

ENGINEERING SERVICES HIGHLIGHTS AND SIGNIFICANT ISSUES REPORT – MONTH ENDING APRIL 2011

Author: DIRECTOR ENGINEERING SERVICES

Purpose

To review Engineering Services Department highlights and significant issues for the month ending April 2011.

Background and Discussion

Highlights and Significant Issues for period are as follows: -

ENGINEERING SERVICES MANAGEMENT

Coordination of project meetings, briefings and reports on the following projects:

- Undertook interviews for Manager Parks & Environment
- Undertook inspections at Sarina with Mayor and Councillors
- Met Mackay Conservation Group onsite with Cr. Walker
- Attended Meadowlands meeting

On-going involvement in the following areas:

- Natural Environment Advisory Committee, City Focus Advisory Committee, Steering Committee Meeting
- Safe Plan, Design and Construct Review Meetings and SES matters
- Engineering Services Program Managers meetings

CIVIL PROJECTS (CONSTRUCTION)

Works have been completed on the following projects:

DAY LABOUR

- Casey Avenue Leisure Court extension
- Illuka Park drainage works
- Lawson Street River to Victoria Street
- Stockbridge Street reconstruction
- Black Street footpath
- Monash fencing
- Penn Street footpath
- Hume Street footpath
- Klingner Street roadwork
- O'Keefe Road roadwork
- Hodges Street roadwork



Kinchant Dam Road

CONTRACTS

- Progress on all projects has been somewhat hindered again by wet weather in April on top of rainfall in previous months maintaining the wet ground conditions.

Works have been substantially completed on the following projects:

DAY LABOUR

- Jenvey Court footpath
- Mackay Bucasia footpath
- Traffic Facility works at various locations



Middle Creek Road

CONTRACTS

- 2009 Flood Saturation Damage Restoration Package 902
- 2009 Flood Saturation Damage Restoration Package 903
- Bluewater Trail Caneland Park
- Mackay South 2 Flood Damage Restoration Package 12, 2008
- Flood Package 8, 2008 – Mackay Central Urban Flood Damage
- Flood Package 11 – Midge Point 2008



Anzac Parade, Finch Hatton - (2009 Flood Saturation Damage Restoration Package 902)

The following projects are in progress:

DAY LABOUR

- Kinchant Dam reconstruction
- Bontanic Garden carpark
- Middle Creek Road
- Norris Road at Beaconsfield Road
- Freshwater Point boat ramp
- Casey Avenue drainage at Bridge Road
- Traffic Facility works at various locations
- Pacific Drive footpath
- Victor Creek car park area

CONTRACTS

- Crediton Loop Road
- Roger Road culverts
- Optic Fibre communications
- Glenpark Street signalisation
- 2009 Flood Saturation Damage Restoration Package 904
- 2009 Flood Saturation Damage Restoration Package 905
- 2009 Flood Saturation Damage Restoration Package 906
- Mango Avenue Reconstruction
- Cell 2 Hogans Pocket



Crediton Loop Road, Crediton



Mango Avenue Reconstruction, Eimeo

The following projects have been awarded:

CONTRACTS

- 2009 Flood Saturation Damage Restoration Package 907
- 2009 Flood Saturation Damage Restoration Package 908
- Evans Street Drain Culvert (Hague Street)
- Perry Road Reconstruction

The following projects have been put to tender:

CONTRACTS

- Demolition & Disposal – Bedford Road Depot
- Caping Road – Realignment and River Crossing Repair
- Holts Road Culvert Upgrade
- Panel of Suppliers - Flood Saturation 2011
- Cape Hillsborough Widening
- Grasstree Beach Road – 3.95 to 4.2km including Bikeway

CIVIL OPERATIONS (MAINTENANCE)

Maintenance Grading in the following areas:

Heavy Grading	Eungella Dam Road,
Formation Grading	Buggybend widening at Eungella Dam Road, Freegards Road,
Temporary Gravel Road Repairs (Grading & Gravelling)	Mt Martin Road, Bradshaw Road, Geeburga-Buthurra Road, Cathu-O'Connell Road, Calen-Mt Charlton Road (gravel patching),
Shoulder Grading	
Pavement Repairs	Eungella Dam Road (fix soft spots),

Special Works:

Footpath repairs – Wellington Street, Luscombe Street, Ferguson Street, Brook Street, Carlyle Street, Brisbane Street, Branscombe Road, Margaret Street, Shakespeare Street, Milton Street, Youngs Lane, Monash Way, Mangrove Road, Gordon Street, Lambrook Court, Telegraph Street, Main Street, Sophia Street.

Vegetation Control –

Sign & Guidepost repairs –

Culvert, Pipe & Catchpit repairs –

Kerb & Channel repairs – Eklund Street, Beckett Court.

Water Board Patching –

Street and Gutter Collection –

Suckins, Digouts & Scours – Geeburga-Buthurra Road, Deals Road, Gells Road, Sturmas Road, Cathu-O'Connell Road, Exmoor Road, Barren Pocket Road, Rogers Road, Midge Point Road,

Special Works – Stabilising bank at Dalrymple Road, Creek Crossing Repairs – Rostirollas Road & Johansens Road, Fence & Handrail Maintenance – Luscombe Street.

Pothole Patching: Schapers Road, Keeleys Road, Blacks Beach Road, Hillend Road, Davey Street, Pioneer Street, Holts Roads, Mansfield Drive, Harveys Road, Beaconsfield Road, Nadarmi Drive, Glenpark Street, David Muir Street, Glenella Road, Glendaragh Road, Pittman Street, Glenella-Richmond Road, Fursden Street, Annie Wood Avenue, Raymond Croker Drive, Greenfields Blvd, Evans Avenue, Ron Searle Drive, Bona Vista Drive, Oak Street, Horse & Jockey Road, Boddington Street, River Street, Macalister Street, Alexandra Street, Cowleys Road, Conners Road, Luscombe Street, Paradise Street, Bridge Road, Holland Street, Archibald Street, Milton Street, Penn Street, Evan Street, Hockey Carpark, Bernborough Avenue, Marlborough Street, Hospital Bridge Fishing Pier, Nelson Street, Victoria Street, Mangrove Road, Shakespeare Street, Churchill Street, Sydney Street, Binnington Esplanade, Hansens Road, George Street, 18th Lane, 12th Lane, Ferguson Street, Carlyle Street, Sophia Street, Wood Street, Napier Street, Clements Street, Kindermar Street, Webster Street, Peri Road, Main Street, Cooks Lane, Tom Thumb Court, Wentford Street, Michelmore Street, Graffunder Street, Nilssons Road, Stockroute Road, Hills Road, Wellington Street, Pratts Road, Lembergs Road, Petersons Road, McColl Street, Old Pleystowe Road, Kellys Road, Tideman Street, Schmidtkes Road, Meadowlands Road, Armstrong Beach Road, Bally Keel Road, Freshwater Point Road, Ness Street, Munbura & Marwood Rd, Chelona Sandiford Rd, Walkerstone Homebush Rd, McEwens Beach Rd, Marwood Rd, Holms & Stockroute Rd, Anna Crt Wollingford Rd & Stockroute Rd, Seivers & Micalif Rd, Austins & Barrie Lane, Barrie Lane & Old McEwens Rd, Palm Tree Creek Rd, Old McEwens Beach Rd, Hannans & Gravinis Rd, Old Rocky Waterholes Rd, McNichols Rd & Ball St, Quattromanis Rd, Walkerstone Homebush Rd, Mc Ewens Beach Rd.

Drainage Maintenance: Kuttabul-Mt Jukes Road, Yalboroo Hall,

Mowing & Slashing: Midge Point and Bloomsbury areas, Calen, St Helens Beach area

Main Roads RMPC:

Other Bituminous Works / Pothole Patching / Pavement Repairs	Nil.
Heavy Formation grading / gravel resheeting / other formation works	Nil.
Culvert / Drainage Works	Nil.
Tractor Slashing Rural / Urban / Boom Mowing / Clearing Works / Herbicide Spraying / Declared Plant Spraying	<p>Tractor Slashing : Showgrounds to Whitsunday Boundary Rosella Store to Showgrounds Showgrounds to Farleigh-Habana Road intersection Intersection Bruce Highway to intersection Eimeo Road Showgrounds to Harbour Road round about</p> <p>Boom Mowing : Gooseponds Creek to Farleigh Access to Church to Levy Road</p> <p>Herbicide Spraying : Isaac Boundary to Lagoon Street intersection - Showgrounds to Whitsunday Boundary Isaac Boundary to City Gates Isaac Boundary to intersection Bruce Highway, Sarina Intersection Bruce Highway to intersection Marlborough-Sarina Road Intersection Bruce Highway to intersection Sarina-Homebush Road Intersection Bruce Highway to intersection Homebush Road Intersection Peak Downs Highway to intersection Sarina-Homebush Road Intersection Bruce Highway to intersection Maraju-Yakapari Road Intersection Bruce Highway (Nth Mackay) to intersection Bruce Highway (The Leap) Intersection Marian-Eton Road to intersection Peak Downs Highway Intersection Mackay-Bucasia Road to intersection Farleigh Road Intersection Bruce Highway to intersection Owen Jenkins Road Intersection Bruce Highway to Access BHP Services Intersection Bruce Highway to intersection Yakapari-Seaforth Road Intersection Bruce Highway to Palm Avenue, Seaforth Intersection Yakapari-Seaforth Road to intersection Farleigh-Habana Road Cremorne/Palm Street intersection to Palmer Street intersection</p>
Rest Area Servicing	Nil.
Road Sweeping/Roadside Litter Collection	City Gates to Showgrounds, Showgrounds to Sams/Heaths Road intersection, Sams Road to Palmer Street, Intersection Bruce Highway to Bucasia, Harbour Road round about, Showgrounds to River Street, Mobil Service Station, Watts Road, Benholme

	Sandy Creek floodway
Emergency Call Outs	Nil.
Signs / Guide Post Works	Nil.



Amhurst Street – Slade Point



Maple Drive Andergrove - Working on Intersection of Maple Drive and Oak Street



Intersection of Spinnaker Way and Royal Sands Boulevard

- Development and design of projects for saturation damage projects throughout the Council area for 2009, 2010 and 2011 events including Shakespeare street, Bridge Road, Farleigh – Habana road Paradise street (George to Bridge) and Mangrove Road.
- Development and design of projects within Capital Works Programme.
- Development of draft 20 yr Capital Works Programme making provision for all current projects and proposed development projects.
- Discussion with property owners and utility providers regarding future road construction at Connors Road (Farrelly to Archibald). Land Acquisitions and realignment notices underway.
- Consultation complete and detail design commenced for Paradise Street (George to Henman Streets) upgrading.
- Consultation and detail design regarding Archibald Street (Connors to Milton) upgrading.
- Consultation and detail design of the HAFF Grant project including Rosewood Drive from Mackay Bucasia road to Chenoweth Drive.
- Discussions with Consultant with regard to finalisation of planning study for Paget intersections and future heavy vehicle paths. Concept planning of intersection upgrades complete and detail design commenced.
- Detail design of culvert crossing Casey Avenue , concept development and detail design for stadium access, car park and Bluewater Trail extension.
- Completion and issue to QT of detail design for on land facilities for Constant Creek boat ramp design.
- Detail design and technical specification preparation for contract delivery projects including Holts Road Culvert upgrade, Rosewood Drive Construction and Grasree Beach Road and footway upgrading.
- Preparation of RRG, Blackspot, SafeST and RLCIP grant subsidy applications.
- Lead role in the preparation of “Safety in Design’, Erosion and Sediment Control and Fish passage and Waterway Barrier applications in relation to designs to meet industry standards.
- Attendance at Paget Depot Management Group & Steering Committee meetings and Corporate Projects Meetings, 2010 & 11 Flood Damage design discussions, Transport Working Group, Management Leadership Forum, Strategic Planning Internal Stakeholders Meeting Mackay Road Infrastructure Group meeting with DTMR.
- Provision of reports to Council on Ooralea Precinct Local Area Traffic Management Study and Traffic Advisory committee minutes.
- Participate in Departmental Briefing to Council.

PARKS AND ENVIRONMENT

The Parks & Environment report for the month of April contains information on activities undertaken

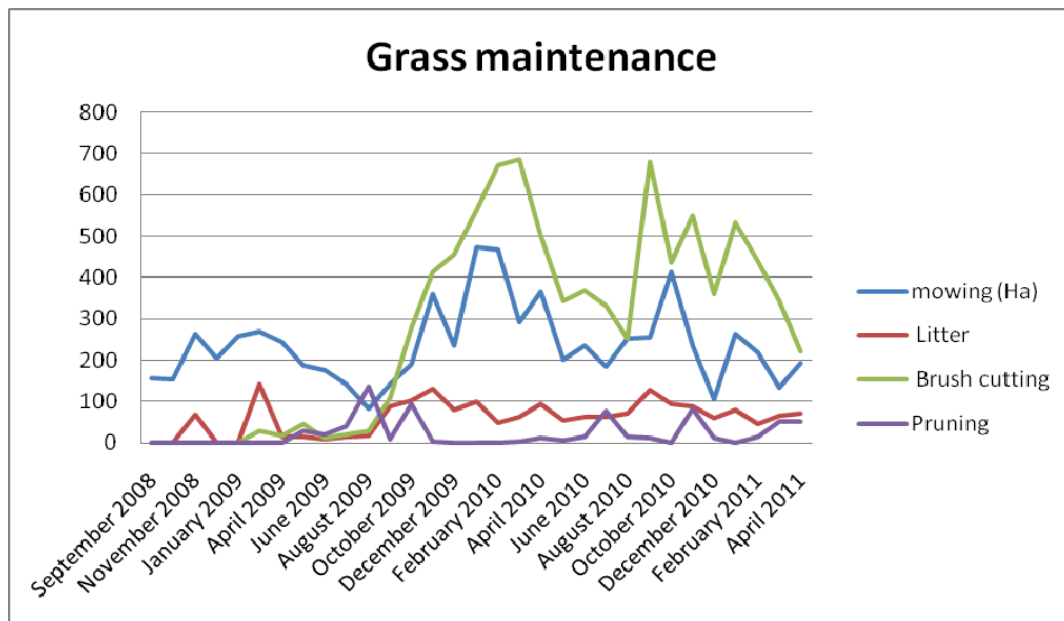
throughout the month by the staff within the program.

- **Officers on call attended** - 11 call outs and 22 phone calls.
- **Administration** - 46 park bookings were taken with some due to ANZAC day celebrations and 1 wedding cancellation received.
- **Customer Requests** –

Customer Requests

Date	Actioned	Received	Unactioned
April 2011	219	210	298

- **Technical Officers** – 2 Developer meetings, 2 “On Maintenance” inspections, 6 “Off Maintenance” inspections.
- **Horticulture Activities** – 137700m2 garden beds serviced; 7.5 hours spent repairing irrigation; 28.5 hours spraying herbicide
- **Grass Maintenance Activities** – 769600m2 parks mowing, 32000 m2 drains mowed; 53300m2 Community Halls mowed, 278000m2 easements mowed; 93 man hours spent whipper-snipping; 21 man-hours spent litter collecting; 51 man-hours spent pruning trees/plants; 2919 toilets cleaned; 1380 BBQs cleaned.
- **Valley** – 296433m2 Parks mowed, 21640m2 drains mowed, 255768m2 road reserves/ Easements mowed, 48 hours spent whipper snipping.
- **Sarina** – 1500000m2 mowed, 40000m2 cemeteries mowed, 80 hours spent whipper snipping.



- **Natural Environment and Marine Beach Activities** -
- The Natural Environment Advisory Committee met on April 5th and heard a presentation on the Mackay planning scheme review.
- Conservation Volunteers Australia (CVA) worked for eight days at Sandfly Creek Environmental Reserve undertaking implementation of the reserve’s management plan, including weed control and revegetation maintenance work. This project is in partnership with Council and is funded by Hail Creek Mine Development Fund.

- Work continued on updating the Reef Guardian Council Action Plan for 2011/12 and a workshop was held with the Great Barrier Reef Marine Park Authority to discuss ideas for the new plan.
- Staff attended the Launch of the Healthy Waterways Alliance at CQU. Presentations were made on the three sub groups and the strategic intent of the alliance. Participants developed a newsletter/report card to promote the activities of the group. A field trip was conducted which showcased council's urban water quality sampling program, mangrove management issues, sustainable initiatives in the cane industry, and recent water weed control projects at Sandringham Lagoon.
- Attended the Sandfly Creek Environmental Reserve Advisory Committee meeting.
- Liaised with Reef Catchments and local Landcare Groups about various projects and initiatives including the Coasts and Communities project and the Land for Wildlife Program.
- Articles were written for various media including Envirochat on various topics including Coasts and Communities Project initiatives.
- Seedlings were planted at Haliday Bay, Ball Bay and Shoal Point, weed control work was undertaken at Haliday Bay, Ball Bay, Bucasia Beach and Finlayson's Point, and fencing was undertaken at Haliday Bay and Ball Bay as part of implementation of the Beach Plans.
- The swimming enclosures at McEwens Beach and Seaforth were repaired. The Bucasia swimming enclosure was closed due to net damage.
- The Sarina beach team planted groundcovers at Armstrong and Campwin Beach, repaired fencing at Campwin and Salonika Beach, removed coconut seedlings at Sarina and Armstrong Beach, removed Agave from Salonika Beach, sprayed Lantana at Campwin Beach, maintained the revegetation site at Grasstree Beach and planted 30 seedlings, and undertook walkway maintenance at Armstrong and Grasstree Beach.



Fencing on Ball Bay Foreshore, to delineate vegetated buffer strip and define beach access points

Cemetery Operations -

Burials Mt Bassett	9
Burials Mt Bassett Ashes	1
Burials - Mackay	2
Burials - Mackay Ashes	0
Burials - Walkerston	9
Burials - Walkerston (Ashes)	2
Burials - Mirani	1
Burials - Marian	2
Burials- Sarina	4
Hand Dig of grave	3

- **Arboriculture Activities -**

Row Labels	Sum of Total Trees Pruned	Sum of Council Trees Removed	Sum of scheduled Palm Trees defroned/deseeded (non-contract)	Sum of trees attended to in Juvenile stage	Sum of trees attended to for other Council works	Sum of trees planted in Streetscapes
April 2011	193	57	51	Nil	Nil	49

- **Parks Building Services Activities -**

Electrical Operations: Traffic Lights April – Electrical staff attended to 2 general maintenance checks of all traffic lights during the month, twenty-five lamps were replaced and minor faults repaired. Five after hours emergency response calls were attended to. One of the emergency response calls to Bucasia Road/ Philips St intersection involved total replacement of the control panel following a traffic accident.

Other Electrical Work: Testing and tagging was completed at three worksites and six requests for repair/ install were completed in council depots. Repairs were completed in four community buildings and four Parks buildings. Amenities at five locations had faults/vandalism repaired and Park Lighting at seven locations was repaired.

Playgrounds: Much of the playground inspector’s time was spent constructing the new play equipment at Armstrongs Beach Community Hall, this has been completed. Operational inspections were completed on 12 of the regions playgrounds. Six minor repairs to play equipment were completed during the month.

Built Asset Maintenance: Vandalism increased substantially, during the school holidays, with a marked rise in the amount of graffiti and damage to park infrastructure. Much of this was dealt with at the time with graffiti being cleaned off five playgrounds, three picnic shelters and seven toilet buildings. The Toilets at Schaefer St Park required a full internal repaint. Amenities at three locations were badly vandalised, Grendan Park and Queens Park received holes punched in walls and doors and a fire was lit in the John Breen Amenities. It will be several weeks before these repairs are completed.

Other repairs completed included the fitting of metal gates to the Victor Creek amenities, the fitting of doors and jambs at Quota Park. Five vandalised Indicator bolts were replaced at seven locations. The removal, repair and replacement of four park bench seats was undertaken at various locations. Three monthly RCD checks were conducted on switchboards throughout the regions parks.



Griffin St Park Repaint Play Equipment

Play Equipment at Griffin Park was repainted in preparation for the Bus Stop and Playground Shade Grant Works media launch. New slats on Coral Point Picnic Shelter were painted and the painting of the Cape Hillsborough Amenities completed during this time.

Capital Projects – The following projects are completed



Armstrong Beach Community Hall Playground



Weather Screen to Midge Point Picnic Shelter



Booking Office Seaforth Campground 1



Removal and Replacement of Exposed Aggregate Concrete to remove trip hazards, Civic Centre Precinct.

- **Mackay Regional Botanic Gardens**

Horticultural and Site Works:

Drainage and other related works – 39.5hrs
Mowing – 100.5hrs
Snipping - 34hrs
Rubbish collection including bin emptying - 55hrs
General garden bed maintenance – 70hrs
Pruning (trees, shrubs including hedging) - 36hrs
Herbicide Spraying – 38hrs
Planting – 11hrs

Weather Station Data

Rainfall for month (mm): 127.6
Days of rain: 23
Av. Temperature for Month (deg C): 22.5
High Wind Speed (knots): 23.5
Avg. Wind Speed (knots): 1.4
Dom. Wind direction: SE

Botanic Gardens Functions:

Meeting Room - 4 x corporate bookings for the meeting room and 12 x community rate bookings
4 x weddings, 3 x cancelled weddings (weather)
1 x wedding reception in the Lagoons Café & Gallery
Friends planting bee in the Heritage Gardens and SGAP working bee in Regional Forests
World Tai Chi Day in the Gardens
Road Runners Event cancelled (weather/flooding of paths)
Site used for school cross country final – St Francis Xavier School

Visitor Services Program:

School Visitation

Due to the wet weather, Schools have been limited in their visitation due to lack of covered areas for large groups, so the ‘Plant-ed Elsewhere’ (Outreach) Program has been visiting schools instead. On cancellation of their visit on April 6th, 4 prep classes from Mackay North Primary School had resources from the Gardens displayed in the school’s hall for very large interactive sessions covering habitats, lifecycles, leaf shapes and mini-beasts. 2 classes of St Francis Year 3s were visited on April 13th with mini-beasts from both land (above and below) and water ecosystems to demonstrate the biodiversity of creatures that Humans impact on when altering environments. The same day 3 Beaconsfield Prep classes were also visited with similar interests as Mackay North...Mini-beasts, habitats, and life cycles. To all schools live creatures, pinned specimens and real examples of plants and habitats (example nests, etc) are presented and these are with supported with posters, stimulus photos, books and conversations / talks.



Dragonfly nymph on display

Two schools have visited - a bush tucker talk and walk for 41 students from Hamilton and Hayman Islands on April 14th and a Biodiversity (plants creatures and ecosystems) school tour for 26 Year 3 / 4 students from Swayneville State Primary School on April 29th.

School Holiday activities

'Metamorphism Magic' was the topic for the Easter school holiday activities and this involved the children walking in the Gardens to view creatures that may develop through complete or in-complete metamorphism. Finding out that some creatures go through 3 or 4 stages of change, with terms such as 'nymphs', 'larvae' and 'pupa' a new experience for many of the children. Seeing creatures in their habitat in these different stages is always an exciting part of the session, as is making creatures in artistic mediums to take home as a reminder of their activity.

These activities are designed to re-connect children with nature via hand-on learning and discovery and encourage return visitation to the Gardens whilst promoting the region's natural environment areas for further discovery.

Events

On April 11th Visitor Services Officer Maya Harrison made a presentation to the **Mothers' of Preschoolers Group** about the Small Explorers Program and interest was garnered with families wishing to attend the Gardens on guided activities in 2011.

Friday Guided walks have been slow to start for this year with rain and public holidays hampering numbers. Three small groups of 1-3 have occurred on three occasions. The Friends of the Gardens have committed to lead these walks on monthly dates during the busy school visitation period.

A **Garden Friends Planting Bee** was held on Saturday April 16th with almost 200 plants being planted in the Heritage Garden, Whitsunday Garden and adjacent Demonstration Garden by 15 volunteers.



Gardens Friends Planting Bee – Heritage Gardens

An added excitement was to be able to see the first recorded flowering of a very special plant, an undescribed *Lepiderema* species from the Conway area. This large shrub/small tree features cauliflorous flowering and fruiting - a botanical term referring to plants which flower and fruit from their main stems or woody trunks rather than from new growth and shoots. This can allow trees to be pollinated or have their seeds dispersed by animals which cannot climb or fly. This *Lepiderema* has only been recorded in

the Central Queensland Coast bioregion at Impulse Creek, located at the headwaters of Conway National Park.



Lepiderema sp. (Impulse Creek A.B.Pollock 73)

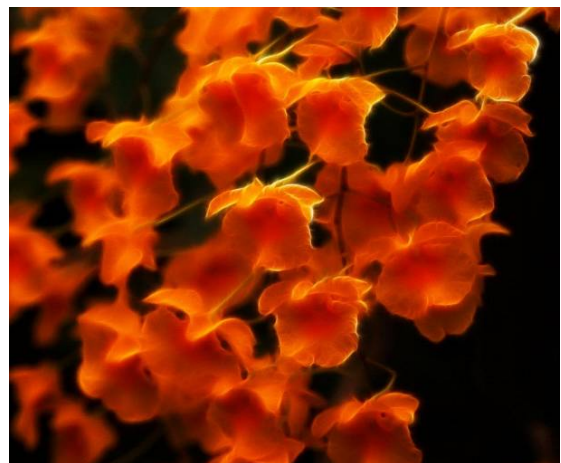
Mini-Planting Bees on Saturday mornings with Curator Dale Arvidsson and smaller numbers of Garden Friends have also started on a regular basis, to add many new plants to the Gardens. April's mini-bee focussed on native annuals and perennial shrubs in the main Visitors Centre precinct and over 150 plants were installed in just two hours by four Gardens Friends.

Over 2800 plants will be added to the Botanic Gardens Living Collection by the Gardens Friends in 2011.

Exhibitions

"Unleashed" - a Photographic exhibition by local artist Cheryl Eagers was held in the Lagoons Gallery from 6 April – 1 May 2011.

It was a dazzling visual exploration (by photographic investigation) on the thoughts of intimacy, desire and possession invoked by orchids, roses and lilies.



Orchid image from "Unleashed"

Consultation

There has been consultation with Engineering Services Program Managers.

Resource Implications

Nil.

Conclusion

The ability to be able to address the backlog of customer requests in all areas of Engineering Services has been facilitated by an improvement to weather conditions.

As previously reported to Council, all available resources have been allocated to remedial works.

It is also evident that significant progress has been made on a number of capital works and flood damage projects.

Officer's Recommendation

THAT this report be received.