



Focus on the Coast Infrastructure

17 March 2011



Priority Projects

- Regional context - REDES
 - Strengthening the regional economy
 - Ensuring an adequate supply of land
 - Focus on centres development
- Local initiatives to achieve regional outcomes



Examples:

- Sparks Road intersection
(to Warnervale Town Centre)
- Porters Creek Wetland Stormwater
Harvesting Scheme



Warnervale Town Centre

- What is it?
 - Commercial, retail, residential, civic, and community development
 - New railway station and bus interchange
- Regional Outcomes
 - House 5,000 people
 - Provide 1,200 new jobs



Warnervale Town Centre





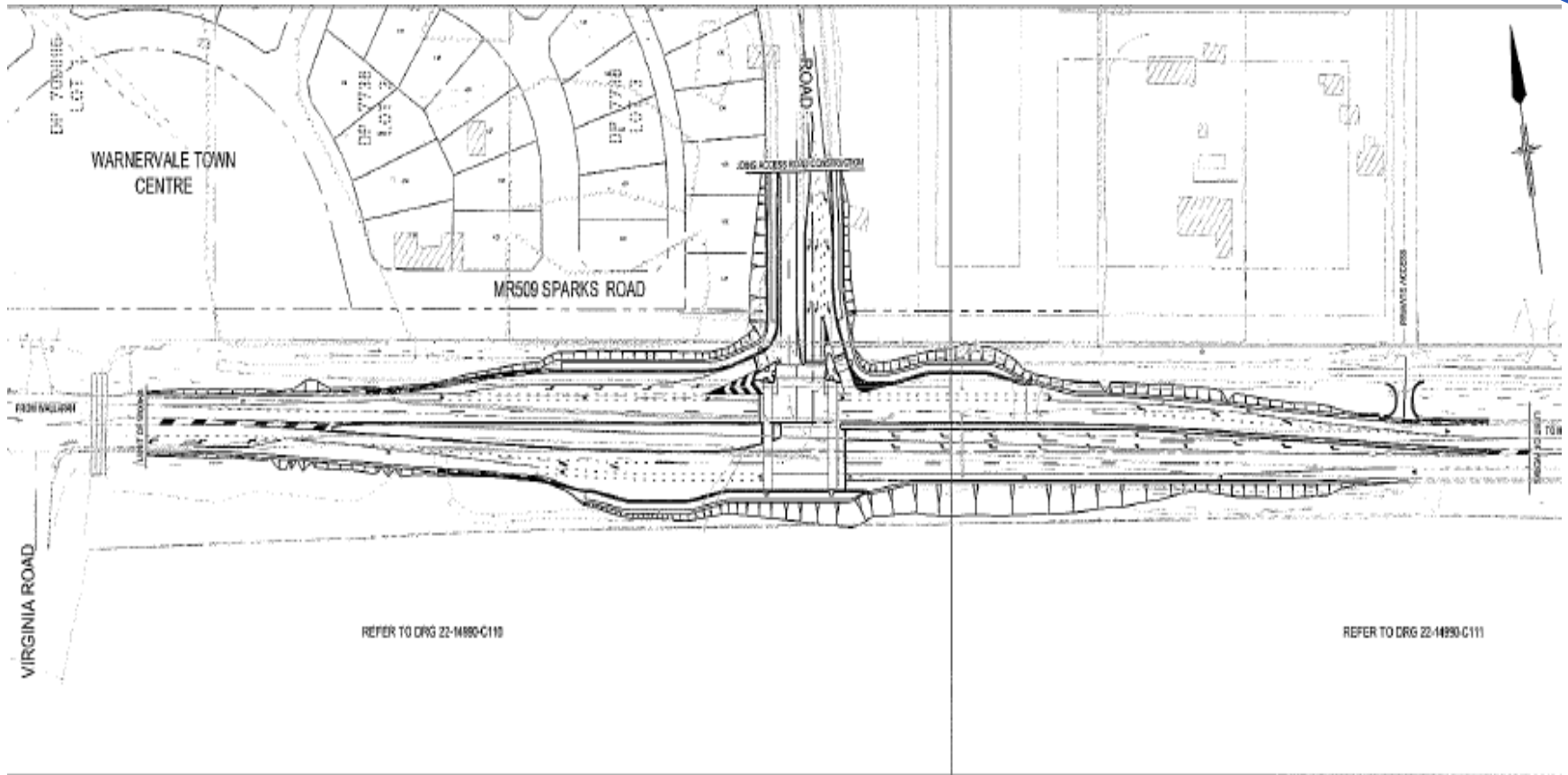
Warnervale Town Centre



**Sparks Rd
Intersection**



Sparks Road Intersection





Sparks Road Intersection

- Key piece of infrastructure
- Will enable development of the town centre
- Preliminary concept plans
- Cost estimate \$8m+



Porters Creek Catchment

- Includes
 - Wyong Employment Zone
 - Warnervale Town Centre
- Regional Outcomes
 - House 12,800 people
 - Provide 8,400 new jobs
 - \$4b of new investment into the economy

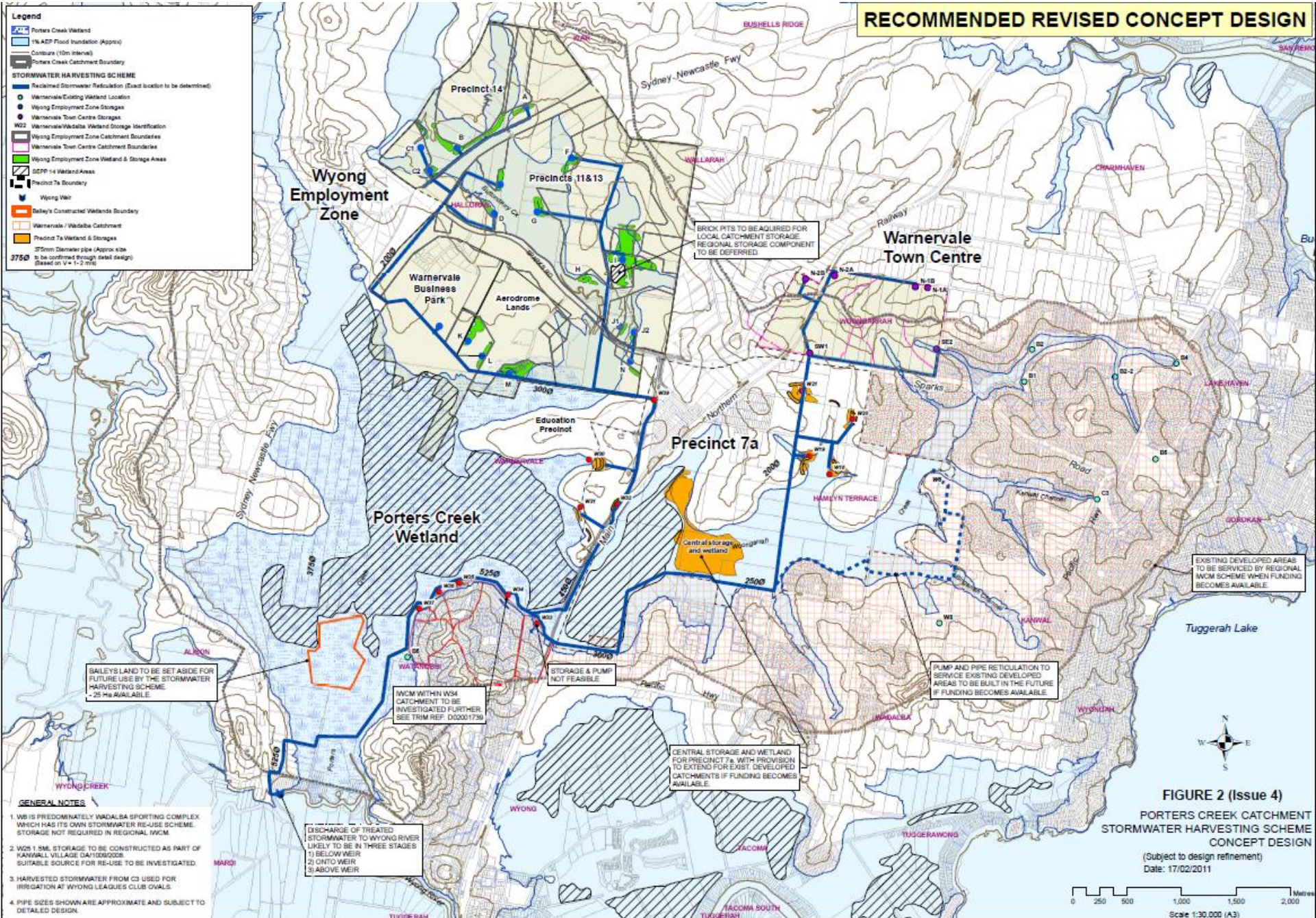
RECOMMENDED REVISED CONCEPT DESIGN

Legend

- Porters Creek Wetland
- 1% AEP Flood Inundation (Approx)
- Contour (10m interval)
- Porters Creek Catchment Boundary

STORMWATER HARVESTING SCHEME

- Reclaimed Stormwater Retention (Exact location to be determined)
- Warnervale/Culling Wetland Location
- Wyong Employment Zone Storages
- Warnervale Town Centre Storages
- W22 Warnervale/Wadialba Wetland Storage Identification
- Wyong Employment Zone Catchment Boundaries
- Warnervale Town Centre Catchment Boundaries
- Wyong Employment Zone Wetland & Storage Areas
- W22P-14 Wetland Areas
- Precinct 7a Boundary
- Wyong Weir
- Baileys Constructed Wetlands Boundary
- Warnervale / Wadialba Catchment
- Precinct 7a Wetland & Storages
- 375mm Diameter pipe (Approx. size to be confirmed through detail design (Based on V=1-2 m/s))



BRICK PITS TO BE ACQUIRED FOR LOCAL CATCHMENT STORAGE REGIONAL STORAGE COMPONENT TO BE DEFERRED

EXISTING DEVELOPED AREAS TO BE SERVICED BY REGIONAL IWCM SCHEME WHEN FUNDING BECOMES AVAILABLE

BAILEYS LAND TO BE SET ASIDE FOR FUTURE USE BY THE STORMWATER HARVESTING SCHEME - 25 HA AVAILABLE

IWCM WITH W34 CATCHMENT TO BE INVESTIGATED FURTHER. SEE TRIM REF. D02001739

STORAGE & PUMP NOT FEASIBLE

PUMP AND PIPE RETICULATION TO SERVICE EXISTING DEVELOPED AREAS TO BE BUILT IN THE FUTURE IF FUNDING BECOMES AVAILABLE

CENTRAL STORAGE AND WETLAND FOR PRECINCT 7a WITH PROVISION TO EXTEND FOR EXIST. DEVELOPED CATCHMENTS IF FUNDING BECOMES AVAILABLE

DISCHARGE OF TREATED STORMWATER TO WYONG RIVER LIKELY TO BE IN THREE STAGES
 1) BELOW WEIR
 2) ONTO WEIR
 3) ABOVE WEIR

- GENERAL NOTES**
1. W8 IS PREDOMINATELY WADIALBA SPORTING COMPLEX WHICH HAS ITS OWN STORMWATER RE-USE SCHEME. STORAGE NOT REQUIRED IN REGIONAL IWCM.
 2. W25 1.5ML STORAGE TO BE CONSTRUCTED AS PART OF KAWWALL VILLAGE DEVELOPMENT. SUITABLE SOURCE FOR RE-USE TO BE INVESTIGATED.
 3. HARVESTED STORMWATER FROM C3 USED FOR IRRIGATION AT WYONG LEAGUES CLUB CHALS.
 4. PIPE SIZES SHOWN ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

FIGURE 2 (Issue 4)
PORTERS CREEK CATCHMENT
STORMWATER HARVESTING SCHEME
CONCEPT DESIGN
 (Subject to design refinement)
 Date: 17/02/2011



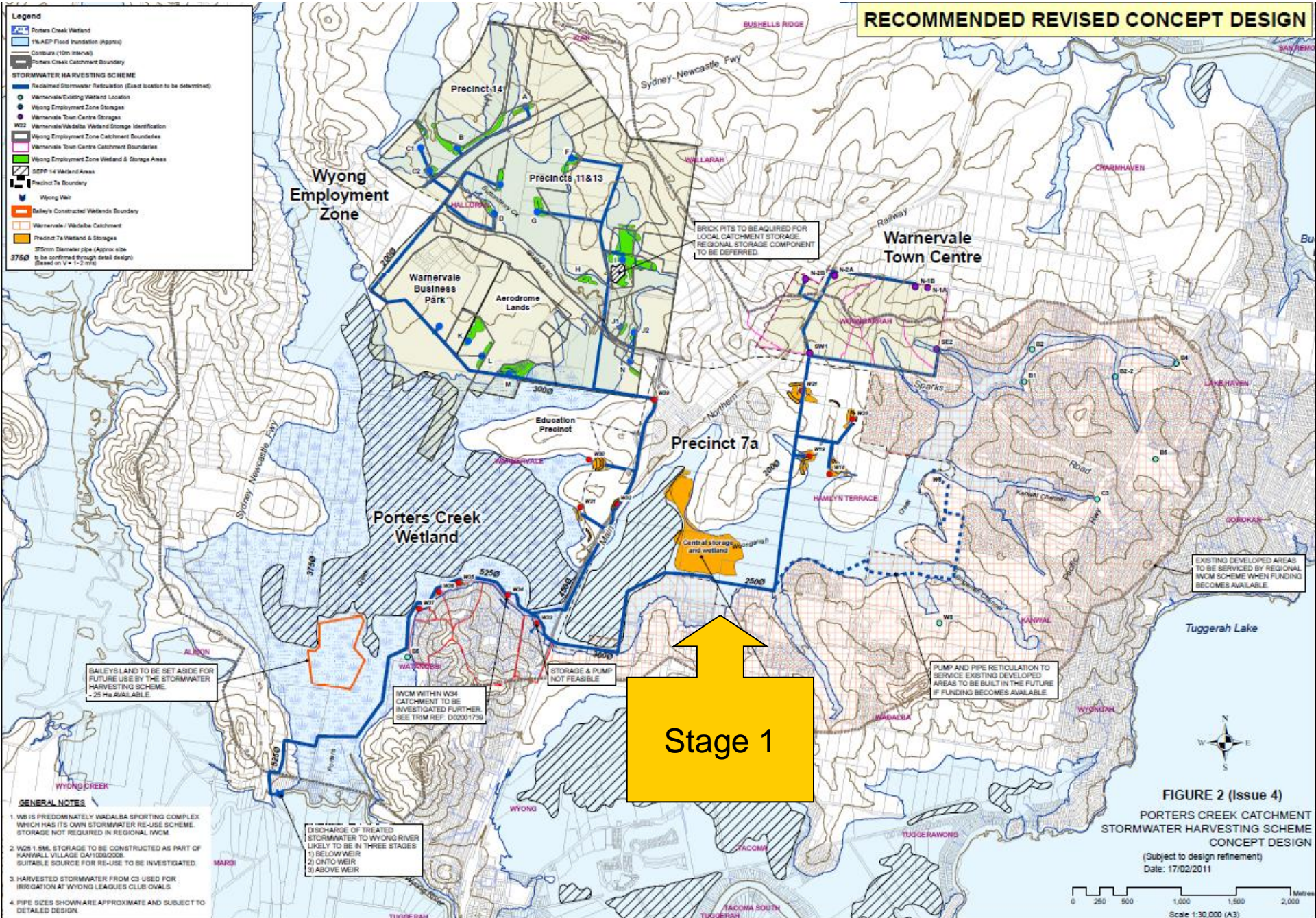
RECOMMENDED REVISED CONCEPT DESIGN

Legend

- Porters Creek Wetland
- 1% AEP Flood Inundation (Approx)
- Contour (10m interval)
- Porters Creek Catchment Boundary

STORMWATER HARVESTING SCHEME

- Reclaimed Stormwater Retention Location (East location to be determined)
- Warnervale/Culling Wetland Location
- Wyong Employment Zone Storages
- Warnervale Town Centre Storages
- W22 Warnervale/Wadalba Wetland Storage Identification
- Wyong Employment Zone Catchment Boundaries
- Warnervale Town Centre Catchment Boundaries
- Wyong Employment Zone Wetland & Storage Areas
- SDPP 14 Wetland Areas
- Precinct 7a Boundary
- Wyong Weir
- Baileys Constructed Wetlands Boundary
- Warnervale / Wadalba Catchment
- Precinct 7a Wetland & Storages
- 375mm Diameter pipe (Approx size to be confirmed through detail design) (Based on V-1-2 2016)



BAILEYS LAND TO BE SET ASIDE FOR FUTURE USE BY THE STORMWATER HARVESTING SCHEME - 25 HA AVAILABLE

BRICK PITS TO BE ACQUIRED FOR LOCAL CATCHMENT STORAGE REGIONAL STORAGE COMPONENT TO BE DEFERRED

INVC WITH W34 CATCHMENT TO BE INVESTIGATED FURTHER. SEE TRIM REF. D02001739

STORAGE & PUMP NOT FEASIBLE

PUMP AND PIPE RETICULATION TO SERVICE EXISTING DEVELOPED AREAS TO BE BUILT IN THE FUTURE IF FUNDING BECOMES AVAILABLE

EXISTING DEVELOPED AREAS TO BE SERVICED BY REGIONAL INVC SCHEME WHEN FUNDING BECOMES AVAILABLE

Stage 1

- GENERAL NOTES**
1. W3 IS PREDOMINATELY WADALBA SPORTING COMPLEX WHICH HAS ITS OWN STORMWATER RE-USE SCHEME. STORAGE NOT REQUIRED IN REGIONAL INVC.
 2. W25 1.5KM STORAGE TO BE CONSTRUCTED AS PART OF KAWWALL VILLAGE DEVELOPMENT. SUITABLE SOURCE FOR RE-USE TO BE INVESTIGATED.
 3. HARVESTED STORMWATER FROM C3 USED FOR IRRIGATION AT WYONG LEAGUES CLUB CHALS.
 4. PIPE SIZES SHOWN ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

DISCHARGE OF TREATED STORMWATER TO WYONG RIVER LIKELY TO BE IN THREE STAGES
 1) BELOW WEIR
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FIGURE 2 (Issue 4)
 PORTERS CREEK CATCHMENT
 STORMWATER HARVESTING SCHEME
 CONCEPT DESIGN
 (Subject to design refinement)
 Date: 17/02/2011





Porters Creek Wetland Stormwater Harvesting Scheme

- Capture and treat urban runoff
- Divert excess stormwater around Porters Creek Wetland and into Wyong River
- Risk Assessment and concept design
- Stage 1 cost estimate up to \$9m



Porters Creek Wetland Stormwater Harvesting Scheme

Refer to Fig. 1 for location and infrastructure details

Legend

- Development Precinct
- Possible options for diverting stormwater from Warnervale Town Centre

Trunk Pipeline

- Segment with associated cost
- 300mm diameter Pipe. Cost of pipeline, land acquisition (if applicable) and easements. (2011 Dollars)

300Ø	\$0.5M
200Ø & 300Ø	\$0.8M
450Ø	\$1.2M
525Ø	\$2.9M
250Ø	\$0.8M
200Ø & 250Ø	\$0.8M

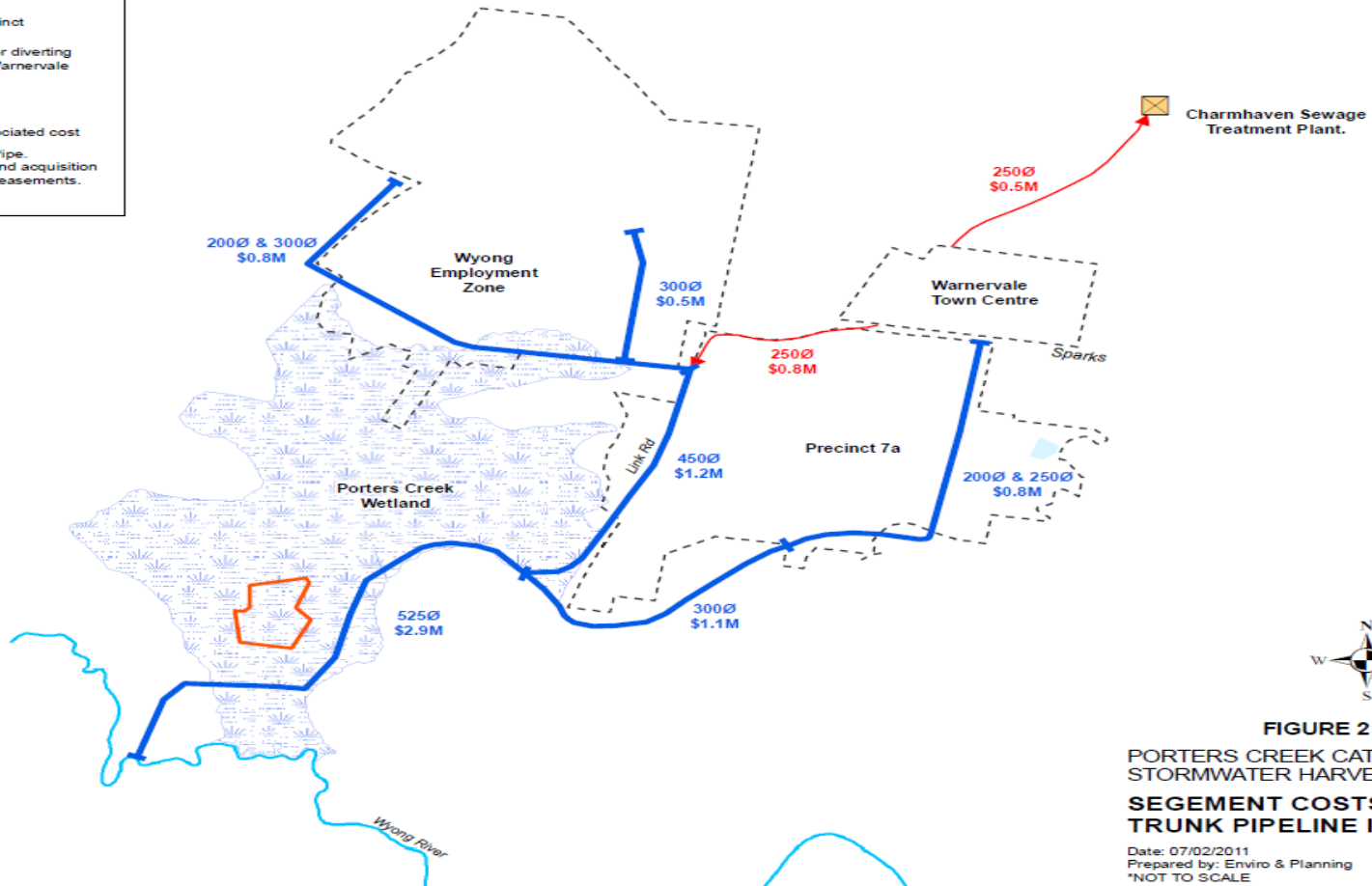
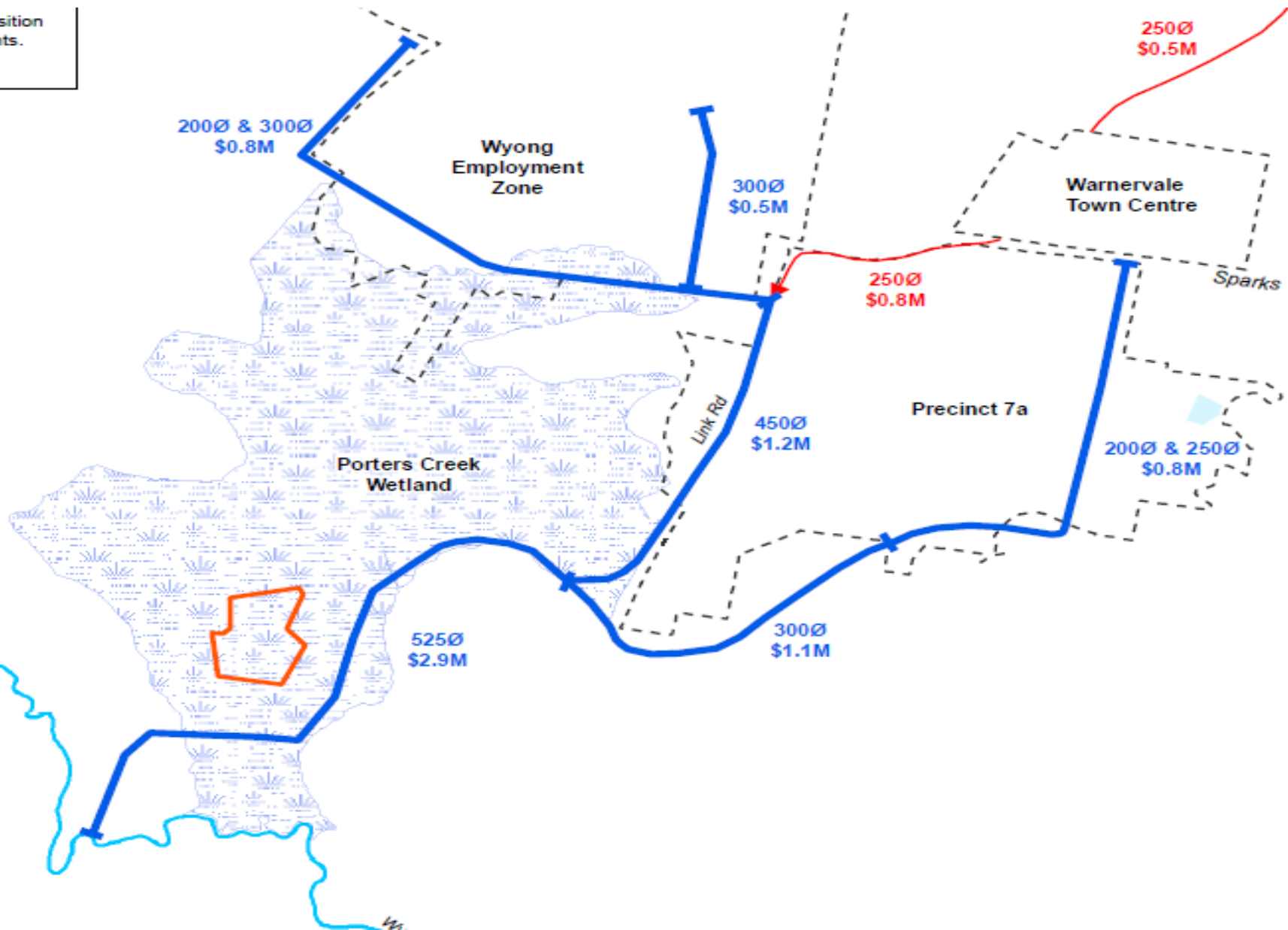


FIGURE 2 (Rev A)
 PORTERS CREEK CATCHMENT -
 STORMWATER HARVESTING STRATEGY
**SEGEMENT COSTS FOR
 TRUNK PIPELINE INFRASTRUCTURE**

Date: 07/02/2011
 Prepared by: Enviro & Planning
 *NOT TO SCALE

Estimated acquisition assessments.



PORTERS CREEK
STOP
SEGMENT
TRIP



Summary

- Sparks Road intersection
(to enable development of Warnervale Town Centre)
- Porters Creek Wetland Stormwater Harvesting Scheme (to enable development of Warnervale Town Centre and the Wyong Employment Zone)