TRAFFIC MANAGEMENT PLAN

REV	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
B	9/6/10	Reviewed following comments	P. Grant	G.O'Mahony	G.O'Mahony
A	7/6/10	Issued for Review	P. Grant		

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1 Purpose

To describe the system and controls to manage traffic on the project.

2 Scope

This work principally relates to the construction a 61km long 450mm diameter pipeline from Bethungra to Bomen (the industrial estate north of Wagga Wagga) on behalf of the APA Group.

See Appendix 1 Schedule of Road Crossings.

The scheduled date for commencement of the works is early June 2010 with an expected duration of two months.

Consultation has taken place with relevant road authorities and required conditions addressed within the Plan

3 Definitions

ROW Right of Way

RTA Road and Traffic Authority of NSW

4 References

AS 1742.3—2009 *Manual of uniform traffic control devices—Part 3: Traffic control devices for works on roads*

5 Key Contacts

Position	Name	Contact Details
Project Manager	Graeme McAinch	0408 453 226
Assistant Project Manager	Garrett O'Mahony	0427 179 529
Construction Supervisor	Bernie Duke	0417 377 337
HSE Adviser	Paul Grant	0428 833 886

6 Traffic Flow Information

Approximate traffic flow data is as follows:

- Light vehicles – a peak of 35 light vehicles is expected for the middle 28 days of the project
- Heavy Vehicles – it is expected that pipe movement from the APA Pipe Stockpile area in Patterson's Road to the Right of Way (ROW) will average daily between 8 – 10

deliveries with a maximum of 5 Pipe Trucks in use. In addition it is expected that a truck and float will be in use on a daily basis moving plant, as necessary, throughout the project. Other vehicles will include a fuel truck, a water tanker and 2 Hiab trucks.

- Oversize Vehicles – it is expected that the use of oversize vehicles will be restricted to deliveries of plant at the commencement of the project, the removal of plant upon completion of the project and the occasional movement of plant from areas of the ROW

Roads that will be impacted during the project will include but not be limited to Olympic Way, Old Junee Road, Burnt Creek Lane, Patterson's Road and Holloways Road.

Increased traffic will also be expected for the duration of the project at and around the Project Office situated at 560 Byrnes Road, Bomen

7 Traffic Management Control Measures

The following measures will be implemented as appropriate:

- Timing – it is expected that the majority of light vehicle movement will occur before and after the peak traffic hours and school zones of 7:00 – 9:00 & 14:00 – 16:00. Pipe deliveries will continue throughout the day. The use of oversize vehicle transport will be arranged, where possible, to avoid peak hours.
- Speed Limits and road conditions will be respected at all times. Pre Start Meetings and Tool Box Talks will be used to emphasise the importance of driving to the conditions, particularly when using unsurfaced roads or following wet weather. All light vehicles will be fitted with an In Vehicle Monitoring System (IVMS). IVMS is a behavioural tool that allows Project Management to identify individual driving behaviours and act on any areas of concern. Data recorded by IVMS include the location, speed, duration and time of journey
- Nominated transport routes will use main roads where possible and be clearly identified with maps provided to ensure drivers are made aware of the requirements to use these routes when travelling to and from the Project Area. See Appendix B for nominated routes identified for access to the ROW. Routes will be subject to confirmation as survey work progresses.
- Prior to commencement of construction works, the Survey and Fencing Crews will clearly define work areas (including access roads/tracks) using a combination of fencing, markers, posts. A map will also be marked up to highlight access roads/tracks and a copy will be provided for every project vehicle.
- Signage will be provided at specific points to enable vehicles to follow the agreed route from main roads to the ROW. Signage will also be provided at entries / exits from the ROW warning other road users of turning vehicles. All signage will be in accordance with AS 1742.3:2009 *Manual of uniform traffic control devices—Part 3: Traffic control devices for works on roads*.
- Car-sharing will be used to minimise the number of vehicle movements transporting crews to and from work areas
- All vehicles will be subject to regular maintenance and inspections to minimise the risk of breakdown
- Land owners will be advised of the progress of the works and the expected dates of extra traffic in their area. Initial notification and further updates are provided to

landowners by the APA Lands Manager. Information provided includes the route of the new pipeline, any required preparatory works, including temporary fencing, the agreed use of any tracks on their land, the proposed time for the works including survey, clear and grade, backfill & remediation and contact details. Following the initial notification, contact is generally made 24 hours before the work commences or earlier where requested

- Traffic Control Plans & Management will be provided by Workforce International Traffic Services, an accredited Traffic Control Provider, and used where required for open trenching of road crossings. Measures would be taken to minimise disruption during open trench crossings to no more than one day. Contingency plans for the erection of signage & barriers will be in place in case of delays.
- Traffic Control will also be used in areas where necessary to ensure any disruption to local traffic is minimised. Signage will also be used to warn road users of any work in the area and specifically where trucks require access to or egress from the ROW.
- Pre and post dilapidation reports will be arranged for major access roads affected by the Project. Impacts considered being attributable to the Project, as determined by the dilapidation reports, following the construction phase of the Project would be remediated by APA. Areas of access to or egress from the ROW will also be monitored and any repairs required carried out upon completion of the works
- Access routes to properties affected will maintained where possible
- Landholders have been advised of the work to be carried out on their property and will be contacted (a minimum of 24 hours) before the date of commencement on their property to arrange for the movement of stock or the erection of temporary fencing where necessary.

8 Emergency Vehicles

It is anticipated that access for emergency vehicles will be maintained at all times during open trenching for road crossings. Where this may not be practicable, the emergency services will be notified of the work prior to commencement on site.

9 Public Notification Process

Landowners will receive prior notification of the expected dates of work commencing on their property.

10 Pipe Stockpile at Patterson's Road

The stockpile area has been selected in line with the Statement of Commitment and addresses the following criteria.

- Is placed in an existing disturbed area
- Avoids vegetation and riparian areas
- Is a minimum of 40m from major water courses and 20m from minor water courses
- Avoids European and Cultural Heritage places or items

- Utilises an existing access
- Does not significantly impact on the existing infrastructure (between 8-10 loads a day for a period of 28 days) and will be subject to a Dilapidation Report both before and after
- Is on flat ground
- Is a temporary facility in an existing rural area set back from the road
- The Land Owner has been consulted

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Appendix 1 Schedule of Road Crossings

YOUNG TO WAGGA - LOOPING

DIRECTIONAL DRILL
THRUST BORING
INDUSTRIAL AREA
TOTAL
A/S ALIGNMENT SHEET

PIPE CROSSINGS : KP 70 - 124.5

No	NAME	CHAINAGE	SHIRE	TYPE	PROPOSED METHOD OF CONSTRUCTION	LENGTH (m) 9.7 WT As per Dwg	ROCK JACKET (m)	POWERCRETE (m)	EXTENT Chainage	Ref DWG
1	CREEK	70149.6	COOTAMUNDRA SHIRE	Minor Watercourse xing	Open Cut	60			70106.8 - 70168.6	YW81 - 0003
2	CREEK	70711.7	COOTAMUNDRA SHIRE							
3	CREEK	70646.7	COOTAMUNDRA SHIRE	Minor Watercourse xing	Open Cut	163			70696.7 - 70859.7	YW81 - 0003
4	CREEK	71368.2	COOTAMUNDRA SHIRE	Minor Watercourse xing					71326.7 - 71411.7	YW81 - 0003
5	CREEK	74411.4	JUNEE SHIRE	Minor Watercourse xing	Open Cut	85			74393.9 - 74439.4	YW81-0003
6	WATERCOURSE	74636.3	JUNEE SHIRE	Minor Watercourse xing	Open Cut	45.5			74626.3 - 74651.3	YW81-0003
7	WATERCOURSE	75113.4	JUNEE SHIRE	Minor Watercourse xing	Open Cut	25			75107.4 - 75117.4	YW81-0003
8	DIRT ROAD	76725.7	JUNEE SHIRE	DIRT RD XING	Open Cut	10			76710 - 76732.0	YW81-0003
9	ULANDRA CREEK	76962.1	JUNEE SHIRE	CREEK	Open Cut	22			76955.5 - 76970.6	YW81-0001
10	WATERCOURSE	77098.7	JUNEE SHIRE	Minor Watercourse xing	Open Cut	15.1			77093.5 - 77106.5	YW81-0003
11	OLD SYDNEY ROAD	77235.8	JUNEE SHIRE	BITUMEN ROAD	Thurst Boring	13			77180.6 - 77247	YW81-0003
12	DIRT ROAD	77922.9	JUNEE SHIRE	DIRT RD XING	Open Cut	97.6	66.4		77901.9 - 77941.4	YW81-0001, YW01-0008
13	LOVERS LANE	78130.7	JUNEE SHIRE			38.5				YW81-0001
14	MAIN LINE VALVE (MLV)	78164.6	BETHUNGRA	DIRT RD XING	Open Cut	82.6			78103.1 - 78165.7	A/S, YW 81-0001, YW04-0006
15	MAIN SOUTHERN RAILWAY	80710.5	JUNEE SHIRE	RAILWAY XING						
16	OLYMPIC WAY	80747.7	RTA	BITUMEN ROAD	Thurst Boring	150.9	150.9		80637.7 - 80788.6	YW81-0010 , YW81-0001
17	FORMED TRACK	80795	JUNEE SHIRE	DIRT RD XING	Open Cut	9.4			80788.6 - 80798.0	YW81-0002
18	WALBRIDGE LANE	83531.5	JUNEE SHIRE	DIRT RD XING	Open Cut	41.6			83510.0 - 83551.6	YW81-0001
19	WATERCOURSE	84995.6	JUNEE SHIRE	Minor Watercourse xing	Open Cut	20			84985.6 - 85005.6	YW81-0003
20	BILLABUNG CREEK	86040.8	JUNEE SHIRE	CREEK	DIRECTIONAL DRILL	77.3		270	86008.3 - 86085.6	YW81-0016
21	BILLABUNG CREEK SOUTH	87181.2	JUNEE SHIRE	CREEK	Open Cut	61.9			87143.7 - 87229.7	YW81-0003
22	ALLAWAH ROAD	88128.4	JUNEE SHIRE	BITUMEN ROAD	Thurst Boring	29.5	26.8		88114.6 - 88141.4	YW81-0001, YW01-0009
23	GULLY	88191.4	JUNEE SHIRE	GULLY XING	Open cut	24			88179 - 88203	A/S, YW81-0003
24	FORMED TRACK	88637.3	JUNEE SHIRE	DIRT RD XING	Open cut	7.7			88633.4 - 88641.1	YW81-0002
25	Illabo to Wantabadgery	91634.1	JUNEE SHIRE	BITUMEN ROAD	Thurst Boring	147.4	116.4		91578.3 - 91694.7	YW81-0001, YW01-0010
26	WATERCOURSE	94234.7	JUNEE SHIRE	Minor Watercourse xing	Open Cut	48			94216.5 - 94264.5	YW81-0003
27	MINOR ROAD	95312.9	JUNEE SHIRE	DIRT RD XING	Open Cut	62.2			95284.0 - 95346.2	YW81-0001
28	WATERCOURSE	96636	JUNEE SHIRE	Minor Watercourse xing	Open Cut	20			96626.5 - 96646.5	YW81-0003
29	WATERCOURSE	99196.2	JUNEE SHIRE	Minor Watercourse xing	Open Cut	177			99044.7 - 99221.7	YW81-0003
30	MINOR ROAD	99296.9	JUNEE SHIRE	DIRT RD XING	Open Cut	26.6			99281.8 - 99308.5	YW81-0001
31	MINOR ROAD	100686.4	JUNEE SHIRE	DIRT RD XING	Open Cut	25.2			100574.0 - 100599.2	YW81-0001
32	WANTIOOL CREEK	101200.8	JUNEE SHIRE	CREEK	Open Cut	20			101190.8 - 101210.8	YW81-0003
33	WANTIOOL (LINE VALVE)	101534		CREEK						
34	MAIN ROAD No. 243	101565.7	JUNEE SHIRE	BITUMEN ROAD	Thurst Boring	98.7	66.4		101534.4 - 101600.8	YW81-0001, YW04-0006
35	WATERCOURSE	104360.1	JUNEE SHIRE	Minor Watercourse xing	Open Cut	27			104337.7 - 104364.7	YW81-0003
36	WATERCOURSE	104745.1	JUNEE SHIRE	Minor Watercourse xing	Open Cut	29			104727.1 - 104756.1	YW81-0003
37	MINOR ROAD	104926.9	JUNEE SHIRE	DIRT RD XING	Open Cut	25.2			104903.9 - 104929.1	YW81-0001
38	WATERCOURSE	105626.6	JUNEE SHIRE	Minor Watercourse xing	Open Cut	18			105617.6 - 105635.6	YW81-0003
39	BURNT CREEK LANE	106442.1	JUNEE SHIRE	DIRT RD XING	Open Cut	28.1			106427.4 - 106455.5	YW81-0001
40	ROCKY CREEK	107701.3	JUNEE SHIRE	CREEK	Open Cut	32			107687.0 - 107719.0	YW81-0003
41	ROCKY CREEK	108214.4	JUNEE SHIRE	CREEK	Open Cut	52			108188.4 - 108240.4	YW81-0003
42	WATERCOURSE	108348	JUNEE SHIRE	Minor Watercourse xing	Open Cut	9.7			108347.4 - 108357.1	YW81-0003
43	BUCKS CREEK	112183.3	JUNEE SHIRE	CREEK	Open Cut	50.3			112160.0 - 112210.3	A/S, YW81-0017
44	PATTERSONS RD	112728.3	JUNEE SHIRE	BITUMEN ROAD	Thurst Boring	62.7	62.7		112702.5 - 112765.2	YW81-0001, YW81-0012
45	DRAINAGE CHANNEL	113384.2	JUNEE SHIRE	DRAINAGE CHANNEL	Thurst Boring	75	12		113378.0 - 113390.0	YW81-0003
46	WATERCOURSE	115122.2	CITY OF WAGGA WAGGA	Minor Watercourse xing	Open cut	28			115103.2 - 115131.2	YW81-0003
47	REEDY CREEK	115537.1	CITY OF WAGGA WAGGA	CREEK	Open cut	9.4			115532.7 - 115542.1	YW81-0003
48	FORMED TRACK	115628.4	CITY OF WAGGA WAGGA	DIRT RD XING	Open cut	4.8			115626.2 - 115631.0	YW81-0002
49	WATERCOURSE	119042.6	CITY OF WAGGA WAGGA	Minor Watercourse xing	Open cut	10.9			119037.6 - 119048.5	YW81-0003
50	HOLLOWAYS RD	119698.8	CITY OF WAGGA WAGGA	DIRT RD XING	Open cut	25.4			119680.1 - 119706.5	YW81-0001
51	WATERCOURSE	121017.5	CITY OF WAGGA WAGGA	Minor Watercourse xing	Open cut	26			121006.5 - 121031.5	YW81-0003
52	MINOR ROAD	122872.1	CITY OF WAGGA WAGGA	DIRT RD XING	Open cut	32.7			122947.1 - 122879.8	YW81-0001
53	MINOR ROAD	124037.8	CITY OF WAGGA WAGGA	DIRT RD XING	Open cut	27.2			124024.2 - 124051.4	YW81-0001
	INDUSTRIAL AREA	124500 - 131000	CITY OF WAGGA WAGGA							
	WATERCOURSE	126931.2	CITY OF WAGGA WAGGA	Minor Watercourse xing	Open cut					YW81-0003
	WATERCOURSE	129136.6	CITY OF WAGGA WAGGA	Minor Watercourse xing	Open cut					YW81-0001
54	Minor Road	129136.6	CITY OF WAGGA WAGGA	DIRT RD XING	Open cut	8500				YW81-0001

Appendix 2 Schedule of Nominated Traffic Routes

MAIN ROAD	SUB-ROAD(S)	ACCESS TO ROW
Byrnes Road	Dampier Road	KP 130
Byrnes Road	Buckman Road	KP 129
Byrnes Road	Trahairs Road	KP 126
Byrnes Road	Holloway Road – Shepard Siding Road	KP 124
Byrnes Road	Holloway Road	KP 120
Byrnes Road	Holloway Road	KP 119
Byrnes Road	Pattersons Road	KP 112
Byrnes Road	Pattersons Road	Access to Pipe Stockpile Area
Byrnes Road	Belmore Road	KP 101
Byrnes Road (Junee)	Belmore Road – Lynton Road – Oades Road	KP 099
Olympic Highway	Brabins Road	KP 095
Olympic Highway	Brabins Road	KP 091
Olympic Highway	Illabo-Allawah Road	KP 088
Olympic Highway	Bore under Highway / Track Crossing	KP 080
Olympic Highway	Old Sydney Road / Undeveloped Road	KP 076
Olympic Highway	Access along fence line	KP 072

These routes will be subject to confirmation as survey progresses