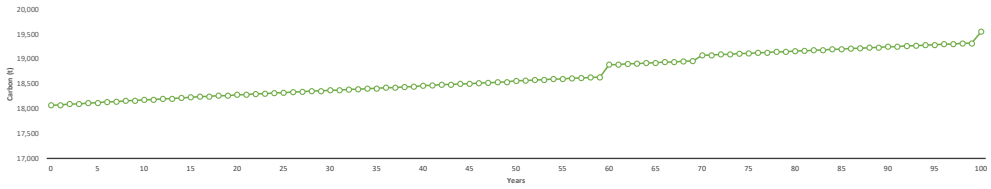
Summary

SOP **IMSE500177**	Project manager **Sally White**	Produced by **Phoenix-Jane Haywa**
Project name **Oxford FAS**	Date produced **20/12/2021**	Reviewed by **Mercedes Blanc-Aceb**

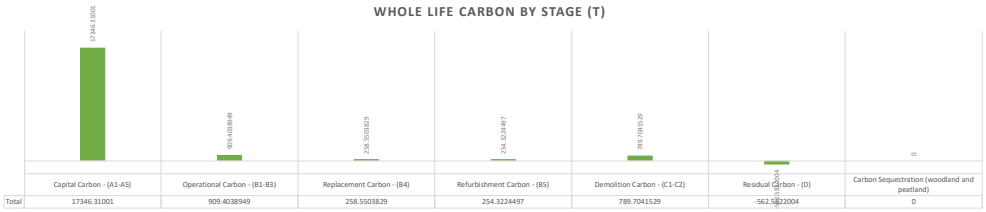
Results

Total Whole Life Carbon	Residual Carbon	Carbon Sequestration	Net Whole Life Carbon
19558.29	**-562.58**	**0.00**	**18995.71**

WHOLE LIFE CARBON (T)

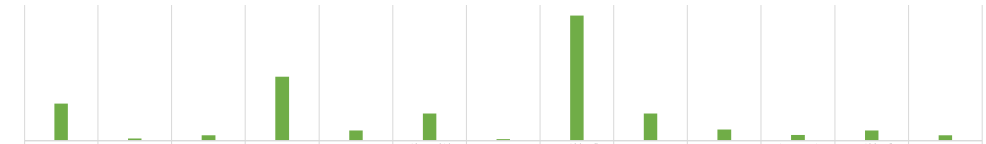


WHOLE LIFE CARBON BY STAGE (T)



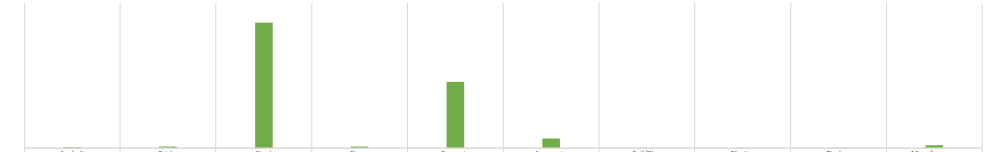
	Capital Carbon - (A1-A5)	Operational Carbon - (B1-B3)	Replacement Carbon - (B4)	Refurbishment Carbon - (B5)	Demolition Carbon - (C1-C2)	Residual Carbon - (D)	Carbon Sequestration (woodland and peatland)
Total	17346.31001	909.4038949	258.5503829	254.3224497	789.7041529	-562.5822004	0

WHOLE LIFE CARBON BY ASSET(T)



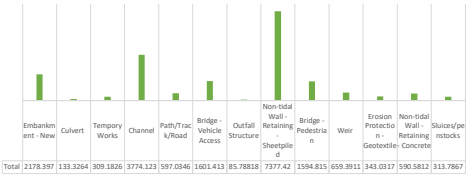
	Embankment - New	Culvert	Tempory Works	Channel	Path/Track/Road	Bridge - Vehicle Access	Outfall Structure	Non-tidal Wall - Retaining - Sheetpiled	Bridge - Pedestrian	Weir	Erosion Protection - Geotextile	Non-tidal Wall - Retaining - Concrete	Sluices/penstocks
Total	2178.397094	133.3264274	309.1826339	3774.123148	597.0346399	1601.412689	85.78817785	7377.420351	1594.815072	659.3911148	343.0317227	590.581155	313.786662

NEW BUILD MATERIALS - (A1) CARBON (T)



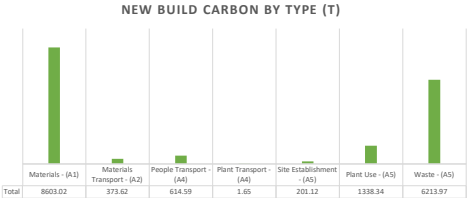
	Asphalt	Bricks	Steel	Stone	Concrete	Aggregate	Soil/Clay	Plastics	Timber	Miscellaneous
Total	33.1991826	61.82325	5185.7603	64.2784922	2733.002277	391.1389409	0.00205	11.6965975	9.254095137	112.8640716

NEW BUILD CARBON (A1-A5) BY ASSET(T)



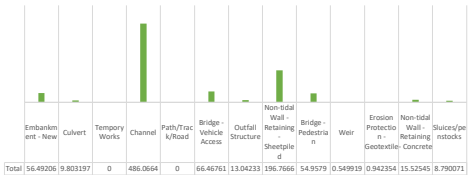
	Embankment - New	Culvert	Tempory Works	Channel	Path/Track/Road	Bridge - Vehicle Access	Outfall Structure	Non-tidal Wall - Retaining - Sheetpiled	Bridge - Pedestrian	Weir	Erosion Protection - Geotextile	Non-tidal Wall - Retaining - Concrete	Sluices/penstocks
Total	2178.397	133.3264	309.1826	3774.123	597.0346	1601.413	85.78818	7377.42	1594.815	659.3911	343.0317	590.5812	313.7867

NEW BUILD CARBON BY TYPE (T)



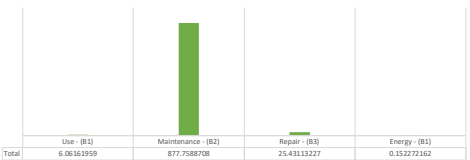
	Materials - (A1)	Materials Transport - (A2)	People Transport - (A4)	Plant Transport - (A4)	Site Establishment - (A5)	Plant Use - (A5)	Waste - (A5)
Total	8603.02	373.62	614.59	1.65	201.12	1338.34	6213.97

WHOLE LIFE OPERATIONAL (B1-B2) CARBON BY ASSET(T)



	Embankment - New	Culvert	Tempory Works	Channel	Path/Track/Road	Bridge - Vehicle Access	Outfall Structure	Non-tidal Wall - Retaining - Sheetpiled	Bridge - Pedestrian	Weir	Erosion Protection - Geotextile	Non-tidal Wall - Retaining - Concrete	Sluices/penstocks
Total	56.49206	9.803197	0	486.0664	0	66.46761	13.04233	196.7666	54.9579	0.549919	0.942354	15.52545	8.790071

WHOLE LIFE OPERATIONAL CARBON BY TYPE (T)



	Use - (B1)	Maintenance - (B2)	Repair - (B3)	Energy - (B1)
Total	6.06161959	877.7588708	25.43113227	0.152272162

Environment Agency

Carbon Planning Tool

+ - Project details

Date produced	Version	Produced by	Reviewed by	SOP	Project name	EA project manager
20/12/2021	P04	Phoenix-Jane Hayward	Mercedes Blanc-Acebal	IMSES00177	Oxford FAS	Sally White

Total project cost	Total construction cost	Total salaries cost	Total consultant cost	Construction start date	Construction finish date	Project Stage	Project Location	EA Area
£ 87,570,004	£79,673,425	£5,300,000	£2,596,579	01/02/2024	01/02/2027	FBC	South East	Thames

+ - Assets

Please ensure no more than 35 assets are entered

Asset ID	Asset class	Asset description	Asset measure	Asset unit	Asset value
PathEA41	Path/Track/Road	All - Access Tracks	9238	m2	£ 1,405,573
OutfEA40	Outfall Structure	All - Outfalls	1	l/s	£ 126,717
CulvEA07	Culvert	All - Culverts	10	m3	£ 185,582
SoftEA59	Landscaping - Grassland	Grass/scrubs/trees	821713	m2	£ 1,344,584
BridEA04	Bridge - Vehicle Access	Area 1A Mofication Botley bridge -	410	m2	£ 1,743,566
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 1A+1B West Seacourt Flood wall -	1956	m2	£ 1,862,105
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 1B Botley road Flood wall -	3242	m2	£ 2,135,181
EmbaEA15	Embankment - New	Area 1B Botley Road Embankment -	2567	m3	£ 1,255,406
EmbaEA15	Embankment - New	Area 1C Botley road allotments	45	m3	£ 1,249,082
BridEA03	Bridge - Pedestrian	Area 2A Westway Cycle footbridge -	145	m2	£ 1,602,421
PathEA41	Path/Track/Road	Area 2A New Spillway - SSW.A2A.01	240	m2	£ 1,266,758
BridEA03	Bridge - Pedestrian	Area 2B Willow walk Bridge -	298	m2	£ 2,354,958
BridEA03	Bridge - Pedestrian	Area 3A North Hinksey Footbridge -	168	m2	£ 1,560,258
BridEA03	Bridge - Pedestrian	Area 3B Bulstake stream footbridge -	70	m2	£ 1,960,526
WeirEA69	Weir	Area 3B Low weir crest - SWR-3AB &	2169	m2	£ 1,964,564
ErosEA18	Erosion Protection - Geotextile	Area 3B+3C Ford Crossings CXF.A3B.02	385	m2	£ 3,283,417
BridEA03	Bridge - Pedestrian	Area 3C Devil's backbone Bridge -	287	m2	£ 2,209,678
EmbaEA15	Embankment - New	Area 3C North South Hinksey bund -	841	m3	£ 1,636,510
Non-EA35	Non-tidal Wall - Retaining - Concrete	Area 3D Osney Mead DWL.A3D.01-4	561	m3	£ 1,642,183
EmbaEA15	Embankment - New	Area 3D Osney Mead DEM.A3D.01	1011	m3	£ 1,259,302
SluiEA58	Sluices/penstocks	Area 3E Eastwyke flow control -	120	m2	£ 1,561,268
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4A South Hinksey Flood wall -	2478	m2	£ 2,196,476
EmbaEA15	Embankment - New	Area 4A South Hinksey Embankment -	4050	m3	£ 1,300,411
WeirEA69	Weir	Area 4B Hinksey Pond Weir -	583	m2	£ 1,594,733
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4C Old Abingdon northeast Flood	745	m2	£ 1,696,865
WeirEA69	Weir	Area 4C Upstream NR Weir -	90	m2	£ 1,284,657
BridEA04	Bridge - Vehicle Access	Area 4D OAR Bridge - CXB.A4D.01 and	866	m2	£ 5,336,552
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4D Kendall Coose Floodwalls -	6815	m2	£ 3,485,171
TempEA77	Tempory Works	Area 4DA New Carrigeway	279	m2	£ 1,984,778
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4E Floodwalls -	2602	m2	£ 3,090,036
EmbaEA15	Embankment - New	Area 4E Hinksey pond Embankment -	5051	m3	£ 2,076,883
EmbaEA15	Embankment - New	Area 4F New Hinksey Embankment -	12735	m3	£ 1,509,624
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4F New Hinksey Flood wall	2065	m2	£ 1,984,736
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4G Floodwall - DWL.A4G.01	250	m2	£ 2,451,813
Non-EA37	Non-tidal Wall - Retaining - Sheetpiled	Area 4H Sheet piles -	2138	m2	£ 2,163,315
ChanEA05	Channel	All - Channels	587933	m3	£ 13,907,740

Add Row

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+ - Sub-Assets

Please ensure no more than 50 sub assets are entered

Asset ID	Asset description	Asset class	Sub-Asset ref.	Sub-Asset description	Sub-Asset category	Standard life	First intervention	Expected new build/Replacement life	Refurbishment type	Expected refurbished Life
BridEA04	Mofication Botley bridge - CXB.A	Bridge - Vehicle Access	BridEA0464	Area 1A Bridge - CXB.A1A.01	Bridges	60	Refurbishment	60	Moderate Refurbishment	60
OutfEA40	All - Outfalls	Outfall Structure	OutfEA4065	All Outfalls	Outfall Structure	60	New Build	60	Minor Refurbishment	60
CulvEA07	All - Culverts	Culvert	CulvEA0766	All Culverts	Culvert	120	New Build	120	Minor Refurbishment	100
Non-EA37	est Seacourt Flood wall - DWL.A	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3767	Area 1A and 1B Flood wall - DWL.A1A.01 & 02	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
Non-EA37	y road Flood wall - DWL.A1B.0	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3768	Area 1B Floodwall - DWL.A1B.01-3	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
EmbaEA15	otley Road Embankment - DEM	Embankment - New	EmbaEA1569	Area 1B Embankment - DEM.A1B.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
EmbaEA15	"Botley road allotments DEM.A	Embankment - New	EmbaEA1570	Area 1C Embankment - DEM.A1C.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
PathEA41	a 2ANew Spillway - SSW.A2A.0	Path/Track/Road	PathEA4171	Area 2A Spillway - SLY.A4H.01	Paths/tracks/roads	60	New Build	60	Moderate Refurbishment	60
BridEA03	festway Cycle footbridge - CXB.	Bridge - Pedestrian	BridEA0372	Area 2A Bridge - CXB.A2A.01	Bridges	60	New Build	120	Moderate Refurbishment	120
BridEA03	2BWillow walk Bridge - CXB.A2E	Bridge - Pedestrian	BridEA0373	Area 2B Bridge - CXB.A2B.01	Bridges	60	New Build	120	Moderate Refurbishment	120
BridEA03	lorth Hinksey Footbridge - CXB.	Bridge - Pedestrian	BridEA0374	Area 3A Bridge - CXB.A3A.01	Bridges	60	New Build	120	Moderate Refurbishment	120
WeirEA69	3BLow weir crest - SWR-3AB &	Weir	WeirEA6975	Area 3B Weir - SWR.A3B.01-06	Weir	120	New Build	100	Minor Refurbishment	100
ErosEA18	ord Crossings CXF.A3B.02 and C	Erosion Protection - Geotextile	ErosEA1876	Area 3B Fords - CXF.A3B.01+02	Erosion Protection	60	New Build	60	Moderate Refurbishment	60
BridEA03	ulstake stream footbridge - CXB	Bridge - Pedestrian	BridEA0377	Area 3B Bridge - CXB.A3B.01	Bridges	60	New Build	120	Moderate Refurbishment	120
WeirEA69	3BLow weir crest - SWR-3AB &	Weir	WeirEA6978	Area 3C Weir - SWR.A3C.01	Weir	120	New Build	100	Minor Refurbishment	100
ErosEA18	ord Crossings CXF.A3B.02 and C	Erosion Protection - Geotextile	ErosEA1879	Area 3C Ford - CXF.A3C.01	Erosion Protection	60	New Build	60	Moderate Refurbishment	60
EmbaEA15	orth South Hinksey bund - DEM	Embankment - New	EmbaEA1580	Area 3C Embankment - DEM.A3C.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
BridEA03	Devil's backbone Bridge - CXB.A	Bridge - Pedestrian	BridEA0381	Area 3C Bridge - CXB.A3C.01	Bridges	60	New Build	120	Moderate Refurbishment	120
EmbaEA15	ea 3DOsney Mead DEM.A3D.01	Embankment - New	EmbaEA1582	Area 3D Embankment - DEM.A3D.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
Non-EA35	a 3DOsney Mead DWL.A3D.01-	Non-tidal Wall - Retaining - Concrete	Non-EA3583	Area 3D Floodwall - DWL.A3D.01-4	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
SluiEA58	Eastwyke flow control - SCG.A	Sluices/penstocks	SluiEA5884	Area 3E Tilting weir	Sluices/penstocks	40	New Build	40	Minor Refurbishment	30
SluiEA58	Eastwyke flow control - SCG.A	Sluices/penstocks	SluiEA5885	Gear box	Gear Box	30	New Build	30	Major Refurbishment	30
SluiEA58	Eastwyke flow control - SCG.A	Sluices/penstocks	SluiEA5886	Electricity	Electricity Supply	60	New Build	100	Minor Refurbishment	100
SluiEA58	Eastwyke flow control - SCG.A	Sluices/penstocks	SluiEA5887	Headwall	Headwall	80	New Build	80	Minor Refurbishment	80
Non-EA37	outh Hinksey Flood wall - DWL	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3788	Area 4A Floodwall - DWL.A4A.01	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
EmbaEA15	uth Hinksey Embankment - DEM	Embankment - New	EmbaEA1589	Area 4A Embankment - DEM.A4A.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
WeirEA69	Hinksey Pond Weir - SWR.A4B.0	Weir	WeirEA6990	Area 4B Weir - SWR.A4B.01&02	Weir	120	New Build	100	Minor Refurbishment	100
Non-EA37	rtheast Flood wall -COC.DWL.A4	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3791	Area 4C Floodwall - DWL.A4C.01-2	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
WeirEA69	"Upstream NR Weir - SWR.A4C	Weir	WeirEA6992	Area 4C Weir - SWR.A4C.01	Weir	120	New Build	100	Minor Refurbishment	100
BridEA04	CXB.A4D.01 and Kennington B	Bridge - Vehicle Access	BridEA0493	Area 4D Bridges - CXB.A4D.01 2	Bridges	60	New Build	120	Moderate Refurbishment	120
Non-EA37	oodwalls - DWL.A4D.11-12 COC	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3794	Area 4D Floodwall - DWL.A4D.01-2, 5-10, 11-12	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
TempEA77	Area 4DANew Carrigeway	Tempory Works	TempEA7795	Area 4D Carrigeway - BAR.A4D.01	Temporary Works	0	Demolition			
Non-EA37	Floodwalls - COCDWL.A4E.01,2	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3796	Area 4E Floodwalls - DWL.A4E.01-2, 4-10	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
EmbaEA15	hksey pond Embankment - DEM	Embankment - New	EmbaEA1597	Area 4E Embankment - DEM.A4E.01	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
Non-EA37	Floodwalls - COCDWL.A4E.01,2	Non-tidal Wall - Retaining - Sheetpiled	Non-EA3798	Area 4F Floodwall - DWL.A4F.01-3	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
EmbaEA15	w Hinksey Embankment - DEM	Embankment - New	EmbaEA1599	Area 4F Embankment - DEM.A4F.01-2	Embankment - Fluvial	130	New Build	100	Minor Refurbishment	100
Non-EA37	rea 4G Floodwall - DWL.A4G.01	Non-tidal Wall - Retaining - Sheetpiled	Non-EA37100	Area 4G Floodwall - DWL.A4G.01	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
Non-EA37	HSheet piles - COC.DWL.A4H.0	Non-tidal Wall - Retaining - Sheetpiled	Non-EA37101	Area 4H Floodwall - DWL.a4G.01-06	Wall - Fluvial	130	New Build	120	Minor Refurbishment	120
ChanEA05	All - Channels	Channel	ChanEA05102	All Channels	Channel	120	Refurbishment	120	Minor Refurbishment	120
PathEA41	All - Access Tracks	Path/Track/Road	PathEA41103	All access tracks	Paths/tracks/roads	60				

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Total project net whole life carbon 18,995.71

+ - Capital carbon 17,346.31

Materials - (A1) 8,603.02

Materials - (A1) **Waste - (A5)** **Transport of materials - (A2)**

Sub-Asset ref.	Sub-Asset description	Material	Material type	Material description	Measure units	Quantity	CO2e (t)	Embodied emissions factor (tCO^2e/t or $tCO2e/m^3$) - overwrite	Waste %	Reused / Recycle / Removed	Distance to waste disposal	Temporary Works - project reuse frequency	Mode of transport	Supplier distance to site	Distance (km)	Other modes of transport used	Other distance (km)
BridEA0464	Area 1A Bridge - CXB.A1A.01	Steel	Engineering Steel	N/A	t	18	22.860		1%	Removed	Regional		HGV	Regional	100		
BridEA0464	Area 1A Bridge - CXB.A1A.01	Stone	General (Stone)	N/A	t	108	8.532		10%	Removed	Regional		HGV	Regional	100		
OutfEA4065	All Outfalls	Concrete	Precast Concrete (General)	40/50 MPa	m3	118	51.088		5%	Removed	Regional		HGV	Regional	100		
OutfEA4065	All Outfalls	Aggregate	General-Primary	N/A	m3	178	1.965		10%	Removed	Regional		HGV	Regional	100		
CulvEA0766	All Culverts	Concrete	Precast Concrete (General)	40/50 MPa	m3	241	103.969		5%	Removed	Regional		HGV	Regional	100		
CulvEA0766	All Culverts	Plastics	PVC General	N/A	t	0	0.496		5%	Removed	Regional		HGV	Regional	100		
Non-EA3767	Area 1A and 1B Flood wall - DWL.A1A.01 & 02	Steel	Engineering Steel	N/A	t	307	389.890		1%	Removed	Regional		HGV	Regional	100		
Non-EA3767	Area 1A and 1B Flood wall - DWL.A1A.01 & 02	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	413	196.885		5%	Removed	Regional		HGV	Regional	100		
Non-EA3768	Area 1B Floodwall - DWL.A1B.01-3	Steel	Engineering Steel	N/A	t	510	647.154		1%	Removed	Regional		HGV	Regional	100		
Non-EA3768	Area 1B Floodwall - DWL.A1B.01-3	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	538	256.475		5%	Removed	Regional		HGV	Regional	100		
EmbaEA1569	Area 1B Embankment - DEM.A1B.01	Aggregate	General-Primary	N/A	m3	2567	28.335		10%	Removed	Regional		HGV	Regional	100		
EmbaEA1569	Area 1B Embankment - DEM.A1B.01	Steel	Engineering Steel	N/A	t	85	107.950		1%	Removed	Regional		HGV	Regional	100		
EmbaEA1570	Area 1C Embankment - DEM.A1C.01	Aggregate	General-Primary	N/A	m3	45	0.497		10%	Removed	Regional		HGV	Regional	100		
PathEA4171	Area 2A Spillway - SLY.A4H.01	Asphalt	Asphalt, 4.5% (bitumen) binder content	N/A	m3	297	33.199		5%	Removed	Regional		HGV	Regional	100		
BridEA0372	Area 2A Bridge - CXB.A2A.01	Timber	General (Timber)	N/A	m3	5	1.463		10%	Removed	Regional		HGV	Regional	100		
BridEA0372	Area 2A Bridge - CXB.A2A.01	Steel	Engineering Steel	N/A	t	64	81.483		1%	Removed	Regional		HGV	Regional	100		
BridEA0372	Area 2A Bridge - CXB.A2A.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	208	99.158		5%	Removed	Regional		HGV	Regional	100		
BridEA0373	Area 2B Bridge - CXB.A2B.01	Steel	Engineering Steel	N/A	t	7	8.890		1%	Removed	Regional		HGV	Regional	100		
BridEA0373	Area 2B Bridge - CXB.A2B.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	305	145.399		5%	Removed	Regional		HGV	Regional	100		
BridEA0374	Area 3A Bridge - CXB.A3A.01	Timber	General (Timber)	N/A	m3	20	5.914		10%	Removed	Regional		HGV	Regional	100		
BridEA0374	Area 3A Bridge - CXB.A3A.01	Steel	Engineering Steel	N/A	t	33	41.910		1%	Removed	Regional		HGV	Regional	100		
BridEA0374	Area 3A Bridge - CXB.A3A.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	140	66.741		5%	Removed	Regional		HGV	Regional	100		
WeirEA6975	Area 3B Weir - SWR.A3B.01-06	Stone	General (Stone)	N/A	t	3	0.274		10%	Removed	Regional		HGV	Regional	100		
ErosEA1876	Area 3B Fords - CXF.A3B.01+02	Stone	General (Stone)	N/A	t	1	0.117		10%	Removed	Regional		HGV	Regional	100		
BridEA0377	Area 3B Bridge - CXB.A3B.01	Timber	General (Timber)	N/A	m3	5	1.581		10%	Removed	Regional		HGV	Regional	100		
BridEA0377	Area 3B Bridge - CXB.A3B.01	Steel	Engineering Steel	N/A	t	0	0.038		1%	Removed	Regional		HGV	Regional	100		
BridEA0377	Area 3B Bridge - CXB.A3B.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	13	6.207		5%	Removed	Regional		HGV	Regional	100		
WeirEA6978	Area 3C Weir - SWR.A3C.01	Stone	General (Stone)	N/A	t	0	0.011		10%	Removed	Regional		HGV	Regional	100		
ErosEA1879	Area 3C Ford - CXF.A3C.01	Stone	General (Stone)	N/A	t	1	0.117		10%	Removed	Regional		HGV	Regional	100		
EmbaEA1580	Area 3C Embankment - DEM.A3C.01	Aggregate	General-Primary	N/A	m3	840	9.272		10%	Removed	Regional		HGV	Regional	100		
BridEA0381	Area 3C Bridge - CXB.A3C.01	Timber	General (Timber)	N/A	m3	1	0.296		10%	Removed	Regional		HGV	Regional	100		
BridEA0381	Area 3C Bridge - CXB.A3C.01	Steel	Engineering Steel	N/A	t	49	62.230		1%	Removed	Regional		HGV	Regional	100		
BridEA0381	Area 3C Bridge - CXB.A3C.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	320	152.550		5%	Removed	Regional		HGV	Regional	100		
EmbaEA1582	Area 3D Embankment - DEM.A3D.01	Aggregate	General-Primary	N/A	m3	1011	11.160		10%	Removed	Regional		HGV	Regional	100		
EmbaEA1582	Area 3D Embankment - DEM.A3D.01	Steel	Engineering Steel	N/A	t	35	44.450		1%	Removed	Regional		HGV	Regional	100		
Non-EA3583	Area 3D Floodwall - DWL.A3D.01-4	Bricks	General (Bricks)	N/A	m3	93	39.827		1%	Removed	Regional		HGV	Regional	100		
Non-EA3583	Area 3D Floodwall - DWL.A3D.01-4	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	567	270.519		5%	Removed	Regional		HGV	Regional	100		
SluiEA5884	Tilting weir	Steel	Hot-dip galvanised steel	N/A	m3	2	34.983		1%	Removed	Regional		HGV	Regional	100		
SluiEA5885	Gear box	Plastics	General (Plastics)	N/A	m3	0	0.057		5%	Removed	Regional		HGV	Regional	100		
SluiEA5886	Electricity	Plastics	PVC Pipe	N/A	m3	3	11.144		5%	Removed	Regional		HGV	Regional	100		
SluiEA5887	Headwall	Concrete	Precast Concrete (General)	40/50 MPa	m3	8	3.370		5%	Removed	Regional		HGV	Regional	100		
Non-EA3788	Area 4A Floodwall - DWL.A4A.01	Steel	Engineering Steel	N/A	t	253	320.954		1%	Removed	Regional		HGV	Regional	100		
Non-EA3788	Area 4A Floodwall - DWL.A4A.01	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	391	186.483		5%	Removed	Regional		HGV	Regional	100		
EmbaEA1589	Area 4A Embankment - DEM.A4A.01	Aggregate	General-Primary	N/A	m3	4050	44.705		10%	Removed	Regional		HGV	Regional	100		
EmbaEA1589	Area 4A Embankment - DEM.A4A.01	Steel	Engineering Steel	N/A	t	78	99.060		1%	Removed	Regional		HGV	Regional	100		
WeirEA6990	Area 4B Weir - SWR.A4B.01&02	Stone	General (Stone)	N/A	t	1	0.046		10%	Removed	Regional		HGV	Regional	100		
WeirEA6990	Area 4B Weir - SWR.A4B.01&02	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	222	105.717		5%	Removed	Regional		HGV	Regional	100		
Non-EA3791	Area 4C Floodwall - DWL.A4C.01-2	Steel	Engineering Steel	N/A	t	177	224.841		1%	Removed	Regional		HGV	Regional	100		
Non-EA3791	Area 4C Floodwall - DWL.A4C.01-2	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	131	62.533		5%	Removed	Regional		HGV	Regional	100		
WeirEA6992	Area 4C Weir - SWR.A4C.01	Stone	General (Stone)	N/A	t	0	0.008		10%	Removed	Regional		HGV	Regional	100		
BridEA0493	Area 4D Bridges - CXB.A4D.01 2	Steel	Engineering Steel	N/A	t	184	233.680		1%	Removed	Regional		HGV	Regional	100		
BridEA0493	Area 4D Bridges - CXB.A4D.01 2	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	970	462.417		5%	Removed	Regional		HGV	Regional	100		
Non-EA3794	Area 4D Floodwall - DWL.A4D.01-2, 5-10, 11-12	Steel	Engineering Steel	N/A	t	1071	1360.589		1%	Removed	Regional		HGV	Regional	100		
Non-EA3794	Area 4D Floodwall - DWL.A4D.01-2, 5-10, 11-12	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	808	385.113		5%	Removed	Regional		HGV	Regional	100		
TempEA7795	Area 4D Carrigeway - BAR.A4D.01	Concrete	In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	404	117.884		100%	Removed	Regional		HGV	Regional	100		
TempEA7795	Area 4D Carrigeway - BAR.A4D.01	Asphalt	Asphalt, 4.5% (bitumen) binder content	N/A	m3	2292	0.000		100%	Removed	Regional		HGV	Regional	100		
Non-EA3796	Area 4E Floodwalls - DWL.A4E.01-2, 4-10	Steel	Engineering Steel	N/A	t	409	519.443		1%	Removed	Regional		HGV	Regional	100		
Non-EA3796	Area 4E Floodwalls - DWL.A4E.01-2, 4-10	Concrete	Reinforced In-situ Concrete (Fly Ash Replacement)	RC 32/40 (32/40 MPa) - 50% Cement Replacement	m3	127	60.496		5%	Removed	Regional		HGV	Regional	100		
EmbaEA1597	Area 4E Embankment - DEM.A4E.01	Aggregate	General-Primary	N/A	m3	5051	55.759		10%	Removed	Regional		HGV	Regional	100		
Non-EA3767	Area 1A and 1B Flood wall - DWL.A1A.01 & 02	Steel	Rebar	N/A	t	41	82.247		1%	Removed	Regional		HGV	Regional	100		

Non-EA3768	Area 1B Floodwall - DWL_A1B.01-3	Steel	Rebar	N/A	t	54	107.062		1%	Removed	Regional		HGV	Regional	100		
Non-EA3583	Area 3D Floodwall - DWL_A3D.01-4	Steel	Rebar	N/A	t	57	112.933		1%	Removed	Regional		HGV	Regional	100		
Non-EA3788	Area 4A Floodwall - DWL_A4A.01	Stone	General (Stone)	N/A	m3	288	55.174		10%	Removed	Regional		HGV	Regional	100		
Non-EA3788	Area 4A Floodwall - DWL_A4A.01	Steel	Rebar	N/A	t	39	77.849		1%	Removed	Regional		HGV	Regional	100		
Non-EA3791	Area 4C Floodwall - DWL_A4C.01-2	Steel	Rebar	N/A	t	39	77.849		1%	Removed	Regional		HGV	Regional	100		
Non-EA3794	Area 4D Floodwall - DWL_A4D.01-2, 5-10, 11-12	Steel	Rebar	N/A	t	81	160.752		1%	Removed	Regional		HGV	Regional	100		
Non-EA3796	Area 4E Floodwalls - DWL_A4E.01-2, 4-10	Steel	Rebar	N/A	t	13	25.253		1%	Removed	Regional		HGV	Regional	100		
Non-EA3796	Area 4E Floodwalls - DWL_A4E.01-2, 4-10	Bricks	General (Bricks)	N/A	t	103	21.997		1%	Removed	Regional		HGV	Regional	100		
Non-EA3798	Area 4F Floodwall - DWL_A4F.01-3	Steel	Rebar	N/A	t	30	60.178		1%	Removed	Regional		HGV	Regional	100		
Non-EA37100	Area 4G Floodwall - DWL_A4G.01	Steel	Rebar	N/A	t	1	1.095		1%	Removed	Regional		HGV	Regional	100		
Non-EA37101	Area 4H Floodwall - DWL_a4G.01-06	Steel	Rebar	N/A	t	1	1.095		1%	Removed	Regional		HGV	Regional	100		
WeirEA6975	Area 3B Weir - SWR.A3B.01-06	Steel	Engineering Steel	N/A	t	54	68.834		1%	Removed	Regional		HGV	Regional	100		
WeirEA6990	Area 4B Weir - SWR.A4B.01&02	Steel	Engineering Steel	N/A	t	1	0.813		1%	Removed	Regional		HGV	Regional	100		
WeirEA6992	Area 4C Weir - SWR.A4C.01	Steel	Engineering Steel	N/A	t	7	8.738		1%	Removed	Regional		HGV	Regional	100		
EmbaEA1599	Area 4F Embankment - DEM.A4F.01-2	Aggregate	General-Primary	N/A	m3	12735	140.572		10%	Removed	Regional		HGV	Regional	100		
EmbaEA1599	Area 4F Embankment - DEM.A4F.01-2	Steel	Engineering Steel	N/A	t	158	200.660		1%	Removed	Regional		HGV	Regional	100		
ChanEA05102	All Channels	Soil/Clay	Imported (excludes transport to site)	Recycled soils	m3	1	0.002		0%								
PathEA41103	All access tracks	Aggregate	General-Primary	N/A	m3	8957	98.875		10%	Removed	Regional		HGV	Regional	100		
PathEA41103	All access tracks	Miscellaneous	Damp Proof Course/Membrane	N/A	m2	29858	112.864		5%	Removed	Regional		HGV	Regional	100		
							0.000										
							8603.019										

Add Row

Transport - (A2/A4) **989.86**

Method Used: Summary

Summary

Transport of materials - (A2)

Mode of Transport	Distance (km)	Total Co2e (t)
Road	7800	373.62
Aeroplane - Freight	0	0.00
Freight Train	0	0.00
Barge	0	0.00
Cargo Ship	0	0.00
		373.62

Transport of non-contractor people - (A4)

EA staff	Consultants
115.11	45.95

Transport of contractor people - (A4)

Labour	Management staff
337.07	127.01

Transport of plant - (A4)

Transport of plant
1.68

Detailed

Transport contractor/sub contractor people - (A4)

Vehicles	1-5 km	6-10 km	11-20 km	21-50 km	51+ k	CO2e (t)
Car						0.00
Car Share						0.00
Motorbike						0.00
Bicycle						0.00
Walking						0.00
Van						0.00
Rail						0.00
Bus						0.00

Transport of plant - (A4)

Vehicles	1-5 km	6-10 km	11-20 km	21-50 km	51+ k	CO2e (t)
Tractor						0.00
Asphalt Paver						0.00
Crane						0.00
Excavators						0.00
Piling Plant						0.00
Rollers						0.00
Dozers						0.00
Dumpers						0.00

Installation - (A5) **7,753.43**

Method Used: Detailed

Summary

Site Establishment - (A5)

Size of Project	CO2e (t)
Large (18 months+)	210.08

Plant use - (A5)

Plant fuel	Measure (Litres)	CO2e (t)
Petrol		0.00
Biodiesel [Standard]		0.00
Diesel [Red]		0.00

Detailed

Site Establishment - (A5)

Fuel Type	Unit	Consumption	CO2e (t)	Electricity emissions factor (kgCO²e/kWh - overwrite
Electricity	kWh	20000	5.71	
Natural Gas	m3	10000	22.86	
LPG	litres	10000	17.46	
Gas Oil [Red Diesel]	litres	20000	67.81	
Petrol	litres	10000	27.61	
Diesel	litres	20000	63.12	
Water	litres	10000	0.01	
BioFuel	litres		0.00	
HVO	litres		0.00	
			204.57	

Plant use - (A5)

Sub-Asset Ref.	Sub-Asset description	Plant	Plant type	Activity	Hours on site	Fuel type	Utilisation	Utilisation (Manual Input)	Consumption l/hr	Total ltrs of fuel used	CO2e (t)	Total ltrs of fuel used - Overwrite
ChanEA05102	All Channels	Excavators	draulic Crawler Backacter - 23.	1 - Channel Excavation	1755.00	Diesel [Red]	75.00%		14.25	18756.56	63.59	
ChanEA05102	All Channels	Excavators	draulic Crawler Backacter - 23.	2 - Channel Excavation	1755.00	Diesel [Red]	75.00%		14.25	18756.56	63.59	
ChanEA05102	All Channels	Excavators	draulic Crawler Backacter - 23.	3 - Channel Excavation	1755.00	Diesel [Red]	75.00%		14.25	18756.56	63.59	
ChanEA05102	All Channels	Dozers	CAT D6N	1 - Channel Excavation	1755.00	Diesel [Red]	80.00%		16.80	23587.20	79.97	
ChanEA05102	All Channels	Dozers	CAT D6N	2 - Channel Excavation	1755.00	Diesel [Red]	80.00%		16.80	23587.20	79.97	
ChanEA05102	All Channels	Dozers	CAT D6N	3 - Channel Excavation	1755.00	Diesel [Red]	80.00%		16.80	23587.20	79.97	
ChanEA05102	All Channels	Dumpers	36 tonne	1 - 3 dumpers serving excavator 1 on turn around	5265.00	Diesel [Red]	80.00%		20.00	84240.00	285.60	
ChanEA05102	All Channels	Dumpers	36 tonne	2 - 3 dumpers serving excavator 2 on turn around	5265.00	Diesel [Red]	80.00%		20.00	84240.00	285.60	
ChanEA05102	All Channels	Dumpers	36 tonne	3 - 3 dumpers serving excavator 3 on turn around	5265.00	Diesel [Red]	80.00%		20.00	84240.00	285.60	
ChanEA05102	All Channels	Excavators	draulic Crawler Backacter - 23.	1 - Material Handling Area	1755.00	Diesel [Red]	75.00%	30.00%	14.25	7502.63	25.44	
ChanEA05102	All Channels	Excavators	draulic Crawler Backacter - 23.	2 - Material Handling Area	1755.00	Diesel [Red]	75.00%	30.00%	14.25	7502.63	25.44	
											1338.34	

Add Row

Materials waste - (A5)

Reused / Recycle / Removed	Distance Travelled	CO2e (t)
Reused	0	0.00
Recycle	0	0.00
Removed	7800	127.38
		127.38

Other construction waste - (A5)

Material	Quantity (t)	Reused / Recycle / Removed	Distance to waste disposal	Distance	CO2e (t)
Soil/Clay	942000	Removed	Local	50	6168.22
Soil/Clay	192000	Reused	Site won	0	0.00
Asphalt	2521	Removed	Local	50	16.51
Concrete	970	Removed	Local	50	6.35
					6191.07

Add Row

Lifecycle carbon **1,649.40**

+ - Operational carbon 909.40

Use - (B1) 6.06

Asset Ref.	Asset Description	Use description	Mode of transport	Fuel type	No. of people traveling by	No. of days manned per year	Return distance to manned asset (km)	CO2e (t)
Non-EA37	est Seacourt Flood wall - DWL.	ood alert, assumed once a year	Van	Diesel	10	1	20	0.062
SluiEA58	Eastwyke flow control - SCG.A	anned by 2 people once per ye	Van	Diesel	2	1	20	0.012
								0.000
								0.000
								0.000
								0.000
								0.000
								0.075

Add Row

Maintenance - (B2) 877.76

Sub-Asset Ref.	Sub-Asset description	Maintenance category	Maintenance description	Mode of transport	Return transport distance (km)	Materials	Plant	Waste	Overhead	Annual intervention fequency	Interventions per year	Exceptional intervention year	CO2e (t) per intervention
BridEA0464	Area 1A Bridge - CXB.A1A.01	Minimum Need	Public safety inspection	Van	20	Low	Low	Not used	Not used	Every year			0.038
BridEA0372	Area 2A Bridge - CXB.A2A.01	Minimum Need	Public safety inspection	Van	20	Low	Medium	Not used	Not used	Every year			0.189
BridEA0373	Area 2B Bridge - CXB.A2B.01	Minimum Need	Public safety inspection	Van	20	Low	Medium	Not used	Not used	Every year			0.161
BridEA0374	Area 3A Bridge - CXB.A3A.01	Minimum Need	Public safety inspection	Van	20	Low	Low	Not used	Not used	Every year			0.121
BridEA0377	Area 3B Bridge - CXB.A3B.01	Minimum Need	Public safety inspection	Van	20	Low	Low	Not used	Not used	Every year			0.014
BridEA0381	Area 3C Bridge - CXB.A3C.01	Minimum Need	Public safety inspection	Van	20	Low	Low	Not used	Not used	Every year			0.221
BridEA0493	rea 4D Bridges - CXB.A4D.01-	Minimum Need	Public safety inspection	Van	20	Low	Low	Not used	Not used	Every year			0.703
OutfEA4065	All Outfalls	Minimum Need	ris removal, de-silting x 20 Out	Van	400	Low	Low	Not used	Not used	Every year			0.181
CulvEA0766	All Culverts	Minimum Need	bris removal, de-silting x 5 culv	Van	100	Low	Low	Not used	Not used	Every year			0.136
SluiEA5884	Tilting weir	Identified Need	General maintenenance	Van	20	Low	Low	Not used	Not used	Every year			0.041
SluiEA5885	Gear box	Identified Need	General maintenenance	Van	20	Low	Low	Not used	Not used	Every year			0.006
SluiEA5886	Electricity	Minimum Need	General inspection	Van	20	Low	Low	Not used	Not used	Every year			0.018
SluiEA5887	Headwall	Minimum Need	nspection, minor concrete repa	Van	20	Medium	Medium	Not used	Not used	Every year			0.040
Non-EA3767	, and 1B Flood wall - DWL.A1A.	Minimum Need	ction, minor concrete repair, sil	Van	80	Low	Low	Not used	Not used	Every 2 years			0.695
Non-EA3768	rea 1B Floodwall - DWL.A1B.01	Minimum Need	ety inspection, silt removal x 3	Van	60	Low	Low	Not used	Not used	Every 2 years			1.030
Non-EA3583	rea 3D Floodwall - DWL.A3D.01	Minimum Need	an areas, vegetation cutting/cle	Van	20	Low	Low	Not used	Not used	Every 2 years			0.430
Non-EA3788	Area 4A Floodwall - DWL.A4A.0	Minimum Need	an areas, vegetation cutting/cle	Van	20	Low	Low	Not used	Not used	Every 2 years			0.647
Non-EA3791	rea 4C Floodwall - DWL.A4C.01	Minimum Need	an areas, vegetation cutting/cle	Van	20	Low	Low	Not used	Not used	Every 2 years			0.372
Non-EA3794	Floodwall - DWL.A4D.01-2, 5-1	Minimum Need	an areas, vegetation cutting/cle	Van	20	Low	Low	Not used	Not used	Every 2 years			1.913
Non-EA3796	4E Floodwalls - DWL.A4E.01-2,	Minimum Need	an areas, vegetation cutting/cle	Van	20	Low	Low	Not used	Not used	Every 2 years			0.634
EmbaEA1569	ea 1B Embankment - DEM.A1B.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.143
EmbaEA1570	ea 1C Embankment - DEM.A1C.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.007
EmbaEA1580	ea 3C Embankment - DEM.A3C.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.016
EmbaEA1582	ea 3D Embankment - DEM.A3D.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.062
EmbaEA1589	ea 4A Embankment - DEM.A4A.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.150
EmbaEA1597	ea 4E Embankment - DEM.A4E.	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.062
EmbaEA1599	a 4F Embankment - DEM.A4F.0	Minimum Need	raising due to settlement, vege	Van	20	Low	Low	Not used	Not used	Every year			0.348
Non-EA37101	ea 4H Floodwall - DWL.a4G.01-	Minimum Need	lic safety inspection, removal o	Van	20	Low	Medium	Not used	Not used	Every year			0.008
ErosEA1876	Area 3B Fords - CXF.A3B.01+02	Minimum Need	Desilt channel, remove debris	Van	20	Low	Low	Not used	Not used	Every year			0.007
ErosEA1879	Area 3C Ford - CXF.A3C.01	Minimum Need	Desilt channel, remove debris	Van	20	Low	Low	Not used	Not used	Every year			0.007
WeirEA6992	Area 4C Weir - SWR.A4C.01	Minimum Need	General maintenenance	Van	20	Low	Low	Not used	Not used	Every 2 years			0.015
ChanEA05102	All Channels	Minimum Need	, remove debris, vegetation cut	Van	20	Low	Low	Not used	Not used	Every 2 years			1.345
								Not used	Not used				0.000
													9.756

Add Row

Repair - (B3) 25.4311

Sub-Asset Ref.	Sub-Asset description	Repair category	Repair description	Mode of transport	Return transport distance (km)	Materials	Plant	Waste	Overhead	Annual intervention fequency	Interventions per year	Exceptional intervention year	CO2e (t) per intervention
BridEA0464	Area 1A Bridge - CXB.A1A.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	0.375
BridEA0372	Area 2A Bridge - CXB.A2A.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	1.882
BridEA0373	Area 2B Bridge - CXB.A2B.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	1.604
BridEA0374	Area 3A Bridge - CXB.A3A.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	1.207
BridEA0377	Area 3B Bridge - CXB.A3B.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	0.139
BridEA0381	Area 3C Bridge - CXB.A3C.01	Not used	Breakdown	HGV	50	Medium	Medium	Not used	Not used	Exceptional		50	2.212
BridEA0493	rea 4D Bridges - CXB.A4D.01-	Not used	Breakdown	HGV	50	Medium	High	Not used	Not used	Exceptional		50	7.022
SluiEA5884	Tilting weir	Not used	Repair weir damage	Van	50	Low	Low	Not used	Not used	Exceptional		15	0.051
SluiEA5885	Gear box	Not used	Repair box/engine/actuator	Van	50	Low	Low	Not used	Not used	Exceptional		10	0.016
SluiEA5886	Electricity	Not used	Repair electricity conection	Van	30	Low	Low	Not used	Not used	Exceptional		10	0.021
SluiEA5887	Headwall	Not used	alant replacement/repair concr	HGV	50	Medium	Medium	Not used	Not used	Exceptional		15	0.095
Non-EA3767	, and 1B Flood wall - DWL.A1A.	Not used	General maintenance x 4 weirs	Van	120	Low	Low	Not used	Not used	Exceptional		25	0.707
Non-EA3768	rea 1B Floodwall - DWL.A1B.01	Not used	eneral maintenance x 3 crossin	Van	90	Low	Low	Not used	Not used	Exceptional		25	1.040
Non-EA3583	rea 3D Floodwall - DWL.A3D.01	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.433
Non-EA3788	Area 4A Floodwall - DWL.A4A.0	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.650
Non-EA3791	rea 4C Floodwall - DWL.A4C.01	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.375
Non-EA3794	Floodwall - DWL.A4D.01-2, 5-1	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	1.916
Non-EA3796	4E Floodwalls - DWL.A4E.01-2,	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.637
Non-EA3798	rea 4F Floodwall - DWL.A4F.01	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.070
Non-EA37100	Area 4G Floodwall - DWL.A4G.0	Not used	alant replacement/repair concr	Van	30	Low	Low	Not used	Not used	Exceptional		25	0.011
Non-EA37101	ea 4H Floodwall - DWL.a4G.01-	Not used	Repair/replace sheet piles	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.011
EmbaEA1569	ea 1B Embankment - DEM.A1B.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.146
EmbaEA1570	ea 1C Embankment - DEM.A1C.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.010
EmbaEA1580	ea 3C Embankment - DEM.A3C.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.019
EmbaEA1582	ea 3D Embankment - DEM.A3D.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.065
EmbaEA1589	ea 4A Embankment - DEM.A4A.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.153
EmbaEA1597	ea 4E Embankment - DEM.A4E.	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.065
EmbaEA1599	a 4F Embankment - DEM.A4F.0	Not used	embankment raising due to se	Van	30	Low	Medium	Not used	Not used	Exceptional		20	0.351
OutfEA4065	All Outfalls	Not used	eneral maintenance x20 outfall	Van	600	Low	Medium	Not used	Not used	Exceptional		20	0.245
CulvEA0766	All Culverts	Not used	eneral maintenance x5 culvert	Van	150	Low	Medium	Not used	Not used	Exceptional		20	0.153
WeirEA6992	Area 4C Weir - SWR.A4C.01	Not used	Repair weir damage	Van	30	Low	Low	Not used	Not used	Exceptional		15	0.018
ErosEA1876	Area 3B Fords - CXF.A3B.01+02	Not used	Repair fords	Van	30	Low	Low	Not used	Not used	Exceptional		10	0.010
ErosEA1879	Area 3C Ford - CXF.A3C.01	Not used	Repair fords	Van	30	Low	Low	Not used	Not used	Exceptional		10	0.010
ChanEA05102	All Channels	Not used	ny collapased banks/erosion pr	Van	30	Low	Low	Not used	Not used	Exceptional		15	1.348
		Not used						Not used	Not used				0.000
													23.066

Add Row

Energy - (B1) 0.15

Sub-Asset Ref.	Sub-Asset description	Name plate (kW)	Overall efficiency rating (%)	Load rating (%)	Use factor (%)	Power absorbed (kW)	Hours / Year	Annual power consumed (kWh)	CO2e (t)	Annual power consumed (kWh) - Overwrite	Emissions factor kgCO2e/kWh - overwrite
SluiEA5886	Electricity	0.75	95.00%	20.00%	1.00%	0.00	8760	14	0.006		
									0.000		
									0.000		
									0.000		
									0.000		
									0.000		
									0.000		
									0.000		
									0.000		
									0.006		

Add Row

Replacement carbon - (B4) 258.55

Materials	109.98
Transport	20.32
Installation	128.25

Refurbishment carbon - (B5) 254.32

Demolition carbon - (C1-C2) 789.70

Material waste	45.74
Plant	669.37
People	74.60