Attachment 4 – Figure 5-46 Soils Mapping of the Operational Area and Field Sample Sites

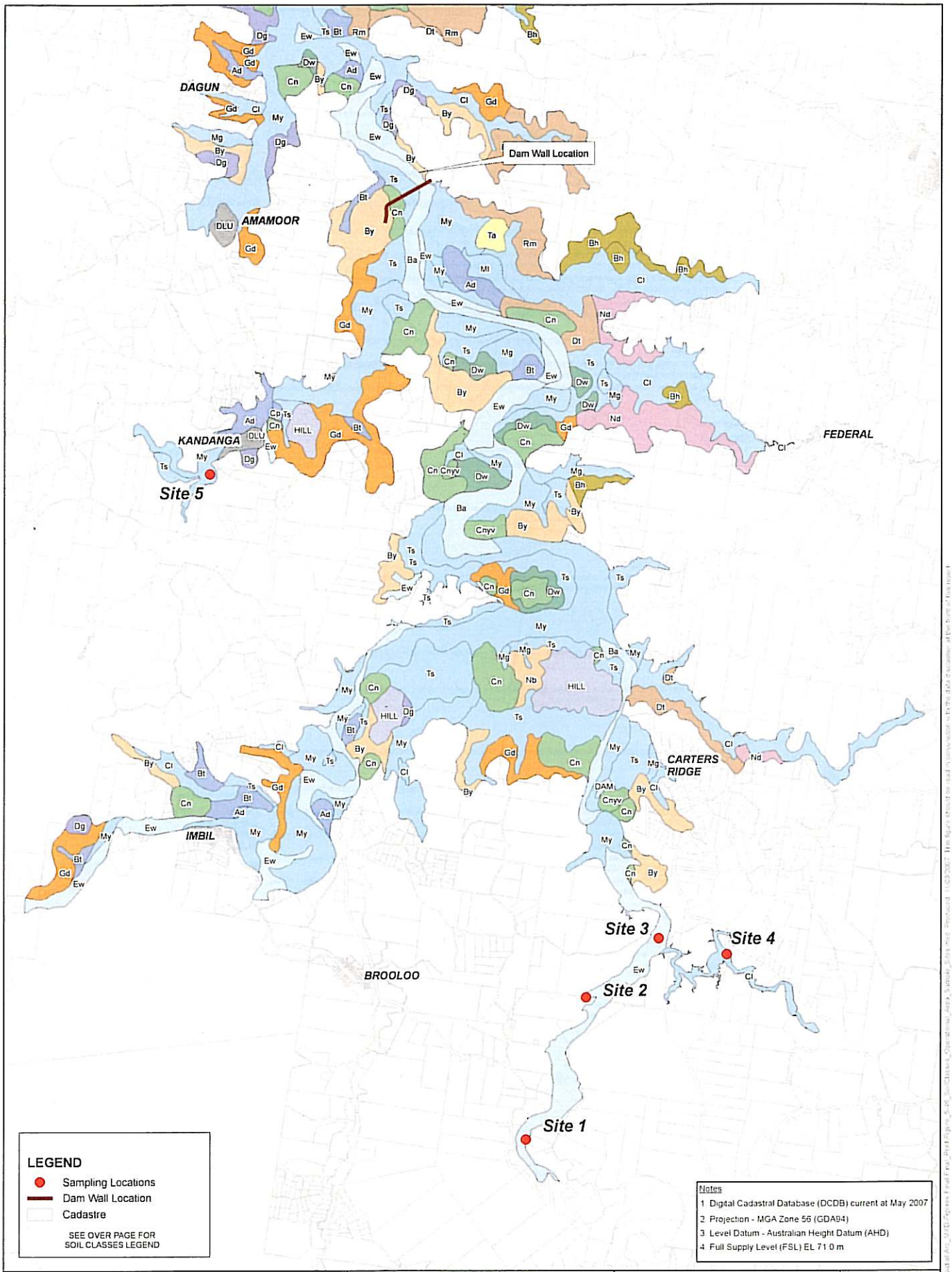
DAGUN
AMAMOOR
KANDANGA
IMBIL
BROOLOO
CARTERS RIDGE
FEDERAL
Dam Wall Location
Site 1
Site 2
Site 3
Site 4
Site 5
LEGEND
Sampling Locations
Dam Wall Location
Cadastre
SEE OVER PAGE FOR SOIL CLASSES LEGEND
Notes
1 Digital Cadastral Database (DCDB) current at May 2007
2 Projection - MGA Zone 56 (GDA94)
3 Level Datum - Australian Height Datum (AHD)
4 Full Supply Level (FSL) EL 71.0 m
N
0 1 2 3 4
Kilometres
QUEENSLAND WATER INFRASTRUCTURE PTY LTD
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FIGURE 5-46
TRAVESTON CROSSING DAM EIS
SOILS MAPPING OF THE OPERATIONAL AREA AND FIELD SAMPLE SITES
DRAWING NUMBER
100452
DATE SEPTEMBER 2007

SPC Mapping Unit	Name	Major Attributes of Dominant Soil	Australian Classification
Soils of the alluvial floodplains			
Stratified sands and loams			
Ba	Baddow	Stratified soil profile with a sand to loamy sand surface over a layered sand to clay loam subsoil with a neutral soil reaction trend	Stratic Rudosol
Ew	Eerwah	Stratified soil profile with a loam to clay loam surface over a layered, sand to light clay subsoil with a neutral soil reaction trend	Stratic Rudosol, Orthic Tenosol
Uniform Clay Soils			
Cl	Cole	Silty loam to silty clay surface overlying a brown, yellow or grey clay subsoil, manganese nodules common, with an acid to neutral sol reaction trend Pale subsurface common	Yellow Dermosol, Brown Dermosol, Grey Dermosol
My	Mary	Strongly structured soil with black, brown or grey surface and black, brown or red subsoil, with a neutral soil reaction trend	Black Dermosol, Brown Dermosol, Grey Dermosol
Ml	Monkland	Black to greyish brown cracking surface over a brown, black to grey subsoil with an alkaline to neutral soil reaction trend	Black Dermosol, Grey Dermosol, Brown Dermosol, Black Vertosol, Grey Vertosol, Redoxic Hydrosol
Mg	Mungar	Silty clay to clay loam surface with pale to bleached subsurface overlying a mottled black, brown to grey subsoil containing manganese and calcareous segregations Neutral to alkaline soil reaction trend	Black Dermosol, Grey Dermosol, Brown Dermosol, Redoxic Hydrosol
Ts	Thompson	Strongly structured soil with a black to brown clay loam surface, overlying mottled black, brown or grey clay subsoil containing manganese nodules Neutral to alkaline soil reaction trend	Black Dermosol, Brown Dermosol, Grey Dermosol, Redoxic Hydrosol, Oxyaquic Hydrosol
Tb	Timbrell	Black or grey silty loam to clay surface with a bleached subsurface over a mottled grey or brown clay subsoil with manganese or calcareous segregations Neutral to alkaline soil reaction trend	Redoxic Hydrosol, Oxyaquic Hydrosol
Texture contrast to gradational soils			
Ad	Aldershot	Sandy clay loam to clay loam surface overlyaing brown or grey, well structured, clay subsoil with a neutral to alkaline soil reaction trend	Brown Dermsol, Grey Dermsol, Brown Chromosol, Grey Chromosol
Bt	Butcher	Black or grey sandy clay loam to clay loam sandy surface with a bleached subsurface, overlying black, brown, grey or black clay subsoil with a neutral to alkaline soil reaction trend	Brown Sodosol, Grey Sodosol, Brown Dermosol, Grey Dermosol, Black Dermosol
Cp	Camp	Black to brown clay loam surface with a bleached subsurface overlying mottled brown, yellow or grey subsoil with an acid soil reaction trend	Brown Chromosol, Grey Chromosol, Yellow Dermosol, Brown Dermosol
Soils of the elevated alluvial plains			
Gradational to uniform textured soils			
Cn	Coonoon	Dark brown to red clay loam to clay surface overlying red clay subsoil with an acid soil reaction trend	Red Ferrosol, Red Dermosol
Cn-yv	Coonoon yellow variant	Dark brown clay loam to clay surface over a brown or red clay subsoil, occasionally mottled at depth with an acid soil reaction trend	Red Ferrosol, Red Dermosol, Brown Dermosol
texture contrast soils			
Dw	Dwyer	Brown to greyish brown clay loam surface overlying a brown, grey or yellow clay subsoil with an acid soil reaction trend Rounded cobble and gravel common on surface and throughout profile	Brown Kurosol, Grey Kurosol, Brown Chromosol, Yellow Chromosol, Brown Dermosol, Grey Dermosol
Soils developed on granodiorite			
Texture contrast soils			
Bl	Bells	Shallow soil with a sandy loam to sandy clay loam surface overlying a brown or yellow sandy clay subsoil with a neutral to alkaline soil reaction trend, overlying weathered granodiorite	Brown Sodosol, Yellow Sodosol
Soils developed on andesite			
uniform loamy to clay soils			
Ta	Tiaro	Dark brown clay loam to clay surface overlying a black to brown clay subsoil with neutral soil reaction trend overlying weathered rock	Brown Dermosol, Brown Chromosol
Gradational to texture contrast soils			
Hb	Highbury	Dark brown clay loam surface with a pale subsurface, overlying a yellowish brown or grey clay subsoil with a neutral to alkaline soil reaction trend, over weathered rock	Brown Dermosol, Grey Dermosol, Brown Chromosol
Soils developed on sedimentary rocks			
Gradational to uniform soils			
Pl	Palm	Sandy to loamy surface overlying a red or brown loam to clay loam subsoil with an acid to neutral soil reaction trend, overlying sandstone	Red Kandosol, Orthic Tenosol
texture contrast to gradational textured soils			
Dt	Dunstan	Brown clay loam to sandy light clay surface with a pale subsurface, overlying a red or brown clay subsoil with an acid to neutral soil reaction trend	Red Dermosol, Brown Dermosol, Red Kurosol
Ko	Kolan	Grey fine sandy clay loam to clay loam fine sandy surface with a bleached subsurface overlying a mottled brown or grey clay subsoil with an acid soil reaction trend, overlying fine grained sedimentary rocks	Grey Kurosol, Brown Kurosol, Brown Chromosol, Grey Chromosol
Tr	Tirroan	Grey loamy sand to sandy loam surface with a bleached subsurface overlying a mottled brown or grey sandy clay subsoil with an acid soil reaction trend, overlying sandstone	Grey Kurosol, Brown Kurosol, Grey Sodosol, Brown Sodosol
Mt	Moat	Grey to greyish brown sandy loam to clay loam surface with a bleached subsurface, overlying a mottled brown clay subsoil with a neutral to alkaline soil reaction trend, overlying sandstone	Brown Dermosol, Brown Chromosol, Brown Sodosol
Rm	Ram	Black to grey brown fine sandy clay loam to clay loam surface with a pale bleached subsurface, overlying a yellow, brown or grey occasionally mottled, clay subsoil with an acid to neutral soil reaction trend	Brown Dermosol, Brown Chromosol, Brown Sodosol
Soils develped on sedimentary rocks dominated by chert			
Gradational to uniform soils			
By	Brooyar	Reddish brown to greyish brown clay loam to light clay surface with a pale to bleached subsurface overlying a mottled red or brown clay subsoil with an acid soil reaction trend	Red Dermosol, Brown Dermosol, Brown Chromosol, Red Kurosol
Nb	Nobby	Shallow rocky soil with a clay loam surface overlying an occasional mottled brown or grey subsoil with an acid soil reaction trend, overlying chert	Leptic Tenosol, Orthic Tenosol, Leptic Rudosol
Texture contrast soils			
Gd	Gander	Brown to grey brown sandy clay loam to clay loam surface with a bleached subsurface overlying a mottled grey, brown or yellow clay subsoil with an acid to neutral soil reaction trend	Brown Dermosol, Grey Dermosol, Brown Chromosol, Grey Chromosol
Soils developed on basalt			
Gradational to uniform soils			
Dg	Dagun	Clay loam to light clay surface overlying a red clay subsoil with an acid soil reacton trend	Red Ferrosol, Red Dermosol
Soils developed on phyllite			
Uniform to gradational soils			
Nd	Neerdie	Brown to grey brown clay loam to light clay surface overlying a red, brown or yellow clay subsoil with an acid soil reaction trend	Brown Yellow or Red Dermosol
Texture contrast soils			
Bh	Beenham	Sandy clay loam to clay loam surface overlying a brown or red clay subsoil with an acid soil reaction trend	Red Dermosol, Brown Dermosol, Red Kurosol, Brown Kurosol
Miscellaneous			
DAM	Dam		
DLU	Urban Area		
HILL	Unit with slopes greater than 10% throughout		

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FIGURE 5-46

TRAVESTON CROSSING DAM EIS

SOIL MAPPING OF THE OPERATIONAL AREA LEGEND

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