

Transport Issues raised by the Tiptree Neighbourhood Plan

– Update including reference to Colchester Borough Council’s Topic Paper 6 and updated Policy SS14 - April 2021

Introduction

- COTTEE Transport Planning have been instructed to consider additional Transport related points raised by the Tiptree Neighbourhood Plan.

Transport Update

1. The COTTEE Transport note attached at Appendix 4 to Colchester Borough Council’s (CBC) Topic Paper 6 dated January 2021 reviews the comments of the Examiner and provides a high-level review of traffic figures based on the traffic data currently available and confirms that a detailed Transport Assessment will be undertaken in the usual manner as part of the planning process with further supporting traffic surveys and analysis to be provided.
2. Policy SS14 confirms this approach at point (iv):

‘Set out the policy framework within the parish to guide the delivery of any infrastructure/community facilities required to support the development. This will include a detailed transport assessment with a view to confirming provision of the first phases of a road between the B1022 and B1023;’

3. At Appendix 2 of the CBC Topic Paper 6 ‘Proposed Modifications’ paragraph 14.219 it is stated that:

‘Infrastructure necessary to deliver the growth up to 2033 will need to address cross boundary issues with neighbouring Local Planning Authorities and neighbouring Parishes. This will include the additional traffic generation forecasts for the proposed new junction 24 onto the A12 as well as from the growth locations. With the northern growth location there is potential for a new road which would ultimately link the B1022 and B1023. The Tiptree Neighbourhood Plan will be expected to deliver the first phases of the road through a design which allows future completion/linkage.’

4. As detailed in the COTTEE January 2021 note there is a need for Essex County Council (ECC) in consultation with Highways England (HE) to examine cross boundary issues especially in relation to traffic predictions for Inworth and routes to A12 junctions at Feering and Rivenhall. This requires that a wider strategic traffic modelling should be undertaken by HE / ECC given that the scheme is scheduled for opening in 2027/2028 and may precede Neighbourhood Plan allocated residential schemes coming forward in Tiptree. There is therefore a need for HE to undertake this work in consultation with ECC so that the traffic impacts of that A12 scheme can be considered in relation to Tiptree and surrounding villages.
5. The high-level traffic assessment undertaken by COTTEE for the three sites to the north of Tiptree provided traffic flows and traffic flow diagrams have now been produced and attached and to this note. This work confirms there is a case to examine the link road further since it demonstrates reduced traffic on local roads and junctions. This can be explored through further surveys and modelling as part of the planning process. In the meantime, as a first phase (as described in CBC's paragraph 14.219 above) the connections at each end of a potential future link could be delivered with the road designs allowing for a future connection to be completed. The no link road situation and associated mitigation measures would be examined as part of the analysis.

Traffic Flow Diagrams

6. Traffic flow diagrams to support the COTTEE Transport Planning document included at Appendix 4 of CBC's Topic Paper 6 and requested by ECC are attached as follows:
 - 1866-TFD-A – Highland Nursery distribution (%)
 - 1866-TFD-B – Highland Nursery vehicle movements
 - 1866-TFD-C – Tower End distribution (%)
 - 1866-TFD-D – Tower End vehicle movements
 - 1866-TFD-E – Elms Farm distribution (%)
 - 1866-TFD-F – Elms Farm vehicle movements
 - 1866-TFD-G – Combined vehicle movements (No Links)
 - 1866-TFD-H – Highland Nursery vehicle movements (With Links)
 - 1866-TFD-I – Tower End vehicle movements (With Links)
 - 1866-TFD-J – Elms Farm vehicle movements (With Links)
 - 1866-TFD-K – Combined vehicle movements (With Links)
7. The impact in numerical terms of traffic from the three north Tiptree developments on key links and the double mini roundabout at the junction of Maypole Road and Kelvedon Road has been estimated as follows (these differ marginally from the figures presented in the COTTEE January

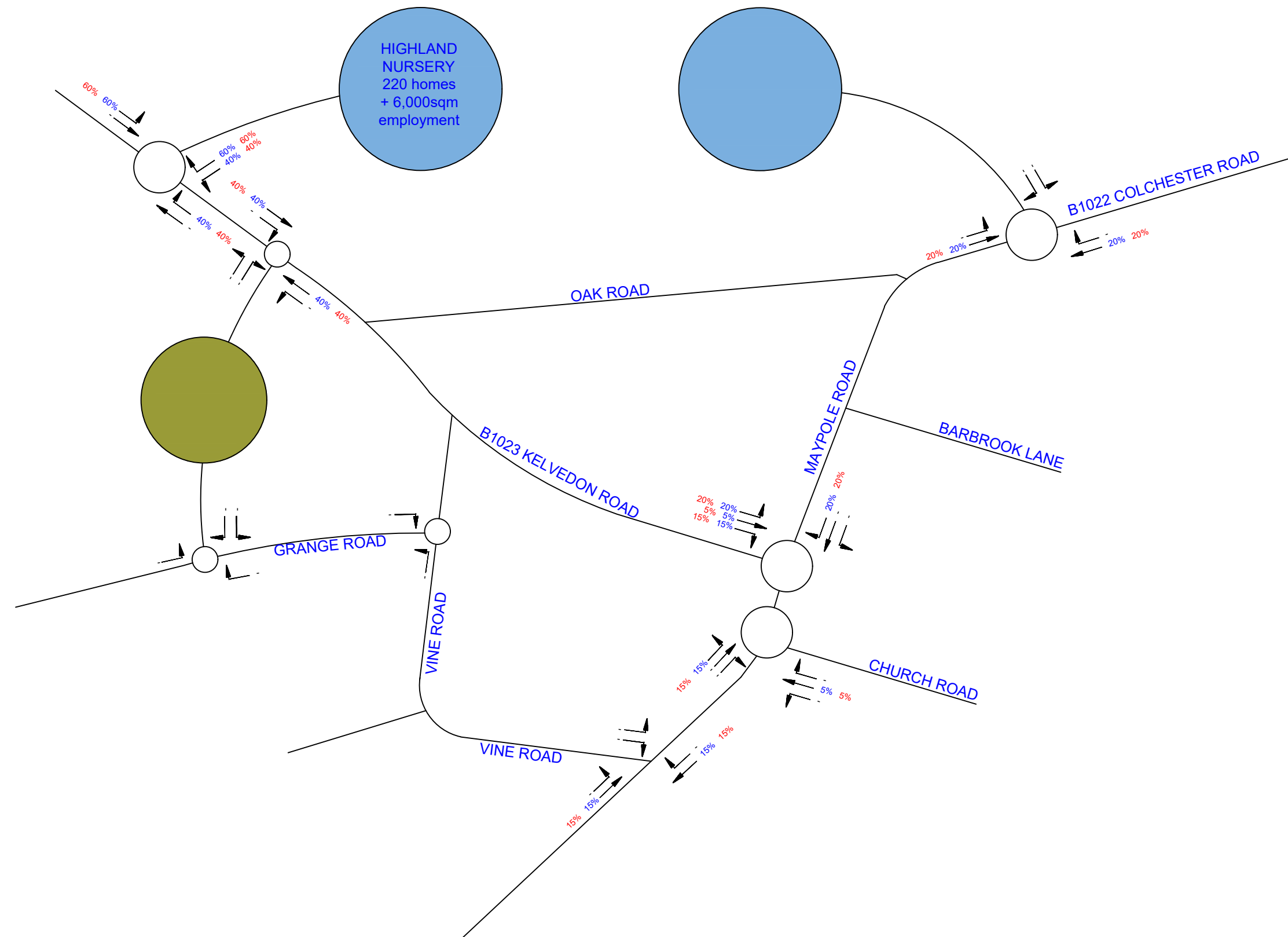
2021 note but do not affect the conclusions). The updated figures show that a link road would reduce traffic further on Kelvedon Road by about 20 additional vehicles in each peak hour:

Road link / junction	No link		With link	
	AM peak	PM peak	AM peak	PM peak
Double mini	201	202	40	40
Kelvedon Road	174	175	13	13
Maypole Road	163	164	27	27
Other Tiptree roads	20	20	20	20

8. A high-level indication of the percentage impact of the combined three schemes at each location (with and without a link road) based on the Gladman 2023 figures is shown in the table below which indicates significant improvements (up to an 19% reduction) with the link in place – again the updated figures show a further improvement for Kelvedon Road when compared to the January 2021 figures:

Road link / junction	No link		With link	
	AM peak	PM peak	AM peak	PM peak
Double mini	9%	9%	2%	2%
Kelvedon Road	19%	18%	1%	1%
Maypole Road	13%	15%	2%	3%

In summary the update further demonstrates the benefits of the link road as proposed in the draft Neighbourhood Plan.



NOTE:
The 'no link' situation assumes that measures would be introduced to deter traffic from using Oak Road as a rat-run during the interim period before the link road is constructed.

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Client
MERSEA HOMES

Project
TIPTREE - PROPOSED LOCAL PLAN ALLOCATIONS

Title
HIGHLAND NURSERY DISTRIBUTION %

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

Drawing No. **1866-TFD-A**

Proposed Distribution (%) AM Peak Hour
Proposed Distribution (%) PM Peak Hour

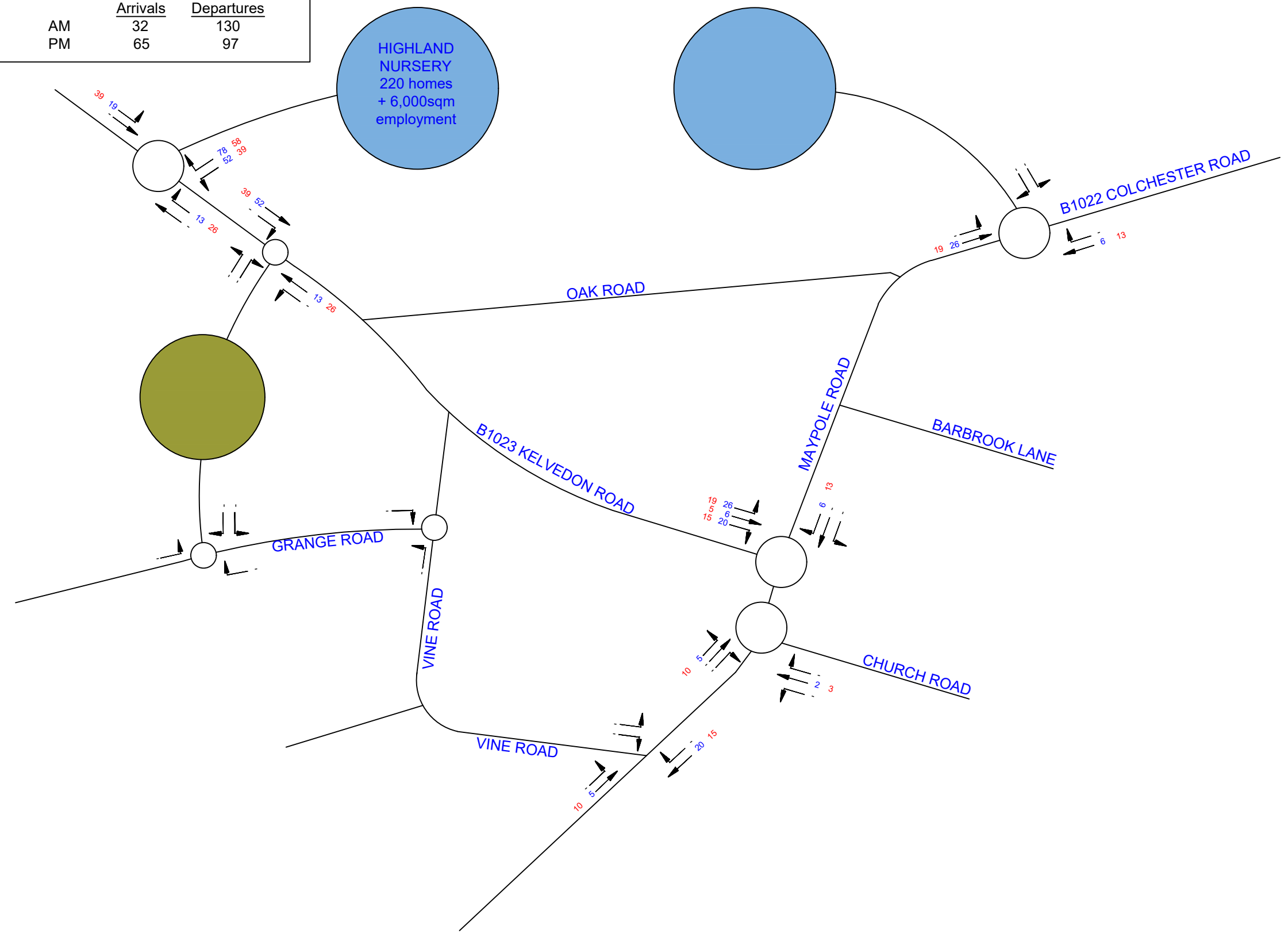


Based on assumed vehicle trip rates of
0.6vph/dwelling during AM and PM peak hours
(residential) and 0.5vph/100sqm (employment)

162 vehicle movements per AM and PM peak
hour

	Arrivals	Departures
AM	32	130
PM	65	97

HIGHLAND NURSERY
220 homes
+ 6,000sqm
employment



NOTE:
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measures would be introduced to deter
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PLAN ALLOCATIONS**

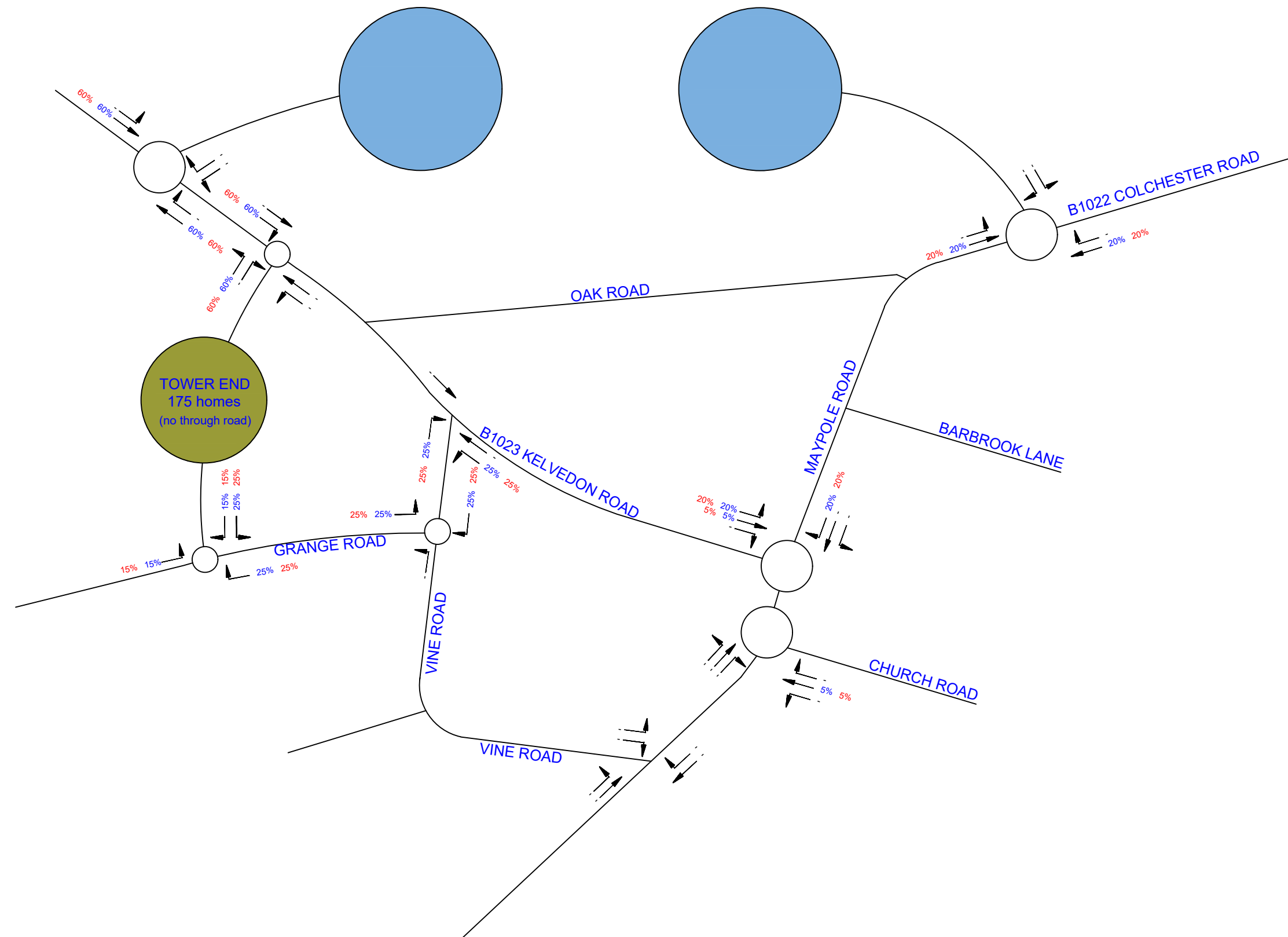
Title
**HIGHLAND NURSERY
VEHICLE MOVEMENTS**

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

Drawing No. **1866-TFD-B**

Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour



NOTE:
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Project
TIPTREE - PROPOSED LOCAL PLAN ALLOCATIONS

Title
TOWER END DISTRIBUTION %

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

Drawing No. **1866-TFD-C**

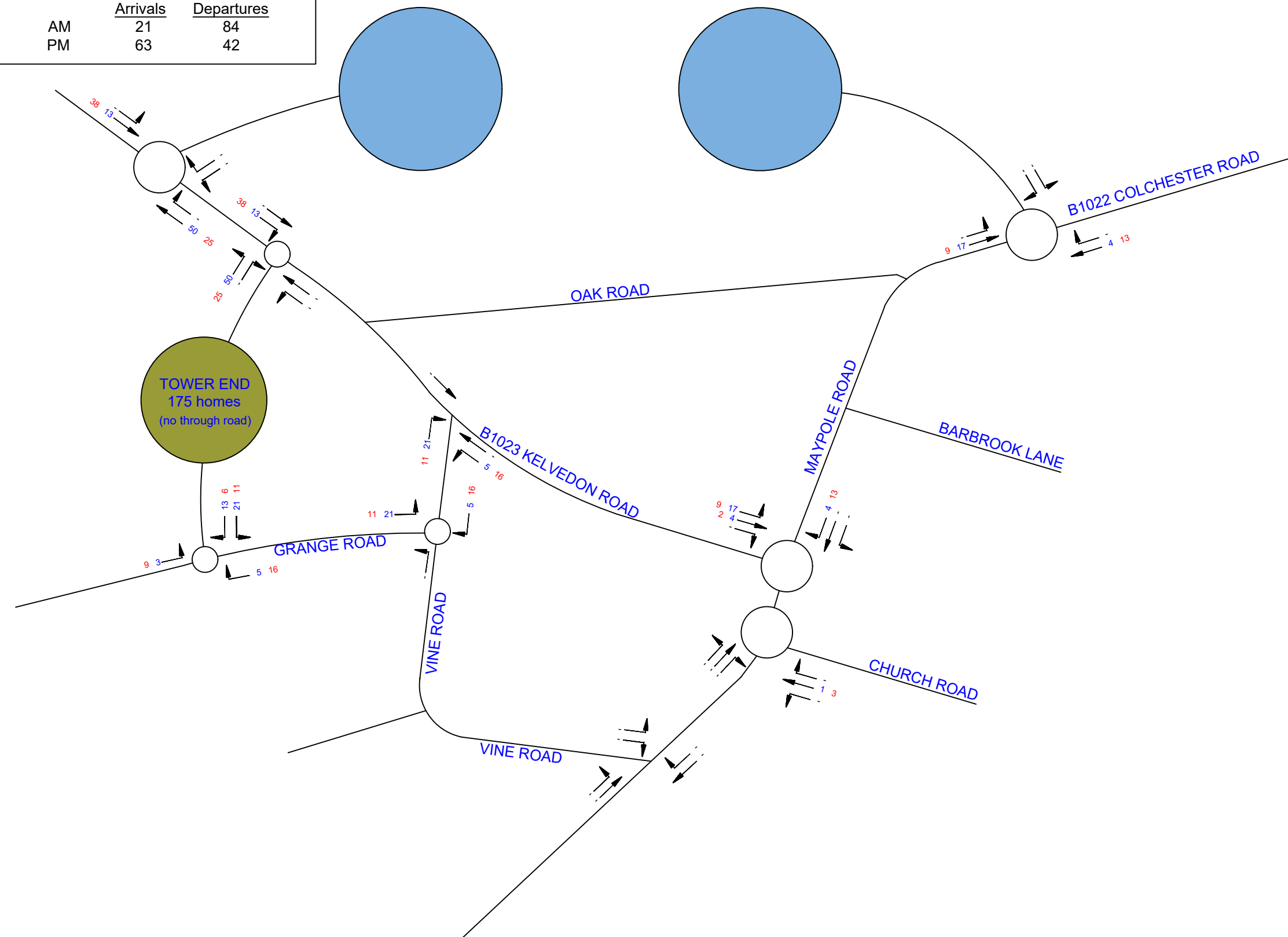
Proposed Distribution (%) AM Peak Hour
Proposed Distribution (%) PM Peak Hour



Based on assumed vehicle trip rates of
0.6vph/dwelling during AM and PM peak hours
(residential)

105 vehicle movements per AM and PM peak
hour

	Arrivals	Departures
AM	21	84
PM	63	42



NOTE:
The 'no link' situation assumes that
measures would be introduced to deter
traffic from using Oak Road as a rat-run
during the interim period before the link
road is constructed.

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**TIPTREE - PROPOSED LOCAL
PLAN ALLOCATIONS**

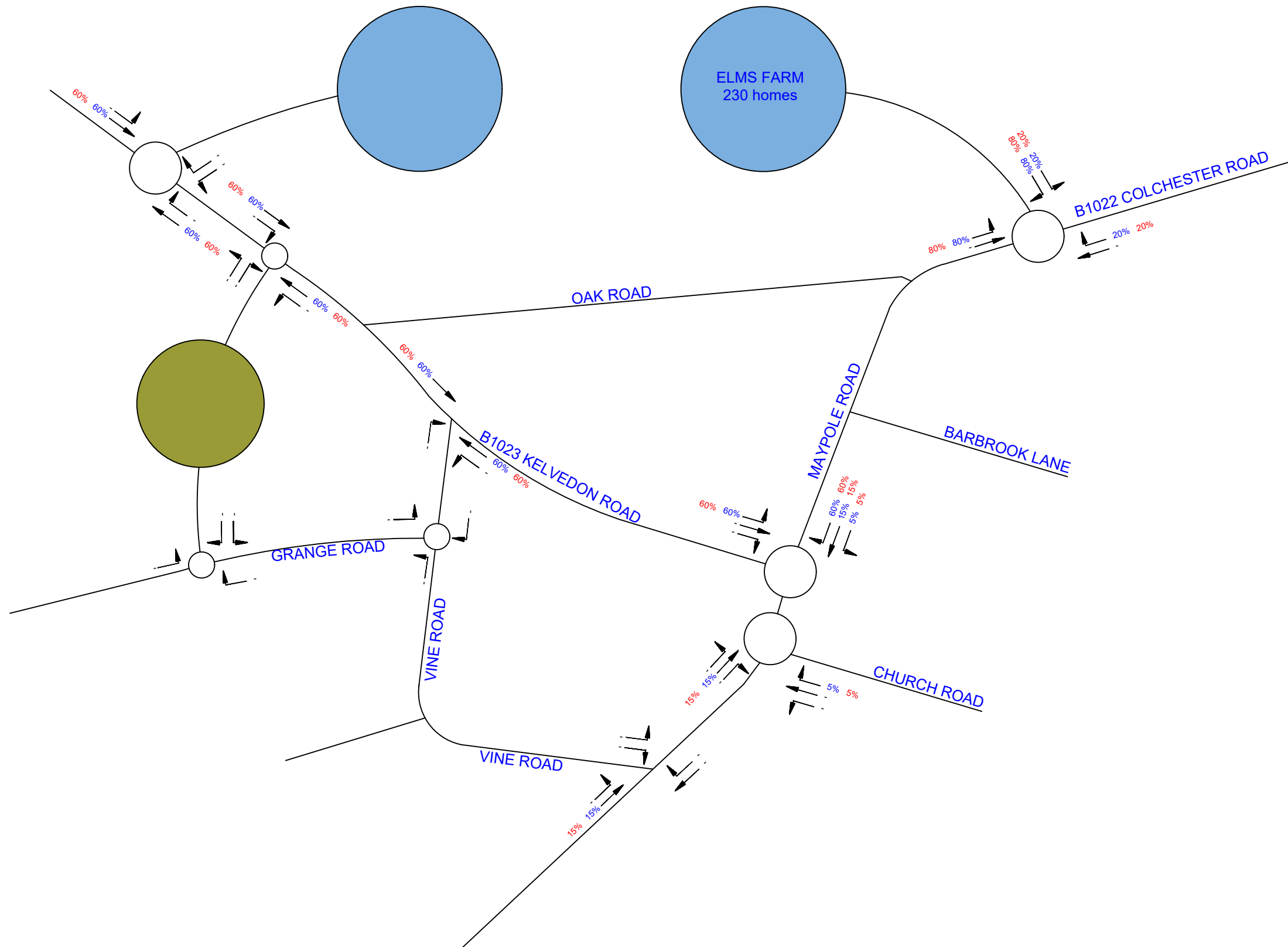
Title
**TOWER END
VEHICLE MOVEMENTS**

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

Drawing No. **1866-TFD-D**

Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour



NOTE:

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Project
TIPTREE - PROPOSED LOCAL PLAN ALLOCATIONS

Title
ELMS FARM DISTRIBUTION %

Drawn
A FIRMIN
Checked
MC

Scale
NTS @ A3
Date
APR 2021

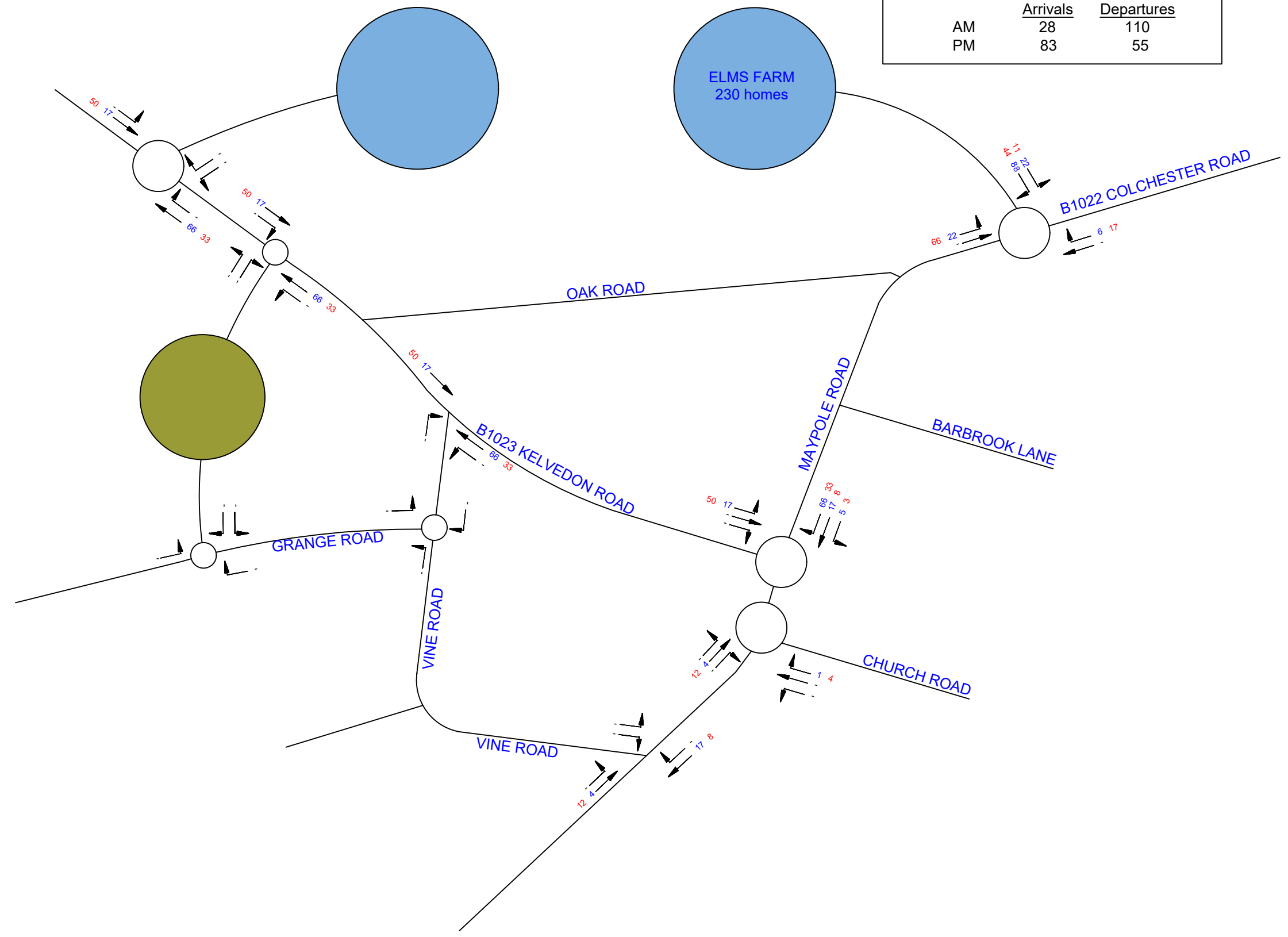
Drawing No.
1866-TFD-E

Proposed Distribution (%) AM Peak Hour
Proposed Distribution (%) PM Peak Hour

Based on assumed vehicle trip rates of
0.6vph/dwelling during AM and PM peak hours
(residential)

138 vehicle movements per AM and PM peak
hour

	Arrivals	Departures
AM	28	110
PM	83	55



NOTE:
The 'no link' situation assumes that
measures would be introduced to deter
traffic from using Oak Road as a rat-run
during the interim period before the link
road is constructed.

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**TIPTREE - PROPOSED LOCAL
PLAN ALLOCATIONS**

Title
**ELMS FARM
VEHICLE MOVEMENTS**

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

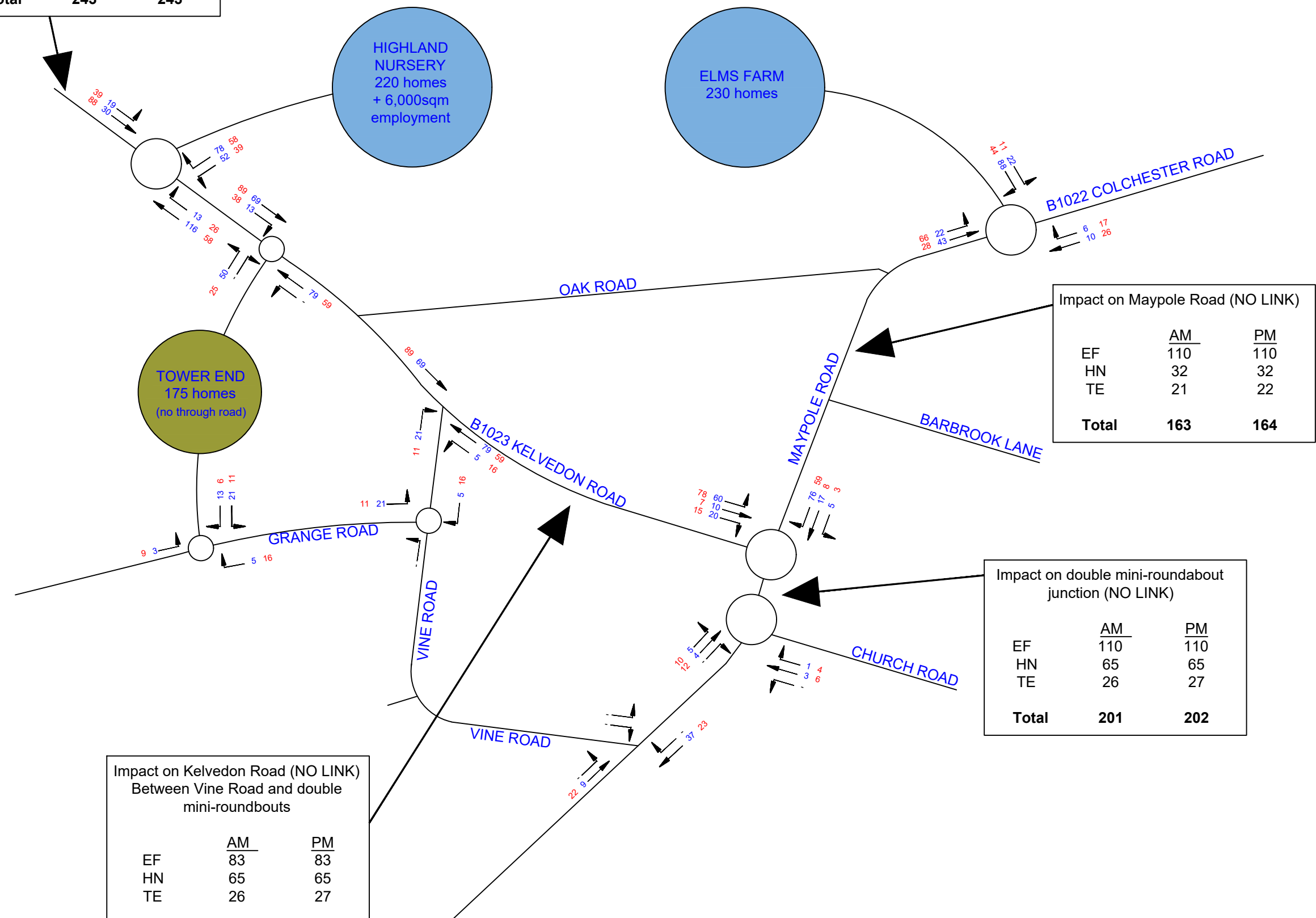
Drawing No. **1866-TFD-F**

Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour



Impact on Inworth Road (NO LINK)

	AM	PM
EF	83	83
HN	97	97
TE	63	63
Total	243	243



Impact on Maypole Road (NO LINK)

	AM	PM
EF	110	110
HN	32	32
TE	21	22
Total	163	164

Impact on double mini-roundabout junction (NO LINK)

	AM	PM
EF	110	110
HN	65	65
TE	26	27
Total	201	202

Impact on Kelvedon Road (NO LINK) Between Vine Road and double mini-roundabouts

	AM	PM
EF	83	83
HN	65	65
TE	26	27
Total	174	175

NOTE:
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Project
TIPTREE - PROPOSED LOCAL PLAN ALLOCATIONS

Title
COMBINED VEHICLE MOVEMENTS (NO LINK ROAD)

Drawn
A FIRMIN

Checked
MC

Scale
NTS @ A3

Date
APR 2021

Drawing No.
1866-TFD-G

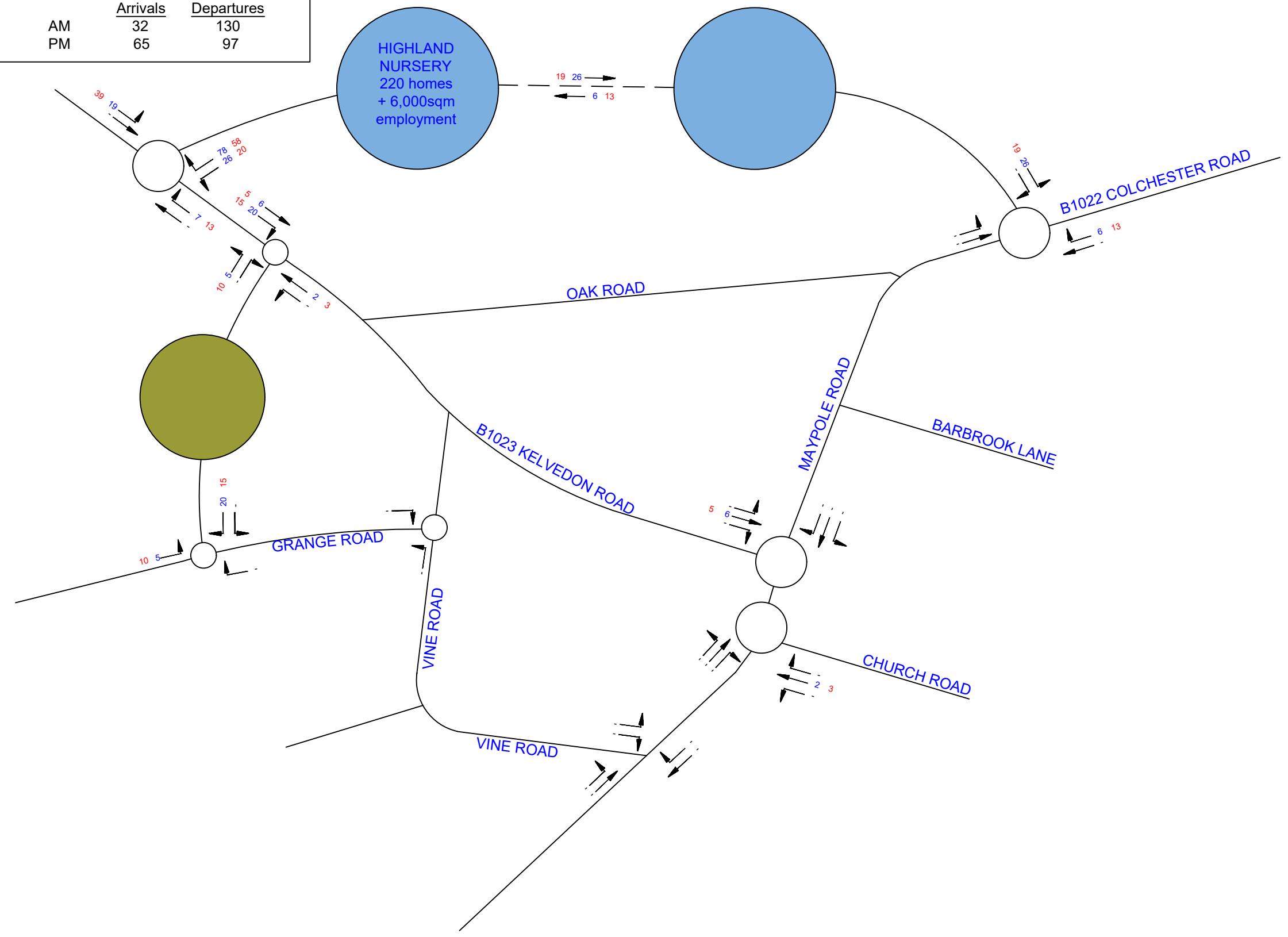
Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour



Based on assumed vehicle trip rates of
0.6vph/dwelling during AM and PM peak hours
(residential) and 0.5vph/100sqm (employment)

162 vehicle movements per AM and PM peak
hour

	Arrivals	Departures
AM	32	130
PM	65	97



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Title
**HIGHLAND NURSERY
VEHICLE MOVEMENTS
(WITH LINKS)**

Drawn
A FIRMIN
Checked
MC

Scale
NTS @ A3
Date
APR 2021

Drawing No.
1866-TFD-H

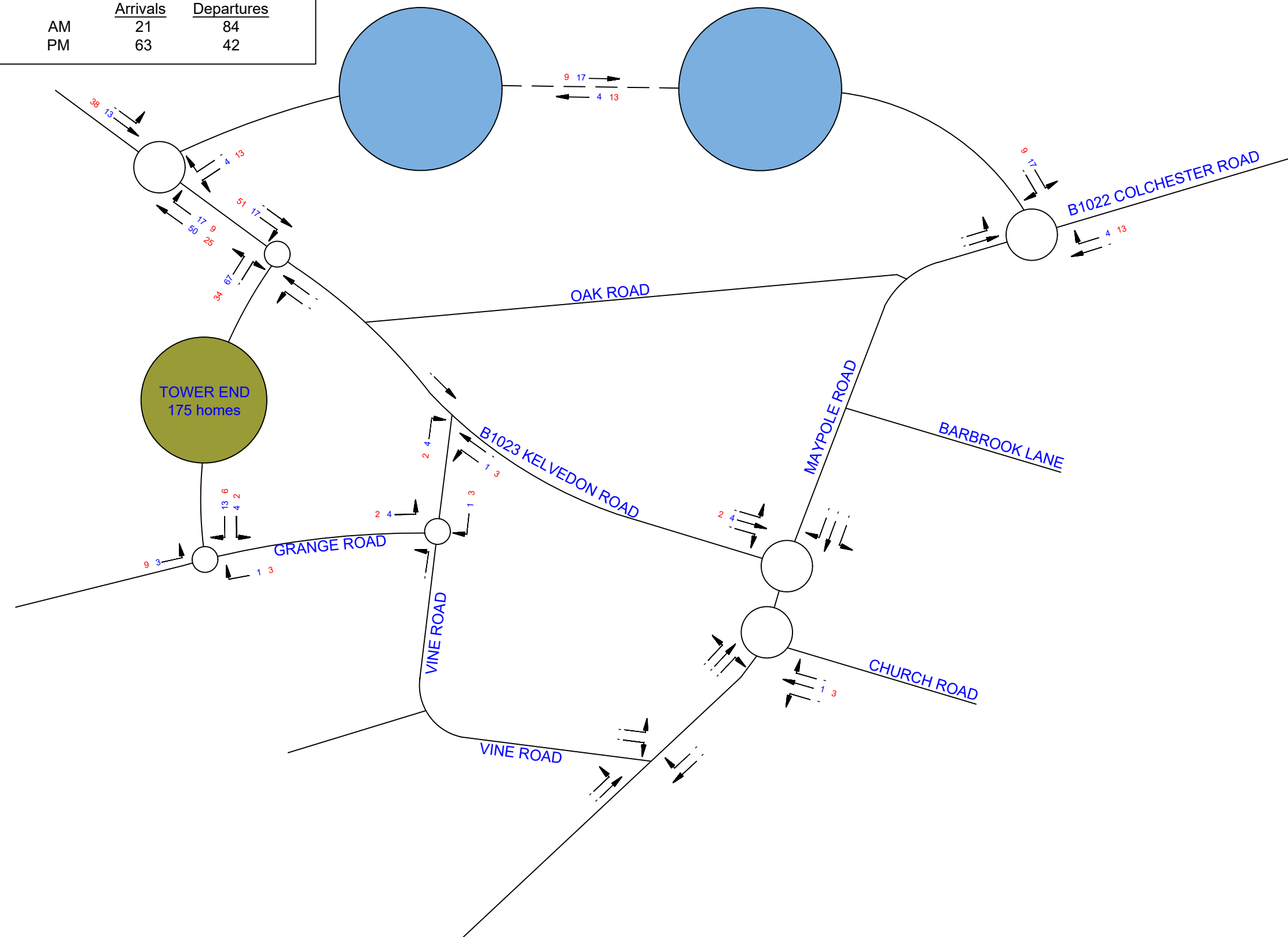
Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour



Based on assumed vehicle trip rates of
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105 vehicle movements per AM and PM peak
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	Arrivals	Departures
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**TIPTREE - PROPOSED LOCAL
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Title
**TOWER END VEHICLE
MOVEMENTS
(WITH LINKS)**

Drawn **A FIRMIN** Checked **MC**

Scale **NTS @ A3** Date **APR 2021**

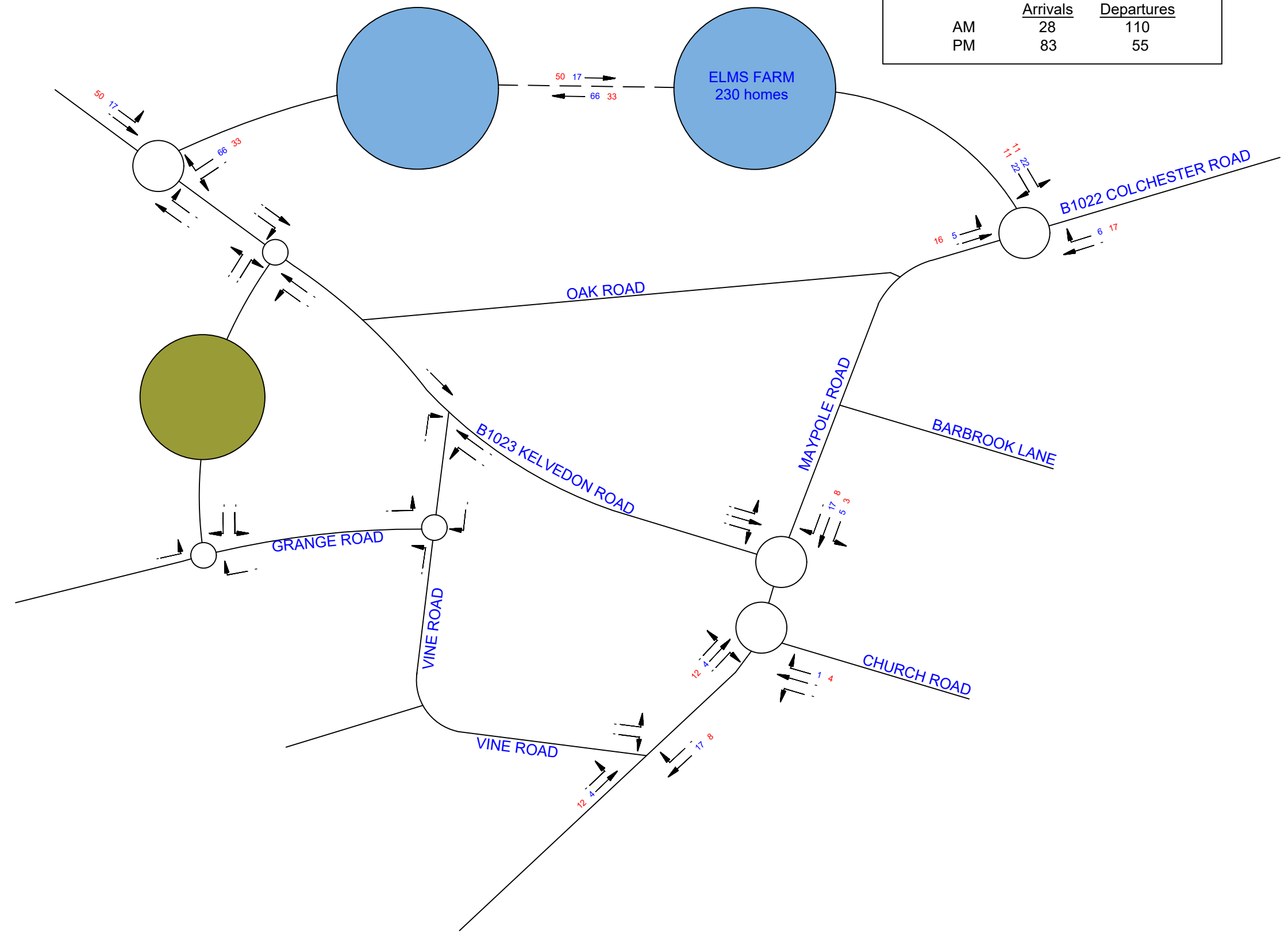
Drawing No. **1866-TFD-I**

Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour

Based on assumed vehicle trip rates of
0.6vph/dwelling during AM and PM peak hours
(residential)

138 vehicle movements per AM and PM peak
hour

	Arrivals	Departures
AM	28	110
PM	83	55



Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour

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Title
**ELMS FARM VEHICLE
MOVEMENTS
(WITH LINKS)**

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Scale **NTS @ A3** Date **APR 2021**

Drawing No. **1866-TFD-J**

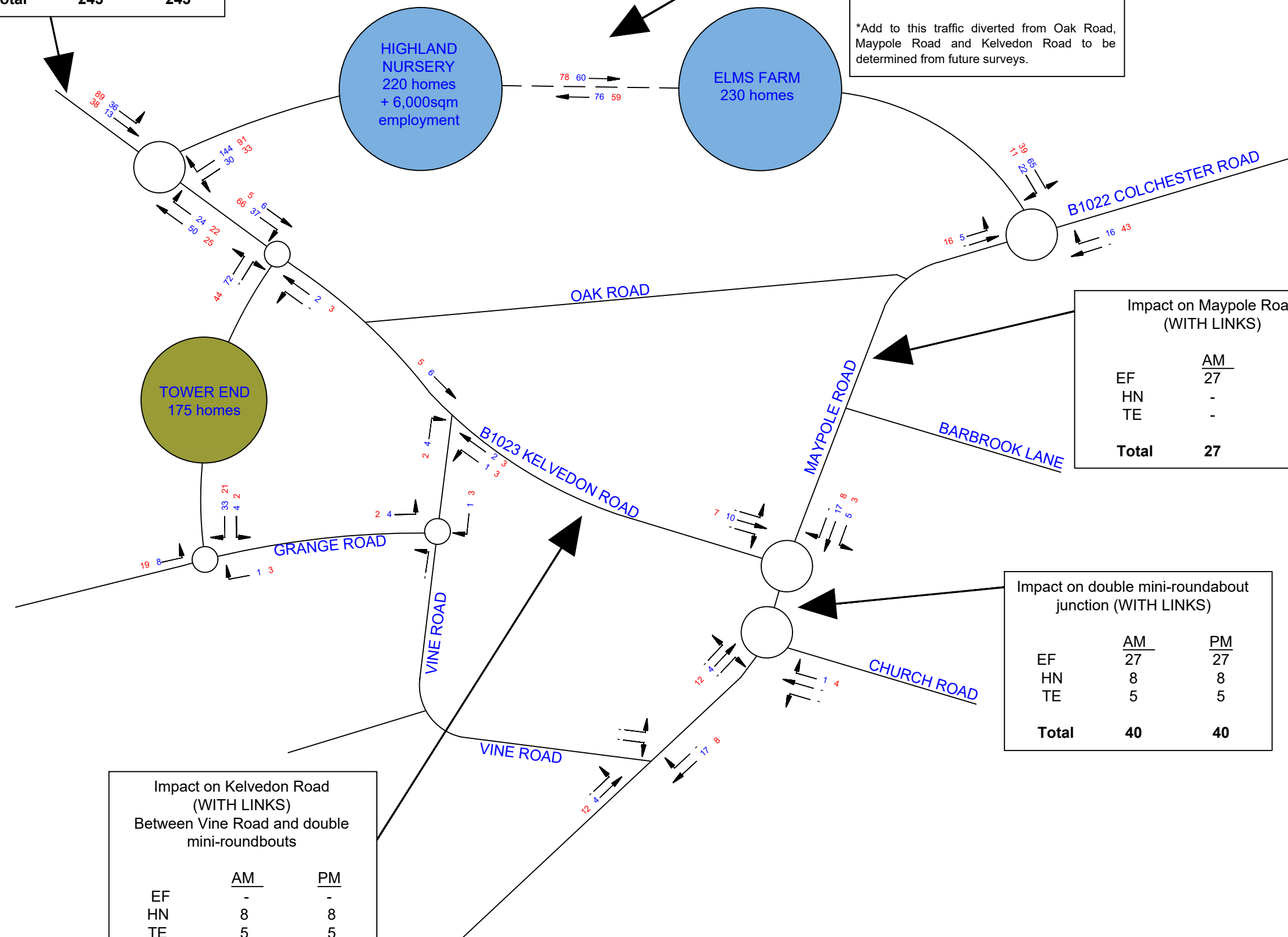
Impact on Inworth Road (WITH LINKS)

	AM	PM
EF	83	83
HN	97	97
TE	63	63
Total	243	243

Impact on proposed link road*

	AM	PM
EF	83	83
HN	32	32
TE	21	22
Total	136	137

*Add to this traffic diverted from Oak Road, Maypole Road and Kelvedon Road to be determined from future surveys.



Impact on Maypole Road (WITH LINKS)

	AM	PM
EF	27	27
HN	-	-
TE	-	-
Total	27	27

Impact on double mini-roundabout junction (WITH LINKS)

	AM	PM
EF	27	27
HN	8	8
TE	5	5
Total	40	40

Impact on Kelvedon Road (WITH LINKS) Between Vine Road and double mini-roundabouts

	AM	PM
EF	-	-
HN	8	8
TE	5	5
Total	13	13

Proposed Vehicle Movements AM Peak Hour
Proposed Vehicle Movements PM Peak Hour

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COMBINED VEHICLE MOVEMENTS (WITH LINKS)

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Scale
NTS @ A3

Date
APR 2021

Drawing No.
1866-TFD-K

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