

Infrastructure Delivery Plan

Background Paper



Addendum September 2017

Introduction

1. This document is an addendum to the Infrastructure Delivery Plan Addendum October 2016 (**LPD/RRO/15**) and should be read in conjunction with it. The purpose of this second addendum is to assess the broad infrastructure requirements of the additional sites proposed for allocation in September 2017. The Site Selection Document Addendum 2 sets out how these additional sites have been selected which involved a reconsideration of the reasonable alternative sites previously assessed as part of the site selection process. The additional sites proposed for allocation are as follows:
 - Site X1 Daybrook Laundry;
 - Site X2 West of A60 (A);
 - Site X3 West of A60 (B);
 - Site X4 Flatts Lane;
 - Site X5 Kighill Lane (A); and
 - Site X6 Kighill Lane (B).
2. The IDP October 2016 assessed all of the reasonable alternative sites. In some cases the proposed additional sites are made up of combinations of the individual sites previously assessed. The following table shows the makeup of the proposed allocations:

SHLAA site	Number of dwellings allocated	Contribution to Five Year Land Supply	Name of housing allocation
6/479 (Metallifature)	72 dwellings	72 dwellings	West of A60 (A)
6/477 (Daybrook Laundry)	49 dwellings	49 dwellings	Daybrook Laundry
6/778 (Land to the west of the A60 Redhill)	150 dwellings	100 dwellings	West of A60 (B)
6/37 (Long Acre Lodge) 6/35 (Mansfield Lane (Flatts Hill), Calverton	185 dwellings	120 dwellings	Flatts Lane, Calverton
6/669 Kighill Lane (18) 6/841 Land at Kighill Lane 6/166 22 Kighill Lane, Ravenshead (8 dwellings)	20 dwellings	20 dwellings	Kighill Lane, Ravenshead (A)
6/843 26 Kighill Lane, site 2 (site rear of) 6/845 28 Kighill Lane, 6/1046 30 Kighill Lane.	30 dwellings	30 dwellings	Kighill Lane, Ravenshead (B)

3. The two sites to the west of the A60 (A and B) are assessed separately but as they adjoin one another with a common access they have also been assessed in combination. The broad assessment for the additional sites is set out in **Appendix 1**. Where appropriate consideration has also been given as to whether there are any in combination effects with the existing proposed 24 housing allocations set out in the Local Planning Document Publication draft. Maps of the additional sites are set out in **Appendix 2**
4. The viability of the proposed allocations has also been tested using the Plan Wide Viability Assessment (**LPD/HOU/08**). The summary of main findings is set out in the section on site viability below.
5. Certain sites namely site X1, Daybrook Laundry and X3 West of the A60 (Site B) have been subject to pre-application discussions with the latter site also subject of a planning application.

Additional Housing Allocations: individual Sites Assessment

Highways

6. The reasonable alternative sites have been assessed to consider whether satisfactory access to the site can be gained from the local highway network and whether any access constraints could be overcome through mitigation work including in particular for any off site highway works that would add significantly to development costs. The assessment is based on the 6Cs Design Guide which sets out assumptions about the number of access points and minimum width of access road depending upon the scale of development and the visibility splays required at the access points governed by approaching vehicle speed. This assessment is for the purposes of plan making only; detailed proposals submitted as part of future planning applications will be determined against the standards in place at that time and subject to a site visit and assessment. The conclusions from the assessment are included within the site schedules in **Appendix 1**.
7. The assessment for the additional proposed allocations indicates that satisfactory access can be achieved for all sites. This includes consideration of the sites West of the A60 A and B in combination where satisfactory access to site B can be delivered through site A and both sites in combination can in principle be satisfactorily served from the A60.

Flood Risk

8. None of the additional allocations are at risk of flooding or could if developed significantly increase the risk of flooding elsewhere. The Daybrook Laundry site adjoins the A60 which is a known flood route for surface water after a severe rainfall event. Whilst this is a particular consideration for the Daybrook Laundry site, all sites are expected to achieve sustainable drainage solutions.

Utilities

9. No specific requirements are identified for any of the additional proposed allocations.

Education

10. Nottinghamshire County Council is the Local Education Authority (LEA) and has assessed capacity against current pupil projections. In general the LEA is seeking contributions from the allocated housing sites towards both primary and secondary education. The LEA applies the following formula to calculate the likely contributions sought:

Provision	Places generated	Cost per place £
Primary school	16 per 100 homes	11455
Secondary school	22 per 100 homes	17260

11. The above formula has been applied to the additional proposed site allocations and estimates of the likely contributions sought are set out in the schedules in **Appendix 1** to be subject of more detailed Section 106 discussions.

Health

12. It is anticipated that development likely to give rise to additional demand for GP services in the above locations will be expected to make financial contributions to primary health care. On average the financial contribution to primary health care is costed at £551 per dwelling and estimates are set out in the schedules. This will be considered on a case by case basis as detailed proposals emerge.

Emergency services

13. No particular requirements are identified for any specific site.

Additional Housing Allocations: Cumulative Assessment

Arnold

14. The two Arnold sites West of A60 A and B have been considered for cumulative impacts on infrastructure and local services. In terms of Highways a satisfactory access can be provided for the overall level of development with

further details to be determined at the detailed planning application stage and preparation of a transport assessment and travel plan.

15. In terms of education and health it is likely that the two sites would be expected to make significant developer contributions to both the costs of extra school places and primary health care.

Calverton

16. Consideration has been given to the cumulative impact of the site X4 (60 homes) being allocated to the north west of Calverton in a location identified for growth including the H16 allocation at Park Road (390 homes). In terms of highways the overall levels of growth envisaged for Calverton in the Aligned Core Strategy have been tested and indicate growth can be delivered without detrimental effect on the highway network. The Flatts Lane site can be satisfactorily accessed from the southern part of Flatts Lane which leads onto Park Road to the south. Further consideration of any necessary highways mitigation together with a travel plan and contributions to public transport can be addressed at the detailed planning application stage and detailed transport assessment.
17. It is anticipated that the extra school places both primary and secondary will require funding through developer contributions as will improvement to local primary care health facilities.

Ravenshead

18. Developer contributions are likely to be required towards additional school places both primary and secondary. Further consideration of any necessary highways mitigation together with a travel plan and contributions to public transport can be addressed at the detailed planning application stage and detailed transport statement.

Plan Wide Viability

19. Gedling Borough Council commissioned AMK Group to consider the broad deliverability of the Local Planning Document taking into account the likely costs of development and the cumulative impacts of Local Plan policy requirements on viability.

20. The Plan Wide Viability assessment is available on the Borough Council's Website¹ and takes into account the cost impacts of the policies proposed in the Local Planning Document and includes a number of assumptions:
- Allowance for S106 contributions and CIL;
 - That affordable homes targets are met in full;
 - Inclusion of abnormal costs where identified for example flood defence works assumed at £25,000 per hectare; and
 - Developer profit is set high at 20% to give flexibility.
21. The study is a strategic assessment of whole plan viability and is not intended to represent a detailed viability assessment of every individual site. It applies generic costs in terms of affordable housing, planning policy costs, impacts and mitigation factors and it is acknowledged that more detailed mitigation and viability information may be required at the planning application stage. It should be noted that in some cases the site areas used for the Plan Wide Viability assessment varies slightly from the corresponding site allocation but this does not affect any of the viability results.

Main Findings

- The West of A60 sites A and B were assessed in combination and whilst viability was marginal in the short 0-5 term, over the medium term (6-10 years) the site was assessed as viable. It is important to note that a cautious approach was taken in assessing this site as the site was assessed as wholly brownfield given that part of the site was previously in employment use as a worst case scenario. The site is subject a planning application which suggests viability is not a concern and indicates the site will be built quickly.
- Daybrook Laundry was assessed as viable although it was assumed the site would come forward in the 5 – 10 year period. The proposed allocation is anticipated to commence earlier in the plan period which may mean the site is more marginal in viability terms.
- The Flatts Lane site (6/35) was assessed for 130 homes and assessed as viable. It is reasonable to assume that the smaller site is viable.
- The sites which make up Kighill Lane were not tested specifically but the nearby allocations H17, H18 and H19 were all assessed and considered viable. The proposed additional allocations X5 A and X6 B are in the same broad location as H17, 18 and 19 and are of a similar nature and in a strong sub housing market area. It is considered reasonable to assume that the viability of site X5 A and X6 B would be similarly positive.

Conclusions

22. None of the additional sites proposed for allocation either individually or in combination raise insurmountable or abnormal infrastructural issues and no “show stoppers” or abnormal costs have been identified. In this context the overall conclusions reached in the original IDP October 2017 remain the same.
23. The IDP considers the Local Planning Document to be deliverable although further work principally through discussions with service providers will be required for all sites at the planning application stage where a more detailed consideration of site viability, the scope and scale of contributions to service and affordable housing can be carried out.

Appendix 1: Additional Allocated Sites: Infrastructure Requirements

Urban Area

X1 Daybrook Laundry

Site summary

Timescale	Commence within 5 years
Site area	1.72 ha
Housing units	50
Affordable housing	20%
Ownership/developer	Proactive owner/developer

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	As a brownfield site previously in employment use there is potential contamination.	Ground condition survey required as part of planning application process.
Education	10 primary school places - £114,600 8 secondary school places - £138,100	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.

Emergency services	No requirements identified.	
Flood risk	The site is not within Flood Zone 2 or 3. The adjacent A60 is prone to surface water flooding and the development will need to ensure that it does not worsen the risk of increasing surface water flood risk elsewhere.	Further discussion with the LLFA as part of the planning application process.
Health	Based on the multiplier of £551 per dwelling cost estimate is £27,550.	Further discussion with CCG as part of planning application process.
Green Infrastructure Open space	10% of site area (0.17 ha) or contribution off site.	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	The signalised junction to the A60 constructed as part of the food store development on part of the Daybrook Laundry site was constructed to allow additional development on site. Access is considered appropriate for scale of development proposed.	Transport statement required. Travel Plan and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Within Air Quality Management Area.	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

X2 West of A60 (Site A)

Site summary

Timescale	Commence within 5 years
Site area	1.33
Housing units	72
Affordable housing	20%
Ownership/developer	Proactive owner/developer

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	As a brownfield site previously in employment use there is potential contamination.	Ground condition survey required as part of planning application process.
Education	15 primary school places - £171,800 12 secondary school places - £207,100	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.
Emergency services	No requirements identified.	
Flood risk	No significant issues identified	

Health	Based on the multiplier of £551 per dwelling cost estimate is £39,700.	Further discussion with CCG as part of planning application process.
Green Infrastructure Open space	10% of site area (0.13 ha).	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	The site has had outline planning permission in the past (2011/1055). Detail of access to be provided but considered no issues given previous use of site; access is sufficiently wide enough for scale of development. Consideration should be given to the need for a signalised junction given speed of level of traffic on Mansfield Rd.	Transport assessment and travel plan required. Highway mitigation and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Close to the AQMA	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

X3 West of A60 (Site B)

Site summary

Timescale	Commence within 5 years
Site area	8.07 ha
Housing units	150
Affordable housing	20%
Ownership/developer	Proactive owner/developer

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	Greenfield site	Phase 1 (desk top land contamination assessment (including a site walkover).
Education	33 primary school places - £378,000 24 secondary school places - £414,240	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.
Emergency services	No requirements identified.	
Flood risk	No significant issues identified	
Health	Based on the multiplier of £551 per dwelling cost estimate is £82,650.	Further discussion with CCG as part of planning application process.

Green Infrastructure Open space	10% of site area (0.8 ha).	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	Information has been submitted by the applicant and reviewed by County Highways. It is considered that satisfactory access can be achieved to the site subject to the provision of a signalised junction and supporting information required via the planning application.	Transport assessment and travel plan required. Highway mitigation and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Assessment in line with proposed LPD 11- Borough Council's Air Quality and Emissions Mitigation Guidance.	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

Key settlement: Calverton

X4 Flatts Lane, Calverton

Site summary

Timescale	Commence within 5 years
Site area	2.37 ha
Housing units	60
Affordable housing	20%
Ownership/developer	Proactive owner/developer

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	Greenfield site	Phase 1 (desk top land contamination assessment (including a site walkover).
Education	13 primary school places - £ 148,900 10 secondary school places - £172,600	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.
Emergency services	No requirements identified.	
Flood risk	No significant issues identified	

Health	Based on the multiplier of £551 per dwelling cost estimate is £101,900.	Further discussion with CCG as part of planning application process.
Green Infrastructure Open space	10% of site area (0.23 ha).	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions. Northern part of the site to be kept open.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	Access to the site can be achieved at the southernmost junction of Flatts Lane and James Drive subject to the provision of a footway long the western side of Flatts Lane and, potentially, the widening of the road which is narrow and is used for parking.	Transport assessment and travel plan required. Highway mitigation and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Assessment in line with proposed LPD 11- Borough Council's Air Quality and Emissions Mitigation Guidance.	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

Key Settlement

Ravenshead

X5 A Kighill Lane

Site summary

Timescale	Commence within 5 years
Site area	1.24 ha
Housing units	20
Affordable housing	30%
Ownership/developer	Proactive owners

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	Greenfield site - garden land. Some existing residential properties.	Phase 1 (desk top land contamination assessment (including a site walkover).
Education	4 primary school places - £45,800 3 secondary school places - £51,800	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.

Emergency services	No requirements identified.	
Flood risk	No significant issues identified	
Health	Based on the multiplier of £551 per dwelling cost estimate is £11,000	Further discussion with CCG as part of planning application process.
Green Infrastructure Open space	10% of site area (0.13 ha).	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	Access from Kighill Lane likely to be satisfactory if existing grass verge incorporated to form pavement along frontage.	Transport statement required. Highway mitigation and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Assessment in line with proposed LPD 11- Borough Council's Air Quality and Emissions Mitigation Guidance.	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

X6 B Kighill Lane

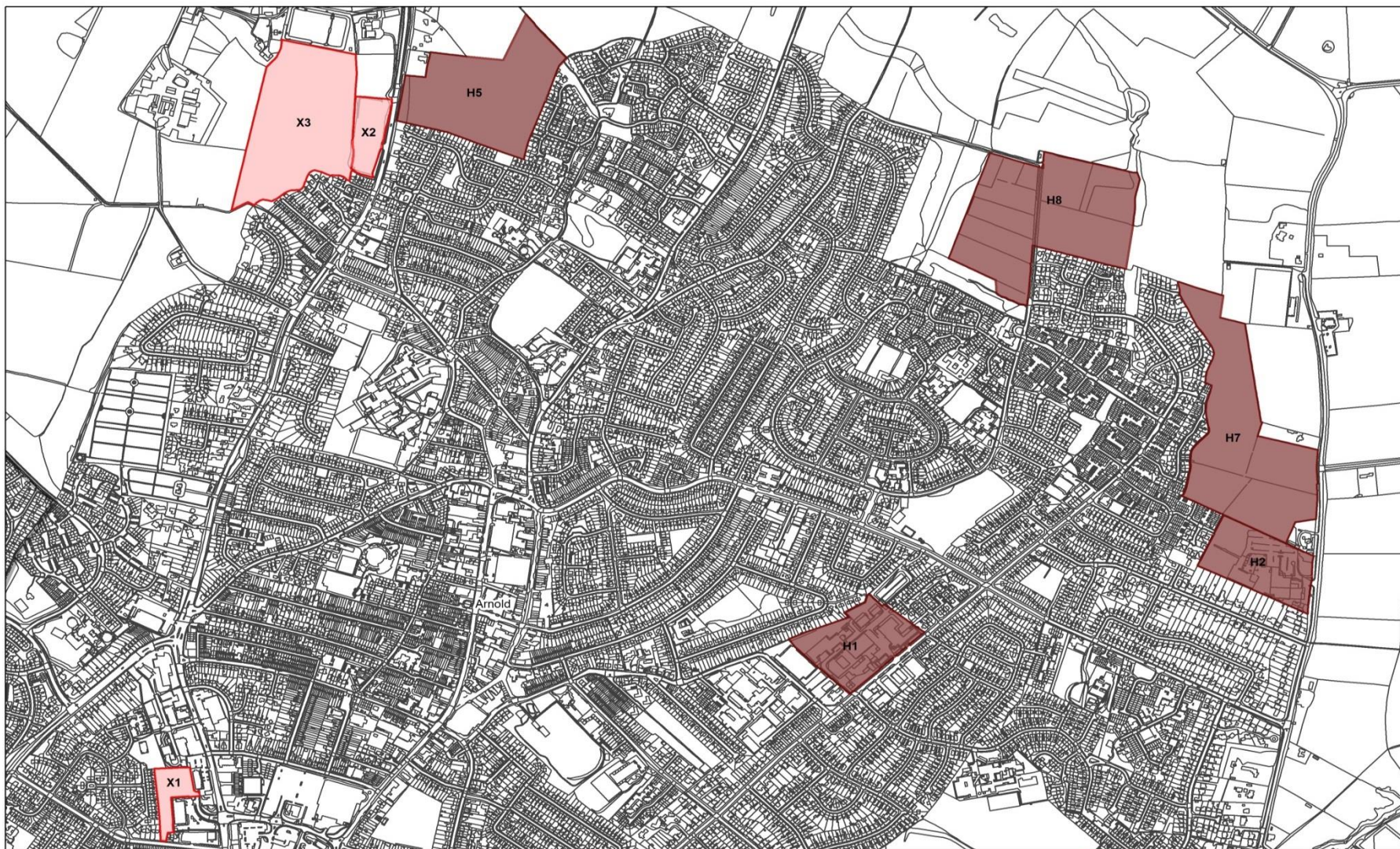
Site summary

Timescale	Commence within 5 years
Site area	1.6 ha
Housing units	30
Affordable housing	30%
Ownership/developer	Proactive owners

Infrastructure	Summary Assessment	Further Work/Funding
Community facilities	No requirement identified.	
Contamination	Greenfield site - garden land. Some existing residential properties.	Phase 1 (desk top land contamination assessment (including a site walkover).
Education	6 primary school places - £68,700 5 secondary school places - £86,300	Further discussion with LEA as part of planning application process. Potential contributions to be agreed as part of S106 discussions.
Emergency services	No requirements identified.	
Flood risk	No significant issues identified	

Health	Based on the multiplier of £551 per dwelling cost estimate is £16,500	Further discussion with CCG as part of planning application process.
Green Infrastructure Open space	10% of site area (0.16 ha).	Further discussions with GBC Parks and Street Care as part of planning application. Potential contributions to be agreed as part of S106 discussions.
Utilities	No requirements identified.	Sewerage – detailed hydraulic modelling required and further discussion with Utilities providers required as part of planning application.
Transport	Access from Kighill Lane likely to be satisfactory if existing grass verge incorporated to form pavement along frontage.	Transport statement required. Highway mitigation and potential contributions to public transport to be agreed as part of S106 discussions.
Air Quality	Assessment in line with proposed LPD 11- Borough Council's Air Quality and Emissions Mitigation Guidance.	Mitigation (dependent upon detail of development). Damage cost calculation for larger proposals.

Appendix 2: Maps of Site Allocations



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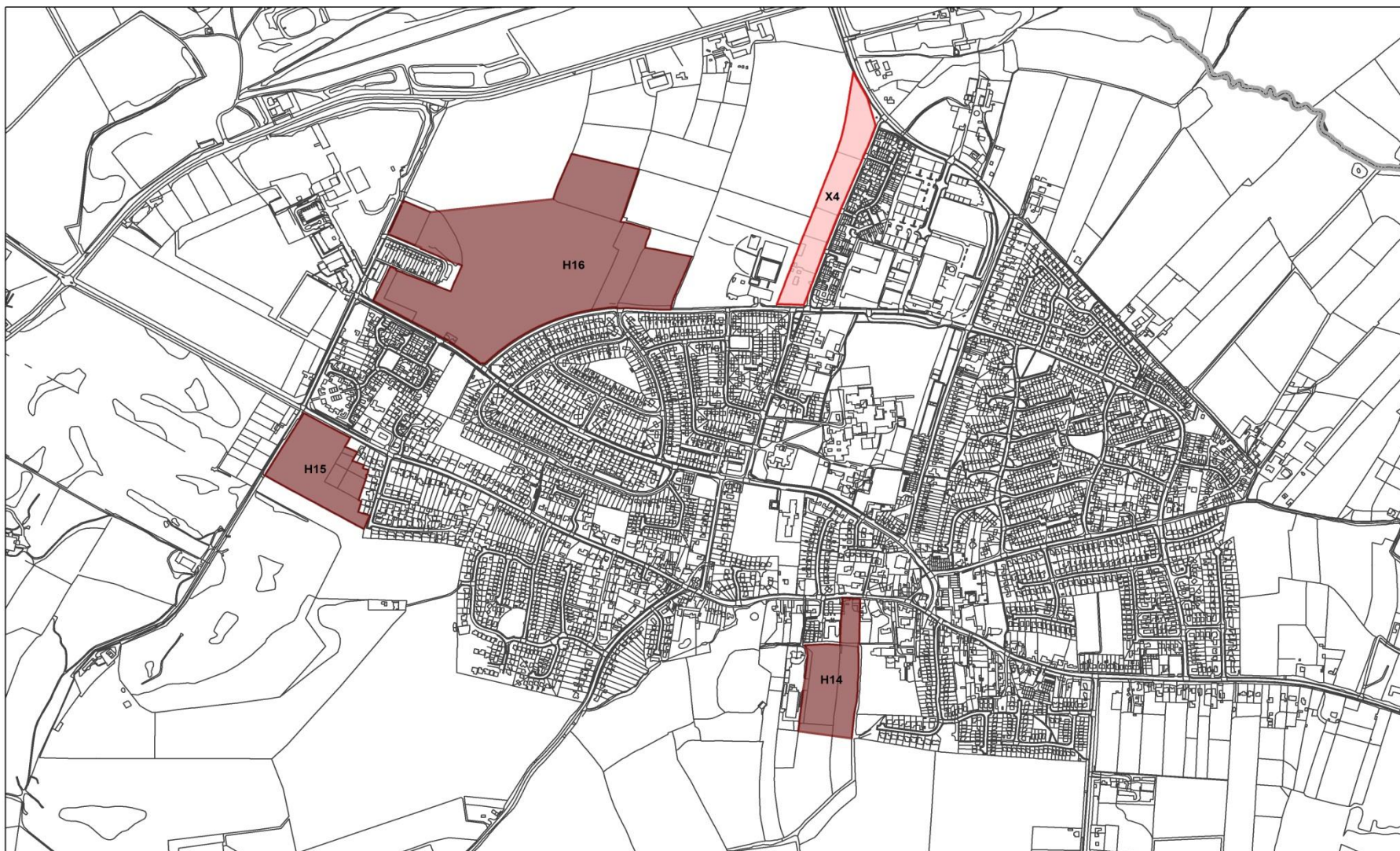


Civic Centre, Arnot Hill Park, Arnold,
Nottinghamshire, NG5 6LU

Policy LPD 65 Urban Area - Arnold

- Housing Sites
- Additional Housing Sites
- Borough Boundary





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Policy LPD 67 Calverton

- Housing Sites
- Additional Housing Sites
- Borough Boundary





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Policy LPD 68 Ravenshead

- Housing Sites
- Additional Housing Sites
- Borough Boundary

