Statement No.

000650

MINISTER FOR THE ENVIRONMENT; SCIENCE

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

PILBARA IRON ORE & INFRASTRUCTURE PROJECT:
PORT & NORTH-SOUTH RAILWAY (STAGE A)

Proposal: Construction of a port at Anderson Point in Port Hedland, which includes shipping facilities, reclaimed areas for iron ore handling infrastructure, stockpiles and ancillary facilities, and a connecting north-south railway over a distance of approximately 345 kilometres to resources in the east Pilbara at Mindy Mindy, as documented in schedule 1 of this statement.

Proponent: Fortescue Metals Group Limited

Proponent Address: 50 King's Park Road
WEST PERTH WA 6005

Assessment Number: 1505

Report of the Environmental Protection Authority: Bulletin 1173

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

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3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

1. the environmental factors of the proposal have not changed significantly;

2. new, significant, environmental issues have not arisen; and

3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Auditing and Performance Review

5-1 The proponent shall prepare an audit programme and submit compliance reports to the Department of Environment which address:

1. the status of implementation of the proposal as defined in schedule 1 of this statement;

2. evidence of compliance with the conditions and commitments; and

3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

5-2 The proponent shall submit a performance review report every five years following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:

1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best practicable measures available;

3. significant improvements gained in environmental management, including the use of external peer reviews;

4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

6 Railway Corridor Disturbance

6-1 The proponent shall not disturb Part 1 or Part 2 of the railway corridor, as defined in schedule 1, other than in accordance with a Railway Corridor Disturbance Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the following agency will be obtained:

- Department of Conservation and Land Management.

The Railway Corridor Disturbance Management Plan shall set out the measures for:

1. flora (including significant species), fauna, ethnographic and archaeological surveys prior to disturbance;

2. physical and graphical delineation of areas to be disturbed, including borrow pits;

3. avoidance and management of significant vegetation, flora and aboriginal sites; and

4. progressive surveying of total area disturbed.

6-2 The total disturbed area associated with construction of Part 1 of the railway corridor (as defined in schedule 1, including borrow pit areas) shall not exceed 2385 hectares without prior written authorisation of the Minister for the Environment.

6-3 The total disturbed area associated with construction of Part 2 of the railway corridor (as defined in schedule 1, including borrow pit areas) shall not exceed 715 hectares without prior written authorisation of the Minister for the Environment.

6-4 The proponent shall implement the Railway Corridor Disturbance Management Plan required by condition 6-1.

6-5 The proponent shall make the Railway Corridor Disturbance Management Plan required by condition 6-1 publicly available.

7 Fauna

7-1 For the portion of the project area which lies outside the Port Hedland Port Authority Boundary, the proponent shall conduct fauna surveys prior to ground-disturbing activities, and if significant fauna are identified, shall not disturb the land surface until significant fauna have been relocated or otherwise appropriately protected in accordance with a Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the following agency will be obtained:

- Department of Conservation and Land Management.

The Fauna Management Plan shall set out measures for:

1. follow-up surveys and delineation of significant fauna populations;

2. identifying suitable relocation sites and relocation techniques or other means of ensuring their ongoing appropriate protection; and

3. monitoring and reporting the success of relocation or other agreed means of appropriate protection employed.

7-2 The proponent shall implement the Fauna Management Plan required by condition 7-1.

7-3 The proponent shall make the Fauna Management Plan required by condition 7-1 publicly available.

8 Surface Water

8-1 For the portion of the project area which lies outside the Port Hedland Port Authority Boundary, the proponent shall not interfere with surface water flow other than in accordance with a Surface Water Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority prior to commencement of construction.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agencies will be obtained:

- Department of Conservation and Land Management; and
- Water and Rivers Commission.

The Surface Water Management Plan shall:

1. establish existing surface flow regimes; and

2. identify significant surface water dependent ecological systems which may be impacted by changes to surface water regimes;

and shall set out measures for:

3. controlling excessive turbidity caused by erosion directly related to railway infrastructure;

4. minimising the potential for contaminants to enter waterways;

5. maintaining the integrity of flow paths and water quantities to protect surface water dependent ecological systems; and

6. monitoring and reporting of any changes in surface water flow regimes caused by implementation of the proposal, and impacts on surface water dependent ecological systems.

8-2 The proponent shall implement the Surface Water Management Plan required by condition 8-1.

8-3 The proponent shall make the Surface Water Management Plan required by condition 8-1 publicly available.

8-4 In the event that adverse impacts on surface water dependent ecosystems are identified, the proponent shall develop and implement appropriate contingencies.

9 Rail Corridor Rehabilitation

9-1 For the portion of the project area which lies outside the Port Hedland Port Authority Boundary, the proponent shall rehabilitate all areas not required for ongoing operations in accordance with a Rail Corridor Rehabilitation Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the following agency will be obtained:

- Department of Conservation and Land Management.

The Rail Corridor Rehabilitation Plan shall set out measures for:

1. identification of disturbed areas not required for ongoing operations;
2. topsoil management;
3. borrow pit management;
4. weed management during operations;
5. restoration of fauna habitat areas lost or modified during construction activities, fauna habitat reconstruction, and rehabilitation of disturbed areas (including rehabilitation of mulga communities);
6. the derivation of completion criteria;
7. monitoring the success of rehabilitation against completion criteria;
8. maintenance of rehabilitation; and
9. progressive surveying of total area rehabilitated.

9-2 The proponent shall rehabilitate not less than 1600 hectares of land disturbed for the railway construction corridor (1265 hectares for Part 1 and 335 hectares for Part 2), access tracks, yards and other infrastructure, unless written authorisation has been obtained from the Minister for the Environment to vary this requirement.

9-3 The proponent shall implement the Rail Corridor Rehabilitation Plan required by condition 9-1.

9-4 The proponent shall make the Rail Corridor Rehabilitation Plan required by condition 9-1 publicly available.

10 Weed Management

10-1 The proponent shall manage weeds during construction and operation of the project in accordance with a Weed Hygiene and Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the following agencies will be obtained:

- Department of Conservation and Land Management; and
- Department of Agriculture.

The Weed Management Plan shall set out measures for:

1. identifying target weeds, having regard for weed species outside the corridor;

2. weed control during construction and operation;

3. hygiene and wash-down for all plant and equipment; and

4. monitoring the success of weed control.

10-2 The proponent shall implement the Weed Hygiene and Management Plan required by condition 10-1.

10-3 The proponent shall make the Weed Hygiene and Management Plan required by condition 10-1 publicly available.

11 Subterranean Fauna Survey and Protection

11-1 Prior to groundwater abstraction, the proponent shall carry out surveys for subterranean fauna and implement actions to protect subterranean fauna in accordance with a Subterranean Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agencies will be obtained:

- Department of Conservation and Land Management;
- Water and Rivers Commission; and
- Western Australian Museum.

The Subterranean Fauna Management Plan shall set out measures for:

1. surveying and identifying subterranean fauna species in areas potentially affected by groundwater abstraction, including comparison with data from subterranean fauna surveys of surrounding areas;

2. monitoring groundwater drawdowns;

3. monitoring subterranean fauna populations in areas affected by groundwater drawdown;

4. determining acceptable drawdown levels; and

5. management actions to protect significant subterranean fauna species in the event that trigger levels are exceeded.

11-2 The proponent shall implement the Subterranean Fauna Management Plan required by condition 11-1.

11-3 The proponent shall make the Subterranean Fauna Management Plan required by condition 11-1 publicly available.

12 Mangrove Protection

12-1 The proponent shall not cause the loss of, or serious damage to, any mangroves or their habitats other than in accordance with a Mangrove Protection Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agency will be obtained:

- Department of Conservation and Land Management.

The Mangrove Protection Plan shall set out:

1. clear physical and geographical delineation of areas (in the form of spatially referenced maps and electronic data), including the different mangrove associations and habitats, to be directly and indirectly disturbed within, and adjacent to, the project area during construction and operations;

2. descriptions of how and when during the construction period the different mangrove associations and habitats delineated by meeting the requirements of item 1 above will be progressively disturbed;

3. procedures for progressive surveys of total area disturbed to confirm the descriptions required by item 2 above, as well as the management actions to be implemented to ensure that disturbance is consistent with the information required by item 1 above;

4. based on current scientific understanding, the cause and effect pathways for the physical and biological stressors, associated with construction and operation of the proposal, on mangroves, their habitats and the key ecological processes which contribute to ecosystem integrity;

5. using information from item 4 above, the early warning indicators of change in the condition/health of:
   a. individual mangroves;
   b. different mangrove associations and their habitats, and
   c. processes and conditions required for mangrove survival;

6. the measures (including quantitative criteria) for each of the early warning indicators identified in item 5 above which specify acceptable mangrove and mangrove habitat condition/health, and the ranges within which processes and conditions required for mangrove survival may vary (criteria to be established on the basis of pre-construction baseline data collected from the project area and/or data from suitable reference sites located outside the zone of influence of the proposal);

7. the procedures for documenting baseline mangrove and mangrove habitat abundance, distribution and condition/health (using scientifically appropriate quantitative measures), and the status of relevant processes and conditions required for mangrove survival in areas which may be directly or indirectly impacted by the proposal and at appropriate reference sites prior to the commencement of construction;

8. the procedures, including clear descriptions of standard methodologies, for regular monitoring of the indicators of mangrove and mangrove habitat abundance, distribution and condition/health, including relevant processes and conditions required for mangrove survival, at sites within the area of influence of the proposal, and at suitable reference sites as appropriate, throughout the life of the project, and for a minimum of two years post-closure if the facility is decommissioned;

9. the management actions which will be implemented to restore mangrove and mangrove habitat condition/health (including processes and conditions required for mangrove survival) to acceptable levels in the event that monitoring reveals that criteria required by item 6 above are not being met;

10. the links between this Plan and the Port Area Rehabilitation Plan required by condition 13, and how these links are to be addressed; and

11. procedures for reporting monitoring data, including assessments of performance against criteria and implementation of any management actions to improve performance.

12-2 The total area of core closed-canopy mangroves directly and indirectly disturbed within the port project area shall not exceed 14.8 hectares, as depicted/specified by meeting the requirements of condition 12-1(1) above, without prior written authorisation of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: For the purposes of this condition, 'core closed-canopy mangroves' are defined as the following mangrove associations: Closed canopy *Rhizophora stylosa*; Closed canopy *Rhizophora stylosa, Avicennia marina;* Closed canopy *Avicennia marina* (seaward); Closed canopy *Avicennia marina* (landward); and Low open woodland *Avicennia marina*.

12-3 The proponent shall implement the Mangrove Protection Plan required by condition 12-1.

12-4 The proponent shall make the Mangrove Protection Plan required by condition 12-1 publicly available.

13 Port Area Rehabilitation

13-1 For that portion of the project area which lies within the Port Hedland Port Authority Boundary, the proponent shall rehabilitate all areas not required for ongoing operations in accordance with a Port Area Rehabilitation Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agency will be obtained:

- Department of Conservation and Land Management.

The Port Area Rehabilitation Plan shall set out measures for:

1. identification of disturbed areas not required for ongoing operations;

2. establishing rehabilitation objectives and completion criteria;

3. implementation of management actions in the event that the completion criteria referred to in item 2 are not met;

4. rehabilitation and/or revegetation of all areas not required for operations using species which occur naturally in Port Hedland;

5. the rehabilitation of not less than 0.74 hectares of core closed-canopy mangroves on both sides of the rail loop at the port facility;

6. establishing a schedule, including timing, for mangrove rehabilitation and revegetation works;

7. monitoring the success of rehabilitation, regeneration and revegetation against completion criteria;

8. propagating and/or transplanting seedlings, including the establishment of a nursery to provide seedling stock for mangrove rehabilitation using local stock with a mixture of species and at the proportions which occur naturally in Port Hedland;

9. protecting juvenile plants from effects which reduce viability (for example, contamination, siltation, wind and tidal erosion, excessive evaporation);

10. contingencies and remedial works to be implemented if the objectives or completion criteria are not met, or rehabilitation strategies are not being implemented; and

11. reporting on rehabilitation success against completion criteria.

13-2 The proponent shall implement the Port Area Rehabilitation Plan required by condition 13-1.

13-3 The proponent shall make the Port Area Rehabilitation Plan required by condition 13-1 publicly available.

14 Dredging and Reclamation Monitoring and Management

14-1 The proponent shall monitor and control water quality changes associated with dredging operations in accordance with a Dredging and Reclamation Monitoring and Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agencies will be obtained:

- Department for Planning and Infrastructure (Maritime Division);
- Department of Fisheries;
- Department of Conservation and Land Management; and
- Port Hedland Port Authority.

The objectives of the Plan are to:

- define the zones of influence of turbidity plumes generated by dredging and reclamation activities; and

- protect the environmental values of the port (including marine communities and habitats, mangrove ecosystem, near-shore tidal reef system and recreational fishing) by controlling impacts associated with dredging and reclamation which may adversely impact on these values, such as sedimentation and erosion, water turbidity and contaminants.

The Dredging and Reclamation Monitoring and Management Plan shall set out:

1. arrangements for dredging, including locations of areas and volumes of material to be dredged and disposed of, type of dredge(s) to be used, and mode of operation;

2. the most probable and worst-case timing and duration of dredging and spoil disposal activities;

3. procedures and/or measures for management of dredging and reclamation to meet timelines identified in item 2, including contingencies for addressing unforseen delays;

4. and spatially define the water quality objectives to be achieved and the key environmental attributes, (including sensitive marine habitats) which require protection from reduced water quality during dredging and reclamation activities;

5. the results of plume dispersion modelling (using an appropriate validated model for the area) showing most probable and worst-case turbidity plume scenarios in terms of plume location, intensity, effects on water quality and likely frequency/duration of interaction with key sensitive environmental attributes, including reef areas, which occur inside the Port Hedland Inner Harbour (See note 1 below), and outside the Port Hedland Inner Harbour from the western end of Finucane Island to Cooke Point;

6. measures for undertaking a determination of risks posed by dredging and reclamation activities to water quality objectives and the key sensitive environmental attributes, including sensitive marine communities and habitats (See note 2 below), based on the outcomes of modelling required by item 5;

7. details of a monitoring programme which focuses on relevant water quality parameters and sublethal indicators of stress in the key sensitive environmental attributes, identified as being at risk from dredging and reclamation activities, including the establishment of management triggers which if not met will require the implementation of a management response;

8. details of a program to monitor water quality parameters, which at a minimum include turbidity, dissolved oxygen and pH at sites located inside and outside the Port Hedland Inner Harbour and which includes the establishment of management triggers based on data collected from appropriately located unimpacted reference sites against which monitoring data is to be evaluated;

9. management actions and contingency measures (including deployment of silt curtains, temporary cessation of dredging and/or reclamation activities) to be implemented in the event that management triggers related to water quality objectives and key environmental attributes (including sensitive marine communities and habitats) are exceeded;

10. evaluation of sediment quality data against relevant guidelines using procedures recommended in the *National Ocean Disposal Guidelines (Commonwealth of Australia, 2002)*;

11. the management and control of return water from the reclamation area to ensure no loss of mangrove systems, outside the areas referred to in condition 12-1(1);

12. the spoil disposal and reclamation process, including management of reclamation ponds and dewatering, total storage volume of the reclamation area and final level(s) of the reclamation area;

13. measures for surface drainage management for the reclamation/spoil disposal area, including water harvesting and contingencies for extreme storm events (for example, tropical cyclones); and

14. reporting.

Note 1: Within these conditions, "the Port Hedland Inner Harbour" is defined as the area landward of a line between Hunt Point and Airey Point and within the Port Hedland Port Authority Boundary.

Note 2: The term "sensitive marine communities and habitats" means mangroves, reef habitats (including those located outside the Port Hedland Inner Harbour), and the biota associated with these habitats.

14-2 The total area of land disturbed by dredging and reclamation within the Port Hedland Port Authority Boundary shall not exceed 300 hectares without prior written authorisation of the Minister for the Environment.

14-3 The proponent shall implement the Dredging and Reclamation Monitoring and Management Plan required by condition 14-1.

14-4 The proponent shall make the Dredging and Reclamation Monitoring and Management Plan required by condition 14-1 publicly available.

15 Introduced Marine Species and Dredging Equipment

15-1 Prior to commencement of dredging and within 48 hours following entry of the dredging equipment and other vessels associated with the proposal within the Port Hedland Port Authority Boundary, the proponent shall arrange and undertake an inspection by an appropriately qualified expert to ensure that:

1. there is no sediment on or within the dredging equipment;

2. ballast water (if any) has been managed according to the Australian Quarantine Inspection Service ballast water requirements; and

3. any fouling organisms on or in the dredging equipment do not present a risk to the ecosystem integrity of the marine waters of Port Hedland.

15-2 The proponent shall manage any sediment or fouling organism found as a consequence of the inspection required by condition 15-1 to the requirements of the Minister for the Environment.

15-3 In the event that the dredging equipment is to be transferred to another location within Western Australian territorial waters following completion of dredging and disposal activities, the proponent shall undertake an investigation employing an appropriately qualified marine scientist to identify the presence of / the potential for introduced marine pest species.

15-4 In the event that any introduced marine pest species are detected, the proponent shall put in place a Marine Pests Management Strategy to ensure that introduced marine pest species are not transferred to other locations within Western Australian territorial waters.

Note: In auditing compliance in relation to the reporting requirements of conditions 15-1 to 15-4, the Environmental Protection Authority expects that advice from the following agencies will be obtained:

- Department of Fisheries; and
- Australian Quarantine Inspection Service.

16 Acid Sulphate Soils

16-1 For that portion of the project area which lies within the Port Hedland Port Authority Boundary, the proponent shall not disturb soils, other than in accordance with an Acid Sulphate Soil Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The Acid Sulphate Soil Management Plan shall set out measures for:

1. identification and description of the occurrence of actual and potential acid sulphate soils on site to be disturbed;

2. management strategies to be implemented;

3. timing of environmental management initiatives;

4. performance criteria to be used to assess the effectiveness of acid sulphate soil management and monitoring;

5. monitoring of soils, surface and groundwater quality to enable the effectiveness of the management strategy to be assessed;

6. contingencies to be implemented on site to deal with unexpected events or in the event of failure of management, including remedial actions and restoration; and

7. reporting on environmental performance objectives.

16-2 The proponent shall implement the Acid Sulphate Soil Management Plan required by condition 16-1.

16-3 The proponent shall make the Acid Sulphate Soil Management Plan required by condition 16-1 publicly available.

17 Dust

17-1 The proponent shall monitor and control dust associated with construction and operation of the port in accordance with a Dust Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following agencies will be obtained:

- Department of Industry and Resources; and
- Town of Port Hedland.

The Dust Management Plan shall set out measures for:

1. defining an objective tool for measuring effectiveness of dust management strategies (for example, monitoring for benchmarking and performance evaluation);

2. controlling the generation of dust during construction and operations;

3. researching and justifying the application of best practice dust mitigation and management during construction and operations;

4. establishing and implementing a comprehensive ambient air quality monitoring programme, including validation of source emissions estimates;

5. participating in a consolidated monitoring programme, involving major industry in the Port Area;

6. continually improving and reducing emissions;

7. a complaints process; and

8. reporting monitoring results.

17-2 The proponent shall review air quality modelling and assumptions presented in the Public Environmental Review and Response to Submissions, in the event that the cumulative impact assessment study commissioned by the Department of Industry and Resources indicates a significant variance from that modelling.

17-3 The proponent shall implement the Dust Management Plan required by condition 17-1.

17-4 The proponent shall make the Dust Management Plan required by condition 17-1 publicly available.

18 Operations Noise

18-1 The proponent shall not conduct port or rail operations other than in accordance with an Operations Noise Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that advice of the following entity will be obtained:

- Town of Port Hedland.

The Operations Noise Management Plan shall address noise emissions from the port and rail operations associated with the proposal and set out measures for:

1. achieving compliance with the *Environmental Protection (Noise) Regulations 1997*, for port operations;

2. achieving compliance with sound levels of $35dBL_{Aeq,1hour}$ and $45dBL_{Amax}$ when determined within indoor sleeping areas, and $40dBL_{Aeq,1hour}$ and $50dBL_{Amax,}$ when determined within indoor living areas of dwellings on affected noise-sensitive premises, for rail operations;

3. identification of noise-sensitive premises affected by noise emissions from either port or rail operations;

4. identification of noise management measures to minimise disturbances to dwellings on affected noise-sensitive premises;

5. implementation of noise management measures as far as practicable;

6. noise monitoring and reporting; and

7. a community consultation and complaints process.

18-2 The proponent shall implement the Operations Noise Management Plan required by condition 18-1.

18-3 The proponent shall make the Operations Noise Management Plan required by condition 18-1 publicly available.

Procedures

1. Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.

2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.

3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

4. Due to the requirements for adaptive management in the implementation of this proposal, the Environmental Protection Authority may vary the criteria referred to in condition 14 from time to time, provided that the result of any such changes is unlikely to lead to unacceptable impacts on the environmental values of local marine ecosystems.

Notes

1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.

2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

3. The proponent is required to obtain Permits for this project to Obstruct or Interfere with Bed and Banks, under the provisions of section 17 of the *Rights in Water and Irrigation Act 1914*.

4. The proponent is required to obtain a 5C Licence to take groundwater for all Stage A railway construction water requirements and ancillary water use for this project under the provisions of the *Rights in Water and Irrigation Act 1914*.

5. The proponent is required to prepare and implement a Construction Noise Management Plan in accordance with Regulation 13 of the *Environmental Protection (Noise) Regulations 1997*, to the requirements of the Town of Port Hedland.

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

03 OCT 2005

Schedule 1

The Proposal (Assessment No. 1505)

The proposal involves the construction of a port facility at Anderson Point in Port Hedland and a connecting north-south railway (to be constructed in two parts) stretching approximately 345 kilometres south south-east to iron ore resources at Mindy Mindy.

The proposal has the following main components:

- the staged construction of a 345 kilometre railway line from Port Hedland to mining operations at Mindy Mindy (see Figure 1). Part 1 involves the construction of a 244 kilometre line from Port Hedland to the Chichester Ranges and Part 2 involves the construction of a 101 kilometre line from the Chichester Ranges to Mindy Mindy ; and

- construction of port facilities consisting of rail loop, car dumper, stockyard and ore handling facilities (including two stackers and a single reclaimer), rescreening facility and product conveyor to a wharf and shiploader at Anderson Point in Port Hedland (see Figure 2).

The key characteristics of the proposal are shown in Table 1 below.

Table 1 - Key Proposal Characteristics

Element	Description
General	
Construction period Project life Export tonnage	20 months approximately 20+ years 45Mtpa
Railway	
Length Support Infrastructure	345 km approximately (Part 1: 244 km, Part 2:101 km) Sidings Administration offices and warehouses Trip servicing facilities Service and repair workshop Rail loops and marshalling yards Maintenance facilities Substations Communication systems
Port	
Stockyard Materials Handling Port development Buildings	2.5Mt capacity (live) Car dumper Conveyors and transfer points Rescreening plant 2x Stackers (8,000 tph each) Reclaimer (10,000 tph) Single wharf 750m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph) Dredging 3.3Mm^3 Shift office Control room and amenities Wharf amenities Substations

Element	Description
Infrastructure	
Power Water Fuel Roads Sewerage	17.5 MW from existing system 2 Glpa from existing system 45 Mlpa for locomotives and other vehicles General traffic, port access, rail service Construction – package treatment plant Operations – septic systems
Disturbance Areas*	
Area of railway construction • railway construction corridor • access track, yards, temporary disturbance Area of operating railway • railway corridor • access road, yards, workshops, maintenance yards Area of port facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas) Area of operating port facilities Total operational areas	3,100 ha (2385 ha for Part 1 and 715 ha for Part 2) • 1,500 ha (1115 ha for Part 1 and 385 ha for part 2) • 1,600 ha (1270 ha for Part 1 and 330 ha for Part 2) 1,500 ha (total) • 688 ha (488 ha for part 1 and 200 ha for Part 2) • 812 ha (632 ha for Part 1 and 180 ha for Part 2) 300 ha 100 ha 1,600 ha
Workforce (approximate peak levels)	
Construction Operations Accommodation	Rail – 1,000 personnel Port – 500 personnel Port and rail – 225 personnel Construction – single status in Port Hedland Track camps for rail Permanent – new or existing residences in Port Hedland, Newman or permanent rail camp

Key:			
*	includes a contingency	MW	mega watts
Mtpa	Million tonnes per annum	Glpa	giga litres per annum
tph	tonnes per hour	Mlpa	million litres per annum
m	metres	Mt	million tonnes
DWT	dead weight tonne	ha	hectares
Mm^3	million cubic metres	km	kilometre

Figures (attached)

Figure 1 - Pilbara Iron Ore and Infrastructure Project.
Figure 2 - Pilbara Iron Ore and Infrastructure Project – Amended Indicative Port Layout.

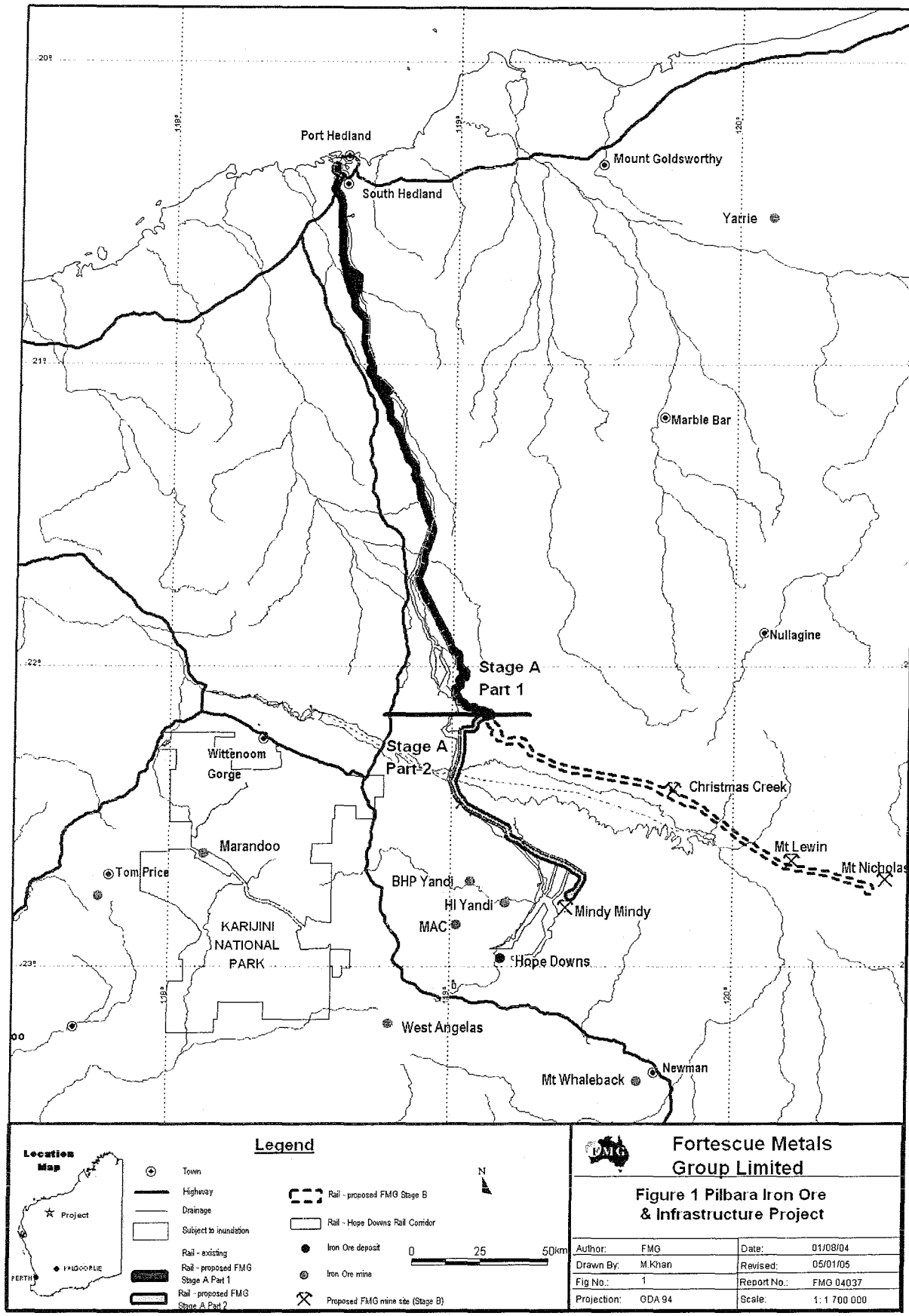


Figure 1: Pilbara Iron Ore and Infrastructure Project

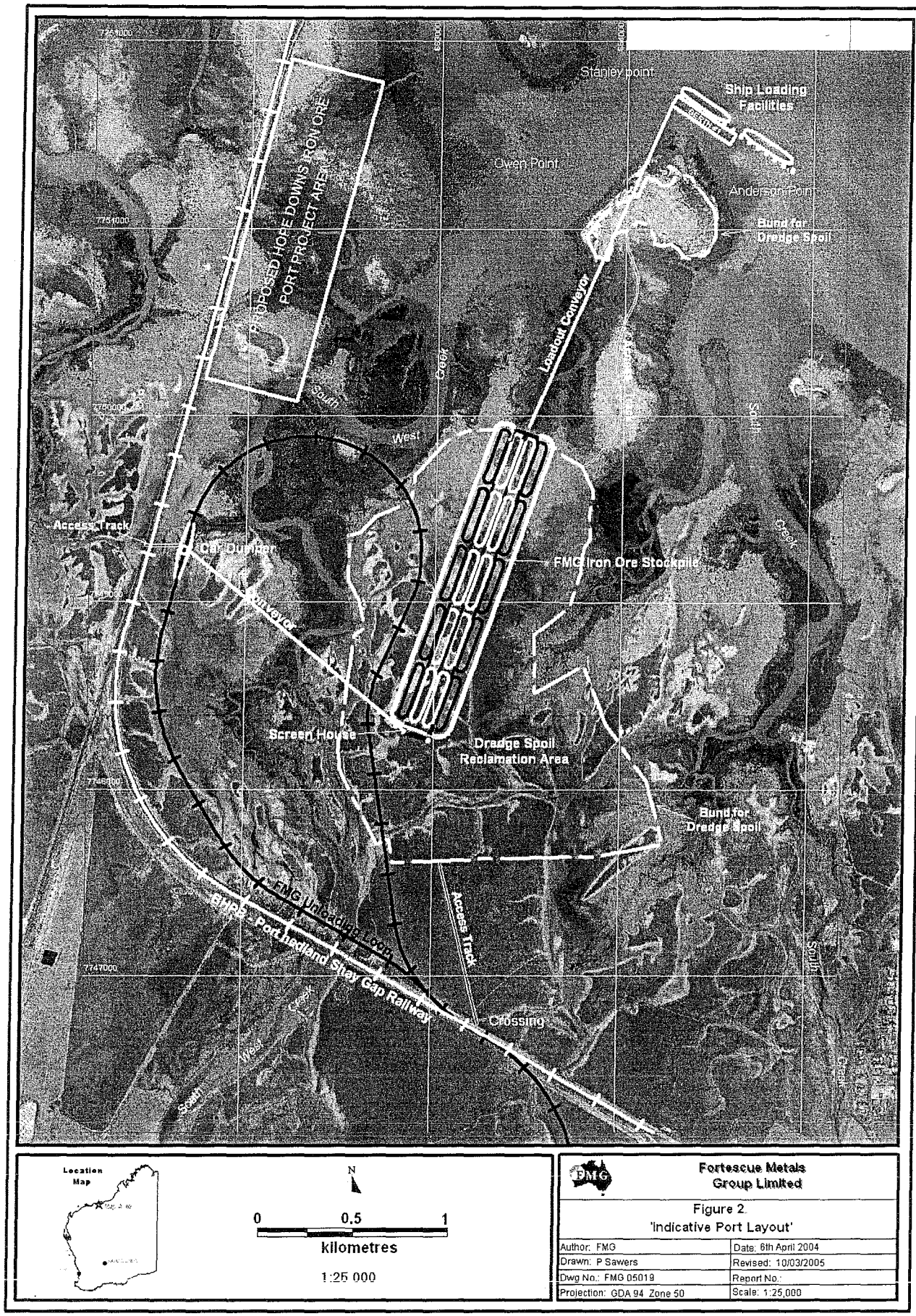


Figure 2: Pilbara Iron Ore and Infrastructure Project – Amended Indicative Port Layout.

Proponent's Consolidated Environmental Management Commitments

(September 2005)

Pilbara Iron Ore & Infrastructure Project: Port & North-South Railway (Stage A)

Fortescue Metals Group Limited

Schedule 2

Proponent's Environmental Management Commitments – September 2005
Pilbara Iron ore & Infrastructure Project: Port & North-South Railway (Stage A) - Assessment No. 1505

Note: The term "commitment" as used in this schedule includes an entire row of the following table and its separate parts.

Topic	Objectives	No.	Actions	Timing	Advice from
Offset measures	EPA Position Statement No 9 - offsets	1.	Fund a detailed research program into relevant taxonomic research at PhD level or equivalent for three years on: • the potential impacts of the project on *Mulgara* or other threatened species; and • taxononomic research of *Acacia aneura* in the Pilbara or some other poorly known taxa such as Malvacea or Tiliacea.	During construction	CALM
Offset measures	EPA Position Statement No 9 - offsets	2.	Undertake and fund environmental baseline mapping and monitoring using airborne hyperspectral data for at least three years, in conjunction with CSIRO, to: • establish an inventory (types, density and geographical/ spatial distribution) of the mangroves surrounding the facility; • undertake research to establish accurate and spatially comprehensive measurements to assess physiological conditions of mangroves; and • establish the pre-facilities level of iron oxide dust deposition on the mangroves and ongoing dust deposition during operations; Or • contribute to a biodiversity initiative of equivalent value.	Prior to port construction	CALM

Topic	Objectives	No.	Actions	Timing	Advice from
Fire Management Plan	Reduce the risk of unplanned fires and provide contingency measures to minimise any impacts in the event that a fire is started.	3.	Have in place and make publicly available a Fire Management Plan to include work procedures for all welding and grinding work, personnel fire hazard procedures, fire response vehicles on site and bushfire contingency plans.	Prior to construction.	CALM
Turtles	Minimise the impact of the port facility on turtles in the port area.	4.	Install frequency-controlled lighting to avoid affecting hatchling and juvenile turtle orientation, and minimise light overspill from the port facility, providing shielding (of lights).	During construction	CALM
Turtles	Minimise the impact of the port facility on turtles in the port area.	5.	Implement a monitoring program to determine the effectiveness of controlled lighting on turtles.	During operations	CALM
Hydrocarbon Management Plan / Oil & Chemical Spill Contingency Plan	To maintain or improve the quality of surface and groundwater, to ensure that existing and potential uses, including ecosystem maintenance is protected.	6.	Have in place and make publicly available, a Hydrocarbon Management Plan / Oil & Chemical Spill Contingency Plan for the Port addressing: • Spill prevention; • Identification of the level of risk posed from contamination by hydrocarbon and chemicals in the area of operations which includes; (a) identification of sensitive areas and measures to protect them; (b) likely types and volumes of hydrocarbons / chemicals.	Prior to port construction.	PHPA DPI FESA

Topic	Objectives	No.	Actions	Timing	Advice from
			• Appropriate procedures to allow rapid assessment of a spill and the mobilisation of response; • Appropriate procedures to control fuel and chemicals handling and berthing contamination; • Appropriate clean up procedures on site according to the level of risk posed; • A first strike response capability is maintained in the event of a spill, which includes the following: (a) equipment appropriate to the level of risk; (b) on site personnel trained in spill response and management. • Appropriate on site arrangements for the disposal of oily and chemical wastes; • Systems in place to monitor and report spills; • Systems to continually monitor and reduce contamination.		
Marine Pest Management Plan	Maintain the ecological function, abundance, species diversity and geographic distribution of marine biota and habitat in order to protect ecosystem health.	7.	Have in place and make publicly available an Introduced Marine Pests Management Plan addressing: • pest species; • monitoring (including supporting any monitoring conducted by PHPA); • regular marine pest surveys (for example every three years); • management measures (including prevention of hull cleaning and scraping at the FMG berth); • compliance with AQIS requirements in relation to ballast water control; and • a management framework which can be implemented to prevent or mitigate any identified environmental impacts.	Prior to construction	PHPA AQIS

Topic	Objectives	No.	Actions	Timing	Advice from
Aboriginal Heritage	To ensure that appropriate consultation occurs with relevant Aboriginal groups in the identification and protection of Aboriginal Heritage sites.	8.	Develop and implement a Cultural Heritage Management Plan, detailing the procedures for consultation with relevant Aboriginal groups and/or their representatives, and the identification, assessment and management of significant Aboriginal Heritage sites within the proposal area.	Prior to construction	DIA Relevant Aboriginal groups, Native Title Groups and/or their represent-atives.
Water usage	To ensure that water conservation measures are implemented.	9.	Develop and implement a Water Management Plan to investigate ways to minimise water use, including water recycling and use of alternative dust suppression measures such as: - enclosing/covering equipment where possible; - sealing roads and high traffic areas; - management of stockpiles; - planting shelter belts; and - harvesting of surface water runoff at the port site to supplement scheme supplies.	Prior to construction	

Key:

AQIS – Australian Quarantine Inspection Service
CALM – Department of Conservation and Land Management
CSIRO – Commonwealth Scientific & Industrial Research Organisation
DIA - Department of Indigenous Affairs
DPI – Department for Planning and Infrastructure
FESA – Fire and Emergency Services Authority
FMG – Fortescue Metals Group
PHPA – Port Hedland Port Authority

Attachment 1– Change to Proposal (Statement 690).

Proposal: PILBARA IRON ORE & INFRASTRUCTURE PROJECT, STAGE A.

Proponent: Fortescue Metals Group Limited

Change: in Schedule 1, Table 1: Key Proposal Characteristics (Assessment no. 1505).

From:

Element	Quantities/Description
Port Development	Dredging 3.3 Mm^3
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	378.4 ha

To:

Element	Quantities/Description
Port Development	Dredging 4.5 Mm^3
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	382.3 ha

Date of Approval: 6/04/06

Attachment to Statement 690

2

Change to Description of Proposal

Proposal: Pilbara Iron Ore & Infrastructure Project, Port & North-South Railway (Stage A)

Proponent: Fortescue Metals Group Limited

Change: additional area of not more than 10 hectares for a temporary access road as shown on Figure 3.

Figure 3. Temporary access road outside PER boundary

Approval Date: 17 AUG 2006

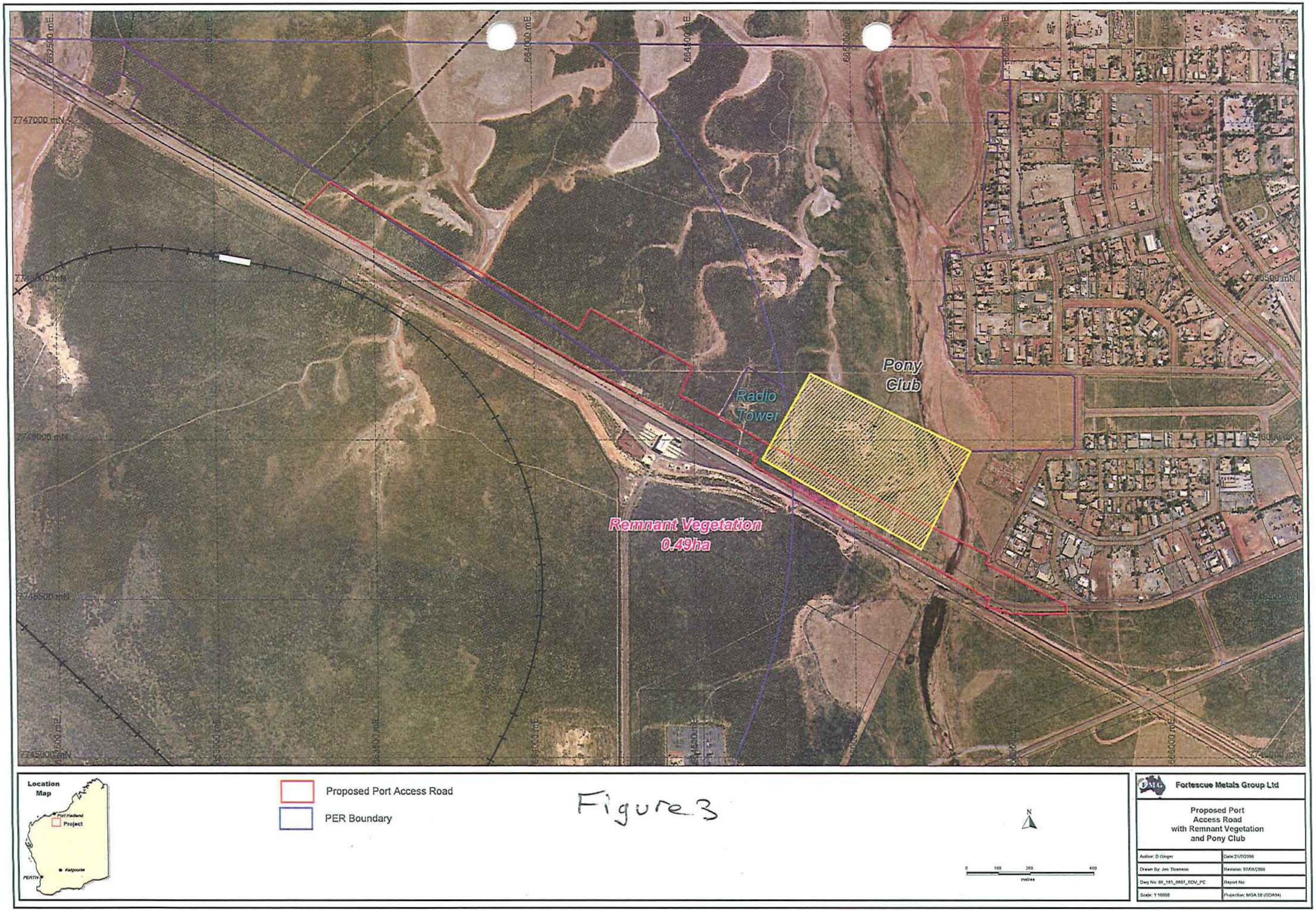

Pony Club
Radio Tower
Remnant Vegetation 0.49ha
7747000 mN
Location Map
Port Hedland
Project
Kalgoorlie
PERTH
Proposed Port Access Road
PER Boundary
N
metres
Fortescue Metals Group Ltd
Proposed Port Access Road with Remnant Vegetation and Pony Club
Author: D Ginger
Date:21/7/2006
Drawn By: Jen Thomson
Report No:
Scale: 1:10000
Projection: MGA 50 (GDA94)

Figure 3

Attachment 3– Change to Proposal (Statement 690).

Proposal: PILBARA IRON ORE & INFRASTRUCTURE PROJECT, STAGE A.

Proponent: Fortescue Metals Group Limited

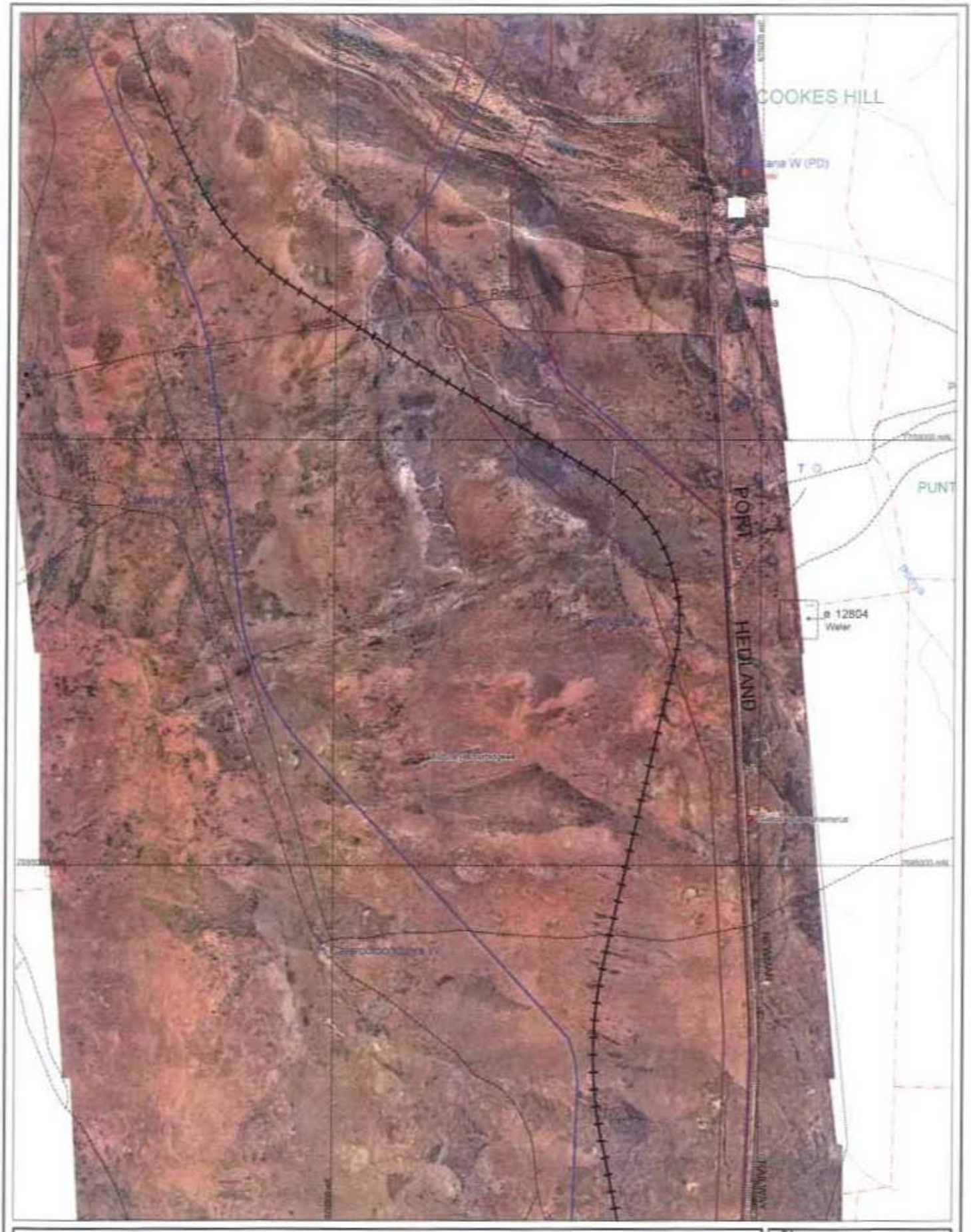
Change: in Schedule 1, Table 1: Key Proposal Characteristics (Assessment no. 1505).

To:

Element	Description	s45C change
Railway		
Support Infrastructure	▪ Rail Loop ▪ Railway alignment	▪ Relocation of Rail Loop, Train Unloader Vault and Conveyor Tunnel south of BHPBIO Shay Gap Railway (refer attached Figure 3, "Proposed Rail Loop Changes") ▪ Realignment of railway 3.5 km east (resulting in additional 1.9 km rail line with minimum 200 m offset from De Grey mineralisation area) (refer attached Figure 4, "Proposed De Grey Rail Realignment")

Date of Approval: 12-09-06


Owen Point
Anderson Point
Smith Point
Lumsden Point
Causeway
Conveyer
Car Dumper
563029mE, 7746573mN
HIGHWAY
Ovals
Location Map
Current Rail Corridor Boundary & Rail Alignment
Priority Flora Locations
Fortescue Metals Group Ltd
Figure 3
Proposed Rail Loop Changes



Location Map

Current Rail Corridor Boundary & Rail Alignment

Priority Flora Locations

Hope Downs Corridor

Fortescue Metals Group Ltd

Figure 4
Proposed De Grey Rail Realignment

Attachment to Statement 690

4

Change to Description of Proposal

Proposal: Pilbara Iron Ore & Infrastructure Project, Port & North-South Railway (Stage A)

Proponent: Fortescue Metals Group Limited

Change: Dredging of an additional 170,000m^3 at Utah Point.

Amendment of Schedule 1 – Key Proposal Characteristics

Features of previously approved Proposal:

Element	Quantities/Description
Port Development	Dredging 4.5 Mm^3
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	382.3ha

Features of changed Proposal:

Element	Quantities/Description
Port Development	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – 382.3 ha Utah Point – 2 ha

Approval Date: 27.04.07

Attachment 5 to Statement 690

Change to Proposal

Proposal: **Pilbara Iron Ore Infrastructure Project: Port & North-South Railway (Stage A)**

Proponent: Fortescue Metals Group Limited

Change:

Components of original Proposal as implemented:

Component	Quantities/Description
Port Materials Handling	Conveyors and transfer points

Components of changed Proposal:

Component	Quantities/Description
Port Materials Handling	Uncovered conveyors and transfer points

Approved under delegation from Minister for the Environment:

Approval Date: 4.4.08.

Attachment 6 to Statement 690

Change to Proposal

Proposal: Pilbara Iron Ore & Infrastructure Project, Port and North-South Railway (Stage A), Herb Elliott Port, Point Anderson, Port Hedland

Proponent: Fortescue Metals Group Limited

Change: Construction of two additional Train Unloaders

Components of original Proposal as implemented:

Component	Quantities/Description
General Construction period	20 months approximately
Port Materials Handling	Car dumper

Components of changed Proposal:

Component	Quantities/Description
General Construction period	35 months approximately
Port Materials Handling	Three Car dumpers

Note: Car Dumper is the same as Train Unloader or TUL.

Approved under delegation
from Minister for the Environment:
Delegation under section 18 of
the Environmental Protection Act
Dated 24 November 2004

S45C Approval Date: 7-8-08

Attachment 7 to Statement 690

Change to Proposal

Proposal: Pilbara Iron Ore & Infrastructure Project: Port & North-South Railway (Stage A)

Proponent: Fortescue Metals Group Limited

Change: Construction of additional rail infrastructure for sections of rail duplication, with associated additional 606 hectares of disturbance in the railway corridor.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
General		
Construction period	35 months approximately	**Element Removed – not relevant**
Project life	20+ years	20+ years
Export tonnage	45Mtpa	45 Mtpa
Railway		
Length	345 km approximately (Part 1: 244 km, Part 2: 101 km)	**Not more than (±10%):** 345 km (total) • Part 1: 244 km • Part 2: 101 km **Sections of duplicate line from port unloading loops to approximately Chainage 23**
Support Infrastructure	Sidings Administration offices and warehouses Trip servicing facilities Service and repair workshop Rail loops and marshalling yards Maintenance facilities Substations Communication systems	Sidings Administration offices and warehouses Trip servicing facilities Service and repair workshop **Rail loops** **Marshalling yards** **Passing Loops** **Spurs** Maintenance facilities Substations Communication systems
	Rail Loop - relocation of rail loop, train unloader vault and conveyor tunnel south of BHPBIO Shay Gap Railway (refer attached Figure 3, "Proposed Rail Loop Changes")	Rail Loop - relocation of rail loop, train unloader vault and conveyor tunnel south of BHPBIO Shay Gap Railway (refer attached Figure 3, "Proposed Rail Loop Changes")
	Railway alignment - realignment of railway 3.5 km east (resulting in additional 1.9 km rail line with minimum 200 m offset from De Grey mineralisation area) (refer attached Figure 4, "Proposed De Gray Rail Realignment")	Railway alignment - realignment of railway 3.5 km east (resulting in additional 1.9 km rail line with minimum 200 m offset from De Grey mineralisation area) (refer attached Figure 4, "Proposed De Gray Rail Realignment")

Element	Description of proposal	Description of approved change to proposal
Port		
Stockyard	2.5 Mt capacity (live)	2.5 Mt capacity (live)
Materials Handling	Three Car dumpers Uncovered conveyors and transfer points Rescreening plant 2 x Stackers (8,000 tph each) Reclaimer (10,000 tph)	Three Car dumpers Uncovered conveyors and transfer points Rescreening plant 2 x Stackers (8,000 tph each) Reclaimer (10,000 tph)
Port development	Single wharf 750 m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph)	Single wharf 750 m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph)
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3
Buildings	Shift office Control room and amenities Wharf amenities Substations	Shift office Control room and amenities Wharf amenities Substations
Infrastructure		
Power	17.5 MW from existing system	17.5 MW from existing system
Water	2 Glpa from existing system	2 Glpa from existing system
Fuel	45 Mlpa for locomotives and other vehicles	45 Mlpa for locomotives and other vehicles
Roads	General traffic, port access, rail service	General traffic, port access, rail service
Sewerage	Construction – package treatment plant Operations – septic systems	Construction – package treatment plant Operations – septic systems
Disturbance Areas		
Area of railway construction	3,100 ha (2,385 ha for Part 1 and 715 ha for Part 2)	**Not more than:** **3,706 ha (total)** – **Part 1: 2,991 ha** – Part 2: 715 ha
• Railway construction corridor	• 1,500 ha (1,115 ha for Part 1 and 385 ha for Part 2)	• **Not more than:** **1,575 ha (total)** – **Part 1: 1,190 ha** – Part 2: 385 ha
• Access track, yards, **borrow pits**, temporary disturbance	• 1,600 ha (1,270 ha for Part 1 and 330 ha for Part 2)	• **Not more than:** **2,131 ha (total)** – **Part 1: 1,801 ha** – Part 2: 330 ha
Area of operating railway • Railway corridor • Access road, yards, workshops, maintenance yards	1,500 ha (total) • 688 ha (488 ha for Part 1 and 200 ha for Part 2) • 812 ha (632 ha for Part 1 and 180 ha for part 2)	**Removed – information now contained in "Area of operating railway"**

Element	Description of proposal	Description of approved change to proposal
Area of operating railway		**Not more than:** **1,575 ha (total)** • **Part 1: 1,190 ha** • **Part 2: 385 ha**
Area of port facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – 382.3 ha Utah Point 2 ha	Anderson Point – 382.3 ha Utah Point 2 ha
Area of operating port facilities	100 ha	100 ha
Total operation areas	1,600 ha	**Not more than 1,675 ha**
Rehabilitation		
Area of rehabilitation due to railway construction corridor, access track, yards, other infrastructure **and borrow pits**.	(element not in Schedule 1, data from Condition 9-2) 1,600 ha (total) (1,265 ha for Part 1 and 335 ha for Part 2)	**Not less than:** **2,131 ha (total)** • **Part 1: 1,796 ha** • **Part 2:** 335 ha
Workforce (approximate peak levels)		
Construction	Rail – 1,000 personnel Port – 500 personnel	**Element Removed – no longer relevant**
Operations	Port and rail – 225 personnel	**Element Removed – no longer relevant**
Accommodation	Construction – single status in Port Hedland Track camps for rail Permanent – new or existing residences in Port Hedland, Newman or permanent rail camp.	Construction – **accommodation** in Port Hedland Track camps for rail Permanent – new or existing residences in Port Hedland, Newman or permanent rail camp.

Key:					
		MW	mega watts	DWT	dead weight tonne
Mtpa	Millions of tonnes per annum	Glpa	giga litres per annum	Mm^3	million cubic metres
tph	tonnes per hour	Mlpa	million litres per annum	ha	hectare
m	metres	Mt	million tonnes	km	kilometre

Hon Donna Faragher JP MLC
MINISTER FOR ENVIRONMENT; YOUTH

Approval date: 17 December 2009

Attachment 8 to Statement 690

Change to Proposal

Proposal: Pilbara Iron Ore & Infrastructure Project: Port & North-South Railway (Stage A)

Proponent: Fortescue Metals Group Limited

Change: Increase in railway corridor disturbance (371 hectares) due to construction of additional infrastructure.
Increase in port operating area (3 hectares) due to widening of causeway.

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
General		
Construction period	Element Removed – not relevant	Element Removed – not relevant
Project life	20+ years	20+ years
Export tonnage	45 Mtpa	45 Mtpa
Railway		
Length	Not more than (±10%): 345 km (total) • Part 1: 244 km • Part 2: 101 km Sections of duplicate line from port unloading loops to approximately Chainage 23	Not more than (±10%): 345 km (total) • Part 1: 244 km • Part 2: 101 km **with sections of duplicate line**
Support Infrastructure	Sidings Administration offices and warehouses Trip servicing facilities Service and repair workshop Rail loops Marshalling yards Passing Loops Spurs Maintenance facilities Substations Communication systems Rail Loop - relocation of rail loop, train unloader vault and conveyor tunnel south of BHPBIO Shay Gap Railway (refer attached Figure 3, “Proposed Rail Loop Changes”)	Sidings Administration offices and warehouses Trip servicing facilities Service and repair workshop Rail loops Marshalling yards Passing Loops Spurs Maintenance facilities Substations Communication systems Rail Loop - relocation of rail loop, train unloader vault and conveyor tunnel south of BHPBIO Shay Gap Railway (refer attached Figure 3, “Proposed Rail Loop Changes”)

Element	Description of proposal	Description of approved change to proposal
	Railway alignment - realignment of railway 3.5 km east (resulting in additional 1.9 km rail line with minimum 200 m offset from De Grey mineralisation area) (refer attached Figure 4, "Proposed De Gray Rail Realignment")	Railway alignment - realignment of railway 3.5 km east (resulting in additional 1.9 km rail line with minimum 200 m offset from De Grey mineralisation area) (refer attached Figure 4, "Proposed De Gray Rail Realignment")
Port		
Stockyard	2.5 Mt capacity (live)	2.5 Mt capacity (live)
Materials Handling	Three Car dumpers Uncovered conveyors and transfer points Rescreening plant 2 x Stackers (8,000 tph each) Reclaimer (10,000 tph)	Three Car dumpers Uncovered conveyors and transfer points Rescreening plant 2 x Stackers (8,000 tph each) Reclaimer (10,000 tph)
Port development	Single wharf 750 m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph)	Single wharf 750 m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph)
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3
Buildings	Shift office Control room and amenities Wharf amenities Substations	Shift office Control room and amenities Wharf amenities Substations
Infrastructure		
Power	17.5 MW from existing system	17.5 MW from existing system
Water	2 Glpa from existing system	2 Glpa from existing system
Fuel	45 Mlpa for locomotives and other vehicles	45 Mlpa for locomotives and other vehicles
Roads	General traffic, port access, rail service	General traffic, port access, rail service
Sewerage	Construction – package treatment plant Operations – septic systems	Construction – package treatment plant Operations – septic systems

Element	Description of proposal	Description of approved change to proposal
Disturbance Areas		
Area of railway construction	Not more than: 3,706 ha (total) – Part 1: 2,991 ha Part 2: 715 ha	**Not more than:** **4,077 ha (total)** – **Part 1: 3,362 ha** – Part 2: 715 ha
• Railway construction corridor	• Not more than: 1,575 ha (total) – Part 1: 1,190 ha • Part 2: 385 ha	• **Not more than:** **1,692 ha (total)** – **Part 1: 1,307 ha** – Part 2: 385 ha
• Access track, yards, borrow pits, temporary disturbance	• Not more than: 2,131 ha (total) – Part 1: 1,801 ha • Part 2: 330 ha	• **Not more than:** **2,385 ha (total)** – **Part 1: 2,055 ha** – Part 2: 330 ha
Area of operating railway • Railway corridor • Access road, yards, workshops, maintenance yards	Removed – information now contained in "Area of operating railway"	Removed – information now contained in "Area of operating railway"
Area of operating railway	Not more than: 1,575 ha (total) • Part 1: 1,190 ha • Part 2: 385 ha	**Not more than:** **1,692 ha (total)** • **Part 1: 1,307 ha** • Part 2: 385 ha
Area of port facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – 382.3 ha Utah Point 2 ha	**Anderson Point – 386 ha** Utah Point 2 ha
Area of operating port facilities	100 ha	**103.7 ha**
Total operation areas	1,600 ha	**Not more than 1,795.7 ha**
Rehabilitation		
Area of rehabilitation due to railway construction corridor, access track, yards, other infrastructure and borrow pits.	Not less than: 2,131 ha (total) • Part 1: 1,796 ha • Part 2: 335 ha	**Not less than:** **2,385 ha (total)** • **Part 1: 2,050 ha** • Part 2: 385 ha

Element	Description of proposal	Description of approved change to proposal
Workforce (approximate peak levels)		
Construction	Element Removed – no longer relevant	Element Removed – no longer relevant
Operations	Element Removed – no longer relevant	Element Removed – no longer relevant
Accommodation	Construction – accommodation in Port Hedland Track camps for rail Permanent – new or existing residences in Port Hedland, Newman or permanent rail camp.	Construction – accommodation in Port Hedland Track camps for rail Permanent – new or existing residences in Port Hedland, Newman or permanent rail camp.

Key:					
		MW	mega watts	DWT	dead weight tonne
Mtpa	Millions of tonnes per annum	Glpa	giga litres per annum	Mm^3	million cubic metres
tph	tonnes per hour	Mlpa	million litres per annum	ha	hectare
m	metres	Mt	million tonnes	km	kilometre

Hon Bill Marmion MLA
MINISTER FOR ENVIRONMENT; WATER

Approval date: 21 August 2011

Attachment 9 to Ministerial Statement 690
Change to proposal under s45C of the *Environmental Protection Act 1986*

Proposal: Pilbara Iron Ore and Infrastructure Project: Port and North-South Railway (Stage A)

Proponent: Fortescue Metals Group Limited

Change: 1) Remove and amend the port elements of Schedule 1 to include wharf AP5; and

2) Removal of references to export tonnage in Schedule 1.

Components of Schedule 1 to be changed

Element	**Description of authorised proposal**	**Description of approved changes to proposal**
General		
Export tonnage	45 Mtpa	**Remove. Relevant environmental matters such as noise and dust can be managed under Part V of the EP Act.**
Port		
Stockyard	2.5 Mt capacity (live)	**Remove not relevant**
Materials Handling	Three Car dumpers Uncovered conveyors and transfer points Rescreening plant 2 x Stackers (8,000 tph each) Reclaimer (10,000 tph)	**Car dumpers** **Conveyors and transfer points** **Rescreening plant** **Stackers** **Reclaimers**
Port development	Single wharf 750 m long Parking berth Ships up to 250,000 DWT Shiploader (10,000 tph)	**Wharves and shiploader (see Figure 5)** **No change to ships or parking berth**
Area of Port Facilities (including spoil reclamation below proposed stockpiles and temporary disturbance areas)	Anderson Point – dredging 4.5 Mm^3 Utah Point – dredging 0.17 Mm^3	**Remove not relevant**

List of Replacement Figures

Figure 5 Port Location and Infrastructure – Pilbara Iron Ore & Infrastructure Project: Port & North-South Railway (Stage A)

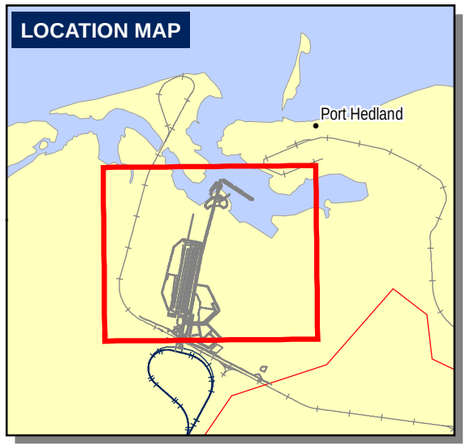
[Signed 6 February 2014]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

662,000
664,000
666,000
7,752,000
7,750,000
7,748,000

AP1
AP2
AP3
AP4
AP5
Wharf
Conveyor Removed
Replacement Conveyor
Stockpiles
Stacker
Inload Conveyor

LOCATION MAP



LEGEND

- AP5 Wharf & Materials Handling Facilities Upgrade
- Existing Port Infrastructure
- Ministerial Statement 690

Data Source(s):
Dataset, Source, Date
Dataset, Source, Date

N

0 200 400 600 800 1,000
metres

Figure 5: Port Location & Infrstructure Pilbara Iron Ore & Infrastructure Project: Port & North-South Railway (StageA)

Requested By: E. Bax
Drawn By: J. Burke
Revised By: jburke
Approved By:
Scale: 1:20,000
Coordinate System: GDA 1994 MGA Zone 50
Document Name: P_MP_GN_0007.001

Date: 6/02/2014
Size: A3L
Revision: 0
Confidentiality: 1

Fortescue Metals Group Ltd
The New Force in Iron Ore