTABLISHMENT AND CO-ORDINATION COMMITTEE

2.0 TITLE

2010-11 Budget – Third Review 'Flood Mini-Budget'

3.0 ISSUE/PURPOSE

The purpose of this submission is to adjust the 2010-11, 2011-12, 2012-13 and 2013-14 Budget allocations for Programs and Business Units and funds for the services of the Council following a review of requests for changes to approved Budgets.

4.0 PROPONENT

[REDACTED] A/Chief Financial Officer, Corporate Services, telephone 340 37884 [REDACTED]

5.0 SUBMISSION PREPARED BY

[REDACTED] Principal Financial Analyst - Reporting, Corporate Finance, Corporate Services, telephone 340 35148.

6.0 DATE

27 April 2011

7.0 FOR E&C APPROVAL OR RECOMMENDATION TO COUNCIL?

For Recommendation to Council.

8.0 IF FOR RECOMMENDATION TO COUNCIL, IS A COUNCIL RESOLUTION REQUIRED UNDER AN ACT OR ORDINANCE?

Yes, City of Brisbane Act 2010 and City of Brisbane (Finance, Plans and Reporting) Regulation 2010, Section 98.

9.0 RECOMMENDATION

That the amended Budget allocations for the Operations and the Projects for the services provided by the Council be approved and adopted for 2010-11, 2011-12, 2012-13, and 2013-14 as required by City of Brisbane Act 2010 and Section 98 of City of Brisbane (Finance, Plans and Reporting) Regulation 2010 and in accordance with the Budgeted Financial Statements submitted, and the recommendations submitted as Part A, Part B and Part C.

10.0

A/Chief Operating Officer
Corporate Services

Deputy Mayor, Chairman
Finance, Economic Development and
Administration Committee

I Support / ~~Reject~~ the Recommendation/s.

If Reject – please state reasons:

11.0 BACKGROUND

City of Brisbane Act 2010 and Section 98 of City of Brisbane (Finance, Plans and Reporting) Regulation 2010 require that Council approval be obtained to alter the Budget.

This Budget Review considers emerging issues requiring funding, additional revenue and expenditure for 2010-11, requests to carryover project funding from 2010-11 to future years, the bringing forward of project funding to 2010-11 and other forward year Budget adjustments as detailed in Part C.

The outcome of the Review is reported by the Divisional Manager to the Establishment and Co-ordination Committee (E&C) so that the Committee may seek Council approval to amend the Budget.

The attached documents entitled "2010-11 Budget – Third Review Report and Recommendations" recommends amendments to the approved Budget for 2010-11. Part A details summary of changes by program, Part B details changes of services by program and Part C details requested changes to 2011-12, 2012-13 and 2013-14.

12.0 CONSULTATION

Executive Management Team. Executive Management Team is in agreement with the attached recommendations. On 13 April 2011, Lord Mayor Graham Quirk, Chief Executive Officer Colin Jensen, Councillor Adrian Schrinner, Councillor Ian McKenzie, and Acting Chief Operating Officer Greg Evans met with Committee Chairs.

13.0 IMPLICATIONS OF PROPOSAL

The anticipated accumulated surplus at 30 June 2011 for the Budget approved by Council is **\$0.4m**.

The sum of the proposed adjustments to the Budget for 2010-11 will increase the anticipated Accumulated Surplus at 30 June 2011 to **\$0.5m** after adjustments for transfers to/from Reserves (refer to the Budgeted Appropriations and Reserve Transfers Statement attached).

Changes to 2010-11 Budget:

	Total Change \$m	Revised Budget \$m
Expenses	+75.3	1,847.8
Revenue	+52.5	1,966.1
Operating Capability	-22.8	118.3
Non-current Asset Acquisition	-85.3	901.4

The net impact of this review on 2011-12, 2012-13 and 2013-14 is listed in 'Part C' and summarised below:

Year	Forward Year Budget Commitments \$m
2011-12	-68.4
2012-13	-76.2
2013-14	-42.3

14.0 COMMERCIAL IN CONFIDENCE

Nil.

15.0 CORPORATE PLAN IMPACT

Reviews to the approved Budget are consistent with managing Council's finances and assets effectively to fund key priorities and provide best value for money within the strong and responsible financial management outcome in Program 10 City Governance.

16.0 CUSTOMER IMPACT

Nil.

17.0 ENVIRONMENTAL IMPACT

Nil.

18.0 POLICY IMPACT

Periodic amendments to the annual Budget are in accordance with policy and legislation.

19.0 FINANCIAL IMPACT

Proposed adjustments to the Budgets for Programs and Business Units and funds for the 2010-11 year will result in a Budgeted Accumulated Surplus of **\$0.5m** at 30 June 2011. This Budget Review, if approved, will alter Budget commitments as follows: Decrease **\$68.4m** in 2011-12, decrease **\$76.2m** in 2012-13 and decrease **\$42.3m** in 2013-14.

20.0 HUMAN RESOURCE IMPACT

Nil.

21.0 URGENCY

Urgent approval is sought so that amendments to the 2010-11 Budget may be reflected in the Quarterly Financial Statements and the operating positions of the Units of Administration.

22.0 PUBLICITY/MARKETING STRATEGY

Not required.

23.0 OPTIONS

1. To accept the recommended amendments to the Budget for 2010-11, 2011-12, 2012-13 and 2013-14.
2. To modify the recommendations, which will affect the proposed accumulated surplus for 2010-11 and alter the recommended 2011-12, 2012-13 and 2013-14 funding change requests.
3. To reject the recommendations and retain the 2010-11, 2011-12, 2012-13 and 2013-14 approved Budgets.

Option 1 is the preferred option.

2010-11 BUDGET

**Third Review
Flood Mini-Budget**

**Report
and
Recommendations**

BUDGET OVERVIEW
Summary of Recommendations

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
OPERATIONS			
Revenue	1,913,582	52,496	1,966,078
Expenses	1,772,542	75,275	1,847,816
INCREASE IN OPERATING CAPABILITY	141,041	-22,776	118,266
Appropriations from Operations	-245,950	-9,266	-255,216
Accumulated Surplus at beginning of year	3,778	0	3,778
ACCUMULATED SURPLUS AVAILABLE FOR TRANSFER	-101,132	-32,041	-133,172
Transfers to Reserves and Capital Accounts	-125,602	32,000	-93,602
Transfers from Reserves and Capital Accounts	227,093	150	227,243
ACCUMULATED SURPLUS AT PERIOD END	360	109	469
STATEMENT OF CAPITAL FUNDING			
Sources of Capital and Debt Funding	4,768,957	-87,531	4,681,426
Application of Capital and Debt Funding	4,768,957	-87,531	4,681,426
CAPITAL FUNDING SURPLUS/(DEFICIT)	0	0	0

Note:

(i) Figures in the Budgeted Financial Statements have been rounded

(ii) These figures have been rounded to the nearest thousand and the figures midway between rounding points are rounded up

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Comprehensive Income

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
Income			
Revenue			
Rate and utility charges	819,649	-7,745	811,904
Less discount and pensioner remissions	-53,008	-3,742	-56,750
	<u>766,641</u>	<u>-11,487</u>	<u>755,154</u>
Fees and charges	179,120	-20,376	158,744
Public transport	245,111	-9,740	235,371
Interest	120,914	-19,729	101,185
Other revenue	<u>255,614</u>	<u>11,009</u>	<u>266,623</u>
	<u>800,759</u>	<u>-38,836</u>	<u>761,923</u>
Donations	64,394	-12,574	51,820
Contributions	120,733	63,845	184,578
Subsidies and grants	<u>161,055</u>	<u>51,548</u>	<u>212,603</u>
	<u>346,182</u>	<u>102,819</u>	<u>449,001</u>
Other Income			
Gain on disposal of non-current investments	0	0	0
Gain on disposal of property, plant and equipment	0	0	0
Gain on early settlement of loan	<u>0</u>	<u>0</u>	<u>0</u>
	<u>0</u>	<u>0</u>	<u>0</u>
Total Income	1,913,582	52,496	1,966,078
Expenses			
Employee costs	760,639	17,490	778,129
Materials and services costs	558,064	9,287	567,351
Depreciation and amortisation expenses	277,122	-841	276,281
Finance costs	71,431	-3,204	68,227
Loss on disposal of non-current investments	0	0	0
Loss on disposal of property, plant and equipment	24,981	7,950	32,931
Loss on early settlement of loan	0	0	0
Other expenses	<u>80,304</u>	<u>44,592</u>	<u>124,896</u>
Total Expenses	1,772,542	75,274	1,847,816
INCREASE IN OPERATING CAPABILITY	141,041	-22,776	118,266
Other Comprehensive Income			
Defined Benefit Plan Revaluation	0	0	0
Net change in fair value of available-for-sale financial assets	0	0	0
Gain on effective hedges	0	0	0
Realised gain on cash flow hedges	0	0	0
Increase in Asset Revaluation Surplus	<u>0</u>	<u>0</u>	<u>0</u>
	<u>0</u>	<u>0</u>	<u>0</u>
Total Comprehensive Income	141,041	-22,776	118,266

BUDGETED FINANCIAL STATEMENTS
Budgeted Appropriations and Reserve Transfers Statement

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
Increase/ (Decrease) in Operating Capability	141,041	-22,776	118,266
Appropriations			
Appropriation (to)/ from the Debt Funding Account	-203,205	2,186	-201,019
Appropriation (to)/ from the Asset Acquisition Account	-42,745	-11,452	-54,196
	-245,950	-9,266	-255,216
Current Year Surplus/ (Deficit) after appropriations	-104,910	-32,042	-136,951
Accumulated Surplus at beginning of year	3,778	0	3,778
ACCUMULATED SURPLUS AVAILABLE FOR TRANSFER	-101,132	-32,041	-133,172
Transfers (to)/from Capital and Reserves			
Transfers (to)/ from Capital	0	0	0
Transfers (to)/ from Reserves			
Transfers (to)/ from the Insurance Reserve	1,000	0	1,000
Transfers (to)/ from the Valley Mall General Reserve	380	0	380
Transfers (to)/ from the Valley Mall Asset Replacement Reserve	-281	0	-281
Transfers (to)/ from Queen Street Mall General Reserve	232	150	382
Transfers (to)/ from the Queen Street Mall Asset Replacement Reserve	-917	0	-917
Transfers (to)/ from the Bushland Preservation Reserve	0	0	0
Transfers (to)/ from the Employee Leave Entitlements Reserve	0	0	0
Transfers (to)/ from the Emergent Expenditure and Inflation Provision Reserve	-108,604	32,000	-76,604
Transfers (to)/ from the Infrastructure Reserve	88,581	0	88,581
Transfers (to)/ from the TransApex Reserve	101,000	0	101,000
Transfers (to)/ from the Debt Fund Reserve	0	0	0
Transfers (to)/ from the City Hall Restoration Reserve	34,200	0	34,200
Transfers (to)/ from the City of Brisbane Investment Corporation Reserve	0	0	0
Transfers (to)/ from the Footpath Reserve	1,700	0	1,700
Transfers (to)/ from the Clem7 Associated Works Reserve	-10,000	0	-10,000
Transfers (to)/ from the City Reach Boardwalk Reserve	-5,800	0	-5,800
Total Transfers (to)/ from Reserves	101,491	32,150	133,641
ACCUMULATED SURPLUS/ (DEFICIT) AT PERIOD END	360	109	469

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Financial Position

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
Assets			
Current assets			
Cash and cash equivalents	313,324	-32,043	281,281
Trade and other receivables	46,850	0	46,850
Inventories	16,934	0	16,934
Derivative financial instruments	0	0	0
Other	73,018	0	73,018
	450,126	-32,043	418,083
Property classified as held for sale	0	0	0
	450,126	-32,043	418,083
Non-current assets			
Receivables	0	0	0
Other financial assets	3,743,113	0	3,743,113
Property, plant and equipment	16,562,911	10,950	16,573,861
Capital work in progress	950,212	0	950,212
Intangible assets	9,344	503	9,846
Other	0	0	0
Defined benefit plan	0	0	0
	21,265,580	11,453	21,277,032
Total Assets	21,715,706	-20,590	21,695,115
Liabilities			
Current liabilities			
Trade and other payables	452,315	0	452,315
Other financial liabilities	259,982	0	259,982
Derivative financial instruments	0	0	0
Provisions	91,606	0	91,606
Other	18,454	0	18,454
	822,357	0	822,357
Non-current liabilities			
Payables	0	0	0
Other financial liabilities	905,761	2,186	907,947
Provisions	23,678	0	23,678
Defined benefit plan	5,952	0	5,952
Other	808	0	808
	936,199	2,186	938,385
Total Liabilities	1,758,557	2,185	1,760,742
NET COMMUNITY ASSETS	19,957,149	-22,776	19,934,373
COMMUNITY EQUITY			
City capital and capital accounts	9,205,038	9,266	9,214,303
Asset revaluation reserve	10,369,147	0	10,369,147
Other reserves	382,604	-32,150	350,454
Accumulated surplus	360	109	469
TOTAL COMMUNITY EQUITY	19,957,149	-22,776	19,934,373

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Cash Flows

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
Cash Flows from Operating Activities			
Receipts			
Net rates and utility charges	785,223	-11,487	773,736
Public transport, fees and charges	422,981	-30,116	392,865
Contributions	120,733	63,845	184,578
Interest	120,914	-19,729	101,185
Other	268,620	11,009	279,629
	<u>1,718,470</u>	<u>13,522</u>	<u>1,731,992</u>
Payments			
Employee costs	776,433	17,490	793,923
Materials and services costs	606,459	9,287	615,746
Finance costs	71,431	-3,204	68,227
Other	80,304	44,592	124,896
	<u>1,534,627</u>	<u>68,165</u>	<u>1,602,791</u>
Net cash generated by Operating Activities	183,844	-54,643	129,201
Cash Flows from Investing Activities			
Proceeds from disposal of property, plant and equipment	219,715	-103,905	115,810
Payments for property, plant and equipment and capital work in progress	-922,344	72,771	-849,573
Dividends received	60,719	0	60,719
Investment in City of Brisbane Investment Corporation Pty Ltd (formerly CBAC)	0	0	0
Investment in other non-current investments	0	0	0
	<u>-641,910</u>	<u>-31,134</u>	<u>-673,044</u>
Net cash used in Investing Activities	-641,910	-31,134	-673,044
Cash Flows from Financing Activities			
Proceeds from borrowings - Repay / Redraw	0	0	0
Transfer to QTC Repay and Redraw Facility	0	0	0
Proceeds from transfer of debt to Queensland Urban Utilities (QUU)	180,175	0	180,175
Repayment of borrowings - Queensland Urban Utilities (QUU)	-180,175	0	-180,175
Proceeds from borrowings	242,000	0	242,000
Repayment of borrowings	-22,986	2,186	-20,800
Repayment of finance lease	-44	0	-44
	<u>218,970</u>	<u>2,186</u>	<u>221,156</u>
Net cash provided by Financing activities	218,970	2,186	221,156
Cash Flows from Government Funding			
Subsidies and grants	161,055	51,548	212,603
	<u>161,055</u>	<u>51,548</u>	<u>212,603</u>
Net cash provided by Government Funding	161,055	51,548	212,603
NET INCREASE/(DECREASE) IN CASH HELD	-78,041	-32,043	-110,084
Cash and cash equivalents at beginning of year	391,364	0	391,364
CASH AND CASH EQUIVALENTS AT END OF YEAR	313,324	-32,043	281,281

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Capital Funding

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
SOURCES OF CAPITAL FUNDING			
Appropriations from revenue:			
Donated assets	64,394	-12,574	51,820
Capital contributions, grants and subsidies for non-current asset acquisitions	181,152	67,277	248,430
Capital funds for future requirements	404	-45,439	-45,035
	<hr/>	<hr/>	<hr/>
Appropriations to the asset acquisition account and debt funding account	245,950	9,266	255,216
Other:			
Loan borrowings	242,000	0	242,000
Deferred borrowings	0	0	0
Proceeds from transfer of debt to Queensland Urban Utilities (QUU)	180,175	0	180,175
Transfer to QTC Repay and Redraw Facility	0	0	0
Loan borrowings drawn - Repay / Redraw	0	0	0
Revenue raised to fund depreciation and amortisation charges	277,122	-842	276,281
Carrying amount of property, plant and equipment disposed	244,696	-95,955	148,741
Carrying amount of property, plant and equipment transferred (QUU)	3,579,014	0	3,579,014
Carrying amount of non-current investments disposed	0	0	0
	<hr/>	<hr/>	<hr/>
	4,523,007	-96,797	4,426,210
TOTAL SOURCES OF CAPITAL FUNDING	4,768,957	-87,531	4,681,426
APPLICATION OF CAPITAL FUNDING			
Non-current assets			
Land	86,526	1,794	88,320
Buildings	88,851	-15,496	73,355
Plant and equipment	127,179	-1,436	125,743
Infrastructure assets	370,760	-20,859	349,901
Intangibles	0	0	0
Other assets	313,422	-49,348	264,074
Capital Expenditure	<hr/>	<hr/>	<hr/>
	986,738	-85,345	901,393
Increase/(decrease) in capital work in progress			
Expenses capitalised	986,738	-85,345	901,393
Investment in other financial assets	0	0	0
Investments in controlled entities			
The City of Brisbane Investment Corporation Pty Ltd (formerly CBAC)	0	0	0
Investment in Queensland Urban Utilities	3,579,014	0	3,579,014
	<hr/>	<hr/>	<hr/>
	3,579,014	0	3,579,014
Non-current asset acquisitions	4,565,752	-85,345	4,480,407
Principal Loan Repayments			
Finance lease liabilities	44	0	44
Repayment of borrowings - Queensland Urban Utilities (QUU)	180,175	0	180,175
Queensland Treasury Corporation	<hr/>	<hr/>	<hr/>
	22,986	-2,186	20,800
Debt Funding	203,205	-2,186	201,019
TOTAL APPLICATION OF CAPITAL FUNDING	4,768,957	-87,531	4,681,426

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Changes In Equity

For the year ending 30 June 2011	Total	Accumulated Surplus	City Capital and Capital Accounts	Asset Revaluation Reserve	Other Reserves
		\$000	\$000	\$000	\$000
Balance at beginning of year	19,820,779	3,778	8,963,759	10,369,147	484,095
Increase in Operating Capability	118,265	118,265	0	0	0
Other Comprehensive Income	0	0	0	0	0
Transfer to foreign exchange reserve for adjustments to cash flow hedges	0	0	0	0	0
Total recognised income and expense for the year	19,939,043	122,043	8,963,759	10,369,147	484,095
Appropriations to / (from) accounts:					
Debt Funding	0	-201,019	201,019	0	0
Asset Acquisition	0	-54,196	54,196	0	0
Transfers to capital (from) accumulated surplus	0	-255,216	255,216	0	0
Transfer of Assets & Liabilities to Queensland Urban Utilities (QUU)	-4,671	0	-4,671	0	0
Reserves Transfers					
Insurance	0	1,000	0	0	-1,000
Valley Mall General	0	380	0	0	-380
Valley Mall Asset Replacement	0	-281	0	0	281
Queen Street Mall General	0	382	0	0	-382
Queen Street Mall Asset Replacement	0	-917	0	0	917
Bushland Preservation	0	0	0	0	0
Transfers (to)/ from the Employee Leave Entitlements Reserve	0	0	0	0	0
Emergent Expenditure and Inflation Provision	0	-76,604	0	0	76,604
Infrastructure	0	88,581	0	0	-88,581
TransApex	0	101,000	0	0	-101,000
Transfers (to)/ from the Debt Fund Reserve	0	0	0	0	0
City Hall Restoration	0	34,200	0	0	-34,200
City of Brisbane Investment Corporation	0	0	0	0	0
Footpath	0	1,700	0	0	-1,700
Clem7 Associated Works	0	-10,000	0	0	10,000
City Reach Boardwalk	0	-5,800	0	0	5,800
Transfer to reserve (from) accumulated surplus	0	133,641	0	0	-133,641
Balance at end of year	19,934,373	469	9,214,303	10,369,147	350,454

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Comprehensive Income By Program

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
OPERATIONS			
Revenue			
CitySmart	137,173	-3,692	133,481
WaterSmart City	30,717	11,402	42,119
Moving Brisbane	248,938	7,076	256,014
Future Brisbane	65,497	-2,700	62,797
Your Brisbane	23,441	-4,623	18,818
Subtropical City-Parks and Recreation	29,534	22,342	51,876
Public Health and Safety	16,234	-2,351	13,883
Economic Development	11,463	0	11,463
Customer Focus	3,800	57	3,857
City Governance	1,018,294	33,466	1,051,761
Business Units	356,519	-12,689	343,830
Total Revenue	1,941,610	48,289	1,989,898
Expenses			
CitySmart	169,249	7,822	177,070
WaterSmart City	90,603	6,792	97,395
Moving Brisbane	486,037	4,254	490,291
Future Brisbane	108,713	16,054	124,767
Your Brisbane	124,070	5,682	129,752
Subtropical City-Parks and Recreation	94,108	10,993	105,101
Public Health and Safety	34,470	33,036	67,505
Economic Development	18,454	311	18,765
Customer Focus	37,269	-4,635	32,634
City Governance	305,843	1,569	307,412
Business Units	331,753	-10,814	320,939
Total Expenses	1,800,568	71,064	1,871,632
INCREASE IN OPERATING CAPABILITY	141,041	-22,776	118,265

Total revenues and expenses in the Budgeted Income Statement by Program differ from those in the Budgeted Income Statement. In the Budgeted Income Statement:

(i) discounts and remissions are deducted from rates and utility charges whereas in the Budgeted Income Statement by Program, they are included in expenses; and

(ii) losses on disposals are classified as an Expense whereas in the Budgeted Income Statement by Program, they net off from revenue.

BUDGETED FINANCIAL STATEMENTS
Budgeted Statement of Capital Funding By Program

For the year ending 30 June 2011	Approved Budget \$000	Third Review \$000	Revised Budget \$000
SOURCES OF CAPITAL FUNDING			
Appropriations from revenue			
Donated assets	64,394	-12,574	51,820
Capital contributions, grants & subsidies for non-current asset acquisitions	181,152	67,278	248,430
Capital funds for future requirements	404	-45,440	-45,036
	<hr/>	<hr/>	<hr/>
Appropriations to the asset acquisition account and debt funding account	245,950	9,265	255,215
Other			
Loan borrowings drawn	242,000	0	242,000
Deferred borrowings	0	0	0
Proceeds from transfer of debt to Queensland Urban Utilities (QUU)	180,175	0	180,175
Transfer to QTC Repay and Redraw Facility	0	0	0
Loan borrowings drawn - Repay / Redraw	0	0	0
Revenue raised to fund depreciation and amortisation charges	277,122	-841	276,281
Carrying amount of property, plant and equipment transferred (QUU)	3,579,014	0	3,579,014
Revenue raised to fund asset write downs	0	0	0
Carrying amount of property, plant and equipment disposed	244,696	-95,955	148,741
Carrying amount of assets transferred to subsidiaries as a grant	0	0	0
Carrying amount of non-current investments disposed	0	0	0
	<hr/>	<hr/>	<hr/>
	4,523,007	-96,796	4,426,211
TOTAL SOURCES OF CAPITAL FUNDING	<hr/>	<hr/>	<hr/>
	4,768,957	-87,531	4,681,426
APPLICATION OF CAPITAL FUNDING			
Non-Current Assets			
CitySmart	28,265	-1,378	26,887
WaterSmart City	57,769	-185	57,584
Moving Brisbane	706,001	-73,430	632,571
Future Brisbane	15,057	-5,403	9,654
Your Brisbane	84,566	-16,939	67,627
Subtropical City-Parks and Recreation	51,842	-2,592	49,251
Public Health and Safety	0	0	0
Economic Development	0	0	0
Customer Focus	8,063	3,822	11,885
City Governance	20,014	11,578	31,592
Business Units	15,161	-819	14,342
	<hr/>	<hr/>	<hr/>
Capital Expenditure	986,738	-85,345	901,393
Investments in controlled entities			
The City of Brisbane Investment Corporation Pty Ltd (formerly CBAC)	0	0	0
Investment in Queensland Urban Utilities	3,579,014	0	3,579,014
	<hr/>	<hr/>	<hr/>
	3,579,014	0	3,579,014
Non-current asset acquisitions	<hr/>	<hr/>	<hr/>
	4,565,752	-85,345	4,480,407
Principal loan repayments			
City Governance	203,205	-2,186	201,019
	<hr/>	<hr/>	<hr/>
Debt Funding	203,205	-2,186	201,019
TOTAL APPLICATION OF CAPITAL FUNDING	<hr/>	<hr/>	<hr/>
	4,768,957	-87,531	4,681,426

2010-11 BUDGET

Summary

(for information only)

PART A

Third Budget Review 2010-2011 Summary of Changes by Program

Please refer to relevant program table (following) for service level breakdown of budget changes

		Approved Budget 10-11 \$000	Change 10-11 \$000	Revised Budget 10-11 \$000
All Programs	Const in Progress	971,577	-84,526	887,051
	Net Expense	1,468,816	81,878	1,550,694
	External Revenue	1,585,091	60,977	1,646,068
1 CitySmart	Const in Progress	28,265	-1,378	26,887
	Net Expense	169,249	7,822	177,070
	External Revenue	137,173	-3,692	133,481
2 WaterSmart City	Const in Progress	57,769	-185	57,584
	Net Expense	90,603	6,792	97,396
	External Revenue	30,717	11,402	42,119
3 Moving Brisbane	Const in Progress	706,001	-73,430	632,571
	Net Expense	486,037	4,254	490,291
	External Revenue	248,938	7,076	256,014
4 Future Brisbane	Const in Progress	15,057	-5,403	9,654
	Net Expense	108,714	16,054	124,768
	External Revenue	65,497	-2,700	62,797
5 Your Brisbane	Const in Progress	84,566	-16,939	67,627
	Net Expense	124,070	5,682	129,752
	External Revenue	23,441	-4,623	18,818
6 Subtropical City - Parks and Recreation	Const in Progress	51,842	-2,592	49,251
	Net Expense	94,108	10,993	105,101
	External Revenue	29,534	22,342	51,876
7 Public Health and Safety	Const in Progress	0	0	0
	Net Expense	34,470	33,036	67,505
	External Revenue	16,234	-2,351	13,883
8 Economic Development	Const in Progress	0	0	0
	Net Expense	18,454	311	18,765
	External Revenue	11,463	0	11,463
9 Customer Focus	Const in Progress	8,063	3,822	11,885
	Net Expense	37,269	-4,635	32,634
	External Revenue	3,800	57	3,857
10 City Governance	Const in Progress	20,014	11,578	31,592
	Net Expense	305,843	1,569	307,412
	External Revenue	1,018,294	33,466	1,051,761



		Approved Budget 10-11 \$000	Change 10-11 \$000	Revised Budget 10-11 \$000
All Business Units	Total Revenue	795,858	5,474	801,332
	Total Expense	771,092	7,349	778,441
	Const in Progress	15,161	-819	14,342
City Business	Total Revenue	111,175	-3,978	107,197
	Total Expense	101,004	-1,927	99,077
	Const in Progress	5,353	-37	5,316
City Design	Total Revenue	49,371	0	49,371
	Total Expense	43,837	0	43,837
	Const in Progress	20	0	20
Brisbane Transport	Total Revenue	321,270	-7,973	313,297
	Total Expense	321,837	-9,507	312,330
	Const in Progress	4,645	-514	4,131
Brisbane CityWorks	Total Revenue	314,043	17,425	331,468
	Total Expense	304,415	18,783	323,198
	Const in Progress	5,143	-268	4,875



PART B

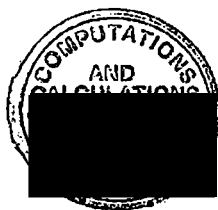
Third Budget Review 2010-11

Changes by Service for
PROGRAM 1: CITYSMART

Service	Operating/Project	Explanation of Change	Change from Approved Budget Capital	Net Expense	External Revenue
			\$000	\$000	\$000
Total Program 1 - CitySmart			-1,378	7,822	-3,692
1.1.1.1 Sustainability Leadership	Sustainable Development Assessment Incentives Package	Decrease in expense due to project being stopped as a funding strategy for flood recovery.	0	-200	0
	Green Heart CitySmart Carbon Offset	Decrease in expense due to favourable market prices for carbon offsets.	0	-290	0
	Eco-Development Advisory Service	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-20	0
1.1.1.2 Green Heart CitySmart Engagement Initiative	Green Heart CitySmart Van and Events	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-30	0
	Green Heart Homes	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-125	0
	Green Heart Business and Industry Program	Decrease in expense and revenue as a funding strategy for flood recovery.	0	-50	-50
	Green Heart Businesses - Sustainable Retrofitting Incentives Package	Decrease in expense as a funding strategy for flood recovery.	0	-200	0
1.1.1.3 Promoting Urban Tree Cover on Private Land	Supporting Community Gardens	Decrease in expense as a funding strategy for flood recovery.	0	-34	0
1.1.2.1 Greenhouse Gas Reduction and Climate Change Adaptation	Lord Mayor's Community Sustainability Grant Scheme	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-277	0
	ClimateSmart Home Service Rebate	Increase in expense due to additional funding required to support the success of the program until end of March 2011.	0	442	0
1.2.1.1 Community Partnering for Conservation Partnerships Program	Core	Increase in expense to restore flood impacted assets at Habitat Brisbane Sites in the South and West regions.	0	40	0
	Voluntary Conservation Agreements - Land for Wildlife and Conservation Partnerships Program	Decrease in expense as a funding strategy for flood recovery.	0	-70	0
	Native Animal Ambulances and Wildlife Carers Grant	Additional funding to account for potential increase in funds required by carers - caring for wildlife affected by flood.	0	30	0
1.2.1.3 Compliance and Regulation	Core	Decrease in expense due to: \$1k reduction in bank fees, \$0.5k transfer to Service 4.3.1.1 Guiding Brisbane's Development and \$28k transfer to Service 7.1.2.1 Law Enforcement and Animal Management Services. Increase in revenue due to additional plumbing revenue for assessment.	0	-29	0
1.2.2.1 Consolidating the Conservation Reserve Network	Bushland Acquisition Program	Carryover of expenditure from 2010-11 to 2011-12 due to program commitments for this financial year being fulfilled.	-1,229	-54	0
1.2.2.2 Conservation Reserves Management Program	Core	Increase in expense: \$238k to fund controlled burn program, \$100k for Bushland Management to staff or visitor centres for weekend openings and \$100k to repair or replace fire fighting equipment.	0	438	0
	Conservation Reserves Management Program	Decrease in expenditure of \$275k as a funding strategy for flood recovery. Transfer of \$376k expense to capital to align with year end expected outcome.	-69	-206	0
	Wipe Out Weeds	Decrease in expense as a funding strategy for flood recovery.	0	-130	0
	Brisbane Invasive Species Management Plan Implementation	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
	Condition Assessments and Rehabilitation	Decrease in expense due to works being delayed as part of funding strategy for flood recovery.	0	-35	0
	Jan 2011 Flood Damages - Conservation Reserves	Increase in expense to carry out flood recovery works in conservation reserves - detailed damage assessment; coordination of volunteer efforts and repairs to various walking and fire trails, which were badly damaged.	0	450	0
1.2.2.3 Restoration	Two Million Trees - Our Urban Forest	Adjustment in project delivery timeframes as a result of January 2011 flood. Revised delivery now March 2012.	0	339	0
1.3.3.1 Environmental Licensing and Compliance	Core	Decrease in expense due to: \$4k reduction in bank fees and \$2k transfer to Service 4.3.1.1 Guiding Brisbane's Development. Decrease in revenue due to incorrect modelling of new Environmental Relative Activity fee structure.	0	-6	-500



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
1.4.1.1 Waste Stream Management and Reduction	Core	Decrease in revenue: \$1.36m cleansing revenue due to lower than anticipated volume growth in rateable properties, \$616k decrease in refuse fees due to free tipping at the transfer stations during the January 2011 and \$240k reduction in Visy gate fee revenue and sales revenue share due to a reduction in recyclable materials collected and processed during the January 2011 flood. Offset by \$300k increase in Visy revenue share due to recovery of commodity markets, \$200k increase in Visy gate fee revenue due to an escalation in recycling tonnes collected from wheeler bins at the kerb, \$300k increase in refuse fee revenue due to increased domestic and non-deals commercial tonnages received at the transfer stations and \$35k claims from State Government for the Gap Storm. Increase in expense: January 2011 flood related costs: \$9.615m collection contracts costs, \$3.5m transportation and disposal and \$567k additional internal operational costs. Decrease in expense: \$1m for Brisbane Waste Innovation Alliance contract costs through reallocation of volumes from Swanbank to Rochdale, \$300k for mobile garbage bin refuse and recycling collection service costs due to lower than anticipated growth in rateable properties, \$150k for bulk bin collection service costs due to lower than anticipated volume growth, \$200k for Sulo contract costs due to lower wheeler bin repair costs, \$1.528m depreciation expense resulting from the capitalisation of Cell 5B at the Rochdale Landfill and \$2.558m imputed tax expense due to decrease in surplus.	0	7,947	-1,382
	Annual Kerbside Large Item Collection	Increase in expense and revenue due to change in the annual kerbside collection service from a half-city large item and half-city green waste collection to whole-city large item collections only, which incurs additional costs due to a net increase in extra tonnages.	0	1,000	70
	Recycling Service for Multi-Unit Dwellings	Increase in expense due to increase in service costs and increase in revenue due to higher than anticipated take up rate of recycling bin services in multi-unit dwellings.	0	159	16
	Provide Additional Household Recycling Capacity	Decrease in \$272k revenue and \$913k expense due to lower than expected participation rates in the new additional household recycling capacity service. \$23k decrease in revenue due to lower participation rates and non-servicing of green waste bins during the January 2011 flood. Decrease in revenue of \$50k and expense of \$200k due to reduction in marketing and promotion costs as a funding strategy for flood recovery.	0	-1,113	-345
	Enhanced Waste Management Computer System	Carryover of capital from 2010-11 to 2011-12 due to delay in the implementation of the Queensland Government landfill levy and the unavailability of legislation/regulations until September 2011.	-80	0	0
	eWaste and Household Hazardous Waste Events	Decrease in expense due to the suspension of the remaining two quarterly eWaste events for 2010-11 as a funding strategy for flood recovery.	0	-7	0
	Green Waste Recycling Service	Decrease in revenue due to lower than anticipated participation rates in the new green waste recycling service. Increase in expense due to cost associated with reduced level services underestimated and continue to be higher than expected.	0	895	-501
	Tip Shop	Decrease in expense due to project savings.	0	-150	0
	Recycling Service for Commerce and Industry	Decrease in \$161k revenue and \$97k expense due to lower than expected participation rates in the new recycling service for commerce and industry. Decrease of \$2k revenue due to non-servicing of commerce and industry recycling bins in flood affected areas during the January 2011 flood.	0	-97	-163
1.5.1.1 City Cleansing	City-wide Litter Prevention	Decrease in revenue due to reduction penalty infringement notices issued by CARS litter compliance officers offset by lower expense due to limited litter compliance activities resulting from redirecting of work to flood-related activities and the cancellation of special police patrols during January 2011.	0	-195	-838
	Neighbourhood Plus - Street Sweeping	Decrease in expense due to project savings.	0	-500	0

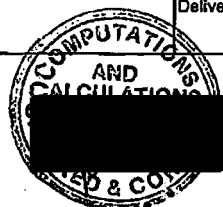


PART B

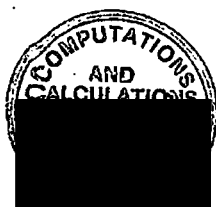
Third Budget Review 2010-11

Changes by Service for
PROGRAM 2: WATERSMART CITY

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 2 - WaterSmart City			-185	6,792	11,402
2.1.1.1 Integrated Water Cycle Management for the Future	Core	Decrease in expense due to: \$1k reduction in bank fees, \$1k transfer to Service 4.3.1.1 Guiding Brisbane's Development and \$17k transfer to Service 7.1.2.1 Law Enforcement and Animal Management Services. Increase in revenue due to additional plumbing revenue for assessment.	0	-19	50
	Managed Aquifer Recharge Agreement	Decrease in expense and revenue for early termination of project as the results did not warrant any further investigation by Brisbane City Council.	0	-40	-40
2.1.1.2 Integrated Water Cycle Planning	Water Reform	Saving due to reduction in legal expenses.	0	-90	0
2.2.2.1 Improve Ecological Health of Waterways	Local Waterways Health Assessment and Evaluation	Decrease in expense due to reduction in the assessment of previously completed Water Sensitive Urban Design projects.	0	-50	0
	Waterways Health Enhancement	Carryover of revenue from 2010-11 to 2011-13 for "Caring for our Country" grant funding to match approved payment schedule. Decrease in expense due to: \$100k reduction for projects not already contract committed and \$700k deferral of works to 2011-12 budget allocation by deferring non-urgent works to future years as a funding strategy for flood recovery.	0	-800	-185
	Erosion and Sediment Control Compliance Project	Increase in project revenue.	0	0	120
	Environmental Flows Assessment	Decrease in expense due to deferring project as a funding strategy for flood recovery.	0	-50	0
	Norman Creek 2026 Project	Decrease in expense due to project savings.	0	-25	0
	Jan 2011 Flood Damages - Creek Remediation	Increase in expense to address waterway erosion issues that are causing safety concerns to public and/or Council assets.	0	1,161	0
	Waterway Human Health and Safety - Site Monitoring	Increase in expense to fund water quality monitoring following flood.	0	50	0
2.2.3.1 Wharves Jetties and Pontoons	Wharves Jetties Pontoons and Fishing Platforms	Decrease in capital due to: \$725k by stopping 2 projects as a funding strategy for flood recovery and \$70k project savings.	-795	0	0
	Melers Road Boat Ramp Reconstruction	Carryover of revenue and expense from 2010-11 to 2011-12 for QTMR funded project impacted by the January 2011 flood.	0	-241	-241
	Jan 2011 Flood Damages - Wharves Jetties Pontoons and Fishing Platforms	Increase in capital to repair/replace assets damaged in the January 2011 flood.	500	0	0
2.2.3.2 Sea and River Walls	Sea and River Walls Rehabilitation	Decrease in expenditure as a funding strategy for the flood recovery.	-857	-143	0
	Jan 2011 Flood Damages - Sea and River Walls	Increase in capital to repair/replace assets damaged in the January 2011 flood.	500	0	0
2.3.1.1 Drainage Investigation and Design	Drainage Design	Increase in expense for urgent local flooding investigations resulting from increased rain and storm events.	0	150	0
2.3.1.2 Gather and Provide Flood Information	FloodWise Property Report Phase 3	Increase in expense to undertake report enhancements following floods.	0	150	0
	FloodWise Information System Stability	Increase in expense to ensure stability of the FloodWise system.	0	160	0
2.3.1.3 Flooding Investigations	Lord Mayor's Flood Taskforce Update and Review	Carryover of expense from 2010-11 to 2011-12 to avoid duplication with the independent review of Council's handling of the flood disaster.	0	-250	0
	LM Flooding Taskforce - Implementation and Delivery	Increase in expense to progress delivery of actions from 2005 LMTSF report.	0	180	0
	Joint Flood Taskforce	Increase in expense to fund and commence implementation of the Joint Flood Taskforce.	0	180	0
2.3.1.4 Local Drainage	Local Drainage Construction	Transfer of \$105k capital to expense to align with year and expected outcomes. \$280k non-urgent works deferred as a funding strategy for the flood recovery.	-385	105	0
2.3.1.5 Major Drainage	Major Drainage Construction	Carryover of \$300k capital from 2010-11 to 2011-12 and \$1.28m capital reduction as a funding strategy for the flood recovery.	-1,580	0	0
2.3.1.6 Plan for Future Infrastructure	Stormwater ICP Infrastructure	Carryover of \$750k capital from 2010-11 to 2011-12 as a funding strategy for flood recovery, offset by \$260k additional funding for latent condition.	-490	0	0
	Stormwater ICP Revenue	Increase in revenue and expense due to pending changes to the infrastructure charges subsidy policy.	0	3,955	11,300
	Rosedale Infrastructure Design and Delivery (15898)	Carryover of capital and revenue from 2010-11 to 2011-12 for Rosedale contributed assets as timing dependent on developers delivering contributed assets.	-7,352	0	-7,352



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
2.3.1.7 Manage Contributed Stormwater Assets	Drainage Contributed Assets	Increase in capital and revenue due to higher than anticipated drainage contributed assets received to date from developers.	7,750	0	7,750
2.3.2.1 Maintain Enclosed Drains	Operating	Decrease in expense due to operating savings.	0	-1,000	0
2.3.2.1 Maintain Enclosed Drains	Jan 2011 Flood Damage - Enclosed Drains Clean-up	Increase in expense for flood related clean up of enclosed drain network.	0	3,500	0
2.3.2.2 Maintain and Rehabilitate Open Drainage	Jan 2011 Flood Damage - Open Drains Clean-up	Increase in expense for flood related clean up of open drain network.	0	1,100	0
2.3.2.3 Drainage Rehabilitation	Stormwater Drainage Rehabilitation	Carryover of \$100k from 2010-11 to 2011-12 due to wet weather and flood recovery demands. \$467k decrease in capital due to construction cost estimates coming in under original design estimates and works being done in conjunction with other works.	-567	0	0
	Jan 2011 Flood Damages - Stormwater Assets	Increase in capital to restore and repair stormwater assets damaged during the January 2011 flood event.	1,900	0	0
2.3.2.6 Reconstruct Gullies	Gully Reconstruction	Transfer of expense to capital to align with year end expected outcome.	1,191	-1,191	0

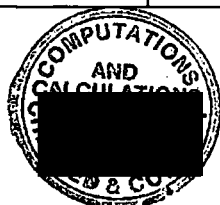


PART B

Third Budget Review 2010-11

Changes by Service for
PROGRAM 3: MOVING BRISBANE

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 3 - Moving Brisbane			-73,430	4,255	7,076
3.1.3.1 Providing Cycling Infrastructure	Local Access Network Improvements - Cyclists and Pedestrians	Savings achieved due to cancellation of jobs.	0	-582	0
	Connecting and Expanding the Bikeway Network	Savings of \$4.538m in capital, requested to be used as funding strategy for increases in other projects: \$1.35m Designing the Network. \$2.884m Bikeways Infrastructures Improvements SEQIPP and \$304k Creating a Cycle Friendly CBD. Savings of \$2.274m capital to go towards LMERC Special Review Target.	-6,812	0	0
	Designing the Network	Additional \$1.350m capital requested as project designs were bought forward to ensure Lord Mayor \$100m commitment is achieved. Funding Strategy: Offset \$1.350m request against savings offered up in Connecting and Expanding the Network project.	1,350	0	0
	Promoting Safer Bikeways	Savings of \$50k expense to meet LMERC Special Flood Review target (part of the Bikeways budget reduction to \$81m).	0	-50	0
	Bikeways Infrastructure Improvement - SEQIPP	Additional \$2.495m capital as projects brought forward. Reduction in revenue of \$389k (revenue was loaded in 2011-12 through budget development due to deferral of St Lucia project). Funding Strategy - offset the net \$2.884m against \$6.812m savings in Connecting and Expanding the Bikeway Network project. Additional \$280k capital for flood damage repair works on Bicentennial Bikeway Stage 2. Carryover of \$500k capital from 2010-11 to 2011-12 due to delay in construction program caused by the recent slip in the Coronation Drive embankment and the planned stability works.	2,275	0	-389
	CityCycle	Additional \$200k expense due to anticipated overrun as a result of launch and consultation costs.	1,000	-800	0
	Completing Riverwalk	Savings of \$96k to declare.	-96	0	0
	Cycling and Pedestrian Blackspots Program	Savings of \$427k to declare to go towards LMERC Special Review Target	-408	-18	0
	Creating a Cycle Friendly CBD	Additional revenue and capital of \$1.65m to recognise and recover shared costs with JCD as per joint principal contract with Council. Bring forward \$304k for On Road Cycle Way Connectivity project works linking CBD and Inner city suburbs (offset against savings in Connecting and Expanding the Bikeway Network).	1,954	0	1,850
3.1.3.2 Riverwalk	Riverwalk Maintenance and Rehabilitation	Additional expense of \$5k and reduction in revenue of \$15k required for Garden Point Boat Harbour because of the flood impact. Also, transfer of \$180k between capital and expense.	-160	165	-15
	Floating Riverwalk Rehabilitation	\$1.1m savings on unspent works following January 2011 flood event.	-1,100	0	0
	Jan 2011 Flood Damages - Floating Riverwalk	Additional \$2.1m capital to repair Council's assets damaged in January 2011 flood event.	2,100	0	0
3.2.1.1 Expanding the Network through New Infrastructure	Ferry Terminal Expansion Project - Increasing Capacity at Existing Terminals	Transfer unspent capital to Jan 2011 Flood Damage Ferry Terminals project.	-6,938	0	0
	Ferry Terminal Expansion Project - Two New Terminals	Transfer unspent capital to Jan 2011 Flood Damage Ferry Terminals project.	-4,197	0	0
	Jan 2011 Flood Damages - Ferry Terminals	Transfer unspent capital from Ferry Terminal Expansion Project - Increasing Capacity of Existing Terminals and Ferry Terminal Expansion Project - Two New Terminals. Forwards also revised according to revised program of works.	12,500	0	0
	Creating a New World City Ferry and CityCat Network	Carryover expense from 2010-11 to 2011-12 due to delays caused by the flood.	0	-170	0
	Riverside Centre City Cat Terminal - Extension to Waiting Area	Due to flooding, the proposed extension to Riverside Centre City Cat Terminal is under reconsideration. It is therefore proposed to transfer \$150k to the 1231A Brunswick St Bus Shelter project in City Governance program.	0	-150	0
	Increasing the CityCat Fleet to 19 Vessels	Bring forward \$127k capital from 2011-12 to 2010-11 to reflect delivery of Cats.	127	0	0
3.2.1.2 Provide Ferry Services	Core	Decrease in expense of \$2.2m for reduction in Ferry Service operating costs due to further savings, \$129k for city cats depreciation following the sale of city cats to QTC. Reduction in revenue of \$4m as recoveries from developers in regard to new ferry terminals will now not be received, and additional revenue of \$60k following signing of the TransLink Transit Authority Interim Ferry Funding Agreement.	0	-2,328	-3,940



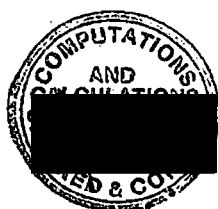
Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
3.2.2.1 Modern and High Quality Bus Infrastructure	Delivering 500 New Buses for Brisbane	Reduction in Capital (and Asset Sales) of \$3m due to lower body prices and lower than expected rise and fall adjustments.	-3,000	0	0
	Sherwood Road Bus Depot	Additional revenue for reimbursements for design works and IT expense of \$2.132m (\$1.104m in 2010-11 and \$1.028m in 2011-12). Additional costs for design works and IT of \$1.125m in 2010-11 (\$438k capital and \$687k expense). Bring forward \$162k expense from 2011-12 to 2010-11 and transfer \$428k capital to expenses in 2011-12. Due to ongoing bad weather carryover \$300k capital and expense from 2010-11 to 2011-12.	300	387	1,104
	New Bus Depots	Early demolition works of \$1m to be included in costs and to be recouped via reimbursement from QTC. Carryover \$125k capital to 2011-12. Reduce costs in 2010-11 by \$1.626m (correction for Second Budget Review). Due to DA issues that have arisen, there may be some delays which would mean further carryover of \$500k.	-1,187	-84	-1,166
	Upgrading and Enhancing the Network	Carryover \$1.08m capital from 2010-11 to 2011-12 due to delay in commencing the project caused by revised structural solution and wet weather. Transfer \$670k from capital to expense. Transfer \$75k expense for BT tools-of-trade budget for drainage works at Toowong workshops to asset owner (City Property).	-670	-335	0
3.2.2.2 Buses where you need them when you need them	Core	Reduction in expense of \$115k due to reduction in bus lease costs. Increase in revenue of \$350k for sale of buses to QTC.	0	-115	350
	CityGlider - West End to Newstead	Additional \$250k revenue from Translink. It is also requested that the project name be changed to "CityGlider Operations".	0	0	250
	CityGlider Bus Turnaround - West End Ferry	CityGlider Turnaround savings \$150k.	-150	0	0
3.2.4.1 Integrate the Various Modes	Enhancing Accessibility on the Bus Network	Savings of \$128k to declare.	0	-128	0
	Upgrading the Public Transport Network	Savings of \$250k expense. Revenue and expense also reduced by \$37k due to reduction in Translink SASIG funding.	0	-287	-37
3.3.1.1 Plan and Design the Network	Rosedale Infrastructure Design and Delivery	Reduce \$3.6m capital/revenue in 2010-11 due to reduced phase 1 projections. Carryover \$13.254m capital and revenue due to timing of contributed assets. Timing dependent on developers delivering contributed assets.	-16,854	0	-16,854
	Transport and Traffic ICP Revenue Project	Increase in expense and revenue due to pending changes to the Infrastructure charges subsidy policy.		10,407	29,735
3.3.2.1 TransApex	TransApex - Go Between Bridge	Reduction in capital of \$1.4m due to savings in traffic calming and Hale Street Link Alliance defect liability budgets. Carryover of \$500k to complete the associated works. Additional revenue of \$440k from FLOW marketing contributions and Alliance gain share payment from Energex works. Savings of \$262k from financing costs due to a revised forecast of project borrowings. Transfer of \$25k expense to capital to reflect correct accounting treatment of project costs.	-2,388	-25	440
	TransApex - Legacy Way	Carryover \$39.586m from 2010-11 to future years to realign the budget with Contractor payments and progress. Transfer \$14.868m from expense to capital in 2010-11 to reflect correct accounting treatment of project costs	-24,718	-14,868	0
	TransApex - Clem Jones Tunnel	Transfer \$1.129m expense to capital to reflect correct accounting treatment of project costs. Reduction of \$500k interest revenue.	1,129	-1,129	-500
	TransApex - East West Link - Review of Traffic Demand	Project stopped, savings of \$20k expense declared.	0	-20	0
	TransApex - Go Between Bridge Operations	Savings of \$1.54m expense from a reduction of overhead expenses. Additional expense of \$50k for the tolling equipment shut down and relocation and asset inspections and repair and \$18k for additional financing costs. Carryover of \$250k expense due to revised project forecast. Revenue reduction of \$866k to match traffic forecast and \$124k due to the recent floods and closure of bridge/toll free period.	0	-1,722	-990
	TransApex - Clem Jones Tunnel Operations	Carryover of \$300k expense for Transport Authority Communications Upgrade. Savings of \$300K declared.	0	-600	0
	TransApex - Legacy Way Operations	Savings of \$1.527m from capitalised interest.	-1,527	0	0



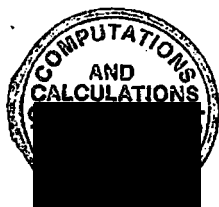
Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
3.3.2.2 Road Action Program	Core	Declare \$22,822m savings against RAP target.	0	22,822	0
	Major Traffic Improvements - Intersections	Transfer in \$80k capital from Safer Routes to School Project for signalisation of the access into Clairvaux Mackillop Catholic College on Klumpp Road, savings of \$550k capital for Jane St/Montague Rd (\$400k) and Ipswich/Juliette (\$150k), transfer of \$857k from expense to capital. Also, various transfers within schedule with a nil net impact.	387	-857	0
	Tilley Rd Extension Stage1 Wondall Rd to Manly Rd	Project complete and waiting on final costs, savings to declare of \$200k. Also, transfer \$75k capital to Manly Rd - Wondall Rd Upgrade and \$275k to Manly Rd Moss St to Aranga Rd to cover final costs of project.	-550	0	0
	Manly Rd - Moss St to Aranga Rd	Transfer \$75k capital from Tilley Rd Extension Stage1 Wondall Rd to Manly Rd.	75	0	0
	Inala Ave - King Ave Stage 1- Blunder Rd to Sherbrooke Rd	Carryover \$3.1m capital from 2010-11 to 2012-13 as per LMERC Special Review.	-3,100	0	0
	Progress Rd Stage 2 - Ipswich Mty to Boundary Rd	Carryover of \$1.2m capital from 2010-11 to 2011-12 due to the need to have the deed of agreement negotiated before proceeding with the project. Increase revenue by \$1.858m due to contribution from Komastu (\$200k in 2010-11 and \$1.658m in 2011-12).	-1,200	0	200
	Beckett Rd Widening-Saturn Cres to Albany Creek Rd	Savings of \$7,369m to declare.	-7,369	0	0
	Johnson Road - Stapylton Road Intersection Upgrade	Carryover of \$500k capital and \$1.173m revenue from 2010-11 to 2012-13 as project has been deferred.	-500	0	-1,173
	Kingsford Smith Drive - Gateway Mty to New Mty	Increase \$1.5m revenue due to QUU contribution towards water main construction works. Savings of \$800k capital based on current revised forecasts.	-800	0	1,500
	Hamilton Rd - Maundrell Tce - Hamilton Rd Intersection Upgrade	Carryover \$800k capital from 2010-11 to 2011-12 as per LMERC Special Review.	-800	0	0
	Padstow and Warrigal Intersection Upgrade	Savings of \$2.2m to declare.	-2,200	0	0
	Beenleigh Rd-Warrigal Rd to St Andrews St	Savings of \$3.4m due to significant reduction in scope. (\$1m of the savings to be offset against the additional money required in Beenleigh Warrigal Rd Intersection)	-3,400	0	0
	Railway Crossing - Robinson Rd Geesbung	Savings of \$50k to declare.	-50	0	0
	Blunder Rd Stage 7-Crossacres St to Blunder Creek Bridge	Savings of \$5.9m to declare.	-5,900	0	0
	Blunder Rd Stage 6-Blunder Creek to Stapylton Rd	Savings of \$5.3m to declare and carryover of \$2m requested due to delays caused by wet weather and revised contract cash flows.	-7,300	0	0
	Bridgeman Rd Stage 1-Beams Rd to Carseldine Rd	Savings of \$2.1m to declare.	-2,100	0	0
	Progress Road Stage 3 - Boundary Rd to Centenary Hwy	Savings of \$100k to declare.	-100	0	0
	Kingsford Smith Drive - Future Upgrade	Carryover \$3.5m from 2010-11 to 2012-13 as per LMERC Special Review.	-3,500	0	0
	Illawenna Street - Beaudesert Rd to Gowan Rd	Savings of \$1.7m to declare.	-1,700	0	0
	Project Enhancement and Maintenance	Project complete and savings to declare of \$100k.	-100	0	0
	Bridgeman Rd Stage 2-Albany Creek Rd to Beams Rd	Savings of \$1m to declare.	-1,000	0	0
	Manly Rd - Wondall Rd Upgrade	Transfer \$75k capital from Tilley Rd Extension Stage1 Wondall Rd to Manly Rd.	75	0	0
	Beenleigh Rd-Stillers Rd	Savings of \$1m to declare. (\$500k of savings to be offset against request in Railway Crossing Telegraph Rd). Also, carryover \$400k from 2010-11 to 2011-12 for landscaping yet to be completed.	-1,400	0	0
	Beenleigh Rd-Warrigal Rd Upgrade	Due to increased scope for this project an additional \$1m is requested (\$300k in 2010-11 and \$700k in 2011-12).	300	0	0
	Railway Crossing - Telegraph Rd Bald Hills - Bracken Ridge	Request additional \$500k capital (over 2 years \$264k in 2010-11 and \$236k in 2011-12 to complete detailed design already in progress. Funding Strategy: Offset request of \$500k against savings in Beenleigh Stillers (\$3.5m).	264	0	0
	Telegraph Rd Corridor	Carryover \$150k to 2012-13 as project was deferred.	-150	0	0
	Moggill Rd Coonan St and Keating St Denmac Ford Site	Transfer \$17m to Service 3.3.2.3 Construct Local Transport Networks.	-16,500	-500	0
	Roads To Recovery Revenue Project	Bring forward \$3m revenue from 2011-12 to 2010-11 due to accelerated Roads to Recovery program at the request/approval of the Federal Government.	0	0	3,000



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
3.3.2.3 Construct Local Transport Networks	Footpath Contributed Assets	Increase in funding requested for footpath contributed assets revenue and capital.	1,500	0	1,500
	Ward Footpath Trust Fund	Carryover of \$500k in unallocated works and works requiring outsourcing for delivery is required. The delivery of these works is carried out in 2010-11 would incur additional costs to Council and would not have been value for ward allocation money. Works will be delivered early in the 2011-12 financial year.	-500	0	0
	Kerb and Channel Contributed Assets	Increase in capital and revenue for Kerb and Channel contributed assets.	2,700	0	2,700
	Retaining Walls and Embankments	\$45k transfer between capital and expense. Also, addition of project at St Bridgid's church in Musgrave Road Red Hill \$250k to meet safety, protection of property and liability requirements funded from savings within the schedule.	45	-45	0
	Road Construction Minor Traffic Density	Savings of \$148k capital as Eagle Tce., Auchenflower is not proceeding. Increase revenue of \$103k for Developer Contribution 21 Lacey Road, Carseldine. Transfer \$165k between capital and expense.	19	-165	103
	Roads and Bikeways Contributed Assets	Increase to revenue and capital \$7.8m due to contributed assets received to date from developers greater than anticipated.	7,800	0	7,800
	Traffic Signals Hardware Equipment	Savings of \$239k capital offered. \$1.644m transfer between capital and expense. Carryover of \$300k from 2010-11 to 2011-12 required as issuing of design packages is delayed.	-2,183	1,644	0
	Developer Contributions - Council Contributions to Developer Constructed Works	Additional funding of \$1.846m sought in order to enter Infrastructure agreements for: - Kilarwah Rd, Wynnum West (\$83k) - Bradman St, Acacia Ridge (\$663k) - Inala Rd, Inala (QM Properties) (\$1.1m)	1,846	0	0
	Stapylton Rd Pallara	Carryover of \$250k from 2010-11 to 2011-12 due to delays in commencement of preliminary design.	-250	0	0
	Sumner Road Upgrade	Bring forward \$1.5m capital from 2011-12 to 2010-11 as project commenced earlier than scheduled. Transfer \$50k expense to capital.	1,550	-50	0
	Wacol Station Rd Sumners Rd Upgrade	Project cancelled. Funds diverted to flood recovery. Savings of \$250k to declare for 2010-11, \$1m in 2011-12 and \$1m in 2012-13	-201	-49	0
	Wacol Station Rd Interim Upgrade	Carryover \$1.5m from 2010-11 to 2011-12.	-1,500	0	0
	Paradise Rd Upgrade	Account reallocation: Transfer \$50k from expense to capital.	50	-50	0
	Translink Bus Lanes	Project cancelled. Savings of \$509k capital \$536k revenue.	-509	0	-536
	Safer Routes to School	Transfer \$80k from Safer Routes to School Project to Major Traffic Improvements Project for signalisation of the access into Clairvaux MacKillop Catholic College on Klumpp Road.	0	-80	0
	Tilley Rd Extension	Carryover \$1.05m from 2010-11 to 2011-12 as detailed design delayed to commence 2011-12 to assist in flood recovery works this financial year.	-1,050	0	0
	Kate Witton Intersection Upgrade	Savings of \$378k capital and \$18k expense as project cancelled following community consultation.	-360	-18	0
	Seventeen Miles Rocks Duporth Intersection Upgrade	Project deferred. Savings of \$3m to declare for 2010-11 and \$5.4m in 2011-12.	-3,000	0	0
	New Kerb and Channel and Kerb Ramps Construction	Offer up funds \$100k (\$98k capital and \$2k expense) - Sugarmill Rd Eagle Farm deferred and rescheduled in a later financial year.	-98	-2	0
	Moggill Rd Coonan St and Keating St Derrnac Ford Site	Transfer \$17m from Service 3.3.2.2 Road Action Program.	17,000	0	0
	Jan 2011 Flood Damages - Roads and Road Related	Additional \$200k capital to repair Council's roads and road related assets damaged in January 2011 flood event.	200	0	0
	Jan 2011 Flood Damages - Traffic Signals	Additional \$2.1m capital to repair Council's traffic signals assets damaged in January 2011 flood event.	2,500	0	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
3.3.3.1 Maintain and Improve the Network	Core	Additional expense of \$100k for Paved Roads due to increased pothole spending and failure repairs caused by heavy rainfall prior to Christmas and \$465k for Grass Cutting Streets following extra cuts programmed to counter ideal growing conditions. Reduction in expense of \$500k for savings identified in street lighting costs, \$300k savings in signal maintenance activity requiring less emergent works than previously forecasted, \$500k Unpaved Roads and \$700k Kerb and Channel maintenance works not spent due to resources being diverted to flood related works. Increase \$8.4m in funding required for road infrastructure assets loss on disposal (negative revenue).	0	-1,435	-8,400
	Roads Network Resurfacing	Deferral to 2011-12 of projects from Roads Network Resurfacing Program, due to timing issues with other Council works with no change to budget. Correction of swing between capital and expense, and swing between internal and external.	2,413	-2,413	0
	Kerb and Channel (10746)	Savings of \$100k expense and transfer of \$26k from expense to capital.	26	-126	0
	Bridges and Culverts Reconstruction and Rehabilitation	Defer funding due to resource reallocation to flood recovery (\$500k) to 2011-12, cancellation of Walter Taylor Ladder replacement project (\$150k), carryover funding of two bridge rehabilitation of projects (\$450k) to 2011-12.	-1,040	-80	0
	Safe Paths CBD	Transfer \$185k between capital and expense.	185	-185	0
	Footpath and Bikeway Reconstruction	Savings of \$367k capital and \$1.88m expense and \$70k transfer between capital and expense.	-367	-1,810	0
	Bridges Rehabilitation Storm Damage	Additional funds required after October 2010 storm to repairs damages sustained to some structural assets. This expenditure does not qualify for grants as the damage threshold Council-wide was not met.	0	211	0
	Major Assets Project Management	\$60k increase in funding requested for Major Assets Project Management, offset by increase in external revenue.	0	60	60
	Repairs Flood Damage Rafting Ground Road	Remove project funding as flood damage is covered under Jan 2011 Flood Damages - Roads and Road Related project.	-972	0	-375
	Jan 2011 Flood Damages - Roads and Road Related	Additional \$6.5m capital and \$800k expense to repair Council's roads and road related assets damaged in January 2011 flood event.	6,500	800	0
	Jan 2011 Flood Damages - Bridges and Culverts	Additional \$470k capital to repair Council's Bridge and Culvert assets damaged in January 2011 flood event.	470	0	0
	Jan 2011 Flood Damage - City Lighting	Additional \$260k expense required due to flood damage to BCC owned lighting assets.	0	260	0
3.3.4.1 Manage the Network	Core	Increase in expense \$2.368m due to increase in unpaid parking revenue 12 months after issue date. Decrease in expense \$18k due to reduction in CARS bank fees less than anticipated and \$200k for CRU savings in labour costs due to vacancies. Transfer \$8k expenses from East Regional Operations to Service Delivery Team due to transfer of building certifier function and \$34k due to allocations error in Second Budget Review. Reduction in revenue of \$8.141m due to revised parking enforcement activity and redirection of officers to flood response.	0	2,110	-8,141
	Road Network Optimisation Strategy	Savings of \$1.861m expense no longer required.	0	-1,861	0
	Suburban Amenity Improvements	Savings of \$700k expense identified, based on year to date spend.	0	-700	0
	Network Modernisation	Savings of \$50k expense identified, based on year to date spend on scheduled projects.	0	-50	0
	Etol Management	Reduction in revenue due to delayed Etol enforcement activities.	0	0	-800
	Modernise Traffic Signal Communications	Savings of \$200k expense.	0	-200	0
	Strategic Freight Route Development	Carryover \$100k expense from 2010-11 to 2011-12 due to scope change.	0	-100	0
	Temporary Road Closure Management	Savings of \$14k expense identified due to closure of the project.	0	-14	0
	Local Area Traffic Management - Traffic Calming	Savings of \$100k expense identified based on project changes following community consultation.	0	-100	0
	Congestion Reduction Unit Initiatives	Carryover of \$150k capital from 2010-11 to 2011-12 for CCTV commissioning costs and capital savings of \$235k CCTV and \$50k VMS management costs. Savings of \$81k expense in CRU relocation projects. Transfer \$320k expense to capital for the VMS component.	-115	-401	0
	Jan 2011 Flood Damages - Signs and Lines	Additional \$50k expense to repair Council's signs and lines assets damaged in January 2011 flood event.	0	50	0

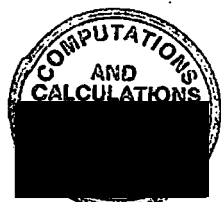


PART B

Third Budget Review 2010-11

Changes by Service for
PROGRAM 4: FUTURE BRISBANE

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 4 - Future Brisbane			-5,403	16,054	-2,700
4.1.1.2 Strategic Land Use Planning	Rosedale Infrastructure Design and Delivery	Decrease in capital: \$2m due to scope changes and \$1.92m carryover of capital from 2010-11 to 2011-12 for land resumption due to delays with confirming extent of land required for roads. Offset by \$680k additional compensation claim payments.	-3,240	0	0
	Affordable Housing	Carryover of expense from 2010-11 to 2011-12: \$1.693m due to slow take up by developers accessing incentives and \$200k to fund applications in progress. Decrease in revenue due to discontinuation of Federal Government grants due to lack of current take up by developers.	0	-1,893	-2,000
	Natural Disaster Risk Management Code for City Plan	Transfer of expense from Natural Disaster Risk Management Code for City Plan project in Service 7.2.1.1 Disaster Management due to realignment of project management.	0	70	0
	City Shape Refresh	Carryover of expense from 2010-11 to 2011-12 due to postponement of Strategic Plan community engagement as Council assess the plan in light of the current flood related reviews and associated event definitions.	0	-385	0
4.1.2.1 Priority Infrastructure Plans and Infrastructure Agreements	Material Change of Use Investigations	Increase in revenue due to Material Change of Use applications debt recovery activities.	0	0	500
	Expedite Infill Priority Infrastructure Plans Implementation.	Increase in expense due to pending change in infrastructure charges.	0	20,015	0
4.2.1.1 Plans for Suburbs and Other Development Areas	Neighbourhood Plans	Decrease in \$119k capital and \$361k expense due to program being delayed as a result of new mapping implications and community concern and involvement. \$989k decrease in expense due to project savings.	-119	-1,350	0
4.2.2.1 Urban Futures Brisbane	City Centre Master Plan	Decrease in capital as a funding strategy for flood recovery.	-299	0	0
	CBD Vibrant Laneways.	Decrease in expenditure as a funding strategy for flood recovery.	-893	-48	0
4.2.3.1 Strategic City Improvement Projects	Strategic City Improvement Projects	Decrease in expenditure as a funding strategy for flood recovery.	-910	-102	0
	Centres Detail Design Manual	Decrease in expense as a funding strategy for flood recovery.	0	-75	0
4.3.1.1 Guiding Brisbane's Development	Core	Decrease in \$1.5m revenue in Development Assessment due to lower than anticipated number of applications being received, fee waivers are being given for flood affected applications and free prelodgement meetings are also being provided for flood affected properties and delays with Neighbourhood Plans are expected to delay the lodgement of some anticipated DAs. Offset by \$300k revenue from increased footpath closure applications. Decrease in expense: \$24k reduction in bank fees and \$34k transfer to Service 7.1.2.1 Law Enforcement and Animal Management Services to correct allocations. Offset by \$18k transfer from various Services to align with service delivery.	0	-40	-1,200
	Development Assessment Improvement	Transfer of expense to capital to align with year end expected outcome.	58	-58	0
	Siting Variations Redesign	Decrease in expense as a funding strategy for flood recovery.	0	-40	0
	Advertising Sign Redesign	Decrease in expense as a funding strategy for flood recovery.	0	-40	0

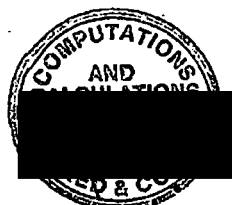


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Third Budget Review 2010-11

Changes by Service for
PROGRAM 5: YOUR BRISBANE

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 5 - Your Brisbane			-16,939	5,682	-4,623
5.1.1.1 Festivals and Events	Core	Decrease in expense due to transfer of Community Cultural Grant funding to Lord Mayor's Community Disaster Relief Appeal Fund in Service 5.4.3.2 Program Support.	0	-32	0
5.1.2.1 City Entertainment	Core	Decrease in expense due to operating savings.	0	-40	0
5.1.4.2 Social History	Core	Decrease in expense due to transfer of Community Cultural Grant funding to Lord Mayor's Community Disaster Relief Appeal Fund in Service 5.4.3.2 Program Support.	0	-10	0
	Chinese Museum	Carryover of expense from 2010-11 to 2011-12 due to negotiations are still continuing on the payment of the grant.	0	-150	0
5.1.5.2 Creative City	Creative City Initiative	Decrease in expense due to ceasing of project.	0	-150	0
5.1.5.3 Powerhouse	Core	Decrease in depreciation expense due to revaluation, re-lifting and retirement of assets.	0	-300	0
5.2.1.1 Lending and Reference Services	Core	Increase in expense due to counter disaster costs for Library Services.	0	34	0
5.2.1.2 Maintain and Enhance Libraries	Core	Decrease in depreciation expense due to revaluation, re-lifting and retirement of assets.	0	-180	0
	Library Enhancements	Transfer of expense to capital to align with year end expected outcome.	150	-150	0
	Jan 2011 Flood Damages - Libraries	Increase in capital to fit out Fairfield Library damaged by January 2011 flood.	1,328	0	0
5.2.1.5 Information and Communications Technology Infrastructure	Wi-Fi and Faster Internet in Every Council Library	Decrease in expense as a funding strategy for flood recovery.	0	-50	0
5.2.1.6 Purchase and Management of Library Collections	Core	Increase in expense due to replacement of flood damaged or lost books from residents houses.	0	40	0
5.3.1.1 Community Participation Opportunities	Active and Healthy Parks Program	Decrease in expense as a funding strategy for flood recovery.	0	-20	0
5.3.2.1 Sport and Recreation Organisation Development	Core	Increase in expense of \$380k due to additional funding for water charges and pedestal remission for Sporting Clubs and Non-profit organisations. Decrease in \$10k expense due to transfer of Community Cultural Grant funding to Lord Mayor's Community Disaster Relief Appeal Fund in Service 5.4.3.2 Program Support.	0	370	0
5.4.1.1 Indigenous Aspirations	Indigenous Aspirations Strategy	Decrease in expense as a funding strategy for flood recovery.	0	-40	0
	Reflecting Aboriginal Culture in Public Space - Sorny Site Upgrade	Carryover of expense from 2010-11 to 2013-14 due to extension of project life.	0	-60	0
5.4.1.2 Multicultural and Refugee Initiatives	Multicultural Communities	Decrease in expense due to scope changes and project savings.	0	-80	0
5.4.1.4 Homelessness and Affordable Housing	Homelessness and Affordable Housing	Carryover of \$350k expense from 2010-11 to 2011-12 due to extension for completion of Community Housing Partnership Program and \$20k decrease in expense as a funding strategy for flood recovery.	0	-370	0
5.4.2.1 Community Capacity Building	Core	Increase in expense of \$100k for Volunteer Coordination and Community Recovery Responses offset by decrease in \$20k expense due to transfer of Community Cultural Grant funding to Lord Mayor's Community Disaster Relief Appeal Fund in Service 5.4.3.2 Program Support.	0	80	0
5.4.3.1 Grants Administration	Core	Decrease in depreciation expense due to revaluation, re-lifting and retirement of assets.	0	-63	0
	Lord Mayor's Flood Recovery Events	Increase in expense due to Lord Mayors Suburban Initiative events to celebrate community contribution towards Flood Event Response for flood impacted Wards.	0	195	0
5.4.3.2 Program Support	Core	Increase in expense: \$150k transfer of Community Cultural Grant from various Services in Your Brisbane Program to Lord Mayor's Community Disaster Relief Appeal Fund.	0	250	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
5.5.1.1 Facilities Development and Maintenance	Core	Increase in depreciation expense due to revaluation, re-lifing and retirement of assets.	0	380	0
	Sports Precinct Planning and Development	Decrease in expenditure as a funding strategy for flood recovery.	-100	-100	0
	Perry Park Indoor Recreation Centre	Carryover of expense from 2010-11 to 2011-12 as contract has not been ratified by other stakeholders.	0	-500	0
	Dragon Boat Storage Racks	Carryover of expenditure from 2010-11 to 2011-12 as a funding strategy for flood recovery.	-30	-20	0
	Wyralong Regional Trail Bike Facility Contribution	Decrease in expense due to share purchase.	0	-500	0
	Community Facility Improvement Program	Decrease in capital due to project savings.	-450	0	0
	Jan 2011 Flood Damages - Community Assets	Increase in capital due to community assets damaged by January 2011 flood.	905	0	0
	Jan 2011 Flood Damages - Community Leases	Increase in expense due to Council assets damaged by January 2011 flood.	0	5,700	0
	Donation to Flood Affected Community Facilities	Increase in expense due to donation to flood affected community facilities.	0	500	0
5.5.2.1 Community Halls	Core	Decrease in depreciation expense due to revaluation, re-lifing and retirement of assets.	0	-30	0
	Kenmore Community Centre	Carryover of capital from 2010-11 to 2011-12 due to reprioritisation of resources as a result of January 2011 flood.	-45	0	0
	Forest Lake Community Hall	Carryover of expense from 2010-11 to 2011-12 due to works unable to be completed in this financial year.	0	-80	0
5.5.2.2 Riverstage	Core	Increase in \$470k expense offset by \$595k revenue due to additional patrons at Riverstage events. \$35k increase in depreciation due to revaluation, re-lifing and retirement of assets	0	505	595
5.5.2.3 Planetarium	Core	Decrease in depreciation expense due to revaluation, re-lifing and retirement of assets.	0	-70	0
5.5.3.1 Sports Complexes	Core	Transfer of revenue and expense between Services 5.5.3.4 Pools and 5.5.3.1 Sports Complexes.	0	10	-50
5.5.3.2 Sports Fields and Hard Courts	Sportsfield and Hard Court Condition Rehabilitation	Transfer of \$800k capital to expense to align with year end expected outcome and \$295k capital savings as a funding strategy for flood recovery.	-1,095	800	0
5.5.3.3 Facilities Improvements Grants	Core	Decrease in expense due to transfer of Community Cultural Grant funding to Lord Mayor's Community Disaster Relief Appeal Fund in Service 5.4.3.2 Program Support.	0	-78	0
5.5.3.4 Pools	Core	Increase in expense due to: \$215k depreciation expense due to revaluation, re-lifing and retirement of assets. Decrease of \$8k revenue as a result of January 2011 flood. Transfer of \$20k revenue and \$40k expense between Services 5.5.3.4 Pools and 5.5.3.1 Sports Complexes.	0	175	12
	City Pools Upgrade Program	Transfer of expense to capital to align with year end expected outcome.	164	-164	0
	Surrender of Centenary Pool and Chemsides Pool Leases	Increase in expense for lessee to surrender leases and Council to manage and refurbish the pools.	0	400	0
	Jan 2011 Flood Damages - Pools	Increase in capital due to January 2011 flood related damages to Jindalee and Bellbowrie pools.	300	0	0
5.5.3.5 Golf	Core	Decrease in revenue of \$180k and \$64k expense due to January 2011 flood damage to the golf course. \$100k decrease to depreciation expense due to revaluation, re-lifing and retirement of assets.	0	-164	-180
5.6.1.1 The People's Place	Core	Decrease in depreciation expense due to revaluation, re-lifing and retirement of assets.	0	-540	0
	City Hall Rebuilding Program	Carryover of expenditure and revenue from 2010-11 to 2011-13 due to timing across financial years based on revised cashflows. Will not affect final delivery date.	-18,068	184	-5,000

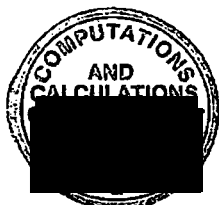


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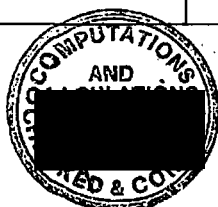
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Changes by Service for
PROGRAM 6: SUBTROPICAL CITY - PARKS AND RECREATION

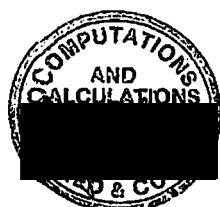
Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 6 - Subtropical City - Parks and Recreation			-2,592	10,993	22,342
6.1.1.1 Managing Trees on Public Land	Core	Increase in expense due to increase in work load as a result of January 2011 flood.	0	765	0
6.2.1.1 Parks Planning and Policy	City Parks Trust	Transfer of expense to capital to align with year end expected outcome. Decrease in capital of \$300k due to delay or not proceed with acquisition of Bellevue St, Gaythorne, as a funding strategy for flood recovery.	-230	-70	0
	Key City Park Upgrades	Carryover of \$720k capital from 2010-11 to 2011-12 Impacted by flood. Decrease of \$30k expenditure due to project savings.	-397	-353	0
	Parks Infrastructure Charges Program	Increase in \$964k expenditure to meet the acquisition costs for a flood affected site and to continue the completion of settlement and implementation phases of the Parks Infrastructure Charges Program. Increase in expense of \$9.135m and revenue of \$28.1m due to pending changes to the infrastructure charges subsidy policy.	2,060	8,039	26,100
	Rosedale Infrastructure Design and Delivery	Carryover of capital and revenue from 2010-11 to 2011-12 dependent on developers delivering contributed assets.	-3,118	0	-3,118
	Brisbane Backyards Exhibit - Project Eden	Decrease in revenue in line with budget allocation.	0	0	-130
	Parks Local Law Review	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-50	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
6.2.1.2 Parks Maintenance and Development	Core	Increase in expense: \$385k to increase the frequency of grass cuts after January 2011 flood, \$220k increased water charges from QUU for parks and toilets, \$300k increase electricity charges, \$280k park tree maintenance as a result of January 2011 flood and \$500k transfer from Neighbourhood Plus - Additional Cuts - Parks Grass project to correct Second Budget Review allocation.	0	1,685	0
	Mt Coot-tha Botanic Gardens - Refurbish Assets	Transfer of revenue and expense to the same project in Service 6.2.2.1 Manage Mt Coot-tha Botanic Gardens to align with budget.	-595	0	-595
	Toilets Upgrade Program	Decrease in capital: \$71k transfer to expense to align with year end expected outcome and carryover of \$210k of capital from 2010-11 to 2011-12 due to availability of resources allocated to flood recovery. \$43k decrease in expense due to project savings.	-281	28	0
	Shelter Upgrades - Parks	Decrease in capital: \$92k transfer to expense to align with year end expected outcome and carryover of \$100k from 2010-11 to 2011-12 to relocate existing facilities to higher ground and \$40k project savings.	-232	92	0
	Repair Road and Car Park Defects	Decrease in expense: \$50k transfer to capital to align with year end expected outcome, \$25k project savings and \$5k expense and \$80k capital carryover from 2010-11 to 2011-12.	-30	-80	0
	Memorial Restoration	Carryover of \$65k expense from 2010-11 to 2011-12 due to delay relocation and restoration of historical relics to preserve and protect items from Anstead Quarry and \$50k project savings, as a flood funding strategy.	0	-115	0
	Play Safe Upgrades	Decrease in expense: \$182k transfer to capital to align with year end expected outcome, \$24k project savings and \$30k expense and \$80k capital carryover from 2010-11 to 2011-12 due to delay works to upgrade playground and amenities at Biambi Yumba Park, which was flood impacted.	102	-236	0
	Boardwalks and Bridges Safety and Asset Maintenance Program	Transfer of expense to capital to align with year end expected outcome.	261	-261	0
	Neighbourhood Plus - Additional Cuts - Parks Grass	Transfer of expense to Core to correct Second Budget Review allocation.	0	-500	0
	Upgrade Key Neighbourhood Parks	Bring forward of \$277k capital from 2011-12 to 2010-11 and \$150k additional capital to deliver commitments and development conditions in upgrades to Philip Place Park (Forest Lake). Carryover from 2010-11 to 2011-12: \$380k revenue from RLCIP projects being deferred due to flood works, \$1,047m capital and \$65k expense to delay works to upgrade playground and amenities at Biambi Yumba Park and to delay works to upgrades at Rosemount Park, Sinnamon Park; Philip Place Park, Forest Lake. Transfer of \$108k expense to capital to align with year end expected outcome.	-512	-173	-350
	Dog Off Leash Area Refurbishment	Carryover of \$60k expense from 2010-11 to 2011-12 to delay works in Yimbun Park and Salisbury Recreation Reserve and \$23k project savings, as a flood funding strategy.	0	-83	0
	Metropolitan and District Playgrounds	Carryover of capital from 2010-11 to 2011-12 due to lead time for delivery of playground equipment and \$90k project savings.	-300	-90	0
	Park Recreation Facility Rehabilitation and Replacement	Transfer of \$52k capital to expense to align with year end expected outcome. Decrease of \$51k expense due to project savings.	-52	1	0
	Park Path and Track Rehabilitation and Reconstruction	Decrease in capital of \$110k and \$10k expense to delay Centenary Place Park project towards the funding strategy for flood recovery. \$97k capital transfer to expense to align with year end expected outcome.	-207	87	0
	Restoration for Recreation	Bring forward of \$200k capital from 2011-12 to 2010-11 to remediate three priority sites and \$70k additional capital due to increase in project costs related to flood.	270	0	0
	Brisbane Foreshore Parklands Enhancement Projects - Stage 2 - Lota and Brighton	Decrease in \$526k expenditure due to delay in upgrading and transfer of \$144k expense to capital to align with year end expected outcome.	-356	-170	0
	Maintain Lakes Systems in Parks	Decrease in expense due to project savings.	0	-60	0
	Water Cartage	Decrease in expense due to reduction in water cartage as a funding strategy for flood recovery.	0	-80	0
	Davies Park Implementation Stage 1	Carryover of expense from 2010-11 to 2011-12 as a funding strategy for flood recovery.	0	-25	0
	Exercise Equipment in Parks	Carryover of expense from 2010-11 to 2011-12 due to delaying approved works in flood affected parks - Amazon Place Park and Jack Cook park and delaying approved works in Decker Park, as a flood funding strategy.	0	-140	0
	Wi-Fi in Parks Trial	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-30	0
	New Perk - Milton Parkland	Increase in expense due to resourcing to initiate the project.	0	120	0
	Jan 2011 Flood Damages - Parks	Increase in expenditure to fund all works associated with restoration of flood affected parks.	680	2,720	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
6.2.1.3 Parks and Reserves Compliance	Core	Decrease in expense due to: \$1k lower than anticipated bank fees, \$1k transfer to Service 4.3.1.1 Guiding Brisbane's Development and \$25k transfer to Service 7.1.2.1 Law Enforcement and Animal Management Services.	0	-27	0
6.2.2.1 Manage Mt Coot-tha Botanic Gardens	Mt Coot-tha Botanic Gardens - Refurbish Assets	Transfer of \$595k capital and \$595k revenue from the same project in Service 6.2.1.2 Parks Maintenance and Development to align with budget. Offset by carryover of \$250k capital and \$150k revenue from 2010-11 to 2011-12 due to extension of design phase.	345	0	445



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Changes by Service for
PROGRAM 7: PUBLIC HEALTH AND SAFETY

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 7 - Public Health and Safety			0	33,036	-2,351
7.1.1.2 Public Health Strategies and Services	Local Laws Review	Decrease in expense due to project savings.	0	-100	0
	Brisbane Water Safety Program	Decrease in revenue due to lower than anticipated demand for pool safety certificates and decrease in expense due to slightly scaling of deliverables.	0	-30	-153
	Safe Pools	Decrease in expense due to lower price negotiated for database.	0	-15	0
7.1.1.3 Mosquito and Pest Services	Core	Increase in expense due to additional mosquito and pests services being required because of the heavy rain.	0	152	0
	Midge Control Advocacy and Research	Decrease in expense due to project being completed earlier than expected.	0	-30	0
7.1.2.1 Law Enforcement and Animal Management Services	Core	Increase in expense due to: \$137k transfer from various Services to correct allocations, offset by \$9k reduction in bank fees and \$4k transfer to Service 4.3.1.1 Guiding Brisbane's Development.	0	124	0
	FIDO - Find Irresponsible Dog Owners Campaign	Decrease in expense due to project savings.	0	-50	0
	Animal Shelters	Decrease in expense due to project savings.	0	-50	0
7.1.2.2 Licensing and Compliance	Core	Decrease in revenue due to redirection of resources and suspension of usual activities during the flood event and revised rapid responses enforcement activity. Decrease in expense: \$6k lower than anticipated bank fees and \$3k transfer to Service 4.3.1.1 Guiding Brisbane's Development.	0	-9	-1,998
	Residential Amenity Program	Decrease in revenue due to scope change and increase in expense as a result of flood event.	0	163	-200
7.2.1.1 Disaster Management	Core	Increase in expense: \$31.75m as a result of the January 2011 flood event and \$1.1m clean up costs related to storm in October 2010.	0	32,850	0
	Natural Disaster Risk Management Code for City Plan	Transfer of expense to Natural Disaster Risk Management Code for City Plan project in Service 4.1.1.2 Strategic Land Use Planning due to realignment of project management.	0	-70	0
	SES Service Recognition Payments	Decrease in expense due to lower than anticipated SES membership.	0	-50	0
	SES Fundraising Support	Increase in expense due to increased SES fundraising activity.	0	50	0
	SMS Early Warning Alerts	Increase in expense due to the anticipated increase in Brisbane Residents signing up for the free Early Warning SMS Alerts service.	0	100	0
	Local Disaster Coordination Centre Refurbishment	Increase in expense to complete Phase 2 of Local Disaster Coordination Centre refurbishment.	0	350	0
7.2.2.1 Crime Prevention Planning and Services	B-SAFE - Promoting Community Safety in Brisbane	Decrease in expense due to project savings.	0	-100	0
	Taskforce Against Graffiti	Decrease in expense due to deferral of education campaign and project savings.	0	-250	0

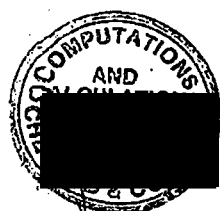


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**Changes by Service for
PROGRAM 8: ECONOMIC DEVELOPMENT**

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital	Net	External
			\$000	Expense \$000	Revenue \$000
Total Program 8 - Economic Development			0	311	0
8.2.1.1 Improving Infrastructure to Reduce Congestion and Promote Growth	Core	Transfer of staff to Service 10.3.3.1 Property Management for Asset Optimisation team.	0	-71	0
8.4.2.1 Queen St Mail Operations	Core	Increase in \$28k expense due to change of scope and \$150k to fund "The City" post flood activation funded from Queens Street Mall General Reserve.	0	176	0
8.4.2.3 Valley Malls Operations	Core	Increase in expense to change of scope.	0	6	0
8.5.1.2 City Marketing Support	Core	Increase in expense to for Brisbane Marketing activities.	0	200	0



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**Changes by Service for
PROGRAM 9: CUSTOMER FOCUS**

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital	Net	External
			Expense	Revenue	
			\$000	\$000	\$000
Total Program 9 - Customer Focus			3,822	-4,635	57
9.1.1.1 Understand Customers	Core	Decrease in expense due to flood funding strategy.	0	-25	0
9.2.1.1 Customer Focus Strategy	Core	Decrease in expense due to flood funding strategy.	0	-45	0
	Customer Focus Training	Decrease in expense due to ceasing of Customer Focus training courses for Brisbane Transport as a funding strategy for flood recovery.	0	-30	0
	Customer Focus Improvement	Decrease in expense due to flood funding strategy.	0	-60	0
9.3.1.1 Customer Service Channels	Core	Increase in expense due to: \$920k Contact Centre activities related to storm and rain events, \$225k service levels related to QUU and \$50k savings.	0	1,095	0
	Regional Councils and Utilities	Increase in expense offset by revenue from QUU for Contact Centre activities.	0	157	157
	Customer Experience Transformation Program	Carryover of \$1.8m capital from 2010-11 to: \$1.3m in 2011-12 and \$0.5m in 2012-13 to recognise CET's share of licensing and support charges incurred in relation to the provision of Oracle software products provided under a Universal Licensing Agreement. Decrease in expense: \$5.622m transfer to capital to align with year end expected outcome.	3,822	-5,622	0
	Pix-O-Grams	Decrease in expense due to project savings.	0	-5	0
	Contact Centre Energy Reduction Hotline	Decrease in expense and revenue due to lower than expected call volumes.	0	-100	-100



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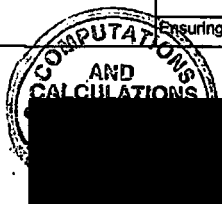
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Changes by Service for
PROGRAM 10: CITY GOVERNANCE

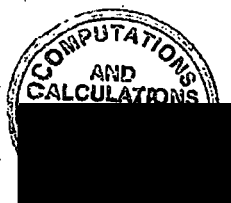
Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
Total Program 10 - City Governance			11,578	1,569	33,488
10.2.1.1 Regional and International Initiatives	Council of Mayors SEQ Executive Directorate	Decrease in expense and revenue to align with expected year end position.	0	-1,288	-1,188
	Program Connect	Decrease in expense and revenue due to project scope changes.	0	-437	-1,270
10.3.1.1 Financial Planning	Core	Increase in revenue for grant funding from NDRRA for January 2011 flood and November 2008 Gap Storm reimbursements offset by grants benefit target not achieved.	0	0	53,643
	Budget Management System Upgrade	Decrease in expense due to project savings.	0	-10	0
10.3.1.2 Treasury Management	Core	Decrease in revenue due to movement in interest from Queensland Urban Utilities offset by increase in interest revenue due to higher than anticipated money market interest rates and average daily cash balance. Decrease in expense due to reduction in finance costs and increase in debt recovery.	0	-3,801	-19,529
10.3.2.1 Management of Financial Systems and Processes	Core	Increase in expense due to change in imputed tax recovery, additional expense for flood relief rebates, and increase in water and sewerage pensioner remissions. Offset by reduction in bank fee charges and reduction in depreciation expense. Decrease in revenue due to reduction for ownership transfer fees, reduction in general rates due to land revaluations and lower than anticipated year on year growth Offset by reduction in owner occupier remissions and increase in interest on arrears in relation to rates debt.	0	6,493	-6,520
10.3.3.1 Property Management	Core	Increase in expense due to changes in depreciation, transfer of costs from Economic Development program and savings in rents. Increase in revenue from Telco.	0	855	700
	Flood Damaged Asset Repair	Increase in expense for cost of repairing assets as a result of January 2011 flood event.	0	1,482	0
	Corporate Accommodation Schedule	Increase in revenue due to contract variations. Transfer of capital to expense to align with expected year end position.	-237	27	230
	Howard Smith Wharves	Transfer of \$10k expense to capital due to reallocation. Carryover of capital from 2010-11 to 2011-12.	-6,430	-10	0
	Regional Business Centre Improvement	Transfer of expense to capital to align with year end position as well as carryover of expense from 2010-11 to 2011-12 to complete the project.	300	-450	0
	Green Square Community Centre	Increase in capital due to additional costs for stamp duty on land purchase offset by savings from TC Belme fit out.	600	-330	0
	Security Master Plan - In-House Alarm Monitoring Setup	Decrease in expense due to project savings.	0	-200	0
	Security Master Plan - Registered Master Keying	Decrease in expense due to project savings.	0	-60	0
	Security Master Plan - Technology Upgrade	Increase in expense to cover contractual commitments.	0	62	0
	Chinatown Mall Redevelopment and Brunswick Street Mall Upgrade	Transfer of expense to cover ongoing maintenance work.	0	-150	0
	Asbestos Removal - Corporate Real Estate	Carryover of expense from 2010-11 to 2011-12 due to resources working on flood related activity.	0	-70	0
	Scouts Everton Park Relocation	Increase in capital for contract work and savings from TC Belme fit out to offset the additional capital expenditure.	190	-50	0
	Ferries Terminals Wharves Moorings and Bridges	Transfer of expense from Moving Brisbane program and carryover of project costs from 2010-11 to 2011-12.	0	70	0
	Corporate Real Estate - Priority Repair	Carryover of capital from 2010-11 to 2011-12 as a funding strategy for flood impacts.	-240	0	0
	Security Master Plan - Outcomes	Decrease in expense due to project savings.	0	-20	0
	Enhancement and Maintenance of Public Markets Squares and Places	Transfer of expense to cover ongoing maintenance work.	0	150	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
10.4.1.1 A Value for Money Procurement Process	Core	Increase in revenue for sale of fleet at Auctions, document management rebate and sale of stock to Queensland Urban Utilities. Increase in expense due to eToll usage.	0	256	330
	Fleet Product Group Acquisition	Decrease in capital due to change in project scope.	-4,600	0	0
	procurement	Decrease in expense due to change in project scope.	0	-50	0
	Securing 2026 Capital Sourcing Program	Recognition of \$20m capital savings from Legacy Way project as a benefit achieved in relation to capital procurement. Transfer of expense to Accounts Payable Automation project to fund the project.	20,000	-40	0
	Securing 2026 Operational Procurement Review	Recognition of savings attained in achieving Operational Procurement benefits target.	0	364	0
	Accounts Payable Automation	Transfer of expense from Securing 2026 Capital Sourcing Program project to fund project requirements.	0	40	0
10.5.1.1 On-going Risk Management	Core	Increase in revenue due to recognition of claims from Insurers on ferries as a result of January 2011 flood.	0	0	7,350
10.5.2.1 Effective Legal Services	Core	Decrease in expense due to realignment of internal pricing charges and decrease in revenue forecast from Queensland Urban Utilities.	0	-198	-125
10.6.2.1 Effective Management and Administration	Core	Increase in expense due to provision for organisational realignment.	0	10,000	0
10.7.1.3 Corporate Improvement Services	Core	Recognition of Securing 2026 benefits not being realised.	0	3,105	0
	Corporate Portfolio Management Office	Decrease in expense due to change in operational scope.	0	-250	0
	Support Services Review	Recognition of project benefits not being realised.	0	2,400	0
10.8.1.1 Responsible Employer	Core	Decrease in gym revenue to align with anticipated year end position. Decrease in expense due to change in operational scope.	0	-38	-100
	Employment Programs - Community Jobs Program	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-40	0
	Participate in Prosperity	Carryover of expense and revenue from 2010-11 to 2011-12 due to timing issues.	0	-117	-117
10.8.1.2 Attractive Employer	Core	Decrease in expense as a funding strategy for flood recovery.	0	-140	0
	Employment Programs - Apprentices	Decrease in expense as a funding strategy for flood recovery.	0	-548	0
	Employment Programs - Graduate Recruitment Program	Increase in revenue for Brisbane City Enterprises Graduate placements and decrease in expense due to new intakes not accepting position.	0	-200	60
	Employment Programs - Cadets Undergraduate	Decrease in expense due to new intakes not accepting positions.	0	-100	0
	Employment Programs - Cadetship Program - Associate Degree	Decrease in expense as a funding strategy for flood recovery.	0	-160	0
10.8.2.1 Workforce Flexibility	Core	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
10.8.2.2 Adaptable Employees	Core	Decrease in expense as a funding strategy for flood recovery.	0	-105	0
10.10.1.1 Optimise Organisational ICT Effectiveness	CityDocs - Document Management System	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-2,650	0
	MS Access Version Compliance - Small Application Development	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-80	0
	Infrastructure Management Program - Network and Fibre	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-170	0
	Infrastructure Management Program - Server and Storage	Decrease in expense due to transfer to capital to align with year end expected outcome	1,110	-1,110	0
	Business and System Efficiency Program	Decrease in expense due to deferral of project for six months as a result of flood.	0	-10,289	0
	Desktop Strategy Implementation	Decrease in expense due to transfer to capital to align to year end position and carryover to 2011-12 due to timing issues.	165	-365	0
	GIS - Coreland Integration	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-110	0
	Teleworking and Remote Depot Desktop Performance	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-50	0
	Telecommunications Voice and Data Contract	Decrease in expense due to reduction in transitional costs.	0	-500	0
	New Information Organisation	Decrease in expense due to project savings.	0	-200	0
	Security Improvement Program	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	-250	0
	Messaging Implementation	Decrease in expense due to transfer to capital to align to year end position and carryover to 2011-12 due to timing issues.	640	-1,030	0
	Council Managed Print Services	Carryover of expense from 2010-11 to 2011-12 due to delaying new contract extension and device upgrades.	0	-240	0
	Ensuring Corporate Web Capacity	Increase in expenditure to ensure Corporate Website Capacity.	80	520	0



Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Net Expense \$000	External Revenue \$000
10.11.1.1 Disaster Response and Recovery	Real Time Access to GIS Data in the Field	Increase in funding for proof of concept for the project.	0	50	0
	Flood Response Review Board	Increase in expense due to independent review of Council's response to the January 2011 flood.	0	750	0
	Queensland State Government - Queensland Floods Commission of Inquiry	Increase in expense for representation at the Flooding Commission of Inquiry established by the Queensland State Government.	0	800	0
	LDCC ICT Infrastructure Upgrade	Increase in expense due to LDCC ICT Infrastructure Upgrades.	0	150	0



PART B

Third Budget Review 2010-11

**Changes for
CITY DESIGN**

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital Expense \$000	Total Revenue \$000	Total Revenue \$000
Total City Design			0	0	0
City Design	Core	Transfer from: Internal expense to external expense and external revenue to internal revenue.	0	0	0



PART B

Third Budget Review 2010-11

**Changes for
CITY BUSINESS**

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital	Total	Total
			\$000	Expense \$000	Revenue \$000
Total City Business			-37	-1,927	-3,978
City Business	Core	Decrease in revenue and expense due to operating activities.	0	-2,254	-3,978
	Parking Meters - Rehabilitation and Enhancement Expansion Project	Increase in expenditure to complete the rollout of the parking meters.	23	267	0
	City Parking Automatic Parking Machines	Transfer of capital to expense to align with year end expected outcome.	-60	60	0



PART B

Third Budget Review 2010-11

Changes for
BRISBANE TRANSPORT

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital \$000	Total Expense \$000	Total Revenue \$000
Total Brisbane Transport			-514	-9,507	-7,973
Brisbane Transport	Core	Decrease in revenue and expense due to operating activities.	0	-9,507	-7,973
	Brisbane Transport Tools of Trade	Decrease in capital: \$75k transfer to Upgrading and Enhancing the Network project in Service 3.2.2.1 Modern and High Quality Bus infrastructure so that the drainage work at Toowong Workshops can be capitalised with the whole-of-site asset and \$203k project savings.	-278	0	0
	New Bus Depot - Fit out	Decrease in capital due to project savings.	-180	0	0
	BT Business Intelligence	Decrease in capital due to project savings.	-56	0	0



PART B

Third Budget Review 2010-11.

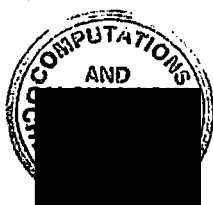
Changes for
BRISBANE CITYWORKS

Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital Expense \$000	Total Revenue +A22\$000	Total Revenue \$000
Total Brisbane CityWorks			-268	18,783	17,425
Brisbane CityWorks	Core	Increase in revenue and expense due to operating activities.	0	18,783	17,425
	Brisbane CityWorks Tools of Trade	Reduction in capital due to: \$68k carryover from 2010-11 to 2011-12 for small vacuum excavation unit and \$200k savings from reallocation of equipment.	-268	0	0

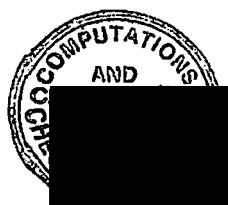


PART C

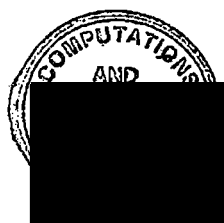
Year: 2011-12 Requested Change					
Service	Operating/Project	Explanation of Change	Change from Approved Budget		
			Capital	Net	External
			\$000	Expense	Revenue
			\$000		
TOTAL PROGRAM CHANGES			-33,340	-56,057	-21,038
1.1.1.1 Sustainability Leadership	Sustainable Development Assessment Incentives Package	Decrease in expense due to ceasing of the project as a funding strategy for flood recovery.	0	-2,265	0
1.1.1.2 Green Heart CitySmart Engagement Initiative	Green Heart CitySmart Van and Events	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-300	0
	Green Heart Schools	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-51	0
	Green Heart Homes	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-400	0
	Green Heart Business and Industry Program	Decrease in expense and revenue due to ceasing of project as a funding strategy for flood recovery.	0	-200	-50
	Green Heart CitySmart Pty Ltd - Operations and Liaison	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-200	0
	Green Heart Businesses - Sustainable Retrofitting Incentives Package	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-400	0
	1.1.1.3 Promoting Urban Tree Cover on Private Land	Supporting Community Gardens	Decrease in expense as a funding strategy for flood recovery.	0	-100
1.1.2.1 Greenhouse Gas Reduction and Climate Change Adaptation	Lord Mayor's Community Sustainability Grant Scheme	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-1,000	0
	CitySmart Pty Ltd - Energy Reduction Program	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
1.2.1.1 Community Partnering for Conservation and Restoration	Voluntary Conservation Agreements - Land for Wildlife and Conservation Partnerships Program	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
	Native Animal Ambulances and Wildlife Carers Grant	Decrease in expense as a funding strategy for flood recovery.	0	-150	0
1.2.2.1 Consolidating the Conservation Reserve Network	Bushland Acquisition Program	Carryover of expenditure from 2010-11 to 2011-12 due to program commitments for 2010-11 financial year being fulfilled.	1,229	54	0
1.2.2.2 Conservation Reserves Management Program	Conservation Reserves Management Program	Decrease in expenditure as a funding strategy for flood recovery.	-532	-164	0
	Wipe Out Weeds	Decrease in expense as a funding strategy for flood recovery.	0	-500	0
	Brisbane Invasive Species Management Plan Implementation	Decrease in expense as a funding strategy for flood recovery.	0	-300	0
	Condition Assessments and Rehabilitation	Decrease in expense by reducing the scope of the project as a funding strategy for flood recovery.	0	-50	0
	Jan 2011 Flood Damages - Conservation Reserves	Increase in expense to carry out flood recovery works in conservation reserves - detailed damage assessment; coordination of volunteer efforts and repairs to various walking and fire trails, which were badly damaged.	0	640	0
1.2.2.3 Restoration	Two Million Trees - Our Urban Forest	Adjustment in project delivery timeframes as a result of January 2011 flood. Revised delivery now March 2012.	0	-1,300	0



1.4.1.1 Waste Stream Management and Reduction	Towards Zero Waste Communication Education and Research	Decrease in expense and revenue due to reduction of Council funding Towards Zero Waste project as a funding strategy for flood recovery.	0	-382	-72
	Annual Kerbside Large Item Collection	Decrease in expense as a funding strategy for flood recovery.	0	-1,000	0
	Recycling Service for Multi-Unit Dwellings	Increase in service costs due to higher than anticipated take up rate of recycling bin services in multi-unit dwellings.	0	164	0
	Provide Additional Household Recycling Capacity	Decrease in \$304k revenue and \$803k expense due to lower than expected participation rates in the new additional household recycling capacity service. Decrease in \$150k revenue and \$550k expense due to reduction in marketing and promotion costs as a funding strategy for flood recovery.	0	-1,353	-454
	Enhanced Waste Management Computer System	Carryover of capital from 2010-11 to 2011-12 due to delay in the implementation of the Queensland Government landfill levy and the unavailability of legislation /regulations until September 2011.	80	0	0
	eWaste and Household Hazardous Waste Events	Decrease in expense due to the suspension of the quarterly eWaste events as a funding strategy for flood recovery.	0	-25	0
	Green Waste Recycling Service	Decrease in revenue and expense in the new green waste recycling service.	0	-479	-328
	Recycling Service for Commerce and Industry	Decrease in \$200k revenue and \$451k expense in the new recycling service for commerce and industry. Decrease in \$150k advertising and promotion expense as a funding strategy for flood recovery.	0	-601	-200
	Compost at Home Education	Decrease in expense due to suspension of the project as a funding strategy for flood recovery.	0	-73	0
1.5.1.1 City Cleansing	City-wide Litter Prevention	Decrease in revenue and expense as a funding strategy for flood recovery.	0	-2,074	-992
2.2.2.1 Improve Ecological Health of Waterways	Local Waterways Health Assessment and Evaluation	Decrease in expense by reducing the scope of assessment of previously completed Water Sensitive Urban Design projects.	0	-150	0
	Waterways Health Enhancement	Decrease in expense as funding redirected to flood recovery priorities. Carryover of \$35k revenue from 2010-11 to 2011-12 for "Caring for our Country" grant funding to match approved payment schedule.	0	-6,220	35
	Local Waterways Health Enhancement	Decrease in expense due to funding reallocating to flood recovery priorities.	0	-750	0
	Environmental Flows Assessment	Decrease in expense due to deferring of project as a funding strategy for flood recovery.	0	-100	0
	Norman Creek 2026 Project	Carryover of expense from 2011-12 to 2012-13 as a funding strategy for flood recovery.	0	-2,100	0
	Jan 2011 Flood Damages - Creek Remediation	Increase in expense to address waterway erosion issues that are causing safety concerns to public and/or Council assets.	0	5,500	0
	Waterway Human Health and Safety - Site Monitoring	Increase in expense to fund water quality monitoring following flood.	0	100	0



2.2.3.1 Wharves Jetties and Pontoons	Wharves Jetties Pontoons and Fishing Platforms	Decrease in expenditure as a funding strategy for flood recovery.	-1,372	-23	0
	Meiers Road Boat Ramp Reconstruction	Carryover of revenue and expense from 2010-11 to 2011-12 for QTMR funded project impacted by the January 2011 flood.	0	241	241
	Jan 2011 Flood Damages - Wharves Jetties Pontoons and Fishing Platforms	Increase in capital to repair/replace assets damaged in the January 2011 flood.	5,600	0	0
2.2.3.2 Sea and River Walls	Sea and River Walls Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-1,813	-208	0
	Jan 2011 Flood Damages - Sea and River Walls	Increase in capital to repair/replace assets damaged in the January 2011 flood.	12,100	0	0
2.3.1.2 Gather and Provide Flood Information	Flood Planning Notes Phase 2	Decrease in expense as a funding strategy for flood recovery.	0	-188	0
	IBIMAP Drainage Data Update	Decrease in expense as a funding strategy for flood recovery.	0	-150	0
	FloodWise Information System Stability	Carryover of expense from 2010-11 to 2011-12 to complete the project.		100	
2.3.1.3 Flooding Investigations	Lord Mayor's Flood Taskforce Update and Review	Carryover of expense from 2010-11 to 2011-12 due to project being suspended while independent review of Council's handling of the flood disaster is undertaken.	0	250	0
2.3.1.5 Major Drainage	Major Drainage Construction	Decrease in \$2m capital as a funding strategy for flood recovery. Carryover of \$300k capital from 2010-11 to 2011-12.	-1,700	0	0
2.3.1.6 Plan for Future Infrastructure	Stormwater ICP Infrastructure	Carryover of capital from 2010-11 to 2011-12 as a funding strategy for flood recovery.	750	0	0
	Stormwater ICP Revenue	Increase in expense due to pending changes to the Infrastructure charges subsidy policy.	0	116	0
	Rochdale Infrastructure Design and Delivery	Carryover of capital and revenue from 2010-11 to 2011-12 for Rochdale contributed assets as timing dependent on developers delivering contributed assets.	7,352	0	7,352
2.3.2.1 Maintain Enclosed Drains	Jan 2011 Flood Damage - Enclosed Drains Clean-up	Increase in expense for flood related clean up of enclosed drain network.	0	1,550	0
2.3.2.2 Maintain and Rehabilitate Open Drainage	Jan 2011 Flood Damage - Open Drains Clean-up	Increase in expense for flood related clean up of open drain network.	0	1,130	0
2.3.2.3 Drainage Rehabilitation	Stormwater Drainage Rehabilitation	Carryover of capital from 2010-11 to 2011-12 due to wet weather and flood recovery demands.	100	0	0
	Jan 2011 Flood Damages - Stormwater Assets	Increase in capital to restore and repair stormwater assets damaged during the January 2011 flood event.	1,750	0	0
2.3.2.4 Mitigate Flooding	Flood Mitigation Studies and Investigation	Decrease in expense for non-urgent creek studies as a funding strategy for flood recovery.	0	-100	0
2.3.2.6 Reconstruct Gullies	Gully Reconstruction	Decrease in expense for non-urgent works as a funding strategy for flood recovery.	0	-250	0
3.1.3.2 Riverwalk	Jan 2011 Flood Damages - Floating Riverwalk	Additional \$900k capital to repair Council's assets damaged in January 2011 flood event.	900	0	0



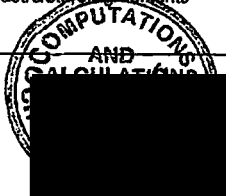
3.1.3.1 Providing Cycling Infrastructure	Connecting and Expanding the Bikeway Network	Scope change to project to meet LMERC Special Review target.	-17,068	-250	-140
	Designing the Network	Scope change to project to meet LMERC Special Review target.	-231	0	0
	Bikeways Infrastructure Improvement - SEQIPP	Reduction in capital \$4.859m, expense \$30k and revenue \$425k due to scope change to project to meet LMERC Special Review target. Carryover \$500k capital from 2010-11 to 2011-12 due to delay in construction program caused by the recent slip in the Coronation Drive embankment and the planned stability works.	-4,359	-30	-415
	Cycling and Pedestrian Blackspots Program	Scope change to project to meet LMERC Special Review target.	-780	-20	0
	Creating a Cycle Friendly CBD	Bring forward \$304k capital from 2011-12 to 2010-11 for On Road Cycle Way Connectivity project.	-304	0	0
3.2.1.1 Expanding the Network through New Infrastructure	Ferry Terminal Expansion Project - Increasing Capacity at Existing Terminals	Transfer unspent capital to "Jan 2011 Flood Damage Ferry Terminals Project".	-15,380	0	0
	Jan 2011 Flood Damages - Ferry Terminals	Transfer unspent capital from Ferry Terminal Expansion Project - Increasing Capacity of Existing Terminals. Forwards also revised according to revised program of works.	22,500	0	0
	Creating a New World City Ferry and CityCat Network	Carryover expense from 2010-11 to 2011-12 due to delays caused by the flood.	0	170	0
	Increasing the CityCat Fleet to 19 Vessels	Bring Forward \$127k capital from 2011-12 to 2010-11 to reflect delivery of Cats.	-127	0	0
3.2.2.1 Modern and High Quality Bus Infrastructure	Sherwood Road Bus Depot	Additional revenue for reimbursements of design works and IT expense \$1.028m. Bring forward \$162k expense from 2011-12 to 2010-11 and transfer \$428k capital to expenses in 2011-12. Due to ongoing bad weather carryover \$300k capital and expense from 2010-11 to 2011-12.	-290	728	1,028
	New Bus Depots	Carryover \$375k capital and \$250k expense from 2010-11 to 2011-12 due to DA issues.	375	250	0
	Upgrading and Enhancing the Network	Carryover \$1.08m capital from 2010-11 to 2011-12 due to delay in commencing the project caused by revised structural solution and wet weather.	0	1,080	0
3.3.1.1 Plan and Design the Networks	Transport and Traffic ICP Revenue Project	Decrease in expense due to pending infrastructure cap from the State Government.	0	-1,928	0
	Rosedale Infrastructure Design and Delivery	Carryover \$13.254m Capital and Revenue from 2010-11 to 2011-12 due to timing of contributed assets.	13,254	0	13,254



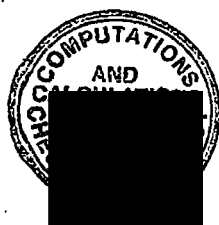
3.3.2.1 TransApex	TransApex - Go Between Bridge	Carryover of \$500k (from 2010-11) to complete the associated works, and \$250k (from 2010-11) to complete the Design and Construction phase.	750	0	0
	TransApex - Legacy Way	Savings of \$42.37m offered in relation to an overall reduction in the Design and Construct (D&C) Contract Sum as at Contract Award from what was initially estimated prior to finalisation of the contract. Transfer \$6.478m from expense to capital within 2011-12 will occur correct accounting treatment of project costs. Carryover \$15m to realign the budget with Contractor payments and progress.	-20,892	-6,478	0
	TransApex - East West Link - Review of Traffic Demand	Project stopped, savings of \$1.15m expense declared.	0	-1,150	0
	TransApex - Go Between Bridge Operations	Carryover of \$250k expense from 2010-11 to 2011-12 due to revised project forecast.	0	250	0
	TransApex - Legacy Way Operations	Savings of \$9.288k from capitalised interest are no longer required (revised by Treasury).	-9,288	0	0
3.3.2.2 Road Action Program	Inala Ave - King Ave Stage 1- Blunder Rd to Sherbrooke Rd	Defer \$900k from 2011-12 to 2012-13 as per LMERC Special Review.	-900	0	0
	Major Traffic Improvements - Intersections	Additional \$651k capital required for 17 Mile Rocks/Oldfield - unsuitable ground conditions.	651	0	0
	Progress Rd Stage 2 - Ipswich Mt to Boundary Rd	Carryover of \$1.2m capital from 2010-11 to 2011-12 due to the need to have the deed of agreement negotiated before proceeding with the project. Increase revenue by \$1.858m due to contribution from Komastu (\$200k in 2010-11 and \$1.658m in 2011-12).	1,200	0	1,658
	Johnson Road - Stapylton Road Intersection Upgrade	Defer project start to 2012-13 as per LMERC Special Review.	-7,960	-540	-3,500
	Hamilton Rd - Maundrell Tce - Hamilton Rd Intersection Upgrade	Carryover \$800k from 2010-11 to 2011-12 as per LMERC Special Review.	800	0	0
	Railway Crossing - Robinson Rd Geebung	Defer project start to 2013-14 as per LMERC Special Review.	-49,900	0	-25,000
	Blunder Rd Stage 6-Blunder Creek to Stapylton Rd	Carryover \$2m capital from 2010-11 to 2011-12 due to delays caused by wet weather and revised contract cashflows.	2,000	0	0
	Kingsford Smith Drive - Future Upgrade	Defer project start to 2013-14 as per LMERC Special Review.	-25,756	0	0
	Beenleigh Rd- Stillers Rd	Carryover \$400k capital from 2010-11 to 2011-12 for landscaping yet to be completed.	400	0	0
	Beenleigh Rd-Warrigal Rd Upgrade	Additional \$700k requested due to increased scope for this project	700	0	0
	Railway Crossing - Telegraph Rd Bald Hills - Bracken Ridge	Defer project start to 2013-14 as per LMERC Special Review. Request additional \$500k capital (over 2 years \$264k in 2010-11 and \$236k in 2011-12 to complete detailed design already in progress.	-29,764	0	-15,000
	Railway Crossing - Lindum Rd Wynnum West	Defer project start to 2013-14 as per LMERC Special Review.	-2,000	0	0
	Roads To Recovery Revenue Project	Bring forward \$3m revenue from 2011-12 to 2010-11 due to accelerated Roads to Recovery program at the request/approval of the Federal Government.	0	0	-3,000
	Telegraph Rd Corridor	Defer project start to 2012-13 as per LMERC Special Review.	150	0	0



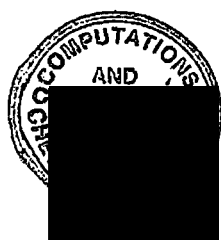
3.3.2.3 Construct Local Transport Networks	Sumner Road Upgrade	Bring forward capital of \$1.5m from 2011-12 to 2010-11 as project commenced earlier than scheduled.	-1,500	0	0
	Ward Footpath Trust Fund	Carryover of \$500k in unallocated works from 2010-11 to 2011-12.	500	0	0
	Traffic Signals Hardware Equipment	Carryover of \$300k from 2010-11 to 2011-12 required as issuing of design packages is delayed.	100	200	0
	Wacol Station Rd Sumners Rd Upgrade	Project cancelled. Funds to be diverted to flood recovery. Savings of \$1m in 2012-13.	-950	-50	0
	Wacol Station Rd Interim Upgrade	Carryover \$1.5m from 2010-11 to 2011-12.	1,500	0	0
	Stapylton Rd Pallara	Carryover of \$250k from 2010-11 to 2011-12 due to delays in commencement of preliminary design.	250	0	0
	Telegraph Rd Corridor	Defer project start to 2012-13 as per LMERC Special Review.	-1,550	0	0
	Wynnum Rd - Manly Rd Belmont Rd Intersection	Project cancelled. Savings of \$500k in 2011-12.	-500	0	0
	Tilley Rd Extension	Defer project start to 2012-13 as per LMERC Special Review (reduction of \$1.95m capital and \$50k expense). Carryover \$1.05m capital from 2010-11 to 2011-12 as detailed design delayed to commence 2011-12 to assist in flood recovery works 2010-11 financial year.	-900	-50	0
	Kate Witton Intersection Upgrade	Project cancelled following community consultation. Savings of \$1.463m in 2011-12.	-1,463	0	0
	Seventeen Miles Rocks Duporth Intersection Upgrade	Project deferred. Savings of \$3m to declare for 2010-11 and \$5.4m in 2011-12.	-5,400	0	0
	Jan 2011 Flood Damages - Roads and Road Related	Additional \$2.4m capital to repair Council's roads and road related assets damaged in January 2011 flood event.	2,400	0	0
3.3.3.1 Maintain and Improve the Network	Bridges and Culverts Reconstruction and Rehabilitation	Carryover \$450k capital from 2010-11 to 2011-12 for two bridge rehabilitation projects.	450	0	0
	Jan 2011 Flood Damages - Roads and Road Related	Additional \$61.96m is required due to flood damage to BCC owned Roads and Road Related assets.	61,960	0	0
	Jan 2011 Flood Damages - Bridges and Culverts	Additional \$2.5m is required due to flood damage to BCC owned Bridges and Culverts Assets.	2,500	0	0
	Jan 2011 Flood Damage - City Lighting	Additional \$390k is required for City Lighting due to flood damage to BCC owned Lighting Assets.	0	390	0
3.3.4.1 Manage the Network	Strategic Freight Route Development	Carryover \$100k expense from 2010-11 to 2011-12 due to scope change.	0	100	0
	Congestion Reduction Unit Initiatives	Carryover of \$150k capital from 2010-11 to 2011-12 for CCTV project commissioning costs.	150	0	0
	Jan 2011 Flood Damages - Signs and Lines	Additional \$450k expense to repair Council's assets damaged in January 2011 flood event.	0	450	0
4.1.2.1 Strategic Land Use Planning	Rochdale Infrastructure Design and Delivery	Carryover of capital from 2010-11 to 2011-12 for land resumption due to delays in confirming extent of land required for roads.	1,920	0	0
	Affordable Housing	Carryover of expense from 2010-11 to 2011-12: \$1.893m due to slow take up by developers accessing incentives and \$200k to fund applications in progress.	0	1,893	0
	City Shape Refresh	Carryover of expense from 2010-11 to 2011-12 due to postponement of Strategic Plan community engagement as Council assess the plan in light of the current flood related reviews and associated event definitions.	0	385	0
4.1.2.1 Priority Infrastructure Plans and Infrastructure Agreements	Expedite Infill Priority Infrastructure Plans Implementation	Decrease in expense due to pending infrastructure cap from the State Government	0	-14,936	0



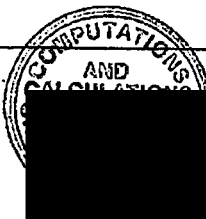
4.2.2.1 Urban Futures Brisbane	City Centre Master Plan	Decrease in expenditure due to no capital works undertaken as a funding strategy for flood recovery.	-1,225	-855	0
	CBD Vibrant Laneways	Decrease in expenditure due to project not supported in 2011-12 as a funding strategy for flood recovery.	-2,400	-1,450	0
4.2.3.1 Strategic City Improvement Projects	Strategic City Improvement Projects	Decrease in expenditure due to scope of works greatly reduced as a funding strategy for flood recovery.	-3,800	-360	0
	Centres Detail Design Manual	Decrease in expense due to project not supported in 2011-12 as a funding strategy for flood recovery.	0	-50	0
4.3.1.1 Guiding Brisbane's Development	Siting Variations Redesign	Bring forward of expense from 2012-13 to 2011-12 to complete the project.	0	10	0
	Advertising Sign Redesign	Bring forward of expense from 2013-14 to 2011-12 to complete the project.	0	15	0
5.1.1.1 Festivals and Events	Indigenous Cultural Events - King George Square	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
5.1.4.2 Social History	Chinese Museum	Carryover of expense from 2010-11 to 2011-12 due to negotiations are still continuing on the payment of the grant.	0	150	0
5.1.5.2 Creative City	Creative City Initiative	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-300	0
5.2.1.2 Maintain and Enhance Libraries	Library Refurbishment and Rehabilitation	Carryover of capital from 2011-12 to 2013-14 as a funding strategy for flood recovery.	-1,020	0	0
5.2.1.4 Outreach Programs	One Book Many Brisbanes	Decrease in expense due to ceasing of project as it has ran for 6 years with decreasing interest to fund flood recovery.	0	-100	0
5.2.1.5 Information and Communication Technology Infrastructure	Wi-Fi and Faster Internet in Every Council Library	Decrease in expense as a funding strategy for flood recovery.	0	-102	0
5.2.1.6 Purchase and Management of Library Collections	Maintain Lending and Reference Collections	Decrease in expense as a funding strategy for flood recovery.	0	-464	0
5.3.1.1 Community Participation Opportunities	Active and Healthy Parks Program	Decrease in expense as a funding strategy for flood recovery.	0	-70	0
5.4.1.1 Indigenous Aspirations	Indigenous Aspirations Strategy	Decrease in expense as a funding strategy for flood recovery.	0	-160	0
5.4.1.2 Multicultural and Refugee Initiatives	Multicultural Communities	Decrease in expense due to change of scope as a funding strategy for flood recovery.	0	-168	0
5.4.1.4 Homelessness and Affordable Housing	Homelessness and Affordable Housing	Carryover of \$350k expense from 2010-11 to 2011-12 due to extension for completion of Community Housing Partnership Program and \$40k decrease in expense as a funding strategy for flood recovery.	0	310	0
5.4.1.5 Youth Initiatives	NightRec - Youth Recreation Outreach Program	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-219	0
	Visible Ink Youth Spaces	Decrease in expense due to deferring proposed Visible Ink South presence as a funding strategy for flood recovery.	0	-50	0
5.4.2.1 Community Capacity Building	Mens Sheds	Decrease in expense due to reduction in grants as a funding strategy for flood recovery.	0	-20	0
5.4.3.1 Grants Administration	Lord Mayor's Suburban Initiative Fund	Decrease in expenditure as a funding strategy for flood recovery.	-300	-2,376	0



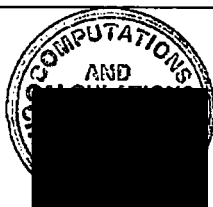
5.5.1.1 Facilities Development and Maintenance	District Tennis Centres	Carryover of capital and revenue from 2011-12 to 2013-14 as a funding strategy for flood recovery.	-1,916	0	-1,500
	Perry Park Indoor Recreation Centre	Carryover of expense from 2010-11 to 2011-12 as contract has not been entered into.	0	500	0
	Luggage Point Trail Bike Facility	Decrease in expenditure as a funding strategy for flood recovery.	-200	-100	0
	Dragon Boat Storage Racks	Carryover of capital: \$50k from 2010-11 to 2011-12 and \$150k from 2011-12 to 2012-13 as a funding strategy for flood recovery.	-100	0	0
	South West Sporting Complex	Carryover of expenditure from 2011-12 to 2013-14 as a funding strategy for flood recovery.	-500	-600	0
	Jan 2011 Flood Damages - Community Assets	Increase in capital due to community assets damaged by January 2011 flood.	1,256	0	0
5.5.2.1 Community Halls	Jamboree Community Hub Design and Construction	Carryover of capital from 2011-12 to 2013-14 as a funding strategy for flood recovery.	-2,250	0	0
	Kenmore Community Centre	Carryover of capital from 2010-11 to 2011-12 due to reprioritisation of resources as a result of January 2011 flood.	45	0	0
	Forest Lake Community Hall	Carryover of expense from 2010-11 to 2011-12 due to works unable to be completed in 2010-11 financial year.	0	80	0
5.5.3.2 Sports Fields and Hard Courts	Sportsfield and Hard Court Condition Rehabilitation	Decrease in expenditure due to no upgrades as a funding strategy for flood recovery.	-2,550	-550	0
5.5.3.4 Pools	City Pools Upgrade Program	Decrease in expenditure and revenue as a funding strategy for flood recovery.	-3,631	-107	-500
	Surrender of Centenary Pool and Chermide Pool Leases	Increase in expense for lessee to surrender leases and Council to manage and refurbish the pools.	0	100	0
5.5.3.5 Golf	St Lucia Golf Links - Greens and Fairway Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-56	-4	0
	St Lucia Golf Links - Rehabilitate Irrigation System	Decrease in capital as a funding strategy for flood recovery.	-400	0	0
	Golf Course Maintenance Depot St Lucia Golf Links	Carryover of \$1.5m capital from 2011-12 to 2013-14 as a funding strategy for flood recovery and additional \$200k capital to prolong the life of the existing shed which will allow construction of a new shed to be deferred until 2013-14.	-1,300	0	0
	Golf Course Road Resurfacing Victoria Park	Carryover of capital from 2011-12 to 2012-14 as a funding strategy for flood recovery.	-200	0	0
5.6.1.1 The People's Place	City Hall Rebuilding Program	Carryover of expenditure and revenue from 2010-11 to 2011-13 due to timing across financial years based on revised cashflows. No impact on final delivery date.	18,460	-11,084	2,800
6.2.1.1 Parks Planning and Policy	Key City Park Upgrades	Carryover of \$720k capital from 2010-11 to 2011-12 impacted by flood. Decrease in \$1.8m expenditure due to suspension of projects as a funding strategy for flood recovery.	-1,103	23	0
	Parks Infrastructure Charges Program	Increase in expense due to pending changes to the Infrastructure charges subsidy policy.	0	547	0
	Rosedale Infrastructure Design and Delivery	Carryover of capital and revenue from 2010-11 to 2011-12 dependent on developers delivering contributed assets.	3,118	0	3,118
	Parks Local Law Review	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-307	0



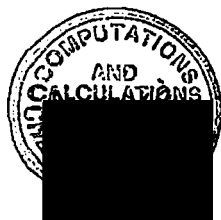
6.2.1.2 Parks Maintenance and Development	Utilities Rehabilitation in Parks	Decrease in expenditure due to reduce scope as a funding strategy for flood recovery.	-143	-73	0
	Toilets Upgrade Program	Carryover of \$210k capital from 2010-11 to 2011-12 due to availability of resources allocated to flood recovery. Decrease in expenditure of \$1.054m due to suspension of projects as a funding strategy for flood recovery.	-598	-246	0
	Shelter Upgrades - Parks	Carryover of \$100k capital from 2010-11 to 2011-12 to relocate existing facilities to higher ground. Decrease in expenditure of \$365k due to reduction in scope as a funding strategy for flood recovery.	-253	-12	0
	Repair Road and Car Park Defects	Carryover of \$85k capital from 2010-11 to 2011-12. Decrease in expenditure of \$872k due to reduction in scope as a funding strategy for flood recovery.	-597	-190	0
	Memorial Restoration	Carryover of \$65k expense from 2010-11 to 2011-12 due to delay in relocation and restoration of historical relics to preserve and protect items from Anstead Quarry. Decrease in expense of \$310k due to reduction in scope as a funding strategy for flood recovery.	0	-245	0
	Play Safe Upgrades	Carryover of \$110k expenditure from 2010-11 to 2011-12 due to delay works to upgrade playground and amenities at Blambi Yumba Park. Decrease in expenditure of \$1m due to reduction in scope as a funding strategy for flood recovery.	-830	-60	0
	Upgrade Key Neighbourhood Parks	Bring forward of \$277k capital from 2011-12 to 2010-11 and \$329k additional capital to deliver commitments and development conditions in upgrades to Philip Place Park (Forest Lake). Carryover from 2010-11 to 2011-12: \$360k revenue from RLCIP projects being deferred due to flood works, \$797k capital and \$65k expense to delay works to upgrade playground and amenities at Blambi Yumba Park and to delay works to upgrades at Rosemount Park, Sinnamoon Park; Philip Place Park, Forest Lake.	849	65	360
	Dog Off Leash Area Refurbishment	Decrease in expense due to reduction in scope as a funding strategy for flood recovery.	0	-242	0
	Metropolitan and District Playgrounds	Carryover of \$300k capital from 2010-11 to 2011-12 due to lead time for delivery of playground equipment. Decrease in expenditure of \$500k due to reduction in scope as a funding strategy for flood recovery.	-100	-100	0
	Park Recreation Facility Rehabilitation and Replacement	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-101	-20	0
	Park Path and Track Rehabilitation and Reconstruction	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-322	-80	0
	Restoration for Recreation	Bring forward of capital from 2011-12 to 2010-11 to remediate three priority sites which are flood impacted.	-200	0	0
	Brisbane Foreshore Parklands Enhancement Projects - Stage 2 - Lota and Brighton	Decrease in expenditure due to upgrade being delayed as a funding strategy for flood recovery.	-1,777	-50	0
	Water Cartage	Decrease in expense due to reduction in water cartage as a funding strategy for flood recovery.	0	-200	0
	Davies Park Implementation Stage 1	Carryover of expense from 2010-11 to 2011-12 as a funding strategy.	0	25	0



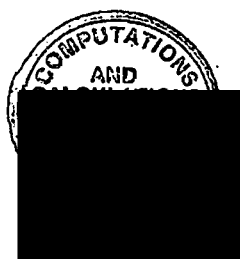
	West End Riverside Parklands	Decrease in expenditure due to ceasing of project as a funding strategy for flood recovery.	-3,489	-971	0
	Exercise Equipment in Parks	Carryover of expense from 2010-11 to 2011-12 due to delaying approved works in flood affected parks - Amazon Place Park and Jack Cook park and delaying approved works in Decker Park as a flood funding strategy.	0	140	0
	Jan 2011 Flood Damages - Parks	Increase in expenditure to fund all works associated with restoration of flood affected parks.	25,820	2,604	0
6.2.2.1 Manage Mt Coot-tha Botanic Gardens	Mt Coot-tha Botanic Gardens - Refurbish Assets	Carryover of \$250k capital and \$150k revenue from 2010-11 to 2011-12 due to extension of design phase. Offset by \$150k decrease in capital as a funding strategy for flood recovery.	100	0	150
7.2.1.1 Disaster Management	Local Disaster Coordination Centre Refurbishment	Increase in expense to complete Phase 2 of Local Disaster Coordination Centre refurbishment.	0	490	0
9.2.1.1 Customer Focus Strategy	Customer Focus Training	Decrease in expense as a funding strategy for flood recovery.	0	-50	0
9.3.1.1 Customer Service Channels	Customer Experience Transformation Program	Carryover of \$1.8m capital from 2010-11 to: \$1.3m in 2011-12 and \$0.5m in 2012-13 to recognise CET's share of licensing and support charges incurred in relation to the provision of Oracle software products provided under a Universal Licensing Agreement.	1,300	0	0
	Fix-O-Grams	Decrease in expense as a funding strategy for flood recovery.	0	-15	0
	Pix-O-Grams	Decrease in expense as a funding strategy for flood recovery.	0	-10	0
10.2.1.1 Regional and International Initiatives	Tele-Classroom Pilot with Brisbane Sister City School	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
	Asia Pacific Cities Biennial Summit	Decrease in expense as a funding strategy for flood recovery.	0	-32	0
10.3.3.1 Property Management	Howard Smith Wharves	Carryover of capital from 2010-11 to 2011-12: \$500k due to timing issues and \$8m as a funding strategy for flood impacts	6,500	0	0
	Regional Business Centre Improvement	Carryover of expense from 2010-11 to 2011-12 to complete the project.		150	
	Security Master Plan - Registered Master Keying	Decrease in expense as a funding strategy for flood recovery.	0	-107	0
	Asbestos Removal - Corporate Real Estate	Carryover of expense from 2010-11 to 2011-12 due to resources working on flood related activity.	0	70	0
	Ferries Terminals Wharves Moorings and Bridges	Carryover of expense from 2010-11 to 2011-12 to complete the project.	0	80	0
	Corporate Real Estate - Priority Repair	Carryover of capital from 2010-11 to 2011-12 as a funding strategy for flood impacts.	240	0	0
10.7.1.3 Corporate Improvement Services	Corporate Improvement Project	Decrease in expense as a funding strategy for flood recovery.	0	-154	0
	Corporate Portfolio Management Office	Decrease in expense as a funding strategy for flood recovery.	0	-200	0
10.8.1.1 Responsible Employer	Employment Programs - Community Jobs Program	Carryover of \$40k expense from 2010-11 to 2011-12 due to timing issues offset by \$14k reduction in expense due to change in project scope.	0	26	0
	Employment Programs - Youth In Recovery	Decrease in expense as a funding strategy for flood recovery.	0	-77	0
	Participate in Prosperity	Carryover of expense and revenue from 2010-11 to 2011-12 due to timing issues.	0	117	117
	Refugee Pathways to Work	Decrease in expense as a funding strategy for flood recovery.	0	-26	0
	Performance Excellence Centre	Decrease in expense as a funding strategy for flood recovery.	0	-68	0



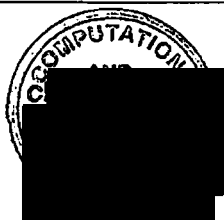
10.8.1.2 Attractive Employer	Employment Programs - Trainees New	Decrease in expense as a funding strategy for flood recovery.	0	-45	0
	Employment Programs - Apprentices	Decrease in expense as a funding strategy for flood recovery.	0	-328	0
	Employment Programs - Graduate Recruitment Program	Decrease in expense as a funding strategy for flood recovery.	0	-225	0
	Employment Programs - Cadets Undergraduate	Decrease in expense as a funding strategy for flood recovery.	0	-81	0
	Employment Programs - Cadetship Program - Associate Degree	Decrease in expense as a funding strategy for flood recovery.	0	-83	0
10.9.1.1 Communicating with the Community	Corporate Website - New Design and Information Architecture Review	Decrease in expense due to project savings.	0	-39	0
	Online Social Media - Development and Integration	Decrease in expense due to project savings.	0	-35	0
	eNewsletter Review and Consolidation	Decrease in expense due to project savings.	0	-164	0
	Digital Communications Research and Development	Decrease in expense due to project savings.	0	-8	0
10.10.1.1 Optimise Organisational ICT Effectiveness	CityDocs - Document Management System	Carryover expense from 2010-11 to 2011-12 due to timing issues.	0	2,650	0
	MS Access Version Compliance - Small Application Development	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	80	0
	Infrastructure Management Program - Network and Fibre	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	170	0
	Business and System Efficiency Program	Carryover of expense from 2011-12 to 2012-14 due to project deferral as a result of flood.	0	-10,000	0
	Desktop Strategy Implementation	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	200	0
	GIS - Coreland Integration	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	110	0
	Teleworking and Remote Depot Desktop Performance	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	50	0
	Security Improvement Program	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	250	0
	Messaging Implementation	Carryover of expense from 2010-11 to 2011-12 due to timing issues.	0	500	0
	Council Managed Print Services	Carryover of \$240k expense from 2010-11 to 2011-12 due to delaying new contract extension and device upgrades. Carryover of \$350k expense from 2011-12 to 2012-13 due to realignment of contracts.	0	-110	0
	Ensuring Corporate Web Capacity	Increase in expense to ensure Corporate Website Capacity.	0	160	0
10.11.1.1 Disaster Response and Recovery	Critical Event Response Desktops	Increase in expense to fund critical event response desktops.	0	120	0
	Real Time Access to GIS Data In the Field	Increase in expense to fund the project.	0	220	0
	Queensland State Government - Queensland Floods Commission of Inquiry	Increase in expense due to legal Costs for Council's representation at the Flooding Commission of Inquiry established by the Queensland State Government.	0	1,200	0
	LDCC ICT Infrastructure Upgrade	Increase in expense due to LDCC ICT Infrastructure Upgrades.	50	250	0
Brisbane Transport	Bus CCTV System	Decrease in capital due to ceasing of bus CCTV retrofits.	-1,479	0	0
Brisbane CityWorks	Brisbane CityWorks Tools of Trade	Carryover of capital from 2010-11 to 2011-12 for small vacuum excavation unit.	68	0	0



Year: 2012-13 Requested Change					
Service	Operating/Project	Explanation of Change	Change from Approved Capital	Net Expense	Budget External Revenue
			\$000	\$000	\$000
TOTAL PROGRAM CHANGES			-111,788	-26,045	-81,635
1.1.1.1 Sustainability Leadership	Sustainable Development Assessment Incentives Package	Decrease in expense to ceasing of the project as a funding strategy for flood recovery.	0	-2,000	0
1.1.1.2 Green Heart CitySmart Engagement Initiative	Green Heart CitySmart Van and Events	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-300	0
	Green Heart Schools	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-51	0
	Green Heart Homes	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-400	0
	Green Heart Business and Industry Program	Decrease in expense and revenue due to ceasing of project as a funding strategy for flood recovery.	0	-200	-50
	Green Heart CitySmart Pty Ltd - Operations and Liaison	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-200	0
	Green Heart Businesses - Sustainable Retrofitting Incentives Package	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-400	0
1.1.2.1 Greenhouse Gas Reduction and Climate Change Adaptation	Lord Mayor's Community Sustainability Grant Scheme	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-1,000	0
1.2.1.1 Community Partnering for Conservation and Restoration	Voluntary Conservation Agreements - Land for Wildlife and Conservation Partnerships Program	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
	Native Animal Ambulances and Wildlife Carers Grant	Decrease in expense as a funding strategy for flood recovery.	0	-150	0
1.2.2.2 Conservation Reserves Management Program	Conservation Reserves Management Program	Decrease in expenditure as a funding strategy for flood recovery.	-532	-164	0
	Wipe Out Weeds	Decrease in expense as a funding strategy for flood recovery.	0	-500	0
	Brisbane Invasive Species Management Plan Implementation	Decrease in expense as a funding strategy for flood recovery.	0	-300	0
	Condition Assessments and Rehabilitation	Decrease in expense by reducing the scope of the project as a funding strategy for flood recovery.	0	-50	0
	Jan 2011 Flood Damages - Conservation Reserves	Increase in expense to carry out flood recovery works in conservation reserves - detailed damage assessment; coordination of volunteer efforts and repairs to various walking and fire trails, which were badly damaged.	0	500	0
1.2.2.3 Restoration	Two Million Trees - Our Urban Forest	Increase in expense required to cater for the 'post planting' two year maintenance period.	0	2,500	0



1.4.1.1 Waste Stream Management and Red	Towards Zero Waste Communication Education and Research	Decrease in expense and revenue due to reduction of Council funding Towards Zero Waste project as a funding strategy for flood recovery.	0	-370	-78
	Annual Kerbside Large Item Collection	Decrease in expense as a funding strategy for flood recovery.	0	-1,000	0
	Recycling Service for Multi-Unit Dwellings	Increase in service costs due to higher than anticipated take up rate of recycling bin services in multi-unit dwellings	0	168	0
	Provide Additional Household Recycling Capacity	Decrease in revenue and expense due to lower than expected participation rates in the new additional household recycling capacity service.	0	-787	-416
	eWaste and Household Hazardous Waste Events	Decrease in expense due to the suspension of the quarterly eWaste events as a funding strategy for flood recovery.	0	-25	0
	Green Waste Recycling Service	Decrease in revenue and expense in the new green waste recycling service.	0	-1,996	-1,234
	Recycling Service for Commerce and Industry	Decrease in revenue and expense in the new recycling service for commerce and industry.	0	-206	-338
	Compost at Home Education	Decrease in expense due to suspension of the project as a funding strategy for flood recovery.	0	-73	0
1.5.1.1 City Cleansing	City-wide Litter Prevention	Decrease in revenue and expense as a funding strategy for flood recovery.	0	-2,074	-992
2.2.2.1 Improve Ecological Health of Waterways	Local Waterways Health Assessment and Evaluation	Decrease in expense by reducing the scope of previously completed Water Sensitive Urban Design projects.	0	-150	0
	Waterways Health Enhancement	Decrease in expense as funding redirected to flood recovery priorities. Carryover of revenue from 2010-11 to 2012-13 for "Caring for our Country" grant funding to match approved payment schedule.	0	-6,620	150
	Local Waterways Health Enhancement	Decrease in expense due to reallocating of funding to flood recovery priorities.	0	-750	0
	Environmental Flows Assessment	Decrease in expense due to deferring of project as a funding strategy for flood recovery.	0	-100	0
	Norman Creek 2026 Project	Carryover of expense from 2011-12 to 2012-13 as a funding strategy for flood recovery.	0	2,100	0
	Jan 2011 Flood Damages - Creek Remediation	Increase in expense to address waterway erosion issues that are causing safety concerns to public and/or Council assets.	0	5,500	0
	Waterway Human Health and Safety - Site Monitoring	Increase in expense to fund water quality monitoring following flood.	0	100	0
2.2.3.1 Wharves Jetties and Pontoons	Wharves Jetties Pontoons and Fishing Platforms	Decrease in expenditure as a funding strategy for flood recovery.	-1,372	-23	0
2.2.3.2 Sea and River Walls	Sea and River Walls Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-1,813	-240	0
2.3.1.2 Gather and Provide Flood Information	Flood Planning Notes Phase 2	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
2.3.1.5 Major Drainage	Major Drainage Construction	Decrease in capital as a funding strategy for flood recovery.	-2,000	0	0
2.3.2.4 Mitigate Flooding	Flood Mitigation Studies and Investigation	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
2.3.2.6 Reconstruct Gullies	Gully Reconstruction	Decrease in expense as a funding strategy for flood recovery.	0	-250	0
3.1.3.2 Riverwalk	Jan 2011 Flood Damages - Floating Riverwalk	Additional \$12m capital to repair Council's assets damaged in January 2011 flood event.	12,000	0	0



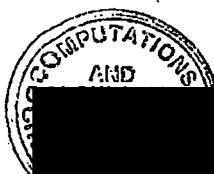
3.2.1.1 Expanding the Network through New Infrastructure	Ferry Terminal Expansion Project - Increasing Capacity at Existing Terminals	Transfer of unspent capital to Jan 2011 Flood Damage Ferry Terminals project.	-15,330	0	0
	Jan 2011 Flood Damages - Ferry Terminals	Transfer of unspent capital from Ferry Terminal Expansion Project - Increasing Capacity of Existing Terminals and Ferry Terminal Expansion Project - Two New Terminals. Forwards also revised according to revised program of works.	40,335	0	0
3.3.1.1 Plan and Design the Network	Rosedale Infrastructure Design and Delivery	Reduce \$3.6m negative revenue due to the phase 1 reduction. Negative revenue is held for future cross-credits allowed under Infrastructure Agreement terms as part of extending the development.	0	0	3,600
3.3.2.1 TransApex	TransApex - Legacy Way	Savings of \$11.08m are offered in relation to an overall reduction in the D&C Contract Sum as at Contract Award from what was initially estimated prior to finalisation of the contract. A carryover of \$9.2m is required into future years to cater for revised spending profile into 2014/15. Transfer of \$1.48m expense to capital to align with forecast.	-18,800	-1,480	0
	TransApex - Legacy Way Operations	Change to capitalised interest as per latest estimates	84	0	0
3.3.2.2 Road Action Program	Inala Ave - King Ave Stage 1- Blunder Rd to Sherbrooke Rd	Carryover of capital to 2012-13: \$3.1m from 2010-11 and \$900k from 2011-12 as per LMERC Special Review.	4,000	0	0
	Johnson Road - Stapylion Road Intersection Upgrade	Defer project start to 2012-13 as per LMERC Special Review.	9,000	0	4,873
	Railway Crossing - Robinson Rd Geebung	Defer project start to 2013-14 as per LMERC Special Review.	-41,900	0	-21,000
	Progress Road Stage 3 - Boundary Rd to Centenary Hwy	Defer project start to 2013-14 as per LMERC Special Review.	-20,352	0	0
	Kingsford Smith Drive - Future Upgrade	Defer project start to 2013-14 as per LMERC Special Review.	-21,000	0	0
	Wynnum Rd - Shafston Ave to Hawthorne Rd	Defer project start to 2014-15 as per LMERC Special Review.	-2,000	0	0
	Stanley St to Old Cleveland Rd	Defer project start to 2014-15 as per LMERC Special Review.	-25,000	0	-12,500
	Railway Crossing - Telegraph Rd Bald Hills - Bracken Ridge	Defer project start to 2013-14 as per LMERC Special Review.	-55,000	-50	-27,500
	Railway Crossing - Lindum Rd Wynnum West	Defer project start to 2013-14 as per LMERC Special Review.	-15,000	-300	-7,650
	Progress Road Stage 4	Final project payment due June 11. Next stage to start in 2012-13 as per LMERC decision (next stage in new project Progress Stage 4).	452	0	0
3.3.2.3 Construct Local Transport Networks	Wacol Station Rd Sumners Rd Upgrade	Project cancelled. Funds diverted to flood recovery. Savings of \$1m in 2012-13.	0	-1,000	0
	Telegraph Rd Corridor	Defer project start to 2012-13 as per LMERC Special Review.	-3,450	0	0
	Wynnum Rd - Manly Rd Belmont Rd Intersection	Project cancelled. Savings of \$1m in 2012-13.	-1,000	0	0
	Tilley Rd Extension	Defer project start to 2012-13 as per LMERC Special Review.	-4,000	-1,000	0
3.3.3.1 Maintain and Improve the Network	Jan 2011 Flood Damages - Roads and Road Related	Additional capital is required due to flood damage to Council's owned Roads and Road Related assets	43,960	0	0
4.3.1.1 Guiding Brisbane's Development	Siting Variations Redesign	Bring forward of expense from 2012-13 to 2011-12 to complete the project.	0	-10	0
	Advertising Sign Redesign	Bring forward of expense from 2013-14 to 2012-13 to complete the project.	0	25	0
5.1.1.1 Festivals and Events	Indigenous Cultural Events - King George Square	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
5.1.5.2 Creative City	Creative City Initiative	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-300	0
5.2.1.4 Outreach Programs	One Book Many Brisbanes	Decrease in expense due to ceasing of project as it has ran for 6 years with decreasing interest to fund flood recovery.	0	-100	0



5.2.1.5 Information and Communication Technology Infrastructure	Wi-Fi and Faster Internet in Every Council Library	Decrease in expense as a funding strategy for flood recovery.	0	-106	0
5.2.1.6 Purchase and Management of Library Collections	Maintain Lending and Reference Collections	Decrease in expense as a funding strategy for flood recovery.	0	-464	0
5.3.1.1 Community Participation Opportunities	Active and Healthy Parks Program	Decrease in expense as a funding strategy for flood recovery.	0	-70	0
5.4.1.1 Indigenous Aspirations	Indigenous Aspirations Strategy	Decrease in expense as a funding strategy for flood recovery.	0	-160	0
5.4.1.2 Multicultural and Refugee Initiatives	Multicultural Communities	Decrease in expense due to change of scope as a funding strategy for flood recovery.	0	-168	0
5.4.1.4 Homelessness and Affordable Housing	Homelessness and Affordable Housing	Decrease in expense due to change of scope as a funding strategy for flood recovery.	0	-40	0

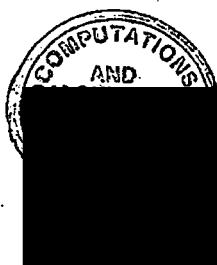


5.4.1.5 Youth Initiatives	Visible Ink Youth Spaces	Decrease in expense due to deferring of proposed Visible Ink South presence as a funding strategy for flood recovery.	0	-50	0
5.4.2.1 Community Capacity Building	Mens Sheds	Decrease in expense due to reduction in grants as a funding strategy for flood recovery.	0	-20	0
5.4.3.1 Grants Administration	Lord Mayor's Suburban Initiative Fund	Decrease in expenditure as a funding strategy for flood recovery.	-300	-2,376	0
5.5.1.1 Facilities Development and Maintenance	Dragon Boat Storage Racks	Carryover of capital from 2011-12 to 2012-13 as a funding strategy for flood recovery.	150	0	0
	South West Sporting Complex	Carryover of capital from 2012-13 to 2014-15 as a funding strategy for flood recovery.	-1,500	0	0
5.5.2.1 Community Halls	Jamboree Community Hub Design and Construction	Increase in expenditure to fund Jamboree Community Hub design and construction.	250	150	0
5.5.3.4 Pools	City Pools Upgrade Program	Decrease in expenditure and revenue as a funding strategy for flood recovery.	-3,068	-107	-500
	Surrender of Centenary Pool and Cherrimside Pool Leases	Increase in expense for lessee to surrender leases and Council to manage and refurbish the pools.	0	100	0
5.5.3.5 Golf	St Lucia Golf Links - Greens and Fairway Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-56	-4	0
	Golf Course Road Resurfacing Victoria Park	Carryover of capital from 2011-12 to 2012-13 as a funding strategy for flood recovery.	100	0	0
5.6.1.1 The People's Place	City Hall Rebuilding Program	Carryover of expenditure and revenue from 2010-11 to 2011-13 due to timing across financial years based on revised cashflows. No impact on final delivery date.	20,829	-10,323	2,200
6.2.1.1 Parks Planning and Policy	Key City Park Upgrades	Decrease in expenditure due to suspension of projects as a funding strategy for flood recovery.	-1,500	-300	0

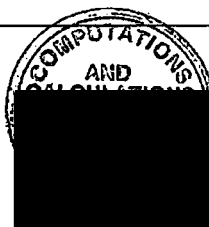


6.2.1.2 Parks Maintenance and Development	Utilities Rehabilitation in Parks	Decrease in expenditure due to reduce scope as a funding strategy for flood recovery.	-153	-83	0
	Toilets Upgrade Program	Decrease in expenditure due to suspension of projects as a funding strategy for flood recovery.	-846	-282	0
	Shelter Upgrades - Parks	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-378	-18	0
	Repair Road and Car Park Defects	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-735	-210	0
	Memorial Restoration	Decrease in expense due to reduction in scope as a funding strategy for flood recovery.	0	-310	0
	Upgrade Key Neighbourhood Parks	Carryover of capital from 2010-11 to 2012-13.	250	0	0
	Dog Off Leash Area Refurbishment	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	0	-328	0
	Metropolitan and District Playgrounds	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-400	-100	0
	Park Recreation Facility Rehabilitation and Replacement	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-115	-20	0
	Park Path and Track Rehabilitation and Reconstruction	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-344	-88	0
	Water Cartage	Decrease in expense due to reduction in water cartage as a funding strategy for flood recovery.	0	-200	0
	West End Riverside Parklands	Decrease in expenditure due to ceasing of project as a funding strategy for flood recovery.	-6,061	-595	0
6.2.2.1 Manage Mt Cool-tha Botanic Gardens	Mt Cool-tha Botanic Gardens - Refurbish Assets	Decrease in capital as a funding strategy for flood recovery.	-150	0	0
7.2.1.1 Disaster Management	Local Disaster Coordination Centre Refurbishment	Increase in expense to complete Phase 2 of Local Disaster Coordination Centre refurbishment.	0	70	0
9.3.1.1 Customer Service Channels	Customer Experience Transformation Program	Carryover of \$1.8m capital from 2010-11 to: \$1.3m in 2011-12 and \$0.5m in 2012-13 to recognise CET's share of licensing and support charges incurred in relation to the provision of Oracle software products provided under a Universal Licensing Agreement.	500	0	0
	Fix-O-Grams	Decrease in expense as a funding strategy for flood recovery.	0	-10	0
	Plx-O-Grams	Decrease in expense as a funding strategy for flood recovery.	0	-10	0
10.2.1.1 Regional and International Initiatives	Asia Pacific Cities Biennial Summit	Decrease in expense as a funding strategy for flood recovery.	0	-32	0
10.3.3.1 Property Management	Howard Smith Wharves	Increase in capital to fund the project.	1,000	0	0
	Security Master Plan - Registered Master Keying	Decrease in expense as a funding strategy for flood recovery.	0	-107	0
10.7.1.3 Corporate Improvement Services	Corporate Improvement Project	Decrease in expense as a funding strategy for flood recovery.	0	-154	0
	Corporate Portfolio Management Office	Decrease in expense as a funding strategy for flood recovery.	0	-200	0
10.8.1.1 Responsible Employer	Employment Programs - Community Jobs Program	Decrease in expense as a funding strategy for flood recovery.	0	-14	0
	Employment Programs - Youth in Recovery	Decrease in expense as a funding strategy for flood recovery.	0	-77	0
	Refugee Pathways to Work	Decrease in expense as a funding strategy for flood recovery.	0	-26	0

10.8.1.2 Attractive Employer	Employment Programs - Trainees New	Decrease in expense as a funding strategy for flood recovery.	0	-45	0
	Employment Programs - Apprentices	Decrease in expense as a funding strategy for flood recovery.	0	-328	0
	Employment Programs - Graduate Recruitment Program	Decrease in expense as a funding strategy for flood recovery.	0	-225	0
	Employment Programs - Cadets Undergraduate	Decrease in expense as a funding strategy for flood recovery.	0	-81	0
	Employment Programs - Cadetship Program - Associate Degree	Decrease in expense as a funding strategy for flood recovery.	0	-83	0
10.9.1.1 Communicating with the Community	Digital Communications Research and Development	Decrease in expense due to project savings.	0	-8	0
10.10.1.1 Optimise Organisational ICT Effectiveness	Business and System Efficiency Program	Carryover of expense from 2011-12 to 2012-13 due to project deferral as a result of flood.	0	5,000	0
	Council Managed Print Services	Carryover of expense from 2011-12 to 2012-13 due to realignment of contracts.	0	350	0
	Ensuring Corporate Web Capacity	Increase in expense to ensure Corporate Website Capacity.	0	160	0
10.11.1.1 Disaster Response and Recovery	Critical Event Response Desktops	Increase in expense to fund critical event response desktops.	0	20	0
	LDCC ICT Infrastructure Upgrade	Increase in expense due to LDCC ICT Infrastructure Upgrades.	0	50	0
Brisbane Transport	Bus CCTV System	Decrease in capital due to ceasing of bus CCTV retrofits.	-543	0	0



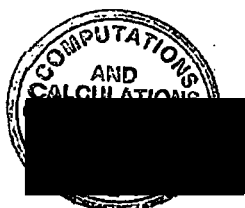
Year: 2013-14 Requested Change					
Service	Operating/Project	Explanation of Change	Change from Approved Budget Capital	Net Expense	External Revenue
			\$000	\$000	\$000
TOTAL PROGRAM CHANGES			-61,976	-19,157	-38,825
1.1.1.2 Green Heart CitySmart Engagement Initiative	Green Heart CitySmart Van and Events	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-300	0
	Green Heart Schools	Decrease in expense due to savings identified through changes to scope of the programs a funding strategy for flood recovery.	0	-51	0
	Green Heart Homes	Decrease in expense due to savings identified through changes to scope of the programs a funding strategy for flood recovery.	0	-400	0
	Green Heart Business and Industry Program	Decrease in expense and revenue due to ceasing of project as a funding strategy for flood recovery.	0	-200	-50
	Green Heart CitySmart Pty Ltd - Operations and Liaison	Decrease in expense due to savings identified through changes to scope of the program as a funding strategy for flood recovery.	0	-200	0
	Green Heart Businesses - Sustainable Retrofitting Incentives Package	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-400	0
1.1.2.1 Greenhouse Gas Reduction and Climate Change Adaptation	Lord Mayor's Community Sustainability Grant Scheme	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-1,000	0
1.2.1.1 Community Partnering for Conservation and Restoration	Voluntary Conservation Agreements - Land for Wildlife and Conservation Partnerships Program	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
	Native Animal Ambulances and Wildlife Carers Grant	Decrease in expense as a funding strategy for flood recovery.	0	-150	0
1.2.2.2 Conservation Reserves Management Program	Wipe Out Weeds	Decrease in expense as a funding strategy for flood recovery.	0	-500	0
	Brisbane Invasive Species Management Plan Implementation	Decrease in expense as a funding strategy for flood recovery.	0	-300	0
1.2.2.3 Restoration	Two Million Trees - Our Urban Forest	Increase in expense required to cater for the 'post planting' two year maintenance period.	0	1,500	0
1.4.1.1 Waste Stream Management and Reduction	Towards Zero Waste Communication Education and Research	Decrease in expense and revenue due to reduction of Council funding Towards Zero Waste project as a funding strategy for flood recovery.	0	-378	-84
	Recycling Service for Multi-Unit Dwellings	Increase in service costs due to higher than anticipated take up rate of recycling bin services in multi-unit dwellings.	0	173	0
	Provide Additional Household Recycling Capacity	Decrease in revenue and expense in the new additional household recycling capacity service.	0	-880	-477
	eWaste and Household Hazardous Waste Events	Decrease in expense due to the suspension of the quarterly eWaste events as a funding strategy for flood recovery.	0	-25	0
	Green Waste Recycling Service	Decrease in revenue and expense in the new green waste recycling service.	0	-2,154	-1,848
	Recycling Service for Commerce and Industry	Decrease in revenue and expense in the new recycling service for commerce and industry.	0	-241	-473
	Compost at Home Education	Decrease in expense due to suspension of the project as a funding strategy for flood recovery.	0	-73	0
1.5.1.1 City Cleansing	City-wide Litter Prevention	Decrease in revenue and expense as a funding strategy for flood recovery.	0	-2,074	-992



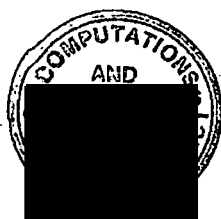
2.2.2.1 Improve Ecological Health of Waterways	Local Waterways Health Assessment and Evaluation	Decrease in expense by reducing the scope of previously completed Water Sensitive Urban Design projects.	0	-150	0
	Waterways Health Enhancement	Decrease in expense as funding redirected to flood recovery priorities.	0	-6,620	0
	Local Waterways Health Enhancement	Decrease in expense due to reallocating of funding to flood recovery priorities.	0	-750	0
	Environmental Flows Assessment	Decrease in expense due to deferring of project as a funding strategy for flood recovery.	0	-100	0
	Waterway Human Health and Safety - Site Monitoring	Increase in expense to fund water quality monitoring following flood.	0	100	0
2.2.3.1 Wharves Jetties and Pontoons	Wharves Jetties Pontoons and Fishing Platforms	Decrease in expenditure as a funding strategy for flood recovery.	-1,372	-23	0
2.2.3.2 Sea and River Walls	Sea and River Walls Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-1,813	-461	0
2.3.1.5 Major Drainage	Major Drainage Construction	Decrease in capital as a funding strategy for flood recovery.	-2,000	0	0
2.3.2.4 Mitigate Flooding	Flood Mitigation Studies and Investigation	Decrease in expense as a funding strategy for flood recovery.	0	-100	0
2.3.2.6 Reconstruct Gullies	Gully Reconstruction	Decrease in expense as a funding strategy for flood recovery.	0	-250	0
3.1.3.2 Riverwalk	Jan 2011 Flood Damages - Floating Riverwalk	Additional capital to repair Council's assets damaged in January 2011 flood event.	60,000	0	0
3.2.1.1 Expanding the Network through ne	Ferry Terminal Expansion Project - Increasing Capacity at Existing Terminals	Revised forward according to revised program of works.	14,700	0	0
3.3.2.1 TransApex	TransApex - Legacy Way	Carryover of \$69.03m is required into future years to cater for revised spending profile into 2014-15. This includes approximately \$12m risk. Transfer of \$1.496m expense to capital to align with forecast.	-67,534	-1,496	0
3.3.2.2 Road Action Program	Railway Crossing - Robinson Rd Geebung	Defer project start to 2013-14 as per LMERC Special Review.	-20,800	0	-10,400
	Kingsford Smith Drive - Future Upgrade	Defer project start to 2013-14 as per LMERC Special Review.	27,256	0	0
	Wynnum Rd - Shafston Ave to Hawthorne Rd	Defer project start to 2014-15 as per LMERC Special Review.	-6,000	0	0
	Stanley St to Old Cleveland Rd	Defer project start to 2014-15 as per LMERC Special Review.	-32,000	0	-16,000
	Railway Crossing - Telegraph Rd Bald Hills - Bracken Ridge	Defer project start to 2013-14 as per LMERC Special Review.	30,000	0	15,000
	Railway Crossing - Lindum Rd Wynnum West	Defer project start to 2013-14 as per LMERC Special Review.	-48,000	0	-25,000
	Progress Road Stage 4	Final project payment due June 2011. Next stage to start in 2012-13 as per LMERC decision (next stage in new project Progress Stage 4).	20,000	0	0
3.3.2.3 Construct Local Transport Networks	Paradise Rd Upgrade	Reduced scope of works in 2013-14 due to planning study completion.	-20,000	0	0
	Telegraph Rd Corridor	Defer project start to 2012-13 as per LMERC Special Review.	-15,000	0	0
	Tilley Rd Extension	Defer project start to 2012-13 as per LMERC Special Review.	-1,000	0	0
4.3.1.1 Guiding Brisbane's Development	Advertising Sign Redesign	Bring forward of expense from 2013-14 to 2011-13 to complete the project.	0	-40	0
5.1.1.1 Festivals and Events	Indigenous Cultural Events - King George Square	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-100	0
5.1.5.2 Creative City	Creative City Initiative	Decrease in expense due to ceasing of project as a funding strategy for flood recovery.	0	-300	0
5.2.1.2 Maintain and Enhance Libraries	Library Refurbishment and Rehabilitation	Carryover of capital from 2011-12 to 2013-14 as a funding strategy for flood recovery.	1,020	0	0



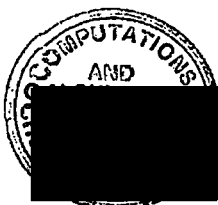
5.2.1.4 Outreach Programs	One Book Many Brisbanes	Decrease in expense due to ceasing of project as it has ran for 6 years with decreasing interest to fund flood recovery.	0	-100	0
5.2.1.5 Information and Communication Technology Infrastructure	Wi-Fi and Faster Internet in Every Council Library	Decrease in expense as a funding strategy for flood recovery.	0	-109	0
5.2.1.6 Purchase and Management of Library Collections	Maintain Lending and Reference Collections	Decrease in expense as a funding strategy for flood recovery.	0	-504	0
5.3.1.1 Community Participation Opportunities	Active and Healthy Parks Program	Decrease in expense as a funding strategy for flood recovery.	0	-70	0
5.4.1.1 Indigenous Aspirations	Indigenous Aspirations Strategy	Decrease in expense as a funding strategy for flood recovery.	0	-160	0
	Reflecting Aboriginal Culture in Public Space - Sorry Site Upgrade	Carryover of expense from 2010-11 to 2013-14 due to extension of project life.	0	60	0
5.4.1.2 Multicultural and Refugee Initiatives	Multicultural Communities	Decrease in expense due to change of scope as a funding strategy for flood recovery.	0	-168	0
5.4.1.4 Homelessness and Affordable Housing	Homelessness and Affordable Housing	Decrease in expense as a funding strategy for flood recovery.	0	-40	0
5.4.1.5 Youth Initiatives	Visible Ink Youth Spaces	Decrease in expense due to deferring of proposed Visible Ink South presence as a funding strategy for flood recovery.	0	-50	0
5.4.2.1 Community Capacity Building	Mens Sheds	Decrease in expense due to reduction in grants as a funding strategy for flood recovery.	0	-20	0
5.4.3.1 Grants Administration	Lord Mayor's Suburban Initiative Fund	Decrease in expenditure as a funding strategy for flood recovery.	-300	-2,376	0
5.5.1.1 Facilities Development and Maintenance	District Tennis Centres	Carryover of capital and revenue from 2011-12 to 2013-14 as a funding strategy for flood recovery.	1,916	0	1,500
	South West Sporting Complex	Carryover of expenditure from 2011-12 to 2013-14 as a funding strategy for flood recovery.	500	600	0
5.5.2.1 Community Halls	Jamboree Community Hub Design and Construction	Carryover of capital from 2011-12 to 2013-14 as a funding strategy for flood recovery and additional fund to complete the project.	2,650	50	0
5.5.3.4 Pools	Surrender of Centenary Pool and Chermiside Pool Leases	Increase in expense for lessee to surrender leases and Council to manage and refurbish the pools.	0	100	0
5.5.3.5 Golf	St Lucia Golf Links - Greens and Fairway Rehabilitation	Decrease in expenditure as a funding strategy for flood recovery.	-56	-4	0
	Golf Course Maintenance Depot St Lucia Golf Links	Carryover of \$1.5m capital from 2011-12 to 2013-14 as a funding strategy for flood recovery.	1,500	0	0
	Golf Course Road Resurfacing Victoria Park	Carryover of capital from 2011-12 to 2013-14 as a funding strategy for flood recovery.	100	0	0
6.2.1.1 Parks Planning and Policy	Key City Park Upgrades	Decrease in \$1.8m expenditure due to suspension of projects as a funding strategy for flood recovery.	-1,500	-300	0



6.2.1.2 Parks Maintenance and Development	Utilities Rehabilitation in Parks	Decrease in expenditure due to reduce scope as a funding strategy for flood recovery.	-184	-94	0
	Toilets Upgrade Program	Decrease in expenditure due to suspension of projects as a funding strategy for flood recovery.	-905	-302	0
	Shelter Upgrades - Parks	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-404	-25	0
	Repair Road and Car Park Defects	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-800	-226	0
	Memorial Restoration	Decrease in expense due to reduction in scope as a funding strategy for flood recovery.	0	-310	0
	Dog Off Leash Area Refurbishment	Decrease in expense due to reduction in scope as a funding strategy for flood recovery.	0	-356	0
	Metropolitan and District Playgrounds	Decrease in expenditure of \$500k due to reduction in scope as a funding strategy for flood recovery.	-400	-100	0
	Park Recreation Facility Rehabilitation and Replacement	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-131	-20	0
	Park Path and Track Rehabilitation and Reconstruction	Decrease in expenditure due to reduction in scope as a funding strategy for flood recovery.	-368	-92	0
	Water Cartage	Decrease in expense due to reduction in water cartage as a funding strategy for flood recovery.	0	-200	0
	West End Riverside Parklands	Decrease in expenditure due to ceasing of project as a funding strategy for flood recovery.	-921	-285	0
6.2.2.1 Manage Mt Coot-tha Botanic Gardens	Mt Coot-tha Botanic Gardens - Refurbish Assets	Decrease in capital as a funding strategy for flood recovery.	-150	0	0
7.2.1.1 Disaster Management	Local Disaster Coordination Centre Refurbishment	Increase in expense to complete Phase 2 of Local Disaster Coordination Centre refurbishment.	0	40	0
10.2.1.1 Regional and International Initiatives	Asia Pacific Cities Biennial Summit	Decrease in expense as a funding strategy for flood recovery.	0	-32	0
10.7.1.3 Corporate Improvement Services	Corporate Improvement Project	Decrease in expense as a funding strategy for flood recovery.	0	-154	0
	Corporate Portfolio Management Office	Decrease in expense as a funding strategy for flood recovery.	0	-200	0
10.8.1.1 Responsible Employer	Employment Programs - Community Jobs Program	Decrease in expense as a funding strategy for flood recovery.	0	-14	0
	Employment Programs - Youth In Recovery	Decrease in expense as a funding strategy for flood recovery.	0	-77	0
	Refugee Pathways to Work	Decrease in expense as a funding strategy for flood recovery.	0	-26	0
10.8.1.2 Attractive Employer	Employment Programs - Trainees New	Decrease in expense as a funding strategy for flood recovery.	0	-45	0
	Employment Programs - Apprentices	Decrease in expense as a funding strategy for flood recovery.	0	-328	0
	Employment Programs - Graduate Recruitment Program	Decrease in expense as a funding strategy for flood recovery.	0	-225	0
	Employment Programs - Cadets Undergraduate	Decrease in expense as a funding strategy for flood recovery.	0	-81	0
	Employment Programs - Cadetship Program - Associate Degree	Decrease in expense as a funding strategy for flood recovery.	0	-83	0
10.9.1.1 Communicating with the Community	Digital Communications Research and Development	Decrease in expense due to project savings.	0	-8	0



10.10.1.1 Optimise Organisational ICT Effectiveness	Business and System Efficiency Program	Carryover of expense from 2011-12 to 2013-14 due to project deferral as a result of flood.	0	5,000	0
	Ensuring Corporate Web Capacity	Increase in expense to ensure Corporate Website Capacity.	0	160	0
10.11.1.1 Disaster Response and Recovery	Critical Event Response Desktops	Increase in expense to fund critical event response desktops.	0	20	0
	LDCC ICT Infrastructure Upgrade	Increase in expense due to LDCC ICT Infrastructure Upgrades.	0	20	0



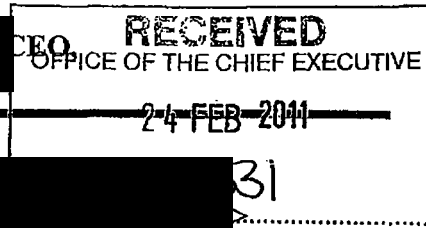
Cheque Payments

Dated Cheque Issued	Amount	Name of club cheque made payable to
04/03/2011	\$ 50,000	Jindalee Bowls Club Inc
04/03/2011	\$ 50,000	Brothers St. Brendans Rugby League Football Club
04/03/2011	\$ 50,000	South Brisbane District Cricket Club Inc
04/03/2011	\$ 50,000	Australian Hellenic Sports & Cultural Association
04/03/2011	\$ 50,000	Eastern Suburbs Soccer Club Ltd
04/03/2011	\$ 30,000	Brisbane Rugby League Referees Association Inc
04/03/2011	\$ 50,000	Rocklea United Soccer Club
04/03/2011	\$ 30,000	El Salvador Soccer Club Queensland Inc
04/03/2011	\$ 30,000	Lions Rugby Union Club Inc
04/03/2011	\$ 30,000	Corinda Horse And Pony Club Inc
04/03/2011	\$ 35,000	Brisbane Basketball Inc
04/03/2011	\$ 50,000	Jindalee Districts Australian Football Club Inc
01/04/2011	\$ 50,000	Western Districts Community & Sporting Club Ltd.
01/04/2011	\$ 50,000	Bellbowrie Sports & Recreation Club Inc
01/04/2011	\$ 50,000	Toowong Bowls Club Inc
01/04/2011	\$ 50,000	Bellbowrie Kindergarten & Preschool Association Inc
24/05/2011	\$ 30,000	Metropolitan Districts Netball Association Inc
19/08/2011	\$ 30,000	Kenmore Churches Soccer Club Inc
19/08/2011	\$ 20,000	Toowong Bridge Club Inc
	\$ 785,000	Total Funding

Status of Claims by NDRRA Classification Commercial in Confidence	Counter Disaster Operations (CDO) Claims \$'000	Emergent Works (EW) Claims \$'000	Restoration of Essential Public Assets (REPA) Claims \$'000	Total Claims \$'000
Cumulative				
Claims prepared	26,389	14,191	0	40,579
Less: Claims with Grants Team pending review/signing	339	558	0	897
Claims lodged with QRA	<u>26,049</u>	<u>13,633</u>	<u>0</u>	<u>39,682</u>
Gross QRA funds approved	12,834	7,371		
Less: Trigger Point Contribution		<u>1,857</u>		
Net QRA funds approved	<u>12,834</u>	<u>5,514</u>		18,348
Gross not yet reviewed by QRA	5,451	4,935		
Less: Trigger Point Contribution remaining		<u>223</u>		
Net submissions still under consideration by QRA	<u>5,451</u>	<u>4,711</u>		10,162
Total Trigger point excess		2,080		2,080
Claims rejected by QRA	7,765	1,327		9,092
Claims lodged with QRA	<u>26,049</u>	<u>13,633</u>	<u>0</u>	<u>39,682</u>
QRA Advance			\$	85,000
Net Claims Approved			\$	18,348
QRA advance to be acquitted			\$	66,652

As at: 25 August 2011

Colin Jensen - Copy of of correspondence from [REDACTED]
Queensland Reconstruction Authority



From: [REDACTED]

To: [REDACTED]

Date: [REDACTED]

Subject: Copy of of correspondence from [REDACTED] CEO, Queensland Reconstruction Authority

Attachments: 20110222 - Attach A.XLSX; 24 Feb 2011 - Colin Jensen, CEO Brisbane City Council - Reconstruction projects & emergent works.pdf

Good afternoon

Please find attached an electronic copy of correspondence from [REDACTED] CEO, Queensland Reconstruction Authority that has been placed in the post to you today.

To assist in the return of the requested information, I have also included an electronic copy of the attachment to the correspondence.

Regards

[REDACTED]
Queensland Reconstruction Authority
Location - Level 9, 119 Charlotte Street, Brisbane
GPO Box 15428 City East Q 4002
[REDACTED]

Unless stated otherwise, this email, together with any attachments, is intended for the named recipient(s) only and may contain privileged and confidential information. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

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Please direct all enquiries to the message author.

Queensland Reconstruction Authority

24 February 2011

Mr Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

Dear Mr Jensen

The Queensland Reconstruction Authority (the Authority) was established on Monday 21 February 2011 with the task of reconstructing those communities across Queensland that were affected by the flooding caused by Tropical Cyclones Tasha and Anthony, and the damage caused by Severe Tropical Cyclone Yasi.

Combined, the 2010–2011 flood and cyclone events represent the most significant natural disaster in the State's history. With more than 90 per cent of Queensland Local Government Authorities (LGAs) disaster declared, the impacts in terms of damage to and requirement for reconstruction of essential public infrastructure are unprecedented.

The Authority recognises the vital role of local governments in the reconstruction task and is currently exploring whether it can make a grant advance to local governments of part of the financial assistance provided by the Commonwealth under the Natural Disaster Relief and Recovery Arrangements (NDRRA).

To this end, the Authority requests the following information:

1. List of Reconstruction Projects

A list of your expected reconstruction projects in priority order, including a brief description of each project, estimated cost and your initial assessment of NDRRA eligibility. A suitable template is attached to this letter.

This list is requested by 18 March 2011.

2. Emergent Works Submission

Details and supporting documentation for costs you have incurred associated with "emergent works" as defined within the NDRRA (including current disaster operations). It is appreciated that some works will be ongoing, however, details are requested as soon as you have available and sufficient information.

Level 9, 119 Charlotte Street Brisbane
PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

In due course, we also request that you submit your detailed NDRRA applications for specific reconstruction projects.

The contact point in the Authority for any enquiring relating to the above is [REDACTED]
[REDACTED] He can be contacted on telephone [REDACTED] or by email at [REDACTED]
[REDACTED] We would appreciate your similar advice as to the relevant contact point in your Council.

Sincerely

[REDACTED]
CEO, Queensland Reconstruction Authority

Enc

Council Name: XYZ Council

PROJECT		LOCATION		REQUIREMENTS		FUNDING		ESTIMATED COST
NAME	NUMBER	TYPE	AREA	DESCRIPTION	STATUS	DATE	AMOUNT	
ABC Street	101	Paved Road	X Regional Centre	Road needs minor earthworks, resurfacing, minor curb and channel	B	N	\$1,245,000	
DEF Recreational Reserve	102	Reserve	Y District Centre	Major water repair, replace amenities, reconstruct embankment, road resurfacing, replanting, signage	B	N	\$6,810,000	
GHI Aquatic Centre	103	Public Pool	Z Regional Centre	Replace filtration system, repair perimeter fencing, replace hot-out block	-	Y	\$78,858	

Business Case Cat D

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APPENDIX 1	BENEFIT-COST ANALYSIS (BCA)
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Executive Summary

This section should summarise the key points from each section in the body of the document. Therefore it is best to complete it after the rest of the document has been developed.

Introduction

This section should provide a description of the purpose, process and structure of the business case.

Rationale

Background

This section should provide a brief history for the proposal, including:

- Who initiated the proposal
- History of the infrastructure being replaced, restored or proposed for a betterment replacement/restoration
- Details of any community engagement including issues and outcomes
- Any previous studies, initiatives, proposals or business cases of prior or current related proposals

Statement of Service Need / Issue / Opportunity

This section should outline the desired outcomes and benefits of the proposal. It will include a high-level description of the proposal's key expected social, economic and environmental benefits. The detail in this section should cover the full extent of the need for proposal and how the proposal will contribute to the economic and social well being of the relevant community.

The description of the desired outcomes and benefits of the project should not be limited to the benefit(s) or outcome(s) achieved through betterment or improvement to the resilience of the original infrastructure. The description of the desired outcomes and benefits also needs to capture the underlying principles in the National Disaster Relief and Recovery Arrangements (NDRRA) Determination 2007 that restoration or replacement of a damaged assets is required as it is an integral and necessary part of the state/community's infrastructure, and if no longer available would severely disrupt the normal functioning of the community.

Contribution to Agency / Local Government Objectives / Lines of Reconstruction

Include a statement to demonstrate how the proposal is linked to the objectives or strategic direction of the local government or applicant and how the proposal will align with the overarching strategic directions set out in the *State Community, Economic and Environmental Recovery and Reconstruction Plan*, including the identified Lines of Reconstruction. It should be clear that the proposal does not undermine or distort the obligations on the local government authority, agency or any level of government for security, business continuity or insurance.

Extent of Local, State and Commonwealth Funding

The guiding principles of *National Partnership Agreement for Natural Disaster Reconstruction and Recovery* for the development and construction of proposals advocate for higher level of governments to not provide assistance until the lower level(s) of government have also done so, and their ability to provide further assistance has reached its limits. This section should therefore present the various funding levels required for the project and demonstrate the division of funding proposed.

Proposal Description

Scope

Define the scope of the proposal, specifically the boundaries of the proposal and identify factors that have been defined as outside the scope of the proposal. The description needs to clearly set out that the scope is linked to restoration/reconstruction of assets impacted by declared natural disasters (Queensland flooding and Tropical Cyclones Tasha and Anthony and Severe Tropical Cyclone Yasi, November 2010 – February 2011) or clearly linked to a proposal to enhance resilience of the asset to future events.

Assumptions

This section should list and critically review the assumptions that have been made in developing the proposal.

Constraints

Define any factors or issues that restrict or could be reasonably expected to restrict the successful delivery of the proposal.

Alternatives (Options)

This section should introduce and define the alternatives to the proposal that have been considered. A restoration or replacement could be considered as the base case alternative to a betterment proposal. It will consider the strengths and weaknesses of the alternatives and summarise why the proposal has been recommended as the preferred option to meet the service needs.

Analysis of Options may include:

- Appropriately support with cost-benefit analysis comparing options (or at least a cost-effectiveness analysis); and
- A commitment to mitigate future claims of the same kind – i.e. details of what measures will be used to mitigate the level of impact of future disaster events.

Economic Analysis

This section should present the outcomes of the economic (and where appropriate, financial) analysis of the proposal with reference to its alternatives. This analysis will focus on the expected whole-of-life benefits and costs of these options and the disaggregated expected net benefits to the various levels of government and broader community. It should also provide a

discussion of any unquantifiable costs and benefits not included in the economic analysis, particularly pertaining to any key strategic objectives for the proposal.

Additional guidance on Benefit Cost Analysis is shown in Appendix 1.

Risk Analysis and Management

The risk analysis and management section should identify the risks associated with the development and implementation of the proposal and in each of the options. The risks should be considered at a high level. The risk analysis should:

- Identify the major risks in each of the options
- Identify the impact and likelihood of these risks
- Identify risk mitigation strategies to address the risks
- Document any impact of these risks on the cost benefit analysis
- Highlight any critical assumptions and dependencies

Funding Analysis

The funding analysis is an important section as it needs to demonstrate that the proposal is consistent with the principles of the *National Partnership Agreement for Natural Disaster Reconstruction and Recovery*. In particular, it needs to:

- (a) Demonstrate that it is unable to be funded in an alternative and more cost-effective or equitable way by the applicant; and
- (b) Explain why the proposal has not been, or could not be, considered for funding under the standard infrastructure programs of the Commonwealth and State/local governments.

The funding analysis should present a detailed description of all potential funding sources identified for the proposal and set out clear justification as to why funding support from the State and Commonwealth Governments are required to deliver the benefits associated with the proposal.

Implementation Strategy

The section is to provide an outline of the governance structure and other arrangements in place to ensure the proposal is able to efficiently achieve its desired outcomes. This will include:

- a description of the governance arrangements for the planning, procurement and implementation of the proposal
- roles, decision-making responsibilities and accountabilities for ensuring the stated outcomes of the proposal are measured and achieved
- a high-level project plan outlining the major phases, decision-points, milestones and significant critical path items

- consideration of the procurement methodology best suited for achieving a value for money outcome for the proposal
- a description of the approach to minimise the risks identified in the Risk Analysis and Management section

APPENDIX 1 **Benefit-Cost Analysis (BCA)**

It may be appropriate to undertake a Benefit-Cost Analysis as the basis of the economic analysis of the project. This analysis encompasses the consideration of a range of benefits and costs associated with the project. This type of analysis is especially useful in the comparative consideration of different potential options for the project and to evaluate the project against other potentially competing projects within a portfolio of projects.

The approach set out below reflects a summary approach drawn largely from the Australian Transport Council, *National Guidelines for Transport System Management in Australia, Volume 3 Appraisal of initiative* (the ATC Guidelines). This approach is generally consistent with the *Cost Benefit Analysis Guidance Material* from the *State Government Project Assurance Framework*. These documents should be accessed directly to provide further detail if required.

Approach

BCA plays a central role in the appraisal process, providing an assessment of those impacts that can be monetised. BCA is a standard technique used all over the world and can be applied to a wide range of initiatives in a defensible, comprehensive, transparent and rigorous way. The material provided below is targeted primarily at transport projects, but the approach is equally valid for other infrastructure classes and project types.

Within the ATC Guidelines the BCA is considered in either a 'rapid BCA' form which takes the main monetised benefits and costs into account or a more detailed BCA. For more detailed BCAs, studies may be required to obtain project specific unit values for externalities. The level of detail included within the BCA should be considered in terms of the scope and scale of the project and the potential risk associated with it.

Analysis Methodology

The BCA allows consideration of monetised benefits and costs. At an early stage of planning or for smaller projects the BCA can be less precise and the benefits that are small or difficult to estimate can be omitted from the calculation and presented as a qualitative consideration.

Where any of the following benefits or costs amount to more than 10 % of the total benefits (or costs) they should if possible be quantified:

- changes in infrastructure operating costs
- savings in infrastructure user costs – (e.g. vehicle operating costs or reduced utility charges)
- improvements in service quality to users (e.g. reliability)
- additional benefits generated from provision of new service
- benefits or costs from alternate asset use.
- environmental benefit, and
- other externality impacts.

These factors should be assessed over a reasonable life of the asset and assessed in net present value (NPV) terms.

To promote consistency and comparability between assessments, it is recommended that recognised parameters are used to determine these values. For example Austroad parameter values for estimating benefits and costs for road restoration projects.

As a further guide default externality values are set out in Volume 3, Part 2, Appendix C of the ATC Guidelines. Parameter values for public transport are in Volume 4 of the ATC Guidelines and rail in Volume 5, Part 4.

Documentation

A suggested approach to the presentation of the BCA analysis and key factors is shown below. The level of detail in both the analysis and presentation should reflect the scope and scale of the project.

List the Benefits and costs of the initiative in the table below

Identify the present value, in dollar terms, and the percentage of total benefits and costs, as estimated from the BCA.

BENEFITS	VALUE (\$)
Savings in (additional) infrastructure operating costs including maintenance	
Savings in infrastructure user costs	
Improvements in service quality to users (e.g. reliability) Improvements in disaster resilience	
Benefits (disbenefits) derived from positive externalities	
Safety benefits (disbenefits)	
Other benefits (disbenefits)	
TOTAL BENEFITS	
<i>Note: Benefits should be positive and disbenefits negative</i>	
Investment costs (including asset renewal costs)	
Describe the non-monetised impacts of the initiative (see table 2.1 in Vol 3 of the ATC Guidelines for examples)	
Identify the beneficiaries and losers (see table 2.1 in Volume 3 of the ATC Guidelines for examples of secondary impacts)	

Summary BCA Results (spreadsheet should be attached)

Year discounted to:					
Net present value (\$)		Benefit-cost ratio		First-year rate of return (%)	
Internal rate of return (%)		Discount rate used (%)		Initiative life used (years)	

Queensland Reconstruction Authority

11 March 2011

Mr Colin Jensen
Mr Chief Executive Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

Dear Mr Jensen

I refer to my letter of 24 February 2011 seeking information on emergent works and other reconstruction projects for your Council resulting from the flooding caused by Tropical Cyclones Tasha and Anthony, and the damage caused by severe Tropical Cyclone Yasi.

To assist the Authority in expediting this process the Authority requires the information requested in my previous letter. Representatives of the Authority have been in contact with your Council seeking advice on the status of this request. Your assistance in providing the information required is greatly appreciated.

To progress the payment of grant advance funding for Natural Disaster Relief and Reconstruction Arrangements eligible reconstruction projects, I request that you execute the attached funding agreement which sets out the terms and conditions for the provision of funding.

In addition to returning the executed funding agreement, the Authority also requires the following information:

1. Bank account details provided on a document incorporating your Council's letterhead; and
2. The name and contact details of the appropriate contact officer in your Council.

Please provide this information via:

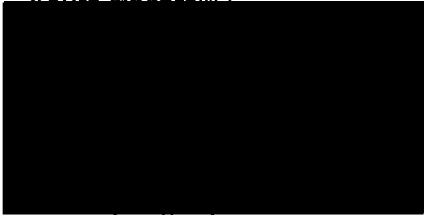
Attention: Chief Financial Officer
Queensland Reconstruction Authority
PO Box 15428 City East
Queensland 4002

Level 9, 119 Charlotte Street Brisbane
PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

BCC.091.0010

Should you wish to further discuss these matters further please contact [REDACTED]
[REDACTED] Chief Financial Officer, who can be contacted on telephone [REDACTED] or via e-
mail [REDACTED]

Y. L. L. L.



Chief Executive Officer

Enc

11 March 2011

[REDACTED]
Chief Executive Officer
Queensland Reconstruction Authority
GPO Box 15428
CITY EAST QLD 4002

De [REDACTED]

Thank you for your correspondence dated 24 February 2011 requesting information in relation to Brisbane City Council's January 2011 Brisbane River flood event. I am pleased to provide the following Attachments for your consideration (note all cost estimates are exclusive of GST):

Attachment A	A summary overview outlining Council's assessment of damaged assets
Attachment B	A detailed list of Projects in accordance with the QRA template requirements
Attachment C	A list of Emergent Works to be completed post April 19 2011.

It is Council's view that all projects are a top priority as these are essential to the people of Brisbane. The Riverwalk will be delivered over a longer timeframe because we need time to determine what is the best option for this asset. Hence our approach is to assess, plan and address all projects in parallel as fast as Council can return assets to operation. For example, the ferry terminals are being made operational immediately, with planning for a final solution underway in parallel. With parks, we have some already fully repaired and operational, some partially opened with closed off sections, and others fully closed but planned for restoration as soon as health concerns, operational capacity and circumstances permit.

At this stage uncertainty exists as to cost estimates, insurance cover, issues of betterment versus restoration to pre-flood standards, availability of non-NDDRA funds (community facility funds, donations and appeal funds etc) which leave gaps and uncertainties in the wide range of asset restoration projects affected. Similarly, Council recognizes that, given the extraordinary rain and flooding events, the scope of eligible NDRRA projects is also uncertain.

However, I am confident these uncertainties can be worked through with the new claims team being formed by QRA. You have Council's full cooperation and support for expediting the complex task facing us all.

With regard to the Emergent Works and Counter Disaster Operations, Council has previously announced that initial estimates stand at \$61.3M for both, and that number is being progressively refined as the full extent of costs becomes clearer. Please be advised that Council has Emerging Works in excess of \$6.4M that will be completed after the April 19th deadline and your approval is sought for an extension for these works.

Claims will be advanced progressively as a separate matter in accordance with instructions conveyed by QRA.

Should you have any questions, please contact [REDACTED] Team Leader – Grants,
Corporate Finance on [REDACTED]

Yours sincerely

Colin Jensen
Chief Executive Officer

Cc [REDACTED] Acting Chief Operating Officer, Brisbane City Council
[REDACTED] Executive Manager, Brisbane City Council
[REDACTED] Acting Chief Financial Officer, Brisbane City Council

Attachment A: OVERVIEW – COUNCIL'S ASSESSMENT OF DAMAGED ASSETS

Asset Class	Asset Category	18 March 2011 Estimates	NDRRA Category A, B, C, D	Non-NDRRA Y/N
Ferry terminals Total		\$70,000,000	D	
Floating river walk Total		\$75,000,000	D	
IT Assets Total		\$473,983	B	
Parks	Memorials / heritage	\$22,571	B	
	Park and street trees	\$5,452,061	B	
	Parks	\$5,812,414	B	
	Playgrounds	\$3,147,349	B	
	Power poles / utilities	\$313,481	B	
	Progressive Field assessed total - LAS	\$5,715,008	B	
	Recreational facilities	\$1,389,348	B	
	Riverside Parks Rehabilitation	\$15,047,085	B	
	Roads and car parks	\$1,419,442	B	
	Shelters and visitor centres	\$2,249,539	B	
Toilets and buildings		\$662,072	B	
Parks Total		\$41,230,370	B	
Property	ACTIVE AND HEALTHY PARKS	\$62,139	B	
	BUS DEPOTS	\$68,966	D	
	CEMETERY AND CREMATORIA	\$22,119	B	
	COMMUNITY LEASE	\$8,767,932	C/D	
	ENTERTAINMENT VENUES	\$475,119	D	
	GOLF COURSES	\$185,327	D	Y
	LIBRARY	\$1,852,998	B	
	MOORINGS	\$24,188	B	
	OFFICES AND DEPOTS	\$1,379,238	B	
	POOLS	\$4,041,031	D	
	RES. LEASE	\$0	B	
	WARD OFFICE	\$293,318	B	
Property Total		\$17,172,377	B/C/D	
Road network	Bikeways	\$2,382,455	B	
	Bus shelters	\$62,696	B	
	Fences	\$652,040	B	
	Footpaths	\$10,783,745	B	
	General road condition	\$112,853,141	B	
	ICB	\$1,003,139	B	
	Kerb	\$3,009,417	B	
	Parking meters	\$764,894	B	
	Public lighting	\$815,050	B	
	Road Formation	\$2,507,848	B	
	Roads	\$6,645,796	B	
	Signs and lines	\$150,471	B	
	Traffic signals	\$3,761,771	B	
Road network Total		\$145,392,463	B	
Stormwater	Enclosed pipes	\$7,711,631	D	
	Open waterways	\$19,949,927	B/D	
	SQIDs / GPTs etc	\$100,314	B/D	
	Stormwater gully inlets	\$1,003,139	B/D	
Stormwater Total		\$28,765,012	B/D	
Structures	Boardwalk	\$288,402	D	
	Boat ramp	\$802,511	D	
	Botanical Gardens Marine Piles	\$626,962	B	
	Bridges	\$1,500,947	B	

Asset Class	Asset Category	18 March 2011 Estimates	NDRRA Category A, B, C, D	Non- NDRRA Y/N
	Culverts	\$1,094,675	B	
	Earth Embankment	\$1,502,201	B	
	Jetty	\$147,963	D	
	Park Bridges	\$97,806	B	
	Pontoons	\$6,037,643	D	
	Retaining walls	\$1,366,777	D	
	Sea and river walls	\$15,855,866	D	
	Walkway	\$75,235	D	
Structures Total		\$29,396,989	B/D	
	Baseline Total	\$407,431,194		

Attachment B: LIST OF PROJECTS

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
Ferry terminals	ferry terminals	Tenerife	Minor work and electrical connection required	\$26,906	D
Ferry terminals	ferry terminals	Apollo Rd	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Bretts Wharf	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Bulimba	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Hawthorne	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	New Farm	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Norman Park	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Mowbray Park	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Dockside	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Riverside	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Guyatt Park	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Hawthorne Refuelling	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	Merthyr Rd	Minor work required	\$26,906	D
Ferry terminals	ferry terminals	River Plaza	Moderate / major repairs required	\$7,623,296	D
Ferry terminals	ferry terminals	Eagle St	Moderate repairs required	\$53,812	D
Ferry terminals	ferry terminals	Thornton St	Moderate repairs required	\$53,812	D
Ferry terminals	ferry terminals	South Bank 3	Moderate repairs required	\$53,812	D
Ferry terminals	ferry terminals	South Bank 1 & 2	Moderate repairs required	\$53,812	D
Ferry terminals	ferry terminals	Riverside Office	Moderate repairs required	\$53,812	D
Ferry terminals	ferry terminals	Dutton Park	Rebuild required	\$1,369,747	D
Ferry terminals	ferry terminals	UC old mooring	Rebuild required	\$1,369,747	D
Ferry terminals	ferry terminals	West End	Rebuild required, potential to reuse waiting area	\$7,876,047	D
Ferry terminals	ferry terminals	North Quay	Major repairs	\$8,385,463	D
Ferry terminals	ferry terminals	QUT	Rebuild required	\$8,332,018	D
Ferry terminals	ferry terminals	Sydney St	Rebuild required, potential to reuse waiting area	\$8,868,910	D
Ferry terminals	ferry terminals	Holman St	Rebuild required, potential to reuse waiting area	\$8,541,761	D
Ferry terminals	ferry terminals	Regatta	Rebuild required, potential to reuse waiting area	\$8,710,778	D
Ferry terminals	ferry terminals	UC St Lucia	Rebuild required, potential to reuse waiting area	\$8,303,400	D
ICT Equipment & Cabling	ICT Equipment & Cabling	Various	Make safe, Clean, rubbish removal, assess	\$473,983	B
Parks	Parks - Natural Areas				
Riverside Parks Rehabilitation	Parks - Riverside Parks Additional			\$15,047,085	B
Parks	Parks - Additional			\$2,585,967	B
Memorials / heritage	Parks- Memorials/Heritage			\$22,571	B
Park and street trees	Green assets (trees etc)		Make safe, Clean, rubbish removal, assess		
Park and street trees	Green assets (trees etc)		Street and Park trees - Make safe, clear from roads/paths, check erosion, silt removal to drip line in mown areas, assess health and structural risks, Young footpath trees being damaged by rubbish clean up.	\$4,501,586	B
Park and street trees	Green assets (trees etc)		Street Trees assessed to date	\$135,424	B
Park and street trees	Green assets (trees etc)		2MT (2 Million Trees) sites - assessment being undertaken	\$815,050	B
Parks	Parks - Damage assessment (Panel Contractor)		Ground truth assessment of damage and estimate of restoration costs	\$62,696	B
Parks	Parks- Temp rubbish storage			\$3,163,751	B
Parks	Parks - Landform restoration		Assessment and restoration of erosion, slumping, fill deposit, drainage. Works could include reprofiling and removal or addition of land; survey of 'land'	\$0	B
Playgrounds	Parks - Playgrounds		Make safe, Clean, rubbish removal, softfall replacement	\$3,147,349	B
Power poles / utilities	Parks- Power poles/utilities		Make safe, Rubbish removal, assess	\$313,481	B
Recreational facilities	Parks- Recreation Facilities		Make safe, Clean, rubbish removal, electrics check	\$1,389,348	B
Roads and car parks	Parks- Roads & car parks		Make safe, Clean, rubbish removal, assess	\$1,419,442	B

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
Shelters and visitor facilities	Parks - Shelters & Visitor facilities		Make safe, Clean, rubbish removal, electrics check	\$2,249,539	B
Toilets and buildings	Parks - Toilets & Buildings		Make safe, Clean, rubbish removal, electrics check, assess	\$662,072	B
Progressive Field assessed total - LAS CEMETERY AND	as at 8 March			\$5,715,008	B
BUS DEPOTS	South Brisbane Cemetery	181a Annerley Road, Dutton Park	Minor building repairs.	\$22,119	B
OFFICES AND DEPOTS	Bowen Hills Bus Depot	201 Abbotford Road	Minor building repairs and replacing of doors and walls.	\$68,966	B
OFFICES AND DEPOTS	Howard Smith Wharves	5 Boundary St	Make good damage.	\$110,596	B
OFFICES AND DEPOTS	Argyle St Depot Albion	39 Argyle Street	Make good damage.	\$93,768	B
OFFICES AND DEPOTS	Montague Rd West End	399 Montague Road	Repairs to lower level building areas and electrical mains.	\$182,526	B
OFFICES AND DEPOTS	Cribb St Depot - Traffic Hut/Urban Cleansing	49 Cribb Street	Minor repairs	\$28,439	B
OFFICES AND DEPOTS	Perrin Park Depot (LAS/SES)	14 Josling St Toowong	Repairs to buildings, including full interior refurbishment and essential services, repair dounatables and restore the community meeting room. Price does not include LAS equipment and goods damages.	\$642,465	B
WARD OFFICE	Tennysen Ward Office	180 Fairfield Road	Complete re-fit and redecoration of ward office.	\$293,318	B
OFFICES AND DEPOTS	Various		Repair and recommission equipment and reticulation.	\$321,443	B
ACTIVE AND HEALTHY PARKS	Davies Park Rowing	150 Jane St	Make good services and certify.	\$62,139	B
ENTERTAINMENT VENUES	Brisbane Powerhouse	119 Lamington Street	Major repairs to air handling unit, stage lift and acoustic treatments.	\$395,174	B
ENTERTAINMENT VENUES	Naval Stores	Lower River terrace	Repairs to buildings and services.	\$79,945	B
GOLF COURSES	St Lucia Golf Course	29 CARAWA ST	Repair and make good.	\$185,327	D
GOLF COURSES	Jindalee Golf Club	56 Yallambree Rd	Repair (Lease managed by City Venues)	\$0	D
LIBRARY	Fairfield Library	180 FAIRFIELD RD	Major refurbishment of fit-out and finishes (including shelving systems and joinery)	\$1,852,998	D
POOLS	Jindalee Pool & Residence	11 Yallambree Road	Refurbish pool amenity building, residence, plant room, clean pools, and replace learn to swim pool shelter.	\$1,288,950	D
POOLS	Bellbowrie Pool	38 Sugarwood St	Replace pool amenity building, repair plant room, clean pools. Does not include replacing residence - suggest no longer have a residence on site.	\$2,752,082	D
COMMUNITY LEASE	89 Community Leasing Sites (each site is reported separately in detail)	Various	Community Services will manage the process of facilitating grants and lessee access to the Appeal Fund.	\$8,767,932	Cal C Gap Funding
Moorings				\$24,188	
Roads		Lake Manchester Rd	Regrading	\$12,539	B
Roads		Gold Creek Rd, Brookfield		\$125,392	B
Roads		Paradise Rd, Larapinta	11km x 8m x 2435/m2 - Awaiting an estimate from T1 regarding improving safety and some flood resistance carrying out by AECOM (Yvonne)	\$351,099	B
Roads		Kholo Rd - approach to bridge		\$626,962	B
Roads		Meire Rd, Indooroopilly	Restoration of collapsed road	\$752,354	B
Roads		Raffing Ground Rd, Brookfield		\$1,216,306	B
Traffic signals			145 inundated; 25 controllers; 39 preventative removal and reinstallations	\$3,761,771	B
Bus shelters				\$62,696	B
Roads		Brisbane Corso	Minor land slip and damaged guard rail	\$125,392	B
Signs and lines				\$150,471	B
Fences				\$652,040	B
Roads		Miscellaneous across the network		\$300,942	B
Bikeways	Various		Rocks Riverside Park and Orleigh Park bikeway slip +	\$0	B
				\$2,382,456	

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
Parking meters			other unspecified		
Public lighting			100 damaged; 115 removed before flood	\$764,894	B
				\$815,050	B
ICB			BCC hut fit outs range from \$60K - \$500K in replacement value. Assume that servers, switches, air conditioners, telemetry, generators requires complete replacement. Tunnel damage, CCTV	\$1,003,139	B
Footpaths			Replace hard surface - 20% affected area	\$1,253,924	B
Kerb			Replace GKC - 5% of affected area	\$3,009,417	B
Footpaths			Removal and reinstallation top soil and turf (25%)	\$9,529,821	B
Road Formation	Additional			\$2,507,848	B
Roads		Radnor St, Indooroopilly	Land slip	\$3,134,809	B
General road condition	Allowance for degradation of general road condition				
Floating river walk	Floating river walk	New Farm	Beyond salvaging, new structure needed	\$112,853,141	B
Bridges	Victoria Bridge	Brisbane City	MAJOR WORKS - Inundated switchboard. Fix fault in lighting circuits, repair and relocate switchboard	\$75,000,000	D
Bridges	Walter Taylor Bridge	Indooroopilly	Minor Works - Removal of excess silt and sand build up under structure	\$31,348	B
Bridges	Prad Street	Red Hill	Minor Works - Replacement/repair of handrails	\$50,157	B
Bridges	Road Bridge	Breakfast Ck Rd, Newstead	MINOR WORKS - Hole on footpath needs to be repaired.	\$6,270	B
Bridges	Bridge	Brickyard Road, Geebung	MINOR WORKS - Repair of scour at abutment	\$2,508	B
Bridges	Burns Rd	Everton Park	MAJOR REPAIR - Repair large scour	\$18,809	B
Bridges	Foot Bridge	Coronation Dr, Milton	MAJOR REPAIR - Repair handrails and lights	\$18,809	B
Bridges	Mornington St	Alderley	Major Works - Relieving slab has been destroyed and requires reconstruction	\$62,696	B
Bridges	Radnor St # 1	Indooroopilly	Minor Works - Guardrail repairs	\$250,785	B
Bridges	Salisbury St	Rocklea	Minor Works - Desilting required	\$12,539	B
Bridges	Sherwood Forest	Sherwood	MINOR WORKS - Removal of silt and painting work	\$18,809	B
Bridges	Wacol Station Road	Sumner	Minor Works - Full inspection of Structure and Guardrail repairs	\$37,618	B
			Major Works required - Approaches require complete rebuilding, balustrades require replacement and unknown damage to structure, further assessment required.	\$18,809	B
Bridges	Kholo Rd, No.1	Kholo	Checking/repairing electrical circuits for lighting and flood lighting	\$501,570	B
Bridges	Go Between Bridge	Brisbane	Scour repairs	\$75,235	B
Bridges	Bridge	Colvin St, Rocklea	Major Works - Replacement of damaged decking	\$3,762	B
Bridges	Leeds Rd, Rocklea	Rocklea	Removal of large amount of silt and inspection of structure	\$137,932	B
Bridges	Bridge	Mandaly St Park, Fig Tree Pocket	Minor Works - Remove large sand deposits from around structure	\$12,539	B
Bridges	Enoggera Ck Bridge	Ashgrove	Minor works - Repair to decking and handrails	\$6,270	B
Bridges	Bridge	In Windermere Avenue Park	Desilting and repairs to bridge deck	\$12,539	B
Bridges	Bridge	Sinnamon Park Rd, 17 Mile Rocks	Remedial works will be determined once inspection has been completed	\$31,348	B
Bridges	Bridges	Various	MAJOR WORKS - Remove and replace damaged wearing surface	\$62,696	B
Bridges	Bridge	Bundaleer St, Brookfield	Required debris clean up and water blasting road surface. Hand rail repair work required.	\$25,078	B
Bridges	Bridge	King Arthur Tee, Terryson	Thick silt built up on bridge and approach foot path needs to be cleaned.	\$2,508	B
Bridges	Bridge	Koorling Drv, Jindalee		\$62,696	B

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
Bridges	Bridge	Jasmin Ct, Fitzgibbon	Bridge deck required silt cleaning. Scour near abutment has been identified.	\$37,618	B
Park Bridges	Park:0305 - Sherwood Forest Park - TURNER ST	SHERWOOD	MINOR WORKS - Pressure wash structure	\$2,508	B
Park Bridges	Park:1823 - Windermere Avenue Park - SINNAMON RD	SINNAMON PARK	MINOR WORKS - Clean up work required.	\$8,777	B
Park Bridges	Park:1823 - Windermere Av Park - WINDERMERE AVE	SINNAMON PARK	MINOR WORKS - Repair scour under footpath.	\$12,539	B
Park Bridges	Park:1823 - Windermere Av Park - WINDERMERE AVE	SINNAMON PARK	MINOR WORKS - Has scour under footpath Nih approach.	\$6,270	B
Park Bridges	Dawson Pde Boardwalk	Keppara - Park:1666 - Kane Street	Major Works - Relieving slab has been destroyed and requires reconstruction	\$62,696	B
Park Bridges	Park bridges	Various,	Remedial works will be determined once inspection has been completed	\$5,016	B
Culverts	Culvert	Gold Creek road, Brookfield	Debris clean up work required. Scour repair work required.	\$18,809	B
Culverts	Culvert	Beaudesert Rd, Moorooka	Cell blocked with trees.	\$6,270	B
Culverts	Culvert	Marshall Rd, Rocklea	Silt needs to be cleaned from road surface.	\$2,508	B
Culverts	Culvert	Factory Rd, Oxley	Repair damaged guardrailing.	\$12,539	B
Culverts	Culvert	Long St E GRACEVILLE	Repair damaged railings	\$6,270	B
Culverts	Culvert	Marshall Rd, Rocklea	Desilting required.	\$12,539	B
Culverts	Culvert	Lake Manchester Rd, Mt Crosby	Repair scour near wing wall and head walls and repair washed out signs	\$10,031	B
Culverts	Culvert	Kholo Rd,KHOLO	Repair armco guardrailing	\$2,508	B
Culverts	Culvert	Skyline Dr KHOLO	Repair scour behind Amco and headwall.	\$12,539	B
Culverts	Cheviot St Grange	Grange	MINOR REPAIR - Repair hand rails	\$12,539	B
Culverts	Raffling Ground Rd	Brookfield	MINOR REPAIR - Repair hand rails	\$12,539	B
Culverts	Culvert	Gold Creek road, Brookfield	Road is a mess needs attention first. Scour, deck need looking at.	\$18,809	B
Culverts	Culvert	Paradise Rd, Pallara	MAJOR - Apron slab has been collapsed. Severe under mining. Road over culvert has been closed. Major work required.	\$188,089	B
Culverts	Culvert	Leybourne St CHELMER	MINOR WORKS - Needs desilting with vegetation removal. Handrail needs to be replaced	\$12,539	B
Culverts	Culvert	Gold Creek road, Brookfield	Debris clean up work required. Scour repair work required.	\$18,809	B
Culverts	Culvert	Raffling Ground Rd, Brookfield	Repair broken rails, debris clean up.	\$12,539	B
Culverts	Culvert	Paradise Rd, Pallara	Scour and minor debris.	\$25,078	B
Culverts	Culvert	Sanananda St, Darra	Required Debris Clean up.	\$12,539	B
Culverts	Culvert	Wolverhampton St, Gordon Park	Required debris clean up work and hand rails repair work required. Wing wall damaged badly and broken away and half of the part sunken and separated.	\$36,427	B
Culverts	Culvert	Bellevue Ave GAYTHORNE	Replace handrails	\$12,539	B
Culverts	Culvert	Gold Creek road, Brookfield	Debris clean up work required. Scour repair work required.	\$18,809	B
Culverts	Culvert	Gold Creek road, Brookfield	Debris clean up work required. Hand rail and scour repair work will be required.	\$18,809	B
Culverts	Brisbane Csp Yeronga	Yeronga	Major Works - Remove water and desilt channel, repair scoured embankment and guardrail to be completed by Roads area. Possible replacement of 4 tide flaps to be confirmed.	\$188,089	B
Culverts	Johnson Rd Forest Lake boundary road with Logan Council	Forest Lake	Major Works - Repair large scour of large embankment, replace culvert apron, headwall and relay outer pipes	\$175,549	B
Culverts		Rosebery St, Chelmer	Repair scour and abutment protection	\$6,270	B
Culverts		Atkinson Dr KARANA DOWNS	MAJOR WORKS - Repair land slip. Rails down needs to be repaired.	\$25,078	B
Culverts	Culvert	Upper Brookfield Rd, Brookfield	Clean debris and silt from surface.	\$50,157	B
Culverts	Culvert	Gold Creek road, Brookfield	Clean debris and silt from surface.	\$50,157	B
Culverts	Culverts	Various	Remedial works will be determined once inspection has been completed	\$20,063	B
Culverts	Culvert	Dawson Pde, Keppara	MAJOR WORKS - Relieving slab has been damaged.	\$12,539	B

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on treatment	ESTIMATED COST	Category
Culverts	Culvert	Cnr Rattling ground road and Wiltunga st, Brookfield	Debris clean up required. Hand rail work will be required.	\$12,539	B
Culverts	Culvert	Bukulla St, Wacol	MAJOR WORKS - Structural failure of concrete cause way surfacing, headwalls and pipe. Causeway and pipe to be reconstructed.	\$50,157	B
Boardwalk	Boardwalk	Cultural Centre board walk, South Brisbane	MINOR WORKS - Investigate possible vibration of structure under traffic	\$18,809	B
Boardwalk	Boardwalk	Welsby St, New Farm	MINOR WORKS - Very thick mud built up require to be cleaned.	\$6,270	B
Boardwalk	Boardwalk	Alice St, City	MINOR WORKS - Deck needs to be cleaned (Mud and Silt).	\$25,078	B
Boardwalk	Boardwalk	Structures in River Toe, Kangaroo Point	MINOR WORKS - Very thick mud built up required to be cleaned. Some repair work needs to be done.	\$37,618	B
Boardwalk	Boardwalk	Courthian Road, 17 Mile Rocks	MINOR WORKS - Required mud clean up. Boardwalk repair work will be required.	\$12,539	B
Boardwalk	Boardwalk	Refinery Pde, New Farm	MAJOR WORKS - Major scour work needs to be done.	\$188,089	B
Walkway	Walkway	Go Between Bridge, Brisbane City	Clean mud from walk way.	\$75,235	B
Retaining walls	99 walls in road network and 213 in parks were affected				B
Retaining walls	Retaining wall	NORTH QUAY	Retaining walls from The Go between Bridge upto the QUT underground car park along the Bicentennial Bikeway on the embankment side were inspected. Damages ranging from general scour under gabion walls, stone pitch wall footings to random cracking along mo	\$50,157	B
Retaining walls	Retaining wall	BEAUDESERT	Sand in cribwall backfill washed down with floods. Erosion noted in almost 70% of The total area. More than 1m deep cavities could be seen. Needs immediate attention.	\$112,853	B
Retaining walls	Retaining wall	FURNESS	Erosion and scour noted at 4 locations along the bike path edge on the creek side. Bike path undermined for a length of about 1.2m at one location.	\$3,762	B
Retaining walls	Retaining wall	RIVERSIDE	Metal in cribwall backfill washed down with floods at random locations along the wall. Erosion noted in approximately 30% of the total area of the wall. Some damages to the crib wall structure could be seen on the wall end near the boat ramp.	\$25,078	B
Retaining walls	Retaining wall	RADNOR	Road banks eroded in several locations before the waterway. Total length of damage app. 20m long. Fence post bases dislodged along with the bank erosion.	\$12,539	B
Retaining walls	Retaining wall	Kookaburra park, Fig Tree Pocket	Retaining wall needs to be fixed.	\$150,471	B
Retaining walls	Additional			\$1,011,916	B
Botanical Gardens	Mooring Piles			\$626,962	B
Earth Embankment	Additional			\$501,570	B
Earth Embankment		Kedron Brook	Land slide		
Earth Embankment			Massive creek bank erosion. (City Design Project Management looking after on behalf of CPAS Water Resources)		
Earth Embankment		Coronation Drive	Bank stability assessment - ongoing	\$41,379	B
Earth Embankment		KSD (near Toorak Rd)	Rock fall - Repaired	\$18,809	B
Earth Embankment		Upstream Meirs Rd Ramp	Bank slip 100m long 5m wide 4m high approx. Parkland, no asset endangered	\$125,392	B
Earth Embankment		Under Eleanor Schonell Bridge	Minor Earth Bank Erosion	\$62,696	B
Earth Embankment		Near SR3039R, around culvert wingwall	Rock and fill washed away, needs replacement	\$25,078	B
Earth Embankment		In front of Wesley ped tunnel bikeway intersection.	15m length of rock and dill washed away undermining bikeway	\$31,348	B
Earth Embankment			20m length of rock and dill washed away undermining bikeway	\$43,887	B
Earth Embankment		Coronation Drv	Some movement, may be minor - see photos	\$25,078	B
Earth Embankment		Go Between Bridge North Abutment	100m length rock slumped and shotcrete failed and bikeway undermined	\$125,392	B
Earth Embankment		Near Merivale Bridge			

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on waterfront	ESTIMATED COST	Category
Earth Embankment		11 Timaru Cl, Westlake	Landside Creek Bank Failure - cause loss to property and retaining wall.	\$188 089	B
Earth Embankment		Musgrave Rd	Rockfall 20 - 30 cm long, 100 - 200m3 in size. Historic issue with Heritage.	\$313 481	B
Boat ramp	Boat Ramp	Meirs Road, Indooroopilly	Required silt and sand clean up.	\$37 618	B
Boat ramp	Boat Ramp	Mandalay St Park, Fig Tree Pocket	Ramp under silt. Required silt and debris clean up.		B
Boat ramp	Boat Ramp	Riverside Dr, South Brisbane	Required new ramp.	\$250 785	B
Boat ramp	Boat Ramp	Kookaburra park, Karana Downs	repair work required.	\$31 348	B
Boat ramp	Boat Ramp	Mt Ommaney Dr, Jindalee	Buried Under	\$376 177	B
Boat ramp	Boat Ramp	Hilda St (Horace Window Reserve Boat Ramp), Corinda	Required debris and silt clean up. Required repair work	\$31 348	B
Boat ramp	Boat Ramp	Holman St, Kangaroo Point	Required silt clean up.	\$75 235	B
Jetty	Jetty	Davies Park Jetty Riverside Dr, West End	No work required. Step required work.	\$12 539	B
Jetty	Jetty	Canragal Drv (Kookaburra park listing platform), KARANA DOWNS	Required silt clean up.	\$10 031	B
Jetty	Jetty	Newstead Pontoon, Newstead	Major damage.	\$125 392	B
Pontoons	Pontoon		Pontoon gone. Closed.	\$300 942	B
Pontoons	Pontoon	Wyampa Rd, Bracken Ridge	Pontoon closed. Major work required. Gantry reconstruction required.	\$100 314	B
Pontoons	Pontoon	Meirs Road, Indooroopilly	Pontoon gone. Gantry still there.	\$263 324	B
Pontoons	Pontoon	Orleigh Pk (Hill End Toe), West End	Pontoon is gone. Required new.	\$526 648	B
Pontoons	Pontoon	Lytton Rd, Morningside	repair work required.	\$37 618	B
Pontoons	Pontoon	Wharf St, Chelmer	Pontoon is still there but badly damaged. Required repair work.		B
Pontoons	Pontoon	Amazons Park Pontoon, Jindalee	Pontoon gone. Required new.	\$188 089	B
Pontoons	Pontoon	Jolimont St, Sherwood	Still under water. Needs to go for inspection again. Lost Pontoon.	\$313 481	B
Pontoons	Pontoon	Davies Park Jetty, West End	Severe damaged for loss of pontoon. A city cat terminal gateway is logged in the upstream pontoon approach. All piers damaged beyond repair(Buckled and knocked over).	\$589 344	B
Pontoons	Pontoon	Davies Park Jetty, West End	Severe damaged for loss of pontoon. A city cat terminal gateway is logged in the upstream pontoon approach. All piers damaged beyond repair(Buckled and knocked over).	\$401 256	B
Pontoons	Pontoon	Davies Park Jetty, West End	Severe damaged for loss of pontoon. A city cat terminal gateway is logged in the upstream pontoon approach. All piers damaged beyond repair(Buckled and knocked over).	\$401 256	B
Pontoons	Pontoon	Davies Park Jetty, West End	Severe damaged for loss of pontoon. A city cat terminal gateway is logged in the upstream pontoon approach. All piers damaged beyond repair(Buckled and knocked over).		B
Pontoons	Pontoon	Davies Park Jetty, West End	Severe damaged for loss of pontoon. A city cat terminal gateway is logged in the upstream pontoon approach. All piers damaged beyond repair(Buckled and knocked over).	\$652 040	B
Pontoons	Pontoon	Paragon St, Yeronga	Pontoon is washed away. Need new pontoon.	\$326 020	B
Pontoons	Pontoon	Hilda St, Corinda	Pontoon gone. Piers severely damaged.	\$307 211	B
Pontoons	Pontoon	Mt Ommaney Drv, Jindalee	Pontoon gone. Required debris clean up.	\$576 805	B
Pontoons	Pontoon	Riverside Dr, West End	Pontoon found. Gantry gone. Required debris clean up.	\$188 089	B
Pontoons	Pontoon	Amesbury St (Naval Stores), Kangaroo Point	Pontoon gone. Required new.	\$551 726	B
Pontoons	Pontoon	Clivenden Ave, Corinda	Required cleaning and repair.	\$25 078	B
Pontoons	Pontoon	Graceville Ave, Graceville	Pontoon is still there but badly damaged. Required major repair work.	\$288 482	B
Sea and river walls	All 97 river walls and 2 groynes at river were affected				B
Sea and river walls	Sea & River Wall	Flinders Pde, Sandgate	repair work required.	\$37 618	B
Sea and river walls	Sea & River Wall	Allpass Pde, Shorncliffe	repair work required.	\$75 235	B
Sea and river walls	Sea & River Wall	Gardens Point st, Brisbane	repair work required.	\$250 785	B
Sea and river walls	Sea & River Wall	Queens Wharf st, Brisbane	repair work required.	\$689 658	B
Sea and river walls	Sea & River Wall	Queens Wharf st, Brisbane	repair work required.	\$689 658	B
Sea and river walls	Sea & River Wall	Gardens Point st, Brisbane	repair work required.	\$250 785	B
Sea and river walls	Sea & River Wall	Coronation Dve, Milton	repair work required.	\$37 618	B
Sea and river walls	Sea & River Wall	Coronation Dve, Toowong	repair work required.	\$25 078	B
Sea and river walls	Sea & River Wall	Glenry St, Toowong	repair work required.	\$37 618	B

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
Sea and river walls	Sea & River Wall	Laurence St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Meira Road, Indooroopilly	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Meira Road, Indooroopilly	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Manday St Park, Fig Tree Pocket	repair work required.	\$125,392	B
Sea and river walls	Sea & River Wall	Macquarie St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Keith St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Keith St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Ryans St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Ryans St, St Lucia	repair work required.	\$25,078	B
Sea and river walls	Sea & River Wall	Manday St Park, Fig Tree Pocket	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Apollo st, Bulimba	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Kenbury st, Bulimba	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Coutts st, Bulimba	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Quay st, Bulimba	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Malcolm st, Hawthorne	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Gillan St, Norman Park	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Gillan St, Norman Park	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Laidlaw st, East Brisbane	repair work required.	\$100,314	B
Sea and river walls	Sea & River Wall	Holman St, Kangaroo Point	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Lower River Tce, South Brisbane	repair work required.	\$37,618	B
Sea and river walls	Sea & River Wall	Riverside Drive, West End	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Orleigh Park River Wall, West End	River wall has been collapsed.	\$62,696	B
Sea and river walls	Sea & River Wall	Orleigh Rd, West End	repair work required.	\$50,157	B
Sea and river walls	Sea & River Wall	Aranui St, Yeronga	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Gladstone st, Dutton park	repair work required.	\$12,539	B
Sea and river walls	Sea & River Wall	Cassia st, Yeronga	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Cassia st, Yeronga	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Joilmont st, Orinda	repair work required.	\$37,618	B
Sea and river walls	Sea & River Wall	Lower River terrace - Kangaroo Point	repair work required.	\$250,785	B
Sea and river walls	Sea & River Wall	MacDonald St, Kangaroo Point	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Orleigh Rd, West End	repair work required.	\$50,157	B
Sea and river walls	Sea & River Wall	Dock St, South Brisbane	repair work required.	\$37,618	B
Sea and river walls	Sea & River Wall	Brisbane Corso, Yeronga	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Hamilton Rd, Kangaroo Point	repair work required.	\$31,348	B
Sea and river walls	Sea & River Wall	Riverside Drive, West End	repair work required.	\$62,696	B
Sea and river walls	Sea & River Wall	Heritage st, Yeronga	repair work required.	\$87,775	B
Sea and river walls	Sea & River Wall	South Brisbane Sailing Club, West End	River wall has been collapsed.	\$43,887	B
Sea and river walls	Sea & River Wall	Various.	Yet to be scoped.	\$1,880,886	B
Sea and river walls	Sea & River Wall	River wall near Jhdalee boat ramp	Major loss of river wall.	\$501,570	B
Sea and river walls	Sea & River Wall	17 Mile Rocks Park	Bank slip required attention.	\$376,177	B
Sea and river walls	Sea & River Wall	17 Mile Rocks Park Downstream side	Bank stabilisation required.	\$376,177	B
Sea and river walls	Sea & River Wall	Sherwood forest Park	Gabions washed away.	\$188,089	B
Sea and river walls	Sea & River Wall		Major land slip.	\$752,354	B
Sea and river walls	Sea & River Wall	The Esplanade	Bank slip.	\$112,853	B
Sea and river walls	Sea & River Wall	The Esplanade, Down stream side	Bank destabilised required Rip Rap facing	\$62,696	B
Sea and river walls	Sea & River Wall	Under Victoria Bridge	River wall required Rehab.	\$37,618	B
Sea and river walls	Sea & River Wall	Borticelli St, Fig Tree Pocket	Bank slip 200m long 5m wide 2m high approx. No asset endangered.	\$250,785	B
Sea and river walls	Additional			\$7,523,543	B
SOLDS / GPTs etc	SOLDS	33 across the five LAS Regions, but mainly South and West	Remove pollutants and silt from SOLDS. Replace SOLDS components. Rubbish in detention basins removed to avoid polluting waterways and flooding of adjacent properties/roads.	\$100,314	B
Stormwater gully inlets	Stormwater gully inlets	8,300 across the five LAS Regions, but mainly South and West	Silt removal and clearing debris - Completed February 2011. Some minor structural repairs and replacement of	\$1,003,139	B

Asset Category	Asset name	Location	Remedial treatment required (short description of proposed works) and include any comments on betterment	ESTIMATED COST	Category
			linets, grates, aprons and gully boxes. This rehabilitation work will be completed by June 2012.		
Open Waterways	Waterways, channels and flood mitigated creeks	Across the five LAS Regions, but mainly South and West	Remove debris/rubbish deposited in vegetation. Desilting / reprofiling of severely affected flood mitigated sections (e.g. highflow bypass channel in Oxley Ck). A targeted assessment and remediation to ensure public safety, public asset protection and waterway health outcomes. Sites include areas of Council investment along creek corridors, principally Schedule 80/81, also including Creek Ranger, HBO, Bikeways and	\$4,702,214	D
Open Waterways	Creek remediation	Across the five LAS Regions	Silt removal and clearing debris. This work is underway and is expected to take 18 weeks to desilt approximately 200km. Desilting major tidal stormwater pipes will be required. Some structural repairs to stormwater pipes, manholes and outlets will be required	\$15,247,713	D
Enclosed pipes	Stormwater pipes and outlets	205 km pipes across the five LAS regions, but mainly South and West		\$7,711,631	B
				\$407,431,194	

Attachment C: Emergent Works expected to NOT be completed by 19 April 2011

Area	Description of Emergent Works	Initial estimate	Approximate Date for completion
LAS	Underground Stormwater Network in the 20 sectors. At this stage we have only assessed about 6km of network, with still some 200 plus kms to complete.	\$4,000,000	Jul-11
LAS	City Waterways Clean. The regions will be putting in teams behind TPI. Whilst we have provided a target of the end of March, this could go over depending on what is pulled out of the waterways.	\$1,000,000	Aug-11
LAS	Undersurfacing replacement. Based on SAS lab advise, the undersurfacing of affected playgrounds will be replaced at an estimated cost of \$500k. Supply will be an issue here, hence our ability to meet the timeline.	\$500,000	Jul-11
BCW - TNP	replace traffic signal controller at the intersection of Vulture & Grey St once private construction works are complete as scaffolding is currently preventing access and the signals are turned off.	\$6,000	Jul-11
BCW - TNP	Follow up condition inspections of traffic signals at 3 months and 6 months post flood to monitor corrosion levels	\$20,000	Sep-11
BCW - TNP	Replace traffic signal equipment currently on back order (23xLCM and 3xVID and 1xVID Mux)	\$93,000	Jul-11
BCW - Structures	Wolverhampton St, Stafford (C2504B): Completed small maintenance work and bridge is open for safe public use. Contractor has to complete bank stabilisation work.	\$40,000	Apr-11
BCW - Structures	Mornington St, Alderley (B1435): Bridge span needs to be reconstructed. Awaiting design from City Design.	\$180,000	Nov-11/Dec-11
BCW - Structures	Leeds St, Rocklea (B1230): Bridge redecking with composite material. Awaiting material approval from City Assets.	\$110,000	Jun-11
BCW - Structures	Kholo Bridge: On hold. Awaiting approval from client in regards to reconstruction / redesign. (Jude Woolhouse)	\$400,000	TBA
BCW - Structures	Kookaburra park Boat Ramp cleanup work: On hold. Awaiting approval from City Assets (Gongwen Li)	\$30,000	TBA
BCW - Structures	Repair of various riverwalls @ 15 Ferry Terminals	in tender process	Jun-11
BCW - Structures	Repair of Regatta Ferry Terminal riverwall	in tender process	Jun-11
BCW - Structures	Repair of Riverwalls at 61 locations. Waiting for scope from client.	in Estimating process	TBA
TOTAL ESTIMATE COST		\$6,379,000	

16 March 2011

[REDACTED]
Queensland Reconstruction Authority
GPO Box 15428
CITY EAST QLD 4002

Dear [REDACTED]

Thank you for meeting with us last week to discuss NDRRA funding issues. As discussed there are a number of specific issues that need to be resolved in order to progress NDRRA funding to Council.

One of these issues is insurance. Council has insurance policies which may provide partial cover for repair and restoration of assets damaged by the rain event, however there will still be a significant financial gap. We are currently working with our insurance assessors but expect the resolution of claims will be a protracted process which is unlikely to be completed for some time. Compounding this is that Council share an insurance policy with Queensland Urban Utilities (QUU) and therefore will need to negotiate an equitable distribution of insurance pay-outs between QUU and Council.

Given the uncertainty around insurance claims, a suggested approach is that Council lodge claims with QRA for 100% of emergent works and asset restoration costs where they are eligible for NDRRA funding. If at a subsequent date Council receives an insurance pay-out which can be attributed to the works claimed under NDRRA, Council will inform QRA and reimburse the State.

Another issue we are seeking your clarification on is progress payments. Council has a number of restoration projects that will be undertaken over a longer period of time. Council's preference is to lodge claims and receive reimbursements from QRA progressively during a project's life, rather than lodging claims at the end of a project.

Both these approaches will greatly assist Council in managing its cashflow requirements.

Could you please advise QRA's position on these proposals.

Should you have any questions, please contact [REDACTED] Team Leader – Grants, Corporate Finance on [REDACTED] or email [REDACTED]
[REDACTED]

Yours sincerely

[REDACTED]

A/Chief Operating Officer

Cc [REDACTED] Acting Chief Financial Officer, Brisbane City Council

Queensland Reconstruction Authority

Our ref: QldRA/Project Control/PSW/TRIM ref TF/11/10662

23 March 2011

Mr Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

Colin
Dear Mr. Jensen

I refer to my previous letter of 11 March 2011 requesting advice on the status of your Council's progress in providing information on emergent and reconstruction works, and attaching a copy of the Funding Agreement between the Queensland Reconstruction Authority (the Authority) and Local Governments.

Thank you for providing the information requested and returning the executed funding agreement and bank account information. I am pleased to advise that the Authority has approved for payment to your Council the sum of (\$59,400,000) including GST by way of grant advance funding for Natural Disaster Relief and Recovery Arrangement (NDRRA) eligible reconstruction projects.

The provision of the grant advance will assist your Council in addressing your identified reconstruction projects.

As discussed this payment is an advance on eligible funding and will need to be supported by the submission of applications that comply with NDRRA requirements. As set out in the funding agreement, should a Local Government fail to submit applications that comply with these requirements the proceeds of grant advance funding will have to be returned to the Authority.

Costs submitted by Council in relation to approved projects have been grossed up for GST. A Recipient Created Tax Invoice (RCTI) inclusive of a RCTI agreement will be issued with each component of funding. The use of RCTIs ensures compliance with GST legislation and is in line with processes previously adopted in processing these claims.

I would encourage your Council to work closely with the Authority to coordinate the preparation and submission of applications for your reconstruction projects.

Thank you for your cooperation and I look forward to working closely with your Council to progress your reconstruction priorities.

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Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

BCC.100.5724

Should you wish to further discuss these matters please contact [REDACTED] can be
contacted on telephone [REDACTED]

Yours sincerely

[REDACTED]
Chief Executive Officer
Queensland Reconstruction Authority

RECIPIENT CREATED TAX INVOICE

Supplier:

Queensland Reconstruction Authority
PO Box 15428
CITY EAST QLD 4002

Recipient:

Brisbane City Council
GPO Box 1434
Brisbane QLD 4001

ABN: 13 640 918 183

ABN: 72 002 765 795

Invoice Number RCTI58
Date 17/06/2011

Further grant advance in accordance with Funding Deed for
recovery/reconstruction assistance

\$31,000,000.00

GST: \$3,100,000.00
Total Inc GST: \$34,100,000.00

The recipient and the supplier declare that this agreement applies to supplies to which this tax invoice relates. The recipient can issue tax invoices in respect of these supplies. The supplier will not issue tax invoices in respect of these supplies.

The supplier acknowledges that it is registered for GST and that it will notify the recipient if it ceases to be registered.

The recipient acknowledges that it is registered for GST and that it will notify the supplier if it ceases to be registered for GST. Acceptance of this RCTI constitutes acceptance of the terms of this written agreement.

Both parties to this supply agree that they are parties to an RCTI agreement. The supplier agrees to notify the recipient if the supplier does not wish to accept the proposed agreement within 21 days of receiving this document.

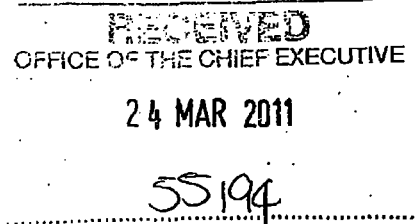
Queensland Reconstruction Authority

Our ref: QldRA/Project Control/PSW/TRIM ref TF/11/10562

23 March 2011

Mr Colin Jensen
Chief Executive Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

Dear Mr *Colin* Jensen



I refer to my previous letter of 11 March 2011 requesting advice on the status of your Council's progress in providing information on emergent and reconstruction works, and attaching a copy of the Funding Agreement between the Queensland Reconstruction Authority (the Authority) and Local Governments.

Thank you for providing the information requested and returning the executed funding agreement and bank account information. I am pleased to advise that the Authority has approved for payment to your Council the sum of (\$59,400,000) including GST by way of grant advance funding for Natural Disaster Relief and Recovery Arrangement (NDRRA) eligible reconstruction projects.

The provision of the grant advance will assist your Council in addressing your identified reconstruction projects.

As discussed this payment is an advance on eligible funding and will need to be supported by the submission of applications that comply with NDRRA requirements. As set out in the funding agreement, should a Local Government fail to submit applications that comply with these requirements the proceeds of grant advance funding will have to be returned to the Authority.

Costs submitted by Council in relation to approved projects have been grossed up for GST. A Recipient Created Tax Invoice (RCTI) inclusive of a RCTI agreement will be issued with each component of funding. The use of RCTIs ensures compliance with GST legislation and is in line with processes previously adopted in processing these claims.

I would encourage your Council to work closely with the Authority to coordinate the preparation and submission of applications for your reconstruction projects.

Thank you for your cooperation and I look forward to working closely with your Council to progress your reconstruction priorities.

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www.qldreconstruction.org.au

BCC.091.0017

Should you wish to further discuss these matters please contact [REDACTED] who can be contacted on [REDACTED] or via e-mail: [REDACTED]

Yours sincerely

[REDACTED]

Chief Executive Officer
Queensland Reconstruction Authority

RECIPIENT CREATED TAX INVOICE

Supplier:

Queensland Reconstruction Authority
ABN 13 640 918 183
Level 9, 119 Charlotte Street
Brisbane Qld 4000

Recipient:

Brisbane City Council
ABN 72 002 765 795
Corporate Services
Level 16, 266 George Street
Brisbane Qld 4000

Invoice number number	RCTI 2
Date	23 March 2011

Description	Total \$
Grant advance in accordance with Funding Deed for recovery/reconstruction assistance	\$54,000,000.00
Sub Total	\$54,000,000.00
GST (10%)	\$5,400,00.00
Total (incl GST)	\$59,400,000.00

The recipient and the supplier declare that this agreement applies to supplies to which this tax invoice relates. The recipient can issue tax invoices in respect of these supplies. The supplier will not issue tax invoices in respect of these supplies. The supplier acknowledges that it is registered for GST and that it will notify the recipient if it ceases to be registered. The recipient acknowledges that it is registered for GST and that it will notify the supplier if it ceases to be registered for GST. Acceptance of this RCTI constitutes acceptance of the terms of this written agreement.

Both parties to this supply agree that they are parties to an RCTI agreement. The supplier agrees to notify the recipient if the supplier does not wish to accept the proposed agreement within 21 days of receiving this document.

Queensland Reconstruction Authority

Our ref: QldRA/Project Control/LH – TF/11/10245

CORPORATE SERVICES
Divisional Manager's Office

5 / 4 / 2011

1 – APR 2011

[REDACTED]
A/Chief Operating Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001
[REDACTED]

I refer to your letters of 11 March 2011 and 16 March 2011 to [REDACTED] concerning Natural Disaster Relief and Recovery Arrangements (NDRRA) trigger point contribution, insurance gap and progressive payments for restoration works.

NDRRA Trigger Point Contribution for 2010/2011 – correspondence 11 March 2011

As an audit requirement of the NDRRA administrative arrangements, normal practice is that Council must exceed its trigger point contribution of \$2,080,000 in actual expenditure before any claims can be made by Council under the Repairs to Essential Public Assets (REPA) relief measure.

However, acknowledging the circumstances associated with the most recent disaster events, it has been determined that this requirement can be waived for this event only. In other words Council may reduce any progress claims to the Queensland Reconstruction Authority (the Authority) by 25% up to a maximum of \$8,320,000 total expenditure such that the maximum trigger point contribution by Council remains \$2,080,000.

Insurance and Progressive Submissions – correspondence 16 March 2011

Insurance

Where insured assets are claimed under provisions of the NDRRA arrangements, funding submissions need to account for costs recovered from insurance.

As you have advised, Council shares an insurance policy with Queensland Urban Utilities (QUU) which covers assets owned by both entities including non water and water assets, some of which are eligible under the NDRRA funding arrangements.

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www.qldreconstruction.org.au

BCC.091.0008

The Authority is unable to make an assessment regarding compensation applicable to the assets the Council wishes to claim under the NDRRA arrangements without obtaining more specific information on these insurance arrangements. Such further information may include full details of all assets the policy covers, the insured value of those assets and the nature, timing and cost estimate of the damage claimed under the policy. Further information relevant to the review may also include the exclusions, terms and conditions that may affect the outcome of any claim on the policy and the distribution of funds between the two entities and/or the assets the policy covers.

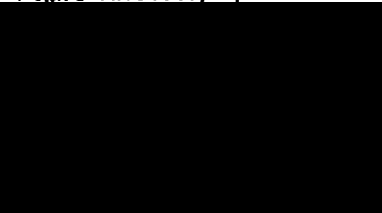
Progressive Submissions

The NDRRA arrangements provide for the reimbursement of eligible actual expenditure for the restoration of works within two (2) financial years after the end of the financial year in which the relevant disaster occurred. While it has been previous practice to wait until the completion of work before a submission is made within the prescribed time limit, Council may make progressive submissions for those projects that continue over an extended period.

The NDRRA arrangements require evidence of actual expenditure through the provision of tax invoices and tax receipts. For progressive payments these requirements remain unchanged. To avoid unnecessary delays in approving progressive submissions, Council should demarcate expenditure for the completion of significant work activities, i.e. conclusion of demolition, or at the achievement of notable milestones in a project's lifecycle, such as completion of all pavement layers. This will assist the Authority in matching scope to actual costs and validating value for money of the expenditure claimed.

Please contact [REDACTED] of the NDRRA Project Control team, Queensland Reconstruction Authority or [REDACTED] if you require further information about these matters.

Yours sincerely ,



Chief Executive Officer



Dedicated to a better Brisbane

25th May 2011



Chief Executive Officer
Queensland Reconstruction Authority
Level 19, 119 Charlotte Street
Brisbane



I refer to your letters of 23 March 2011, 6 and 17 May 2011 regarding the grant advance of \$54 million and our submissions for reimbursement of counter disaster operation costs.

Your 23 March 2011 letter advised Council that the Authority had approved grant advance funding of \$54 million which would assist Council in addressing its identified reconstruction projects.

Your 6 and 17 May 2011 letters endorsed partial reimbursement (\$258,886.59 and \$825,945.15 retrospectively) of counter disaster operation costs incurred by Council and advised the amounts could be drawn down against the \$54 million advance.

From discussions with the Authority it was our understanding that counter disaster operation (CDO) and emergent work claims would be reimbursed as they were progressively claimed and approved by the Authority. Further, I understood that the \$54 million was a grant advance for asset reconstruction projects (not CDO and emergent works) and this would involve a separate acquittal process.

This is still the preferred position of Council as it will allow Council to better manage the significant cashflow challenges associated with undertaking the flood recovery work. To date Council has incurred approximately \$65 million on flood recovery.

Council is devoting significant effort in preparing claims and ensuring requested documentation is attached to support the claim. Although this is of high priority, the process, time and effort involved has resulted in \$30 million claims being lodged to date. It is of concern that despite costs incurred to date being well in excess of the \$54 million advance, based on progress to date, the claim preparation and assessment process will delay for a considerable time any further reimbursement of the costs incurred. This adverse cash flow position will be further exasperated with costs of flood (excluding adverse revenue impacts) estimated to be \$109 million by 30 June 2011.

..12

Corporate Services
Divisional Manager's Office
Reception Level 16 Brisbane Square 266 George Street Brisbane Qld 4000 GPO Box 1434 Brisbane Qld 4001
T 07 3403 4578 F 07 3334 0058


With respect to acquitting the \$54 million advance against the reconstruction of assets, I suggest two alternative approaches for your consideration:

- Council will progressively claim and be reimbursed for reconstruction costs assessed as being eligible by the Authority for NDRRA funding. Council will track and report forward estimates of project claims to be lodged with the Authority until they drop to a residual amount of e.g. \$60 million, after which point all claims will receive nil reimbursement from the Authority until the \$54 million is fully utilised. Any financial adjustments between the Authority and Council will then be made.
- The Authority will spread the grant advance across the total estimated claims which will result in an approximate 13% reduction in the reimbursed amount of each claim (e.g. \$54m / \$407m). Council will track and report forward estimates of project claims with the Authority so the apportionment percentage can be adjusted accordingly.

These approaches will allow Council to optimise its flood recovery cashflow position while maintaining a strong reporting and accountability regime with the Authority.

It would be appreciated if you could clarify your position with respect to these issues.

Yours sincerely

A black rectangular box redacting the signature of the Acting Chief Operating Officer.

Acting Chief Operating Officer

Queensland Reconstruction Authority

For reply please quote: QldRA/LUP/BN – TF/11/17213

3 JUN 2011

[REDACTED]
Transport Planning and Strategy Manager
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

[REDACTED]
I refer to recent discussions in relation to the Design Competition for the rebuilding of the Brisbane River Ferry Terminals and in particular to your request for details regarding the Queensland Reconstruction Authority's (the Authority) role and the expectations of Council in this process.

I note that officers from the Authority have previously met with [REDACTED] from Council outlining the need for a business case for Category D projects and providing a template for Council to use. It should be noted that the Design Competition does not negate the need for the Business Case, it should continue to be developed with information currently to hand and updated as progress is made on the design of the new facilities. The Value for Money (VfM) aspect of the Business Case is a critical part of the business case as indicated by the joint federal and state announcement regarding the "up to \$145m to fast track reconstruction of the BCC Riverwalk and ferry terminals" and has been reinforced by the Australian Government Reconstruction Inspectorate and Authority's Submission Guide.

Therefore your business case should include VfM information which can be updated later in the process as more information becomes available.

I note that Council recently received a presentation from the Authority's Project Control Team outlining the new submission guidelines which centres on VfM and changes to the submission process.

It should be further noted that the Business Case process does not limit the outcomes of the Design Competition, nor on Council's own processes which I understand are complimentary to the VfM requirements.

If a meeting is required to discuss specific aspects of the Business Case, please contact

[REDACTED]
Yours sincerely,

[REDACTED]
Chief Executive Officer

Level 9, 119 Charlotte Street Brisbane
PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

BCC.091.0028

Queensland Reconstruction Authority

For reply please quote: QldRA/PCB/LH – TF/11/17149

3 JUN 2011

[REDACTED]
Acting Chief Operating Officer
Brisbane City Council
Level 16 Brisbane Square
266 George Street
BRISBANE QLD 4000

[REDACTED]
I refer to your letter of 25 May 2011 and discussions on 31 May 2011 between yourself [REDACTED] from the Queensland Reconstruction Authority (the Authority), regarding Brisbane City Council's (BCC's) adverse estimated cash flow position as at 30 June 2011.

The Authority has noted the Council's advice and accordingly agrees to provide a further grant advance to Council prior to 30 June 2011. The details of the amount of the further advance will be clarified when you provide the additional required information. The terms applying to the advance will be the same as those applying to the initial advance provided.

In respect of the initial advance, I note that Council was of the view that the \$54 million was an advance for asset reconstruction projects, this is not the case, the advance is for CDO, emergent and reconstruction works.

For further clarification of any of these matters, please contact the Authority's [REDACTED]

I trust this advice is of assistance.

Yours sincerely,

[REDACTED]
Chief Executive Officer

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PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

BCC.091.0030

Queensland Reconstruction Authority

For reply please quote: QldRALUP/BN – TF/11/17256

08 JUN 2011

[REDACTED]
Transport Planning and Strategy Manager
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

[REDACTED]
I refer to a previous letter sent to you on 3 June 2011 regarding the Queensland Reconstruction Authority's (the Authority) role and the expectations of Brisbane City Council (Council) in relation to the Design Competition for the rebuilding of the Brisbane River Ferry Terminals.

Further to my letter of 3 June 2011, I confirm that the rebuilding of the Brisbane River Ferry Terminals has been approved as eligible under Natural Disaster Relief and Recovery Arrangements - Category D.

I also note that the betterment scope, including elements such as compliance with the Federal *Disability Discrimination Act 1992* and dual berthing, is supported provided it is within budget and has been considered in Council's Business Case.

I trust this information clarifies your concerns. Please contact [REDACTED] on telephone [REDACTED] if you require further assistance.

Yours sincerely,

[REDACTED]
Chief Executive Officer

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PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au



Dedicated to a better Brisbane

10th June 2011

[REDACTED]
Chief Executive Officer
Queensland Reconstruction Authority
PO Box 15428 City East
BRISBANE QLD 4002

Ref QldRA/PCB/LH- TF/11/17149

Dear [REDACTED]

I refer to your letter of 3 June 2011 and subsequent discussions between myself, [REDACTED] and [REDACTED] from the Queensland Reconstruction Authority (QRA).

Council welcomes the offer from QRA in relation to an additional advance. Council has estimated that its total eligible expenditure net of insurance claims will be \$85 million this financial year and therefore requests and advance of \$31 million to assist in managing its cash flow. Total expenditure by council this financial year on flood activities will be in excess of \$100 million and your advance will be of great assistance.

If you have any queries on the above please contact myself on ([REDACTED])

Yours sincerely

[REDACTED]
A/Chief Operating Officer
BRISBANE CITY COUNCIL

→ 6.106E18

Queensland Reconstruction Authority

Our ref: QldRA/Project Control/LH/TF/11/17384

20 JUN 2011

CORPORATE SERVICES
Divisional Manager's Office

21/6/2011

[REDACTED]
Acting Chief Operating Officer
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4000

Dear [REDACTED]

I refer to your letter of 10 June 2011 advising the Queensland Reconstruction Authority that the total estimated expenditure to 30 June 2011 on eligible reconstruction projects for Brisbane City Council will be \$85 million, net of insurance proceeds.

As indicated in my letter to you of 3 June 2011, the Authority has agreed to pay further grant advance funding to Brisbane City Council. I am pleased to advise that the Authority has approved payment of a further \$34,100,000.00 including GST by way of further grant advance funding for Natural Disaster Relief and Recovery Arrangements (NDRRA) eligible reconstruction projects.

This payment is a further advance on eligible funding and is in addition to the \$59,400,000.00 including GST paid to Brisbane City Council on 23 March 2011. These advance payments will need to be supported by the submission of applications that comply with NDRRA requirements. As set out in the funding agreement between Brisbane City Council and the Authority, should a Local Government fail to submit applications that comply with these requirements, the proceeds of grant advance funding will have to be returned to the Authority.

Costs submitted by Council in relation to approved projects have been grossed up for GST. A Recipient Created Tax Invoice (RCTI) inclusive of a RCTI agreement will be issued with each component of funding. The use of RCTIs ensures compliance with GST legislation and is in line with processes previously adopted in processing these claims.

Thank you for your cooperation and I look forward to continuing to work closely with Brisbane City Council to progress your reconstruction priorities.

Should you wish to further discuss these matters please contact [REDACTED] on telephone [REDACTED]

Yours sincerely
[REDACTED]

Chief Executive Officer

Level 9, 119 Charlotte Street Brisbane
PO Box 15428 City East
Queensland 4002 Australia
Telephone +61 7 3008 7200
Facsimile +61 7 3008 7299
www.qldreconstruction.org.au

BCC.100.5727

Extract from BCC 2010/11 Annual Financial Statements:

17) Flood Event Notes to the BCC Accounts:

In January 2011, parts of Brisbane were subject to a major flood event. Costs of \$91.6 million for clean -up and to repair damaged assets were incurred during the year and are included in Employee Costs and Materials and Services Costs. The assessment of further damage and resulting costs is continuing.. The written down book value of assets totally destroyed amounted to \$39.5 million, which was included in the Loss on Disposal of Property, Plant and Equipment section of Council's Accounts (refer note 11.(b)). Costs recovered during the year comprise \$85 million received from the Queensland Reconstruction Authority as Natural Disaster Relief and Recovery Arrangements (NDRRA) grants (refer note 3.(f)) and \$6.5 million insurance claims received (refer note 3.(d)). The NDRRA grants were received in advance. At year end, \$16.6 million of these advances was acquitted against approved claims. It is expected that all grants received will be fully acquitted. Insurance claims submitted but not settled at year end are \$3.35 million. Council expects to be eligible for further recoveries through NDRRA grants and insurance claims in relation to this event.

Queensland Reconstruction Authority

Our ref: QldRA/Project Control/KB – TF/11/13707

16 AUG 2011

Mr Colin Jensen
Chief Executive Officer
Brisbane City Council
PO Box 1434
BRISBANE QLD 4001

Dear Mr Jensen *Colin*

I refer to your Council's submission for Natural Disaster Relief and Recovery Arrangements assistance for Emergent Works following Queensland Flooding and Tropical Cyclones Tasha and Anthony, November 2010- February 2011.

The application has been examined in terms of eligibility under the joint Commonwealth and Queensland Government Natural Disaster Relief and Recovery Arrangements (NDRRA) applying to the Brisbane City Council.

The Queensland Reconstruction Authority has concluded that of Council's 15 submissions totalling \$1,789,321.40 (excluding GST), \$1,430,311.48 is eligible for funding assistance under the NDRRA. Council is now authorised to draw down \$1,072,733.61 from the advanced funding of \$85,000,000 towards Emergent Works costs as an eligible measure in accordance with the terms of the Funding Agreement between Council and the Queensland Reconstruction Authority. A summary of the assessed submissions is included (**Attachment A**).

Please refer to attached Schedule 1 for details of endorsed submissions. To indicate acceptance of this endorsement please sign and return your copy of Schedule 1.

This endorsement is subject to compliance with the eligibility provisions outlined in the *Queensland Disaster Relief and Recovery Arrangements* published by the Department of Community Safety at www.disaster.qld.gov.au.

Please contact [REDACTED] of the NDRRA Project Control Team on [REDACTED] if you require further information about this approval.

Yours sincerely |

[REDACTED]
Chief Executive Officer

Encl

Attachment A

FUNDING APPLICABLE

Grant Assistance authorised to drawdown	\$1,072,733.61
Council's Trigger Point Contribution	\$357,577.87*
Total	\$1,430,311.48

*This amount represents 25 percent of the total cost (\$1,430,311.48) for this submission.

Note: Brisbane City Council's maximum trigger point contribution is \$2,080,000. Including the trigger point contribution deducted above, a total of \$1,679,324.44 has now been deducted from Council's maximum trigger point contribution. The balance \$400,675.56 (\$2,080,000 minus \$1,679,324.44) will be deducted from future submissions.

Queensland Reconstruction Authority

SCHEDULE 1: Approved Projects – Please indicate acceptance by approving and returning to Queensland Reconstruction Authority Project Control Branch

For assistance in recovery and reconstruction for Queensland Floods and Tropical Cyclones Anthony and Tasha and damage arising from Severe Tropical Cyclone Yasi

Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.14.11	Flood clean up - Kerbside waste	\$92,818.27	CDO	
BCC.16.11	Flood clean up - Kerbside waste	\$14,196.49	CDO	
BCC.19.11	Flood clean up - Kerbside waste	\$16,822.50	CDO	
BCC.24.11	Flood clean up - Kerbside waste	\$18,065.00	CDO	
BCC.26.11	Flood clean up - Kerbside waste	\$1,786.83	CDO	
BCC.29.11	Flood clean up - Kerbside waste	\$95,677.50	CDO	
BCC.30.11	Flood clean up - Kerbside waste	\$19,520.00	CDO	
BCC.4.11	Flood clean up - Kerbside waste	\$99,488.00	CDO	
BCC.12.11	Flood clean up - Kerbside waste	\$8,113.70	CDO	
BCC.23.11	Flood clean up - Kerbside waste	\$74,469.20	CDO	
BCC.28.11	Flood clean up - Kerbside waste	\$400,533.25	CDO	
BCC.42.11	Production of Sandbags	\$116,546.08	CDO	
BCC.47.11	Production of Sandbags	\$54,356.18	CDO	
BCC.70.11	Flood clean up - Kerbside waste	\$14,007.87	CDO	
BCC.95.11	Production of Sandbags	\$19,155.58	CDO	
BCC.99.11	Production of Sandbags	\$39,275.29	CDO	
BCC.69.11	Clean up and disposal of flood waste - private property	\$298,341.08	CDO	
BCC.3.11	Kerbside clean up, LDCCops, evac centre expenditure	\$258,016.26	CDO	

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For assistance in recovery and reconstruction for Queensland Floods and Tropical Cyclones Anthony and Tasha and damage arising from Severe Tropical Cyclone Yasi

Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.36.11	Emergent Works undertaken in various parks	\$67,727.14	Emergent Works - REPA	
BCC.1.11	Repairs of road traffic signals, traffic signal controllers and electrical equipment	\$78,126.60	Emergent Works - REPA	
BCC.5.11	Debris removal	\$17,324.26	CDO	
BCC.18.11	Flood clean up	\$166,102.61	CDO	
BCC.118.11	Kerbside pick up - waste	\$496.00	CDO	
BCC.39.11	Emergent works including clean up and repairs of roads, parks, bikeways and footpaths	\$17,874.28	Emergent Works - REPA	
BCC.96.11	Production of sandbags	\$5,549.46	CDO	
BCC.101.11	Production of sandbags	\$53,684.89	CDO	
BCC.41.11	Emergent works including clean up and repairs of roads, parks, bikeways and footpaths	\$1,123,445.04	Emergent Works - REPA	
BCC.9.11	Debris Removal and Consumables Cost	\$22,766.03	CDO	
BCC.20.11	Flood Clean up	\$386,536.97	CDO	
BCC.27.11	Flood Clean up	\$6,861.82	CDO	

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Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.2.11	Emergent works repairs to traffic signals	\$431,619.43	Emergent Works-REPA	
BCC.7.11	Debris Removal and Consumables Cost	\$30,527.09	CDO	
BCC.22.11	Flood clean up	\$1,944,054.67	CDO	
BCC.104.11	Kerbside Clean up	\$6,169.16	CDO	
BCC.37.11	Emergent works undertaken in various parks	\$504,381.04	Emergent Works - REPA	
BCC.8.11	Debris Removal and Consumables Cost	\$58,978.80	CDO	
BCC.32.11	Debris Removal and Consumables Cost	\$176,882.95	CDO	
BCC.38.11	Repairs and clean up of essential assets including roads, parks and bikeways	\$309,937.19	Emergent Works - REPA	
BCC.17.11	Flood Clean up	\$818,408.60	CDO	
BCC.43.11	Repairs to traffic signals	\$315,285.90	Emergent Works - REPA	
BCC.135.11	Removal of debris from streets, paths and parks	\$191,796.45	Emergent Works - REPA	
BCC.72.11	Kerbside Clean up	\$255,055.43	CDO	

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Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.56.11	Survey works undertaken of the stormwater network	\$133,517.84	Emergent Works - REPA	
BCC.6.11	Overtime and meal allowances	\$860,947.26	CDO	
BCC.13.11	Flood clean up - Kerbside waste	\$2,764.20	CDO	
BCC.15.11	Flood clean up - Kerbside waste	\$236,516.50	CDO	
BCC.21.11	Flood clean up - Kerbside waste	\$378,277.80	CDO	
BCC.31.11	Debris Removal and Consumables Cost	\$140,929.24	CDO	
BCC.33.11	Debris Removal and Consumables Cost	\$46,305.44	CDO	
BCC.34.11	Labour, Materials, Services and Plant for sandbags	\$1,140,359.74	CDO	
BCC.45.11	Flood clean up - Kerbside waste	\$0.00	CDO	
BCC.46.11	Flood clean up - Kerbside waste	\$1,210,705.36	CDO	
BCC.49.11	Supplier and Labour Costs	\$171,987.00	CDO	
BCC.51.11	Supplier and Labour Costs	\$104,484.00	CDO	
BCC.52.11	Supplier and Labour Costs	\$24,140.00	CDO	
BCC.53.11	Supplier and Labour Costs	\$28,664.00	CDO	
BCC.71.11	flood clean up - Kerbside waste	\$446,194.68	CDO	
BCC.73.11	flood clean up - Kerbside waste	\$119,814.00	CDO	
BCC.76.11	flood clean up - Kerbside waste	\$23,954.00	CDO	
BCC.78.11	flood clean up - Kerbside waste	\$123,910.83	CDO	

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Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.94.11	flood clean up - Kerbside waste	\$368,226.32	CDO	
BCC.97.11	flood clean up - Kerbside waste	\$30,820.00	CDO	
BCC.98.11	flood clean up - Kerbside waste	\$137,463.42	CDO	
BCC.100.11	Production of sandbags	\$52,943.00	CDO	
BCC.105.11	Production of sandbags	\$122,082.60	CDO	
BCC.106.11	flood clean up - Kerbside waste	\$21,419.50	CDO	
BCC.109.11	flood clean up - Kerbside waste	\$201,556.13	CDO	
BCC.113.11	flood clean up - Kerbside waste	\$9,663.98	CDO	
BCC.114.11	flood clean up - Kerbside waste	\$27,360.04	CDO	
BCC.116.11	flood clean up - Kerbside waste	\$200,056.70	CDO	
BCC.117.11	flood clean up - Kerbside waste	\$430,478.84	CDO	
BCC.119.11	Flood relief expenses	\$304,638.07	CDO	
BCC.122.11	Flood relief expenses	\$31,894.13	CDO	
BCC.123.11	flood clean up - Kerbside waste	\$36,729.60	CDO	
BCC.124.11	Flood relief expenses	\$165,014.42	CDO	
BCC.125.11	flood clean up - Kerbside waste	\$49,346.10	CDO	
BCC.126.11	flood clean up - Kerbside waste	\$59,437.78	CDO	
BCC.128.11	flood clean up - Kerbside waste	\$11,083.00	CDO	
BCC.129.11	Overtime and wages	\$19,761.00	CDO	
BCC.130.11	Call Centre Costs	\$81,546.58	CDO	

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For assistance in recovery and reconstruction for Queensland Floods and Tropical Cyclones Anthony and Tasha and damage arising from Severe Tropical Cyclone Yasi

Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.131.11	Overtime and wages	\$0.00	CDO	
BCC.133.11	Overtime and wages	\$287,201.70	CDO	
BCC.149.11	Overtime and wages	\$33,480.49	CDO	
BCC.158.11	flood clean up - Kerbside waste	\$84,230.06	CDO	
BCC.159.11	flood clean up - Kerbside waste	\$32.63	CDO	
BCC.112.11	Emergent works removal of debris from various parks/streets	\$53,698.48	Emergent works - REPA	
BCC.57.11	Clean up of roads, parks and bikeways	\$25,235.15	Emergent works - REPA	
BCC.81.11	Repairs to traffic signals electrical equipment	\$9,856.43	Emergent works - REPA	
BCC.10.11	Consumables	\$29,634.02	CDO	
BCC.120.11	Removal of debris and rubbish from various streets and parks	\$426,845.15	Emergent works - REPA	
BCC.58.11	Supplies	\$2,071.12	Emergent works - REPA	
BCC.63.11	Supplies and labour	\$1,208.41	Emergent works - REPA	
BCC.66.11	Labour hire	\$5,321.68	Emergent works - REPA	

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For assistance in recovery and reconstruction for Queensland Floods and Tropical Cyclones Anthony and Tasha and damage arising from Severe Tropical Cyclone Yasi

Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.74.11	Repair & clean up of bridges and roads	\$354.37	Emergent works - REPA	
BCC.83.11	Repairs to various assets	\$761.26	Emergent works - REPA	
BCC.87.11	Clean up and repair assets	\$24,977.44	Emergent works - REPA	
BCC.88.11	Labour hire	\$1,096.85	Emergent works - REPA	
BCC.103.11	Clean up and repair assets	\$261.55	Emergent works - REPA	
BCC.160.11	Removal of debris from streets and parks	\$239,840.93	Emergent works - REPA	
BCC.40.11	Repairs & clean up of assets	\$436.46	Emergent works - REPA	
BCC.59.11	Supplies and labour	\$98,801.96	Emergent works - REPA	
BCC.60.11	Supplies and labour	\$103,206.08	Emergent works - REPA	
BCC.64.11	Supplies and labour	\$298,465.95	Emergent works - REPA	

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Project Approved	Description	Cost Estimate \$	Funding Source(s)	
			NDRRA	Other
BCC.65.11	Supplies and labour	\$125,423.30	Emergent works - REPA	
BCC.67.11	Supplies	\$48,132.95	Emergent works - REPA	
BCC.75.11	Clean up of roads, bridges and bikeways	\$42,904.91	Emergent works - REPA	
BCC.79.11	Clean up of roads, bridges and bikeways	\$26,769.95	Emergent works - REPA	
BCC.84.11	Repairs & clean up of assets	\$51,349.91	Emergent works - REPA	
BCC.85.11	Repairs & clean up of assets	\$27,287.31	Emergent works - REPA	
BCC.86.11	Repairs & clean up of assets	\$101,319.11	Emergent works - REPA	
BCC.89.11	Repairs & clean up of assets	\$23,788.06	Emergent works - REPA	
BCC.91.11	Repairs & clean up of assets	\$23,122.11	Emergent works - REPA	
BCC.92.11	Repairs & clean up of assets	\$76,888.54	Emergent works - REPA	

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Project Approved	Description	Cost Estimate	Funding Source(s)	
			NDRRA	Other
BCC.143.11	Clean up of roads, bridges and bikeways	\$24,837.02	Emergent works - REPA	
Total		\$18,484,615.32		

Accepted by :

Signed for and on behalf of _____ by _____ date _____