Appendix 5.4

Full Construction Programme

N51 to N2 North — Construction Programme (Gantt Chart)

Timeline: Month 1 to Month 36

Site Controls

Activity	Duration	Dependencies
Set up Main Site Compound and Access Routes	2 months	
Project Systems/Commuications Set up	1 month	
Environmental Operating Plan	2 months	
Archaeological Investigations	1 month	
Ecological Surveys	1 month	
Invasive Species Removal	1 month	
Set up Water Quality Monitoring System	1 month	
Water Quality Monitoring	1 month	
Set up Sediment and Erosion Control Measures	1 month	

Works from N51 to River Boyne

Activity	Duration	Dependencies
Permanent Access for Landowner 118/119	2 month	In advance of access/haul road
Fencing	1 month	
Site Access/Haul Route	2 months	
Site Clearence, tree and hedge removal	1 month	Seasonal Restrictions, eg bird nesting
Pre-earthworks drainage including Interceptor ditches and Attenuation Ponds 3 and 4	4 months	
Petrol Interceptors and Grit Vortices	2 months	
Culverts	1 month	May be seasonal constraints
Construct Sediment fence and run-off collection trench around proposed works at the northern end of the Boyne bridge	1 month	In advance of works between Earthworks Plug F and the River
Construct Temporary Working Platform and sheet pile coffer dam for Bridge Piers	2 months	
Construct Earthworks Fill - benched into slope for North abutment Working Platform - provide erosion control geotextile/mat to earthwork fill	2 months	
Construct Bridge Bored Pile Foundations	5 months	
Construct Bridge RC Pad Foundations, piers and Abutments	6 months	
Farm Accommodation Bridge #3	7 months	
Topsoil Strip, including temporary drainage measures	5 months	Will be done in sections to control management of run-off
Earthworks, including temporary run-off control measures	7 months	Will be done in sections to control management of run-off. Assumed programme will include disposal of the majority of this cutting.
Capping and Erosion control (vegetation) on side slopes	7 months	Will be done in sections to control management of run-off
Drainage	6 months	Will be done in sections to control management of run-off
Services	3 months	
Kerbs	3 months	
Footways and Verges	4 months	
Road Restraint systems	1 month	
Pavement, including roundabouts	3 months	
Signs and Road Markings	1 month	
Finishings	1 month	
Remome Earthworks plug F and progression of earthworks to River Boyne Bridge	2 months	Dependent on completion of earthworks, capping and side slope vegetation
Drainage on section north of River Boyne bridge	2 months	
Kerb and footway on section north of River Boyne bridge	1 month	
Road Restraint systems on section north of River Boyne bridge	1 month	
Pavement on section north of River Boyne bridge	1 month	
Signs and road markings on section north of River Boyne bridge	1 month	

Works from N51 to N2 North Tie-in

Activity	Duration	Dependencies
	2 months	
Topsoil Strip, including temporary drainage measures	4 months	Will be done in sections to control management of run-off
Earthworks, including temporary run-off control measures	4 months	Will be done in sections to control management of run-off. Assumed majority of earthworks will be cut to fill operations
Capping and Erosion control (vegetation) on side slopes	4 months	Will be done in sections to control management of run-off
Drainage	4 months	Will be done in sections to control management of run-off
Services	3 months	
Kerbs	3 months	
Footways and Verges	4 months	
Road Restraint systems	1 month	
Pavement, including roundabouts	3 months	
Signs and Road Markings	1 month	
Finishings	1 month	
Temporary Traffic Management for on road works and tie-ins	2 months	
Roadworks at tie-ins	2 months	
Public Lighting	1 month	
Landscaping	2 months	

River Boyne Bridge

Activity	Duration	Dependencies
Set up Satellite Compound	2 months	
Traffic Management Plan and Approval	2 months	
Construct Temporary site access to Attenuation Pond 2	1 month	
Construct Attenuation Pond 2 incl. PI, Grit Seperator and outfalls	3 months	
Design and Construct Temporary bridge over canal	4 months	
Complete temporary access to facilitate bridge construction on South side of the river	2 months	
Fence off the site	1 month	
Construct Hard Standings at south abutment and in flood plain area	3 months	Attenuation Pond 2 to be operational
Construct Temporary Sheet Pile to enable piling	1 month	
Construct Bridge Bored Pile Foundations	5 months	
Construct Bridge RC Pad Foundations, piers and Abutments	6 months	
Off-site Prefabrication of Steel Girders	10 months	Independent of site works
Set up site for Erection of Steel Girders, including specialist Cranes and install bridge bearing plates	1 month	
Lift in girders	3 months	
Remove section of access track and construct new arrangement	1 month	
Reinforced Concrete Deck Construction (utilising precast elements)	5 months	
Apply waterproofing, road surfacing, parapets, finishes	2 months	
Construct Permanent Bridge Maintenance Access arrangements	1 month	
Remove hardstandings and restore areas	1 month	
Remove access tracks and temporary access bridge and reinstate	2 month	
Pre-fabricate Cycle Bridge Off-site	6 months	
Construction of Ped/cyc Link and Canal Bridge	3 months	
Realignment of the Tow Path	1 month	
Dismantle Satellite Offices	1 month	

Works to South of River Boyne

Chart callout annotations:
- Platforms WP3 and WP4
- Girders in Place
- Platforms WP1 and WP2
- Girders in Place
- Removal of Platform and temporary access
- Cycle Bridge and Link

Activity	Duration	Dependencies
Set up site accesses and Temporary traffic management	1 month	
Fencing	1 month	
Archaeological Investigations	1 month	
Ecological Surveys	1 month	
Invasive Species Removal	1 month	
Set up Water Quality Monitoring System	1 month	
Water Quality Monitoring	1 month	
Set up Sediment and Erosion Control Measures	1 month	
Farm Accommodation Bridge #1	7 months	
Site Clearence, tree and hedge removal	1 month	
Pre-earthworks drainage including Interceptor ditches and Attenuation Pond 1	2 months	Attenuation Pond #1 at Southern tie-in - not critical
Diversion of ESB overhead power line	2 months	
Petrol Interceptors and Grit Vortices	1 month	Attenuation Pond #1 at Southern tie-in - not critical
Culverts	1 month	Culvert at Southern tie-in - not critical
Topsoil Strip, including temporary drainage measures	10 months	Will be done in sections to control management of run-off
Earthworks, including temporary drainage measures	10 months	Will be done in sections to control management of run-off
Construct Temporary Run-off Holding Pond	1 month	Necessary due to Rossnaree Road Earthworks Plug
Capping and Erosion control (vegetation) on side slopes	10 months	Will be done in sections to control management of run-off
Drainage	10 months	
Services	2 months	
Kerbs	2 months	
Footways and Verges	2 months	
Road Restraint systems	1 month	
Pavement including roundabout excluding Surface course	2 months	
Signs and Road Markings	2 months	Finish after earthworks plug is removed
Finishings	2 months	Finish after earthworks plug is removed
Temporary Traffic Management for on road works and tie-ins	2 months	
Roadworks at tie-ins	2 months	
Public Lighting	1 month	
Landscaping	2 months	
Traffic Management Design and Approval to close Rossnaree Road	2 months	
Remove Earthworks plug A and progression of earthworks to River Boyne Bridge	4 months	Also dependent on relocating access to WP2
Capping and Erosion control (vegetation) on side slopes	4 months	
Drainage on section south of River Boyne bridge	4 months	
Kerb and footway on section south of River Boyne bridge	2 months	
Road Restraint systems on section south of River Boyne bridge	1 month	
Pavement on section south of River Boyne bridge	2 months	
Construct Rosnaree Overbridge	7 months	
Complete Mainline Roadworks under Rossnaree Road	4 months	
N51 Works		
Temporary Traffic Management Plan for on road works	3 months	
Implement Rolling Traffic Management Control		
Construct Roadworks	10 months	Work will be done in sections
Construct Footway	10 months	Work will be done in sections
Construct Public Lighting	9 months	Work will be done in sections
Construct Gateway	1 month	
Construct signs and Lines	1 month	

Timeline header: Month 1 – Month 36

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