Infrastructure Study 2016 and Delivery Plan

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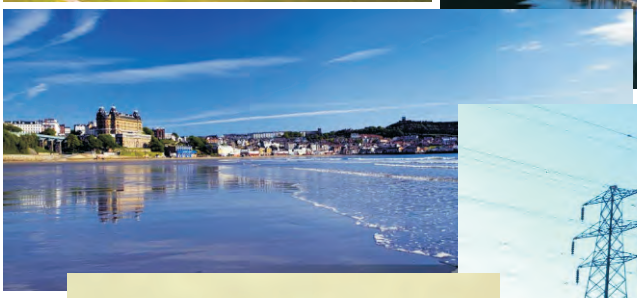


Scarborough Borough Council

April 2016

CONTENTS

1 INTRODUCTION

1.1 This is an updated Infrastructure Study and Delivery Plan. The original report was prepared by Roger Tym & Partners in 2009/11.

1.2 It provides an update to the work carried out by Roger Tym & Partners with Peter Brett Associates (specialist transport input) and UCE (specialist utilities input) and sets out an updated level of infrastructure that could be required to meet the growth aspirations of the Borough.

2 SCOPE AND APPROACH

Introduction

2.1 This section defines the scope of the assessment and the approach taken.

The area and sites covered

2.2 This report covers that part of the Scarborough Borough Council area outside of the North York Moors National Park and is based on a pattern of development that has emerged through work on the Local Plan replacement.

2.3 We follow PINS in defining these areas of concentrated development as being "strategic" if the delivery of the Local Plan is dependent on their delivery[1].

2.4 A map showing the coverage at Appendices 1 and 2 is included.

The types of infrastructure

Defining the scope

2.5 In this study the following types of infrastructure are examined:

Table 2.1 Infrastructure categories

Primary infrastructure	
Ambulance	Fire
Police	Primary health care
Education and childcare	Transport
Public space, parks, sport and leisure	Community centres, libraries
Secondary infrastructure	
Waste	Gas
Electricity	Waste water
Potable water	Flood defence

2.6 Note that Section 216 of the Planning Act 2008 (as amended by CIL Regulation 63) provides a wide definition of the types of infrastructure that can be funded by CIL, including roads and other transport facilities, flood defences, schools and other educational facilities, medical facilities, sporting and recreational facilities, and open spaces. CLG has confirmed that this list is not absolute and that the definition has necessarily been left open in order to avoid having to update the Regulations on a regular basis.

This report focuses on "primary infrastructure"

2.7 This study focuses on primary infrastructure (although it will cover secondary infrastructure). These categories are marked above in the table.

2.8 Primary infrastructure is infrastructure required to accompany development in order to allow new households and jobs to function within a wider community. This infrastructure will be largely used by the community living and working in the development but others would not be excluded from using these facilities.

[1] PINS (2009) *Examining Development Plan Documents: Learning from Experience* (9)

2.9 It is assumed that some developer contribution in the form of S106 or CIL will be required to support the provision of primary infrastructure. In many instances, other mainstream central or local funding will also be used to support the delivery of primary infrastructure.

Secondary infrastructure is dealt with differently

2.10 Secondary infrastructure is infrastructure intended to create accessible, serviced and developable sites. Developers build these costs into their assessment of sites.

2.11 Secondary infrastructure will typically include internal access roads within their sites, and connections to the mains for drainage, sewage, gas, electricity and telecoms. Developers also generally pay for small scale open and play spaces together with on site and adjacent landscaping, and so this falls within the definition. (Note that more strategic open and play spaces are dealt with explicitly under primary infrastructure).

2.12 A separate itemisation of all secondary infrastructure costs and requirements as part of this assessment would be unacceptably complicated. However, these costs have not been ignored. Generic costs of secondary infrastructure have been built into the assessment of developer contributions.

2.13 There may be instances when utilities need upgrading to cope with growth. In these instances, there will be cost demands that go beyond the simple requirements of connection to the mains. It may be, for example, that utility provision is at capacity, and that further growth is impossible until further investment takes place. Often, utility can recoup the capital expenditure to meet growth from charges on new customers. However, in some (but not all) instances, part or all of these costs may fall on the developer. The method adopted in this report picks up these issues with utility companies, where information is available.

2.14 A similar approach has been taken to flood issues.

Affordable housing costs are dealt with through their effects on potential developer contributions (such as CIL)

2.15 Affordable housing requirements must be understood as part of an infrastructure study, because the levels of affordable housing demanded have a profound onward impact on the viability of development, and on amounts of developer contribution available from each housing site to fund infrastructure.

2.16 High level estimates of potential CIL contributions (which are raised from development) take account of affordable housing requirements.

Understanding the categories of infrastructure which are outside our scope

National infrastructure is beyond our scope

2.17 It is the Government's intention that developer contributions should be sought for infrastructure which is (in the words of the CIL Regulations) 'directly related to the proposed development' and 'fairly and reasonably related in scale and kind to the proposed development'.

2.18 It is understood that the general approach adopted was that infrastructure that is commonly seen as a core competency of national Government and their agencies was to be excluded from developer contributions. This means that areas of infrastructure provision such as defence infrastructure, prisons and law courts are excluded from this assessment. The exceptions were agreed to be the infrastructure provided by the Environment Agency and the Highways Agency.

2.19 This approach has therefore been adopted in the assessment.

Private "infrastructure" is beyond the scope of this report

2.20 The brief focuses on the costs of providing the public infrastructure required to meet the growth proposals in the borough.

2.21 The private market provides a number of facilities than can be interpreted as being "infrastructure" - including things such as petrol stations, shopping facilities, and (state-regulated but privately provided) pharmacists and opticians. The provision of these private-sector services can be an important component in perceptions of the quality of life in an area. However, because these will be privately provided the report will not be quantifying infrastructure requirements or calculating the costs or funding of providing this private "infrastructure". Where this activity creates jobs, however, we take account of the infrastructure needs it generates.

Requirements: approach to estimating the requirements of infrastructure for growth

2.22 This part of the work looks at the infrastructure *required* to support planned growth.

This work focuses on the infrastructure requirements of future growth

2.23 This infrastructure assessment will focus on the infrastructure requirements of housing and jobs growth from 2011-32. Because it focuses on *growth,* this study does not deal with general infrastructure demand and public spending requirements as a whole from existing housing and jobs development that is already in place.

2.24 The majority of potential growth planned for the borough does not have planning permission, and consequently has no S106 agreement. This is the focus of this report. However, there is also the category of sites which have planning permission (outline and full), and some which have both a planning permission and a signed S106 agreement. Service providers (many of whom are statutory consultees to the planning process) are generally aware of this growth. These sites are located within or adjacent to the existing urban areas and infrastructure requirements have been fully considered in the decision making process either through existing surplus infrastructure capacity and/or signed or forthcoming Section 106 agreements. These developments are viewed as "water under the bridge", with local development impacts already considered and potentially mitigated.[2] The report therefore does not investigate infrastructure requirements for this category.

[2] It is recognised that in practice some of this growth's infrastructure requirements may not have been fully provided for through those existing planning agreements. This may be particularly the case for smaller sites, which across the country have historically often escaped making significant developer contributions. This is to be expected, and these uncertainties are within a sensible margin of error for the study as a whole.

2.25 A slightly different approach to calculating transport requirements is taken. Transport is something of a special category. Individual, incremental S106 agreements on unbuilt sites with planning permission can often mitigate very local transport impacts of growth but can fail to capture the cumulative impacts of growth on strategic transport infrastructure. (This is less of a problem with infrastructure such as schools or primary care where growth impacts are generally confined within catchment areas, even incremental S106 agreements can often successfully mitigate impacts). To deal with transport requirements properly, we have worked with the appropriate highways bodies to determine the transport requirements of *all* growth expected from 2011-32 (from sites both with and without planning permission and any section 106 agreements).

Service providers have been consulted

2.26 The requisite information on infrastructure needs, costs, funding and phasing was initially provided by the stakeholders and collated. Where appropriate and available this information has been updated for this update to the 2011 Infrastructure Study.

2.27 The report retains the premise from the initial Roger Tym report that, in some instances, it is not possible to include all of service providers' requests for infrastructure. This remains for two reasons.

A. In some instances the planning system does not oblige developers to make certain types of payments, so these have not been included; and

B. To ensure that infrastructure requirements and costs were treated in the most appropriate way to maximise the potential deliverability.

Demographic changes have been taken into account

2.28 There are two demographic issues which need to be borne in mind with this assessment. The first is the changing demographic profile of the population; the second is the relationship between the provision of new housing stock and the population growth. There are two points to make.

- The changing demographic profile: typically, the UK population is ageing. Scarborough's population is already significantly older than the UK average, and proportion of over 60s in the population is expected to grow further in coming years.[3] These changes in the demographic profile might mean that, for example, less education infrastructure was required than might otherwise be the case.
- The relationship between new housing stock, and population growth. It is often the case that some of the residents of proposed new houses will already live in the same local authority area. In areas where the average household size is reducing – as in Scarborough - an increase in housing stock may not result in a commensurate increase in the local population, even allowing for

[3] ONS 2012 based population projections*:* 31.8% of the population are aged over 60, compared with an average of 22.6% nationally. Only 20.1% of the population are aged between 20 and 39, compared to 26.8% nationally. Population change is predicted to have a major impact on future housing markets and the requirement for specialist support and accommodation. The population is expected to increase by around 21,00 between 2011 and 2032 and the proportion of the population aged 60 or over is expected to increase to 40.2% by 2032 (31.2% now).

new occupants of the vacated houses.[4] For example, new housing might cater for divorcees, or suppressed households, who previously lived in existing households within the area. This reduces the extra pressure on the local community infrastructure as a result of the proposed development. It is therefore possible that jobs and housing growth may simply represent an alteration in the location of demand, or lower population densities.

2.29 The initial report assumed service providers being broadly aware of these issues (in some cases, such as education, an understanding of these matters is core to their work).

Population projections for the area have been used these for household size information

2.30 The projections used at the time of the update showed that the overall level of the population was projected to rise by some 2,300 between 2012 and 2032 in the borough. Whilst this is substantially lower than the previous iteration of the Infrastructure Study, this is 'policy-off'. Taking into account the expected level of economic growth and the demographics of the area, the 'policy-on' situation will require substantial in-migration, of a level not dissimilar to that proposed in the previous iteration of the Infrastructure Study.

Table 2.2 Scarborough population growth[5]

	2012	2016	2021	2026	2032
Scarborough Population	108,600	108,600	109,100	109,900	110,900

Source: ONS 2012 Based Sub Regional Projections of Population

2.31 Where household size figures are required for the assessment, the most up to date figures have been used. The latest (2012 based) household projections suggest household size will fall to 2.03 persons per household by 2032. Small changes in household size are well within the margin of error of a strategic study of this type.

Table 2.3 Scarborough average household sizes[6]

	2012	2017	2022	2027	2032	Remaining plan period average
Scarborough Household Size	2.15	2.11	2.08	2.06	2.03	2.09

Source: ONS

[4] CLG 2012 based Household projections suggest an increase of around 3650 households over the period 2011 to 2032, with increases in the proportion of multi-person and one-person households particularly noticeable.

[6] Population per household based on 2012 sub regional projections of populations and ONS 2012 Based Sub Regional Projections of Population. The above represents total population per household, and thus includes non-household residents such as those in institutions such as prisons, student residences and care homes. It does not allow for vacant properties. It does not specifically focus on the expect number of occupants of a new dwelling, which may also vary from the average.

The document should not be a "wish list" approach of infrastructure requirements

2.32 It is not desirable to load an infrastructure assessment with a gold-plated "wish list" of perceived needs. Local Plans need to:

- Have evidence of deliverability, with evidence strong enough to stand up to independent scrutiny;[7] and
- Have evidence of "what physical, social and green infrastructure would enable the amount of development proposed for the area, taking account of its type and distribution".[8]

2.33 The key concepts here are those of enabling development and deliverability. Clearly, infrastructure provision should not be so elaborate and costly that it forms a barrier to development. This assessment follows a pragmatic approach that balances deliverability with providing sufficient infrastructure to ensure the growth is properly catered for. The report tries to gauge a realistic level of infrastructure provision, in the following ways.

- At the time of the initial report, service providers were provided with a map showing the location and quantum of jobs and housing growth. They were invited to explain what requirements they had, given this planned growth, and invited them to explain why this infrastructure is required. This process has built a realism and transparency into the approach. Further updates have been sought from Infrastructure Providers to compile this update.
- The rough rule of thumb used in the initial report was that the infrastructure requirements for growth in this assessment should be broadly in line with the levels of infrastructure enjoyed by the rest of society.
- Wherever possible, account has been taken of service providers' existing spare capacity. There is a reliance on the service providers' expertise here. This has the effect of reducing infrastructure requirements, and so their costs and funding requirements.

Service delivery is continually being reconfigured. Strategies change. This affects levels of infrastructure required to support new growth

2.34 Infrastructure assessments are generally aiming at a moving target. Public services, and hence the infrastructure they demand for delivery, are in a constant state of flux. For example, reviews of transport policy could have big implications for infrastructure requirements. Technology is likely to continue to affect infrastructure requirements over the next few years in ways which may be difficult to predict. In other service areas, joint use community / education / CCG buildings infrastructure are currently being examined, all of which alter infrastructure demand. Funding levels (and, consequently, legitimate infrastructure requirements) vary with political exigencies. Most service providers do not plan beyond three years, and so cannot by definition be expected to know their precise requirements in the longer term.

[7] NPPF (2012) Para 173.

2.35 This means that infrastructure requirements as a result of growth are difficult to predict and are necessarily subject to a considerable margin of error. In addition, there remain uncertainties over the mainstream funding that is likely to be available. There can therefore be no reliance on public funding being significant in this study.

The precise nature and timing of growth is not fixed, meaning that being precise about the required infrastructure is not appropriate

2.36 It is important to point out this involves infrastructure requirements at a high level. In the great majority of cases, the work is carried out far in advance of detailed masterplanning work at the individual site level. In each instance, Environmental Assessments and Transport Assessments will be carried out that would map out likely infrastructure needs and costings in significantly more detail and precision. It is therefore most likely that more detail will emerge as the planning process proceeds, and that this detail will supersede the assumptions within this report.

Costs: approach to estimating the costs of infrastructure for growth

2.37 Here the overall approach to costs is explained.

Service providers' cost estimates have been used where possible

2.38 Wherever possible, we have used service providers' own estimates of the cost of their infrastructure requirements.

2.39 Where these estimates did not exist, the consultants' initial report used various sources including case studies, published guides and interpretations of data from cost guides such as *Spon's Architects' and Builders' Price Book* and the Building Cost Information Service (BCIS). These have been updated accordingly.

Capital costs and revenue costs are quoted separately in this study

2.40 Changes to CIL Regulations made through the Localism Bill made "ongoing" costs potentially chargeable through CIL.

2.41 In line with the desire to ensure that development is viable as possible and to avoid double funding, the report concentrates on capital costs in this report. Where revenue costs are likely to be substantial this is noted.

2.42 Significant capital requirements bring with them considerable revenue burdens on public bodies. Where service providers have expressed concerns about the revenue implications of the new provision this is flagged up.

2.43 Note that the distinction between capital and revenue is difficult to make in some instances. It is the case that some agencies meet capital costs through revenue expenditure, for instance through leasing or borrowing.

2.44 The major costs quoted in this study have been updated from the 2010 real prices quoted in the previous iteration of the Study by the consultants. No inflation is included in our cost calculations. This is because it is not possible to know what the inflation rate will be in future, or exactly when items will be built. However, it should be noted that the CIL Regulations state that charging authorities will be required to apply an annually updated index of inflation to keep the levy responsive to market

conditions. This index will be the All-In Tender Price Index of Construction Costs of the RICS. It will be important to use this to keep the CIL up-to-date over time.

Funding: approach to estimating the funding for infrastructure for growth

2.45 The aim of this section on funding is to show the funding available for the infrastructure. It is important to note that, as we have pointed out above, these estimates are necessarily going to be subject to a margin of error.

Step 1: estimating levels of mainstream public funding available

2.46 It remains the Government's intention to use CIL and S106 to fund infrastructure *after* sources of mainstream Government support have been identified.

2.47 Mainstream capital funding remains scarce. Much of the initial work with service providers was undertaken from early to mid-2010. Cuts which subsequently took place were not known of at that time but many service providers were already aware of the negative outlook for public funding by early 2010. This was reflected in the Infrastructure Study of 2011.

Step 2: estimating the amount of infrastructure funding available for strategic infrastructure through S106/S278

2.48 Work showed that a number of pieces of strategic infrastructure (defined as infrastructure which has a wider, cross-site impact) were expected to be provided through the normal process of obtaining planning permission. This was particularly the case with the Middle Deepdale project, which is now under construction.

2.49 In other circumstances, it is assumed that S106 will be limited in future to site specific impacts and supporting the provision of affordable housing. This is the approach anticipated in the CIL Regulations, which also cover the future scope of S106 charges.

Step 3: estimating the funding gap for growth infrastructure

2.50 The next stage is to understand the funding that could, in theory, be properly sought through the developer contributions.

2.51 It is apparent that CIL is becoming increasingly necessary: after April 2015, there is little realistic prospect of getting strategic infrastructure funded through S106, or even a S106 "pool". Whilst CIL was shown to be unviable several years ago, Scarborough Borough Council will review this position and undertake an update on a possible level of CIL charge.

2.52 The level of CIL charge is not the focus of this report. The objective here is to contribute to the production of a sound evidence base for the Local Plan examination, so the Study does not go into further detail on CIL in this report. Irrespective of the status of a Scarborough Borough CIL charge, Section 106 agreements will still be available for use to some degree.

2.53 One of the central principles of this report is that it does not make definitive statements about how developer contributions available through a future CIL should be spent.

- The report does not make suggestions about whether CIL receipts should be spent on infrastructure, although it is assumed that it will be. The Localism Act allows some of the money raised to be spent on things other than infrastructure. The Study will not make suggestions about how CIL receipts are shared out between competing infrastructure requirements (be they education, transport, open space). This is a decision that should be made by the Borough Council at a later date.
- The report does not make suggestions about where CIL receipts should be spent. The Act gives the Government the power to require that some of the money raised from the levy go directly to the neighbourhoods where development takes place.

Funding for some service providers is related to population – so as population grows, funding grows

2.54 Some service providers have a funding formula which calculates funding by reference to population sizes. This means that as population grows as a result of new housing, their Government funding rises. However, this is not the whole picture: there are a number of components of these funding formulas (including factors such as population deprivation, rurality, and so on).

2.55 Service providers in this position include Education (which receives a local authority grant, but one ring fenced by central Government), Health / CCGs, Police, Fire Service, and the Ambulance Service.

2.56 Local authorities are also funded on a formula that includes population numbers and their characteristics. The services that local authorities provide (such as libraries and waste) can therefore be said to be at least partially funded on a per capita basis.

Need to avoid "double funding" service providers – funding them once through the development process, and again from capitation-related mainstream funding

2.57 Double funding occurs when service provider agencies that receive capitation based funding seek reimbursement from developers of the capital cost of providing facilities and this should be avoided.

2.58 Double funding is undesirable. In effect, one part of the economy is paying hidden subsidies to another part. This would artificially depress activity in one part of the economy (in this case the example might be house building and employment space development) and inflate it in another part beyond the level anticipated by either policy or strategy. Firstly, this is an example of a cause of economic inefficiency. Secondly, whilst the effect of this process may be no bad thing, if this is the choice that society wishes to make, then it should be made explicitly and balanced against possible reductions in overall delivery of housing and employment.

Other innovative funding sources have been investigated

2.59 A number of innovative funding sources were investigated at the time of the initial report in respect of funding infrastructure. These were reviewed along with the likely impact they could have.

Approach to prioritisation

2.60 There must be a mechanism that will allow the prioritisation of investment in infrastructure.

2.61 It is the objective here to prioritise which infrastructure projects are most important in allowing growth in the borough to take place in a sustainable and well planned way. Please note that this prioritisation process does not intend to sequence infrastructure investments in time order.

2.62 Ultimately, it will be necessary to prioritise both within theme areas (say, prioritising the most important transport projects) and also between theme areas (say, deciding to invest in open space, rather than transport). There is no right answer here. These decisions rest with elected representatives under advice from their officers, in order to allow different areas and interests to express their different priorities.

2.63 To assist the process of making these decisions this report categorises different infrastructure spending into two different level of priority.

The prioritisation categories

2.64 The initial Study created the following categories and these have been retained:

- Essential requirements: this category would apply to infrastructure which would be required by legal statute or regulation, and would have to be implemented if the development was to go ahead[9].
- Other requirements: There are a range of other infrastructure investments that could be considered. Different areas are likely to have different needs that will be reflected here. Some might be very important; others might be long term ideas or more speculative concepts. As we pointed out above, much depends on the choices of the Borough Council at a certain point in time, and the amount of money that there is available to purchase infrastructure. (Tight budgets would mean that only essential requirements were met; more funding might mean that the other projects were funded).

There are important caveats to be attached to this work

2.65 The remit of this Study is to help provide an evidence base for a sound replacement to the Borough Local Plan, and provide a focus for long term strategic financial decisions. As particular sites come forward, it is very likely that there could be localised issues and impacts, which are not within the remit of this assessment to cover. These will nevertheless need to be addressed to enable development to proceed. However, the process is valuable as it offers a framework highlighting the decisions and choices which will need to be made.

2.66 There are a number of important points which must be borne in mind when using this document.

[9] Other infrastructure spending – such as water, gas and electricity connections - are clearly essential to housing and jobs development, but because these connections can be expected to happen anyway as part of a development they fall outside the prioritisation categories.

- Infrastructure providers reserve the right to update the information provided. As might be expected, there are some gaps in knowledge and understanding of what is needed and how it might be paid for. The estimates will need to be refined over time. This assessment can, therefore, only ever be a snapshot of current infrastructure needs, commitments, options and ideas.
- The estimates of infrastructure requirements, costs and funding provided here involve spatial and temporal generalisation. Quite simply, it is not realistic to match resources to needs to places with the degree of precision necessary to reach sound decisions on what infrastructure is required on any one given site or with any one service provider.
- This infrastructure assessment is not itself a policy document. Information included in the assessment does not override or amend the various agreed/adopted strategies, policies and commitments which local authorities and other infrastructure providers currently have in place. In many respects the assessment reflects existing strategies, policies and commitments, but it also includes information and evidence which will help shape future policy making, the Local Plan evidence base and investment decisions.
- Further work after this study has closed will be necessary to prioritise infrastructure requirements.
- Although this work can be used as a high level guide, developers and Local Planning Authorities will not be able to solely rely on this work to negotiate individual Section 106 agreements. The analysis is not at the level of accuracy that allows this function to be performed.

3 WHAT IS THE PLANNED GROWTH TO PROVIDE INFRASTRUCTURE FOR?

Introduction

3.1 In this section an explanation of what jobs and housing growth require the provision of infrastructure. This is important, as this assessment must start from an agreed set of assumptions about housing and jobs growth.

3.2 The first part of this discussion relates to the housing growth. The second part relates to the employment growth.

Where is housing growth located? How is it phased?

The starting point for this study is the emerging Local Plan

3.3 The growth agenda in respect of 'stepping up' housing delivery was established in the early draft of the Regional Spatial Strategy, however, the final figures adopted were subsequently increased to a greater level with the Borough given the ambitious target to grow by a minimum of 11,800 dwellings between 2004 and 2026 (as opposed to the original figure of 7,960 dwellings). The RSS was, however, revoked and housing numbers are now determined locally through the Local Plan.

3.4 The latest iteration of the Objective Assessment of Housing Need that will be used to inform the Local Plan proposes a housing target of 461 per annum between 2011 and 2032; an overall figure of 9681 new dwellings.

The Local Plan provides more detail on housing growth locations

3.5 The Local Plan is currently being replaced and this will set out the scale and broad location of growth across the Borough.

Phasing of housing

3.6 The housing trajectory used to develop the infrastructure assessment has a bearing on the requirement and thus the planning and funding for infrastructure.

3.7 Although a phasing policy is not proposed, development will be limited by existing infrastructure constraints. Taking this into account, the latest housing trajectory can be found at Appendix 1.

Strategic employment growth expected

3.8 Due to the nature of the Council's Objective Assessment of Housing Need, the target for housing growth corresponds directly with predicted job growth. The OAN seeks to ensure that there will be sufficient people of working age, who are also economically active, in order to meet the projected demands of the employment market (jobs). The calculations set out in the OAN are based on the creation of 5000 Full Time Equivalent jobs within the plan area between 2011 and 2032. In turn, the job creation figure is derived from an analysis of recent forecasts produced by the Regional Econometric Model (REM). Clearly, the delivery of these jobs will depend on a number of factors, not least the performance of the economy.

4 HOW MUCH CAN DEVELOPMENT CONTRIBUTE TOWARDS INFRASTRUCTURE NEEDS?

Introduction

4.1 Securing reasonable contributions from development will be an important way of funding, and therefore delivering, the infrastructure required to support growth in the Borough.

4.2 Developer contributions make an important contribution to the funding of infrastructure. There are two mechanisms though which these contributions are collected. The first is Community Infrastructure Levy; the second is Section106 contributions.

Assumptions about how much developer contributions can be raised from Community Infrastructure Levy (CIL)

4.3 The Council previously commissioned work to look at possible levels of Community Infrastructure Levy (CIL) charge in the Borough. This was shown to be unviable across large parts of the Borough at that time. This is in the process of being reviewed.

4.4 Should a CIL charge prove to be viable there will need to be important decisions made by the Council that would inform the final Charging Schedule, including

- Any differential charging in different areas of the Borough.
- How to strike the balance between - on the one hand - raising money for infrastructure, and on the other hand, maintaining the financial viability of developments in the area.

4.5 As a final decision has yet to be made on CIL viability, it is not known at this stage how much money could be raised by CIL.

4.6 However, sensible projections of how much might be raised from developer contributions have been made.

4.7 The assumptions are entirely without prejudice to the final level of CIL Charge decided upon. The assumptions are set out in the table below.

4.8 It is anticipated that the great majority of CIL charge will be levied from residential development. Some other charges may be made of other types of development, but they will be relatively insignificant when set against the receipts from residential. The report has therefore not speculated on non-residential CIL receipts at this point.

Table 4.1 Residential CIL charge (estimate without prejudice to the final level set by the Borough Council)(1)

Category	CIL
Possible estimate charge per sqm	£40
Average Home Size	90sq m
Number of Homes without Planning Permission (allocations)	Approx 6500
Assumed % of affordable housing	25% (1625 units)
Assumed reduction of homes in assumed non-viable CIL location (unparished Scarborough)	Circa 400 units
Number of chargeable homes	4475
Total possible contribution	£16,110,000

(1) The figures in this table are indicative only with the charge per sq m an estimate based on the experience of nearby local authorities. The number of homes without planning consent is an approximate figure taken from the emerging Local Plan and the % of affordable is estimated. Whilst some locations specify 40% others are 20%. There are also significant infrastructure requirements on the larger schemes that might reduce the affordable contribution. 25% therefore seems a reasonable estimate of what could be achieved across the board

Assumptions about how much developer contribution can be raised from Section 106 agreements

4.9 Section 106 continues to exist and there is no suggestion that it will be revoked. Development may pay both S106 and CIL, although individual circumstances will dictate the extent to which S106 is levied. Under CIL Regulations, which also cover Section 106, Section 106 is now expected to be very tightly targeted at mitigating the impacts of individual developments. It will also be called upon to pay for affordable housing.

4.10 Because of the more tightly defined role of S106, such funding will no longer be the preferred option to fund off-site strategic infrastructure.

4.11 S106 contributions in the form of in-kind or on-site provision are referred to in this report. As the Plan will include a number of large and/or strategic sites they will be required to make provision individually for what could be classed as large infrastructure projects that are strategic in nature, for example, a primary school.

5 OTHER FUNDING SOURCES

Introduction

5.1 Having looked at developer funding in the sections above, this section examines other ways in which funding might be provided for the necessary infrastructure in the borough.

5.2 This section remains largely unchanged from the Infrastructure Study of 2011 when the work relied on the judgment of the consultants and their judgment of the relevance and reliability of other sources of finance. In other areas, they were able to rely on detailed technical work that had already been undertaken.

The approach

5.3 In some instances, the funding sources covered here are not considered to be useful in raising funding for infrastructure in Scarborough Borough. Where this is the case, this is stated.

5.4 In other instances, there may be a role for certain types of funding. Many depend on political choices and some require the introduction of primary legislation. Others would need detailed work to reliably quantify the potential level of contributions, although assumptions have been made in this study to broadly quantify the potential scale of contribution made.

5.5 Experience suggests the best approach is not to simply aggregate all of the possible funding sources and then match them to aggregate needs, or to simply hunt around for possible sources of funding on an opportunistic basis, but rather to identify financial problems as precisely as possible before seeking solutions from the more limited range of possibilities that are specifically suited to addressing them.

Tax Increment Financing

TIF was not seen as having a clear role in financing Scarborough's infrastructure

5.6 The Tax Increment Financing (TIF) model is a method of financing using a future uplift in business rates (a "tax increment") resulting from an infrastructure investment. It does not involve any additional taxation.

5.7 The scheme may be useful where the sources of funding available for a scheme to deliver economic growth and renewal cannot cover the cost of infrastructure required by the scheme.

5.8 In the scheme envisaged by the Government, the additional business rates revenue that is raised as a result of a development is used to pay for the necessary infrastructure, without which the development would not otherwise occur. The increased future tax income stream which would ordinarily go to the Exchequer is "securitized" (ie, converted to a capital lump sum) by a bank. Then, the future tax income is used to repay the loan over a given period. At the end of the repayment period, tax revenues revert to the Exchequer.

5.9 Although in theory TIF could be used to fund other elements of infrastructure provision, the idea has been advanced primarily as a way of funding transport infrastructure.

5.10 The consultants previously concluded that there could be a role for TIF in financing some transport infrastructure, but that possible role, and the scale of that role, is still not clear.

5.11 Significant set-up costs mean that TIF would be only worth doing with a relatively large scheme. Much depends on legislation (which will be necessary), and on the willingness of local authorities to lend against the (uncertain) future income stream created by business rates. The Council would be at risk if new business rates did not materialise.

5.12 In light of this, it is not considered sensible to rely on TIF to generate funding towards infrastructure needs.

User charges and securitised user charges

Securitising future income streams could be explored – but would be costly, and is unlikely to raise a great deal of funding

5.13 Securitisation is a process of raising asset backed finance through a loan or an issue of debt securities that are supported by cashflow from underlying assets (rather than the borrower's business generally). Securitisation gives the lender a prior right to income from these defined assets.

5.14 The downside is that securitisation restricts the ability to change or otherwise amend the secured assets and thus limits operational flexibility.

- A Scarborough Business Improvement District could be set up, and capital for investment in (for instance) the public realm or smaller scale transport improvements could be made with a loan repaid by the additional rates income from a BID scheme. However, the amount that could be raised is not likely to prove significant. Business Improvement Districts are funded through charging local businesses an additional rate, typically an extra 1% - 2% for an agreed scheme of investment.
- Income from parking charges could possibly be securitised and used to pay for small scale transport improvements. However, any capital sum raised might be modest.

5.15 In light of this, the levels of income that could be secured are not considered to be sufficient to justify setting up such a vehicle. This is not included as a funding source for infrastructure in this study.

Private Finance Initiative

PFI credits are scarce

5.16 Where appropriate, this method of financing has been dealt with in the subject-specific chapters. PFI opportunities only normally exist for big infrastructure packages. PFI credits are currently very scarce.

Local Asset Backed Vehicle

A Local Asset Backed Vehicle will not be appropriate

5.17 Local Asset Backed Vehicles marry public and private landholdings to best advantage, effectively maximising the value of public land in the context of a wider development scheme and increasing project finance opportunities.

5.18 Such a vehicle has previously been explored by the Council and not taken forward. Whilst it may be possible to take a LABV forward at some point in future, for the purposes of this study, it is assumed that this is not the case.

Government grants

The advantage of upfront grant payments

5.19 The advantage of an upfront grant payment is that it can be used immediately to meet the cost of providing the infrastructure and reduces the overall cost of the scheme.

5.20 This is in contrast to a system of periodic payments. With period payments, a finance package of loans and equity is needed to pay for the construction of the infrastructure and then the loan is repaid using the periodic payments. This makes the total cost of the project much more expensive as the cost of the finance is added to the cost of construction. There are also the additional issues that the cost of finance has to cover the cost of the risk that the periodic payments are not paid on schedule, the cost of arranging the finance and supervising the repayments.

5.21 A second key advantage of an upfront payment from the public sector is that it provides a high degree of certainty that the scheme can be completed. The process of applying for public funding can be vigorous and time-consuming but once the monies have been approved there is a high degree of certainty that the project can be completed.

5.22 It is not anticipated that a significant contribution will be made from grants and loans. The reasoning was set out in the initial Infrastructure Study and the expected public funding cuts continue to date.

Loans

5.23 Some approaches to funding seek to address funding gap issues with loans. However, there are limits to the way that loans can be used in the circumstances in the Scarborough borough. These are as follows.

- A loan is not another form of so called ‘gap funding’. It can only be the answer where the problem is simply limited to the timing of costs and receipts.
- A loan needs to be repaid with interest which will accumulate until revenues are available to start repayment. These compounding effects can significantly add to costs especially when there is a long timescale involved before payback.

- There are likely to be severe difficulties in finding lenders who are prepared to accept the risk of non-payment or delayed payment. This is an issue where the repayments will be made from planning contributions and where lenders are in effect relying on the contributing development going ahead on schedule and generating the necessary funds. Many take the view that property development is an inherently risky, cyclical activity and highly geared activity are thus reluctant to lend without some form of underlying guarantee.

5.24 It is assumed that loans will not be used to finance infrastructure in Scarborough Borough.

New Homes Bonus (NHB)

NHB may form a funding stream

5.25 One of the Government's proposals to incentivise the development of new housing is the New Homes Bonus scheme.

5.26 The scheme is intended to be a permanent part of local Government Financing. For the purpose of this analysis, it is assumed that it will continue.

5.27 New Homes Bonus funding is, however, funded by Central Government by using the funding previously allocated to Local Authorities in the Housing and Planning Delivery Grant and taking substantial amounts per year off Local Authorities formula grant.

5.28 Given that the NHB replaces a large amount of mainstream funding to local authorities and that local authorities have the flexibility on how to spend this (un-ringfenced) grant, it is highly likely that local authorities will want to use NHB backfill the gap created by the lost funding. This has been borne out over recent years with NHB not being used for infrastructure funding within the Borough.

5.29 It is therefore unwise to assume that any significant portion of NHB will be spent on infrastructure to support growth. It is therefore assumed that no NHB is spent in this way, with it going to broader Council spending priorities.

Prudential borrowing

Local authorities' prudential borrowing powers could be used more aggressively – but are likely to be closely scrutinized

5.30 The Borough Council could use its prudential borrowing powers to effectively advance funding for key elements of infrastructure in anticipation of planning contributions or other possible increases in their income.

5.31 The point was made earlier that developer's capital is expensive. By contrast, the financial cost of public sector capital is much lower. There are opportunities to improve the economics of development by delaying the implementation of infrastructure schemes for as long as possible and using public funds to pay for what is required on an interim basis with repayment once the proceeds from development begin to materialise.

5.32 Repayment could perhaps come from the proceeds of a CIL, if put in place.

5.33 Historically, local government financial management practices have been conservative and in any event, it is possible that the Government will constrain their ability in this respect. The New Local Government Network points to the potential of the substantial and often underused asset and reserves base of local authorities but also says that, "the indications from the Treasury are that the current latitude in the prudential borrowing regime is far from certain and that local authority asset management will be heavily scrutinised".[10]

5.34 It is therefore assumed that prudential borrowing does not make a contribution to infrastructure funding in Scarborough borough.

Conclusion

5.35 The update to the review of funding sources suggests that:

- Tax Increment Financing requires major schemes to be viable and we do not consider there is likely to be such a scheme to justify taking it forward.
- Local Asset Backed Vehicles require significant amounts of land in public ownership to be worthwhile. Whilst it may be possible to take an LABV forward, it is assumed that no separate finance is available through a LABV in this study.
- Private finance Initiative is not likely to make a contribution to financing new infrastructure. Given the recent economic climate and the continued uncertainty, it is unlikely that public bodies will be willing to enter into these long term commitments.
- In the current economic climate the likelihood of upfront grant or loan payments from the public sector is very small, although it may re-emerge slowly in the future over the life time of the Local Plan.
- The public sector could undertake to make periodic payments using revenue raised from its own activities. This is unlikely though to raise significant amounts of money each year.
- The New Homes Bonus could bring in significant funding, however, this is not ringfenced for infrastructure delivery. Recent experience has shown that little of none of this will be made available for infrastructure funding.

10 New Local Government Network *Capital Contingences: Local capital finance in an era of high public debt*

6 INFRASTRUCTURE IN THE BOROUGH

6.1 This report now moves to look at the infrastructure needed in the borough over the plan period.

6.2 In each instance, the report will seek to address the following questions.

- What are the Infrastructure requirements generated by future growth?
- When is infrastructure needed?
- Who will provide it?
- What are the costs?
- How can new infrastructure be funded?
- What are the priorities?
- Are there any issues, dependencies and barriers to growth?

7 AMBULANCE

Introduction

7.1 This section includes an examination of how the proposed growth in Scarborough Borough affects the requirements, costs and funding of ambulance services in the Borough.

Context

7.2 Ambulance services in Scarborough Borough are provided by the Yorkshire Ambulance Service NHS Trust ('the Service'). This provision in Accident and Emergency and Patient Transport Services in Scarborough Borough is as follows:

- There are three ambulance stations: at Scarborough, Filey and Whitby and one facilitated standby point located Coldyhill Lane, Scarborough.
- Scarborough currently has four ambulances 24/7 and two working 10 hours per day,
- Whitby has two ambulances 24/7.
- Filey has two ambulances 24/7.
- During seasonal periods of increased demand ambulances from Malton, Kirbymoorside and Bridlington are drafted in to the Scarborough locality.

Accident and Emergency

7.3 Seen at a borough-wide level, demand is significantly higher in summer months because of the seasonal increase in population due to tourism causing acute demand pressures on the service

7.4 Demand remains high between 8 o'clock in the morning to midnight.

7.5 Within the Scarborough, Ryedale & Whitby community the predicted demand growth over the next 3 years is approximately 3.5% for accident & emergency services with an increasing number of complex patients having to be transported to specialist centres out of area such as York, Middlesbrough and Hull.

7.6 The requirement for ambulance services is set by national targets to respond to 95% of emergency incidents within 19 minutes and 75% of life-threatening incidents within eight minutes. Analysis by Organisational Research into Health (ORH) commissioned by Yorkshire Ambulance Service (YAS) identifies the provision the Service needs to make to meet these targets. This takes place within the context of rising demand for ambulance services: according to the DoH the number of 999 calls for ambulances has increased by one-third in the last five years.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

7.7 Increase in ambulance requirements to support demand growth will require local stations and resources to be evaluated in terms of size, suitability, location and staff

numbers to ensure vehicles and clinicians can respond in a timely manner to meet the needs of the community.

7.8 Where there is no possibility of expanding the current ambulance stations; this will require new facilities and the exact locations to be determined based on the predicted growth and the future expansion of housing within the community. The Service expects to complete Trust wide analysis in the next 6-12 months. Subject to confirmation in an ORH study, there may also be a requirement for an additional ambulance by 2026.

7.9 The precise nature of the additional service provided will depend not only on a higher population from new housing, but also on other operational factors such as demand rising due to demographic and social factors and changing hospital facilities/community care provision.

7.10 Patient Transport Service (PTS) provides non-emergency transport in the Scarborough, Ryedale and Whitby Community. YAS provides transport for people who are unable to use public or other transport due to their medical condition and include those:

- attending hospital outpatient clinics
- being admitted to or discharged from hospital wards
- needing life-saving treatments such as chemotherapy or renal dialysis.

7.11 Approximately 25,651 journeys were undertaken in 2014/15 within the Scarborough and Ryedale CCG area. These journeys were carried out by the 19 PTS vehicles which are sited within the Accident and Emergency Stations.

7.12 The Service would propose to purchase premises, and capital costs would need to be determined upon location and or building suitability.

7.13 The Service estimates that the costs of acquiring a building for the Scarborough locality in the region of £2.3m and subsequent running costs would be of the order of £85k per annum. (This is based on current annual and utility requirements including 5% uplift for inflation)

How can new infrastructure be funded?

7.14 The Ambulance Service is funded through service level agreements with CCGs. Wakefield CCG is the lead commissioner for the Yorkshire Ambulance Service, who would need to approach them for determining potential allocation for construction and equipping an additional ambulance station, together with the running costs.

7.15 Ultimately NHS funding for the Service forms part of the historic allocation of the CCGs it covers, and this in turn is related to their populations. This does not include capital funding.

What are the priorities?

7.16 This is rated as an “other” priority. This means that the provision of this new infrastructure is not currently legally required by statute or regulation in order for the development to proceed.

Issues, dependencies and barriers to growth

7.17 The current proposal for an additional facility and ambulance results from the need to meet targets now, and is not related to growth.

7.18 Further work will be needed to determine exactly what the requirements of growth will be. Failure to provide additional facilities when needed for the increased population will result in the Service being unable to meet the target response times.

7.19 However, there is some flexibility as to when additional provision is made to maintain response times, so Ambulance Services are not a showstopper.

8 FIRE

Introduction

8.1 The proposed growth in housing and employment and how it affects the requirements, costs and funding of fire and rescue services in the Borough is examined in this section.

Context

8.2 The fire and rescue service in Scarborough Borough is provided by North Yorkshire Fire and Rescue. The service is delivered from the following facilities:

- One wholetime fire station (crewed 24/7) in Scarborough.
- One seven day crewed station in Whitby (crewed 08.00 – 18.00 by firefighter staff who are also on call outside these hours)
- Four retained stations (part-time firefighters) in Danby, Filey, Lythe and Robin Hood's Bay.
- One volunteer station in Goathland.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

8.3 The Fire Service considers that the proposed growth will not give rise to a need for additional provision. The current stations cover the main areas and have quick response times. Modern dwellings have hard-wired smoke alarms and pose relatively little danger, so the proposed growth will not add significantly to the demands on the Service in Scarborough Borough. Because of this, and because the Service operates on a settlement-wide basis, there are no constraints on growth in individual areas arising from the level of provision of Fire and Rescue Services.

8.4 Prevention plays a major role in managing demand. Examples include:

- Seeking the provision of sprinklers in dwellings occupied by vulnerable groups
- Ensuring that houses in hard-to-reach areas have smoke alarms.

8.5 The Service constantly reviews the level of provision required through its Integrated Risk Management Plan. This planning process reviews fire station locations and their appliance and equipment provision. A review of fire cover for the area is expected in future and it is possible there may be a need for increased provision in the southern area of the Borough. This may involve a move of part of Scarborough Fire Station's equipment rather than all-new provision.

8.6 As this possible additional requirement is tentative, and appears to be driven by existing conditions as much as by future growth, it is not included among the requirements arising from growth in Scarborough Borough. We therefore assume that the costs for the Fire Service of proposed growth are nil.

How can new infrastructure be funded?

8.7 The question does not arise as there is no need for additional provision.

What are the priorities?

8.8 Given the lack of requirements, prioritisation has not been undertaken.

Issues, dependencies and barriers to growth

8.9 As there is no need for additional provision, fire infrastructure issues do not pose any barrier to growth in Scarborough Borough.

9 POLICE

Introduction

9.1 The proposed growth in housing and employment affects the requirements, costs and funding of the police service in the Borough is examined in this section.

Context

9.2 Policing in Scarborough Borough is provided by North Yorkshire Police. The service is delivered from four police stations.

9.3 The largest station is at Scarborough, which is open from 8am to midnight. The others are:

- Whitby, open weekdays 8.30am to 5pm (Friday 4.30pm) and weekends 10am to 2pm
- Eastfield, open weekdays 8.30am to 12.30pm and 1.30pm to 5pm (Friday 4.30pm)
- Filey, open weekdays 8.30am to 12.30pm and 1.30pm to 4.30pm

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

9.4 What follows is an initial estimate based on the high level information provided at the time of the initial Infrastructure Study (as the housing numbers have not altered substantially nor the location of development the previous findings remain relevant): it will be possible to work up more detail when housing types and phasing is available in more detail. But in summary, the Police identified the following requirements:

- A Response Base
- Two Local Police Stations and potentially a third local police station or access to a community room/space in Scalby
- 'Upfront' recruitment and training costs

Response Base

9.5 Based on the likely socio-economic profile of the area, the large volume of housing proposed for Middle Deepdale and Cayton and the expansion of the Strategic Employments sites and increase in traffic that they will bring it is anticipated that there will be a requirement for a response base for police serving the area. It would serve as a base for a policing group consisting of Police Constables, Police Community Support Officers, traffic police and Road Policing Group if needed.

9.6 The building will not have any specialist facilities (e.g. custody). It will need to provide space for office accommodation, briefing room, locker room, shower/wc facilities, mess and parking facilities.

Local Police Stations embedded in community facilities

9.7 On the scale of growth proposed, Local Police Stations will be required at Cayton, Middle Deepdale and potentially Scalby. These will be a presence in the community and would ideally form part of joint provision of community facilities serving the new housing. Facilities needed: an office and interview room, with access to a meeting room, toilet facilities, parking/cycle provision etc. They will not be manned fulltime.

Bringing forward provision

9.8 NYP wish to be able to have a policing presence in new developments from an early stage. Income from the Council Tax precept will not be achieved until the properties have been constructed/occupied. They will therefore be seeking support / funding for recruitment and training of additional officers 'upfront' to bring forward policing in growth areas.

9.9 It is not considered that such a requirement is permissible under the regulations because training is not a capital item. Whilst the changes to the CIL Regulations, as identified in the Localism Bill, will allow for the ongoing costs of provision to be charged, it is questionable as to whether this is intended to include training of staff which is a core part of the police service and as such, must be covered by its core budgets. How much will these facilities cost?

9.10 Costs are as follows:

- Response base: a rough guide of the space requirements for a response base/facility is 150 m², and based on an estimated construction cost of £1,750 per m² it would could cost in the region of £262,500 (this excludes any car parking provision).
- Local police stations embedded in community facilities: If Local Police Stations are provided by developers as part of the overall community provision, (say, to a community/health centre, or other shared provision) then costs would be less than a standalone facility. Assuming a requirement for about 20 m² and typical community centre construction costs of about £1,615 per m², a Local Police Station would cost in the region of £32,300, less any savings from joint provision. The total costs of three would therefore be £96,900.
- Recruitment and training costs will be identified when the numbers of additional officers can be identified. The Police state that recruitment and training costs should also be provided by developers, although we note that former Circular 05/05 refers to revenue costs in relation to maintenance. Given that they have not been quantified, we have not made any allowance for these costs in this study. (Even if they were to be quantified in future, the development process has typically not paid these costs in other areas).

9.11 Total identified costs are of the order of £360,000.

How can new infrastructure be funded?

9.12 The funding of the Police-related elements of infrastructure is as follows:

- Ideally NYP would wish provision of Local Police Stations to be made directly by developers as part of other community facilities they provide. This might be in lieu of a cash payment as part of a S106 Agreement or CIL. They would also prefer direct provision of a Response Base in the Cayton/Middle Deepdale area (location to be subject to review of plans, costs/availability).
- The Response Base could also be provided by developers as the building does not have any specialist elements, although this would ordinarily be a stand-alone facility. This could be the subject of further discussion (depending on location and other facilities in that area).
- Recruitment and training costs would require a cash contribution, part of a 106 or CIL. These costs have not been quantified, and so funding cannot be calculated.

What are the priorities?

9.13 This is rated as an “other” priority. This means that the provision of this new infrastructure is not likely to be legally required by statute or regulation in order for the development to proceed.

Issues, dependencies and barriers to growth

9.14 No immediate barriers to growth have been identified.

9.15 NYP wish to be involved in the planning of the new development areas so that they are able to have an input on provision for the facilities described above.

9.16 NYP wish to see resources made available for them to have a presence in the growth areas from an early stage. While there is some flexibility in the relationship between housing growth and police resources there is a point at which the quality of service will suffer.

10 LIBRARIES AND COMMUNITY CENTRES

Introduction

10.1 The infrastructure requirements for community centres and library provision are considered in this section.

Context

The provision of library services

10.2 North Yorkshire County Council provides the library service in the Borough, however, due to funding cuts some libraries are now wholly volunteer run. There are currently six libraries located within the main towns or larger urban areas, with mobile libraries serving the rural villages/areas.

10.3 All branch libraries offer books and information, work in partnership with Scarborough Borough Council to deliver Access to Services (local council info) and offer public internet access.

Defining community centres

10.4 Community centres should not be confused with community facilities.[11] A community centre is a meeting place used by members of a community for social, cultural, or recreational activities.

What are the infrastructure requirements arising from growth? Who will provide it? What are the costs?

There are aspirations for new community centre provision at two strategic sites

10.5 There was a desire to provide community centres / neighbourhood centres as part of the infrastructure requirements for both the south of Cayton and Scalby. Other sites are not considered to be of a sufficient scale to warrant new provision as a result of growth. The expectation is that the smaller sites can use existing provision.

10.6 There is some existing provision around the south of Cayton and Scalby strategic sites. Consultation has suggested that this appears to be insufficient to cope with further growth, although closer study would be required to show fully convincing evidence of need (which could be necessary if these requirements were to form part of a S106 Agreement).

- Scalby has a church hall, and the Newby and Scalby Village Hall which is run by the Parish Council. Consultation suggests that this is space very well used

[11] The definition of community facilities in planning is very wide. It includes a wide range of facilities including shops, post office, schools, meeting places, open space and green corridors, burial grounds, libraries, art galleries, museums, doctor's and dentist's surgeries, places of worship, community centres, youth provision, heritage and arts facilities. The Use Class Order for non residential institutions (D1) includes such uses as libraries, schools, health centres, places of worship and so on. We have dealt with many of the facilities listed above (such as schools and doctors' surgeries) separately in this report. Other facilities such as shops, pubs, dentists, places of worship and post offices, are outside our remit given that they are privately provided. These are a matter of spatial planning in terms of identifying policies and broad allocations in planning documents.

(on evidence of room bookings). This suggests that provision is broadly at capacity and will possibly not meet the needs of further growth.

- Cayton has Jubilee Hall. Again this appears to be well used. The Parish Council have ambitions for a new community centre. The developer of the recently approved Cayton site has gifted land on the development to the parish council in order to provide a site for the construction of new facilities. This still requires the parish council to allocate considerable funds to the construction of the new facility.

National standards to suggest the level and cost of new community centre provision have been used (excluding land cost)

10.7 The requirement for community centres tends to depend on local needs, often based on surveys of communities residing in an area. The initial Infrastructure Report used information taken from the consultants experience elsewhere and substantiated this with information from standards used elsewhere to ensure these recommendations were appropriate(12).

10.8 Requirements can vary from 0.2sq m to 1 sq m per housing unit. For this assessment, we have adopted a requirement of 0.4sqm per household unit as a guide.

10.9 Regarding costs, typical build costs (which exclude land costs) range from between £1,500sq m to £1,800 sq m. A mid-point cost figure of £1,650 per m2 is proposed. Thus a centre for a community of 2500 dwelling units (for example, south of Cayton), would result in a requirement of approximately 1000 m2 and would cost approximately £1.65m.

10.10 The above costs and requirements standards have been used in the spreadsheet calculations to arrive at a broader estimation of community centre costs.

There may be ways of reducing these costs, in order to provide community centres more efficiently

10.11 Given the imperative to a) ensure that development remains economically viable, and to b) use public funding efficiently, it may be wise to investigate other methods for the provision of community centres for the new strategic sites. Stakeholders around the country favour the development of joint multi-purpose centres that provide for a range of uses, including community, social, health, learning, and sports facilities for the sustainable urban extensions. There may be economies that can be achieved with the provision of these multi-use centres at both south of Cayton and Scalby. This approach has also been adopted locally at Falsgrave CRC and Green Lane, Whitby.[13]

10.12 This approach may create some penalties. One may be around flexibility – for example, school premises would not be available during the school day (even though

[12] Sources used have been the Leicestershire and Rutland Rural Community Council and Sport England

[13] These resource centres include business units, community facilities, educational space, sports hall etc. for a wide range of flexible uses. Both of these were funded with significant external funding sources - Falsgrave as part of the SRB programme and Green Lane with ERDF, Yorkshire Forward, NYCC Community Fund and some Council money.

that is relatively short). Another is that there could be a change in the management ethos: community centres are currently run by the Parish council or local management committee on behalf of their communities as a community resource. Even so, the potential savings can make a good case for tolerating these disadvantages.

10.13 The actual configuration, cost and management of these will vary considerably in each area, and would need to be investigated as masterplanning processes developed.

Additional libraries infrastructure is not required

10.14 The assessment is based on the initial discussion with the County Libraries General Manager, who in turn liaised with the local librarians at Scarborough and Whitby. The main point to note is that the growth in terms of potential increase in numbers using the existing library service would be welcomed. There is no need for additional infrastructure to support the level of growth proposed, as there is sufficient capacity to cope with the planned growth. Thus there are no new additional capital costs or funding implications arising from the proposed growth plans..

How can new infrastructure be funded?

Funding for community centres has historically come from grant funding

10.15 Most community centres developments are dependent on external funding in the form of grants or developer contributions to support the capital cost of providing the infrastructure and for major extensions / repairs.

10.16 Around the country, grants used include Lottery, Charities, local authority grants administered via the Rural Community Councils and Landfill Grants. Similarly, in Scarborough, community centres are funded by a range of external grants, fundraising and Parish Council funds.

10.17 The Borough Council and the County Council do not have a specific fund for the provision of new community centres. The Parish Council position varies depending on the resources and priorities of each Parish Council but in general it is clear that there is no ready money available for the creation of new community centres to cope with growth.

10.18 In respect of the locations of need these appear directly attributable to the large housing allocation sites at south of Cayton and Scalby. In light of this, such provision would most likely be delivered on site as an in-kind S106 contribution. Consequently, whilst there is a potential funding gap for the creation of new community centres to cope with growth, there is the scope to deliver these on site.

10.19 The libraries service states that no infrastructure is required. Therefore no funding solutions have been pursued.

What are the priorities?

10.20 This is rated as an “other” priority. This means that the provision of this new infrastructure is not likely to be legally required by statute or regulation in order for the development to proceed.

Infrastructure timing assumptions

10.21 It is assumed that the infrastructure will be needed over the same build out period as the housing development. In the spreadsheet model we have pro-rata’d infrastructure costs in line with the assumed phasing of development.

Issues, dependencies and barriers to growth

Stakeholders are nervous of ongoing maintenance and other revenue costs arising from community centre provision

10.22 Feedback from stakeholders raised concerns about identifying agencies / communities willing to take on the management and funding.

The requirement for efficient infrastructure provision means that the concept of multi-use centres should be pursued with other partners

10.23 As mentioned above, multi-use centres are coming up the agenda as a way of efficiently providing for community needs.

10.24 Otherwise, there are no obvious delivery issues.

11 EDUCATION

Introduction

11.1 In this section the education infrastructure requirements stemming from the proposed housing growth for the following service are examined:

a) Early Years provision – 2 - 4

b) Primary Education – 4 - 11

c) Secondary Education 11 – 16yrs

d) Post 16 and Special Education Needs and Disabilities (SEND)

11.2 Higher education has not been included in this assessment.

Context

11.3 North Yorkshire County Council (NYCC) retains its statutory duty to secure sufficient school places in an increasingly complex environment which includes academies and a University Technical College. The assessment of this section has been updated in dialogue with the Children & Young People's Service of NYCC. We have utilised NYCC information relating to current and forecast roll numbers for the various schools in Scarborough, Filey and Whitby.

11.4 In arriving at the estimations account has been taken of any surplus capacity at primary and secondary schools.

Agreed Assumptions

11.5 The following assumptions have been agreed with NYCC:

- Use the forecast data provided as of March 2015 and based on numbers on roll at October 2015.
- Primary and secondary pupil yield ratios (of 0.25 and 0.13 per dwelling respectively)
- Appropriate broad groupings of schools to coincide with the indicative directions of growth map.
- Use of DCFS (now DfE) school expansion costs and location factors as at 2008 /09 to cost any new requirements.

Post 16 Education

11.6 The management of Post 16 provision has been reorganised in response to the Government's proposed changes in the leaving age in 2013 and 2015. NYCC is now responsible for Post-16/Further Education (FE) provision, having taken over from the Learning and Skills Council (LSC).

11.7 Given that there are still a number of areas of uncertainty around this it should be borne in mind that these conclusions may change in future as changes bed in.

11.8 Although no specific infrastructure requirements have been identified at this stage, future capital expenditure may be necessary to accommodate growth and should therefore be monitored closely.

Special Education Needs and Disabilities Education (SEND)

11.9 The special needs of most children can be met effectively through action taken by their mainstream school. Specialist support is available through the placement in special schools and through enhanced mainstream schools. No specific infrastructure requirements have been identified at this stage.

Early Years

11.10 An increasing universal entitlement to free childcare and education for 3 and 4 years olds, and an entitlement to free childcare and education for some 2 year olds is expected to put pressure on schools and settings. The impact will be monitored closely.

What are the infrastructure requirements arising from growth? Who will provide it? What are the costs?

11.11 The education infrastructure requirements and costs to meet this requirement are summarised in the Table 11.1 below. This takes account of existing capacity to meet the needs arising from the growth. The total estimated cost to meet the education needs of the proposed growth is £29.6m

Table 11.1 Schools Infrastructure Requirement and Cost

Area	Type	Hsg Growth	Growth requirements	New* requirements	Cost per child**	Total Growth Cost
Scarborough (North Scalby, Central, and South Scarborough other)	P& EY	1050	263	263	£13,596	£3,575,748
Scarborough (North Scalby, Central, and South Scarborough other)	Secondary	1050	137	Surplus	£20,293	£0
South Scarborough (Middle Deepdale, North Middle Deepdale and South Cayton)	P& EY	4000	1000	1000	£13,596	£13,596,000
South Scarborough (Middle Deepdale, North Middle Deepdale and South Cayton)	Secondary	4000	520	447	£20,293	£9,070,971
Whitby	P& EY	450	113	103	£13,596	£1,400,388
Whitby	Secondary	450	-690	Surplus	£20,293	£0
Filey, Hunmanby and Southern Villages	P& EY	260	65	65	£13,596	£883,740
Filey, Hunmanby and Southern Villages	Secondary	260	34	Surplus	£20,293	£0
Northern villages	P& EY	170	43	43	£13,596	£584,628
Northern villages	Secondary	170	22	Surplus	£20,293	£0
Western Villages	P& EY	200	50	37	£13,596	£503,052
Western Villages	Secondary	200	26	Surplus	£20,293	£0

NOTE: Due to the make-up of existing school catchment areas slightly different area boundaries in this table have been used.

*New requirement is based on total growth requirement, less existing surplus capacity (after deducting requirements stemming from current consents).

** Cost is based on the 2008/09 DCSL extension multiplier and locational factor, based on projected pricing levels at Q4 2008. Allowances have been added for external works, furniture, and equipment of £383 and professional fees at 10%. This excludes ICT equipment, site abnormalities, site acquisition, costs, VAT.

How can new infrastructure be funded?

11.12 At the time of writing[14], NYCC has recommended that we assume no mainstream funding for the identified education costs arising from the growth. It is expected that funding will be provided through S106 Agreements and/or CIL. It is assumed that £2.5m worth of funding will be available for a one form entry primary school serving Middle Deepdale and Eastfield. This is not shown in the table above as the updated education requirements provided by NYCC have already factored this in; i.e. the school is addressing the need of an existing planning consent and the table refers to growth planned through the Local Plan.

11.13 A significant proportion of the resulting requirement is specifically related to a small number of very large sites; Scalby, future phases of Middle Deepdale and south of Cayton. These alone will have the majority impact on the requirement for new primary school provision. Early indications suggest that there will be a requirement for four new primary schools; one at Scalby, one to the western end of Middle Deepdale (there is currently plans for a primary school on the east section of the Phase 1 development) and potentially two across the south of Cayton.

11.14 It is difficult to attribute an exact figure to these schools, however, this will be estimated by using the agreed multiplier for educational provision and multiplying this by the assumed number of chargeable properties in the respective locations.

11.15 For the purposes of this high level study the costs attributed are as follows:

Location/Site	No. of Dwellings	Chargeable Dwellings (1)	Charge per Primary Pupil Place	Total Equivalent Contribution
Middle Deepdale	1200	1080	£13,596	£3,670,920
South of Cayton	2500	2250	£13,596	£7,647,750
North Scalby	900	810	£13,596	£2,753,190

(1) This is an estimate on the basis that circa 10% of properties will be non-chargeable including extra care or one bed dwellings.

Issues, dependencies and barriers to growth

11.16 It is important to note that the numbers on roll are constantly changing, and will be affected by population changes, migration, changes in government policy and capital programmes. The assessment is based on current information; actual requirements will need to be considered in more detail at master planning and planning application stages.

11.17 The combined growth at Scarborough South and will require very early planning. Early discussions should be initiated to support the proper planning of the education infrastructure needs for this area to ensure housing delivery can proceed.

11.18 Similarly, a note of caution is raised for the northern villages to highlight concerns about primary school capacity. As a consequence of the submission of a housing scheme in Cloughton this is currently being discussed with the resolution of expanding the footprint of the school into adjoining land being proposed.

11.19 The Scarborough North and Scarborough Central areas have been identified as potentially having issues in the short term. The situation in Scarborough North and Scarborough Central is being monitored closely and discussions with existing schools are ongoing.

11.20 The final issue of note is the unknown impact of the proposed University Technical College in Scarborough to serve 14 to 19 year olds (600 pupils). This has the propensity to have an impact on the requirement for secondary school places across

the Borough although the actual scale of impact will be unknown until such time the facility is up and running and greater clarification over the intake including both the age and geographical distribution has been established.

12 PUBLIC SPACE, PARKS, SPORT AND LEISURE

Introduction

12.1 Open spaces, public space, parks, sport and recreation all underpin people's quality of life. In this section we examine the needs generated by growth.

Context

The definitions we are using

12.2 The National Planning Policy Framework defines open space as “all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity”. While the Planning Practice Guidance recognises that open space can take many forms, it does not provide a comprehensive list of individual typologies.

12.3 The Companion Guide to the former Planning Policy Guidance Note (PPG) 17 identified the various forms of green space, including parks, green corridors, outdoor sports facilities, allotments, community gardens, cemeteries, civic spaces, including civic and market squares, and other hard surfaced areas designed for pedestrians. It also includes amenity greenspace (most commonly, but not exclusively in housing areas), informal recreation spaces, green spaces in and around housing, domestic gardens and village greens.

12.4 Indoor sport and recreation uses are not formally defined within the guidance. However, for our purposes in this plan, this use has been taken to include swimming pools, indoor sports halls, leisure centres, etc.

Scope

12.5 This section covers parks, amenity green space, playgrounds, playing fields and leisure centres. Strategic green infrastructure is covered in a separate chapter. Private, voluntary and specialist sports provision including, for example, indoor and outdoor tennis clubs, stadia, and golf courses, have not been covered. Nor have cemeteries, as typically there a very limited number of cases when significant investment in cemeteries is needed. The requirements and costs for cemeteries have been treated as ‘de minimis’ (significant investment in cemeteries is usually only required when land costs are particularly high).

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

Method for determining requirements and costs

Scarborough Borough Council has completed an NPPF compliant assessment of open space

12.6 This assessment was published in May 2014 and provides an up to date picture of current provision. It considers the quantity, quality and accessibility of all green spaces above 0.25 hectares in size. As it incorporates criteria that are necessarily subjective (quality and accessibility), it is more difficult to apply clear rules to when considering their potential to support growth.

12.7 For the purposes of this study, where the assessment identifies facilities that are classed as being 'below average' or 'poor' (from a quality perspective), these facilities are considered to currently not contribute towards local need. In these cases, the assumption is that their enhancement would enable them to contribute towards meeting demand generated by new growth. In an area where there is an existing surplus of quantitative provision, this is a more efficient way of addressing the needs of growth than providing new facilities.

A flexible approach based around the use of local space standards

12.8 The standards set out within the assessment are derived from a detailed analysis of local provision and have been 'benchmarked' against similar standards used by neighboring authorities. They are presented in terms of the level of green space provision (hectares) required per 1,000 population and in order to extrapolate the demands of planned housing and population growth, an average household size figure of 2.03 persons per household has been applied (in line with the latest ONS forecasts and the Borough Council's Objective Assessment of Housing Need).

12.9 In planning to meet the Borough's target for housing delivery, the emerging Local Plan takes account of completions (dwellings built) since the beginning of the plan period (2011), sites with planning permission, and new site allocations. The green space implications of the two former sources of housing development have already been calculated through the planning application process (in line with the Council's adopted Green Space SPD, or other relevant SPD at the time of consideration). Therefore, only the growth implications of site allocations have been assessed within this study.

12.10 It should be noted that the emerging Local Plan does not take account of the contribution made by other sources of housing development (e.g. rural exceptions sites, windfall sites, etc.) in meeting the overall target. Given that these are typically small scale developments (10 or fewer dwellings), these sources are considered to provide additional flexibility within overall delivery and their growth implications have not been assessed within this study. This reflects the approach set out in the Council's Green Space SPD, where developer contributions towards green space provision will not be sought from developments of 10 or fewer dwellings.

Costed the open space standards

12.11 The open space, parks and leisure requirements that these sites might generate have been examined and costed using the Council's adopted Green Space SPD.

12.12 The following approach has been taken.

- This assessment concentrates on primary infrastructure. It is assumed that small scale open space provision (such as very small scale "pocket" open space on housing developments) are for the most part incorporated in build costs, and so do not need to be separately dealt with.
- Land costs are not included in these calculations as costs will vary widely depending on location. Those developments that are able to buy agricultural land for use as (say) a playing field or park will typically pay twice agricultural land values (say £20k/ha); those developments in urban areas will pay significantly more. This is particularly relevant for space-hungry requirements, such as playing fields and parks. A more detailed approach would need to be taken on a case-by-case basis, but the lack of land costs here should be noted.
- New employment development is assumed to result in no requirement for additional green space, parks, or sport and leisure facilities.

Important caveats

12.13 The approach seeks, where possible, to take account of local deficits and surpluses in open space. Historic deficits should only be addressed where doing so would also contribute towards meeting the demand requirements of new growth.

12.14 Where a facility is considered to be of 'below average' or 'poor' quality, a contribution towards its improvement is considered to effectively represent the provision of new facilities. There is no way of clearly knowing how much it would cost to bring these facilities up to an acceptable standard, so the approach taken has been on a case by case basis.

12.15 Standards will have to be applied and interpreted in a flexible way to take into account varying local circumstances. In particular, there may be a need to interpret the standards flexibly in relation to areas of high density redevelopment, i.e. where the land may simply not be available to satisfy the quantitative components of the standards.

12.16 It should also be noted that the Council's Green Space SPD does not require the provision of new dedicated natural parks and green space. It is considered that such provision will be made through the delivery of new "urban parks" in large scale housing developments (over 500 dwellings). Developer contributions towards the improvement of natural parks will also be secured through the urban parks typology.

12.17 Similarly, the SPD only requires the provision of new dedicated urban parks in large-scale housing developments (over 500 dwellings). In such instances, a standard of 1.2 hectares of provision per 1,000 people will be applied. Where required, developer contributions towards the improvement of existing urban parks will also be sought.

Open space, sports and recreation requirements and costs

Natural parks and green space

12.18 When existing provision is considered against the relevant standard there is shown to be a surplus of natural parks and green space in Scarborough, which is mainly due to the presence of large country parks in the town. While no additional natural green space provision is required, the majority of new housing sites will be required to contribute towards the improvement of existing natural green spaces.

12.19 While there is a shortfall of natural green space in Whitby, additional provision will not be delivered through new housing development. However, contributions towards the improvement of existing provision will be sought.

12.20 Filey is shown to have a surplus of provision due to the large country park. Again, there is no requirement for additional natural green space provision and existing green spaces are of sufficient quality. Therefore, no contributions towards their improvement will be sought.

12.21 Given that a standard has not established for the provision of natural green space in rural areas (Service Villages and Rural Villages), there are no specific deficiencies or surpluses in the quantity of existing provision. However, new housing development in the Service Villages of Hunmanby and Burniston will be required to contribute towards the improvement of existing natural green spaces. It should be noted that level of development that is expected to occur in the Rural Villages is unlikely to generate a requirement for a financial contribution towards the improvement of existing natural green spaces.

12.22 The cost of improving existing natural parks and green space provision across the plan area has been included within the calculation for the urban parks typology (see below).

Urban parks

12.23 In Scarborough there is a surplus of urban park provision. Again, this is due to the presence of large sites in the town, including South Cliff Gardens and Peasholm Park. In line with the approach set out in the Green Space SPD, new urban park provision will be required alongside the delivery of large scale housing developments (over 500 dwellings). Such sites account for 4,600 dwellings in the Scarborough Urban Area, which generates a requirement for 11.21 hectares of on-site urban park provision based on a standard of 1.20 ha per 1,000 population. The equivalent cost of this provision, based on a cost of £155,468.50 per hectare (as set out in the Green Space SPD), equates to £1,742,802.

12.24 Contributions towards the improvement existing sites will also be required from a number of developments, particularly from those that are within walking distance of Linden Road Neighbourhood Park and Albermarle and Grosvenor Crescents, all of which are either rated as ‘below average’ or ‘poor’ in the Green Space Audit. It is expected that sites totaling 330 dwellings will not be required to make a contribution towards urban park provision. The overall cost of new and/or improved urban park provision in the Scarborough Urban Area equates to £1,858,764.

12.25 While there is a large quantitative shortfall of urban park provision in Whitby, development opportunities in the town are unlikely to be of a scale that would deliver new park provision. Such provision would have to be secured on a site by site basis as the approach set out in the Council's Green Space SPD typically only requires new urban parks on sites that would deliver 500 or more dwellings. Nevertheless, it would be expected that all new development would contribute towards the improvement of existing provision, including natural parks and green space. This equates to £207,539.

12.26 In Filey, there is a surplus of provision totaling over 4ha. Given that existing provision is also considered to be of sufficient quality, no additional parks or contributions towards the improvement of existing provision will be required.

12.27 The total cost of new and/or improved urban park provision across the plan area is £2,066,303.

Amenity green space

12.28 Notwithstanding specific deficiencies in a small number of settlements, there is surplus of amenity green space provision across the plan area as a whole. Whilst for other typologies this would suggest that there is no need to provide additional space, amenity space is very local to developments. Therefore, regardless of whether there is an existing surplus or deficiency, on-site amenity space is needed to support all new development (where sufficient need is generated). On-site green space is typically required for developments of 25 or more dwellings.

12.29 Based on a standard of 0.55 ha per 1,000 population, there is a total need for 15.361ha of space. Again, the large majority of this (12.76 ha) is in Scarborough, with 1.33 ha and 0.29 hectares in Whitby and Filey respectively.

12.30 While the Green Space SPD does not provide a cost for providing amenity green spaces (as amenity spaces are delivered directly through development), by adopting an illustrative cost of £20,000 per hectare, a total cost of £312,149 for amenity green space can be derived.

Play facilities

12.31 Play facilities consist of Local, Neighbourhood and Settlement Equipped Areas for Play (LEAPs, NEAPs and SEAPs respectively). The Council's Green Space SPD states that all new housing developments (of 11 dwellings or more) will generally[15] be required to contribute towards the provision of new play facilities (either on- or off-site). Developments of 100 or more dwellings will typically require on-site provision of play facilities.

12.32 When assessed against the standard of 0.20 ha of play facilities per 1,000 population, there is shown to be a deficiency in provision across the plan area. This quantitative deficiency is most pronounced in Scarborough, although it is noted that the Green Space Audit demonstrates that the majority of the area is within walking

[15] Unless existing play areas within walking distance of the proposed development are of sufficient quality and have sufficient capacity to accommodate the additional level of demand to be generated by that development

distance of a play facility. In Scarborough, housing sites that can deliver in excess of 100 dwellings account for 4830 units in total. These sites will generate demand for 1.96 ha of on-site play provision, with an equivalent cost of £3,172,866. Other sites will be expected to contribute towards the improvement of existing facilities, particularly those that were identified as being of 'below average' or 'poor' in the Green Space Audit. These sites will generate £275,060 in off-site contributions. The overall cost of new and/or improved play facilities in the Scarborough Urban Area equates to £3,440,884.

12.33 New play facilities in Whitby will be delivered primarily through on-site provision in large development sites (over 100 dwellings), with smaller sites contributing towards the improvement of existing facilities. On-site provision totaling 0.13 ha will be required, with an equivalent cost of £210,340. Contributions totaling £149,646 will also be required. The overall cost of new and/or improved play facilities in Whitby equates to £359,986.

12.34 Development opportunities in Filey are unlikely to be of a scale that would require the delivery of on-site play facilities. Based on the identified allocations, contributions totaling £78,829 would be required towards the improvement of existing play facilities.

12.35 In the Service Villages the preference will likely be for off-site contributions, although the requirements for identified housing sites in Hunmanby, East Ayton and Burniston generate demand for additional facilities in the respective villages. The combined cost of delivering new and/or improved play facilities in the Service Villages equates to £329,111.

12.36 No housing allocations have been identified in the Rural Villages and any housing developments not otherwise identified in the Local Plan, i.e. windfall or exceptions housing, would be unlikely to require a contribution towards the improvement of existing facilities.

12.37 The total cost of new and/or improved play facilities across the plan area equates to £4,208,810.

Outdoor sports facilities (pitches)

12.38 The Scarborough Playing Pitch Strategy (adopted October 2013) provides the most up-to-date assessment of playing pitch (outdoor sports) provision, including the sports of football, rugby union, rugby league, cricket, hockey and tennis. The PPS was undertaken in line with Sport England's methodology and assesses the demand (current and future) and supply (including quality) aspects of pitch provision in the Borough. The Green Space SPD is set up towards supporting the delivery of the recommendations/actions of the PPS.

12.39 Notwithstanding site specific deficiencies in the quality of individual pitches and/or ancillary facilities, the PPS demonstrated a relative balance between the demand and supply of playing pitches both now and in the future. However, it also identified quantitative deficiencies within particular sports, some of which are due to existing issues and some which are directly caused and/or exacerbated by future population growth.

12.40 Given the level of detail involved, a determination over whether or not a particular housing site should contribute towards new and/or improved outdoor sports provision can only be made during the planning application stage. Therefore, for the purpose of this study, it can only be assumed that all new development will be required to contribute towards the provision of outdoor sports facilities (whether on-site or off-site). In doing so, the figure generated effectively represents the maximum potential contribution, while the final contribution (that calculated at application stage) may be lower.

12.41 Based on the approach outlined above, growth in Scarborough will generate a pure quantitative need for 18.08 ha of outdoor sports provision. However, it is extremely unlikely that this level of provision will be required, although the equivalent cost could be used to improve the quality of existing provision. The equivalent cost for the Scarborough Urban Area is £1,952,245.

12.42 Growth in Whitby will generate a need for 1.89 ha of sports provision, which has an equivalent cost of £204,244.

12.43 Housing development in Filey will generate a need for 0.41 ha of sports provision, with an equivalent cost of £44,725.

12.44 The Service Villages will require 1.98 ha of sports provision, which equates to an equivalent cost of £214,187.

12.45 Development opportunities in the rural villages are unlikely to generate demand for outdoor sports provision.

12.46 The overall (maximum potential) cost of new and/or improved outdoor sports facilities across the Borough equates to £2,415,400.

Other leisure facilities requirements and costs

12.47 The analysis below of the need for other leisure facilities is based on high level discussions with Council officers. The existing leisure strategy for the Borough ('Active and Healthy Lifestyles', Leisure Strategy 2005-2010) is dated and as such, much of the provision identified therein is not reflective of the needs accompanying growth.

12.48 Yet the nature of facilities assessed in this section – leisure centres, swimming pools, athletics facilities, arts facilities, etc. – do not naturally lend themselves to a straightforward assessment against an expected provision standard. Needs are assessed more qualitatively and it is more difficult to be definitive about them.

12.49 The analysis below identifies a significant number of schemes that are considered necessary for Scarborough to provide a modern leisure offer. For the purposes of this study, these schemes are considered to be sufficient to address the future needs of growth in the early years of the plan period. It will be important to reassess this position as part of any review of infrastructure needs and the CIL, if implemented.

Sports facilities

12.50 Given the nature and range of sports facilities, it is not possible to apply any reasonable standards to such provision. However, the previous leisure strategy for the Borough aimed to increase participation, quality and access to sports facilities.

12.51 The existing provision of indoor leisure facilities in Scarborough town is currently on two sites which are geographically split (Scarborough Sports Centre and Scarborough Indoor Pool). These sites are over 30 years old and are not appropriate for modern leisure needs. Planning permission was granted in 2015 for the development of a 'Leisure Village' at Weaponess Valley. This facility will effectively consolidate the existing and outdated provision onto a single site, which will serve the whole of the Borough. It will act as a hub for sports provision and will be supported by several existing 'satellite' facilities, including the rugby club at Silver Royd, the Gymnastics Academy, the Table Tennis Centre and the Indoor Tennis Centre. Facilities to be provided at the Leisure Village include:

- a 2,000 capacity 'Category C' community football stadium with third generation (3G) artificial pitch.
- a 25m swimming pool with spectator seating for 250 people and associated teaching pool;
- a four court sports hall to cater for sports such as tennis, badminton, netball and basketball;
- a Gym and dance studio;
- three squash courts;
- a multi-use games area (MUGA) facility catering for sports such as hockey, netball, and tennis;

12.52 Funding mechanisms for the delivery of the Leisure Village have been identified.

12.53 Whitby is considered to have sufficient leisure provision to accommodate growth.

12.54 In Filey, the Filey Sports Partnership (a group of stakeholders in the town) is seeking the provision of a dual use leisure centre. A Lottery bid was rejected in 2001 and at present there is little prospect of it coming forward. However, the aspiration for the facility still exists within the local community. While there is no evidence to support the need for such a facility, for illustrative purposes only, the anticipated cost of providing a facility with a one-court gymnasium and a 25m swimming pool would be around £4.5m (based on costs set out in Sport England's 'Kitbag' 2015Q1). Given that the likely housing allocations in Filey total less than 200 dwellings (less than 5% growth), the need for this facility cannot realistically be attributed to growth.

Non-sports leisure facilities

12.55 No specific requirements for new non-sports leisure facilities have been identified. Given the nature of such facilities, it is not possible to apply any reasonable standards to such provision.

12.56 At North Bay, there is a wish to see the provision of new leisure attractions. To date this has included the construction of a 6,500 seat open air theatre as part of the Sands development. An indoor water park is currently being constructed as part of the wider development and is due to open in spring 2016.

How can new infrastructure be funded?

There is nil mainstream funding available

12.57 In light of the Comprehensive Spending Review and the significant cuts to local authority budgets, it is assumed that there is a nil capital budget set aside for the acquisition of new open space to cope with the demands of growth.

12.58 Capital investment of this sort is normally considered to be within the remit of Local Authorities but there are no dedicated mainstream sources of funding to support any investment. There are some small and specialised sources of funds for specific and narrowly defined projects but these cannot sensibly be used as a platform for strategic investment. It is not practical to assume that the Borough Council will be able to contribute significantly to capital expenditure.

12.59 It is therefore assumed that the capital cost of provision of these facilities is not available from existing mainstream funding.

12.60 Where money is available from CIL, we anticipate that these funds would be allocated to a central fund for improvements and enhancement to recreation and community infrastructure. Some of this money can then be used towards match funding lottery and other grant aid.

12.61 However, it is not possible to be precise about how successful authorities will be in attracting match funding. It is assumed that no match funding will be available.

12.62 In the previous section it was indicated which non-sports leisure facilities would be considered to attract private developer funding. It is therefore considered to be funding neutral.

Issues, dependencies and barriers to growth

12.63 All of the identified green space requirements are considered to be “desirable” rather than “essential”. However, it is important that the provision of green open space and play/sports facilities is made in tandem with the build out of the new housing provision. If this is not done then green open space will only be provided on the periphery of new developments, rather than as an integral part around which good design of new development is established.

12.64 Much of the provision should be made on-site so it is important that with the largest developments, off-site contributions are minimised and provision as part of the development is maximised. This is usually the case with large developments in any event.

12.65 It should be noted that, under the CIL Regulations which postdate the Localism Bill, it is considered acceptable for new development to contribute to maintenance. Whilst development may be able to provide significant amounts of new space, the high

requirements for new green space will create substantial requirements for maintenance. This may create difficulties if development is also expected to pay for this.

12.66 For this reason, maintenance payments are not included here.

As an example, a reasonable cost of maintenance for urban parks is £10 per m^2 per annum. Providing this over a reasonable period, say 20 years, creates a total cost of £16.38m for the Scarborough urban area alone. It is important to recognise equally that the Borough Council may be unable to address such requirements, so there may need to be alternative mechanisms for provision, e.g. creating a parks trust.

13 STRATEGIC GREEN INFRASTRUCTURE

Introduction

13.1 This section looks at how growth generates needs for strategic green infrastructure.

Context

The demand for strategic green infrastructure

13.2 Local greenspace on the doorstep of new development may need to be complemented with larger scale destination sites for varied leisure and recreation experiences. Strategic green infrastructure outside the footprint of new development could also have a role to play in bringing together both existing and new communities through linking settlements and country parks, wildlife reserves, urban greenspaces, heritage sites and waterways.

13.3 However, whilst growth will bring increased pressure on existing strategic green infrastructure assets, the question is around the extent to which capacity already exists. Scarborough Borough already has remarkable natural assets (e.g. beaches) which should not be overlooked.

13.4 Scarborough Council and Natural England have jointly undertaken a mapping exercise to identify existing green infrastructure assets.

13.5 It should be noted that potential schemes with some of the attributes of Strategic Green Infrastructure are being picked up through the emerging Local Plan. For example, the indicative masterplan produced for the South Cayton allocation has identified a potential green link, extending from Oliver's Mount to the north to the Cars Wetland to the south.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

13.6 As described in the previous chapter, the Council has completed a Green Space Audit. Many of the potential strategic needs have been incorporated into this assessment and as such, have been included in the previous section.

13.7 Therefore there are no specifically identified strategic green infrastructure projects or plans identified in policy.

13.8 This position is considered to be reasonable because of the rural nature of the borough and the ease of access of the majority of the population to a range of strategic open spaces. These include both green spaces and also the coastline that runs the length of the borough. All the major settlements are located close to this coastline.

How can new infrastructure be funded?

13.9 There are no specifically identified strategic green infrastructure projects or plans identified as requirements of growth. Consequently, there is no infrastructure which requires funding.

Issues, dependencies and barriers to growth

13.10 There are no specifically identified strategic green infrastructure projects or plans identified as requirements of growth. Consequently, there are no issues, dependencies or barriers to growth identified.

14 PRIMARY HEALTH CARE

Introduction

14.1 The area is covered by two Clinical Commissioning Groups; (1) Scarborough and Ryedale and (2) Hambleton, Richmondshire and Whitby. The latter of these has confirmed that the proposed re-configuration of Whitby Hospital and the associated facilities are sufficient to address the future requirements of growth in Whitby. This scheme is likely to be fully funded centrally and there is suggested to be no requirement for additional investment into primary health care in this part of the Local Plan area. The remainder of this chapter therefore sets out the requirements in the remaining areas of the Local Plan area.

14.2 NHS Scarborough and Ryedale Clinical Commissioning Group (SRCCG) replaced NHS North Yorkshire and York Primary Care Trust on 1 April 2013. NHS SRCCG has responsibility for some health services whilst others were transferred to the local authority. NHS SRCCG became responsible for the co commissioning of primary care services on 1 April 2015 and works closely with NHSE to develop strategic plans for primary care services which are fit for the future.

14.3 NHS SRCCG has been consulted on the emerging Scarborough Borough Local Plan. The Council has now published their Local Plan which is effective for the period 2011 to 2032 and includes the Infrastructure Delivery Plan which identifies the infrastructure requirements attributed to Strategic Locations identified within that strategy. NHS SRCCG is committed to working closely with Scarborough Borough Council to develop more detailed plans and work collaboratively to establish local costs appropriate for different areas of Scarborough Borough.

14.4 The new health organisations became fully operative with effect from 1st April 2013.The health commissioning bodies, NHS England Northern team and NHS Scarborough and Ryedale Clinical Commissioning Group will work collaboratively to develop strategies for the provision of healthcare across the Area Team that reflect both national strategic agendas and local priorities. Emerging strategies will be integrated to encompass primary and community care and take into account the provision of public health/mental health, secondary care and social services as appropriate. These strategies will review and determine the means of providing future healthcare reflecting locality health needs, national strategies and existing/potential health estate. Historic strategies will be acknowledged and revisited to ensure the delivery of healthcare in line with current policy objectives.

14.5 This process will take some time to develop, and the service development plans will be influenced by the Local Plan, recognising housing developments and consequent population shifts that will, or are likely to, happen. Once approved, health infrastructure developments typically take from two to three years from inception to completion for small to medium projects and longer for large developments involving service and public consultations and funding approvals.

14.6 The NHS organisations involved and the Council will work collaboratively to develop appropriate strategies for the delivery of healthcare and the infrastructure from which it is provided.

14.7 There are currently no primary care or community projects on site or under contract. A number of inherited projects are subject to business case and funding. These are intended to address pre-existing requirements and are not related to any additional health care needs arising from the housing developments proposed in the Local Plan Strategy.

14.8 Having taken account of the development proposed in the Local Plan Strategy the impact of the proposed housing site allocations (those without a formal planning consent) is an increase of 16,199 patients, equating to just over a 9% increase in patients and GP provision over the Plan period. The areas suffering the most significant impact are Deepdale, Eastfield and Scalby. These significant increases in demand on health services cannot be accommodated within existing health infrastructure. The potential total health infrastructure cost impact for additional new facilities over the period 2011 to 2032 is assessed as being around £5,063,932. The emerging strategies will determine the optimal means of delivery for each area.

14.9 The cost impact of additional health infrastructure will be a combination of non-recurrent capital and recurrent costs determined by the means of delivering the infrastructure. The impact of recurrent infrastructure costs to NHS England is very significant and will be recognised in the emerging health infrastructure strategies and delivery plans.

14.10 The Local Plan proposals will be embedded in the baseline needs assessment of the emerging health strategies to identify the means by which the additional health infrastructure necessary as a consequence of the Local Plan housing proposals will be delivered and procured.

14.11 A schedule of capital projects will be identified in the emerging strategic health infrastructure delivery plan. In addition, developments on unallocated sites will further impact on health infrastructure and additional reactive proposals will emerge in response to ad hoc development proposals.'

14.12 The existing health infrastructure in Scarborough already operates above optimum capacity and cannot absorb the impact of the additional homes proposed for the area covered by SRCCG in the Local Plan. The total current estimated cost of developing additional health infrastructure to support planned developments is £5,063,932 with the largest impact of the south central developments impacting on Eastfield Surgery with 10,698 new patients with an estimated cost of £3,344,226 and north developments impacting on Scarborough Medical Group, (Danes Dyke) and Hackness Road Surgery with 3481 new patients with an estimated cost of £1,088,301 to provide the healthcare infrastructure.

14.13 It should be noted that of the schemes used in the above calculations some are now permitted and have made a contribution towards health facilities. This has resulted in circa £400,000 of contributions and leaves the remainder of housing at 5700 dwellings in the Local Plan (SRCCG) area.

Strategic Health Investment Plan

14.14 The new health organisations are developing strategic plans for the future primary care estate which will recognise changing patterns in the commissioning of Primary Care an Out Of Hospital community care services within localities and current standards for GP premises.

14.15 The provision of health services is governed by NHS guidelines and by national and locality strategies reflecting local priorities. The provision of integrated care is a national priority. NHS England is currently working with all primary care providers, NHS Trusts and Local Authorities to build clear strategies that will deliver integrated care fit for the future. In Estate terms, the importance of excellent modern premises that are fit for purpose central to local populations is fundamentally key to this strategic thinking.

14.16 The emerging strategies will identify the most appropriate means of delivering health premises suitable to meet the challenges identified from the Scarborough Local Plan Strategy.

14.17 The impact of non-recurrent and recurrent infrastructure costs to NHS Scarborough and Ryedale CCG is very significant and will be recognised in the emerging health infrastructure strategies and delivery plans and requests for developer contributions.

14.17 The size, location and configuration of new health infrastructure will be determined by NHSE England and NHS SRCCG through the delegated authority to co commission primary care, taking into account national strategic agendas, NHS guidance and regulations relating to the provision of primary and community care facilities and local strategic priorities. Delivery will be subject to the availability of funding and developer contributions. The provision of any pharmacy facilities will be governed by the pharmaceutical regulations applicable at the time. These matters are not governed or constrained by planning statements, third party or speculative planning applications.3.

Impact of Proposed Development on Medical Provision

Existing Provision

14.18 Central: GP Primary Care Services are provided by 6 GP practices across Scarborough centre. All 6 GP practices are located within the town centre resulting in patient lists distributed throughout the town. All of these practices are approximately 1.5km to 2 km from the application site.

14.19 North: GP Primary Care Services are provided by 2 GP practices in Hackness and Danes Dyke with branches in Cloughton. These practices are approximately 1.5km to 2 km from the application site.

14.20 South: GP Primary Care Services are provided by 1 GP practice in Filey. These practices are approximately 1.5km to 2 km from the application site.

14.21 South Central: GP Primary Care Services are provided by 2 GP practices to the south of Scarborough in Hunmanby and Eastfield. These practices are approximately 1.5km to 5 km from the application site.

14.22 West: GP Primary Care Services are provided by 1 GP practice with a practice in West Ayton and a branch in Seamer. These practices are approximately 1.5km to 5 km from the application site.

14.23 Community services are provided at Northway Clinic and Sure Start at Briercliffe and also from the GP surgeries. Locality based health services include both GP services and community services. These two services work together as primary care multi-disciplinary teams to provide care to local residents whether or not they are actually registered with the local practice. The demand for these services is directly proportionate to the number of patients – increased demand for GP services will involve an increase in community service provision in terms of NHS strategic objectives to provide as much care possible outside of hospital and in the home or home like environment.

14.24 The existing GP practice premises in Scarborough are currently operating above capacity and the impact of further development on health services and health infrastructure is very significant. The existing health infrastructure in Scarborough, Scalby, Filey and Eastfield cannot absorb the further pressure on delivery of services due to the construction of the homes proposed in the Council's Local Plan Strategy.

(The following data is provided by NHS SRCCG: October 2015)

Area	**GP Practice**	**Whole Time Equivalent GPs**	**Total No. Patients (raw list)**	**Average Patients per WTE GP (1500/GP)**
Town Centre	Propspect Road	4.0	7,513	1878
	Falsgrave	5.5	10,456	1901
	Belgrave	2.25	5,042	2240
	Brook Square	7.14	11,409	1597
	Peasholm	4.6	8,022	1743
	Castle Health Centre*	2.3	2,629	1143
North	Hackness	2.4	3,328	1386
	SMG	9.0	12,800	1422
South Central	Eastfield	5.0	7,675	1531
	Hunmanby	2.6	4,007	1541
South	Filey	5.1	8,900	1745
West	West Ayton	5.3	8,113	1530

14.25 Department of Health standard for GP provision is 1800 patients per GP however the latest data indicates 1500 patients per GP, recognising the increased level of co morbidities and complexity of an ageing population. The capitation statistics demonstrate that GP Surgeries within 2-5kms of the development are already at or near capacity of 1500 patients per GP.* Castle Health Centre is an APMS practice.

14.26 The actual local consultation rate for primary care is 6.20 visits per annum compared to the expected rate of 5.96 per annum reflecting the local demographics and associated health needs. Patients and GPs are supported by a multidisciplinary team with more consultations taking place in primary care rather than at hospital based services. NHS SRCCG commissioning strategy, influenced by the national and local challenges and a need to develop integrated models of care.

14.27 The impact of residential development is therefore very significant with regard to necessary GP and other health service provision in the area. NHS England follows good practice and adheres to national guidance with regard to list sizes, and recognises that anything above 1500 patients per WTE GP puts pressure on a GP Practice and the services it is able to offer to its patients.

14.28 During the last 2 years four town centre practices have merged into two practices in line with the NHSE "Five Year Forward" https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web, looking at delivering primary at scale and ensuring sustainable services. This means that it would not be possible to accommodate the increase in list size within the current premises due to the existing pressure on services. The Scarborough town practices are reviewing their ability to absorb existing service pressures. The potential for additional capacity to serve future planned residential developments is subject to forward strategic health investment planning and funding.

Impact of the Proposed Developments on Health Infrastructure

14.29 The usual standard adopted of 2.03 persons per home within NHS SRCCG response to the Local Plan will be used in these considerations. However, it is likely that these will be family homes and families also place a higher than average demand on local health services creating further pressure on health service delivery.

14.30 Applying this ratio to the 7980 homes proposed for the sites indicates 16,199 persons. The introduction of a further 16,199 patients in this locality will have a significant impact on the physical infrastructure necessary to provide health services to the local population. The premises already operate above capacity and additional premises infrastructure would be essential to deliver health services to these patients.

14.31 This capacity issue was recognised in the Scarborough Borough Council Local Plan highlighting that in relation to Primary Care/Community and Hospital Services 'the amount of development proposed is likely to increase the demand for these services, however, the plan identifies the need to increase provision if services in line with current/future need.'

14.32 In looking at the impact of the Local Plan on primary and community healthcare services five areas have been identified with a range of the level of impact on existing services and these are detailed below. The assumptions applied at this stage are 2.03 persons per household; 1500 patients per GP, 300sq.m per GP and a cost of £1563 per sq.m. construction costs. (Construction costs taken from BCIS data base)

North

- 3481 persons with high healthcare demands
- 2.32 WTE GPs
- 696 sq. metres of health infrastructure
- Additional Health Infrastructure cost £1,088,301

Therefore the cost of the additional health infrastructure solely for the application site is estimated at:

Total £1,088,301

Town Centre

- 243 persons with high healthcare demands
- 0.16 WTE GPs
- 49 sq. metres of health infrastructure
- Additional Health Infrastructure cost £76,149

Therefore the cost of the additional health infrastructure solely for the application site is estimated at:

Total £76,149

South Central

- 10,698 persons with high healthcare demands
- 7.13 WTE GPs
- 2139 sq. metres of health infrastructure
- Additional Health Infrastructure cost £3,344,226

Therefore the cost of the additional health infrastructure solely for the application site is estimated at:

Total £3,344,226

West

- 548 persons with high healthcare demands
- 0.37 WTE GPs
- 110 sq. metres of health infrastructure
- Additional Health Infrastructure cost £ 171,336

Therefore the cost of the additional health infrastructure solely for the application site is estimated at:

Total £ 171,336

South

- 1228 persons with high healthcare demands
- 0.82 WTE GPs
- 246 sq. metres of health infrastructure
- Additional Health Infrastructure cost £383,920

Therefore the cost of the additional health infrastructure solely for the application site is estimated at:

Total £ 383,920

14.33 This reflects the health infrastructure capital costs to support the Local Plan sites. Furthermore, the impact of additional revenue costs and also of secondary and mental health are not reflected in these costs.

14.34 The practice which will see the greatest impact is Eastfield Surgery and consideration needs to be given to the wider healthcare infrastructure needs including day care, elderly residential care, wellbeing clinics and support services. Access to services at Scarborough Hospital is restricted as patients need to take 2 buses to the hospital.

14.35 Should this Local Plan be approved, it is requested that the above financial impact of the developments on health infrastructure is recovered by means of a payment under Section 106 of the Town & Country Planning Act 1990.

14.36 The above requested Section 106 sums meet the tests of:

- **Necessary**: existing infrastructure cannot accommodate the additional demand. NHSE planned investments relate to existing capacity shortfalls only;
- **Directly related** to the development: the impact on health infrastructure (GP and community services) is a direct consequence of the developments;
- **Fairly and reasonably related in scale and kind** to the development: evidence based average health infrastructure costs are requested reflecting necessary additional health infrastructure solely and directly related to each residential development.

Additional Health Impact

14.37 In addition the healthcare economy will have no alternative but to incur the long term residual revenue impact of the development to fund increased GMS contractors (GPs) and inflated pharmaceutical, diagnostic, hospital, mental health and other associated costs. This report also does not address the impact of the development on these services or mental health services and secondary care.

Timing of and access to any Health Infrastructure Contribution Payment

14.38 The most appropriate means of delivering the required additional capacity in healthcare premises will evolve with emerging strategies for the provision of GP Primary Care, Out of Hospital Care and Community services in this locality reflecting planned residential developments. All strategic planning is subject to funding and further stakeholder statutory consultations on emerging strategies. Timing of the payment is vital to successful delivery of strategic health infrastructure:

- health infrastructure decisions cannot be implemented on an incremental or piecemeal basis;

- strategic forward planning is essential for the required outcomes to ensure the services locality GP practices and Community Services providers are able to offer to patients are not adversely affected by a development;

- forward financial and healthcare planning dictate delivery within an approved envelope of annual capital and revenue budgetary constraints programmed for the investment;

- increased capacity must be embedded in a fully integrated solution;

- strategic integrated health infrastructure solutions will be delivered against multiple development sites on a locality wide basis to which each housing development should contribute in accordance with the health infrastructure impact of that development;

- NHSE and NHS SRCCG are being required to forward plan and deliver health infrastructure developments with sufficient capacity to deliver services for planned and ad hoc unplanned residential developments;

- capital must be invested at the time of construction;

- NHSE and NHS SRCCG do not have flexibility in accessing financial resources;

- the NHSE strategic programme for delivering necessary health infrastructure developments which are directly, fairly and reasonably related to each development requires robust access to developer funding contributions;

- in other developments the consequence of phasing of the payment is that the sum is so diluted in any one year that it fails to deliver the desired, optimal or any solution;

- A suitable process for accessing S106 monies for health infrastructure implemented in other cases is as follows: developer S106 payments are paid to and held by the council for a period e.g. 5 years during which time detailed evidence based proposals for the delivery of the necessary health infrastructure are submitted to the council for release of the funding with any balance at expiry of the holding period being repaid to the developer.

14.39 It is therefore requested that any Health Infrastructure Contribution payment is made in a single lump sum at an appropriate time to facilitate mobilisation of strategic healthcare programming for timely delivery of the necessary increased capacity. A suitable process for payment of S106 contributions and means of accessing the funding to be set out in the S106 Agreement.

Issues, dependencies and barriers to growth (Conclusion)

14.40 NHSE and NHS SRCCG and other health stakeholders will need to identify a schedule of capital projects in the emerging strategic health infrastructure delivery plan. This will recognise the impact of committed housing sites and strategic sites allocated in the Scarborough Borough Council Local Plan Strategy and be subject to necessary developer financial contributions which are fairly related to the direct impact of each development on health infrastructure in the designated areas of development.

14.41 This response from the CCG reflects the additional developments which will further impact on health infrastructure. Mitigation of these significant and substantial impacts are requested through a financial contribution towards healthcare infrastructure provision in this locality through an appropriate planning agreement.

14.42 This is currently estimated at a minimum cost of additional health infrastructure solely for the application sites and minimum developer contribution towards such costs of £5,063,932.

14.43 Of this £5,063,932, circa £400,000 has already been contributed towards this figure from planning consents and associated S106 Agreements. This leaves a current shortfall of £4,663,932. The housing remaining with this CCG area as allocated within the Local Plan number 5700 dwellings (or 71.4% of the dwellings used for the above calculations by the CCG). It is therefore proposed that the remainder of the dwellings should be assessed on the basis of their impact, which therefore stands at £3,615,674.

14.44 The £400,000 contribution is not shown in the table later in the document as the updated requirements factor this in (the table refers to growth planned through the Local Plan without a consent).

14.45 NHSE and NHS SRCCG is committed to working with Scarborough Borough Council to ensure the impact of the Local Plan is continually assessed as the CCG strategic plans for healthcare delivery change in light of new models of care and a move towards more healthcare being delivered in primary and community care settings.

15 Transport

Introduction

15.1 In this section the transport infrastructure required to support planned jobs and housing growth is examined. The potential cost of that infrastructure, how that infrastructure might be funded, and when it is required is also assessed. Issues that need to be addressed are then picked up.

15.2 The original work was based on reviewing reports on transport issues in the area and interviews held with the Highways Agency (now Highways England) and North Yorkshire County Council as the Local Highways Authority. The key documents are:

- the Regional Network Report (2008) produced by the Highways Agency
- the Route Utilisation Strategy for Yorkshire and Humber produced by Network Rail (2009)
- the Local Transport Plan(s) for 2006-2011 and 2011-2016 produced by North Yorkshire County Council (the highway authority for the Borough).
- a report on a transport model of the highway network in Scarborough and forecasts of future conditions on the network by the Jacobs consultancy for the Borough Council
- a report on the cost of possible improvements to the highway network at congestion hot-spots produced by Peter Brett Associates (PBA)
- Junction Option Testing Report (Jacobs)

15.3 This section begins by examining the context for transport infrastructure in the Scarborough Borough Local Plan area and exploring the capacity of each transport mode to deal with the increased demand associated with growth.

Context

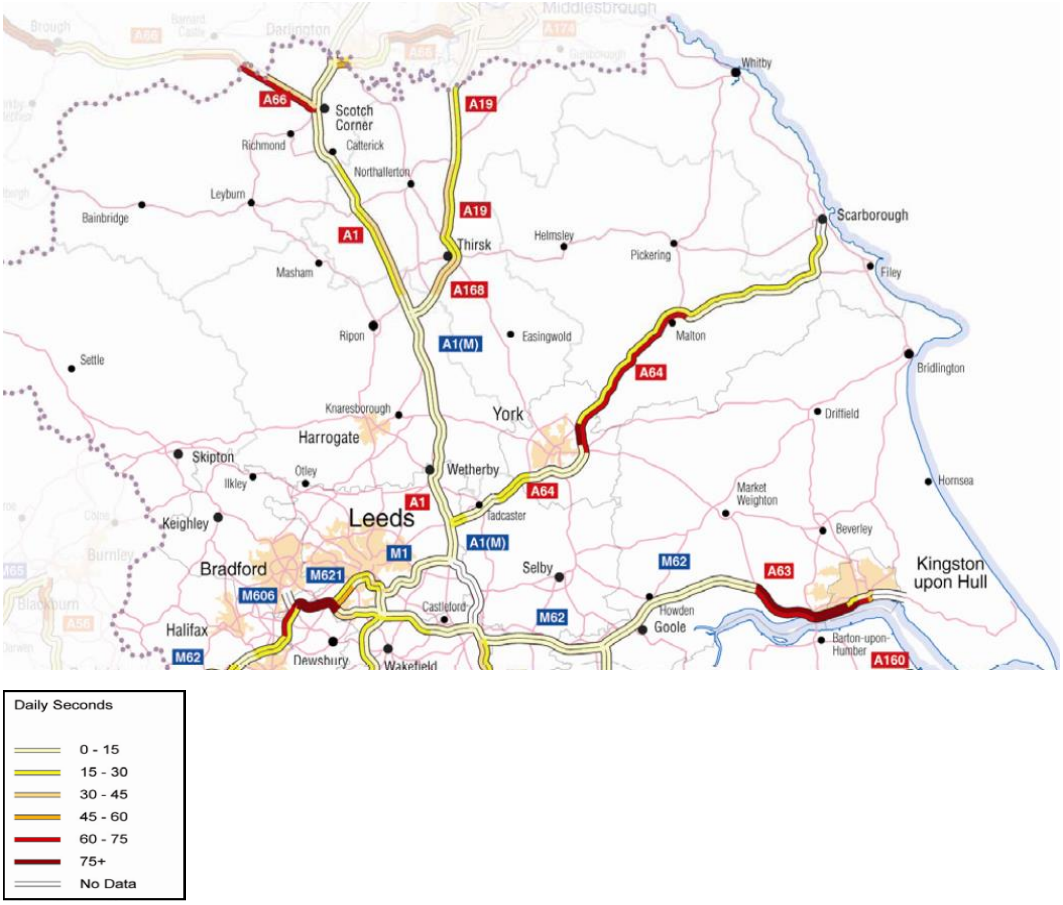
15.4 The main mode of transport used in the Borough is predominantly the car. The journey to work census data for 2011 showed that for those people living and working in the Borough, 57% used car, 4% used buses and 22% walked or cycled. There has been a large growth in homeworking since the previous census with approximately 14% of people mainly working at home. For people travelling into the Borough from outside to work, 90% used car and only 4% use public transport. For people living in the Borough and travelling outside it to work, 84% use the car and 8% use public transport. These figures are based on the Census 2001 (this is the most up to date information currently available) as information from the latest Census is not available at this time. This suggests a high level of reliance on the private car to meet the area's transport needs and consequential pressure on the road network both to and from and within Scarborough.

Highways

There are existing road infrastructure "pinch points" both in the local area and the broader North Yorkshire area

15.5 The main highway route into the Borough is the A64 which runs east/west from York. Access from Whitby in the north is on the A171 and from Hull in the south along the A165. Highways England has reviewed conditions on the strategic highway network. The figure below shows the areas of highest delay on the network in 2006. Although outside the immediate Scarborough area, the link westbound on the A64 between Malton and York is identified as a stretch of road under particular pressure. In the longer term there is an aspiration to make the route more efficient and subsequently to upgrade the A64 and increase capacity and there are preliminary proposals to upgrade Hopgrove Roundabout and the stretch of carriageway between York and Malton.

Figure 14.1 Observed total delay per vehicle, 2006



Source: Highways Agency, Regional Network Report for Yorkshire and Humberside, 2008

15.6 There are also some areas of pressure at certain times in the local highway network. These are particularly associated with the A64 between Musham Bank roundabout and Dunslow Road roundabout and at a number of key junctions within the town. However, recent work (Spring 2015) commissioned by Highways England has confirmed that no objections in relation to the growth agenda will be raised in relation to the Strategic Road Network junctions although a recommendation of a left filter

lane off Dunslow Road to the A64 was supported if shown to be required at a later date. This is left in the calculations in this document but its absolute requirement during this Plan period is not guaranteed.

Rail

The railway network is able to accommodate predicted future growth in Scarborough, although some overcrowding may occur on peak hour services. Rail is not investigated further in this report

15.6 Scarborough is the terminus of the Trans-Pennine rail route and the Yorkshire coastal line. There is an hourly service on the Trans-Pennine route which starts in Liverpool and calls at the major stations of Warrington, Manchester, Huddersfield, Leeds and York. More locally these trains serve Malton, Seamer and Scarborough.

15.7 There is a train approximately every two hours on the Yorkshire coastal line which runs south from Scarborough calling at locally at Seamer, Filey and Hunmanby and then running on to Bridlington, Beverly and Hull. Network Rail previously examined the possibility of increasing the frequency of the service on this line and concluded that it does not currently represent value for money. The stretch of single line track between Seamer and Bridlington means that the greatest frequency that can be achieved is an hourly service. But at this frequency the additional revenue from the new passengers attracted to the railway by the additional trains is not sufficient to cover the cost of the extra rolling stock required and the train crew costs of running these services.

15.8 The rail infrastructure on the approach to Scarborough station was upgraded in 2010 with major signalling upgrades and simplification of the track layout.

15.9 The railway network is able to accommodate predicted future growth in Scarborough. However, the issue to monitor is the possibility of over-crowding on peak hour services between Scarborough, Malton and York. The level of patronage on this line will be affected by a number of external factors such as changes in the rail fares, fuel prices and housing growth along the route.

15.10 Whitby is served by rail northwards to Teesside. This service is more infrequent than those in Scarborough and runs on four occasions daily. There is also a line between Pickering and Whitby although this is primarily tourism focused.

Buses

The bus network is able to accommodate future predicted growth in Scarborough. We do not investigate buses further in this report

15.11 There are a variety of operators of bus services in the Borough and they can rapidly develop new routes or increase frequencies to meet the demands from growth, providing there is sufficient demand to make the provision of these additional services commercially viable. A general reduction in the level of rural bus subsidy means that rural areas may well suffer a reduction in their service level which will impact on the level of public transport provision for any new housing in rural areas.

- Bus stations. There is currently no bus station in the Town Centre of Scarborough. Instead reliance is made of on-street bus stops. Previous discussions have suggested that the Bus Operator is satisfied with the current arrangements but is looking toward improvements to these facilities as opposed to a new bespoke station. The report does not investigate bus station infrastructure further.
- Park and Ride. There are two park and ride services from the south, Seamer Road on the A64 and the Filey Road on the A165. These are currently running with spare capacity at certain times and parts of the year. This may be exploited to accommodate indigenous growth. The Park and Ride is very much a part of the Scarborough Integrated Transport strategy and spare capacity now will create a buffer for predicted growth, especially aligned with on and off street car parking strategy in the inner core of the Town Centre and with possible re-development of some Town Centre off-street car parks in the future. This infrastructure is currently in place, and so has not been investigated further. Whitby has a Park and Ride to the north of the town.

15.12 The performance for some local bus services was improved with the implementation of the Scarborough Integrated Transport scheme funded by the Department for Transport (DfT). This work included realigning part of the A165 in the south of Scarborough, the building of the two park and ride sites, complimentary bus priority measures on their routes into Scarborough and an expansion of the SCOOT urban traffic control system which improved the efficiency of the traffic signals system in the town, so reducing delay to bus services having the necessary in-built technology and assisting those buses to keep to their scheduled arrival times.

Approach to historic deficit

15.13 The introduction explains that the central objective is to understand the infrastructure requirements resulting from growth in housing and jobs. In theory, this means that you have to "tune out" changes in infrastructure requirements due to other factors – such as trend growth in transport demand, or historic deficits in infrastructure provision.

15.14 While the general approach has been to concentrate on the transport implications associated with growth only, historic deficits in transport should not be entirely "tuned out", as they can have a bearing on scheme requirements, deliverability, timing and priorities. Where such 'historic deficit' exists then additional growth may

- mean that planning permission will not be granted, or to a lesser degree reduce the attractiveness of the development.
- mean that infrastructure upgrades may have to happen sooner than they otherwise might (for example, an improvement in road infrastructure might have to happen at the start of housing development, rather than at the end).

15.15 It is clear from existing work referred to above that there are some existing constraints in the highways transport network at certain times even before planned growth takes place.

15.16 The report therefore attempts to be mindful of existing congestion issues in the work undertaken.

What are the infrastructure requirements arising from growth? When are they needed? What are the costs?

A VISUM model (Jacobs Stage 1and 2 Report – Local Plan Library Ref: CSD-34A&G) have been used to estimate the increased transport demand created by growth

15.17 Through the County Council, Scarborough Borough Council has commissioned transport assessments to understand the impact of housing growth on the road network.

The reports do not relate certain pieces of infrastructure to certain growth sites – so at the current time it is not possible to say from the model that certain pieces of infrastructure are directly required to cope with certain growth sites. Further interrogation of the model reports has allowed a degree of attributing the level of impact of development to junctions on the network. This is shown later in this Chapter but will be subject to review and updating as planning applications are submitted and considered.

15.18 The modelling shows that during the Plan period, cumulative growth (across all growth sites) will require the following additional road infrastructure.

Five junctions in the area will need additional capacity

15.19 Since the initial report was published some junction mitigation has been instigated and further works have determined that there are only five junctions requiring mitigation. These are within the Scarborough urban area as shown below.

- Scalby Road / Falsgrave Road
- Scalby Road / Manor Road
- Stepney Road / Stepney Drive
- Scalby Road / Stepney Drive priority
- Dunslow Road / A64

15.20 One of the critical issues for growth in Scarborough is the capacity of the A64 between Musham Bank roundabout and Dunslow Road roundabout. It is not possible to build additional lanes here because of the geometric constraints of the area and proximity of the railway line. The capacity of the roundabouts could be increased to ease congestion at the junctions but ultimately this road limits the number of vehicles that can access Scarborough along the A64 corridor. Recent evidence (Local Plan Library Ref: CSD-34I-L) provided through Highways England has subsequently confirmed that with the exception of possible requirement for a minor alteration to Dunslow Roundabout (a left-filter lane), both of these junctions on the Strategic Road Network will operate within acceptable tolerances.

15.21 Additionally, there are plans for two link roads between the A64 and A165. This will provide access to new housing development in the area. The first of these is the Middle Deepdale link road which will be provided by the developers of the new

housing at Middle Deepdale giving the occupiers of the new housing a choice of routes out of the development. The trigger for the building of this link is the completion of 700 houses on the Middle Deepdale site. Residents from the development are likely to choose to travel on the A64 between Musham Bank roundabout and Dunslow Road roundabout if they are travelling from or to the south.

15.22 The second proposed link is associated with new housing to the south of Cayton and will provide an access from the new housing onto the B1261 and then to the A165. It would also link with the existing road network and provide a route onto the A64 at the Dunslow Road Roundabout.

When is infrastructure needed?

15.23 It is difficult to provide firm guidance about when infrastructure is required. This is for the following reasons.

- The Jacobs transport modelling work does not allow us to say exactly when transport infrastructure improvements are required during the plan period. No interim year modelling work has been reported.
- Interpolation of data in the Jacobs model is difficult, because there is no linear relationship between traffic volumes and delay at junctions (nor should there be).
- There are no local or national guidelines about what level of transport congestion is considered intolerable.
- There is uncertainty about the rate of background traffic growth. This is the case both in the Scarborough borough area, and nationally. The modelling work uses the DfT TEMPRO growth forecasts which have recently been reissued. The latest forecast for the background level of growth in traffic levels is lower than the previous estimates and recent traffic counts by NYCC Highways have borne this out. In addition, when TEMPRO growth forecasts are used in a highway-only model, they are often found to be insufficiently sensitive to travel behaviour responses to fuel price rises, such as a reduction in the number of trips made and the changing of home and/or work location in order to reduce the length of car journeys.

15.24 The decision whether or not it is acceptable to allow such stress, and over what timescale, rests with the appropriate Highway governing bodies or other infrastructure provider. Key considerations would be political judgements and the implications for sustainable transport, the economy and the overall local environment. As a consequence the decision on what constitutes an acceptable level of network stress for individual developments lies outside the scope of this study.

15.25 The most significant transport barriers to growth are experienced in Scarborough town (central), with barriers being less significant at other sites. If each individual site is looked at in isolation, then additional congestion could be tolerated on these sites. However, this view of *individual* site impacts can fail to capture the *cumulative* impacts of growth on strategic transport infrastructure. The delivery of the growth aspirations for the borough is likely to require the junction improvements and link road mentioned above.

Total costs have been obtained

15.26 The work on costs has been assembled as follows.

Junctions.

15.31 Peter Brett Associates has prepared a high-level assessment of the costs of improving these junctions and providing the East/West Link Road. These were supplemented by Jacobs and further refined by North Yorkshire County Council (Highways) and are presented in the table below. These are based on indicative designs and detailed design work will refine the costs further.

Cayton Link Road.

15.32 The proposed new link road between the A64 and B1261 (leading to the A165) serving the Cayton housing has not yet been designed in detail so the route is not finalised, however, it is expected to adjoin the B1261 to the immediate west of Killerby. A previous option for the route to travel north/south was dismissed on cost/benefit analysis with modelling work suggesting its usage would be low. It is anticipated that the majority of the road infrastructure will be self-contained as an integral part of the development leaving the implementation of the relatively short connections to the B1261 (though this may ultimately also form part of the wider development site) and Cayton Approach (at the Business Park) as the potentially unfunded elements. However, for the purposes of this report it is important to understand the likelihood of these elements actually requiring funding outwith the development itself that would put a burden on wider funding mechanisms.

15.33 Link Road – East: It is highly expected that the route of this road from Station Road to the B1261 will open up further land for housing including the potential relocation of sports facilities to within the wider development. This road then forms the boundary and the extent of the housing development thus becoming an integral part of the wider scheme and therefore not an unfunded infrastructure requirement.

15.34 Link Road – West: There is also the requirement to connect the link road up with Cayton Approach; the highway that currently terminates within the Business Park. Once again it is highly unlikely that this will remain as a piece of unfunded infrastructure. It crosses a parcel of land to the south of Plaxton Park; a committed employment site that has only recently received a planning consent. The delivery of this employment scheme would require the road to be put in to service the land up to the boundary with the housing land to the east. Should this development not progress, the developer(s) of the housing site to the east would have the opportunity to install the road at their own cost. This may have knock on impacts on the viability of other components of the scheme (such as affordable housing levels), however, it demonstrates that this infrastructure requirement can be delivered by more than one means and without the need for outside subsidy or funding. Outside funding is, however, being investigated as this would be a means of opening up the full strategic housing site more quickly.

15.35 Notwithstanding the above it is important to understand the cost implications of these elements. Indicative cost estimates for the full stretch of road were prepared at the time of the initial Infrastructure Study on the basis of having to raise the road as well as being able to build at-grade. These cost estimates have been updated to take

account of inflationary pressure and relate to the previously referred to connections to the east and west ends of the development. These costs are shown in the table below and exclude land costs and VAT. As such the costings shown are an estimate and may actually be lower. The report assumes the more expensive of the options will be chosen/required.

Table 14.1 Preliminary cost estimates for the A64 – B1261 (A165) link road**

	Link Road - East			Link Road – West		
	Project	+ Optimism Bias	Total	Project	+ Optimism Bias	Total
At Grade	£1,561,109	£686,888	£2,247,997	£1,206,452	£530,839	£1,737,290
Raised	£2,423,169	£1,066,194	£3,489,364	£1,840,503	£809,821	£2,650,324

Source: PBA Report (January 2011)

*RPI taken from ONS website - http://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw

** Full breakdown of costs from PBA Report (as updated) in Appendix 4

15.36 The project costs quoted include an allowance for utilities, preliminaries, design, supervision and contingencies but exclude and land costs and VAT. They also add on the recommended 44% Optimism Bias.

Table 14.2 Preliminary cost estimates for local junction improvements

Junction	Mitigation Required	Mitigation Proposed (& Source)	Initial Cost (RPI-July 2011 234.7 & Jan 2012 238)	Cost - Feb 2016 (RPI 260)	Plus Optimism Bias (44%)	Resurfacing	Total
Dunslow Roundabout	Yes	Left Filter lane (PBA)	£95k (July 2011)	£105k	£46k	N/A	£151k
Scalby Road / Falsgrave Road	Yes	Signalisation: Option 2 (Jacobs)	£232k (Jan 2012)	£253k	£111k	£68k	£432k
Stepney Road / Stepney Drive	Yes	Widened Roundabout and Entry Points (Jacobs)	£195.6k (Jan 2012)	£214k	£94k	£37k	£345k
Scalby Road / Manor Road	Yes	Modified Roundabout (Jacobs)	£75.2k (Jan 2012)	£82k	£36k	£33k	£151k
Scalby Road / Stepney Drive	Yes	Signalisation and Lane Alterations (Jacobs)	£182.2k (Jan 2012)	£199k	£88k	£104k	£391k
Total			£780,000	£853,000	£375,000	£242,000	£1.47m

Source: PBA/Jacobs/NYCC Highways/SBC

*RPI taken from ONS website -http://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw

Stripping out historic deficit costs to isolate a transport infrastructure cost generated by growth in Scarborough

Schemes are categorised according to the extent they service existing problems

15.37 There is a need to estimate a cost for infrastructure to support growth (rather than a total cost of the transport infrastructure in Scarborough during the plan period). There is a difference between the two, because the need for transport infrastructure improvements cannot always be entirely ascribed to new growth.

15.38 The initial Infrastructure Study identified the extent to which each transport improvement services historic transport deficit on the network through qualified judgements. It recognised that historic deficit is significant and therefore a discount has been proportioned to the cost of each scheme according to the extent to which it services existing issues. The following discount values have been used:

- 0% - in the instances where the scheme only services historic deficit, meaning that no cost can properly be ascribed to site growth;
- 25% - where the scheme is considered to primarily service historic deficit, with the balance servicing site growth;
- 50% - where the scheme services historic deficit at a medium level;
- 75% - where the scheme services historic deficit at a low level; and
- 100% - in the few instances where a scheme will cater almost entirely for one or more growth site.

15.39 After the cost of deficit is identified in this exercise above, the remaining costs are ascribed to housing and jobs growth. These costs are shown in the table below.

15.40 No attempt has been made to weight scheme costs according to the extent to which they enable the different individual growth sites. This is because there is no robust evidence to support such an allocation.

Table 14.3 Transport costs which can be ascribed to growth

Junction	2011 type	Mitigation Option	Project Cost	Proportion of Costs Attributable to Growth	Infrastructure Costs Attributable to Growth
Dunslow Roundabout	Normal Roundabout	Left Filter Lane	£151,000	100%	£151,000
Scalby Road / Falsgrave Road	Mini Roundabout	Signal T-Junction	£432,000	50%	£216,000
Stepney Road / Stepney Drive	Normal Roundabout	Widen entrances to roundabout	£345,000	50%	£172,500
Scalby Road / Manor Road	Mini Roundabout	Signal T-Junction	£151,000	50%	£75,500
Scalby Road / Stepney Drive	Priority T-junction	Staged signal T-Cross left	£391,000	50%	£195,500

		turn filter			
JUNCTIONS TOTAL			£1,470,000		£806,500
Cayton Link Road (East) – Raised		Link Road	£3,489,364	100%	£3,489,364
Cayton Link Road (West) - Raised		Link Road	£2,650,324	100% (unless delivered as part of employment site then 0%)	£2,650,324
LINK ROADS			£6,139,688		£6,139,688
GRAND TOTAL			£7,609,688		£6,950,188

How can new infrastructure be funded?

There are potential funding streams available

15.41 It seems sensible to assume that there is no pot of money currently available for transport improvements created by growth from the local Highways Authority. There are currently no funding streams available from the DfT to fund large transport projects.

15.42 However there are opportunities for growth bids through the Local Enterprise Partnership (LEP) and the Borough Council are, in conjunction with LEP members, working up a bid to address the capacity issues within the central Scarborough area (4 no. junctions). The mitigation of these junctions is seen as critical to the future growth aspirations of the town and a strong case is being put forward to secure the funding to address this matter.

15.43 It is accepted that this funding is not guaranteed and a contingency should be identified to deliver the mitigation required to the four critical junctions. Should the bid be unsuccessful then the funding gap would be the priority for addressing through either the S106 Agreement method or through a future CIL charge. The Development Contribution Matrix overleaf builds on the Transport Modelling work and provides a ‘best fit’ of impact on the junctions in respect of the relevant housing allocations proposed in the emerging Local Plan. It demonstrates that required infrastructure can be delivered by proposed developments. It should be acknowledged that this may change depending on planning permissions and final detail design of infrastructure schemes. It's a tool/ reference that can be used by SBC Planning Officers and LHA Officers

15.44 This demonstrates that the level of funding gap is not considered disproportionate to the level of development being promoted and it is entirely feasible for the strategic and large developments to co-fund the works required either through S106 (pooling is not an issue in respect of sites of this scale) or any contributions to CIL they may

be required to make. The highlighted areas show how these five schemes could contribute circa 95% of the costs of the junction mitigation works.

15.45 The impacts of this on the viability of each scheme would have to be assessed; however, the improvements required to these junctions are critical to the growth aspirations of the town, are classed as being of the highest priority and would, if adopted, be reflected as such on any future Regulation 123 list. It should be noted that this initial work was completed prior to the proposed addition of a small number of allocations; whilst some could be reasonably estimated due to allocations within close proximity, no estimations or assumptions have been put forward for Sites HA1, HA4 and HA5. Whilst these are relatively modest sites they are in relative close proximity to some of the junctions referred to. The impact of these junctions can be fully assessed at planning application stage and contribute financially if considered appropriate (taking into account the 'rule of 5'). This is considered an appropriate way forward taking into account the costs of updating the evidence base for the relatively small gains in evidence that this would bring (ie; in respect of providing a proportionate evidence base).

PLAN REF	No of Properties or Area for Employmen	Site Name	Junction D	Junction E	Junction F	Junction G	WORKS COST FOR SITE
		WORKING SCHEME COST	**£432,000**	**£345,000**	**£151,000**	**£391,000**	**£1,319,000**
		TOTAL TRIPS	113	202	135	239	
		COST PER TRIP	£3,823.01	£1,707.92	£1,118.52	£1,635.98	**£1,319,000**
		Total Trips (All Vehicles 2 way)					
HA6	**900**	**Land at Scalby Rd / Station Road**	£91,752	£47,822	£57,044	£134,151	**£330,769**
HA12	**80**	**Land Adjacent to Caravan Site**	£7,646	£6,832	£2,237	£4,908	**£21,623**
HA13	**2500**	**Land South of Cayton**	£95,575	£160,545	£27,963	£114,519	**£398,602**
HA2	**50**	**Westwood Campus**	£0	£0	£0	£0	**£0**
HA 29	**40**	**Nurseries, East Ayton**	£0	£0	£0	£0	**£0**
EMP-A1	**1.1ha**	**North of Burton Riggs**	£7,646	£1,708	£2,237	£1,636	**£13,227**
EMP-A2	**0.9ha**	**Land South of Cayley Court**	£3,823	£0	£1,119	£0	**£4,942**
HA7	**600**	**Land North of Middle Deepdale**	£103,221	£58,069	£27,963	£62,167	**£251,421**
HA8	**100**	**Land at High Eastfield Farm, Musham Bank Road**	£19,115	£11,955	£5,593	£11,452	**£48,115**
HA9	**500**	**Land to North Middle Deepdale (W of Deepdale Valley**	£87,929	£49,530	£22,370	£52,351	**£212,181**
HA4	**100**	**Yorkshire Coast College, Scarborough**					**£0**
HA14	**90**	**Land off Rimington Way, Osgodby**	£15,292	£8,540	£4,474	£9,816	**£38,122**
HA30	**100**	**South of Racecourse Road, East Ayton**	£0	£0	£0	£0	**£0**
HA28	**60**	**Napier Crescent, Seamer**	£0	£0	£0	£0	**£0**
HA1	**40**	**Land off Springhill Lane, Scarborough**					**£0**
HA5	**60**	**Land off Lady Edith's Drive, Newby, Scarborough**					**£0**
			£432,000	£345,000	£151,000	£391,000	**£1,319,000**

Table 14.4 – Allocations and Junctions (Attributing costs)

Funding allocated to North Yorkshire will be focused on highways maintenance

15.46 The amount of funding that each local authority receives for highways maintenance and small transport improvement schemes is determined by a fixed formula and this is not responsive to the actual number and cost of schemes the local authority wishes or feels it is necessary to deliver. Also the funding is not received directly by Scarborough Borough but rather is allocated to North Yorkshire as whole. North Yorkshire is due to receive around £4m funding for small transport improvements in each of the remaining years of this current comprehensive spending review period, but none of this is ring-fenced to Scarborough, and North Yorkshire has stated that its intention is to concentrate on the maintenance and management of existing infrastructure.

15.47 It is possible that the small transport improvement schemes funding could contribute towards the cost of local junction improvements in Scarborough but there will be many competing demands on these limited funds throughout the County and the expenditure may well have to be diverted towards maintenance of the existing highways.

A funding gap remains

15.48 Whilst there is potential funding from the LEP for selected junctions a funding gap remains for transport infrastructure, albeit unknown until such funding bids can be resolved and determined. The table below shows the potential funding gaps on two scenarios; successful LEP bid and not successful (the full funding gap).

Table 14.5 Assessed funding gap for transport needs

	Gross cost	Funding from other sources	Funding gap (If LEP bid successful)	Funding gap (If LEP bid unsuccessful)
Scalby Road / Falsgrave Road	£432,000	£432,000	£0	£432,000
Scalby Road / Manor Road	£345,000	£345,000	£0	£345,000
Stepney Road / Stepney Drive	£151,000	£151,000	£0	£151,000
Scalby Road / Stepney Drive priority	£391,000	£391,000	£0	£391,000
Dunslow Road / A64	£151,000	£0	£151,000	£151,000
Link road (east)	£3,489,364	£0	£3,489,364	£3,489,364
Link Road (west)	£2,650,324	£0	£2,650,324	£2,650,324
Total		**£1,319,000**	**£6,290,688**	**£7,609,688**

15.49 This shows a potential funding gap of over £7.5m depending on bids for available funds and the delivery mechanisms adopted for the east and west spurs of the Cayton link road (see para 15.33 and 15.34). Contingency should the LEP bid be unsuccessful was referred to in Para 15.43.

Issues and barriers to growth

15.50 The rate at which traffic growth associated with existing development in the Scarborough area makes use of the existing limited spare capacity on the A64 and the junctions in the town centre depends on a number of factors. These include

- the level of economic growth in the area (which affects the level of car ownership and the number of peak hour trips to employment);
- the cost of fuel (which acts as a deterrent to car use); and
- effectiveness of campaigns to encourage the use of sustainable travel modes.

Initiatives to reduce demand for transport infrastructure

15.51 An attempt could be made to reduce the number of car trips associated with new development by managing the demand for travel. This would be incorporated in residential and workplace travel plans and Town Centre Strategies. For major sites the developers would be required to introduce and maintain (utilising Travel Plan Coordinators) such plans as part of their planning consent. The Council may also

wish to co-ordinate and implement area wide transport plans, linking in public transport operators.

15.52 The developers of particular sites would be required to fund travel plans and subsidise bus services. The funding for this work would come from Section 106 agreements.

15.53 Where possible improvements to public transport and walk/cycle facilities will be sought so as to promote the choice of non-car modes of transport on a wider scale throughout the borough. This could include the provision of a further park and ride site to the north of Scarborough and two sites for Whitby.

Timing assumptions

15.54 For the schemes related to needs in Scarborough town centre – created by most of the growth proposals within the immediate hinterland of the town – it is very difficult to be precise as to when each scheme will needed. This depends on the levels of congestion caused by additional traffic using the town centre, which partially involves a judgement as to when such congestion is nearing unacceptable levels. For the purpose of assessing when infrastructure costs will be incurred, such needs are spread evenly across the whole plan period. In reality, none of the costs will individually be spread across such a long time period. However, in aggregate, this represents a reasonable assumption in terms of overall costs per annum.

16 Electricity

Introduction

16.1 This section deals with electricity infrastructure requirements in the Scarborough Borough Council area. It has not been updated from the original report and is considered to remain valid.

How is the system structured?

16.2 The electricity industry in Great Britain comprises generation, transmission, distribution, metering and supply companies. The electricity distribution networks carry electricity from the transmission systems (owned and operated by National Grid) and some generators that are connected to the distribution networks to industrial, commercial and domestic users.

A regulated market is in place

16.3 The electricity market (along with the gas market), including the activities of Distribution Network Operators (DNOs) and Independent licensed Distribution Network Operators (iDNOs), is regulated by the Gas and Electricity Markets Authority, which governs and acts through the Office of Gas and Electricity Markets (Ofgem).

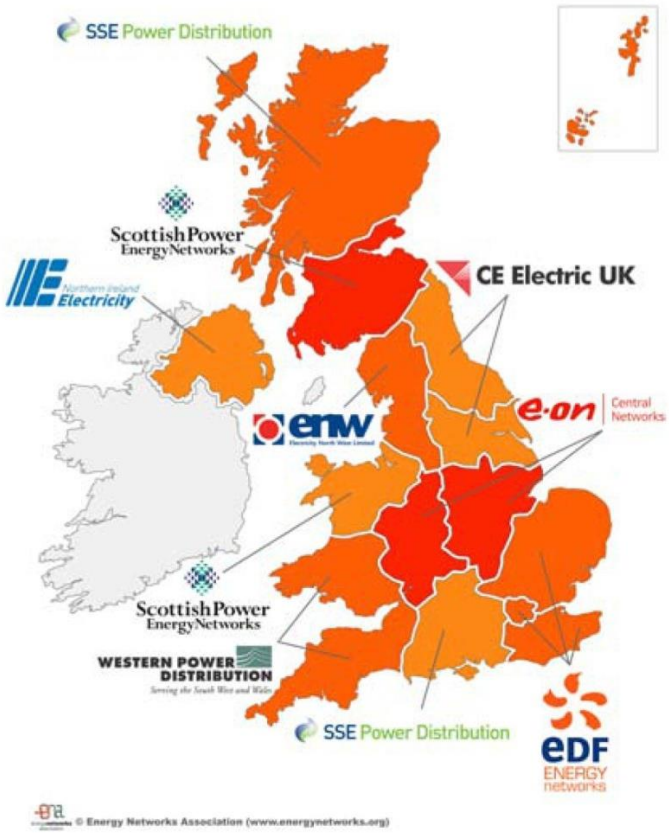
16.4 As the gas and electricity industries' regulatory body, Ofgem's primary duty is to protect the interests of consumers, where possible by promoting competition. As an independent economic regulator, it acts without interference from Government, and is answerable to the Public Accounts Committee (PAC) of the House of Commons. Its powers are derived from the Gas Act 1986 and the Electricity Act 1989, as amended. It also has enforcement powers under the Competition Act 1998.

16.5 Ofgem specifically regulates those parts of the electricity and gas markets that either cannot be opened up to competition, or where competition is not yet established, such as gas and electricity transmission systems and electricity distribution networks. Ofgem sets price controls to protect consumers from unfair pricing by these monopolies.

Distribution network operators form a natural monopoly

16.6 The majority of electricity distribution services are provided by Distribution Network Operators (DNOs) who operate within a designated area, based on the former regional electricity board (REB) areas at the time of privatisation. There are fourteen licensed distribution network operators (DNOs), owned by seven different companies (see map below). Each DNO is separately licensed with responsibility for a designated distribution service area. Each of these DNO areas forms a natural monopoly since there is only one operator for each area.

Figure 14.2 Distribution network operators



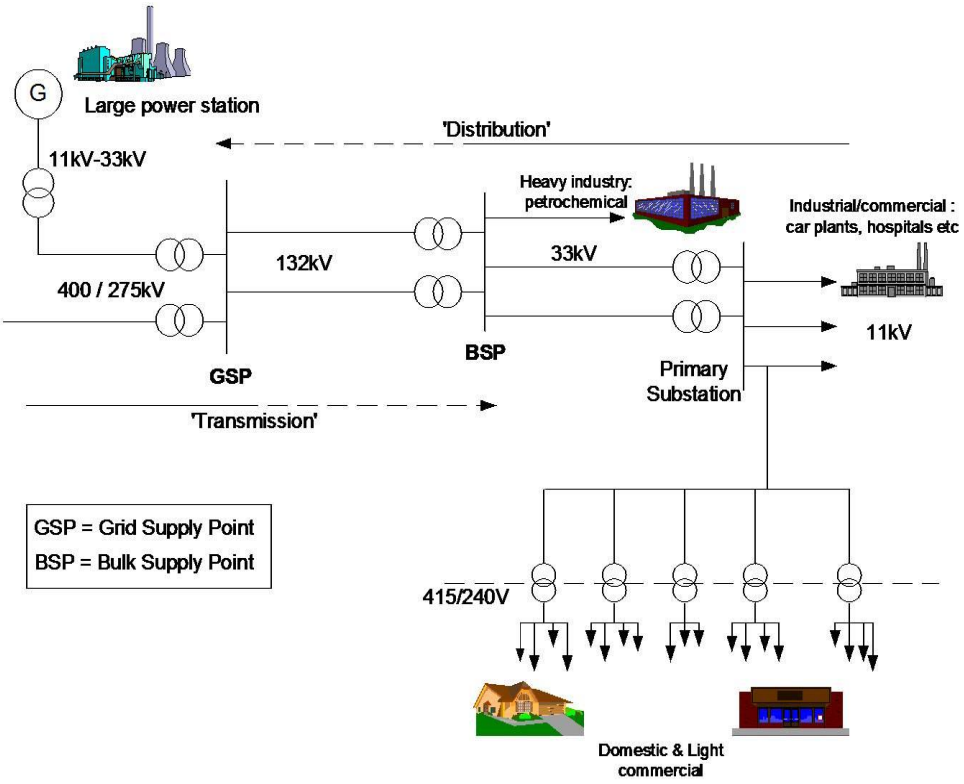
Four independent operators run smaller networks

16.7 In 2005 Ofgem introduced competition in distribution. Companies can apply to the regulator to become Independent licensed Distribution Network Operators (iDNOs). These iDNOs provide an alternative to the incumbent distribution network operator for the adoption of new network assets.

16.8 There are also four independent network operators who own and run smaller networks embedded in the DNO networks. These are known as independent distribution network operators (IDNOs). These companies provide an alternative choice to the traditional method of network provision and ownership. Additionally, there are a number of independent connection providers (ICPs) who can install extensions from existing DNO owned networks to provide new connections to end users. IDNOs and ICPs provide choice and competition in the network and connection market.

16.9 The figure below provides a simple diagrammatic illustration of the transmission and distribution system for electricity in the UK.

Figure 14.3 The electricity transmission and distribution system



16.10 In summary electricity enters a DNO's network via interfaces with the electricity transmission network, operated by National Grid, known as Grid Supply Points (GSP's). It is then distributed to end users via 132kV, 33kV, 11kV (in the some cases, 6.6kV) and low voltage networks, via 33kV to 11kV (or 6.6kV) substations known as primary substations and at low voltage via 11kV (or 6.6kV)/ LV substations known as secondary distribution substations. In rural networks it is still common to find pole mounted transformers providing low voltage supplies to rural communities, farms, etc.

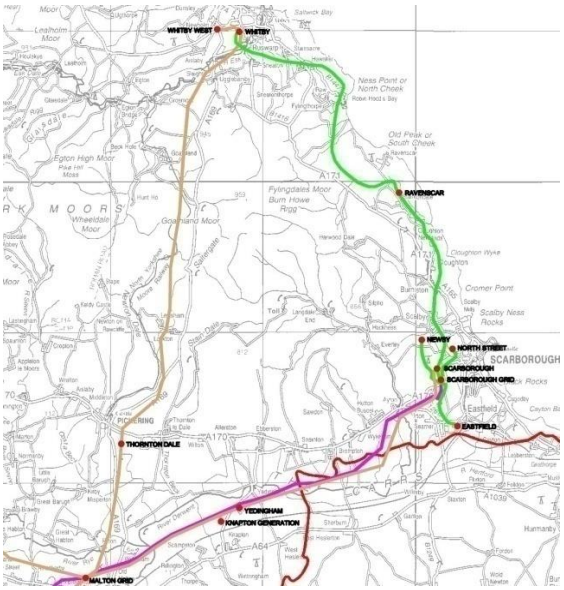
Scarborough Borough lies within the two licence areas (YEDL and NEDL)

16.11 The geographic area covered by Scarborough Borough Council lies within the two electricity Distribution Network Operator (DNO) licence areas (YEDL16 and NEDL) operated by CE-Electric. The boundary between the two licence areas is shown in the following figure. NEDL operates to the north of the boundary and YEDL to the south.

[16] YEDL – Yorkshire Electricity Distribution Limited / NEDL – North East Distribution Limited

16.12 The NEDL network is supplied from the Malton Grid substation from which a 132kV power line supplies the Scarborough Grid 132kV/33kV substation located within Scarborough. 33kV lines emanate from this substation to feed primary substations as shown in the following figure. In addition 66kV circuits connect Malton Grid to Whitby and Scarborough. These act as standby sources to improve network security.

Figure 14.5 The NEDL transmission lines



Key: Pink – 132kV, Brown – 66kV, Green – 33kV

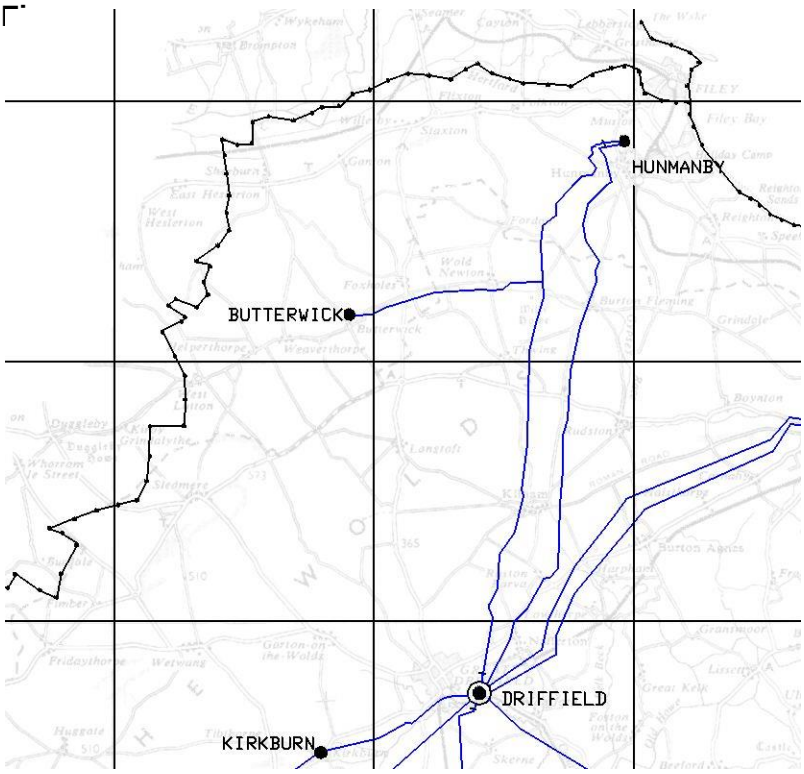
16.13 We have mapped which areas are supplied by each substation. These maps are attached at Appendix 2.

16.14 NEDL has published the following data relating to these substations. The table indicates all substations except Eastfield have reasonable spare capacity available.

Table 14.4 Maximum loads and forecast loads (NEDL)

Substation	Maximum Load for 2008/09	Forecast Load Information					Firm Capacity
		2009/10	2010/11	2011/12	2012/13	2013/14	
	MVA	MVA	MVA	MVA	MVA	MVA	MVA
Scarborough 132kV	87.80	89.11	90.45	91.81	93.19	94.59	100.00
Eastfield	29.13	29.42	29.71	30.01	30.31	30.61	32.00
Newby	14.12	14.40	14.69	14.98	15.28	15.59	24.00
North Street	18.00	18.36	18.73	19.10	19.48	19.87	24.00
Scarborough 33/11	21.00	21.42	21.85	22.29	22.73	23.19	32.00
Whitby T1	5.25	5.28	5.30	5.33	5.36	5.38	12.00
Whitby West T1	5.50	5.53	5.56	5.58	5.61	5.64	12.00

16.15 The YEDL Network is supplied from the Driffield 132kV/66kV grid substation. 66kV power lines emanate from Driffield to supply primary substations at Hunmanby and Butterwick.



16.16 The areas supplied by each YEDL primary substation are show in Appendix 3.

16.17 YEDL has published the following data relating to its substations. The table indicates all substations except Butterwick have reasonable spare capacity available.

Table 14.5 Maximum loads and forecast loads (YEDL)

Substation	Maximum Load for 2008/09	Forecast Load Information					Firm Capacity
		2009/10	2010/11	2011/12	2012/13	2013/14	
	MVA	MVA	MVA	MVA	MVA	MVA	MVA
Driffield 132kV	117.35	118.64	112.84	113.40	113.97	114.54	147.00
Hunmanby	8.39	8.43	8.47	8.52	8.56	8.60	24.00
Butterwick	5.19	5.21	5.24	5.27	5.29	5.32	6.50

Each distribution network operator has to meet minimum supply security standards

16.18 To comply with their electricity distribution licence each DNO is required to plan and develop their distribution network to meet the requirements of Engineering Recommendation (ER) P2/6. This recommendation defines the network security standards to which each DNO has to comply with but does not dictate the ways in which to deliver what are known as 'security standards' i.e. the time taken to restore supplies following an outage which is dependent on the design and redundancy built

into the electricity network. A key point to note is that to meet the requirements of ER P2/6 the electricity networks are designed to cater for the peak network load which is predicted to occur during average cold spell conditions: however due to the increased use of air conditioning in the past 10 years, peak network loads are increasingly occurring during the summer months rather than the winter.

The pricing and investment planning process in the electricity industry

16.19 Ofgem implement price controls on DNOs. Their principal objective is to protect the interests of existing and future customers through:-

- promoting competition, wherever appropriate; and
- regulating monopoly businesses (such as DNOs) that operate electricity distribution networks

16.20 Price controls are set to allow network operators (DNOs), through efficient operation, to earn a fair return after capital and operating costs whilst limiting the costs that can be passed onto customers through its charges.

16.21 Price controls are generally set for 5-year periods. The current pricing control period runs from 1 April 2010 to 31 March 2015. Ofgem monitors compliance with the price control conditions and can take enforcement action if price control or licence requirements are breached.

Infrastructure expenditure is managed via Ofgem. Rates of return on investment are regulated

16.22 For a DNO capital expenditure ("CAPEX") covers the amount it spends on its assets such as in replacing or providing new overhead lines, underground cables, switchgear and transformers. For Price Control purposes this covers its future capital requirements based upon projections of future growth and the condition of its present assets. Ofgem then review these projections and allow a level of capital expenditure based on what an efficient company would incur over the next price control period.

16.23 Companies earn a regulated rate of return on its capital expenditure (typically over a 40 year period) from current and future customers by way of income derived through its ongoing distribution use of system ("DUoS") charges. The capital expenditure allowance in the Price Control also includes load-related new connections and reinforcement and non-load, non-fault, new and replacement assets and a proportion of other direct and indirect activity costs - all of which are net of customer contributions/connection charges. In this way the Price Control system effectively not only determines prices, but also dictates the investment that a DNO can make during that 5-year pricing control period.

Deviating from the agreed investment plan is difficult

16.24 DNOs cannot deviate from the agreed investment plan for each 5-year pricing control period without making a robust business case to Ofgem, and providing clear evidence of 'certainty' that the anticipated development and associated additional electricity usage will happen. This is to ensure that DNOs do not wastefully invest in infrastructure that ultimately is not used, and for which customers may have

effectively been 'charged' for through adjusted prices. There are however two key disadvantages of this system:-

1 DNOs are relatively restricted in their ability to respond to new initiatives or sudden changes impacting upon their network during the 5-year Price Control period.

2 A major driver of connection charges is the existing capacity available in the local network, plus other technical aspects concerning security of supply and other technical criteria. A DNO's capital expenditure on work to meet load variations - including additional load from both existing and new customers - has a major impact on a network's ability to accommodate additional load. Since load from new customers require new connections there is a temptation for this to be used to collect income towards uprating networks that might otherwise need be funded by the DNO.

Electricity costs associated with development

16.25 In accordance with Section 22 of the Electricity Act special terms are applied by DNOs for infrastructure-only developments (ie no buildings are initially built only road infrastructure is undertaken) where an extension or reinforcement of the distribution system is required in advance of actual connections to individual premises. Speculative developments (where a building is built speculatively with no known occupier e.g. office building) are treated similarly to infrastructure-only developments, but in these cases final connections to individual premises are requested even though uncertainty about occupancy exists.

16.26 In both these cases, the developer will be expected to enter into a contractual arrangement with the DNO covering the works to be undertaken (i.e. infrastructure and/or works on the development site). The full cost of this is charged in full in advance of the works being carried out, with any contribution to reinforcement being based on the capacity requested by the developer for the development and the point of connection to the existing distribution system as detailed above. In addition DNOs do not:

- refund connection charges if anticipated load for a development fails to materialise;
- and allow system capacity to be reserved for more than five years (as after this time any untaken capacity will be available for use elsewhere if required). It should be noted that the DNOs do not have an obligation to reserve capacity for infrastructure only schemes, any agreement will be based on a site specific negotiation with the DNO.

Competition in connections in the UK

16.27 With the introduction of competition in connections there are now three routes to obtaining an electricity connection:-

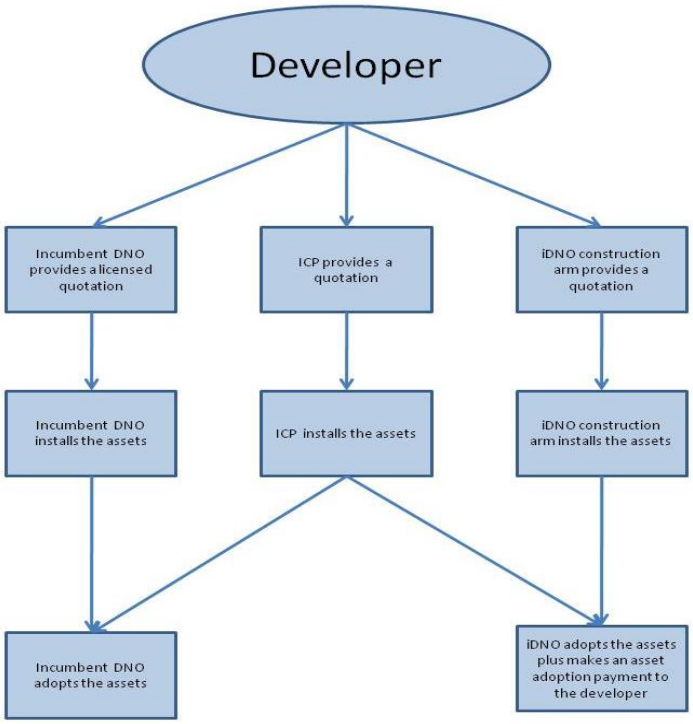
- the traditional approach of obtaining a quotation (often referred to as a 'Section 16 quotation') directly from **the incumbent DNO**. In this case the developer pays the whole cost of the new connection and any associated reinforcement upfront,

with the assets then being handed over to the to the incumbent DNO free of charge;

- through an **Independent Distribution Network Operator (iDNO).** This arrangement allows the developer who paid for the connections to be reimbursed a sum for the transfer of the assets to the iDNO to recognise the value of the connection assets and their revenue earning potential (the current regulatory arrangements for DNOs do not allow them to make such payments for taking over competitively-provided network assets).
- through an **Independent Connection Provider (ICP)**, approved as an accredited contractor through the Lloyds NERS scheme for the provision of all contestable works up to the new point of connection(s). Once completed the ICP arranges for the installed assets to be adopted by the incumbent DNO or an iDNO.

16.28 The following flowchart sets out the process in steps.

Figure 14.7 Developers' choices when connecting to the main supply



Source: UCE

There are risks of abortive work being carried out

16.29 It is important for the Council, developers and other stakeholders involved in delivering electricity infrastructure to note that a) is it vital to ensure that forecast load requirements are as accurate as possible to reduce the upfront costs, and b) significant abortive costs can be incurred if a development does not go ahead in either the timescales envisaged or to the scale envisaged.

16.30 DNOs report that forecast loads from developers are almost always in excess of the actual load that is eventually taken up on a development. In addition there have

been several incidences of abortive costs being incurred on capacity that has been reserved but not taken up within the allowed 5-year reservation window.

Charges for reinforcement of the existing distribution system

16.31 Where reinforcement is required DNOs can charge a contribution towards the costs of this work, based on the following simple formula:-

$$\text{Connection Charge Contribution} = \text{Reinforcement Cost} \times \left(\text{Required Capacity} \div \text{New Network Capacity}\right)$$

16.32 Reinforcement charges only cover work up to one voltage level above the voltage at the point of connection (PoC) of the new extension to the existing distribution system (known widely as 'the Voltage Rule').

The accuracy of determining of the PoCs should be checked and verified

16.33 It is important for the Council, developers and other key stakeholders when considering an investment towards infrastructure costs that the accuracy of determining PoCs is checked and verified, as costs can significantly increase dependent upon voltage point at which they are required - generally the higher the voltage level, the greater the costs.

DNOs operate on a 'first developer pays' principle

16.34 DNOs operate on a 'first developer pays' principle. The is because under the terms of their DNO licences they are not allowed to speculatively invest in infrastructure which is not already within their 5-year investment plan, and they therefore have to recover the full cost of all of the new or improved infrastructure created. This can lead to circumstances where a developer on a major scheme who only has an interest in part of the site may be asked to pay for the full costs of delivering the infrastructure that will service the entire site, despite only having an interest in part of it.

Connections must be provided on request. Charging levels are set by Ofgem

16.35 All electricity DNOs have a statutory duty under the Electricity Act 1989 to provide connections (i.e. extensions from its distribution system) upon request from persons seeking connections (note that connections are not included in the five year plan).. DNOs are entitled to recover the reasonable costs of providing a connection, including any necessary enhancement or reinforcement to its distribution system by way of a connection charge, which is payable in advance of any works being carried out. It is not intended that DNOs generate any profit from connections, nor that they attain network betterment over-and-above that requested by the customer.

16.36 Under the terms of their licences electricity DNOs must produce and implement charging methodologies for connection to their distribution systems, clearly setting out on what basis costs will be calculated. These methodologies have to be pre-approved by Ofgem. It is important to note that DNOs are also obliged to publish these charging statements so that all potential customers can check the basis of any

cost estimates provided to them: CE-Electric publishes this information on their website so that it is easily and readily accessible.

Recent changes to accommodate local generation have increased connection costs

16.37 Aside from the introduction of competition in connections from 1995, one of the key challenges facing the electricity distribution industry is the connection of renewable and other generation plant to networks which have traditionally carried electricity from large power stations in one direction only (ie. from the highest to the lowest voltage levels): the introduction of embedded generation onto these networks has meant that in many cases larger-sized equipment needs to be installed at the expense of the generator.

16.38 In April 2005 Ofgem instigated changes to connection charging arrangements for all DNOs in order to simplify them and make them more transparent (further amendments have been introduced subsequently).17

16.39 These changes have had a dramatic effect on some types of developments, particularly those with high load requirements. For large developments the changed voltage rule has had the greatest impact: for example if the DNO deem the point of connection (PoC) to the distribution system being at 11 kV (the lowest level of HV supply) the cost of necessary work is based on the costs associated with next highest voltage level (33kV), which are inevitably more expensive. In practice this means that developments with similar characteristics and network requirements face much higher costs after April 2005 than they did before.

16.40 Some changes have caused concern amongst both DNOs and end-consumers - DNOs feeling that this system is unfair as they are being asked to support a higher proportion of upfront investment costs; and end-consumers feeling that in reality they are being asked to pay a greater proportion of network asset investment costs upfront via connection charges.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

The business park has sufficient electricity infrastructure

16.41 Following a £1m investment by Scarborough Borough Council and Caddick Developments in 2009, a new 11kV circuit with 10MVA of capacity was installed from Scarborough Primary substation to the Business Park and ten new 1MVA substations installed within the business park to cater for the future anticipated growth. It is assumed NEDL have reserved the new capacity free of charge for up to

[17] The major changes included a) changes to the charging methodology to be used by DNOs for connections to their distribution systems; b) removal of Tariff Support Allowance (TSA), which were previously used by DNOs to offset the cost of installing new (load) connections to their distribution systems, and were equivalent to the sum of money recovered in the DNO's on-going distribution use of system (DUoS) charges for those assets; and c) a redefined voltage rule, meaning that rather than using the voltage of the metered supply (LV), as previously, DNOs could base rechargeable costs to developers on the voltage of the point at which the new extension to the development is connected to the DNO's distribution system.

5 years, reservation beyond this date would require the payment of a capacity reservation charge.

There is likely to be a need for a primary sub-station and network reinforcement in South Scarborough

16.42 The potential additional growth within the South Scarborough area could trigger the need for a new primary substation due to the demand on the Eastfield Primary Substation. It is likely additional reinforcement of, or extensions to, the local 11kV distribution networks would be required. The most likely position of the new primary substation would be on the Scarborough South Business Park within area 12 on the map. Based on the existing new connection charging methodologies, NEDL would also charge for any costs towards the reinforcement of the 132kV and 33kV networks to allow the new primary substation to be installed. An estimated cost of a new primary substation would be £3m excluding any reinforcement or extensive 33kV cabling works.

Other areas may require some network reinforcement

16.43 The projected growth in the other areas will not trigger the need for new primary substations based on the information obtained. However it is not possible to determine whether reinforcement of 11kV distribution networks / substations would be required to support the projected growth at local level. Developers will have to undertake specific studies of any reinforcement when their plans and phasing are more specific; developers would have to contribute to any reinforcement, and can be expected to take this into account in their calculations of site value.

How can new infrastructure be funded?

Funding will be private – either through developer or through adoption by an iDNO

16.44 Depending on how the new capacity is requested the cost of network reinforcement will either be apportioned or charged in full by NEDL to the first applicant, based on their current connection charging methodology.

16.45 Alternatively should a sufficient business case exist a contribution in part or in full towards the cost of the new electricity infrastructure to serve each of the development areas (including primary substations) could be obtained from the new assets being adopted by an iDNO rather than NEDL / YEDL.

Are the upgrades deliverable?

16.46 The scale of the investment required is unlikely to materially affect the viability of any scheme. Should reinforcement be required, sufficient time should be allowed in order to ensure capacity is in place in sufficient time to supply the new developments.

What are the priorities?

16.47 These infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked as “not applicable” in the spreadsheet model.

Issues and timing assumptions

16.48 The issues we see here are as follows:

- need for liaison and forward planning. The construction of substations involves long term planning, the purchasing of long lead time equipment and the reservation of sites for the substations (although there is a proposed site at the Business Park). It has been assumed that all wayleaves and legal requirements for the substation sites and cabling works will be forthcoming. Any delay in this process could significantly affect construction works and cause delays.
- The need for an equitable spreading of costs across site developers. In providing supply reinforcements, we have identified a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage). It will be important to ensure that the costs are equitably borne by all the developers. An example of dealing with the former problem is a forward funding arrangement, as discussed elsewhere in the report, with the cost recovered through a charge per dwelling.

16.49 Subject to close working between the planning authority, developers and networks there appear to be no showstoppers with regard to electricity supply.

16.50 The delivery of a new primary substation can take between 18 and 24 months.

17 TELECOMMUNICATIONS

Introduction

17.1 This section deals with Telecommunications infrastructure requirements in the Scarborough Borough Council area. It has not been updated from the original report and is considered to remain valid.

How is the system structured?

17.2 BT is the main telecommunication provider within the Scarborough council area. There are no cable operators such as Virgin Media.

17.3 The Scarborough borough is served with the telephone exchanges shown in the following figure.

Figure 17.1 Scarborough Borough telephone exchanges

17.4 These exchanges serve approximately the following numbers of premises

Table 17.1 Exchange service numbers

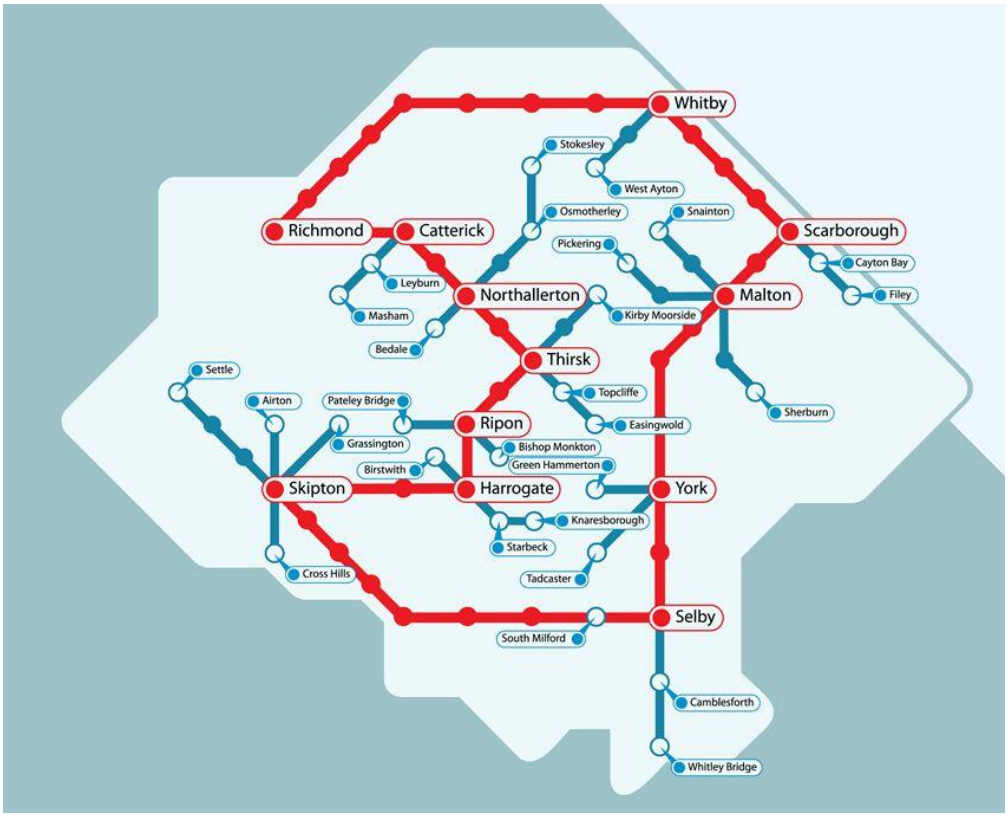
Exchange	Residential Premises	Non-Residential Premises
Scarborough	22,450	1,823
Cayton Bay	4,203	177
Filey	3,989	282
Hunmanby	2,052	139
West Ayton	3,332	122

Hackness	131	25
Cloughton	1,191	63
Robin Hoods Bay	934	113
Whitby	6,960	633
Sandsend	331	54
Sleights	1,201	67
Grosmount	255	62
Goathland	223	40

17.5 There has been a programme of investment in telecoms in the area. North Yorkshire County Council together with Yorkshire Forward, the European Regional Development Fund and BT invested in the creation of NYnet, a new high speed communications infrastructure across North Yorkshire.

17.6 The expanded network is shown in the following figure.

Figure 17.2 NY Net broadband infrastructure



What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

17.7 There will be significant additional demand arising from growth in housing and jobs. The timing of these infrastructure requirements will be broadly in line with the rate of development.

17.8 However, requirements are unlikely to represent a significant showstopper for growth. BT has a universal service obligation to provide a connection on request with functional internet access delivered over copper cable. This provides internet connection speeds of 28.8kbits/s as a minimum service.

17.9 If the cost of providing a connection is less than £3,400 per property, BT sets a standard charge of approximately £125.00. Where the cost of providing a new connection is in excess of £3,400, the additional charges are billed to the customer / developer. This charging principle seems to be only applied to single connection and small developments.

17.10 Broadly speaking, at a network wide level, capacity will exist, and has been bolstered by the NYNet project. Rather than the actual Telecommunications infrastructure being an area of risk to future development projects especially business related, it is the quality of the services delivered over the infrastructure that will impact future developments such as availability of broadband, broadband speeds, availability of choice in relation to telecoms providers, fibre optic infrastructure down to user level rather than copper etc.

How can new infrastructure be funded?

17.11 Funding for upgrading equipment at main exchanges is borne by BT. All on-site work ie installing ducting and chambers is undertaken by the developer or their appointed contractor with BT issuing the required ducting free of charge.

17.12 Should an end user require a connection in excess of the minimum copper connection (e.g. a fibre optic connection), the full cost of providing this service is paid for by the end user / developer. To some extent, the infrastructure required for upgraded services is already being provided. BT is implementing a programme of replacing the main copper connections from exchanges to road side cabinets with fibre optic cabling (known as fibre to cabinet).

Are the upgrades deliverable?

17.13 The upgrading of telecoms infrastructure is an ongoing process. Requirements are unlikely to materially damage viability overall, although there may be individual exceptions at very remote rural locations. However, these exceptions are highly unlikely to prejudice the overall delivery of the Core Strategy development numbers.

What are the priorities?

17.14 We have ranked this infrastructure as an “other” priority. It is not a statutory requirement. In any event, there are existing mechanisms which require providers to pick up these costs. They do not represent a priority for public sector investment.

Issues and timing assumptions

17.15 BT requires sufficient advance notice of a development (6 months minimum) to develop a plan of how to serve a new development.

The timing of infrastructure provision will be related to real-world build-out rates.

18 GAS

Introduction

18.1 This section deals with gas infrastructure requirements in the Scarborough Borough Council area. It has not been updated from the original report and is considered to remain valid.

How is the system structured?

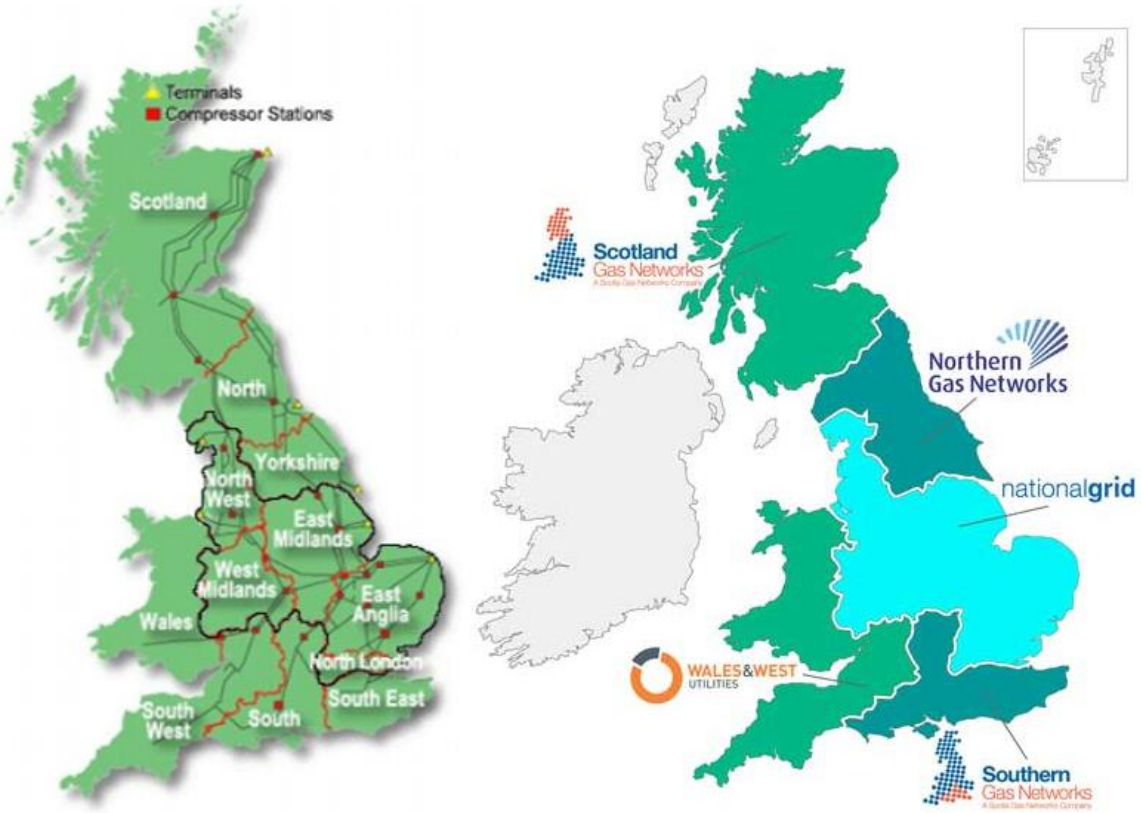
National Grid operates the national gas transmission system

18.2 National Grid operates the national gas transmission system which supplies the 12 local distribution zones across the country. Within each distribution zones gas is reduced in pressure and piped to homes and businesses through intermediate (I/P), medium (M/P) and low pressure (L/P) networks to industrial, commercial and domestic consumers.

There are twelve local distributors

18.3 The twelve local distribution zones are managed by eight gas distribution network operators (GDNs), which each cover a separate geographical region of Britain. There are also a number of smaller networks owned and operated by Independent Gas Transporters (iGTs).

Figure 18.1 The national network and local distributors



18.4 The operators of the distribution networks within the Scarborough area are Northern Gas Networks - North of England (North LDZ & Yorkshire LDZ). NGN have contracted the operational activities to United Utilities Operations.

There are a number of independent gas transporters

18.5 There are also a number of smaller networks owned and operated by Independent Gas Transporters (iGTs). Over half of all new gas connections are adopted by iGTs.

18.6 The formation of iGTs came as the result of the introduction of competition in gas distribution and connections by the regulator Ofgem.

Ofgem supervises the market

18.7 As existing gas distribution networks are natural monopolies, GDNs and iGTs are regulated by Ofgem to protect consumers from potential abuse of monopoly power. Similar to the electricity and water industries 5-year price control periods are used, which incorporate curbs on expenditure as well as incentives for efficiency and innovation. The price controls limit the amount of revenue that energy network owners can take through charges they levy on users of their networks to cover their operating costs and give a return in line with agreed expectations. As with electricity and water, a gas transporter is bound by duties imposed by the Gas Act, other relevant legislation and the conditions incorporated in their licence; if they fail to comply with any condition of its licence or any duty, they may be subject to enforcement action by Ofgem.

18.8 Ofgem reviews the price controls every five years and looks to balance the need to allow the companies appropriate resources with the need to protect customers' interests. Price controls are set for the four companies that own the local gas distribution networks.

18.9 A new 5-year price control period commenced on 1 April 2008.

Options for obtaining a new gas connection

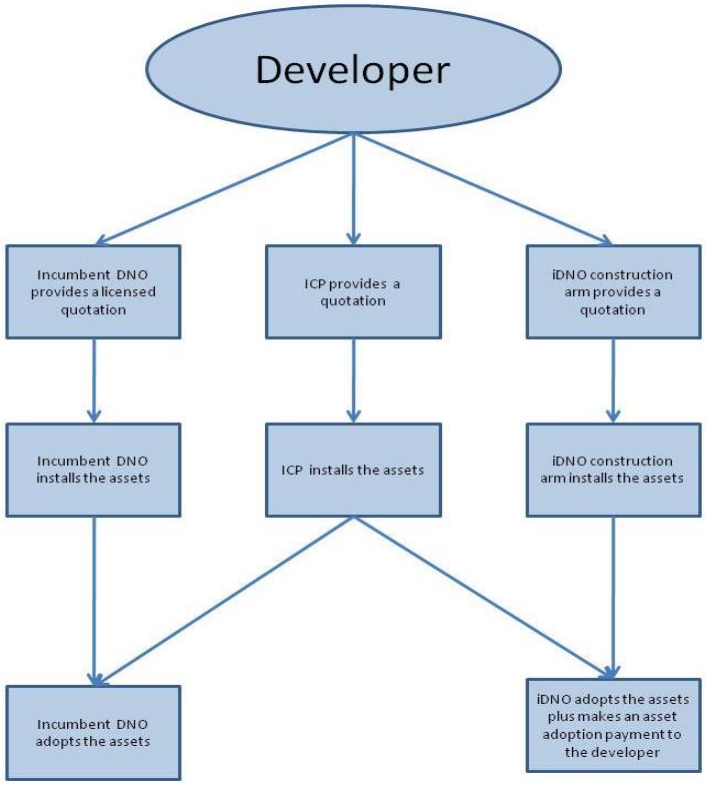
18.10 As with electricity, the introduction of competition in connections and distribution means there are three routes to obtaining a gas connection in the UK:-

- The traditional approach of obtaining a licensed quotation directly from the incumbent gas distribution company. In this case the customer pays the whole cost of the new connection and any associated reinforcement and free issues the assets to the incumbent distribution network operator;
- Through an Independent Distribution Network Operator (iDNO/iGT). These are companies who have obtained a license from the industry regulator Ofgem to operate as a gas distribution company in competition with the incumbent companies. A difference in using one of these companies is the possibility of the iDNO either contributing to the cost of the new connection or providing an opportunity to share in the profits they will make from distributing gas to the development. An existing incumbent gas distribution company can also act as an iDNO out of their normal distribution area following Ofgem making their licenses nationwide.

- Through an Independent Connection Provider (ICP), approved as an accredited contractor through the Lloyds NERS scheme for the provision of new connections. These companies are able to provide an alternative route for the provision of the contestable work items in this case all work up to the point of connection. Once completed the ICP arranges for the installed assets to be adopted by the incumbent Gas Distribution Company or an iDNO.

18.11 The following flowchart sets out these three options and the key steps involved:-

Figure 18.2 Developers' gas connection options



Gas costs associated with development

If the work is planned into the investment programme, the reinforcement is the responsibility of the gas transporter

18.12 Where the gas transporter has already planned and financially approved general reinforcement of a Distribution Network System within their 5-year price control period, and those works are due to be undertaken prior to the Winter following connection of the new load request (which obviates the requirement for specific reinforcement), the gas transporter will fund the full cost of the general reinforcement.

18.13 Where a general reinforcement project that has already been planned and financially approved has to be upsized prior to construction due to new development and an associated increase in demand, then only the additional costs necessary to meet the customer's load can be charged to the developer.

Specific reinforcement costs fall on the first developer. Cost calculation formulas are not published

18.14 Reinforcement required to enable the connection of identified new consumers, or to permit an increase in flow rate in respect of an existing consumer, or to allow an existing consumer to change from interruptible to firm transportation, is known as 'Specific Reinforcement'. The gas transporter apportions the cost of Specific Reinforcement according to the location of that required reinforcement in relation to the Connection Charging Point.

18.15 As in the electricity and water industry, chargeable reinforcement must be paid upfront, using the 'first developer pays' principle. Northern Gas Networks use a formula to calculate the chargeable element of any reinforcement works required to feed new or increased gas loads: this formula is not published and NGN have stated they have no intention of making this publicly available.

Upstream costs are the responsibility of the gas transporter. Downsteam costs are charged to the developer

18.16 The gas transporter funds Specific Reinforcement upstream of the Connection Charging Point (subject to the Economic Test in respect of Distribution Network System reinforcements). Specific Reinforcement downstream of the Connection Charging Point is charged to the developer.

18.17 Where an independent connection provider (ICP) is used, the customer will be informed of where the connection should be made. The customer will then be offered a payment to offset the additional cost that the gas transporter estimates will be associated with their being asked to connect at the alternative point. If the customer insists on making a connection at another point, which represents a sub-optimal system development solution, then the gas transporter is entitled to charge the full cost of any associated reinforcement to the customer.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

At South Scarborough – Filey the existing medium pressure system will need reinforcement

18.18 Based on the proposed growth areas, NGN has provided the following feedback in relation to their Medium Pressure network.

18.19 As the details below show, the medium pressure network in Scarborough – Burniston, Hunmanby, Snainton and Whitby can feed the proposed development without reinforcement.

18.20 There is no gas in Flixton and the nearest main is a 6” steel medium pressure just south of Cayton. A feeder approx 4000m long is required to provide gas to Flixton.

18.21 However it is not possible to determine whether reinforcement of Low Pressure distribution networks would be required to support the projected growth at local level. Developers will have to undertake specific studies of any reinforcement when their

plans and phasing is more specific; developers would have to contribute to any reinforcement, and can be expected to take this into account in their calculations of site value.

- Scarborough – Burniston. Areas 1, 2 and 8 on the plan amount to just over 2000 dwellings. This level of development could be supported by the Scarborough - Burniston Medium Pressure (MP) system.
- Cayton - Filey. Areas 4,5, 6 and 7 add up to over 4000 houses. The MP system between Cayton - Filey could not accommodate this level of increased demand and reinforcement of the system would be needed. Any contribution to network reinforcement would be determined at time of application. In certain circumstances Northern Gas Networks would fund the cost of any network reinforcement.
- Hunmanby. Additional demand could be supplied by the MP system at Hunmanby. Assumed around 150 dwellings here.
- Snainton. Area 9, 125 dwellings - the MP system in the area could support this level of demand.
- Whitby. Area 11, 100 dwellings - the MP system at Whitby could support this level of demand.
- Flixton. There is no gas in this area. The nearest gas is a medium pressure main in Cayton approximately 0.4km to the north. For the proposed number of houses it would be more cost effective to utilise another fuel to providing heating eg oil / electricity.

18.22 Regarding costs, Northern Gas Networks use a formula to calculate the chargeable element of any reinforcement work required to feed new or increased gas loads. This is not published and Northern Gas Networks have no intention to make this available.

18.23 Northern Gas Networks are currently involved in a large scale metallic main replacement program which can, as a side benefit, increase the capacity of the network. It is known that old metallic mains were often oversized for the actual gas loads. If these mains are replaced size for size (e.g. replace a 4” cast iron main with a 125mm Pe main) there is spare capacity. In some circumstances replacement can cancel out the need for reinforcement.

18.24 Whilst Northern Gas Networks work to specific replacement guidelines calculated from risk assessments of individual mains, they are not obliged and are not prepared to give details of the program of replacement work.

How can new infrastructure be funded?

18.25 Northern Gas Networks require payment for chargeable reinforcement up front. In an extreme case, if a development of 5000 houses needed £500,000 reinforcement and the first developer was building just 10 houses, the full reinforcement cost would be payable by this first developer.

Gas networks constructed by iGTs are charged to the developer

18.26 Most new developments have gas networks constructed and operated by iGTs. This is for the following reason.

- If a Gas Transporter (as opposed to an *independent* gas transporter) was commissioned by a developer to connect a development, then developers would be charged – because Gas Transporters are no longer allowed to recover reinforcement charges by increasing the transportation charges hence the reinforcement is charged to the developer.
- If an *Independent* Gas Transport is used to connect a development, the iGT can apply a rebate to the costs which means they will recover some of the reinforcement costs from the transportation charges. They cannot do this by increasing the transportation charge but it can be a decision to extend the payback period of the site or by taking a smaller return on the investment. This option is more financially attractive to the developer.

18.27 Both of these options are business oriented and are not regulated. However Ofgem has the power to check the iGT is using the correct number of plots and house types to calculate the gas load. Any attempt to impose changes, for example by upping the transportation charges to recover the costs, would be very unpopular.

Are the upgrades deliverable?

18.28 As noted above, where developers have to contribute to any reinforcement, then they can be expected to take this into account in their calculations of site value.

What are the priorities?

18.29 These infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked as "not applicable" in the spreadsheet model.

Issues and timing assumptions

18.30 In common with the other utilities, we see the following issues:

- The need for liaison and forward planning. Construction involves long term planning. It has been assumed that all wayleaves and legal requirements for the substation sites and cabling works will be forthcoming. Any delay in this process could significantly affect construction works and cause delays.
- The need for an equitable spreading of costs across site developers. In providing supply reinforcements, we have identified a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage). It will be important to ensure that the costs are equitably borne by all the developers.

19 POTABLE WATER

Introduction

19.1 This section deals with potable water infrastructure requirements in the Scarborough Borough Council area.

How is the system structured?

19.2 Water company investment programmes are directed towards maintaining existing company assets and meeting new and existing statutory requirements. For potable water these particularly relate to water quality and ensuring adequate raw water resources, storage, and treatment capacity to serve their existing customer base.

19.3 Provision is also made in the business plan for investment in new water treatment capacity and resources to meet growth demands.

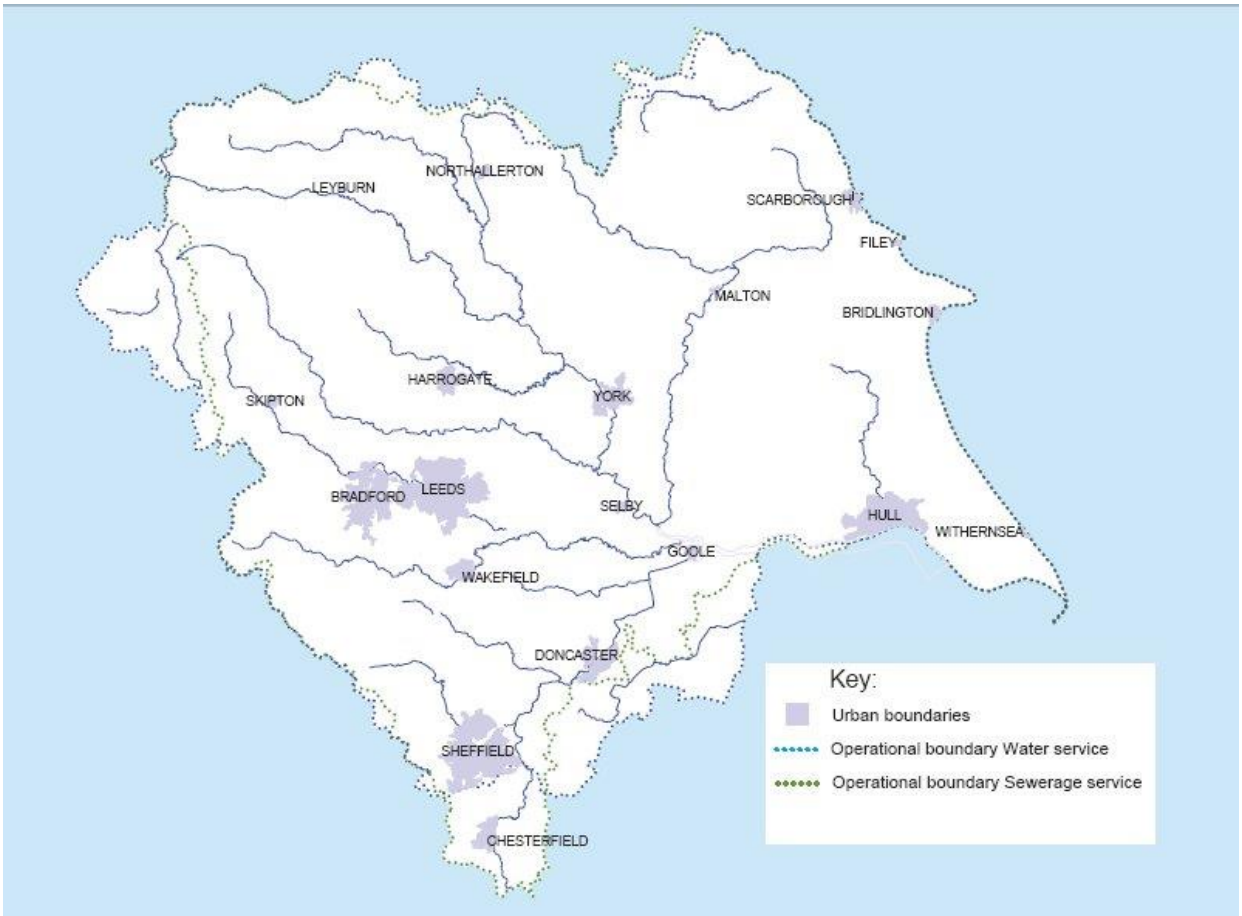
OFWAT regulates prices

19.4 Price regulation in the water industry is set on a five yearly programme, each company produces a Business Plan for approval by the Water Regulator (OFWAT). The sixth round of Asset Management Plans' (AMPS) has been agreed by the Regulator (OFWAT) setting out the water companies' charging and investment structures for the plan period commencing 2015.

Potable Water Supply Management Structure

19.5 Yorkshire Water is the statutory undertaker for potable water supply and distribution networks, and for water resources and treatment, in the study area.

Figure 19.1 Water and sewerage operational boundaries



19.6 The Yorkshire Water potable water supply network currently comprises three water resource zones (see Fig. 2). These are the Grid Surface Water Zone (SWZ), East Surface Water (SWZ), and East Groundwater Zones (GWZ). Over 95% of the region is now connected to the Grid. The Scarborough Growth areas fall within the current East Groundwater Zone.

19.7 Yorkshire Water, through recent investment has ensured increased security of supply by extending the Grid to cover the East Groundwater Zone including Scarborough Growth Areas). The Yorkshire Water Grid allows water to be transferred throughout the Zone to distribute water demands as they arise making full use of the available water resources throughout the region.

Figure 19.2 Current Water Resource Zones

No overall water deficit is expected

19.8 Yorkshire Water predicts[18] that there will be no overall water deficit in the region for the 25 year period to 2034/2035 after making allowances for the impact of climate change on water resources, and reductions in demand due to conservation water saving measures.

19.9 Demand growth assumes that all new homes will be built in line with the Code for Sustainable Homes and have a per capita consumption not exceeding 120 litres/head/day.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

At strategic level there is no constraint on development

19.10 Yorkshire Water has adequate capacity in its existing network and upgraded network following connection of the East Coast GWZ to the Grid SWZ and consequently at a strategic level there is no constraint on development.

Local network upgrades may be necessary at site level

19.11 Local network upgrades may be necessary to provide a water supply to a particular development. These will need to be assessed at a local level. Costs associated with water mains connections and network reinforcement will need to be assessed at a site specific level.

[18] Yorkshire Water Final Water Resource Management Plan 2010-2035 - WRMP

How can new infrastructure be funded?

Developers are expected to pay for local network upgrades on their own sites

19.12 New off-site and on-site water mains to connect new developments to the local network are the financial responsibility of the developer usually through the requisition process to fund network reinforcement to provide adequate capacity for specific developments.

19.13 New (off-site and on-site) water mains can be requisitioned from Yorkshire Water through Section 41 of the Water Industry Act 2003 with the requisitioner responsible for paying the Yorkshire Water's costs for providing the water main. Alternatively the person requiring the water main is able to engage a suitably accredited (WIRS) contractor to carry out the water main laying with the pipe then being vested to the Yorkshire Water as a public water main. Normally Yorkshire Water will be responsible for the physical process of connecting the new water main to the local network, with the developer requiring the supply responsible for water company costs.

Are the upgrades deliverable?

19.14 Although individual site assessments will need to be made, it is thought highly unlikely that there are any showstopper issues. The lack of potable water infrastructure is unlikely to affect development viability.

What are the priorities?

19.15 These infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked "not applicable" in spreadsheet model.

Issues and timing assumptions

19.16 The main issue is common to many of the utilities matters - this is the need for an equitable spreading of costs across site developers. In providing supply reinforcements to a strategic site, there is a risk that all the costs will fall on the first developer(s) or on the later ones (if new mains only become essential at that stage). It will be important to ensure that the costs are equitably borne by all the developers. An example of dealing with this problem is a forward funding arrangement, as discussed elsewhere in the report, with the cost recovered through a charge per dwelling.

20 WASTE WATER

Introduction

20.1 This section deals with waste water (sewage) infrastructure requirements in the Scarborough Borough Council area.

How is the system structured?

20.2 Yorkshire Water is the statutory undertaker for the sewerage network including the operation of the wastewater treatment works in the study area.

20.3 Under the current (AMP6) asset management plan Yorkshire Water is planning a programme of works to reduce sewer flooding and sewer collapses, improvements to effluent quality, and enhancements to sewage treatment.

Service delivery is overseen by OFWAT. A five-year investment plan is agreed between Yorkshire Water and OFWAT

20.4 Price regulation in the water industry is set on a five yearly programme. Each water company produces a Business Plan for approval by the Water Regulator (OFWAT). The sixth round of Asset Management Plans' (AMP6) have recently been agreed by the Regulator (OFWAT) setting out the water companies' charging and investment structures for the plan period.

Waste water management structure

20.5 Wastewater is collected via the sewerage network and delivered by a combination of gravity and pumped sewers to local wastewater treatment works. Treatment works capacity is governed by the maximum population draining to a works, and the consented discharge from the works to a watercourse or sea outfall. These treatment works can range from small units serving a few dwellings to large works that will accommodate Scarborough.

20.6 Yorkshire Water has a duty to accept new domestic connections into the sewerage network. The public sewerage network does not, however, serve all areas. Some development sites may be too remote from the sewerage network for a connection to be economically or technically feasible. For smaller sites in these locations alternatives means of sewage disposal will be necessary.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

There are a number of specific waste water treatment capacity issues relating to certain wastewater treatment plants

20.7 Where required to meet the Growth Strategy, improvements to treatment works are planned to meet the projected growth pattern. Development will need to be phased in line with improvement works to these plants or alternatively Developers will need to fund improvements where site are brought forward in advance of the projected

development plan. Yorkshire Water has provided brief comments on treatment works status:

- Filey WwTW: the works is near to capacity and existing headroom is likely to be utilised by currently committed and proposed new development.
- Folkton WwTW (Southern Villages area): There is no proposal to replace the current works in AMP6. The proposed houses in Hunmanby that are within this catchment area can be accommodated without a requirement to increase capacity.
- Hunmanby WwTW: The proposed houses in Hunmanby within this catchment can be accommodated without a requirement to increase capacity.
- Scarborough WwTW: there is capacity available at the Scarborough WwTW for proposed levels of new development.
- Reighton WwTW: There are no longer any proposals for allocating housing within the rural villages. Whilst some windfall development or small exceptions schemes may come forward there is some marginal capacity to accommodate low levels of growth.
- Seamer WwTW: The works have capacity to accommodate the levels of development proposed within the catchment area. The issue in respect of this WwTW is not the plant itself but the trunk sewer in the Cayton locality. It is planned to upgrade the trunk sewer (set out in AMP6) which, on completion, will overcome current capacity issues. In the short term restrcitions may be placed on larger developments in this area Whilst a further expansion of capacity of the WwTW is unlikely during this Plan period, YW own a significant area of 'spare' land which is set aside for future expansion.
- Whitby WwTW: the works has available capacity but an increased discharge consent may be required.

20.8 At a site specific level where a public sewer is available for a connection local investigations will be necessary to establish available capacity. A point of connection close to the site may need to be agreed with Yorkshire Water. Developers are entitled to employ their own Contractor to install wastewater sewers (and pumping stations) and offer these sewers for adoption to the wastewater undertaker. Alternatively the Developer has the option of requisitioning the sewer from the wastewater undertaker who will construct the sewer with costs rechargeable to the Developer.

How can new infrastructure be funded?

20.9 Funding mechanisms depend on the infrastructure requirement in question.

Sewage treatment works are funded by Yorkshire Water, and are allowed for in AMP6

20.10 Yorkshire Water has allowed in their AMP6 business plan for upgrading wastewater treatment works capacity to accommodate the level of growth proposed in the Local Plan. Costs for improvement works will be funded through customer charges (on householders across the Yorkshire Water area). Improvement works will be carried out to match the proposed growth levels from the Local Plan replacement and will therefore not be a restriction on development. Should a specific development come

forward in advance of planned infrastructure improvements or the development was not included in the AMP6 submission, Yorkshire Water may require a developer contribution towards the works.

Mains connections are funded by the developer

20.11 It is the responsibility of the site Developer to fund the works to connect to the public sewer at a point of connection agreed with the sewerage undertaker.

Are the upgrades deliverable?

20.12 Although individual site assessments will need to be made, it is thought highly unlikely that there are any showstopper issues. The lack of waste water infrastructure is unlikely to affect development viability.

What are the priorities?

20.13 These infrastructure costs are generally picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked “not applicable” in spreadsheet model.

Issues and timing assumptions

20.14 The issues relating to sewage as follows:

Early engagement is important

20.15 The lead times imposed by the five-yearly AMP cycle on improvements to STWs need to be reflected in early engagement between the water companies, developers and LPAs. Any future update to the Local Plan or allocations contained therein should be carried out with the fill involvement of Yorkshire Water to ensure their Managaments Plans take such plans into account. Without early involvement the viability of development could be affected through the additional costs with the provision of appropriate infrastructure thus posing a risk to housing delivery.

Infrastructure must precede development

20.16 Where the discharges from proposed developments require enhancements to STWs and the networks serving them, it is essential that these are carried out and completed before the developments are occupied. Close liaison between the planning authority and the water companies is essential to ensure that the latter are aware of proposed development programmes.

Equitable cost sharing

20.17 Cost of sewerage network enhancements in a strategic site need to be borne by all the development in the area, rather than falling on those at the beginning or the end. This matter applies to many utilities.

21 SURFACE WATER DRAINAGE

Introduction

21.1 This section deals with surface water drainage in the Scarborough Borough Council area.

How is the system structured?

Responsibilities

21.2 Responsibilities for surface water drainage are as follows:

- Yorkshire Water is responsible for the public surface water sewers within the Scarborough Borough Council district.
- The Internal Drainage Boards (IDB) are responsible for the watercourses within their Drainage Districts. These IDBs exercise similar operational and regulatory powers to the Environment Agency within these areas. Note that we examine fluvial flood defence in the next section.
- The Environment Agency is responsible for watercourses which have been designated as Main River and have a duty to ensure that increased flood risk does not result from new development. Other watercourses may be under riparian ownership.

Approaches to surface drainage

21.3 Conventional surface water drainage utilises underground piped systems designed to remove surface water from a site as quickly as possible. This may result in flooding problems downstream and reduce the natural recharge of groundwater levels. Such systems may also create a direct pathway for pollutants from urban areas to pass into watercourses and groundwater.

21.4 The former Planning Policy Statement 25 (PPS 25) required local planning authorities to promote the use of Sustainable Drainage Systems (SuDS) to achieve the control of surface-water. SuDS should be the default drainage measure for all new developments, with other drainage measures only considered if all SuDS forms are considered not viable. This promotion of this means of drainage is retained as an integral part of the online Planning Practice Guidance website

21.5 SuDS aim to mimic natural surface water drainage by dealing with surface water runoff as near to its source as possible. This can be achieved through the use of source control (eg. green roofs, permeable paving, rainwater recycling) and the attenuation and treatment of water through the drainage systems (e.g. using filter drains, swales, basins and ponds). SuDS often involve a “management train” of different techniques to manage runoff and pollution on a site.

21.6 In the Written Statement (HCWA161) from the Department of Communities and Local Government, it is clearly stated that major developments (10 dwellings or more) should, ensure that SuDS are put in place unless demomstrated to be inappropriate. Where SuDS are considered inappropriate or not viable other drainage measures

should be considered. A range of SuDS techniques can be implemented into a development to prevent the increased risk of flooding and pollution control.

21.7 The order of priority for achieving SuDS compliance is:

- Discharging to ground via infiltration;
- Discharging to a watercourse; and then
- Discharging to a sewer

21.8 As a minimum, developments on greenfield sites should attenuate surface-water runoff to existing greenfield runoff rates for all events up to and including the 1% (including climate change) storm design event.

21.9 As a minimum, developments on brownfield sites should lead to a reduction in existing runoff rates, so that, at the very least, an allowance for climate change is incorporated. Ideally a minimum 30% reduction in run off rate of the pre-development rate should be achieved plus an additional 20% storage to allow for climate change unless it is demonstrated that such a reduction is not practicable.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

21.10 Yorkshire Water has advised that it is not desirable to put surface water into sewers for additional runoff from new developments. An assessment will be required as a site-specific level to establish the feasibility of restricted discharges to surface water sewers if no other means of drainage are available.

21.11 The Strategic Flood Risk Assessment (SFRA) has identified several Critical Drainage Areas within the Scarborough Borough Council area. These areas are particularly sensitive to increase runoff and/or volume which would significantly increase flood risk downstream of the site. It has been recommended that more stringent controls on surface water management are implemented within Critical Drainage Areas. However the SuDS design requirements for sites located outside of the Critical Drainage Areas are still very similar.

21.12 There have been moves towards exploring the concept of an overall strategy towards water management with some of the key stakeholders. Stakeholders are aware that it would be helpful to determine an overall strategy early in the planning process, rather than allowing piecemeal developments with temporary solutions. For example, amalgamating flood detention basins with public open space leads to efficiencies in land use and maintenance. Skilfully designed and masterplanned, these can be a positive asset to a new development.

How can new infrastructure be funded?

New surface water drainage infrastructure will be the developer funded

21.13 New surface water drainage infrastructure will be developer funded for each individual site. A commuted sum may also be payable by the developer where third

party adoption of SuDS assets takes place to secure long term maintenance and repair.

21.14 Where connections to existing public surface water sewers are necessary the developer will be responsible for any costs incurred.

21.15 Where surface water discharges to Internal Drainage Board watercourses are necessary the IDB may require a commuted sum payment.

Are the upgrades deliverable?

21.16 Individual sites' land values should take account of the need for surface drainage. These should be explored in individual cases.

What are the priorities?

21.17 These infrastructure costs are picked up by the private sector. They do not represent a priority for public sector investment. Prioritisation is therefore marked "not applicable" in spreadsheet model.

Issues and timing assumptions

21.18 Widespread drainage issues have been reported throughout the district as a result of inadequate hydraulic capacity of the public sewers. Increased rainfall intensity due to the effects of climate change will put additional pressure of the existing public sewers. Therefore the implementation of SuDS to deal with flood risk should be the default drainage measure for all new major developments.

22 FLOOD DEFENCE (FLUVIAL & COASTAL)

Introduction

22.1 This section deals with fluvial and coastal flood defence in the Scarborough Borough Council area.

22.2 Flooding and erosion from rivers and coastal waters is a natural process that can threaten life and cause substantial damage to property. Although these natural processes cannot be wholly prevented, their impacts can be avoided and reduced through good planning and management. Flood risk to dwellings can be exacerbated by development in inappropriate locations. New developments can potentially increase surface water runoff within a catchment and increase flood risk to other properties.

How is the system structured?

22.3 Responsibilities are as follows.

- The Environment Agency (EA) has a duty to exercise a general supervision over all matters relating to flood risk management. The EA has permissive powers to maintain and improve rivers designated as a Main River, to construct and maintain defences against flooding, to issue flood warnings, and to manage water levels.
- The Internal Drainage Boards (IDB) are responsible for the watercourses within their Internal Drainage District and exercise similar operational and regulatory powers to the EA within these areas.
- Outside of the IDB local authorities are the operating authority for most Ordinary Watercourses and have permissive powers to manage these watercourses. Certain watercourses are designated as COWS (Critical Ordinary Watercourses) that are particularly susceptible to flooding or where flooding will endanger property or life, the Environment Agency maintain a register of COWS.

Fluvial risk

A Strategic Flood Risk Assessment has been carried out

22.4 The NPPF requires local planning authorities to implement planning policy to steer new development away from areas at risk of flooding towards area at lower risk.

22.5 To assist the local planning authority with the undertaking of the Sequential Test a Strategic Flood Risk Assessment (SFRA) for North East Yorkshire has been carried out.

22.6 The SFRA contains a series of flood maps for the Scarborough Borough Council district. These flood maps should be used by the local planning authority to carry out the Sequential Test during their planned land allocations.

22.7 The order of priority when undertaking the Sequential Test is detail below:

i The overall aim of the local planning authority should be to steer new development into Flood Zone 1.

ii Where there are insufficient sites available in Flood Zone 1, then appropriate sites in Flood Zone 2 should be considered.

iii Only where there are no reasonably available sites in Flood Zones 1 or 2 should the local planning authority consider the suitability of sites in Flood Zone 3.

22.8 The implication of climate change should also be considered during the Sequential Test process.

Coastal flood defence

22.9 The operating authorities coastal engineers formally meet with Defra, the Environment Agency, North York Moors National Park and English Nature every 6 months to discuss coastal issues.

22.10 The Shoreline Management Plan (SMP) exists to promote good and prudent management of the coastline including inappropriate development. The overall aim of the SMP is to set out a plan for a 100 year horizon indicating how the coastline should be managed, taking into account the wider implications on the neighbouring coastline and the environment.

22.11 The Shoreline Management Plan sets out preferred policies to safeguard the natural and human environments and to create community confidence in delivery of this important service.

22.12 Below are the four SMP policies available to shoreline managers:

- Hold the line by maintaining or changing the standard of protection. This policy covers situations where work or operations are carried out in front of the existing defences (such as beach recharge, rebuilding the toe of a structure, building offshore breakwaters and so on) to improve or maintain the standard of protection provided by the existing defence line.
- Advance the line by building new defences on the seaward side of the original defences.
- Managed Realignment by allowing the shoreline to move backwards or forwards, with management to control or limit movement (such as reducing erosion or building new defences on the landward side of the original defences).
- No active intervention where there is no investment in coastal defences or operations.

22.13 Preference to the sequential approach should be taken during the planned land allocation process to avoid development within inappropriate areas which are subject to coastal erosion.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

22.14 As noted in the chapter above on surface drainage, there have been moves towards exploring the concept of an overall strategy towards water management with some of the key stakeholders. Stakeholders are aware that it would be helpful to determine an overall strategy early in the planning process, rather than allowing piecemeal developments with temporary solutions. For example, amalgamating flood detention basins with public open space leads to efficiencies in land use and maintenance. Skillfully designed and masterplanned, these can be a positive asset to a new development.

How can new infrastructure be funded?

22.15 By applying the sequential approach to future development the need for funding to provide protection from flood and coastal processes would be minimised. This has been a central criteria used for assessing housing and other allocations. No allocations (or the development contained within) will involve physical development on a Floodzone of a higher classification than 1; the lowest level.

The EA funds and maintains fluvial and coastal flood defences – but will not pay for flood defence to support new development

22.16 The Environment Agency is responsible for the construction of new flood defences and the long term maintenance of defences which protect existing assets from Main River and coastal flooding. The EA will not construct or upgrade flood defences to promote new development within flood risk areas.

22.17 Where new or renewed flood defences provide protection for both new and existing properties, costs are pro-rata'd between developers and the EA.

22.18 Furthermore, it is highlighted in the SMP2 that grant under the Coast Protection Act 1949, is only considered with respect to existing assets and not in relation to potential development value.

There may be adjustments in funding approaches in coming years

22.19 However, taking the broader intent of the SMP2, development opportunity has to be taken into account, given that this is a potential pressure on the coast over the next 100 years.

22.20 Such an approach may require input from several areas of interest in terms of tourism, planning, environment and coastal engineering and more closely linking long term spatial planning for the area and moving beyond sectorial funding solely under coast protection. An appropriate funding source for new flood defences may be from the Community Infrastructure Levy or similar scheme.

22.21 Any onsite flood protection measures identified within a site specific FRA will be funded by the developer for each individual development.

23 WASTE

Introduction

23.1 In this section we examine how the proposed growth in housing and employment in Scarborough affects the requirements, costs and funding of waste collection and management services in the Borough.

How is the system structured?

23.2 Waste Management in Scarborough is the responsibility of Scarborough Borough Council as the waste collection authority and North Yorkshire County Council as waste disposal authority. Both authorities are members of the York & North Yorkshire Waste Management Partnership.

23.3 The Partnership has drawn up a Waste Management Strategy to cover the period 2006-2026. The current targets of the strategy are:

- Reduce: the area currently produces more waste per head than average – the target is to be among the lowest 25% by 2013
- Reuse: community focus on reuse
- Recycling and composting: target of 50% of household waste by 2020
- Residual waste: the target is to divert 75% from landfill by 2013. Discussions with two short-listed bidders are being undertaken with a view to selecting a tender later in the year.

23.4 There are three Household Waste Recycling Centres (HWRCs) in Scarborough: at Seamer Carr, Burniston and Whitby. Those at Seamer Carr and Whitby are relatively new.

23.5 The site at Seamer Carr is adjacent to an integrated waste management facility run by Yorwaste and includes a compost area, electricity generation from methane collection, and aggregates recycling as well as landfill. It also has a demonstrator pilot thermal treatment plant at the commissioning stage which will produce electricity and heat for reuse.

What are the infrastructure requirements arising from growth? When is infrastructure needed? Who will provide it? What are the costs?

As the majority of growth is in the South of the Borough, Seamer Carr HWRC will need to be expanded

23.6 There is enough capacity at the Whitby and Burniston HWRCs to cope with the small proportion of growth planned for the north of the Borough. Whitby is relatively new and Burniston has recently been upgraded to increase its capacity.

23.7 As the majority of projected growth is in the south of the Borough, most of the increased demand will fall on Seamer Carr. Seamer Carr is currently receiving 6,000 tonnes of waste per annum. North Yorkshire County Council estimates that it could deal with a 20% increase to 7,200 tonnes per annum. This is based on the peak

deliveries at the site in any 12 month period since it opened in 2005. However, it must be noted that at this peak, service delivery was poor compared to present time as excessive queuing time was a frequent problem at weekends and bank holidays, and the knock on effect of this is to reduce recycling performance. At between 60% and 65% this site is performing to a similar level to the County average. The County Council estimates that the proposed scale of development at Middle Deepdale alone will put pressure on Seamer Carr.

23.8 The existing catchment of Seamer Carr is estimated to be around 16,000 households. The new dwellings proposed for the south of the Borough will fall within this catchment area. It is estimated that this increase will generate a significant additional demand, of which some can be absorbed by the existing facility at Seamer Carr.

23.9 Expansion of the Centre to meet the balance of the demand from planned growth will cost an estimated £450,000 – this is based on the 2005 costs to consent and build the existing site (pro-rated to reflect the size of expansion compared to the existing site) and inflated to 2016.

23.10 There are no proposals to expand the facility in the current Waste Management Five-Year capital plan, and no discussions have yet been held about the next revision of the capital plan.

23.11 Scarborough Borough Council as the waste collection authority will need to service the additional dwellings predicted in the catchment area.

23.12 Two additional collection rounds will be required by 2032: the two vehicles required will cost about £180,000 each which would have to be funded through the Councils Vehicle, Plant and Equipment (VPE) fund. As new properties are occupied they will be liable for Council Tax and a proportion of this represents a contribution to the cost of waste collection; however, this revenue income stream may not reflect the actual revenue cost. Additional depot facilities will not be required. It is anticipated that this requirement will be addressed through a growth bid reflecting the costs at the time of requirement.

A new waste transfer station will also be needed but current levels of waste are the main driver for this

23.13 North Yorkshire County Council has procured a residual waste treatment plant to reduce the amount of residual waste being sent to landfill. This waste treatment plant will not be located in the Borough, so there is a requirement for waste transfer stations for bulking up residual waste collected by the Borough Council and from HWRCs for onward transport to the treatment plant. The main driver for waste transfer stations is the need to transfer residual waste from existing dwellings and businesses.

23.14 The north of the Borough is already covered by a waste transfer station at Whitby, and the projected low increase in dwelling stock growth through the period of this plan indicates that the existing facility will be able to cope with demand throughout the plan period.

23.15 Budgetary provision has been made for a waste transfer station in the south of the Borough and Seamer Carr is a potential location for this development. Whilst there is a significant projected increase in the number of properties served by this facility during the life of this plan, the transfer station has not yet been designed and the projected increase can be addressed at the design stage. No mechanism has been established to calculate the additional build costs associated with this additional throughput, so no developer contributions can be identified as part of this report.

How can new infrastructure be funded?

Developer contributions are sought to fund this expansion

23.16 No funding has been identified to date to improve Seamer Carr HWRC. There are two potential sources of funding for an expansion of Seamer Carr: prudential borrowing by the County Council or developer contributions.

23.17 Because of predicted pressure on budgets, the view of the County Council is that the only way expansion could be afforded is through developer contributions.

Issues, dependencies and barriers to growth

23.18 As the Seamer Carr site is owned by the County Council and has room for expansion of the HWRC there do not appear major barriers to making provision for growth, subject to the availability of funding.

24 TABULAR SUMMARY OF REQUIREMENTS, COSTS AND PROJECT-RELATED FUNDING

24.1 In the following table is a summary all of the infrastructure requirements, costs and project-related funding.

24.2 Note that funding from CIL and New Homes Bonus is dealt with separately.

Table 24.1 Summary of infrastructure requirements, costs and project-related funding

	Priority	Capital or revenue ?	Known **gross** cost (not specifically tailored to impact of attributable growth)	Borough impact proportion: % gross costs attributable to growth	Known infrastructure costs attributable to growth ("growth cost")	Funding via mainstream / public agency	Funding via utility companies	Known/ reasonably anticipated funding from other possible sources	Known/reasonably anticipated delivery of in-kind infrastructure through a proposed scheme/allocation	Known **Gross** costs after anticipated funding/delivery ("Gross cost funding gap")	Known **Growth** costs after anticipated funding ("Growth cost funding gap")
(A) TRANSPORT											
Scalby Road / Falsgrave Road	Critical	Capital	£432,000	50%	£216,000	£0	£0	£432,000	£0	£0	£0
Stepney Road / Stepney Drive	Critical	Capital	£345,000	50%	£172,500	£0	£0	£345,000	£0	£0	£0
Scalby Road / Manor Road	Critical	Capital	£151,000	50%	£75,500	£0	£0	£151,000	£0	£0	£0
Scalby Road / Stepney Drive priority	Critical	Capital	£391,000	50%	£195,500	£0	£0	£391,000	£0	£0	£0
Dunslow Road / A64	Desirable	Capital	£151,000	100%	£151,000	£0	£0	£0	£0	-£151,000	-£151,000
Cayton Link Road (East and West Links)	Necessary	Capital	£6,139,688	100%	£6,139,688	£0	£0	£0	£6,139,688	£0	£0
Sub total			**£7,609,688**		**£6,950,188**	**£0**	**£0**	**£1,319,000**	**£6,139,688**	**-£151,000**	**-£151,000**
(B) EDUCATION											
Primary and Early Years –Middle Deepdale and South Cayton	Necessary	Capital	£13,596,000	100%	£13,596,000	£0	£0	£0	£11,318,670	-£2,277,330	-£2,277,330
Primary and Early Years - Filey and Southern Villages	Necessary	Capital	£883,740	100%	£883,740	£0	£0	£0	£0	-£883,740	-£883,740
Primary and Early Years – North Scalby, Central and Scarborough Scarborough other	Necessary	Capital	£3,575,748	100%	£3,575,748	£0	£0	£0	£2,753,190	-£822,558	-£822,558
Primary and Early Years - Northern Villages	Necessary	Capital	£584,628	100%	£584,628	£0	£0	£0	£0	-£584,628	-£584,628
Primary and Early Years - Whitby	Necessary	Capital	£1,400,388	100%	£1,400,388	£0	£0	£0	£0	-£1,400,388	-£1,400,388
Primary and Early Years - Western Villages	Necessary	Capital	£503,052	100%	£503,052	£0	£0	£0	£0	-£503,052	-£503,052
Secondary - South Scarborough – Middle Deepdale and South Cayton	Necessary	Capital	£9,070,971	100%	£9,070,971	£0	£0	£0	£0	-£9,070,971	-£9,070,971
Sub total			**£29,614,527**		**£29,614,527**	**£0**	**£0**	**£0**	**£14,071,860**	**-£15,542,667**	**-£15,542,667**
(C) HEALTH											
Scarborough North	Essential	Capital	£1,088,301	60%	£652,981			*[£100,000]*		-£988,301	-£652,981
Scarborough Centre	Essential	Capital	£76,149	100%	£76,149					-£76,149	-£76,149
South Scarborough – Middle Deepdale and South Cayton	Essential	Capital	£3,344,226	74%	£2,474,727			*[£250,000]*		-£3,094,226	-£2,474,727

	Priority	Capital or revenue ?	Known **gross** cost (not specifically tailored to impact of attributable growth)	Borough impact proportion: % gross costs attributable to growth	Known infrastructure costs attributable to growth ("growth cost")	Funding via mainstream / public agency	Funding via utility companies	Known/ reasonably anticipated funding from other possible sources	Known/reasonably anticipated delivery of in-kind infrastructure through a proposed scheme/allocation	Known **Gross** costs after anticipated funding/delivery ("Gross cost funding gap")	Known **Growth** costs after anticipated funding ("Growth cost funding gap")
Filey/Hunmanby	Essential	Capital	£383,920	43%	£165,086			*[£50,000]*		-£333,920	-£165,086
Western Villages	Essential	Capital	£171,336	74%	£126,789					-£171,336	-£126,789
Sub total			**£5,063,932**		**£3,495,732**		**£0**	***[£400,000]***		**-£4,663,932**	**-£3,495,732**
(D) OPEN SPACE & LEISURE											
Urban parks (including Natural Parks and greenspace)	Desirable	Capital	£2,066,303	100%	£2,066,303	£0	£0	£0	£1,742,802	-£323,501	-£323,501
Amenity green space	Desirable	Capital	£312,149	100%	£312,149	£0	£0	£0	£312,149	£0	£0
Outdoor sports facilities	Desirable	Capital	£2,415,400	100%	£2,415,400	£0	£0	£0	£0	-£2,415,400	-£2,415,400
Equipped Play Areas	Desirable	Capital	£4,208,810	100%	£4,208,810	£0	£0	£0	£3,383,206	-£825,604	-£825,604
Filey Sports Centre	Desirable	Capital	£4,500,000	5%	£225,000	£0	£0	£0	£0	£4,500,000	£225,000
Sub total			**£13,502,662**		**£9,227,662**	**£0**	**£0**	**£0**	**£5,438,157**	**-£8,064,505**	**-£3,789,505**
(E) COMMUNITY											
New community centre, South Cayton	Desirable	Capital	£1,650,000	100%	£1,650,000		£0	£0	£1,650,000	£0	£0
New community centre, Scalby	Desirable	Capital	£594,000	100%	£594,000	£0	£0	£0	£594,000	£0	£0
Sub total			**£2,244,000**		**£2,244,000**	**£0**	**£0**	**£0**	**£2,244,000**	**£0**	**£0**
(F) EMERGENCY SERVICES											
Police response base	Desirable	Capital	£360,000	100%	£360,000	£0	£0	£0	£0	-£360,000	-£360,000
3x local police stations	Desirable	Capital	£90,000	100%	£90,000	£0	£0	£0	£0	-£90,000	-£90,000
Ambulance	Desirable	Capital	£2,300,000	0%	£0	£0	£0	£0	£0	£0	£0
Sub total			**£2,750,000**		**£450,000**	**£0**	**£0**	**£0**	**£0**	**-£450,000**	**-£450,000**
(G) UTILITIES											

	Priority	Capital or revenue ?	Known **gross** cost (not specifically tailored to impact of attributable growth)	Borough impact proportion: % gross costs attributable to growth	Known infrastructure costs attributable to growth ("growth cost")	Funding via mainstream / public agency	Funding via utility companies	Known/ reasonably anticipated funding from other possible sources	Known/reasonably anticipated delivery of in-kind infrastructure through a proposed scheme/allocation	Known **Gross** costs after anticipated funding/delivery ("Gross cost funding gap")	Known **Growth** costs after anticipated funding ("Growth cost funding gap")
Electricity - new primary sub-station - South Scarborough	Necessary	Capital	£3,000,000	100%	£3,000,000	£0	£3,000,000	£0	£0	£0	£0
Gas	Necessary	Capital	Not known	100%	Not known	£0	All costs to developer / provider	All costs to developer / provider	£0	£0	£0
Waste water – new or upgrade of existing WwTW	Necessary	Capital	Not known	100%	Not known	£0	All costs to developer / provider	All costs to developer / provider	£0	£0	£0
Sub total			**£3,000,000**		**£3,000,000**	**£0**	**£3,000,000**	**£0**	**£0**	**£0**	**£0**
(H) WASTE											
Seamer Carr HWRC	Desirable	Capital	£450,000	100%	£450,000		£0	£0	£0	-£450,000	-£450,000
2x waste collection vehicles	Necessary	Capital	£360,000	100%	£360,000	£360,000	£0	£0	£0	-£0	-£0
Sub total			**£810,000**		**£810,000**	**£360,000**	**£0**	**£0**	**£0**	**-£450,000**	**-£450,000**
TOTAL ALL INFRASTRUCTURE			£64,594,809		£55,792,109	£360,000	£3,000,000	£1,319,000	£27,893,705	-£29,322,104	-£23,878,904

25 THE DELIVERY PLAN - SUMMARY OF INFRASTRUCTURE REQUIREMENTS, COSTS AND FUNDING

Introduction

25.1 In this section, the requirements, costs and funding of infrastructure are summarised providing a Delivery Plan. This Delivery Plan brings together the identified infrastructure and its purpose is to demonstrate that the growth proposed in the Local Plan can be adequately accommodated and the required infrastructure provided when needed. It should be recognised that this is very high level and much of the detail of actual delivery will be determined at the planning application stage. This will set out the infrastructure requirements overall and that related to growth. It will then consider them in relation to whether the infrastructure types are essential (be that 'critical' or 'necessary') or not ('desirable').

Analysing estimated infrastructure costs

Estimated "gross" infrastructure costs by category

25.2 The table below shows estimated infrastructure costs by category. The figures presented below are the "gross" infrastructure costs. These are not specifically tailored to the impact of growth, so some of these costs provide infrastructure with wider benefits to society as a whole.

25.3 Education is the largest single component of estimated infrastructure costs across the borough, with open space/sports representing the second highest cost. The third highest cost is transport. Categories listed as 'other' – including emergency services, utilities and waste – are less significant when seen in this context, and over this time period.

Table 25.1 Gross costs of infrastructure in Scarborough borough (£)

Infrastructure Category	Known 'gross' infrastructure costs
Education	£29,614,527
Open Space	£13,502,662
Transport	£7,609,688
Community	£2,244,000
Health	£5,063,932
Other	£6,560,000
Total	£64,594,809

Refining the "gross" infrastructure costs to get an "infrastructure cost of growth"

25.4 Above shows the "gross" infrastructure cost. This is useful, because it provides a broad picture of how much money will need to be spent on infrastructure in the Borough in the plan period.

25.5 However, the key statistic in planning terms is the cost of infrastructure required to support growth (rather than a total cost of the infrastructure in Scarborough Borough during the plan period).

25.6 There is a difference between these two numbers, because the need for infrastructure improvements (particularly transport infrastructure) cannot always be entirely ascribed to new growth.

25.7 To calculate the cost of infrastructure ascribable to growth, assumptions about the extent to which new infrastructure costs arise from growth alone have been made, and shared those costs pro-rata.

25.8 The difference between the gross cost and the more refined "cost of growth" number is not inconsequential and adds up to £8.8m. It is noted though that most infrastructure costs arise from the need to cope with growth.

Table 25.2 Infrastructure costs attributable to growth

Infrastructure Category	Known infrastructure costs attributable to growth
Education	£29,614,527
Open Space	£9,227,662
Transport	£6,950,188
Community	£2,244,000
Health	£3,495,732
Other	£4,260,000
Total	£55,792,109

Focusing on essential schemes reduces infrastructure costs

25.9 Infrastructure items should be classed as critical, necessary and desirable. Those classified in the critical or necessary categories are considered to be essential to allow growth to proceed.

25.10 The table below shows that if partners were to provide only those items considered to be essential in order for development to proceed, then costs would be reduced somewhat.

25.11 However, this is not to say that the items making up the 'other' category are not important. Essential items in this context represent items without which development could not be brought forward. Further infrastructure is likely to be required in order to generate a good quality, well planned place.

25.12 It should be noted that a zero figure (such as for community uses) simply means that none of the identified items were considered to be essential based on the assessment used in the study.

Table 25.3 Infrastructure costs for growth by priority

Infrastructure Category	'Essential' infrastructure costs for growth	% of total 'essential' costs (rounded)	'Other' category infrastructure costs for growth	% of total 'other' costs (rounded)
Transport	£6.95m	15.8%	£0	0%
Education	£29.61m	67.5%	£0	0%
Health	£3.5m	8%	£0	0%
Open Space	£0	0%	£9.23m	77.4%
Community	£0	0%	£2.24m	18.8%
Emergency services	£0	0%	£0.45m	3.8%
Utilities	£3m	6.8%	£0	0%
Waste	£0.81m	1.8%	£0	0%
Total	£43.87m		£11.92m	

Analysing estimated funding

Estimating mainstream funding, utilities funding and New Homes Bonus

25.13 The potential availability of mainstream public funding to pay for the infrastructure requirements resulting from the assumed growth was assessed as part of the initial Study. Service providers were interviewed, strategic documents assessed, and research undertaken to get an answer here.

25.14 Those results demonstrated that very little funding was expected at that time and, due to current public sector finances, this is not anticipated to change in the short term.

25.15 New Homes Bonus funding is an important funding source, however, it is unlikely this will be utilised for meeting the costs of the identified infrastructure requirements. This was explained earlier in the report.

25.16 Funding through S106 refers to that negotiated as an off-site contribution (existing) or what is reasonably expected to be provided on-site provision to mitigate the impacts of the development. For the purposes of this report such costings have only been attributed to the large and strategic sites where it is expected that infrastructure will be provided on-site as part of the wider development. Where this is the case, a financial figure has been attributed to the proposed solution using the appropriate costings of infrastructure (eg roads) or using the current formulae to calculate the equivalent cost (eg education or open space). The individual components of this were referred to in the corresponding chapters of the report.

25.17 Funding for utilities will generally be provided privately, either by the utilities company or the developer. Utilities costs are therefore assumed to net off with available funding. Utilities are covered on the following table, but only for completeness.

Table 25.4 Mainstream and utilities funding

Infrastructure Category	Funding via mainstream public / agency	Funding via utility companies	Funding through S106 (including on-site provision on large sites)	Potential funding from LEP/other
Transport	£0	£0	£6.14m	£1.32m
Education	£0	£0	£14.07m	£0
Health	£0	£0	£0	£0
Open Space	£0	£0	£5.44m	£0
Community	£0	£0	£2.1m	£0
Emergency services	£0	£0	£0	£0
Utilities	£0	£3.0m	£0	£0
Waste	£0.36m	£0	£0	£0
Total	£0.36m	£3.0m	£27.75m	£1.32m

Estimating developer contributions and In-Kind Provision (through Section 106) and CIL

25.18 Developer contributions make an important contribution to the funding of infrastructure, especially on mitigating the individual impacts of a large or strategic development. This was explained in section 4 and referred to throughout the report.

Putting costs and funding together

The headline figures on costs, funding and developer contributions are as follows.

Known infrastructure costs attributable to growth ("growth cost") of	-	£55.79m
Mainstream funding of	+	£0.36m
Utilities funding of	+	£3.0m
Potential LEP Funding	+	£1.32m
S106 In-Kind Infrastructure Provision (Financial Equivalent)	+	£27.89m
Leaves a funding gap of	-	£23.22m*

*Note: This figure does not fully correlate with the figure of -£23,878,904 in Table 24.1. This is due to potential LEP funding contributing to full costs as opposed to the 'growth cost'. If the

LEP contribution is tailored to actual growth (ie £660,000) this provides a truer reflection of the potential funding gap of circa £23.9m.

25.19 Whilst there appeared to be a large funding gap, it has been demonstrated that this is in actuality likely to be much smaller on the basis that:

- As the Plan proposes a number of very large sites, a significant proportion of the infrastructure will be delivered through the development of these sites as an integral part of the proposal (mitigating its own impacts);
- The link road connections (south of Cayton) should not require external funding (this is explained in the Transport Chapter).

26.20 It is therefore appropriate, as has been done in the table above, to ascribe a financial figure to infrastructure that is a direct result of the development, contained within that development site and will be delivered as a constituent part of the proposal. This has been referred to throughout the report and relates to the provision of, for example, primary schools on the Cayton, Middle Deepdale and Scalby sites or the provision of open space on these sites. To not make a financial allowance for the provision of such infrastructure and not reduce the resulting funding gap would actually result in a form of double counting and a substantial over-estimation of the monies required to address outstanding infrastructure requirements.

26.21 In addition to the above the impact of imposing a CIL charge can also be considered on addressing the funding gap.

Table 25.5 Possible CIL contributions (estimates)

Category	CIL
Possible estimate charge per sqm	£40
Average Home Size	90sq m
Number of Homes without Planning Permission (allocations)	Approx 6500
Assumed % of affordable housing	25% (1625 units)
Assumed reduction of homes in non-viable CIL location (unparished Scarborough)	Circa 400 units
Number of chargeable homes	4475
Total possible contribution	£16,110,000

26.22 Furthermore, as the plan runs until 2032, per annum funding appears much more manageable.

26.23 As referred to in Chapter 4 the Council is revisiting the introduction of a CIL charge. Subject to this proving to be viable, in general, across the Borough a Charging Schedule will be published and consulted upon in the short term to ensure the level set does not undermine the economic viability of the Local Plans aspirations. Prior to

the CIL Charging Schedule being adopted, (or if it proves to be unviable), S106 will remain the main mechanism for the delivery of on or off-site infrastructure to address the funding gap identified in this report in accordance with proposed Local Plan policy INF5.

26.24 Further detail in respect of the delivery of the individual infrastructure projects is shown in tabular form overleaf. This are sub-divided into Essential (Critical or Necessary) and Desirable infrastructure. The risk of the infrastructure not being delivered is rated from low to high; the table below explaining the definitions of these.

Importance to Delivery of Local Plan Growth	Definition
Critical	The infrastructure identified under this category must be delivered. Without it the development proposed cannot take place.
Necessary	The infrastructure identified under this category is required to support new development but the timing of its delivery is less critical.
Desirable	The infrastructure identified under this category will aid in the delivery of sustainable communities and provide beneficial environments for residents. Their timing (and in some cases delivery) is not necessarily critical to accommodate the growth planned.

Table 1: Critical Infrastructure Requirements (Development cannot proceed without this being addressed)

Infrastructure	Required When	Reasons	Delivery	Indicative Cost	Funding	Risk of not proceeding	Contingencies
Transport							
Scalby Road / Falsgrave Road Junction Mitigation		Critical upgrade to accommodate existing and future traffic growth	NYCC	£432,000	LEP	Medium	S106, CIL
Stepney Road / Stepney Drive		Critical upgrade to accommodate existing and future traffic growth	NYCC	£345,000	LEP	Medium	S106, CIL
Scalby Road / Manor Road		Critical upgrade to accommodate existing and future traffic growth	NYCC	£151,000	LEP	Medium	S106, CIL
Scalby Road / Stepney Drive		Critical upgrade to accommodate existing and future traffic growth	NYCC	£391,000	LEP	Medium	S106, CIL

Table 2: Necessary Infrastructure (The infrastructure is needed to support development but the exact delivery timing is less critical).

Infrastructure	Required When	Reasons	Delivery	Cost	Funding	Risk of not proceeding	Contingencies
Transport							
Cayton Link Road – connections to B1261 and Cayton Approach	At 'to be agreed stages' of the development of the south of Cayton allocation.	To enable the full development of the strategic growth site due to existing limitations of Cayton Low Road	Developer of Cayton or Plaxton Park	£6,139,688	Developer	Low	Not required. The development cannot progress beyond a yet to be determined point without the installation of the full link. There is also the option of LEP funding currently being investigated as this scheme has been identified as a priority in the LEP region.
Education							
Provision of additional capacity for Primary Years – Middle Deepdale and South of Cayton	Phased in accordance with sites being brought forward.	To ensure adequate school places are available aligned with increased population (children) arising from new development.	NYCC	£13,596,000	Developer Contributions (3 schools on-site) and S106	Low	Development phased to utilise existing capacity until sufficient funding or on-site provision delivered.
Provision of	Phased in	To ensure adequate school	NYCC	£883,740	Developer	Low	Development phased

additional capacity for Primary Years – Filey and Southern Villages	accordance with sites being brought forward.	places are available aligned with increased population (children) arising from new development.			Contributions		to utilise existing capacity until sufficient funding secured.
Provision of additional capacity for Primary Years – North Scalby, Central and Scarborough other	Phased in accordance with sites being brought forward.	To ensure adequate school places are available aligned with increased population (children) arising from new development.	NYCC	£3,575,748	Developer Contributions (1 school on-site) and S106	Low	Development phased to utilise existing capacity until sufficient funding secured.
Provision of additional capacity for Primary Years – Northern Villages	Land required for expansion of school prior to any development of housing in this location.	To ensure adequate school places are available aligned with increased population (children) arising from new development.	NYCC	£584,628	Developer Contributions (including provision of land for expansion)	Low	In respect of the additional land required there is no contingency. This is in the process of being resolved in line with a current planning application.
Provision of additional capacity for Primary Years – Whitby	Phased in accordance with sites being brought forward.	To ensure adequate school places are available aligned with increased population (children) arising from new development.	NYCC	£1,400,388	Developer Contributions	Low	Development phased to utilise existing capacity until sufficient funding secured.
Provision of additional	Phased in accordance with	To ensure adequate school places are available aligned	NYCC	£503,052	Developer Contributions	Low	Development phased to utilise existing

capacity for Primary Years – Western Villages	sites being brought forward.	with increased population (children) arising from new development.					capacity until sufficient funding secured.
Secondary - Middle Deepdale and South of Cayton	Phased in accordance with sites being brought forward.	To ensure adequate school places are available aligned with increased population (children) arising from new development.	NYCC	£9,070,971	Developer Contributions	Low	Development phased to utilise existing capacity until sufficient funding secured.
Health							
Provision of additional capacity for health (GP Surgeries)	Phased in accordance with sites coming forward	To ensure adequate support for increased pressure on the primary health care service.	CCH and GP Surgeries	£3,495,732	Developer Contributions, CCG	Low to Medium	Alternative sources of funding to be explored by service providers.
Utilities							
New Electricity Sub-Station (South Scarborough)	Phased in accordance with sites being brought forward.	Necessary infrastructure to support development of sites in the south of the Local Plan area.	CE-Electric (NEDL)	£3,000,000	CE-Electric (NEDL). May be a contribution from developer.	Low	Phased release of sites to utilise existing capacity in electricity supply.
Gas Supply reinforcement	Phased in accordance with sites being brought forward.	Necessary infrastructure to support development of sites in the Local Plan area	Norther Gas Networks	Unknown	Norther Gas Networks. May be a contribution from developer.	Low	Phased release of sites to utilise existing capacity in gas supply.
Possible new or expanded Waste Water Treatment	Phased in accordance with sites being	Necessary infrastructure to support development of sites in the Local Plan area	Yorkshire Water	Unknown	Yorkshire Water. May be a contribution from	Low	Phasing release of sites to fully utilise existing WWTW capacity.

Works	brought forward.				developer depending on timing of development in relation to AMP.		Additional WWTW capacity only undertaken if shown to be required
2 x Waste Collection Vehicles	1 vehicle required in short term. Further vehicle in accordance with sites being brought forward.	Necessary to support additional waste from new development in the Borough.	Scarborough Borough Council	£360,000	Scarborough Borough Council	Medium	Fully utilise existing capacity. No other contingency.

Table 3: Desirable Infrastructure (The delivery of this infrastructure is important to support the development of sustainable communities but it is not critical)

Infrastructure	Required When	Reasons	Delivery	Indicative Cost	Funding	Risk of not proceeding	Contingencies
Transport							
Dunslow Road / A64 junction improvements	Unknown and dependent on future assessments of developments impact on capacity.	A left turn filter lane may be required to ease capacity of this junction due to the proposed growth in the south of the town.	NYCC/Highways England/Developer	£151,000	Developer Contribution	Medium	None (the junction would operate approaching or above capacity).
Open Space & Leisure							

Provision of and investment into Urban Parks	Phased in accordance with sites being brought forward.	To improve access to areas of open space and recreation for new and existing developments.	Developer/SBC	£2,066,303	Developer Contribution (3 or 4 provided on-site and off-site contributions	Low	None
Provision of amenity green space	Phased in accordance with sites being brought forward.	To improve the quality of residential developments and provide immediate access to open space / recreational space.	Developer	£312,149	Developer (provided on site)	Low	None
Provision of Outdoor Sports Facilities	Phased in accordance with sites being brought forward.	To improve access to sports facilities.	Developer/SBC/Local Sports Partnerships	£2,415,400	Developer Contribution (either on-site on large / strategic allocations and off-site contributions)	Low	None
Provision of Equipped Areas of Play	Phased in accordance with sites being brought forward.	To improve access to play facilities for children.	Developer/SBC	£4,208,810	Developer Contribution (either on-site provision or off-site contributions)	Low	None

APPENDIX 1

HOUSING TRAJECTORIES

	To Date	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	TOTAL
Housing Allocations																		
HA1 Land off Springhill Lane, Scarborough																20	20	40
HA2 Westwood Campus Site, Valley Bridge, Scarborough							25	25										50
HA3 101 Prospect Mount Road, Scarborogh					30													30
HA4 Land at Yorkshire Coast College, Lady Edith's Drive, Scarborough									30	30	30	30	20					140
HA5 Land off Lady Edith's Drive, Newby			24	20	10	6												60
HA6 Land to east of Lancaster Park, Scalby				20	50	70	70	70	70	70	70	70	70	70	70	70	60	900
HA7 Land north of Middle Deepdale (east of Deep Dale Valley), Eastfield								25	90	90	90	90	90	75	50			600
HA8 Land to west of Middle Deepdale, Eastfield							60	25	15									100
HA9 Land north of Middle Deepdale (west of Deep Dale Valley), Eastfield									75	90	90	90	90	65				500
HA10 Braeburn House, Moor Lane, Eastfield			30															30
HA11 Land to west of Church Lane, Cayton **Allocation for 40. Initial schemes drawn up for 47 and latest for 75.*					20	20												40
HA12 Land to east of Church Lane, Cayton						20	30	30										80
HA13 Land to south of Cayton **Scheme is predicted to come forward with 1725 dwellings within Plan period, and 775 dwellings beyond 2031/32.*																		
- HA13 - Phase 1 (A)					50	50	50	50	50	50	25							325
- HA13 - Phase 1 (B)						25	50	50	50	50	50							275
- HA13 - Phase 1 (C)								50	50	50	50							200
- HA13 - Phase 2 (A)											25	50	50	50	50	25		250
- HA13 - Phase 2 (B)												50	50	50	50	50	50	300
- HA13 - Phase 2 (C)												50	50	50	50	50	50	300
- HA13 - Phase 3 (A)																25	50	75
- HA13 - Phase 3 (B)																		
- HA13 - Phase 3 (C)																		
HA14 Land off Rimington Way, Osgodby				30	30	30												90
HA15 Land off Stakesby Road, Whitby						40	40											80
HA16 Land between West Thorpe and The Nurseries, Whitby					10													10
HA17 Land opposite Whitby Business Park and to the south of Eskdale Park, Whitby								20	40	40	40	40	40	40	40	20		320
HA18 Land adjacent Captain Cook Crescent, Whitby			20	20														40
HA19 Residential Care Home, 1 Larpool Lane, Whitby							20											20
HA20 Land to the south of Upper Bauldbyes, Prospect Hill, Whitby				30	20													50
HA21 Land at Whitby Golf Club (East), Whitby						30	30											60
HA22 Land to north of Scarborough Road, Filey						20	20	20										60
HA23 Land off Church Cliff Drive, Filey					15	15												30
HA24 Silver Birches, Station Avenue, Filey							30											30
HA25 Land off Outgaits Lane, Hunmanby					15	30	15											60
HA26 Land off Sands Lane, Hunmanby			15	30	15													60

	To Date	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	TOTAL
HA27 Land between Stonegate and Sheepdyke Lane, Hunmanby												10	10					20
HA28 Land to west of Napier Crescent, Seamer					20	20	20											60
HA29 Land to north and east of The Nurseries, East Ayton										20	20							40
HA30 Land to south of Racecourse Road, West Ayton			20	20	20	20	20											100
HA32 Land to west of The Grange, High Street, Burniston						20	20	20										60
HA33 Land to north of Limestone Road, Burniston				20	20													40
HA34 Land to south of Limestone Road, Burniston																20	20	40
Planning Permissions																		5565
High Mill Farm, Station Road, Scalby (Phase 1) *43 completions to date.		40	40	25														105
High Mill Farm, Station Road, Scalby (Future Phases)				15	40	40	40	40	40	40	40	40	32					367
Former Scarborough Rugby Union Football Club, Scalby Road, Scalby				59	24													83
Land at Danes Dyke, Newby				10														10
35 Trinity Road, Scarborough						14												14
Edgehill, Seamer Road, Scarborough		30	30															60
St Thomas Hospital, Foreshore Road, Scarborough						12												12
Carlton Hotel, Belmont Road, Scarborough		10																10
'Atlantis', Peasholm Gap, Scarborough						24												24
Former McCain Stadium Football Ground, Seamer Road, Scarborough			20	25														45
17-23 Aberdeen Walk (Former Evening News Office), Scarborough		14																14
Salisbury Arcade, Huntriss Row, Scarborough				6	16													22
Middle Deepdale (East), Eastfield		125	75	75	75	75	75	57										557
Middle Deepdale (West), Eastfield		90	90	90	90	90	90	85										625
Burnside Resource Centre, 1 Burnside, Eastfield		10																10
West Garth, Cayton		20																20
Land at Eskdale Park, Whitby		40	40	23														103
Land off Highfield Road, Whitby			20	20														40
Land off Helredale Gardens and St Peters Road, Whitby		48	33															81
Sneaton Castle Farm, Castle Road, Whitby			30	50	60	50	40	16										246
Muston Road, Filey		30	30	30	27													117
Land to the west of Farside Road, West Ayton			25	25	21													71
Scarborough Road / Pasture Lane, Seamer					15	15												30
Electricity Building, Filey Road, Gristhorpe			15	15	15													45
All Other Planning Permissions (less than 10 units)		90	80	70	29													269
Known Sources of Housing																		
Holbeck Hill, South Cliff, Scarborough			22															22
Bramcote School, Filey Road, Scarborough					54													54

	To Date	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	TOTAL
Filey Road Sports Centre, Scarborough						20	20											40
Brooklands Hotel, Esplanade Gardens, Scarborough		5	5	12														22
Newby Farm Road / Danes Dyke, Scalby			42															42
Electricity Building, Filey Road, Gristhorpe (Phase 2)						15	15	10										40
Filey Tennis Courts, Southdene, Filey			15	15														30
Town Farm, High Street, Cloughton			12	12														24
Argyle Garage, Argyle Road, Whitby			14															14
Whitby Hospital Site, Whitby					60													60
Completions																		
Completions To Date (2011/12 – 2015/16)	1435																	1435
TOTAL (exc. Windfall)	**1435**	**552**	**747**	**767**	**851**	**771**	**780**	**593**	**510**	**530**	**530**	**520**	**502**	**400**	**310**	**280**	**250**	**10328**

APPENDIX 2

AREAS SERVED BY NEDL ELECTRICITY SUB-STATIONS

Figure A2.1 -Area supplied by Scarborough Primary Substation (light red)

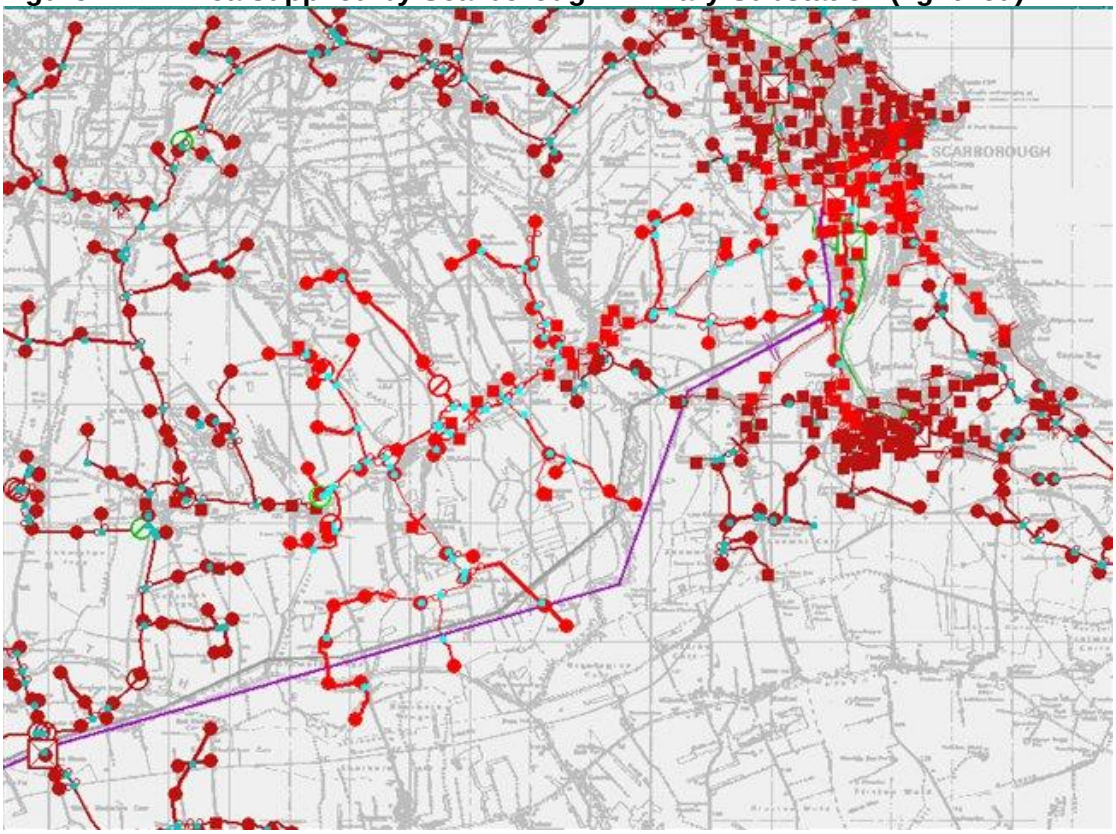


Figure A2.2 - Area Supplied by North Street Primary Substation (light red)

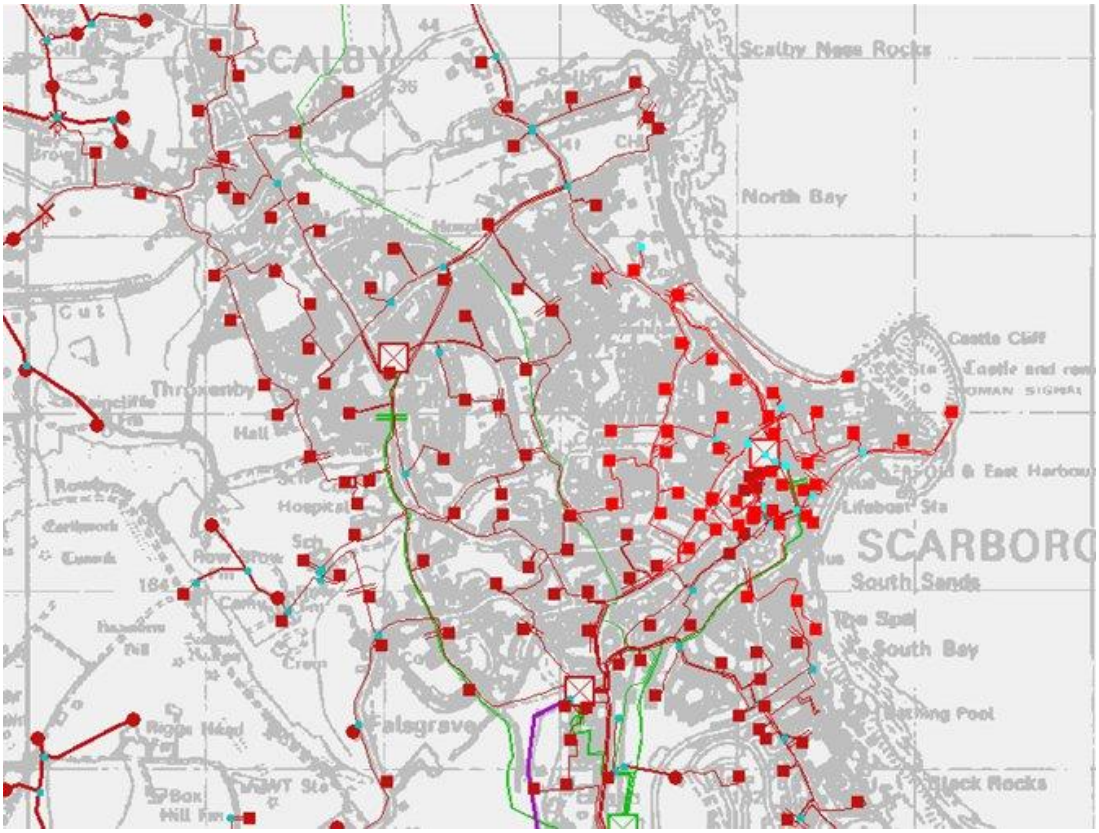


Figure A2.3 - Area Supplied by Ravenscar Primary Substation (light red)

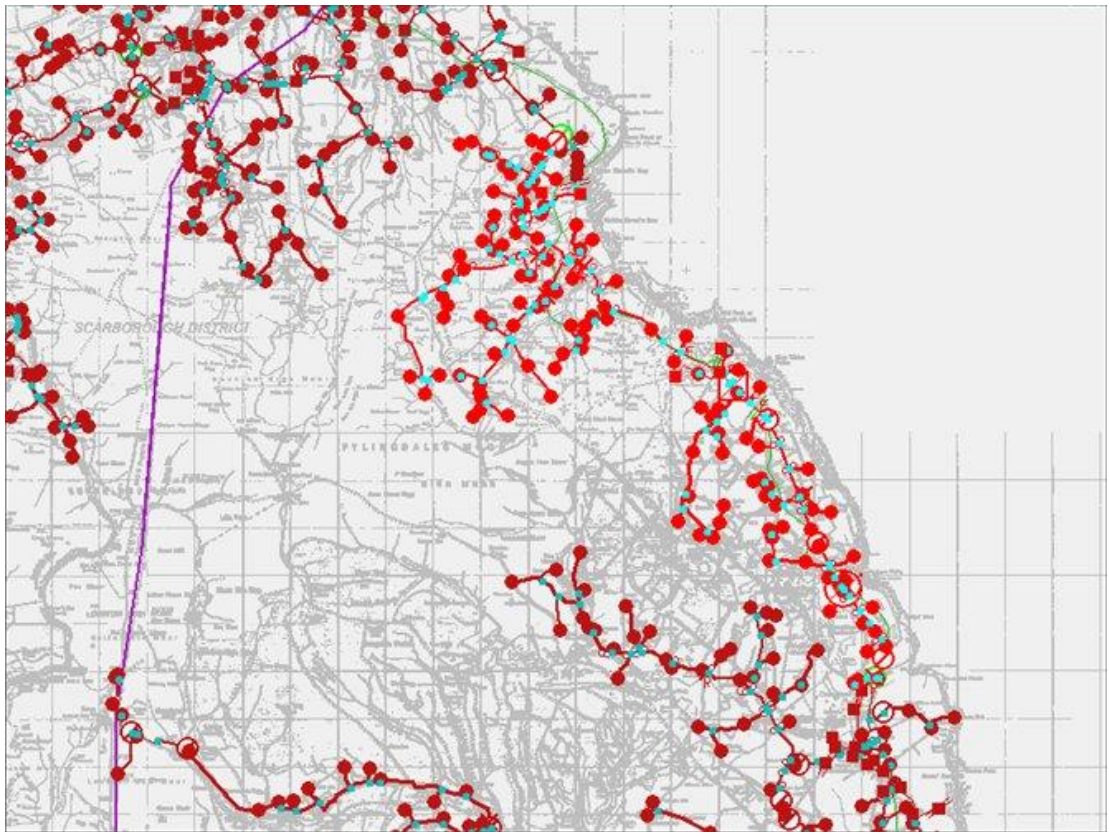


Figure A2.4 - Area supplied by Whitby Primary Substation (light red)

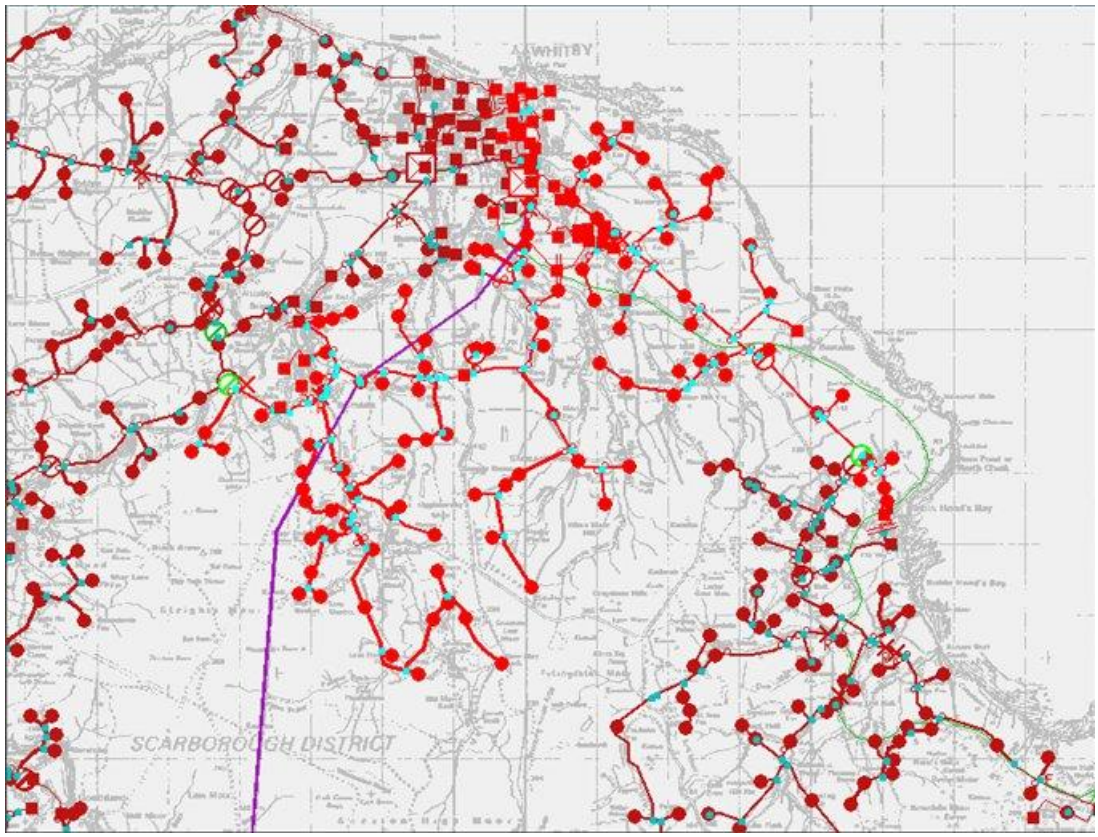


Figure A2.5 - Area Supplied by Whitby West Primary Substation (light red)

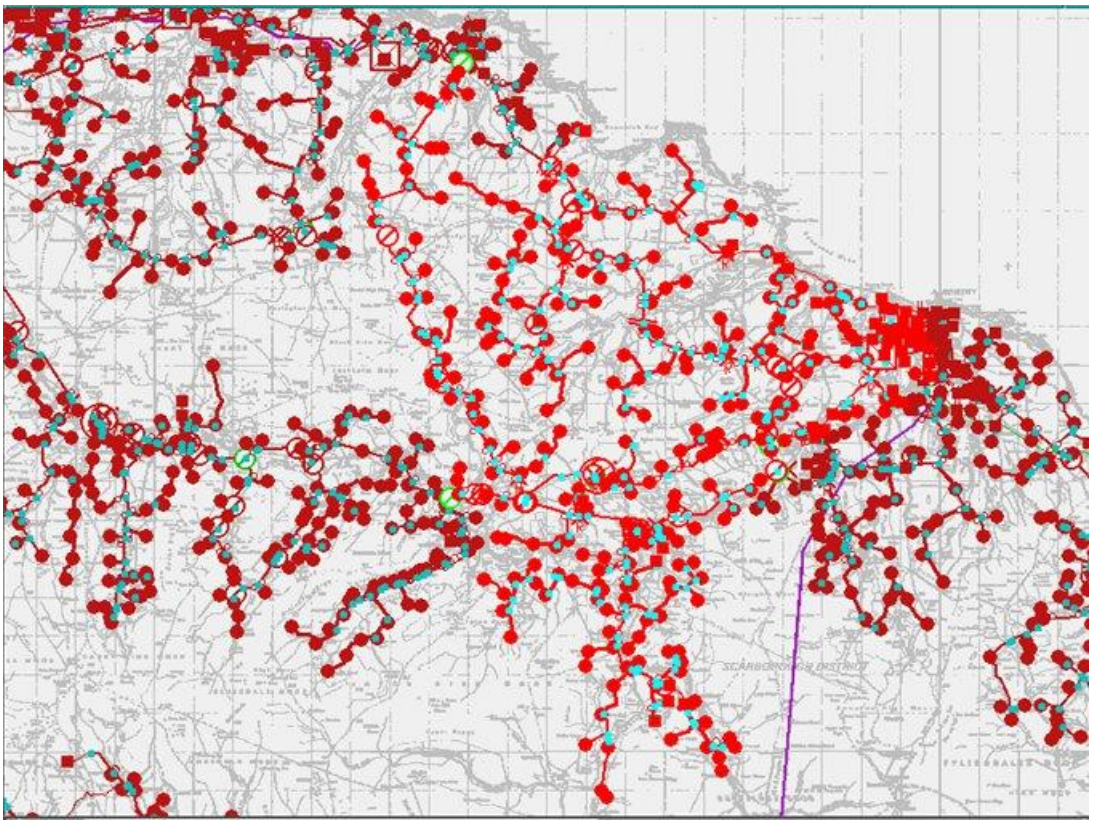


Figure A2.6 - Area supplied by Newby Primary substation (light red)

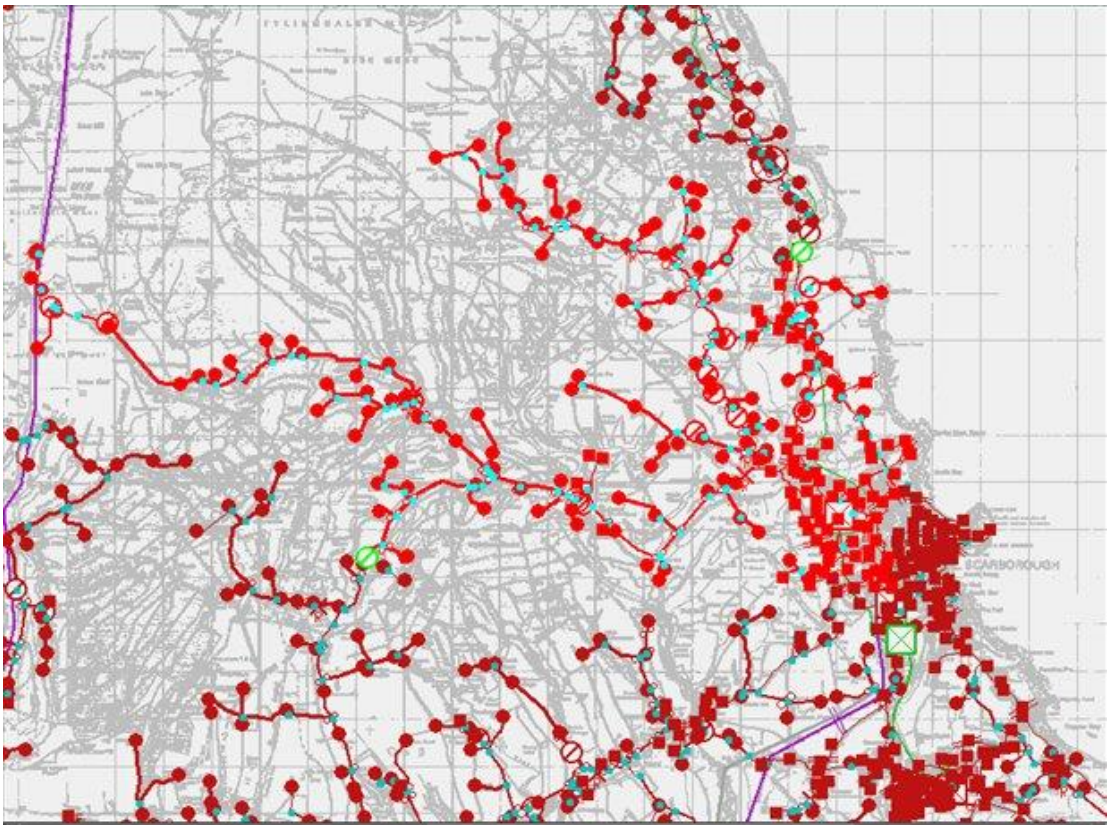
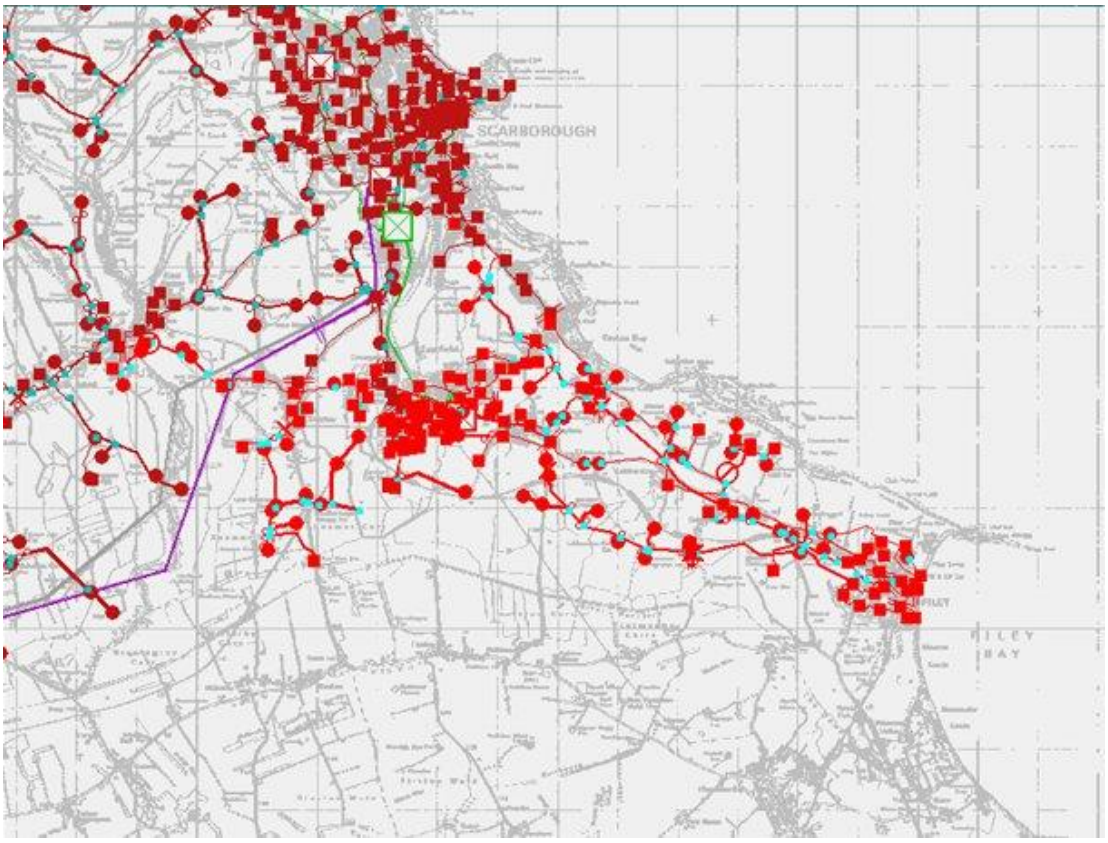


Figure A2.7 - Area supplied by Eastfield primary substation



APPENDIX 3

AREAS SERVED BY YEDL ELECTRICITY SUB-STATIONS

Figure A3.1 - Area supplied by Hunmanby primary substation

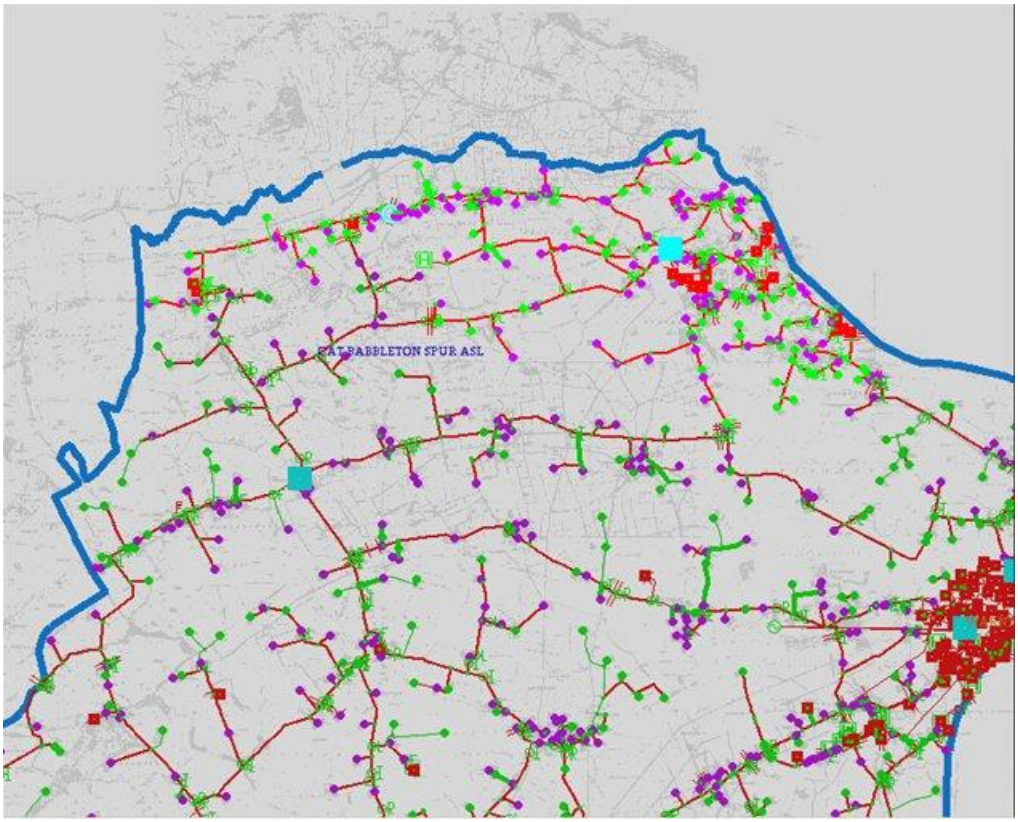
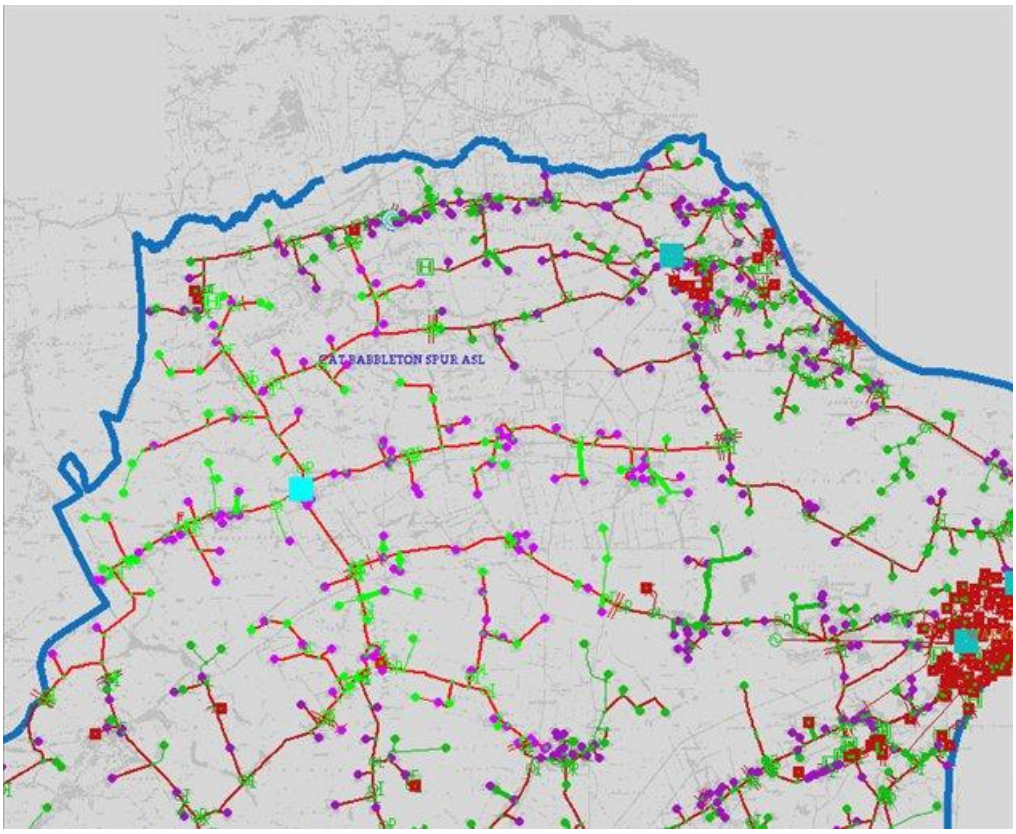


Figure A3.2 - Area supplied by Butterwick primary substation



Appendix 4 – Breakdown of Link Road Costs

Link Road - East					
	Cost Jan 2011	Cost*	Per Unit	Length/Area/No	Budget Costing
New 7.3m road	£1,460	£1,658	Lin m	380	£629,904
Additional minor earthworks	£45	£51	m3	300	£15,328
Major Structures (1)	£100,000	£113,537	no	1	£113,537
Minor Structures (2)	£15,000	£17,031	no	2	£34,061
Landscaping/Boundary/Environmental Treatments	£15,000	£17,031	per 100m	3.8	£64,716
Network Junctions	£150,000	£170,306	jct	0	£0
Side Road Junctions	£75,000	£85,153	jct	1	£85,153
Track	£25,000	£28,384	jct	0	£0
Sub Total					£942,699
Utility Diversions		5%			£47,135
Preliminaries		15%			£141,405
Sub Total					£1,131,238
Design and Supervision		18%			£203,623
Contingency		20%			£226,248
Total					£1,561,109
				Plus Optimism Bias (44%)	£686,888
				Total	£2,247,997

Link Road - East (Raised 80%)					
	Cost Jan 2011	Cost*	Per Unit	Length/Area/No	Budget Costing
New 7.3m road	£2,360	£2,679	Lin m	380	£1,018,201
Major Structures	£100,000	£113,537	no	2	£227,074
Minor Structures	£15,000	£17,031	no	4	£68,122
Landscaping/Boundary/Environmental Treatments	£15,000	£17,031	per 100m	3.8	£64,716
Network Junctions	£150,000	£170,306	jct	0	£0
Side Road Junctions	£75,000	£85,153	jct	1	£85,153
Track	£25,000	£28,384	jct	0	£0
Sub Total					£1,463,266
Utility Diversions		5%			£73,163
Preliminaries		15%			£219,490
Sub Total					£1,755,920
Design and Supervision		18%			£316,066
Contingency		20%			£351,184
Total					£2,423,169
				Plus Optimism Bias (44%)	£1,066,194
				Total	£3,489,364

* Cost has been estimated using figures in PBA Report of January 2011 and applying RPI to Feb 2016. RPI change is 229.0 to 260

Area of minor earthworks calculated using a pro rata from PBA Report.

(1) Major - In respect of this proposal, it is considered that the remodelling of the junction with the B1261 with either a roundabout or modified junction would fall under the 'major' category.

(2) Minor - Signage on approach to junctions with B1261 and the development site.

Link Road - West					
	Cost Jan 2011	Cost*	Per Unit	Length/Area/No	Budget Costing
New 7.3m road	£1,460	£1,658	Lin m	390	£646,480
Additional minor earthworks	£45	£51	m3	306	£15,634
Major Structures (3)	£100,000	£113,537	no	0	£0
Minor Structures (4)	£15,000	£17,031	no	0	£0
Landscaping/Boundary/Environmental Treatments	£15,000	£17,031	per 100m	3.9	£66,419
Network Junctions	£150,000	£170,306	jct	0	£0
Side Road Junctions	£75,000	£85,153	jct	0	£0
Track	£25,000	£28,384	jct	0	£0
Sub Total					£728,534
Utility Diversions		5%			£36,427
Preliminaries		15%			£109,280
Sub Total					£874,240
Design and Supervision		18%			£157,363
Contingency		20%			£174,848
Total					£1,206,452
				Plus Optimism Bias (44%)	£530,839
				Total	£1,737,290

Link Road - West (Raised 80%)					
	Cost Jan 2011	Cost*	Per Unit	Length/Area/No	Budget Costing
New 7.3m road	£2,360	£2,679	Lin m	390	£1,044,996
Major Structures	£100,000	£113,537	no	0	£0
Minor Structures	£15,000	£17,031	no	0	£0
Landscaping/Boundary/Environmental Treatments	£15,000	£17,031	per 100m	3.9	£66,419
Network Junctions	£150,000	£170,306	jct	0	£0
Side Road Junctions	£75,000	£85,153	jct	0	£0
Track	£25,000	£28,384	jct	0	£0
Sub Total					£1,111,415
Utility Diversions		5%			£55,571
Preliminaries		15%			£166,712
Sub Total					£1,333,698
Design and Supervision		18%			£240,066
Contingency		20%			£266,740
Total					£1,840,503
				Plus Optimism Bias (44%)	£809,821
				Total	£2,650,324

* Cost has been estimated using figures in PBA Report of January 2011 and applying RPI to Feb 2016. RPI change is 229.0 to 260

Area of minor earthworks calculated using a pro rata from PBA Report.

(3)&(4) Not considered to be any major or minor structures. This is a continuation of Cayton Approach and any associated structures would be within the actual housing development site and therefore delivered as part of that scheme.

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