

ENVIRONMENTAL STATEMENT (VOLUME III)

Appendix 17.6 Section by Section Descriptions

HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
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APPENDIX 17.6 - SECTION BY SECTION DESCRIPTIONS

Table 1 - Section 1: Elton to Hob Lane

Overview	<p>Section 1 contains the areas of Ince and Elton, and borders Section 2 at Hob Lane.</p> <p>The Stanlow Centralised Compound is location in Section 1. This Section also contains two AGI, the Stanlow AGI at Thornton (north of the A5117), and Ince AGI, to the north of Elton. Linking these two sites is the Ince AGI to Stanlow AGI Pipeline, which crosses the following routes (north-south):</p> <ul style="list-style-type: none"> • Railway sidings to Glass Works; • Hooton and Helsby Line; • A5117 (north of M56 J14); • B5132 Cryers Lane; and • A5117 School Lane (west of Cryers Lane). <p>To the west of this pipeline, and exiting the Stanlow AGI, the Stanlow AGI to Flint AGI Pipeline is to leave the site in a southerly directly, passing over the A5117.</p>
SRN	<p>The M56 Junction 14 (A5117 / Hapsford Interchange) is the only access point to the SRN for construction routes within this Section.</p>
LRN	<p>Branching out from the M56 Junction 14 interchange, there are two strategic local routes that pass through this Section.</p> <p>To the north of the junction, the A5117 corridor provides access to the refineries of Ince and Elton, as well as an alternative link to the M53 and Junction 10 to the west.</p> <p>To the south, the A5117 passes through Hapsford where it has a junction with A56 Chester Road. The A56 Chester Road runs in a north-south direction and provides access to the M53 Junction 12 to the south, as well as Chester.</p>
Rail	<p>There are two railway lines that the within this section. The first is the Hooton and Helsby Line through the Wirral, which interact with the DCO Proposed Development at two locations:</p> <ul style="list-style-type: none"> • Overbridge at Ince Lane, immediately to the west of Ince and Elton Station (OS Grid Ref: 345514, 375841); and • Overbridge at Peel Lane, south of Oil Sites Road and east of Essar Site (OS Grid Ref: 344979, 375911).
PRoW	<p>PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)</p>
Geographical Landmarks	<p>North of the A5117, Pool Lane, noted to be a possible construction route, is the eastern access to the wider Stanlow Manufacturing Complex, as well as the University of Chester, Thornton Science Park site.</p> <p>Additionally, there is a road bridge that carries Station Road over the Protos Site access route Grinsome Road.</p> <p>There are no significant bodies of water that are crossed within this Section.</p>

Table 2 - Section 2: Hob Lane to A41 Liverpool Road

<p>Overview</p>	<p>Section 2 covers the area between the Section 1 cut-off at Hob Lane / Thornton-le-Moors and the A41 Liverpool Road at Backford. This section contains Rock Bank BVS, Chorlton Lane, and Picton Lane Centralised Compound. Within this section, the Newbuild Carbon Dioxide Pipeline is proposed to cross the following routes:</p> <ul style="list-style-type: none"> • M56 (south of Thornton-le-Moors); • Thornton Green Lane (south of M56); • River Gowy; • Mill Brook; • Picton Lane; • M53 (west of Picton); • Wervin Road; • Shropshire Union Canal; • Access Road; • Chorlton Lane (Rock Bank BVS); and • A41 Liverpool Road (Section 2/3 Border).
<p>SRN</p>	<p>There are two junctions within this Section which provide access to the SRN, with the M56 travelling in an east-west direction, and the M53 travelling in a north-south direction. To the north of the Section, the M53 Junction 10 (Stanlow Halt Interchange) provides access onto the SRN from the A5117 Kinsey Road (west) and A5117 (east). To the south of the Section, the M53 Junction 12 (Hoole Island) provides access onto the SRN. An additional junction is located within this section on the SRN; M53 Junction 11 / M56 Junction 15.</p>
<p>LRN</p>	<p>There are three key local routes identified within this Section. The A5117 is a single-carriageway road with street lighting, provisional in-carriageway cycle routes, and footways for its entire length. It takes the form of a dual carriageway between its junction with the A56 in Hoole and the M56 Overbridge, whereupon it becomes a single carriageway route to its junction with the A5117 at Great Sutton. The A56 forms the eastern and southern border, providing a route between the M56 Junction 12 and the areas of Bridge Trafford and Mickle Trafford. It takes the form of a single-carriageway route throughout its length, passing through the centres of the residential areas stated.</p>
<p>Rail</p>	<p>The Chester to Warrington line is located within this section but is not anticipated to interact with Proposed construction traffic routes.</p>
<p>PRoW</p>	<p>PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)</p>
<p>Geographical Landmarks</p>	<p>This section contains Cheshire Oaks Retail Park, a large retail outlet centre that is a high traffic generator. There are a number of bridges within this section that are located on potential construction routes. These are listed below, with railway bridges identified in the previous section above.</p> <ul style="list-style-type: none"> • A5117 overbridge (River Gowy) (OS Grid Ref: 343127, 374583); • A5117 overbridge (Shropshire Union Canal) (OS Grid Ref: 341956, 374379); • B5132 Cryers Lane overbridge (M56) (OS Grid Ref: 344999, 373833); • Picton Lane overbridge (M56) (OS Grid Ref: 342743, 372836); • Wervin Road underbridge (M56) (OS Grid Ref: 342306, 372889); • Picton Lane overbridge (Shropshire Union Canal) (OS Grid Ref: 342350, 373009); • Little Stanney Lane underbridge (M53) (OS Grid Ref: 341769, 373776); • Rake Lane overbridge (M56) (OS Grid OS Grid Ref: 340769, 373086); • Whitby Lane overbridge (M56) (OS Grid OS Grid Ref: 339548, 372845); • A41 Liverpool Road underbridge (M56) (OS Grid Ref: 339178, 372708); • Wervin Road underbridge (M56) (OS Grid Ref: 342114, 372506); • Croughton Road overbridge (Shropshire Union Canal) (OS Grid Ref: 341990, 372466); • A41 Liverpool Road overbridge (Shropshire Union Canal) OS Grid OS Grid Ref: 340024, 370964); • A41 Liverpool Road overbridge (Chester Millennium Greenway) (OS Grid Ref: 342655, 368259); and • A56 Warrington Road overbridge (Chester Millennium Greenway (OS Grid Ref: 343019, 368370).

Table 3 - Section 3: A41 Liverpool Road to A548 Sealand Road

Overview	<p>Section 3 covers the area between the Section 2 cut-off at A41 Liverpool Road and the A548 Sealand Road.</p> <p>Section 3 contains the reserve Sealand Road centralised compound. Within this section there is one proposed BVS site at Mollington, with the Stanlow AGI to Flint AGI Pipeline running in a northeast-southwest orientation. Within this section, the Newbuild Carbon Dioxide Pipeline is proposed to cross the following routes:</p> <ul style="list-style-type: none"> • Station Road; • Grove Road; • Townfield Lane; • Overwood Lane (Mollington BVS); • A540 Parkgate Road; • Hermitage Road; • The England / Wales Border; and • A548 Sealand Road (Section 3/4 Border).
SRN	<p>Within this Section, the M56 Junction 16 provides access to the SRN, with the junction becoming the A494 Bypass Road west of this. Two potential construction routes, utilising the A540 Parkgate Road and the A548 Sealand Road are proposed to use this route. The M56 / A494 route forms the northern extent of this Section.</p>
LRN	<p>As identified above, two potential construction routes are proposed to pass through this section using significant local routes.</p> <p>The A540 Parkgate Road links between Bache and the M56 Junction 16 / A494 Bypass Road junction. For the majority of its length, this route is rural in nature, with single carriageway and intermittent street lighting.</p> <p>The A548 Sealand Road links the residential areas of Blacon to the west of Chester to the A494 Welsh Road at Garden City to the north of the River Dee. This route is rural in nature, with intermittent street lighting and occasional footways in residential areas. This route forms the border of Section 3 and Section 4, as well as crossing the England / Welsh border at Blacon (OS Grid Ref: 337369, 367327).</p>
Rail	<p>An overbridge of the Wirral Line between Chester and Hooton is located at Station Road, west of Mollington (OS Grid Ref: 339085, 371085).</p>
PRoW	<p>PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)</p>
Geographical Landmarks	<p>There are a number of geographic landmarks that are highlighted within this section.</p> <p>The primary feature within this Section is the England / Wales border, running diagonally in a northwest – southeast alignment between the A494 / A550 junction in the north to the A548 Sealand Road / Western Avenue junction at Blacon in the south.</p> <p>Outside of the overbridge identified previously at Mollington over the Chester to Hooton Line, there are two bridges which may be used by construction traffic:</p> <ul style="list-style-type: none"> • Seahill Road overbridge (Chester Millennium Greenway) (OS Grid Ref: 335455, 369139); and • A540 Parkgate Road overbridge (Shropshire Union Canal) (OS Grid Ref: 339334, 368744).

Table 4 - Section 4: A548 Sealand Road to A550 Gladstone Way

Overview	<p>Section 4 covers the area between the Section 3 cut-off at the A548 Sealand Road and the A550 Gladstone Way (Section 5).</p> <p>Section 4 contains the Wood Farm and; River Dee and Sandycroft Centralised Compounds. Within this section, there are no BVSs or AGI sites, with the Stanlow AGI to Flint AGI Pipeline running in a north- west orientation. Within this section, the Newbuild Carbon Dioxide Pipeline is proposed to cross the following routes:</p> <ul style="list-style-type: none"> • Deeside Lane; • River Dee (Sealand); • North Wales Coast Line (east of Queensferry); • Broughton Brook; • B5129 Chester Road; • Moor Lane; • B5129 Chester Road (approx. 260m); • Mancot Lane; • Colliery Lane; and • A550 Gladstone Way (Section 4/5 Border).
SRN	<p>This Section contains the shortest route-length of SRN of all 7 sections, with approximately 2km of length provided by the A494 to the north of the Section.</p> <p>This part of the route travels between the junction with the A548 Sealand Road to the north and the A550 Gladstone Way to the south; both of these routes forming Section boundaries and construction routes.</p> <p>Notably, this part of the SRN takes the route over the River Dee estuary, the most significant river crossing of the proposed construction routes.</p>
LRN	<p>The A550, running in a north-south direction between the A494 and the North Wales Expressway Junction 35, forms the boundary between Section 4 and Section 5. It is a single carriageway route with intermittent lighting within the urban areas which it passes through of Mancot and Hawarden.</p> <p>The B5129 links the areas of Saltney and Sandycroft with the A494 at the junction with the A550. Close to that A494 it is industrial in nature, becoming rural south of Sandycroft. It is single carriageway with intermittent street lighting throughout its length, with a number of tight turns noted along the periphery Hawarden Airport to the south.</p>
Rail	<p>There are two locations where potential construction routes pass the North Wales Coast Line between Chester and Holyhead:</p> <ul style="list-style-type: none"> • An overbridge at the B5129 Saltney Ferry Road, north of Saltney Ferry (OS Grid Ref: 336865, 365182); and • An overbridge at the B5129, north of Aviation Park business park (OS Grid Ref: 334878, 366239).
PRoW	<p>PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)</p>
Geographical Landmarks	<p>The most notable geographical landmark of this section is the Hawarden Airport, located west of Saltney Ferry. Home to the Aviation Park Group industrial estate, the site is also home to an Airbus manufacturing centre.</p>

Table 5 - Section 5: A550 Gladstone Way to B5126 Connah's Quay Road

Overview	<p>Section 5 covers the area between the Section 4 cut-off at the A550 Gladstone Way and the B5126 Connah's Quay Road (Section 6).</p> <p>This section contains the Shotton Lane and Northhop Hall AGI Centralised Compounds. Within this section there are two proposed AGI and BVS sites at Aston Hill BVS and Northhop Hall AGI, with the Stanlow AGI to Flint AGI Pipeline running in an east-west orientation. Within this section, the Newbuild Carbon Dioxide Pipeline is proposed to cross the following routes:</p> <ul style="list-style-type: none"> • Lower Aston Hill Lane (Aston Hill BVS); • Borderlands Line (south of Aston); • A494 Aston Expressway; • Church Lane; • Old Aston Hill; • Shotton Lane; • B5125 Holywell Road; • Green Lane (north of Ewloe Green); • Green Lane (west of Ewloe Green); • Pinfold Lane; • Wepre Brook; • Chester Road; • Brookside; • Northhop Hall AGI; • B5125; and • B5126 Connah's Quay Road (Section 6 Border).
SRN	<p>Within this Section, the A494 Aston Road and the A55 North Wales Expressway create an east-west and north-south route through the section. Both routes meet at Junction 34 of the North Wales Expressway, to the west of Ewloe.</p> <p>Construction routes meet the SRN at the A494 / B5125 and the A494 / Lower Aston Hill BVS Lane junctions.</p>
LRN	<p>The key Local Route for this Section is the B5125, which travels in an east-west direction between the A494 and the A55 North Wales Expressway Junction 33. This is a single-carriageway route, rural in nature for the majority of its route, with the section within Northhop encompassing street lighting and intermittent within the village.</p> <p>An additional local route is the B5129 which travels in an east-west alignment between the A494 at Queensferry and the A548 Chester Road to the west of Connah's Quay.</p>
Rail	<p>There are three road crossings of the Borderlands Line between Bidston and Wrexham General:</p> <p>An underbridge at the B5129 Chester Road West, adjacent to Shotton railway station (OS Grid Ref: 330720, 368830);</p> <p>An overbridge at Old Aston Hill, to the west of Higher Shotton (OS Grid Ref: 330409, 367114); and</p> <p>An underbridge at Lower Aston Hill BVS Lane, east of Ewloe (OS Grid Ref: 330892, 366692).</p>
PRoW	<p>PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)</p>
Geographical Landmarks	<p>There is one significant physical landmark within this section of the B5125 overbridge (Wepre Brook) (OS Grid Ref: 327814, 367601) in Northhop Hall AGI, causing the road surface to narrow over a stone-edge bridge.</p> <p>The southern area of this Section is shown to have an increase in the steepness of topography when compared to both previous Sections and those surrounding the Dee Estuary.</p>

Table 6 - Section 6: B5126 Connah's Quay Road to A5119 Northop Road

Overview	<p>Section 6 covers the area between the Section 5 cut-off at the B5126 Connah's Quay Road to the A5119 Northop Road (Section 7).</p> <p>Within this section, the Stanlow AGI to Flint AGI Pipeline runs in a north-south orientation, and the route terminates at Flint AGI. The Flint AGI to Flint Connection Pipeline also exists within this section. Within this section, the Newbuild Carbon Dioxide Pipeline is proposed to cross the following routes:</p> <ul style="list-style-type: none"> • Starkey Lane; and • Flint AGI.
SRN	The A55 North Wales Expressway runs along the southern edge of this Section, with proposed construction routes accessing at Junction 33 (A5119).
LRN	<p>There are three key local routes through this Section. Firstly, the B5129 runs in an east-west orientation, between Connah's Quay and the A548 Chester Road junction, adjacent to the Connah's Quay Power Station. It is an urban route, with single lane running throughout its length.</p> <p>The A548 Chester Road is a dual carriageway route, running in an east-west orientation from the River Dee bridge to Pentre Ffwrndan. At Pentre Ffwrndan it becomes an urban single-carriageway route through the centre of Flint, before becoming a dual-carriageway again in Section 7.</p> <p>The A5119 Northop Road is a single carriageway route, running in a north-south orientation. It connects the urban area of Flint to Junction 33 of the A55 North Wales Expressway through local rural areas.</p>
Rail	Proposed construction routes run in parallel to the North Wales Coast Line, but do not interact with it at any point within this Section.
PRoW	PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III)
Geographical Landmarks	<p>The landmark structure within this section is the Connah's Quay Power Station, located to the north of the Section adjacent to the A548 Flintshire Bridge. Access to this location is provided via the A548 Chester Road / B5129 / Kelsterton Road junction.</p> <p>There is one bridge structure located within this Section situated on a potential construction route. This is at the B5126 Connah's Quay Road overbridge (A55 North Wales Expressway J33a) (OS Grid Ref: 325253, 368355).</p>

Table 7 - Section 7: A5119 Northop Road to Talacre

Overview	<p>Section 7 marks the end of the corridor and encompasses all infrastructure west of the A5119 Northop Road, which bisects Flint. In effect, for the DCO Proposed Development, this incorporates the following Block Valve Station Locations:</p> <ul style="list-style-type: none"> • Babell • Pentre Halkyn; and • Cornist Lane
SRN	The A55 North Wales Expressway bisects the BVS in this section, separating the Cornist Lane site from the Pentre Halkyn site, west of the A55.
LRN	The road network in this section, connecting the BVS sites to the SRN are predominantly rural in character. The A5119 Northop Road however marks the eastern boundary of the section and the A548 runs along its northern edge parallel to the Dee Estuary. Nearby settlements to the west including Holywell are served by the A5026 which links from the A548, and the A5026 to the south, which provides a connection to the A55. Bryntirion Road is an important route locally, connecting Bagilt to the A55 in a north-south alignment.
Rail	Potential construction routes run in parallel to the North Wales Coast Line, but do not interact with it at any point within this Section.
PRoW	PRoW are summarised in Appendix 17.5 - Public Rights of Way by Section (D.6.3.17.5) (Volume III) .
Geographical Landmarks	This area is predominantly characterised by the rural nature of the area west of Flint lying between the North Wales coast, and the A55 to the south. It does however include a number of settlements, concentrated around the A548 in the north including Flint and associated industrial areas at its western boundary, Bagilt, Holywell, and further north, Mostyn and Penyffordd.