

TfA Ref: 16377

20 July 2018

Brisbane City Council
GPO Box 1434
Brisbane QLD 4001

To Whom It May Concern,

Proposed Caltex Service Station Re-Development at 647 Kingsford Smith Drive (Cnr Theodore Street), Eagle Farm QLD 4009 – Stormwater & Oily Water Management.

We confirm that the existing stormwater drainage system will generally remain unchanged as a result of the proposed service station interim works and re-development works. Stormwater runoff will continue to be conveyed by the existing gully pits, trench drains and pipes and discharge to the existing legal points of discharge on Kingsford Smith Drive and Theodore Street.

Given the absence of an existing oily water system on site, new sub-catchments will be created for areas where fuel dispensing and fuel deliveries occur in order to separate the high risk (hydrocarbon generating e.g. under the canopy) areas from the low risk areas (the rest of the site). These measures will be implemented in a staged approach to cater for the planned re-development schedule.

Stage 1 (Interim Works) will be aimed at addressing the runoff from fuel dispensing and fuel delivery areas only, particularly the uncovered high flow diesel dispensing area which currently shows signs of severe pavement deterioration. These works will be undertaken immediately.

Stage 2 (Re-Development Works) encompasses the drainage works associated with the planned knockdown rebuild of the service station which will ultimately tie into the new oily water system proposed to be built during Stage 1.

A brief summary of the proposed stormwater and oily water management strategy for both Stage 1 and Stage 2 is provided below.

Stage 1 (Interim Works)

These works focus on addressing the lack of an oily water system in the existing service station and will be aimed at ensuring stormwater runoff from the existing dispensing and fuel delivery areas is separated from the rest of the forecourt areas and treated accordingly.

Generally, the following works will be undertaken:

- Replacement of the existing concrete pavement where dispensing of high flow diesel currently occurs (uncovered area on the Eastern side of the site) with a new concrete bunded area drained by trench drains and a gully pit connected to a Spel Puraceptor Class '1' (P.040 unit) via underground pipe network for hydrocarbon removal. This will ensure that any spillage and runoff from this area is treated prior to discharge to the site's stormwater network.
- Installation of a Spel Puraceptor Class '1' (P.040 unit) and associated underground pipe network between the high flow diesel refuelling area and the Eastern crossover on Kingsford Smith Drive.
- Replacement of concrete pavements in the areas where the Spel Puraceptor and associated pipework will be installed.
- Installation of a trench drain at the Eastern crossover on Kingsford Smith Drive discharging to the Proposed Spel Puraceptor unit in order to intercept stormwater runoff from the existing car canopy and underground

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

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tank farm areas. This will ensure that any spillage and runoff from these areas is treated prior to discharge to the site's stormwater network.

- Provision of oily water system pipe stub for future car canopy and tank delivery stand drainage connection (Stage 2 works).
- The stormwater flows generated from the high flow diesel dispensing area and the catchment that will be conveyed by the proposed Eastern crossover trench drain can be easily handled by the proposed Spel Purceptor unit (P.040) as this device has a treatable flow rate of up to 40 litres per second.

A conceptual stormwater management plan depicting the proposed oily water system and indicating how all the low risk areas will continue to drain to the existing stormwater system has been prepared for Council information and is attached to this letter (Refer Drawing 11298- DA16 Rev A "Conceptual Stormwater Management Plan – Stage 1 Interim Works").

Stage 2 (Re-Development Works)

As part of the re-development works a new car canopy will be built approximately in the same location of the existing canopy and some additional sections of pavement will be replaced with new concrete pavements. Stormwater and oily water for the areas affected by Stage 2 works will be managed as follows:

- Dispensing of fuel will occur in a concrete bunded area covered by a canopy roof that overhangs the dispensing area by a quarter of the roof height horizontally. Any spillage or minor spills from under the canopy will be captured by grated gully pits and directed to the Spel Purceptor built during Stage 1 via underground pipe network for hydrocarbon removal. Treated water from the Spel Purceptor will be then discharged to the existing site's stormwater network.
- The fuel delivery stand or fill point (unloading area) will be located under the new car canopy and any spills that might occur during unloading operations will be also directed to the Spel Purceptor which can fully contain a spill from the largest delivery tanker compartment (8,000 litres) plus allowances for wind blow rain (14,400 total working capacity). A licensed contractor will remove the contents of the Spel Purceptor when required.
- The existing high flow diesel dispensing area located on the Eastern side of the site will remain in the same location therefore concrete pavements (built during Stage 1) will only be slightly modified to accommodate new dispensers and fuel pipework. This concrete bunded area will continue to be drained by a trench drain and gully pit connected to the Spel Purceptor unit (installed during Stage 1). This will ensure that any spills occurring in this area will continue to be contained within the Spel Purceptor.

A conceptual stormwater management plan depicting the proposed oily water system upgrade and indicating how all the low risk areas will continue to drain to the existing stormwater system has been prepared for Council information and is attached to this letter (Refer Drawing 11298- DA15 Rev B "Conceptual Stormwater Management – Stage 2 Re-Development Works").

Please do not hesitate to contact the undersigned should you require any clarification regarding this letter.

Kind regards,



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For and on behalf of TFA Project Group.