

Area 3: Carmarthenshire: LANDMAP Change Detection: Visual & Sensory Aspect Monitoring Report Final: March 2015

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Rev No. 3

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1.0 Introduction

- 1.1. In August 2013 Natural Resources Wales (NRW) commissioned Bronwen Thomas Landscape Architect (BTLA) to carry out stages 1, 2a and 2b of the interpretation of the LANDMAP Change Detection Packs (CDP) for the Visual & Sensory aspect covering several parts of Wales including Area 3 which includes Carmarthenshire.
- 1.2. In September 2013 BTLA was commissioned to prepare and manage the Local Authority questionnaire input into Visual & Sensory Change Detection across all of Wales.
- 1.3. In July 2014 BTLA was commissioned to carry out field visits, complete the surveys and update the Visual & Sensory data including the on-line surveys and GIS for the parts of Wales covered in the first stages, including Carmarthenshire.

2.0 Methodology

2.1. 'LANDMAP Guidance for Wales: Monitoring Landscape Change' (NRW 2014) provides a full explanation of the methodology. The tasks carried out, in brief, have been:

Stage 1: Baseline of Change

- Creation of monitoring tables for each of the local authorities, listing aspect areas, sources of change detection and recommended amendments;
- Desk study of maps and resources supplied in the Change Detection Pack to identify aspect areas where significant landscape change is anticipated, relating to boundaries, classification, evaluation and descriptions;
- Population of relevant columns to form the Stage 1 tables, relating to the CDP resources, namely:
 - 1. Aspect area UID and name;
 - 2. Change indicated by OS data, aerial photographs and roads/buildings maps;
 - 3. Change indicated by complexity maps (segment density) and NDVI;
 - 4. Change indicated by Phase 1 and seasonal change maps:
 - 8. (Draft) recommended LANDMAP amendments.

Stage 1a: Local Authority questionnaire findings

- Assessment of information derived from local authority questionnaire.
- Population of relevant columns in the monitoring table:
 - 5. Change indicated by LPA questionnaire
 - 8. Adjustments to recommended LANDMAP amendments

Stage 1b: Additional desk-based information

- Assessment of further information requested and supplied by NRW and local authorities;
- Cross-check against Consistency Report to ensure inconsistencies have been rectified;
- Population of relevant columns of the monitoring table:
 - 6. Changes indicated by other resources;
 - 8. Adjustments to recommended LANDMAP amendments
- Preparation of summary report to provide information specific to Carmarthenshire and give a summary of key changes and influences, with illustrations, detected at this stage.

Stage 2: Fieldwork verification and survey completion

- Visits to aspect areas to verify significance of changes and identify additional changes;
- Population of relevant columns in the monitoring table:
 - 7. Change indicated by fieldwork
 - 8. Adjustments to recommended LANDMAP amendments
- Adjustments to monitoring table relating to feedback from LPAs and incorporation of further additional sources of information;
- Revision of summary report to take account of changes made at stage 2;
- Preliminary Quality Assurance.

Stage 3: Updating the Visual & Sensory

- Updating all aspect area surveys as recommended in the monitoring table;
- Updating aspect area boundaries in the Visual & Sensory GIS layer;
- Revision of monitoring table and summary report to take account of changes made at stage 3;
- · Quality Assurance.

3.0 Monitoring Table Notes

- 3.1 The final monitoring table has been prepared in accordance with the Technical Specifications. The following general notes provide clarity and explain any modifications.
- 3.2 The final table accompanies this report.
- 3.3. Letters (**a. b.** etc.) refer to the separate changes that have been identified in each aspect area. This allows the recommended LANDMAP amendments to relate to the different changes.
- 3.4. Potential changes identified at stage 2 but not substantiated by fieldwork or other later methods have been retained in the final monitoring table for the sake of transparency.
- 3.5. Italics refer to amendments required for consistency rather than significant change.
- 3.6. Figures taken from mapping and aerial photographs show all boundary changes and illustrate some of the amendments. These are provided with the accompanying monitoring table.
- 3.7. The following notes relate to each column of the monitoring table:
- **Column 1:** Aspect Area UID and name.
- **Column 2:** The Mastermap road and built form change mapping, and the 2001 and 2010 aerial photographs provided the most useful data for detecting possible change. It must be noted that the aerial photographs provided in the CDP do not show the most recent changes.
- **Column 3:** The complexity maps and NDVI mapping identified some possible vegetation changes. In Carmarthenshire these have assisted in verifying change.

Column 4: Phase 1 habitat mapping has not been supplied. Seasonal change has not provided any further information relating to significant Visual & Sensory change.

Column 5: BBNPA responded to the questionnaire. Feedback from LPA has followed draft reporting.

Column 6: Other resources used for Carmarthenshire:

- Forestry mapping showing conversion from conifer to broadleaf woodland
- Windfarm mapping showing windfarm developments in Carmarthenshire.
- Google Earth (referenced as GE2013) provides more up-to-date aerial photographs for parts of Carmarthenshire.

Column 7: It must be noted that the fieldwork was carried out in summer 2014, approximately six months after the stage 1 monitoring table was completed, and several years after the aerial photographs were taken. Care was taken, therefore, to ensure that developments and other potential changes that appeared to be in progress at earlier stages were checked on site. Fieldwork has verified most of the changes identified.

Column 8: In summary, the following amendments are recommended:

- Twenty aspect areas require boundary changes. Three of these changes relate to inconsistencies.
- Twenty-two aspect areas require checking and/or amendments to survey data relating to descriptions and recommendations.
- There are no recommended changes to classifications or evaluations.
- There are no new aspect areas recommended.

4.0. General Approach to Recommended Amendments Relating to All-Wales Landscape Change

4.1. The following notes provide an overview of the recommended amendments that have been applied to all areas of Wales being monitored by Bronwen Thomas Landscape Architect. Only notes that may be relevant to Carmarthenshire are included.

Forestry conversion to broadleaf woodland

- 4.2. Source: All Wales GIS mapping supplied by NRW. This maps areas of former conifer plantation that have been replanted with broadleaves since 2001in NRW-managed forests.
- 4.3. Where there are considerable areas of broadleaf conversion shown on the mapping within an aspect area this is noted in column 6. However, all these areas which have been checked during fieldwork are not having any significant visual & sensory impact yet. Therefore the broadleaf conversion is noted as a trend with recommendation to continue conversions to broadleaf, and referred to in the amended summary only, especially in relation to prominent areas such as valley sides overlooking settlements (e.g. Crynant) or main transport/tourist routes (e.g. north of Rosebush in Preselis), or recreational areas (e.g. Afan Forest Park). This only applies to aspect areas which are significantly wooded, not where woodland/forestry is not a key characteristic.

Phytophthora felling

Source: Comprehensive coverage of actual felling has not been made available therefore this has not been able to be included as change, except where noted as significant during fieldwork.

Windfarms

- Source: All Wales GIS mapping, August 2013. This maps all consented and operational windfarms, giving name, number and heights of turbines.
- 4.6. Some windfarms have already been included in the Visual & Sensory data, however these surveys will be checked and may be amended, with cumulative effects being considered. Operational windfarms are included as a landscape change within the aspect area, with amendments relating to detractive views within, change to sense of place, trend, condition, recommendations. Windfarms are also considered to be making significant change to views from other aspect areas within 5km, with detractive views out. If these aspect areas are primarily forestry, or valleys without views, or facing away from the windfarm, views from these have not changed significantly. The impact of all the operational and consented windfarms have been verified by fieldwork. Where windfarms are consented but not built, amendments relate to trend and recommendations. In order to provide consistent descriptions, the landscape types identified in 'Guidance on cumulative impact of wind turbines on landscape & visual amenity: Pembrokeshire and Carmarthenshire' (White Consultants 2012) will be used. These are: wind turbine landscape; windfarm.

Single wind turbines

- Sources: LPA questionnaire. No comprehensive mapping has been available, therefore change detection has relied on LPA observations, personal knowledge and fieldwork observations.
- There are many more (and larger) single or pairs of wind turbines now than at the time of the original Visual & Sensory surveys. Where there are a considerable number within an aspect area the cumulative effect may make a change to views within (detractive), trend, recommendations (e.g. parts of Pembrokeshire plateau and around Milford Haven). Where turbines are sparcely scattered and not prominent, no significant change is detected. The landscape types identified in 'Guidance on cumulative impact of wind turbines on landscape & visual amenity: Pembrokeshire and Carmarthenshire' (White Consultants 2012) will be used. These are: area with no turbines; area with very occasional wind turbines; area with occasional turbines; area with turbines.

Solar farms

Sources: LPA questionnaire. No comprehensive mapping has been available, therefore change detection has relied on LPA observations, personal knowledge and fieldwork observations.

4.10. Solar farms tend to be thinly spread at present and not considered to be making significant visual & sensory change yet (e.g. western part of Vale of Glamorgan, eastern parts of Pembrokeshire plateau). Fieldwork has shown that these are not prominent features from many viewpoints. These are noted and amendments will be made to trend and recommendations.

Settlement expansion

- 4.11. Sources: GIS Mastermap road and building change mapping, aerial photographs (2001 and 2010), plus Google Earth 2013 photography where applicable. The impacts of most of the areas of expansion have been verified by fieldwork.
- 4.12. As well as boundary changes around settlement aspect areas there is also encroachment on gaps between settlements which is significant in the 'busy' parts of the country such as M4 corridor and tourist areas (such as Pembrokeshire and Ceredigion coast). As well as physical encroachment, there is encroachment on views with some prominent edges of settlements impacting on the adjacent rural aspect areas. Where this is significant in the rural aspect areas amendments are recommended to detractive views and trend/recommendation relating to encroachment.

Coastal erosion

- 4.13. Source: The Welsh Coastal Storms, December 2013 & January 2014 an assessment of environmental change, NRW Evidence Report 33. This report became available in September 2014, after most fieldwork had been completed. LPA feedback has identified some specific areas of change which have all been verified by fieldwork.
- 4.14. The acceleration of coastal erosion, in terms of Visual & Sensory landscape change, is having a significant effect on some dunes systems (e.g. Newborough on Anglesey) or necessitating new sea defences (e.g. Borth in Ceredigion) but elsewhere is less significant. Amendment recommendations to aspect areas which have had specific erosion relate to trends and recommendations. No specific change relating to coastal erosion has been detected in Carmarthenshire.

5.0 Summary of Key Changes and Influences in Carmarthenshire

Expansion of settlements:

- 5.1. New housing estates and industry on the edges of Carmarthen, Llanelli, St. Clears and Ammanford, also some of the Gwendraeth valley settlements, mean that these towns and villages have expanded beyond their aspect area boundaries.
- 5.2. Llanelli has additional development within its aspect area.

Scattered developments:

5.3. A significant amount of scattered development has taken place (and continues) adjacent to the A48 corridor around Cross Hands and the Gwendraeth valley. The Llanelli coastal belt has also seen a significant amount of scattered developments.

Large local developments:

5.4. Ffos Las race track and adjacent housing has developed significantly over the past few years, and is on-going.

New road schemes:

5.5. The Llanddowror bypass on the A477 has made significant changes to views and tranquillity within the aspect areas it passes through, and the valley which it bypasses.

Windfarms:

5.6. Three fairly small windfarms have been built or expanded, having visual impacts within and beyond their aspect areas. The large windfarm in Brechfa Forest has yet to be built, and it is expected to have widespread visual impacts within and on adjacent aspect areas.

Single turbines:

5.7. Small and medium-sized turbines are scattered mainly in areas north and west of the Towy valley. They are not becoming a key characteristic yet.

6.0. Monitoring Table and Figures

Italics denotes amendments required for consistency rather than significant change

1 Aspect Area UID & name	2 Change indicated by: OS data, Aerial photographs &	3 Complexity maps (segment density) &	4 Phase 1 & seasonal change	5 LPA questionnaire (from BBNP)/ feedback (LPA)	6 other resources	7 Fieldwork	8 Recommended LANDMAP amendment
CRMRTVS006 Upper Brynaman	Roads/Buildings Housing expansion at Bryn Hyfryd in west into 576. Not enough to be significant	NDVI	Change	Toodback (El A)		No significant change	No amendment required – no significant change
CRMRTVS013 Banc Pen Arthur ridge	organica in			Broadleaf conversion, may change descriptions		Not visually significant	No amendment required – no significant change
CRMRTVS014 Mynydd Myddfai	Tracks resurfaced throughout. Not apparent on aerial				GE2013 shows no significant change		No amendment required – no significant change
CRMRTVS015 Bannau Sir Gaer and environs	a.Shadow confirmed	a.More productive cluster around Llyn y Fan Fach – may be shadow/water		b. Llyn y Fan Fach Car park extension/ improvements. Anticipated in financial year 2013/2014	GE2013 shows no change to car park (b.)		No amendments required – no significant change
CRMRTVS016 The Black Mountain	a.Various short new/renewed tracks at quarry viewpoint on road at Foel Fawr. Not apparent on aerial b.Not clear on aerial	b.Large areas of less/much less productive in south at Tair Carn Isaf/Uchaf		c.Brest Cwm Llwyd + Coed y Rhaiadr - deep peat burns - result in change to landscape colour + fire scars – highly visible. d.Black Mountain overgrazing (and others) -	GE2013 shows no significant change (a. b. c. d.)	a. b. No significant change observed. Mynydd Bettws windfarm conspicuous from southern parts.	Survey: Amend summary, views to reflect views to windfarm.

			soil erosion, loss of grass - some recovery there from eg thicker heather cover on parts of the Black Mountain			
CRMRTVS103 Brandy Hill	Bypass shown on OS base due to open late 2013, but not on aerial 2010			Bypass built. Amendments needed	Bypass conspicuous. Nearby large single wind turbine	Survey: Amend summary, views, sensory qualities, evaluations, condition, trend, recommendations to reflect intrusive new road and turbine
CRMRTVS104 Marlas/Llwchwr valley & slopes	Shed at Ammanford expanded into this aa					GIS: Boundary change with 526 Survey: note boundary change
CRMRTVS142 Lower Taf valley	Bypass shown on OS base due to open late 2013, but not on 2010 aerial			Bypass built. Amendments needed	Bypass conspicuous	Survey: Amend summary, views, sensory qualities, evaluations, condition, trend, recommendations to reflect intrusive new road.
CRMRTVS161 Pembrey levels & motor sports	Expansion of Pembrey into this aa					GIS: Boundary change with 229 Survey: note boundary change
CRMRTVS192 Cwm Duad/Gwili	Not apparent on aerial	Large areas of more productive woodland on south side, adjacent to main road				No amendments required – no significant change
CRMRTVS209 Rhos Blaen Esgair	a.Felling apparent on aerial.	a.Block of forestry much less productive - felling	a.Clear felling & re-planting. c.Several single wind turbines.	b. Patch of broadleaf conversion (not correlate with less productive)	Very occasional trubines	Survey: Amend summary and trend, recommendations to reflect future broadleaf, and single turbines
CRMRTVS211 Ffos Las	New roads and development, housing and				Large area of new housing to north east of race track being	Survey: Check/amend summary, views, sensory qualities, condition, trend,

	industry, Ffos Las Race Track developed since 2001			developed	recommendations to reflect race course, housing activity
CRMRTVS229 Burry Port & Pembrey	a.New distributor roads B4311 linking to Ashpits. b.Development to west of Pembrey into 161, on aerial			Confirmed	GIS: Boundary change with 820 (a.) and161 (b.) Survey: Amend summary and trend to reflect expanding settlement
CRMRTVS270 St Clears	Expansion of housing in 3 places to north into 633 and 995			Extent confirmed	GIS: Boundary changes with 633, 995 Survey: Amend summary and trend to reflect expansion of settlement
CRMRTVS277 Cross Hands- Capel Hendre	a. Various expansions within: housing. b.Industry at Cross Hands c.Drefach expanding into this aa			General noticeable proliferation of new housing developments. Clear views to Mynydd y Betws windfarm from northern half of aa	GIS: Boundary change with 395 (c.) Survey: Amend summary, descriptions, views, condition, trend, recommendations to reflect increase in development and views to windfarm.
CRMRTVS300 Lower Gwili valley	Edge of Carmarthen expanding into this aa, but not significant on aerial			Insignificant	No amendments required – no significant change
CRMRTVS330 Brechfa Forest	a.not built 2010 b.not apparent on aerial	a. Windfarm not built yet	a.Brechfa Forest West windfarm 28 turbines 145m ht.consented b.Various quite large areas of broadleaf conversion, mainly in west on slopes and edges	b. Not making significant visual impact yet	Survey: Amend summary and trend to reflect gradual increase in broadleaf
CRMRTVS377 Pen y garn & Moelfre	3 turbines appear built 2010	Turbines included in existing descriptions	Blaenbowi/Morfa windfarm – 10 turbines operational	Confirmed - views from west	Survey: Check/amend turbines included
CRMRTVS378 Llanelli	a. Industrial development east of			Confirmed	GIS: Boundary changes with 557 (a. b.) and 436

	Felinfoel into 557 b. Housing development east of Swiss Valley into 557 c. Housing development in east, adjacent to bridge, into 436 d. Housing development at North Dock.				(c.) Survey: Amend summary
CRMRTVS395 Gwendraeth settlements	a.Housing expansion at Tumble south into 557. b.Housing expansion at Drefach east into 277 c.Housing expansion at Bancffosfelen into 665, not on aerial d.Housing expansion at Pont-Henry into 955 e.Poorly drawn boundary around Pontyates				GIS: Boundary change at Tumble with 557 (a.), at Drefach with 277 (b.), at Bancffosfelen at 665 (c.) and with Pont Henry at 955 (d.) Boundary re-drawn at Pontyates with 955 (e.) Survey: note boundary changes and expansion trend
CRMRTVS400 Gwendraeth Fach	Housing estate at Llangadog in south. Former works demolished and housing developed on site. Poorly drawn boundary with 665 at this point			All former works site developed as housing	GIS: Boundary change with 665 to include all housing on former works Survey: note boundary changes
CRMRTVS416 Trevaughan slopes	Edge of Carmathen expanding into this aa, former works, now housing.				GIS: Boundary change with 831 Survey: note boundary change
CRMRTVS436 Llanelli levels	a.Housing expanding into in east by bridge, from 378			Various developments confirmed	GIS: Boundary change with 378 (a.) Survey: Amend summary,

CRMRTVS446 Llanddowror,	b.new road connections c.caravan park Bypass shown on base OS but not on		Bypass built		Bypass has reduced traffic considerably	descriptions, views, condition, trend, recommendations to reflect increase in development and restorations. Survey: Amend summary, views, sensory qualities,
etc. woods	2010 aerial				traine considerably	evaluations, condition, trend, recommendations, to reflect reduction in through traffic
CRMRTVS459 Mid Taf Valley				CR – review value as Moderate		CR done
CRMRTVS504 Mynydd Betws	a. not built in 2010 b. new quarry on county boundary			a.Mynydd y Betws windfarm consented 16 turbines, 110m	a. Windfarm built, conspicuous in northern part b. Not visually significant	Survey: Amend summary, views, condition, trend, recommendations to reflect windfarm development
CRMRTVS526 Ammanford	a.Various developments within. b.New bypass within along valley floor. c.Development of Pont Amman colliery site d.Housing expansion into 576 in north. e.Industrial shed on valley floor into 104 in south			c. GE2013 shows all housing on colliery site	All developments confirmed	GIS: Boundary change with 567 (d) and 104 (e) Survey: Amend summary and trend to reflect expansion and improvements to settlement
CRMRTVS553 Llanpumsaint basin	a.felled	a.Large patch of forestry much less productive	a.No significant change expected from felling/replanting	b.Patches of broadleaf conversion in north. c.Brechfa forest slopes to east – broadleaf now		Survey: Amend summary and trend to reflect gradual increase in broadleaf.
CRMRTVS557 Llanelli Hills	 a.Expansion of east Llanelli in 2 places – housing and industry. b.Tumble expanding into this aa 					GIS: Boundary change with 378 (a) and 395(b) Survey: note boundary changes

CRMRTVS576 Black Mt. southern slopes	a.New road(cycleway?) along river Amman between Glanaman and Ammanford, not apparent on aerial b .Ammanford expanded into this aa		Recreational route		c. Mynydd y Betws windfarm conspicuous on southern skyline	GIS: Boundary change with 006 (b) Survey: Amend summary, views to reflect nearby windfarm.
CRMRTVS633 Lower Taf & Cywyn valleys	a.Bike track between road & river near Four Wheels, enlarged since 2001 b.St Clears expanded into this aa in north c.Edge of Carmarthen expanding into this aa			a.Bike track more visible but doubt any change to description	a. Not conspicuous	GIS: .Boundary change with 270(b) and 831 (c) Survey: note boundary changes
CRMRTVS665 Crwbin ridge	Bancffosfelen expanding into this aa. Poorly drawn boundary with 400 at southern end				Confirmed	GIS: Boundary change to with 395 to exclude housing. Boundary change with 400 to exclude housing
CRMRTVS713 Upper Cothi catchment	Not apparent on aerials			Patches of broadleaf conversion on eastern sides CR – Change rarity to High and overall to High		Survey: Amend summary and trend to reflect gradual increase in broadleaf CR done
CRMRTVS715 West March Pendine				a.Parc Cynog windfarm on skyline	Confirmed	Survey: Amend summary and views to reflect views to Parc Cynog windfarm
CRMRTVS749 Crychan & Halfway forest	a.Felling	a. More and less productive		b. Patches of broadleaf conversion mainly to west, upper part		Survey: Amend summary and trend to reflect gradual increase in broadleaf
CRMRTVS814 Marros Hills	Windfarm built		Extension of windfarm built – needs updating	Parc Cynog windfarm consented 6 turbines 80m	Windfarm conspicuous from within area and coast	Survey: Amend summary, views, descriptions, trend, recommendations to

						reflect larger windfarm
CRMRTVS820 Millenium Coastal Park	a.Development at Machynys – housing & access road (s. of Llanelli), plus golf course b.Development at Ashpits (e of Burry Port 229)					GIS: Boundary change with 229 Survey: Amend summary, trend, recommendations to reflect increase in development and activities.
CRMRTVS831 Carmarthen	Various new developments within. a.Extension at Pensarn into 960 b.St David's Hospital and Starling Park in west into 633, not apparent on aerial. c.Housing into 416 in NW, not apparent on aerial. d.Small amount into 300 Glangwili, not apparent on aerial				Various developments within confirmed. a. Pensarn, b Starling Park,. c. north west housing all confirmed built. d. not significant.	GIS: Boundary changes with 960,633,416. Survey: Amend summary, boundaries and trend to reflect expansion of settlement.
CRMRTVS843 Middle Tywi valley			Unlikely to make difference to descriptions	Small patches of broadleaf conversion on north west slopes		Survey: Amend summary and trend to reflect gradual change to broadleaf
CRMRTVS870 Mynydd tre beaddau	Windfarm built			Blaengwen (Alltwallis)Windfarm 10 turbines 85m operational in west	Confirmed, most conspicuous from west	Survey: Amend summary, views, descriptions, trend, recommendations to reflect impact of windfarm.
CRMRTVS948 Loughor estuary				CR – amend boundary to exclude sewage works. Change overall value to high		CR done
CRMRTVS960 Middleton Hill	Edge of Carmarthen expanding into this aa				Confirmed	GIS: Boundary change with 831 Survey: note boundary change
CRMRTVS995 Whitland to St. Clears	a.St.Clears expanded into this aa in 2 places					GIS: Boundary changes with 270 (a.) and 395 (b) Survey: Amend summary

b. Pont-Henry expanded into this aa					and trends to reflect gradual reduction due to development.
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Carmarthenshire: Change Detection Figures



CRMRTVS633 Lower Taf & Cywyn valleys Bike track expanded Grid ref. SN282 145

2001

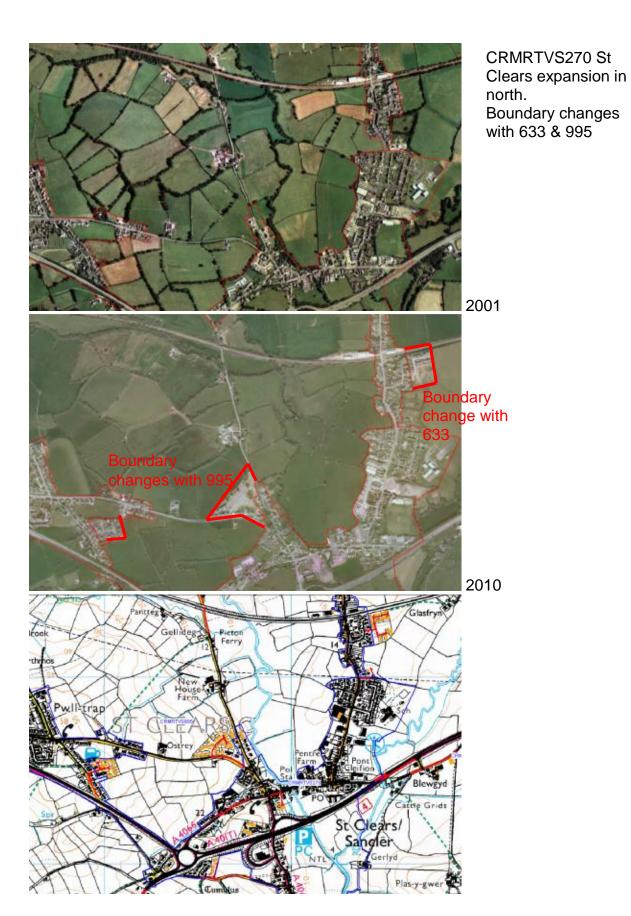


2010



CRMRTVS103 Brandy Hill and CRMRTVS142 Lower Taf valley Bypass route on OS base

Bike track





CRMRTVS400 Gwendraeth Fach New housing at Llangadog with poorly-drawn boundary with 665 Grid ref. SN422 074

200



2010
CRMRTVS211 Ffos Las Race track development





2001 2010

CRMRTVS229 Burry Port & Pembrey Development to west of Pembrey into 161



Various changes in Burry Port/Llanelli vicinity – see following pages

A. CRMRTVS229 Burry Port & Pembrey Developments to east of Burry Port into 820





2001 2010

B. CRMRTVS820 Millenium Coastal Park

Machynys developments - housing and golf course, south of Llanelli





2001 2010

C. CRMRTVS229 Burry Port & Pembrey Stadium development in Llanelli





D. CRMRTVS436 Llanelli levels/CRMRTVS378 Llanelli Works changed to housing by Loughor bridge





2001 2010

E. CRMRTVS378 Llanelli/CRMRTVS557 Llanelli hills





East Llanelli expansion of industry
Swiss Valley - expansion of housing

CRMRTVS395 Gwendraeth settlements



Tumble expanding into 557



Drefach expanding into 277

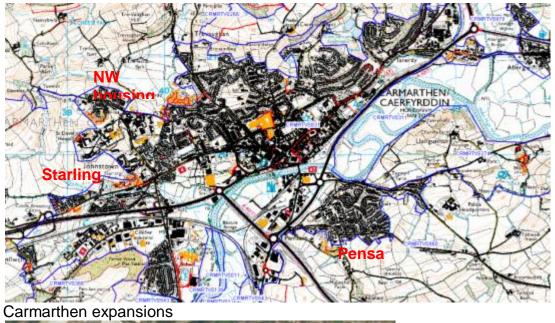
Pont-Henri expanding into 955



Pontyates poorly drawn with 955



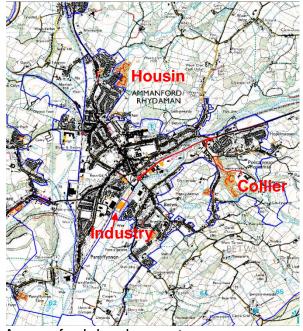
Carmarthen 831 Carmarthen





Pensarn expansions

CRMRTVS526 Ammanford



Ammanford developments



North Ammanford expansion into 576



Ammanford colliery 2001



2010







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