

ABERDEEN CITY COUNCIL

COMMITTEE	Operational Delivery Committee
DATE	31 August 2022
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	Notice of Motion by Councillor Stewart to consider options for pedestrian crossings on King's Gate and Forest Road.
REPORT NUMBER	OPE/22/076
DIRECTOR	Rob Polkinghorne
CHIEF OFFICER	Mark Reilly
REPORT AUTHOR	Katherine Watson
TERMS OF REFERENCE	1.1.1

1. PURPOSE OF REPORT

- 1.1 To respond to the Notice of Motion by Councillor Stewart to consider options for installing an additional pedestrian crossing on King's Gate in the vicinity of the Atholl Hotel and installing a crossing on Forest Road near its junction with King's Gate.

2. RECOMMENDATION(S)

It is recommended the Committee:-

- 2.1 note the review as recorded within the report;
- 2.2 agrees the current pedestrian crossing infrastructure on King's Gate near Forest Road meets the needs of local people, including children and their families walking to local schools; and
- 2.3 notes that the results of observational surveys and a cursory pedestrian routes-to-school plotting exercise show a moderate demand to cross King's Gate near Moray Place, and instruct the Chief Officer, Operations and Protective Services to install a new pedestrian island with minor adjustments to the existing infrastructure.

3. CURRENT SITUATION

- 3.1 Following the unsuccessful outcome of a pedestrian crossing assessment on King's Gate between Forest Road and Woodhill Road in June 2021, at the Operational Delivery Committee on 18 November 2021 Councillor Stewart brought forward the following Notice of Motion:

- 3.2 “That this Committee instructs the Chief Officer – Operations and Protective Services to submit a report to the next appropriate committee concerning the alternative options of installing another pedestrian crossing on King’s Gate in the vicinity of the Atholl Hotel from the south side to the north side of King’s Gate and installing such a crossing on Forest Road near its junction with King’s Gate and any other options which are considered by the Chief Officer to be appropriate.
- 3.3 “This motion is made on pedestrian safety grounds, addressing the needs of local people, particularly of families living within the King’s Gate/ Forest Road West End area, wanting to walk children safely to local schools, mainly Mile End Primary School and to match the pedestrian crossing provisions for local schools on the Queen’s Road corridor.”
- 3.4 Subject to approval at this committee, the previous administration, as part of the budget setting process for 2022/23 allocated a budget of £35,000 each (£70,000 in total) for the installation of separate crossings on King’s Gate and Forest Road (NHCP No. 898, Approved General Fund Capital Programme item "King's Gate & Forest Road Pedestrian Crossings"). The installations of other new crossings, which reach the required criteria, are financed through other budgets.

Comparison to facilities in surrounding area

- 3.5 King’s Gate, between Woodstock Road to the west and Fountainhall Road to the east, has two signalised crossings, one to the east of Forest Road and another to the west of Fountainhall Road. No on street parking was observed during site visits and there are several side roads and accesses to properties along the route.
- 3.6 Forest Road between King’s Gate and Morningfield Road is a busy side road leading to Queen’s Road. There is parking along the street in controlled parking bays. There is an uncontrolled crossing on Forest Road at the junction with King’s Gate. Dropped kerbs and tactile paving are provided.
- 3.7 A comparison has been made that the facilities on King’s Gate are not to the same standard as those on Queen’s Road. Many businesses are situated on Queen’s Road, while King’s Gate is largely residential. On Queen’s Road there are controlled crossings at roundabouts; on Fountainhall Road there is one outside shops. Drawing number OPE-22-076-D1-00 within Appendix 2 shows approximate locations of the current crossing infrastructure in this area.

Accident history

- 3.4 A review of injury accidents between 2017 and 2021 was carried out. One road traffic collision was recorded in 2020 on King’s Gate involving a slight injury to a pedestrian, occurring between Moray Place and Woodhill Road.

Qualification for a pedestrian crossing facility

- 3.8 It is a Council policy to install new pedestrian crossings at locations that meet a certain ratio of pedestrians to vehicles at peak times. Other criteria, including vehicle speeds and nearby local amenities contribute towards a modifying factor that boosts the score. To qualify for a traffic island, the final score should exceed 0.7. To qualify for a controlled crossing facility on a single carriageway, the final score should exceed 1. See background paper "PV2-assessment" for full details on score calculation.
- 3.9 During pedestrian observation surveys undertaken in June 2021 and March 2022, Officers observed a significant flow of vehicles and pedestrians emerging from Forest Road, crossing King's Gate, and continuing over to Oakhill Road and vice versa. A good number of adults but few children crossed King's Gate between Moray Place and Woodstock Road.
- 3.10 On King's Gate at peak traffic times, the vehicle headway gaps were sometimes too short for a pedestrian to cross. Those short gaps led to traffic emerging quickly from minor roads onto King's Gate, perhaps without fully taking into account pedestrians attempting to cross.
- 3.11 The outcome of the 2021 survey was the observed locations, A-D (see Appendix 1), did not meet the threshold ratio of pedestrians to vehicles to warrant a crossing facility. The survey took place whilst Aberdeen City was under the COVID-19 Alert Level 1 restrictions, which was thought to have impacted numbers of daily journeys.
- 3.12 In March 2022 the survey was repeated, with Forest Road surveyed simultaneously. Numbers of vehicles and pedestrians on King's Gate increased from 2021. The existing controlled crossing site next to Forest Road qualified for the crossing this time, but the other locations including Forest Road sites did not.
- 3.13 An anonymised pupil origin and destination study took place to ensure improvements would be targeted to pedestrian hotspots along routes to schools. This study included pupils at Aberdeen Grammar, Albyn, Ashley Road, St Joseph's RC Primary and Mile End schools.
- 3.14 Pedestrian numbers generated from this study for each junction between King's Gate and Queen's Road (see Appendix 2) reflect a hypothetical scenario where there are no absences, all pupils walk to school, and pupils follow the route to school suggested by Google Maps. Note: the origin information gathered for the local authority schools filtered out any pupils not living within the Aberdeen City Boundary. The origins of local authority pupils were taken to be the centroid of the Scottish Government 2011 Data Zones in which they live, and Data Zones totalling fewer than 5 pupils were filtered out of the study (see background paper "Scottish Government 2011 Data Zones").
- 3.15 Based on the single busiest hour of vehicles on King's Gate from the March 2022 survey (1025 between 8am-9am) and taking the modifying factor to be 1.3, to qualify for an island the pedestrian count should equal 51 or more. The pedestrian numbers generated from the five schools' data show that the

junctions at Forest Road, Oakhill Road and Woodhill Road could meet the threshold to qualify for an island.

- 3.16 The single busiest hour of vehicles on Forest Road from the March 2022 survey was 328, between 8am-9am. Using the relationship between pedestrians and vehicle numbers laid out in the policy “PV2-assessment”, the required number of pedestrians to qualify for a crossing is substantially higher than King’s Gate. The numbers generated from the five schools’ data do not meet this threshold at any Forest Road junctions.
- 3.17 Few school pupils cross King’s Gate at locations other than the controlled crossing next to Forest Road. This was observed in real life and was shown in the relative number of anticipated pedestrians crossing the road at Forest Road compared with other locations within the cursory origin and destination study.
- 3.18 According to the 2020 Sustrans Hands Up Survey 50.7% of Aberdeen City school pupils walked to school on survey day. The true numbers at each junction are hence likely to be ~50.7% of what this method found, which assumed all pupils walked.

Locating a new crossing

- 3.19 King’s Gate is about 8 metres wide and a bus route. After any island is installed, the remaining carriageway needs to allow buses past, but not fall within the dangerous range for cyclists. The dangerous range is a lane width – either side of the island – between 3 and 4.25 metres.
- 3.20 Without blocking driveways and while being a safe distance away from junctions, the closest place to Oakhill Road on King’s Gate a crossing could fit is at the Oakhill Road westbound bus shelter. It would not be expected many people would travel this distance uphill from Forest Road or Oakhill Road to cross, and on the ground it was observed few people crossed between the bus stop and Oakhill Road in comparison to the short length of King’s Gate between Oakhill Road and Forest Road. (An island cannot be accommodated on the desire line between Oakhill Road and Forest Road because it would impact the ghost islands and HGVs turning left out of Oakhill Road or Forest Road would hit the island.) With an island, the bus stop need not be relocated, but it invites the risk of impatient drivers overtaking a stopped bus, driving round the wrong side of the island into oncoming traffic. If a zebra or push-button crossing is installed, the bus stop would need to be relocated outside of the zigzag markings, potentially to a site in front of a house.
- 3.21 Likewise at the Moray Place/Woodhill Road end, where the numbers from the schools’ origin and destination study reveal the potential for an island, it is difficult to place an island due to driveways, bus stops, trees and manhole covers. An island can fit at the site of the Woodhill Road eastbound bus stop, provided the bus shelter is relocated a few metres eastwards (see Appendix 3). Moving the bus shelter westwards negatively impacts the visibility splays at the Woodhill Road junction to less than the minimum standards detailed in the background paper Aberdeen City Council’s ‘Guidelines & Specification for Roads within Residential & Industrial Developments’. It was more common for

pedestrians to cross straight over King's Gate and up Woodhill Road, rather than walking along to Woodstock Road and up, so the further east an island is located from Moray Place, the less likely it is to be used. It is inadvisable to install an island exactly on that desire line, 8 metres or so east of Moray Place, as HGVs turning right out of Moray Place would hit the island and the northern verge of King's Gate. Furthermore, on the south side it would result in a continuous line of dropped kerbs around 16 metres in length (around 10 metres on the north side), which could confuse visually-impaired pedestrians over where the footway ends and carriageway begins, and the direction to travel to cross the road (tactile paving, which provides guidance on direction, cannot be laid across driveways as it quickly breaks with vehicle overrun). A new island near Moray Place/Woodhill Road is expected to have a traffic-calming effect, due to the horizontal deflection on an otherwise wide, straight route. It should be emphasised that: by the usual the PV-squared scoring process, an island here is only warranted if one day all pupils attend school and get there by walking, and; establishing whether an island should be installed at this location was not the original objective of this report.

- 3.22 In the pedestrian crossing survey Forest Road achieved low scores comparable to other sites around the city. If a new crossing was installed here, then it would set a precedent. Forest Road has a push-button pedestrian crossing at the Queen's Road roundabout.
- 3.23 The Forest Road-King's Gate junction could be signalised. This would allow pedestrians to cross safely following the desire line, and potentially reduce risky driver behaviour as vehicles emerge from minor roads. The downsides to this option, other than cost, are the traffic tailbacks or rerouting it may generate.
- 3.24 The current crossing layout is considered an appropriate arrangement on King's Gate, given the spatial constraints. Controlled crossings or islands could be installed but at some distance from the pedestrian desire lines and with an impact on buses. It is unlikely pedestrians would regularly use crossing facilities far out of their way. It is therefore recommended no further action is undertaken to install new pedestrian crossings near the Atholl Hotel on King's Gate and on Forest Road.

Impact on children and young people

- 3.25 Having safe places to cross busy roads enables children and young people to get about independently by active travel. There is a controlled crossing close to Forest Road most children use to cross King's Gate that will remain in place. If a new island near Moray Place/Woodhill Road is installed, more children than was observed through surveys, but shown by the origin and destination study would travel that way on foot potentially, may be encouraged to walk to school by that route. Children who already walk that way would benefit from the increased crossing safety an island provides. Children who might usually travel to school by vehicle but begin walking by that route would benefit physically and mentally from the additional physical activity.

4. FINANCIAL IMPLICATIONS

4.1 The costs to install the pedestrian island on King's Gate near Moray Place will be drawn from the current allocated capital budget for 2022/23.

5. LEGAL IMPLICATIONS

5.1 There are no direct legal implications arising from the recommendations of this report.

6. ENVIRONMENTAL IMPLICATIONS

6.1 There are no direct environmental implications arising from the recommendations of this report.

7. RISK

Category	Risks	Primary Controls/Control Actions to achieve Target Risk Level	*Target Risk Level (L, M or H) *taking into account controls/control actions	*Does Target Risk Level Match Appetite Set?
Strategic Risk		No significant risks identified		Yes
Compliance		No significant risks identified		Yes
Operational		No significant risks identified		Yes
Financial		No significant risks identified		Yes
Reputational	Proposal may be contentious and attract negative feedback.	Concerned parties would be provided thorough rationale as to the requirement for the proposal.	M	Yes
Environment / Climate		No significant risks identified		Yes

8. OUTCOMES

<u>COUNCIL DELIVERY PLAN</u>	
	Impact of Report

Aberdeen City Council Policy Statement	The proposals in this report have no impact on the Council Delivery Plan.
<u>Aberdeen City Local Outcome Improvement Plan</u>	
	The proposals in this report have no impact on the Local Outcome Improvement Plan.
Regional and City Strategies	The proposals in this report have no impact on Regional and City Strategies.

9. IMPACT ASSESSMENTS

Assessment	Outcome
Integrated Impact Assessment	Not required.
Data Protection Impact Assessment	Completed for handling of anonymised private school pupil home address information. Data relating to pupils at local authority schools was already restricted by MIS colleagues to Datazone granularity and pre-filtered to results greater than 5 per Datazone. Children were thus completely unidentifiable from the dataset used.
Other	There are no additional impact assessments completed for this report.

10. BACKGROUND PAPERS

- 10.1 [Operational Delivery Committee – Thursday, 18 November](#)
- 10.2 PV2-assessment
- 10.2 [Hands Up Scotland Survey 2020](#)
- 10.4 [Scottish Government 2011 Data Zones](#)
- 10.5 Aberdeen City Council Guidelines and Specifications for Roads within Residential and Industrial Developments (excerpt: visibility splays)

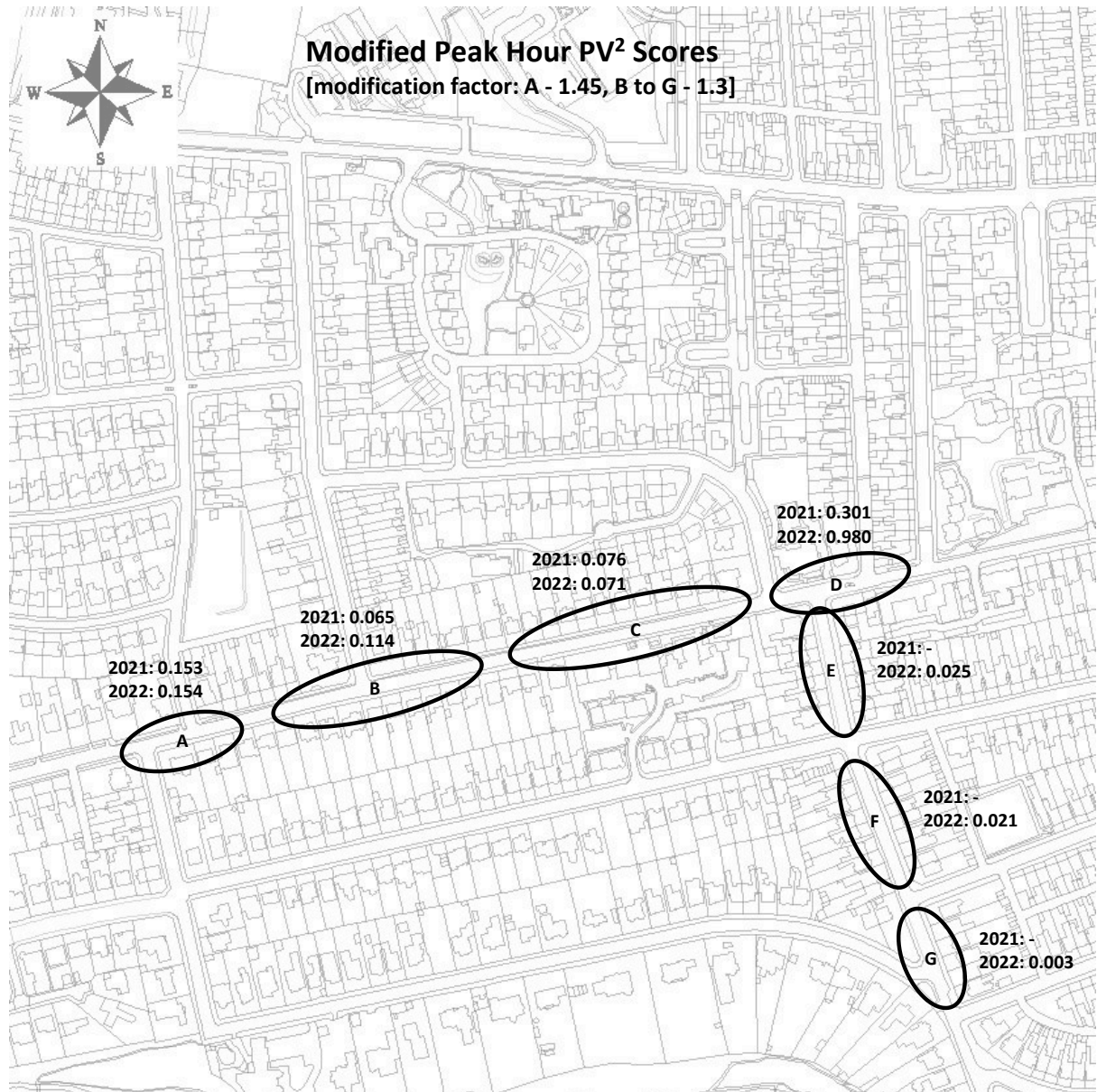
11. APPENDICES

- 11.1 Appendix 1 – Modified Peak Hour PV² Scores
- 11.2 Appendix 2 – School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents
- 11.3 Appendix 3 – Island options near Moray Place/Woodhill Road

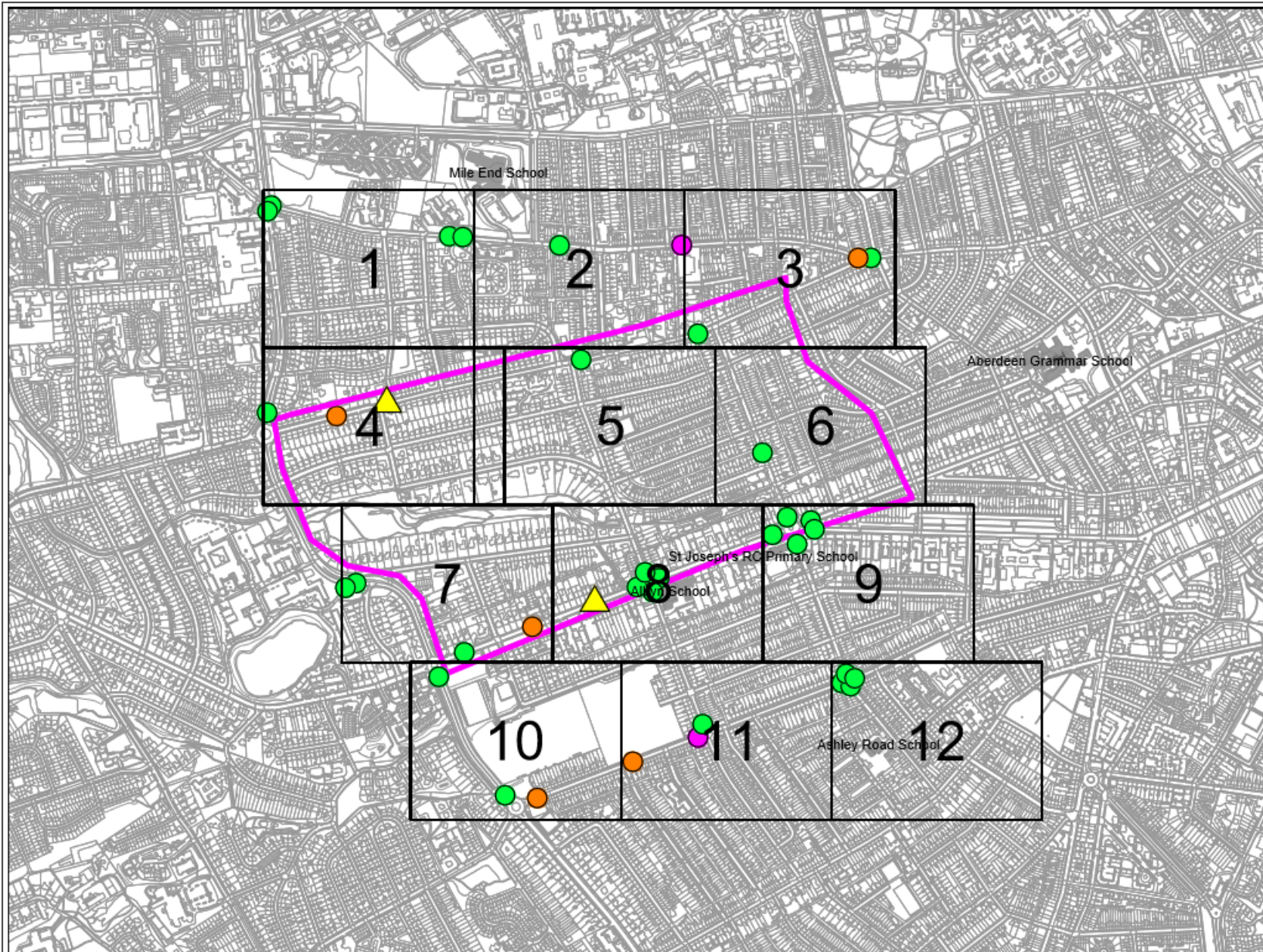
12. REPORT AUTHOR CONTACT DETAILS

Name	Katherine Watson
Title	Engineering Assistant
Email Address	KaWatson@aberdeencity.gov.uk
Tel	01224 522529

APPENDIX 1 – Modified Peak Hour PV² Scores



APPENDIX 2 – School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

- PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
- ISLAND
- ZEBRA CROSSING
- ▲ COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
- ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:15000	Project Number -	Sheet size A4






Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - all zones		
Drawing Number OPE-22-076-D1-00	Sheet No. 00/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

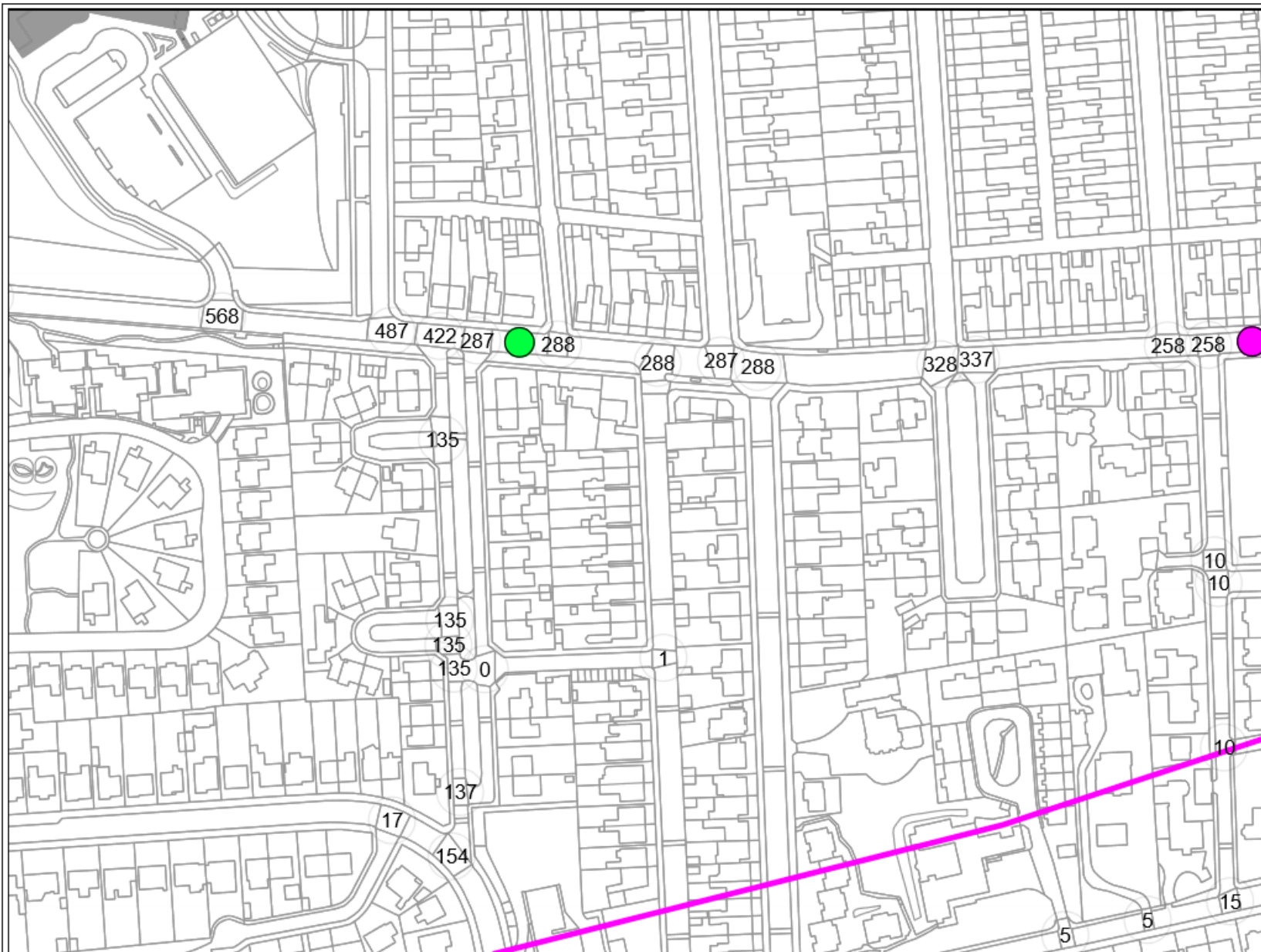


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4

Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 1		
Drawing Number OPE-22-076-D1-01	Sheet No. 01/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

- PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
- ISLAND
- ZEBRA CROSSING
- ▲ COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
- ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

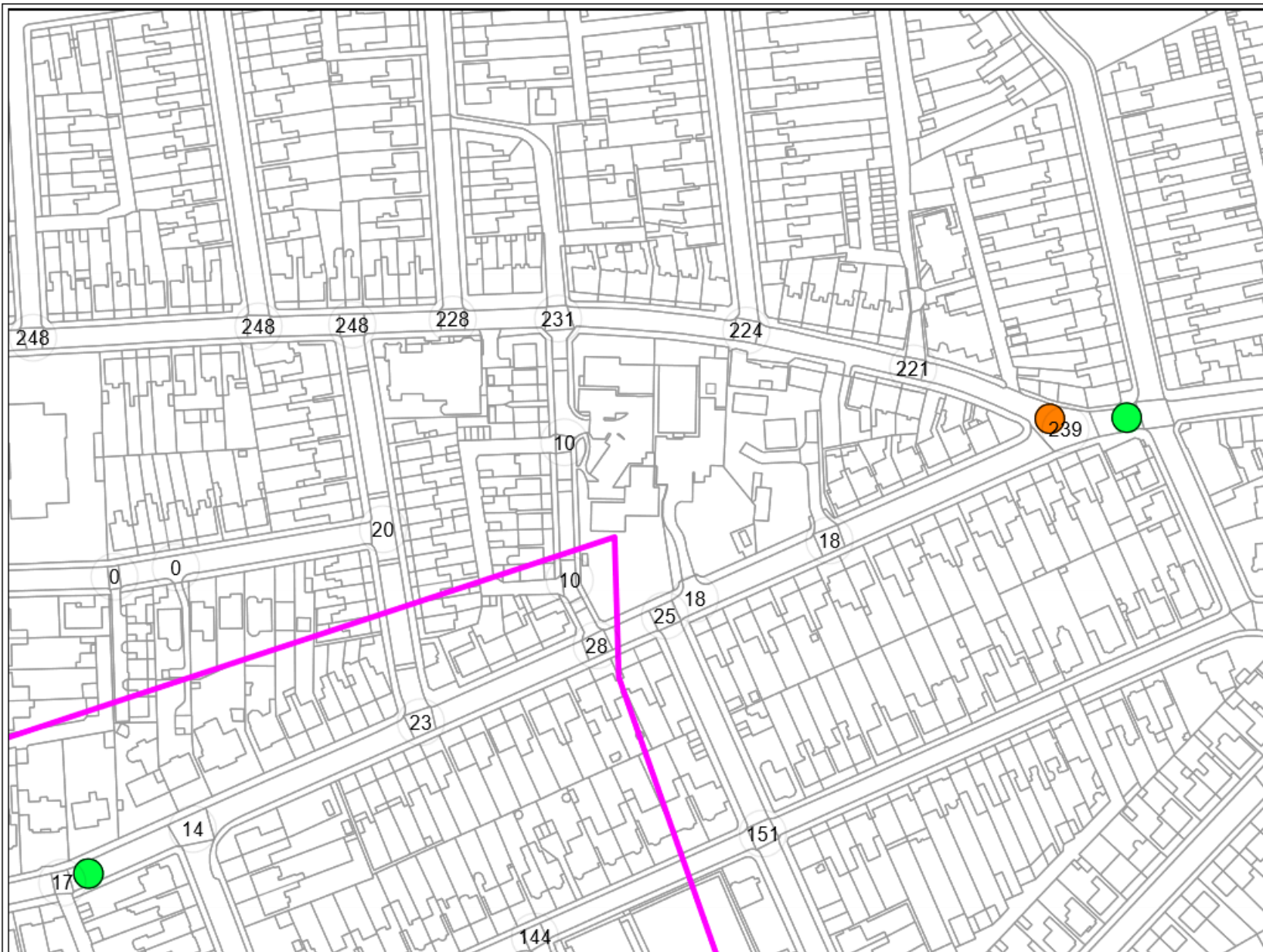


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4

Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 2		
Drawing Number OPE-22-076-D1-02	Sheet No. 02/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

- PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
- ISLAND
- ZEBRA CROSSING
- ▲ COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
- ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client
ABERDEEN CITY COUNCIL

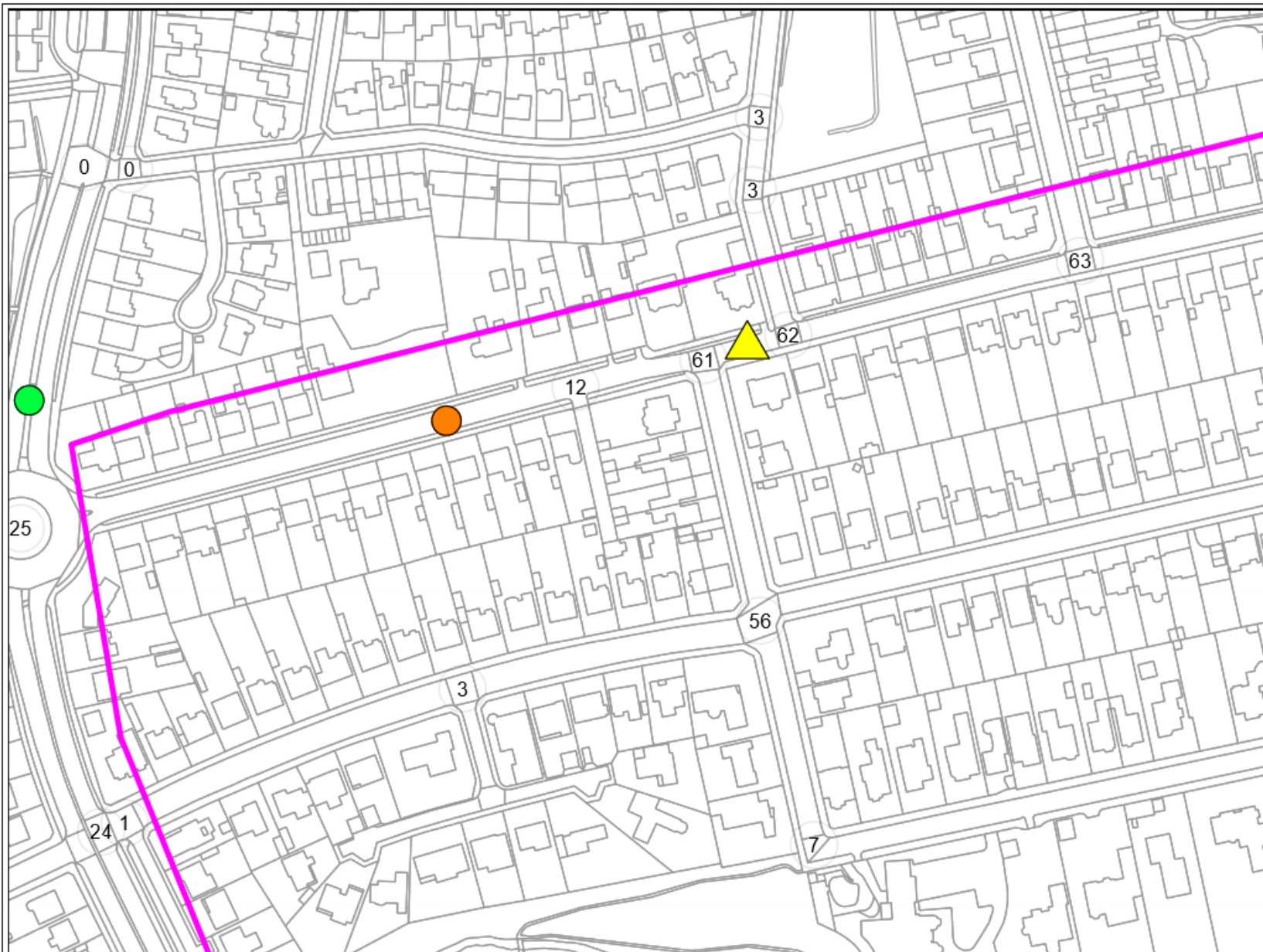
Project
King's Gate & Forest Road area new pedestrian crossing assessment

Description
Issued for information

Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4
------------------	---------------	----------------	------------------	-----------------	---------------------	------------------

Drawing Title
School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 3






Drawing Number OPE-22-076-D1-03	Sheet No. 03/12	Revision 3
------------------------------------	--------------------	---------------



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

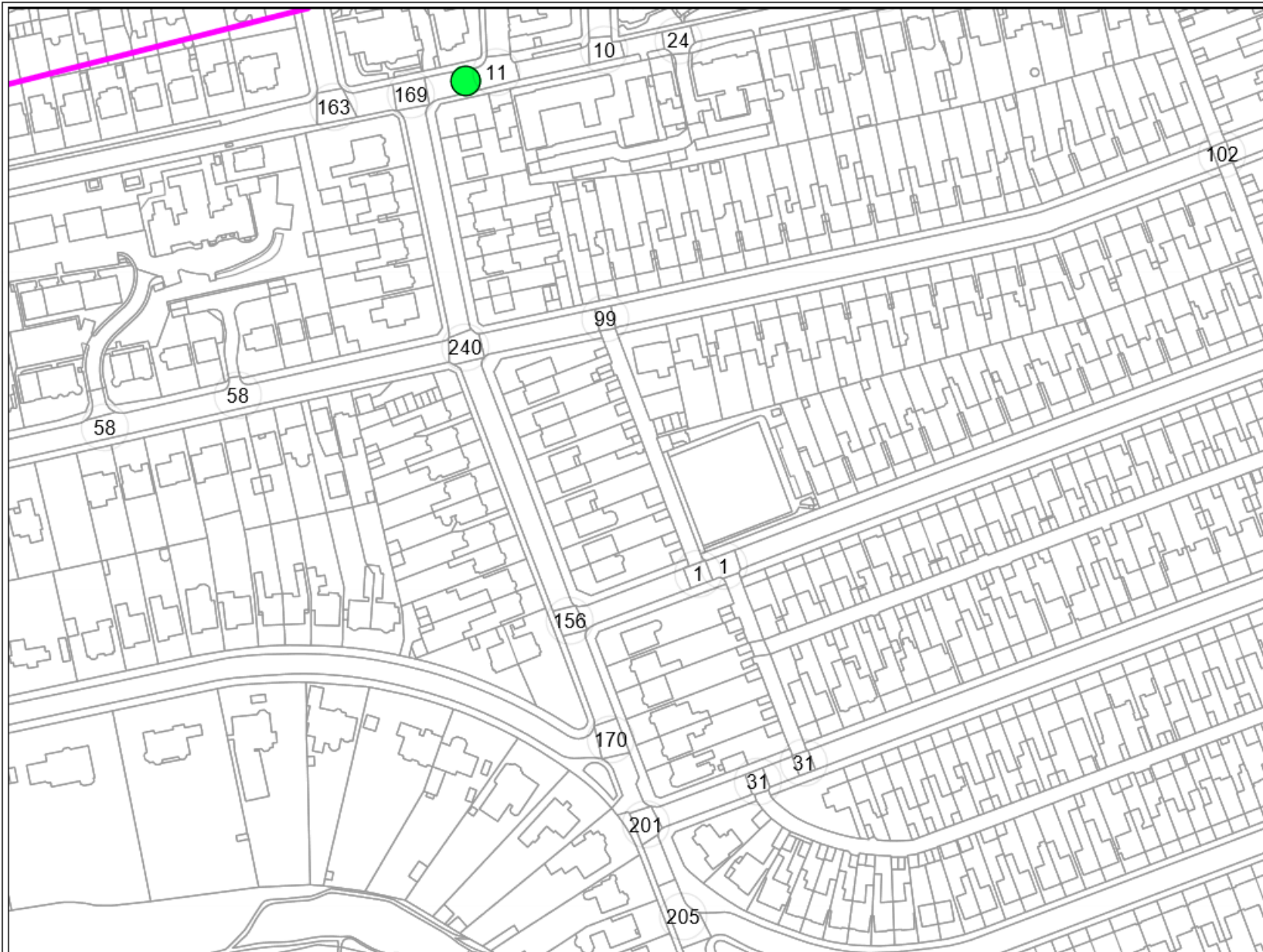
Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
Traffic Management and Road Safety
Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4






Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 4		
Drawing Number OPE-22-076-D1-04	Sheet No. 04/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

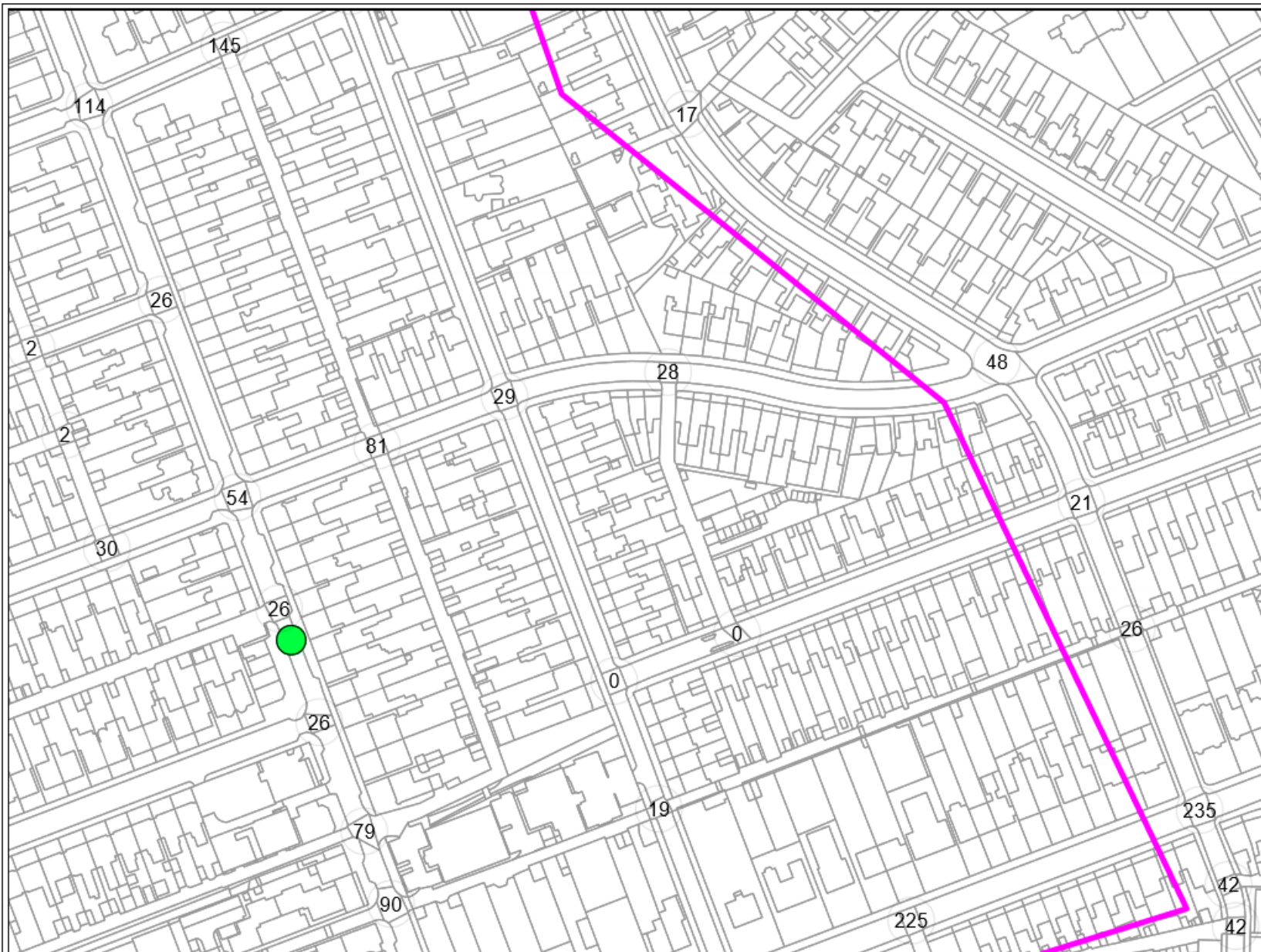


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4






Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 5		
Drawing Number OPE-22-076-D1-05	Sheet No. 05/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client
ABERDEEN CITY COUNCIL

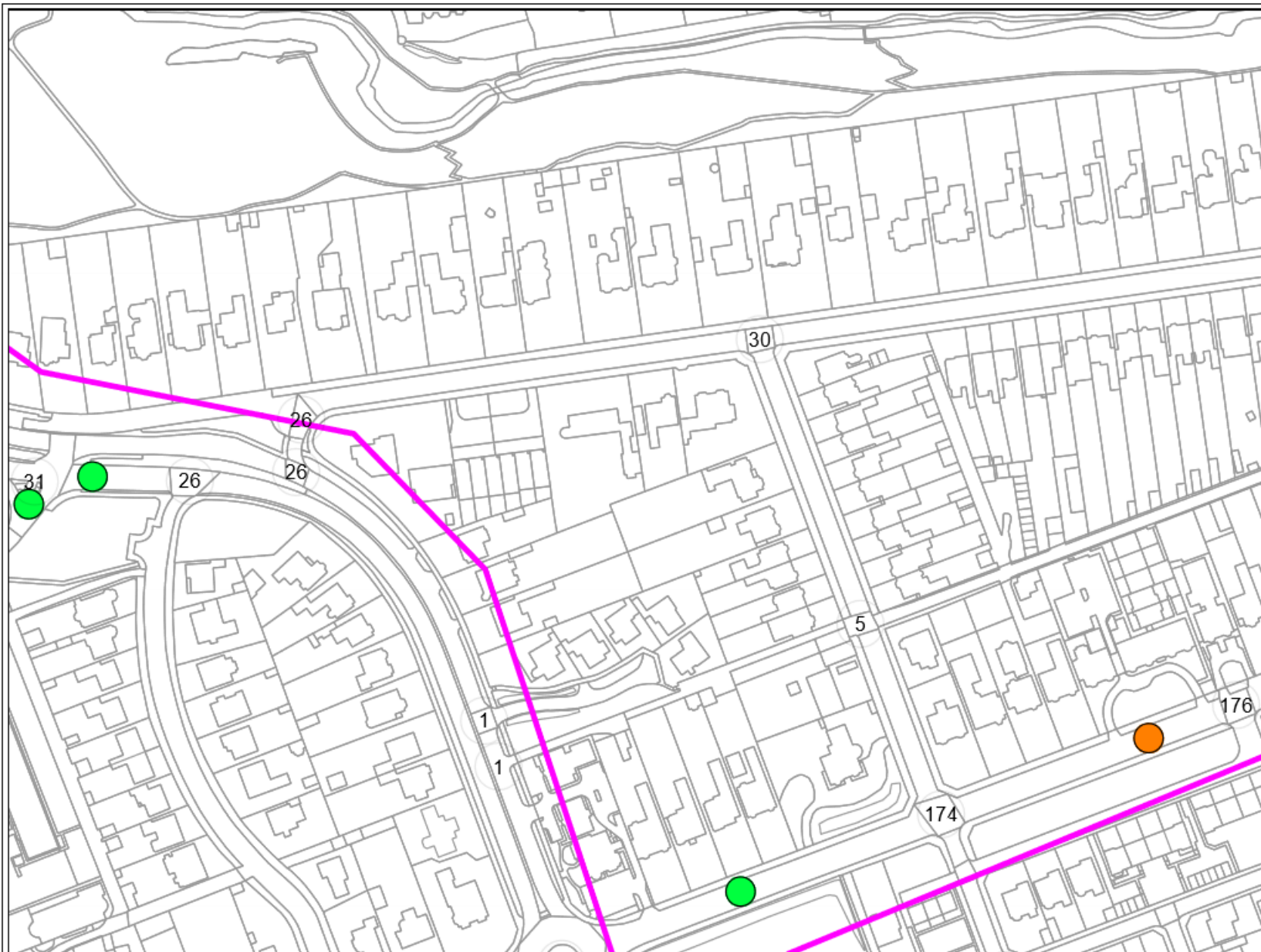
Project
King's Gate & Forest Road area new pedestrian crossing assessment

Description
Issued for information

Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4
------------------	---------------	----------------	------------------	-----------------	---------------------	------------------

Drawing Title
School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 6






Drawing Number OPE-22-076-D1-06	Sheet No. 06/12	Revision 3
------------------------------------	--------------------	---------------



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

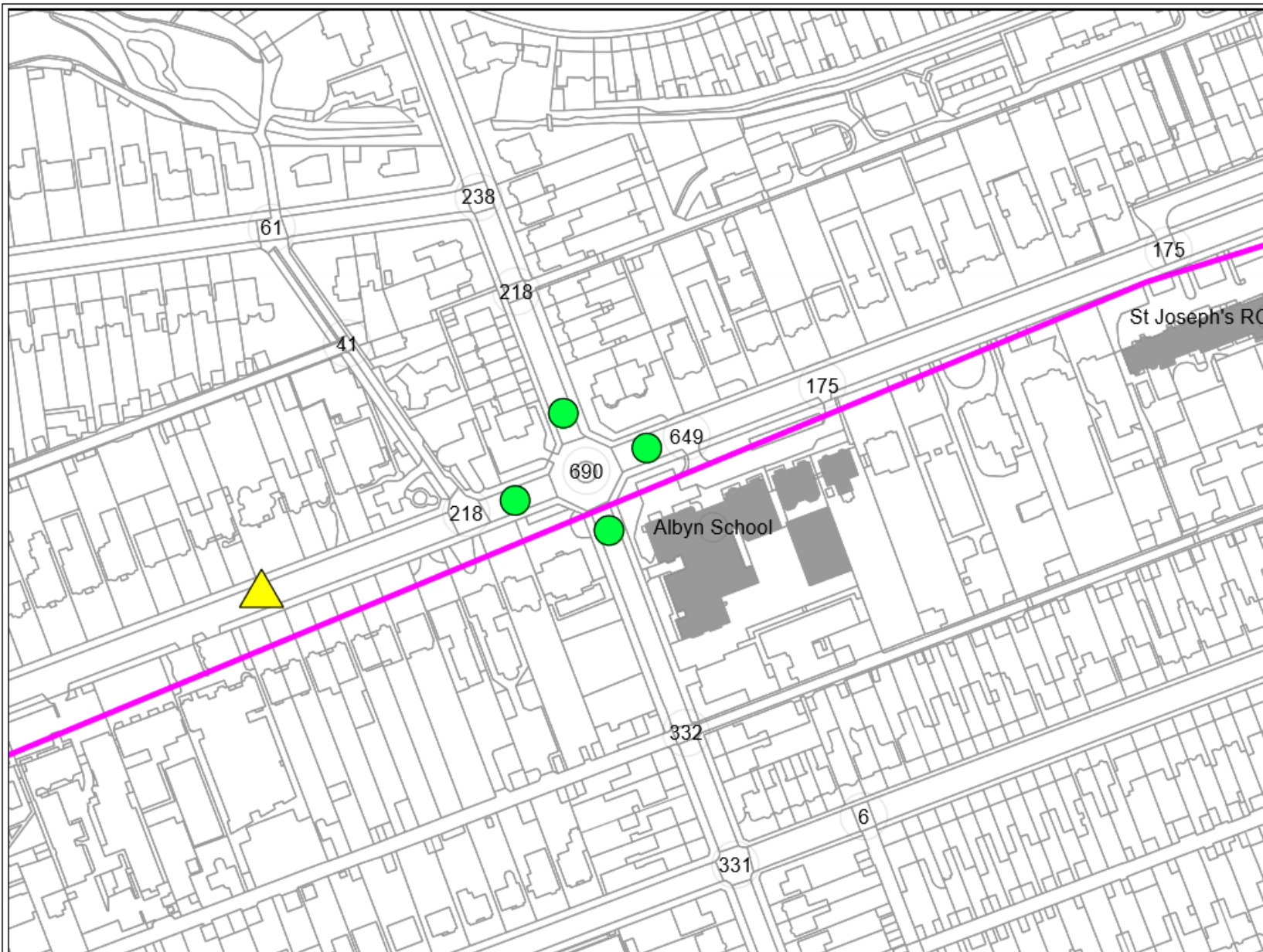


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4

Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 7		
Drawing Number OPE-22-076-D1-07	Sheet No. 07/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

- PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
- ISLAND
- ZEBRA CROSSING
- ▲ COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
- ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



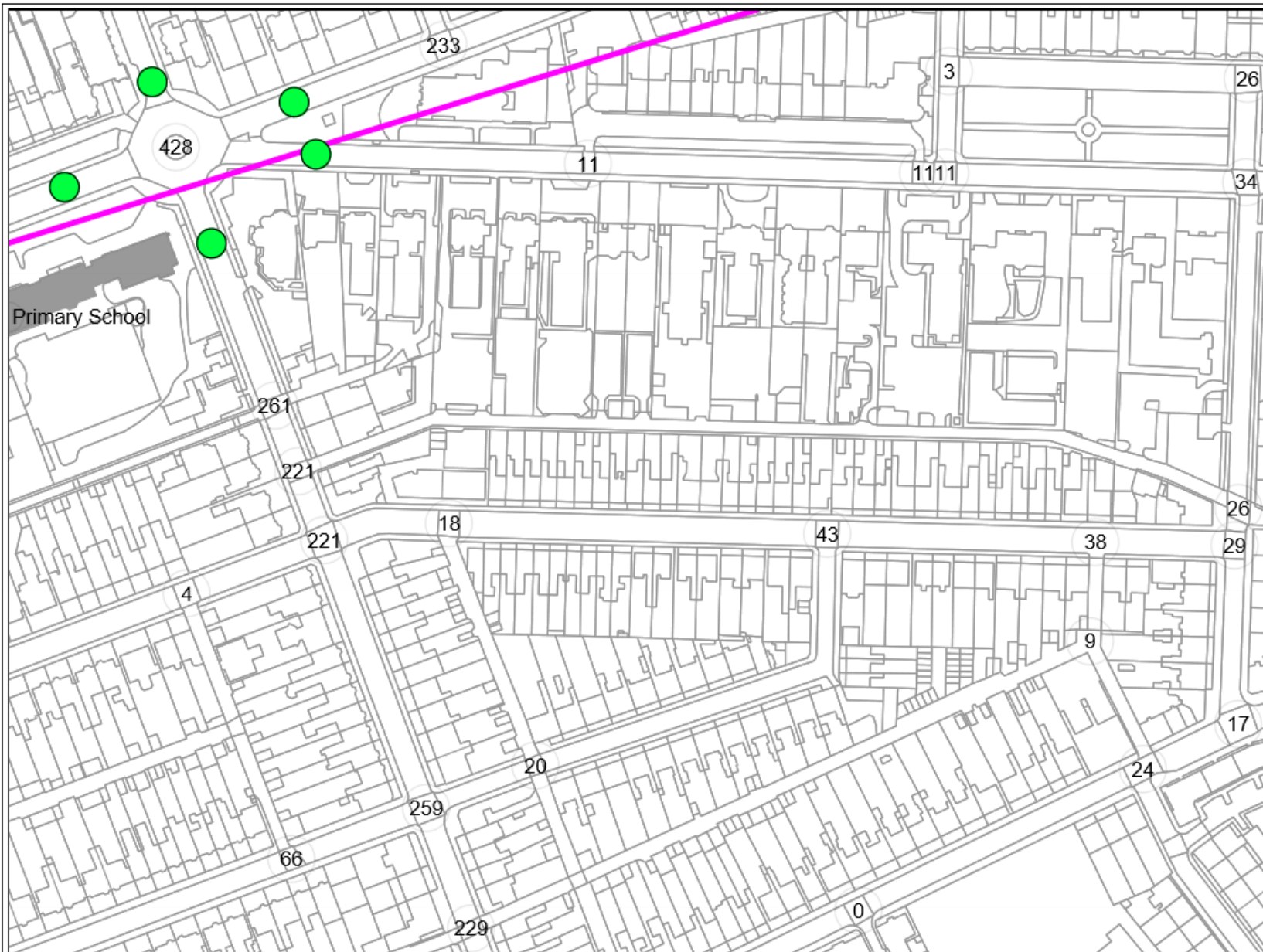
Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4

Drawing Title
School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 8






Drawing Number OPE-22-076-D1-08	Sheet No. 08/12	Revision 3
------------------------------------	--------------------	---------------



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

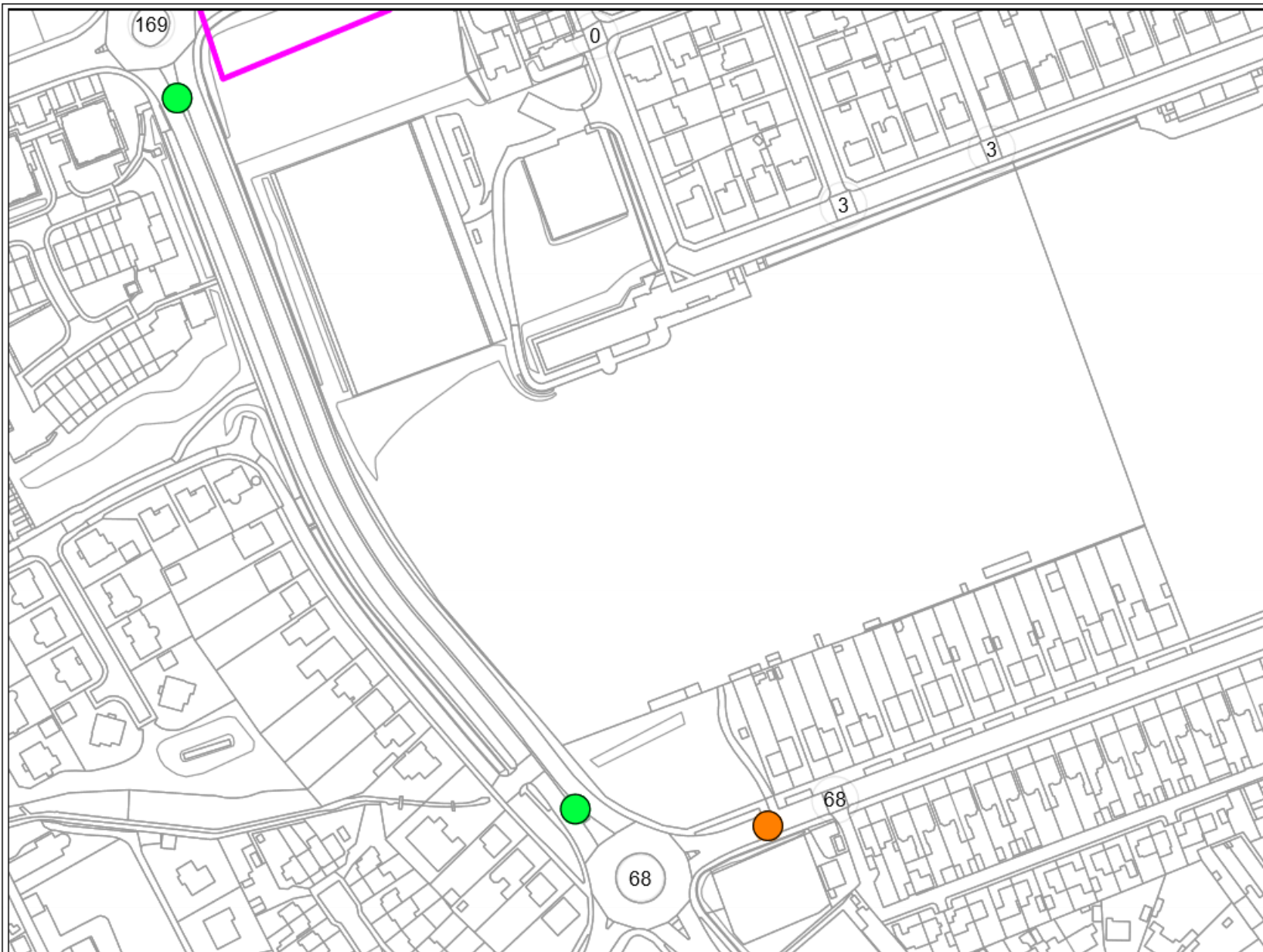


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4






Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 9		
Drawing Number OPE-22-076-D1-09	Sheet No. 09/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

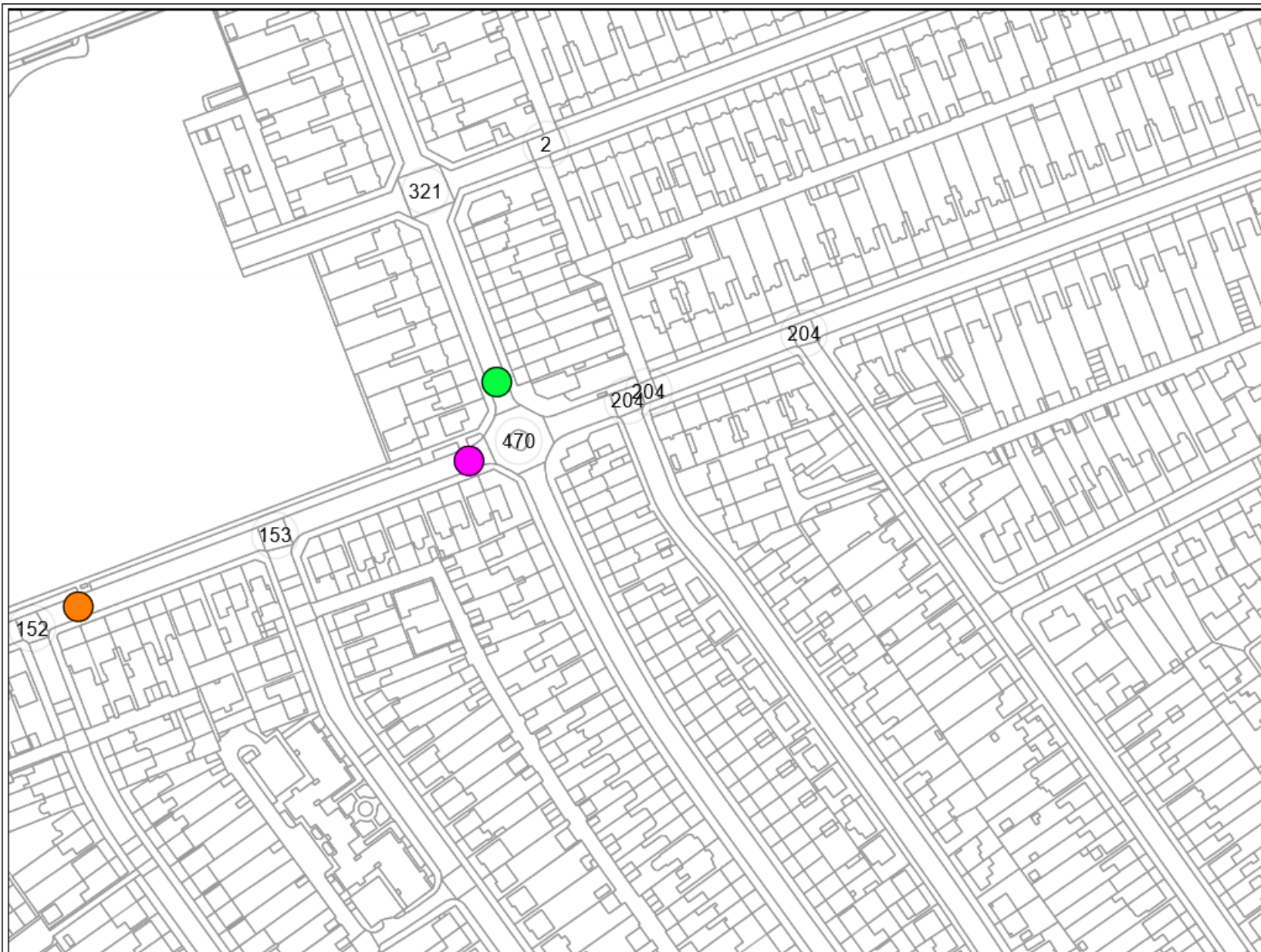


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4

Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 10		
Drawing Number OPE-22-076-D1-10	Sheet No. 10/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

- PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
- ISLAND
- ZEBRA CROSSING
- ▲ COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
- ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022

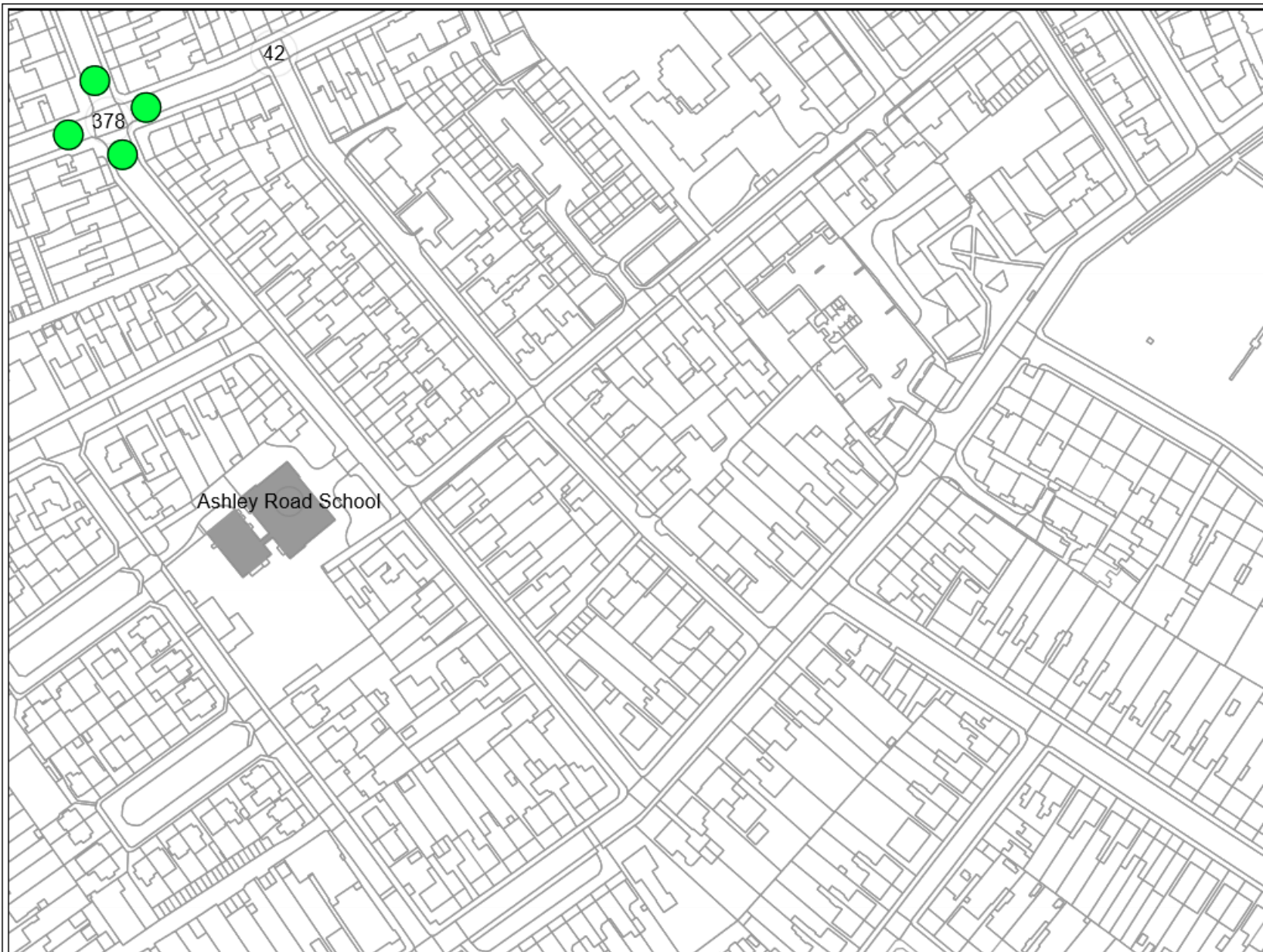


Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator KW	Checked VR	Approved DR	Date 13/05/22	Scale 1:2500	Project Number -	Sheet size A4






Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 11		
Drawing Number OPE-22-076-D1-11	Sheet No. 11/12	Revision 3



GENERAL NOTES:

1. NUMBERS AT JUNCTIONS AGGREGATED FROM GOOGLE MAPS SUGGESTED WALKING ROUTES FROM ANONYMISED PUPILS' HOME ADDRESSES OR DATA ZONES TO ABERDEEN GRAMMAR SCHOOL, ALBYN SCHOOL, ASHLEY ROAD SCHOOL, MILE END SCHOOL AND ST JOSEPH'S RC PRIMARY SCHOOL. THE NUMBERS AT JUNCTIONS SHOW EXPECTED QUANTITY OF PEDESTRIANS IF THERE WAS PERFECT ATTENDANCE AT SCHOOL ONE DAY, ALL PUPILS TRAVELLED TO SCHOOL ON FOOT AND ALL FOLLOWED THE SUGGESTED WALKING ROUTES TO SCHOOL GENERATED BY GOOGLE MAPS. MORE REALISTIC NUMBERS WOULD BE CLOSER TO 50.7% OF THIS (BASED ON 2020 FIGURE IN TABLE 3.1 OF THE SUSTRANS 'HANDS UP' SURVEY).

LEGEND

-  PUSH-BUTTON CONTROLLED PEDESTRIAN CROSSING
-  ISLAND
-  ZEBRA CROSSING
-  COLLISIONS INVOLVING PEDESTRIANS SINCE 2017 WITHIN ACCIDENT SEARCH ZONE
-  ACCIDENT SEARCH ZONE

Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



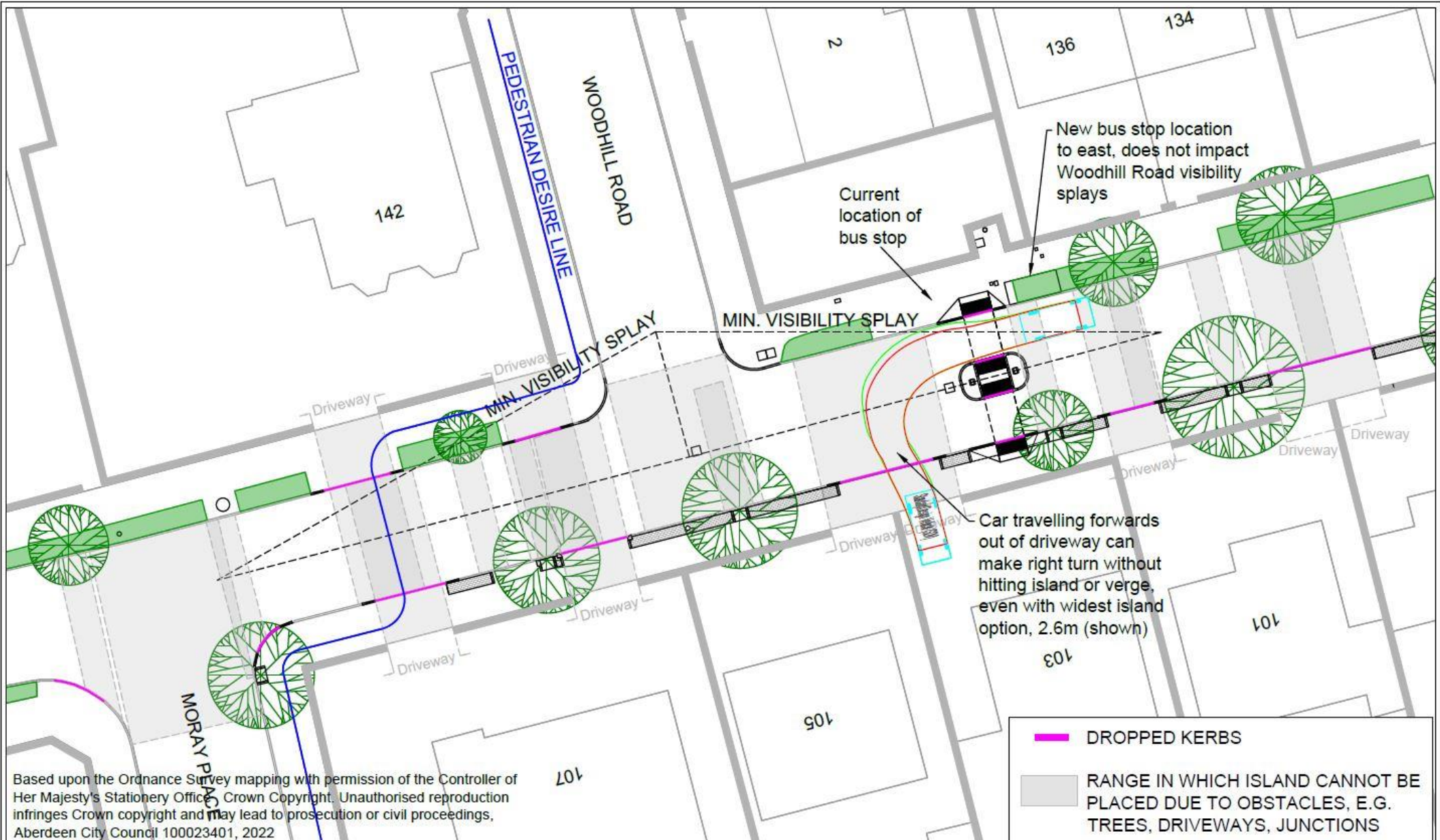
Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL						
Project King's Gate & Forest Road area new pedestrian crossing assessment						
Description Issued for information						
Originator	Checked	Approved	Date	Scale	Project Number	Sheet size
KW	VR	DR	13/05/22	1:2500	-	A4

Drawing Title School walking route hypothetical ped. qty. in relation to schools, crossing facilities and recorded accidents - zone 12		
Drawing Number OPE-22-076-D1-12	Sheet No. 12/12	Revision 3

Appendix 3 - Island options near Moray Place/Woodhill Road



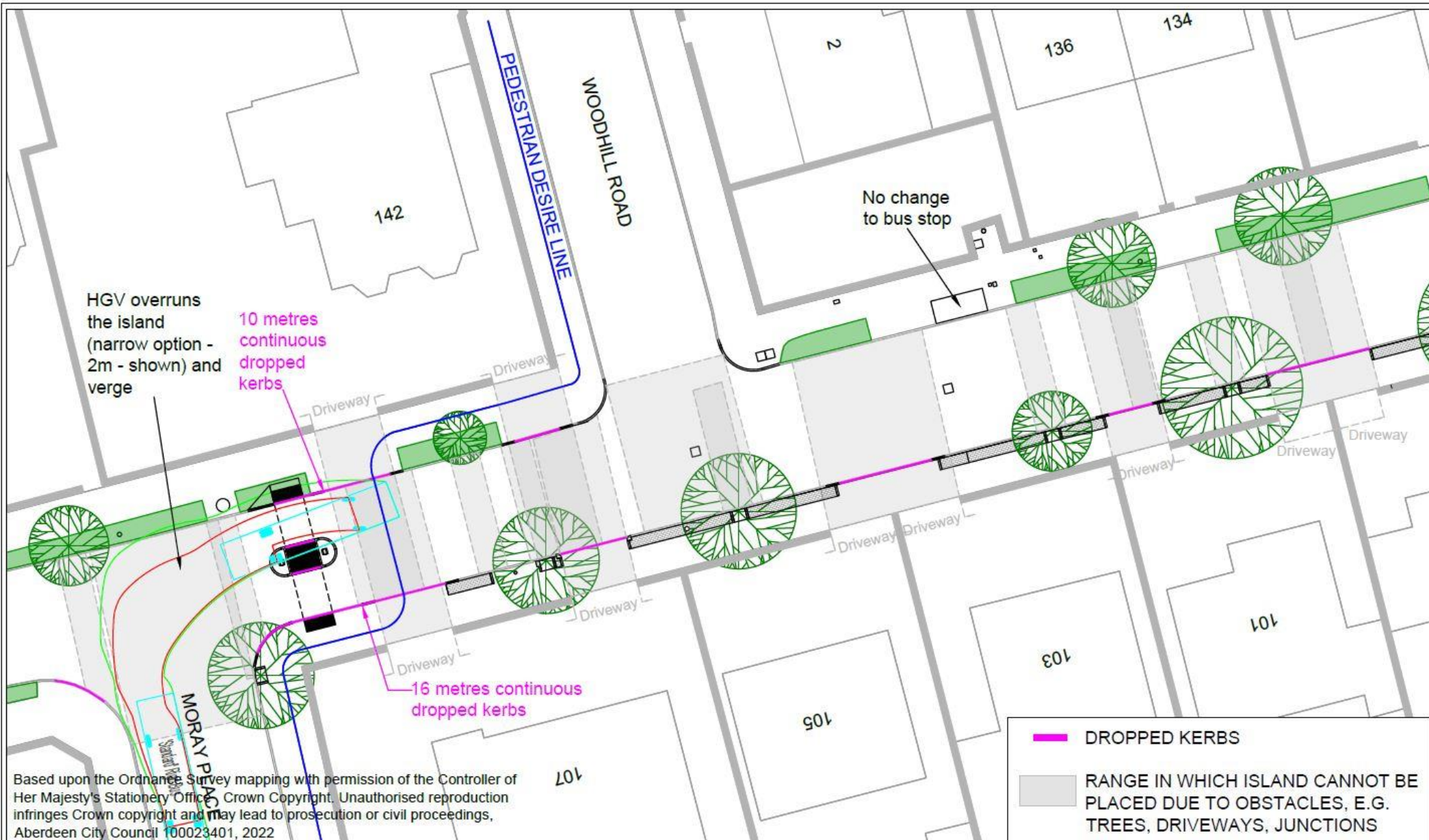
Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
 Traffic Management and Road Safety
 Business Hub 11, 2nd Floor West, Marischal College
 Broad Street, Aberdeen AB10 1AB
 General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL							
Project King's Gate & Forest Road new pedestrian crossing assessment							
Description Issued for information							
Originator KW	Checked VR	Approved VR	Date 03/08/22	Scale 1:350	Project Number -	Sheet size A4	

Drawing Title Potential location for new island, at Woodhill Road eastbound bus stop		
Drawing Number OPE-22-076-D2-01	Sheet No. 1/2	Revision 0



Based upon the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings, Aberdeen City Council 100023401, 2022



Operations and Protective Services
Traffic Management and Road Safety

Business Hub 11, 2nd Floor West, Marischal College
Broad Street, Aberdeen AB10 1AB
General Enquiries Telephone: 01224 522305

Client ABERDEEN CITY COUNCIL							
Project King's Gate & Forest Road new pedestrian crossing assessment							
Description Issued for information							
Originator KW	Checked VR	Approved VR	Date 03/08/22	Scale 1:350	Project Number -	Sheet size A4	

Drawing Title Potential location for new island, nearest Moray Place		
Drawing Number OPE-22-076-D2-02	Sheet No. 2/2	Revision 0