The background of the page is a vibrant red color. It is decorated with several abstract geometric shapes in blue, green, and white. In the top right, there is a large white circle with a blue border, partially overlapping a dark blue rectangular area. To its left, a green curved shape overlaps the red background. In the bottom left, there is a blue shape with a white circle inside, and another blue shape with a white circle inside. A large green curved shape is in the bottom right, overlapping a red curved shape. The text is positioned on the left side of the page.

**Appendix H.2**  
Bus Stop Review  
Analysis



# Lucan to City Centre Core Bus Corridor Scheme

## Bus Stop Review Analysis

March 2022



| No. | Direction | Bus Stop                                      |      | Existing Stop? | Proposal (Retained / Removed / New) | Demand (AM peak) 2028 |                   |                |            | Bus Lay-by or Onstreet |            | Proposed Bus Stop Capacity | Spacing of Bus Stops (meters) | Public Consultation Feedback (Any specific feedback on this stop) |
|-----|-----------|---|------|----------------|-------------------------------------|-----------------------|-------------------|----------------|------------|------------------------|------------|----------------------------|-------------------------------|---|
|     |           | Name  | No.  |                |                                     | Local Services        | Regional Services | Total Services | Passengers | Existing               | Proposed   | No. of Bays                |                               |   |
| 1   | Inbound   | Lucan Retail Park                             | 2234 | Yes            | Retained                            | 17                    | 0                 | 17             | 2356       | onstreet               | onstreet   | 2                          | Start of Scheme               | No  |
| 2   |           | Hermitage Golf Club                           | 2235 | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               | No  |
| 3   |           | Ballyowen Lane (near Hermitage Golf Club)     | 2236 | Yes            | Retained                            | 45                    | 5                 | 50             | 4061       | bus lay-by             | bus lay-by | 1                          | 955                           | No  |
| 4   |           | Hermitage Clinic (i)                          | 2238 | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               |   |
| 5   |           | Hermitage Clinic (ii)                         | 5056 | Yes            | Retained                            | 48                    | 2                 | 50             | 4061       | onstreet               | onstreet   | 1                          | 520                           | No  |
| 6   |           | N4 inbound (near the inbound merge)           | N/A  | No             | Removed                             |                       |                   | 16             | 1960       | N/A                    | bus lay-by | 1                          |                               | No  |
| 7   |           | Liffey Valley, Kings Hospital                 | 2239 | Yes            | Retained                            | 53                    | 19                | 72             | 6031       | bus lay-by             | bus lay-by | 3                          | 370                           | No  |
| 8   |           | Hollyville Lawn, Lucan Old Road               | 4359 | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               |   |
| 9   |           | Palmerstown, Old Lucan Road                   | 4360 | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               |   |
| 10  |           | Mill Lane, Old Lucan Road                     | New  | No             | New                                 | New                   | New               | New            | N/A        | N/A                    | onstreet   | 1                          | 180                           | No  |
| 11  |           | Kennelsfort Road (Lower)                      | ?    | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               |   |
| 12  |           | Chapelizod Bypass at Kennelsfort Road         | 2241 | Yes            | Retained                            | 50                    | 14                | 64             | 5751       | onstreet               | bus lay-by | 1                          | 1500                          | No  |
| 13  |           | Palmerstown, Lucan Road (The Oval)            | 2242 | Yes            | Retained                            | 50                    | 14                | 64             | 5751       | onstreet               | bus lay-by | 1                          | 210                           | No  |
| 14  |           | Chapelizod Bypass (over Chapelizod Hill Road) | New  | No             | New                                 | 46                    | 14                | 60             | 5676       | N/A                    | onstreet   | 1                          | 1670                          | <a href="#">Yes</a>   |
| 15  |           | Islandbridge, Memorial Gardens gate           | 7435 | Yes            | Retained                            | 50                    | 40                | 90             | 6307       | onstreet               | onstreet   | 1                          | 2300                          | <a href="#">Yes</a>   |

| No. | Direction | Bus Stop                                      | Permeability Issue<br>(Yes / No) | (I) Interchange Stop (i.e. stops both serving orbital and radial routes) | (II) If Yes, which Services                                  | Distance from Controlled Pedestrian Crossing<br>(meters) | Notes  | Desgin Rationale   |
|-----|-----------|---|----------------------------------|--|--|--|--|--|
|     |           | Name  |                                  |  |  |  |  |  |
| 1   | Inbound   | Lucan Retail Park                             | No                               | Yes  | W4 (Orbital), 322, 323 & 324<br>(Peak Time Routes)           | 15   |  | 1) The existing Lucan Retail Park, Stop 2234, is proposed to be retained but relocated closer to the junction by approximately 25m. The existing stop was located approximately 90m from the controlled pedestrian crossing at the junction, the relocation will therefore improve pedestrian connectivity to the stop.<br>2) A double stop is proposed at this location due to the relatively high volumes of boarding and alighting, stop also serves orbital routes;<br>3) A bus stop island has been introduced to enhance cycle permeability.   |
| 2   |           | Hermitage Golf Club                           |                                  |  |  | >100   |  | Existing bus stop is proposed to be removed due to:<br>1) The stop is situated over 100m from a pedestrian crossing;<br>2) Existing boarding and alighting data is relatively low; and<br>3) The stop is not paired with an outbound stop.   |
| 3   |           | Ballyowen Lane (near Hermitage Golf Club)     | No                               | Yes  | 321, 322, 323, 324, 325, 326, 327, 328<br>(Peak Time Routes) | Foot & Cycle Bridge (25m)                                |  | 1) Existing bus stop layby is proposed to be retained;<br>2) Stop is located adjacent to existing golf club and residential catchment to the south of N4   |
| 4   |           | Hermitage Clinic (i)                          |                                  |  |  | >100   | Stop appears not to be in use  | 1) Existing stop to be removed. Stop is located in excess of 100m from a pedestrian crossing.<br>2) Stop located in close proximity to Stop 5056   |
| 5   |           | Hermitage Clinic (ii)                         | Yes                              | No   | N/A  | 50   | 1) Permeability - Existing boundary trees adjacent to bus stop                         | 1) Existing stop proposed to be retained<br>2) Minor relocation of the existing stop closer to the controlled pedestrian crossing;<br>3) A layby not proposed at this location for the following reasons: It is envisaged the majority of services will continue along the corridor therefore inline stop will not cause significant delay to bus journey times. Also there is an existing constraints at this location due to the existing stone wall boundary and trees.   |
| 6   |           | N4 inbound (near the inbound merge)           | Yes                              | No   | N/A  | >100   | 1) Permeability - Access for pedestrians   | 1) Existing stop proposed to be removed for the following reasons:<br>- stop doesn't appear to be in use currently;<br>- stop is in an isolated location with no pedestrian crossing facilities;<br>- No catchment is available from this stop   |
| 7   |           | Liffey Valley, Kings Hospital                 | No                               | Yes  | G2 (Branch Route), S4 & W2 (Orbital Routes)                  | 10   |  | 1) Existing layby to be relocated west of its current location, for the following reasons:<br>- To provide a greater distance for buses exiting the layby to get in lane across M50;<br>- To tie in with a new pedestrian crossing into Liffey Valley shopping centre;<br>- To tie in with the cycle route along the quietway.<br>2) The existing layby has capacity for approx 2 buses. The new layby proposed to be extended to provide additional capacity. A total of 74 services is projected in the AM peak, proposed design will provide capacity for approx 5 buses stopping at this location, which will ensure there will be limited delay to bus journey time |
| 8   |           | Hollyville Lawn, Lucan Old Road               |                                  |  |  |  |  | 1) Bus stop to be removed from Old Lucan Road for the following reasons:<br>- introduction of two way cycle route;<br>- bus services not proposed along this section<br>- Bus stops and services will be available in Palmerstown Village  |
| 9   |           | Palmerstown, Old Lucan Road                   |                                  |  |  |  |  | 1) Bus stop to be removed from Old Lucan Road for the following reasons:<br>- introduction of two way cycle route;<br>- bus services not proposed along this section<br>- Bus stops and services will be available in Palmerstown Village  |
| 10  |           | Mill Lane, Old Lucan Road                     | No                               | No   | N/A  | 10   |  | 1) New stop proposed at this location for the following reasons:<br>- Stop located near nursing home;<br>- stop located in Palmerstown Village;<br>- Paired inbound and outbound stops<br>2) Bus Stop island is proposed to minimise delay for cycle flows   |
| 11  |           | Kennelsfort Road (Lower)                      |                                  |  |  |  |  | Existing bus stop proposed to be removed from this location for the for the following reasons:<br>- nearby stops proposed on Chapelizod Bypass and also also Lucan Old Road.   |
| 12  |           | Chapelizod Bypass at Kennelsfort Road         | No                               | No   | N/A  | 40   |  | 1) Existing bus stop is proposed to be retained in its current location;<br>2) Proposals include a new controlled pedestrian crossing on Chapelizod bypass (eastern arm), to enhance pedestrian connectivity between inbound and outbound stops;<br>3) Existing in-line stop replaced by a new layby. This is due to the high volume of bus services in the morning peak, 64 buses per hour. Layby will assist to minimise delay along the corridor when a bus is stopped at this location<br>4) Bus stop island not required as advisory cycle route is along Lucan Road  |
| 13  |           | Palmerstown, Lucan Road (The Oval)            | No                               | No   | N/A  | 30   | 1) Permeability - Pedestrian Crossing is proposed on the west arm of The Oval junction | 1) Existing stop proposed to be relocated prior to junction for the following reasons:<br>- Proposed layby to be introduced due to the high volume of services on the CBC at this location;<br>- At the existing location, it was not feasible to introduce a layby due to the existing Petrol Filling Station. The proposed relocated stop utilises an existing grass verge to accommodate the layby;<br>- New pedestrian footpath and crossing proposed to connect the inbound and outbound stops  |
| 14  |           | Chapelizod Bypass (over Chapelizod Hill Road) | No                               | No   | N/A  | 10   |  | 1) Proposed double layby. Stop proposed to provide enhance accessibility for the nearby residential and commercial areas to CBC  |
| 15  |           | Islandbridge, Memorial Gardens gate           | Yes                              | No   | N/A  | 80   | 1) Permeability - Existing boundary wall and trees adjacent to bus stop                | 1) Existing stop to be retained but proposed to be relocated closer to the junction for the following reasons:<br>- Proposed to be located immediately adjacent to a controlled pedestrian crossing;<br>- proposed to be located near to the entrance of the memorial gardens<br>2) Layby considered at this location but due to existing land constraints associated with the existing memorial gardens and boundary wall, layby at this location deemed not feasible   |

| No. | Direction | Bus Stop                                      |      | Existing Stop? | Proposal (Retained / Removed / New) | Demand (AM peak) 2028 |                   |                |            | Bus Lay-by or Onstreet |            | Proposed Bus Stop Capacity | Spacing of Bus Stops (meters) | Public Consultation Feedback (Any specific feedback on this stop) |
|-----|-----------|---|------|----------------|-------------------------------------|-----------------------|-------------------|----------------|------------|------------------------|------------|----------------------------|-------------------------------|---|
|     |           | Name  | No.  |                |                                     | Local Services        | Regional Services | Total Services | Passengers | Existing               | Proposed   | No. of Bays                |                               |   |
| 16  |           | Kilmainham Jail, Islandbridge, Memorial Park  | 2722 | Yes            | Retained                            | 50                    | 40                | 90             | 6307       | onstreet               | onstreet   | 2                          | 350                           | <a href="#">Yes</a>   |
| 17  |           | Heuston Station, Saint John's Road West       | 4413 | Yes            | Retained                            | 62                    | 42                | 104            | 7578       | onstreet               | onstreet   | 2-3                        | 1160                          | No  |
| 18  |           | Heuston Station                               | New  | No             | New                                 | New                   | New               | New            | N/A        | N/A                    | onstreet   | 1                          | 100                           | No  |
|     |           |   |      |                |                                     |                       |                   |                |            |                        |            | Average Spacing (m):       | 847                           |   |
| 1   |           | Heuston Station, Victoria Quay                | 4320 | Yes            | Retained                            | 23                    | 0                 | 23             | TBC        | onstreet               | onstreet   | 1                          | 460                           | No  |
| 2   |           | Outside Heuston Train Station / Heuston St    | 2637 | Yes            | Retained                            | 57                    | 24                | 81             | 1520       | onstreet               | onstreet   | 1                          | 190                           | No  |
| 3   |           | Islandbridge / SCR, Chapelizod Bypass         | 2721 | Yes            | Retained                            | 43                    | 6                 | 49             | 9          | onstreet               | onstreet   | 2                          | 1025                          | No  |
| 4   |           | Memorial Gardens                              | 7012 | Yes            | Retained                            | 43                    | 6                 | 49             | 1135       | onstreet               | onstreet   | 1                          | 385                           | <a href="#">Yes</a>   |
| 5   |           | Chapelizod Bypass (over Chapelizod Hill Road) | New  | No             | New                                 | 43                    | 4                 | 47             | 1113       | N/A                    | onstreet   | 1                          | 2300                          | <a href="#">Yes</a>   |
| 6   |           | Palmerstown Drive, Lucan Road                 | 2201 | Yes            | Removed                             |                       |                   | 51             | 1128       | onstreet               | onstreet   | 1                          |                               | No  |
| 7   |           | The Oval                                      | 7239 | Yes            | Retained                            | 47                    | 4                 | 51             | 993        | onstreet               | bus lay-by | 1                          | 1660                          | No  |
| 8   |           | Palmerstown, Lucan Road                       | TBC  | Yes            | Retained                            | 47                    | 4                 | 51             | 993        | onstreet               | bus lay-by | 1                          | 320                           | No  |
| 9   |           | Palmerston, Palmerstown Village               | 2212 | Yes            | Retained                            | N/A                   | N/A               | N/A            | N/A        | onstreet               | onstreet   | 1                          | 200                           | No  |
| 10  |           | Mill Lane, Old Lucan Road                     | New  | No             | New                                 | New                   | New               | N/A            | N/A        | N/A                    | onstreet   | 1                          | 365                           | No  |
| 11  |           | Old Lucan Rd / Kenelsfort Road                | New  | No             | Removed                             | New                   | New               | N/A            | N/A        | N/A                    | onstreet   |                            | 200                           | No  |
| 12  |           | Hollyville Lawn, Old Lucan Road               | 4357 | Yes            | Removed                             |                       |                   | 0              | 0          | onstreet               | N/A        |                            |                               |   |

| No. | Direction | Bus Stop                                      | Permeability Issue<br>(Yes / No) | (I) Interchange Stop (i.e. stops both serving orbital and radial routes) | (II) If Yes, which Services | Distance from Controlled Pedestrian Crossing<br>(meters) | Notes   | Desgin Rationale   |
|-----|-----------|---|----------------------------------|--|-----------------------------|--|---|--|
|     |           | Name  |                                  |  |                             |  |   |  |
| 16  |           | Kilmainham Jail, Islandbridge, Memorial Park  | Yes                              | No   | N/A                         | 220  | 1) Permeability - Existing boundary wall and trees adjacent to bus stop   | 1) Existing stop proposed to be retained.<br>2) Layby considered at this location but not feasible due to existing physical constraints;<br>3) Relocating the stop closer to the pedestrian crossing considered but not feasible due to the proposed retention of the left turn lane, to cater for the approx 400 left turners in the morning peak hour (from base 2019 surveys);<br>4) Double stop proposed to cater for 2 buses stopping. This is due to the relatively high (>100) boarding and alighting data during the peak periods                                  |
| 17  |           | Heuston Station, Saint John's Road West       | No                               | Yes  | O, S2 & N2 (Orbital Routes) | 70   |   | 1) Existing stop location is proposed to be retained. The existing layby is proposed to be amended to an in-line stop for the following reasons:<br>- to cater for a new bus stop island to provide enhanced off road facility for cyclists.<br>- Physical constraints from achieving a layby at this location due to the existing station building  |
| 18  |           | Heuston Station                               | No                               | Yes  | O, S2 & N2 (Orbital Routes) | 15   |   | 1) New two way bus gate in front of Heuston Station. New inbound stop proposed at this location to provide direct access to station and luas   |
| 1   |           | Heuston Station, Victoria Quay                | No                               | Yes  | O, S2 & N2 (Orbital Routes) | 15   |   | 1) Proposed PC3 drawing does now not extend to Victoria Quay. Stop removed from Bus Stop Analysis  |
| 2   |           | Outside Heuston Train Station / Heuston St    | No                               | Yes  | O, S2 & N2 (Orbital Routes) | 20   |   | 1) Existing stop proposed to be relocated east to a new location to allow for a double bus stop and layby to be introduced.<br>2) Double stop layby proposed due to the high volume of services<br>3) Relocated bus stops to be situated adjacent to pedestrian crossing<br>4) Note: The existing stop caters for 3 buses. It was not feasible to accommodate a triple stop in front of the HSE due to the constraints (existing mature trees). Therefore the existing online stop has been retained to supplement the proposed double layby                               |
| 3   |           | Islandbridge / SCR, Chapelizod Bypass         | Yes                              | No   | N/A                         | 165  | 1) Permeability - Existing boundary wall and trees adjacent to bus stop. Bus Stop is far from the R11/R148 junction | 1) Existing bus stop is proposed to be relocated east by approximately 70m to ensure the bus stop is located within 100m of the controlled pedestrian crossing;<br>2) A layby was considered at this location due to the volume of services, but due to existing railway line and embankment at this location, an inline service was considered more appropriate;<br>3) Double stop proposed due to the high volume of services.   |
| 4   |           | Memorial Gardens                              | Yes                              | No   | N/A                         | 85   | 1) Permeability - Existing boundary wall and trees adjacent to bus stop   | 1) Existing Memorial Gardens stop is proposed to be relocated west by approx 50m to ensure stop is located adjacent to a pedestrian crossing;<br>2) A layby was considered at this location due to the volume of services, but due to existing railway line and embankment at this location, an inline service was considered more appropriate;<br>3) A double stop was considered at this location but following a review of the boarding and alighting information, it was considered that a single stop would be sufficient for the anticipated demand at this location |
| 5   |           | Chapelizod Bypass (over Chapelizod Hill Road) | No                               | No   | N/A                         | 10   |   | 1) Proposed new stop at Chapelizod Hill Road, which will enhance accessibility to the corridor<br>2) Proposed double layby, the layby will facilitate buses stopping at this location to minimise impact of waiting buses upon bus journey times.<br>3) Double stop proposed at this location to cater for potential demand at this locaiton.  |
| 6   |           | Palmerstown Drive, Lucan Road                 | No                               | No   | N/A                         | 200  |   | 1) Existing stop proposed to be removed due to:<br>- The stop is not paired with an inbound stop;<br>- Stop not situated within 100m of a pedestrian crossing;<br>- Due to the high volume of services, a layby is a preferred arrangement of this corridor. It is not feasible to introduce layby at this location without landtake.<br>- It was considered that stop can be removed and catchment served by stop at the Oval   |
| 7   |           | The Oval                                      | No                               | No   | N/A                         | 70   |   | 1) Existing stop proposed to be retained, layby to be introduced to minimise impact of waiting buses upon bus journey times.   |
| 8   |           | Palmerstown, Lucan Road                       | No                               | No   | N/A                         | 15   | 1) Permeability - Pedestrian Crossing is proposed   | 1) Existing stop retained, layby introduced due to the high volume of services along the corridor, layby will assist to minimise impact of waiting buses upon bus journey times  |
| 9   |           | Palmerston, Palmerstown Village               | No                               | No   | N/A                         | 15   |   | 1) Existing stop proposed to be removed. Stop is located within the village, but a new stop is proposed in the village (Mill Lane), which is a more suitable location to accommodate waiting facilities and provide a greater catchment area, whilst also facilitating the rationalisation of stops to improve bus journey times.  |
| 10  |           | Mill Lane, Old Lucan Road                     | No                               | No   | N/A                         | 20   |   | 1) Proposed new stop to serve Palmerstown Village. Stop is located on Mill Lane to cater for catchment and also situated near nursing home<br>2) Stop was proposed at PC2 stage, it is now proposed to relocate the stop to facilitate better catchment in Palmerstown Village   |
| 11  |           | Old Lucan Rd / Kenelsfort Road                | No                               | No   | N/A                         | 20   |   | 1) Stop was proposed at PC2 stage on Lucan Road (at the junction with Kennelsfort Lower). Stop has now been removed due to rationalisation, given that a stop is already located along Lucan Road at the Mill Lane junction. This will assist to enhance bus journey times through the village   |
| 12  |           | Hollyville Lawn, Old Lucan Road               |                                  |  |                             |  |   | 1) Bus stop to be removed from Old Lucan Road for the following reasons:<br>- introduction of two way cycle route;<br>- bus services not proposed along this section<br>- Bus stops and services will be available in Palmerstown Village  |

| No. | Direction | Bus Stop                         |      | Existing Stop? | Proposal (Retained / Removed / New) | Demand (AM peak) 2028 |                   |                |            | Bus Lay-by or Onstreet |            | Proposed Bus Stop Capacity | Spacing of Bus Stops (meters) | Public Consultation Feedback (Any specific feedback on this stop) |
|-----|-----------|----------------------------------|------|----------------|-------------------------------------|-----------------------|-------------------|----------------|------------|------------------------|------------|----------------------------|-------------------------------|---|
|     |           | Name                             | No.  |                |                                     | Local Services        | Regional Services | Total Services | Passengers | Existing               | Proposed   | No. of Bays                |                               |   |
| 13  |           | Liffey Valley                    | 2213 | Yes            | Retained                            | 50                    | 8                 | 58             | 1074       | bus lay-by             | bus lay-by | 3                          | 1400                          | No  |
| 14  |           | Clarion Hotel                    | 2214 | Yes            | Retained                            | 45                    | 5                 | 50             | 1009       | bus lay-by             | bus lay-by | 1                          | 360                           | No  |
| 15  |           | St Loman's Hospital              | 2215 | Yes            | Retained                            | 45                    | 5                 | 50             | 1009       | onstreet               | bus lay-by | 2                          | 650                           | No  |
| 16  |           | Ballyowen Lane                   | 2216 | Yes            | Retained                            | 45                    | 5                 | 50             | 1004       | bus lay-by             | bus lay-by | 1                          | 435                           | No  |
| 17  |           | Ballyowen, Slip Road onto the N4 | 4599 | Yes            | Retained                            | 27                    | 0                 | 27             | 482        | onstreet               | onstreet   | 1                          | 500                           | No  |
|     |           |                                  |      |                |                                     |                       |                   |                |            |                        |            | Average Spacing:           | 697                           |   |

| No. | Direction | Bus Stop                         | Permeability Issue<br>(Yes / No) | (I) Interchange Stop (i.e.<br>stops both serving orbital<br>and radial routes) | (II) If Yes, which Services                    | Distance from Controlled Pedestrian Crossing<br>(meters) | Notes  | Desgin Rationale   |
|-----|-----------|----------------------------------|----------------------------------|--|--|--|--|--|
|     |           | Name                             |                                  |  |  |  |  |  |
| 13  |           | Liffey Valley                    | No                               | Yes  | G2 (Branch Route),<br>S4 & W2 (Orbital Routes) | 15   |  | 1) Existing layby to be relocated west of its current location, for the following reasons:<br>- To tie in with a new pedestrian crossing into Liffey Valley shopping centre;<br>2) The existing layby has capacity for approx 2 buses. The new layby proposed to be extended to provide additional capacity. A total of 74 services is projected in the AM peak, proposed design will provide capacity for approx 5 buses stopping at this location, which will ensure there will be limited delay to bus journey time |
| 14  |           | Clarion Hotel                    | <a href="#">Yes</a>              | No   | N/A  | >100   | 1) Permeability - Pedestrian crossing required towards the | 1) Bus stop and layby proposed to be retained as a relatively high volume of boarding and alighting, indicating the stop is well utilised.   |
| 15  |           | St Loman's Hospital              | No                               | No   | N/A  | 170  |  | 1) Existing stop proposed to be upgraded to a double layby. Layby proposed at this location as space permits and also to minimise the impact of stopping buses upon bus journey times.   |
| 16  |           | Ballyowen Lane                   | <a href="#">Yes</a>              | No   | N/A  | >100   | 1) Permeability - Existing boundary wall and trees         | 1) Existing stop proposed to be upgraded to a layby. Layby proposed at this location as space permits and also to minimise the impact of stopping buses upon bus journey times.  |
| 17  |           | Ballyowen, Slip Road onto the N4 | <a href="#">Yes</a>              | Yes  | W4 (Orbital)                                   | 115  |  | 1) Existing bus stop to be retained. Ayby considered at this location but due to constraints, it is not feasible.  |

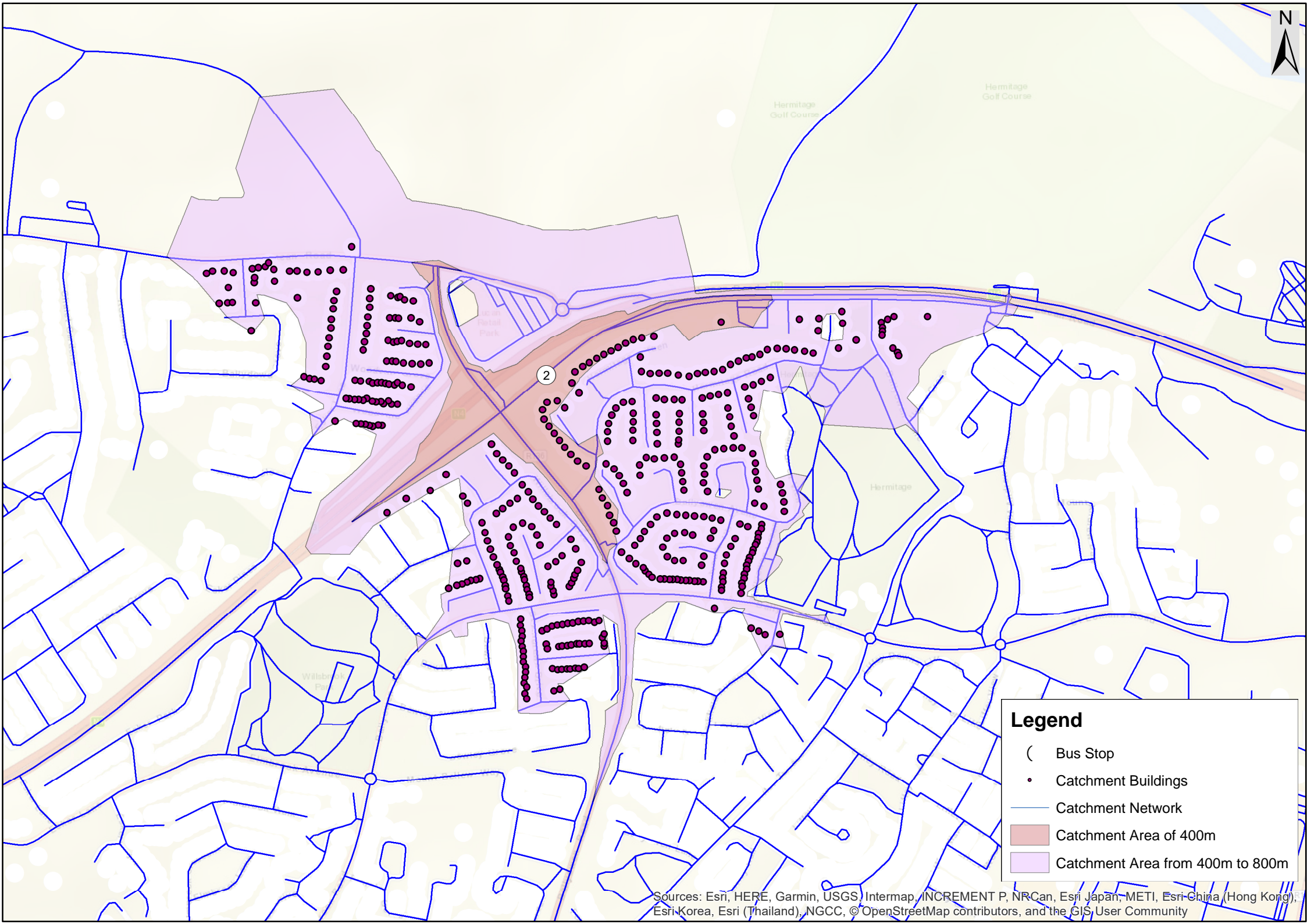


**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

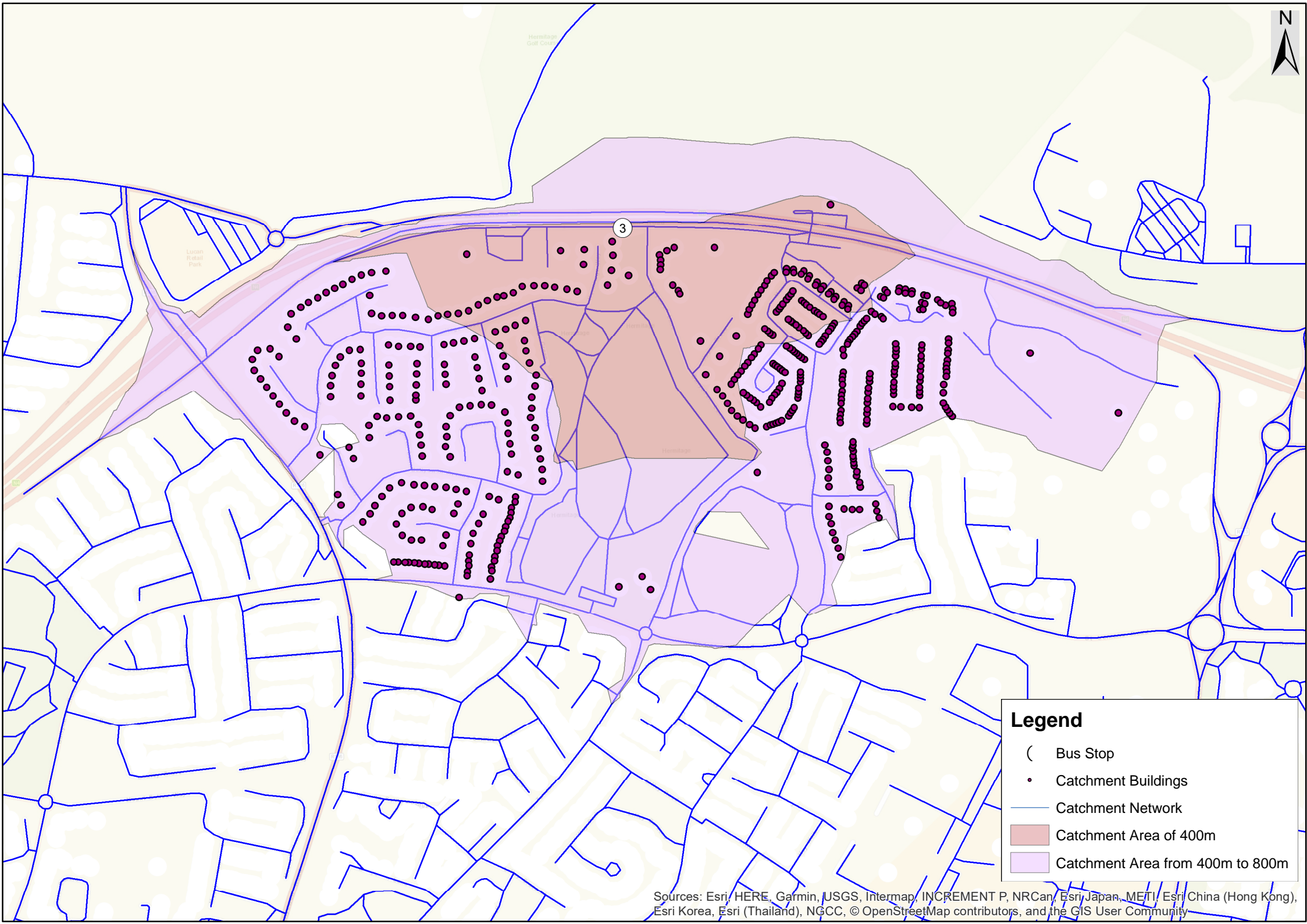




**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

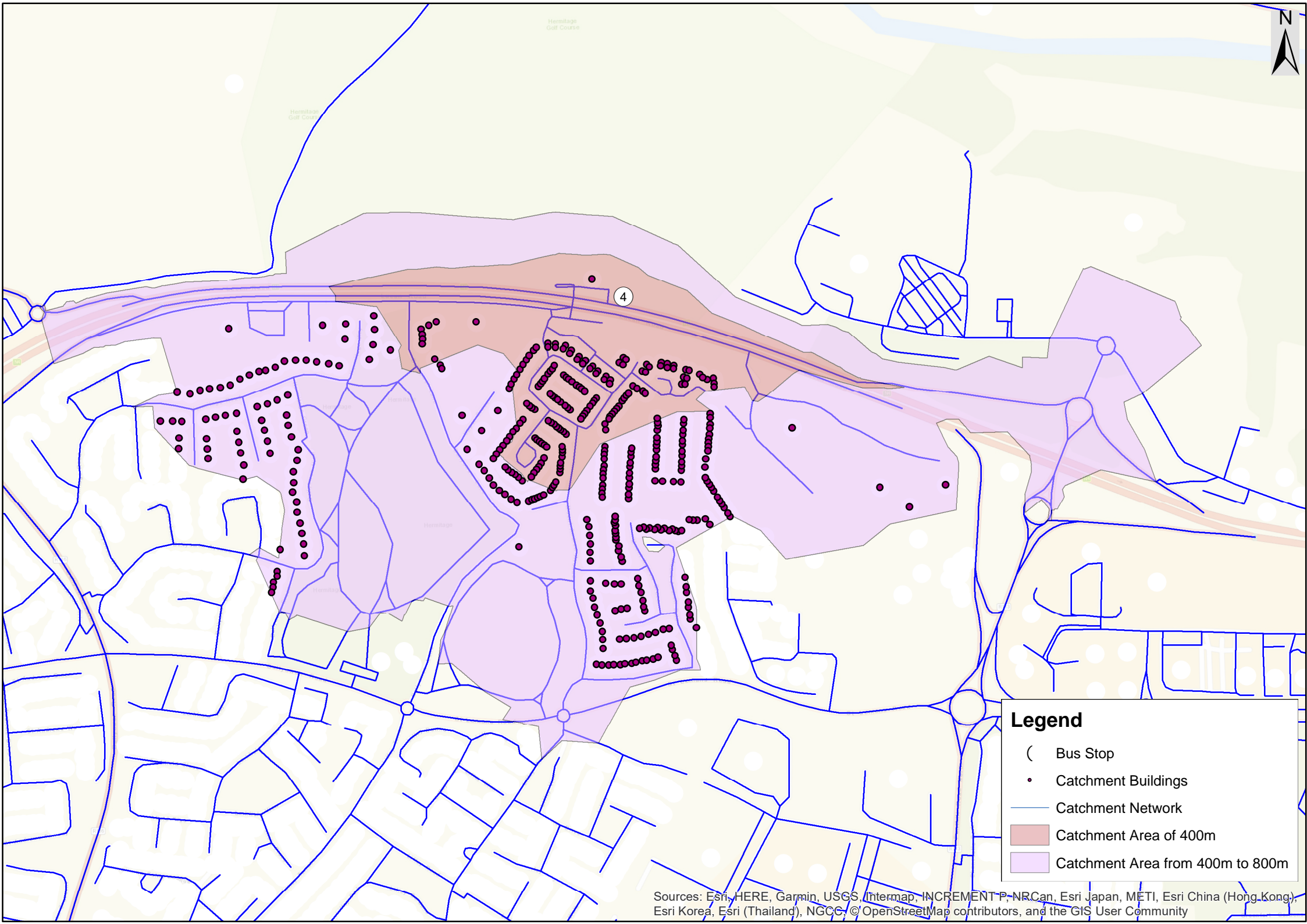




**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

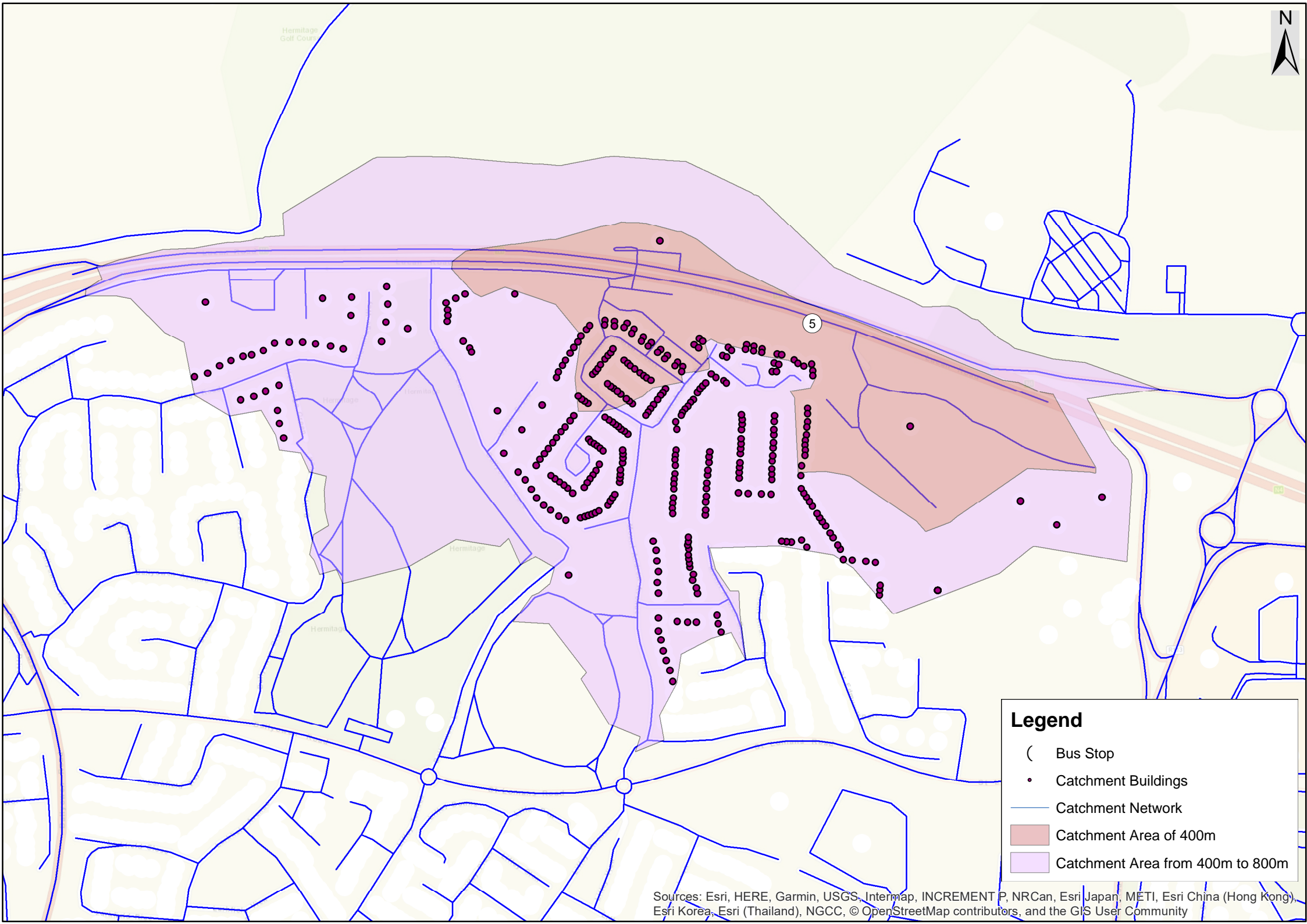


**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

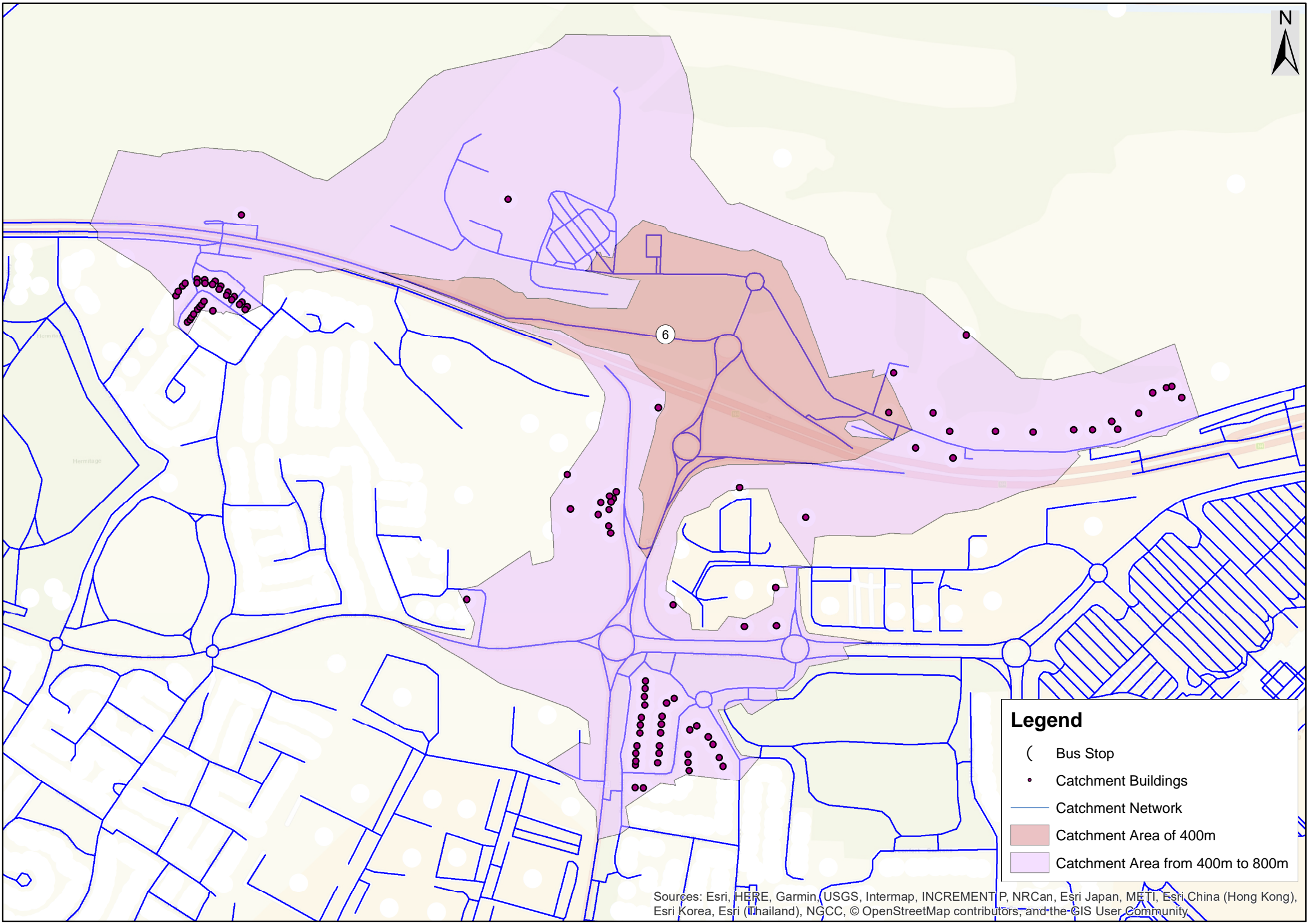




**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

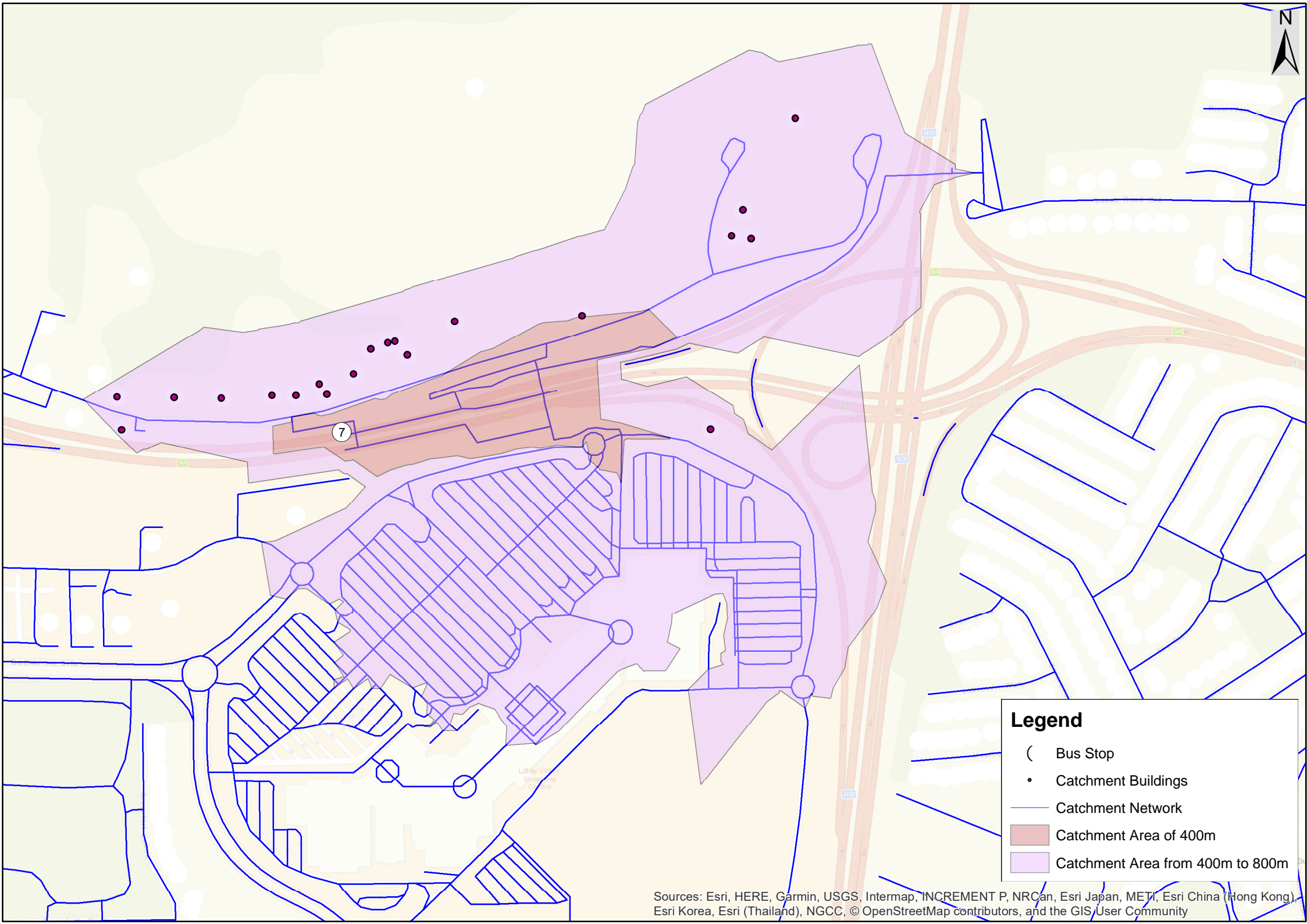


**Legend**

- ( Bus Stop
- Catchment Buildings
- Catchment Network
- Catchment Area of 400m
- Catchment Area from 400m to 800m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

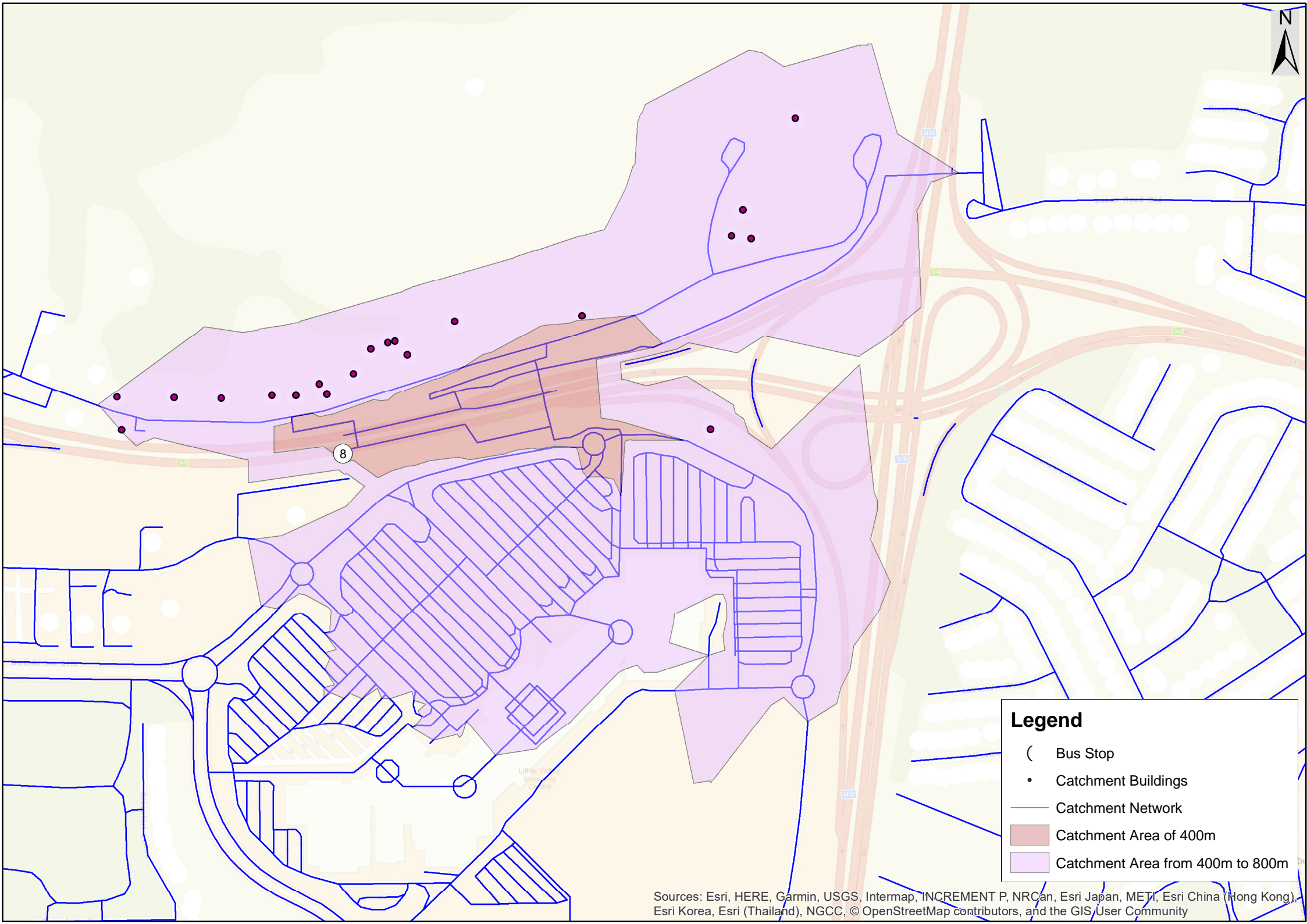




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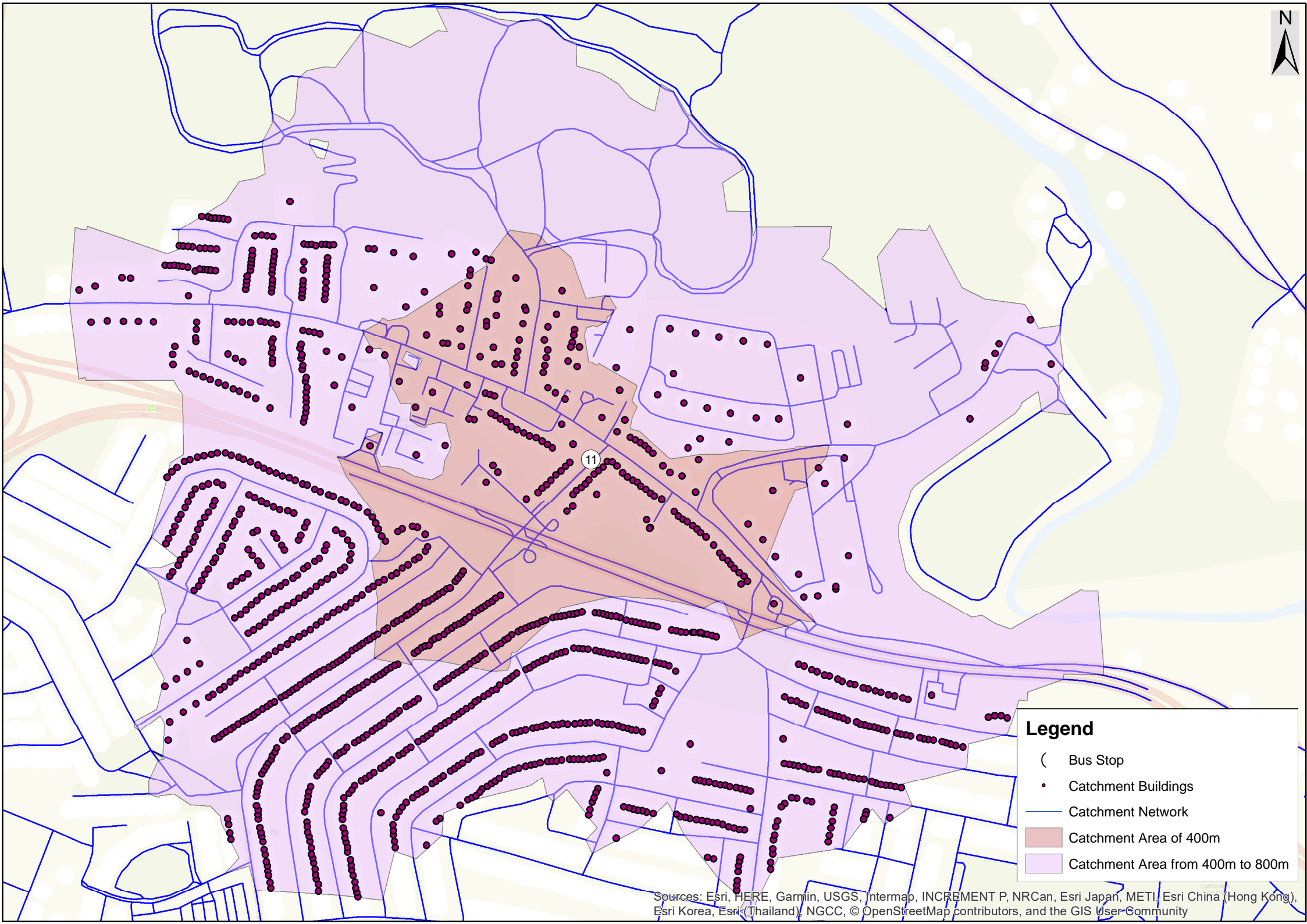
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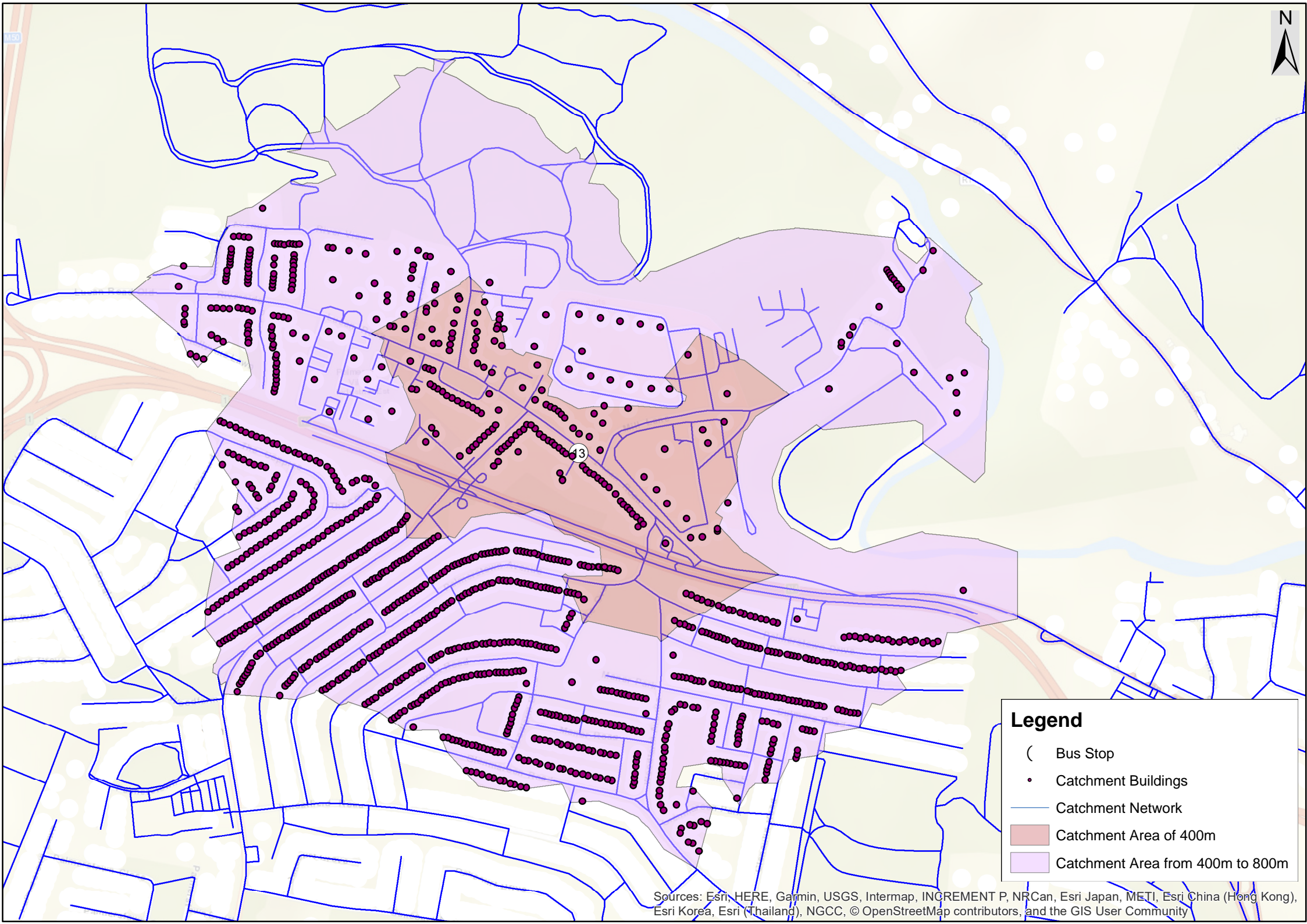


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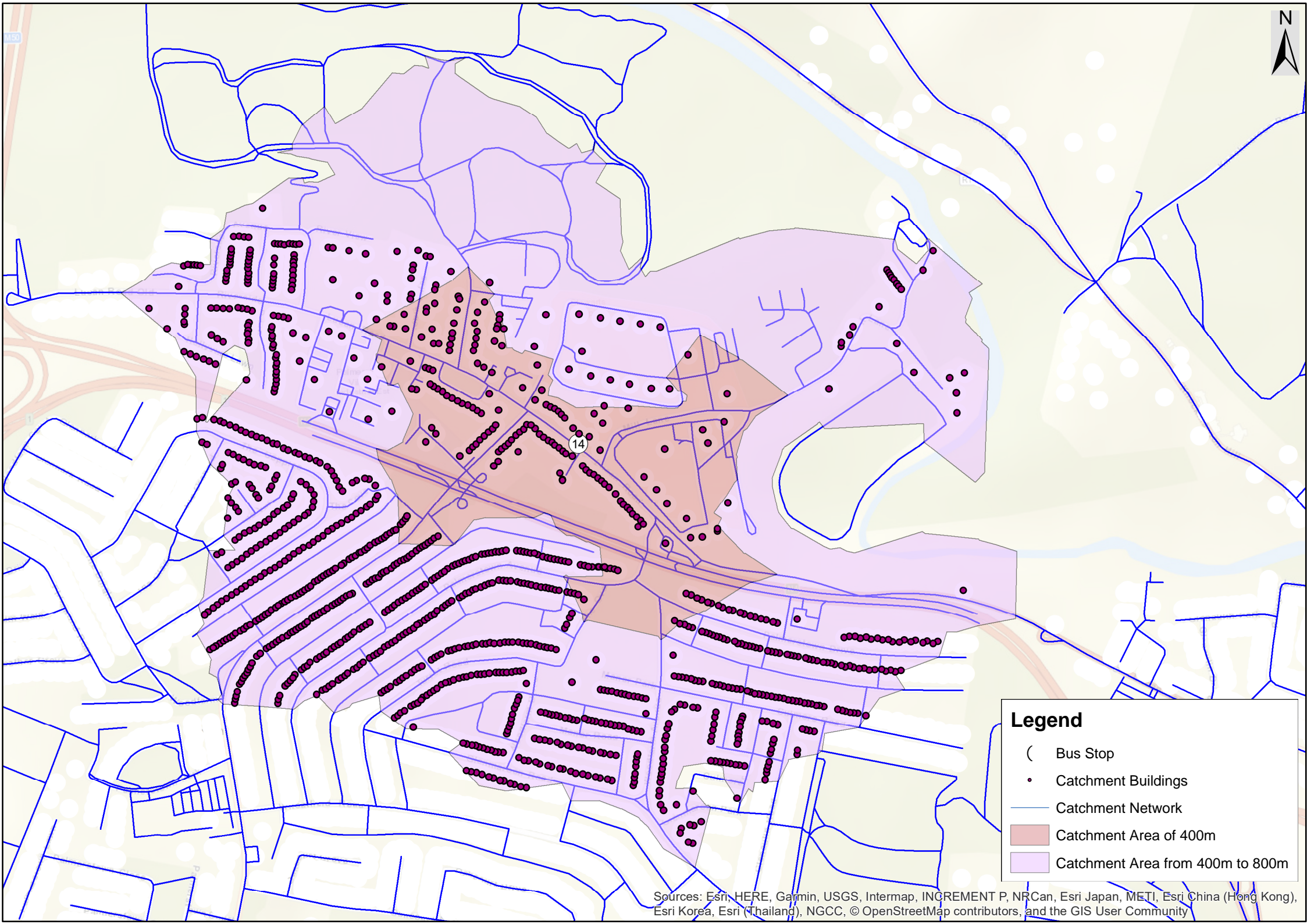




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**Legend**

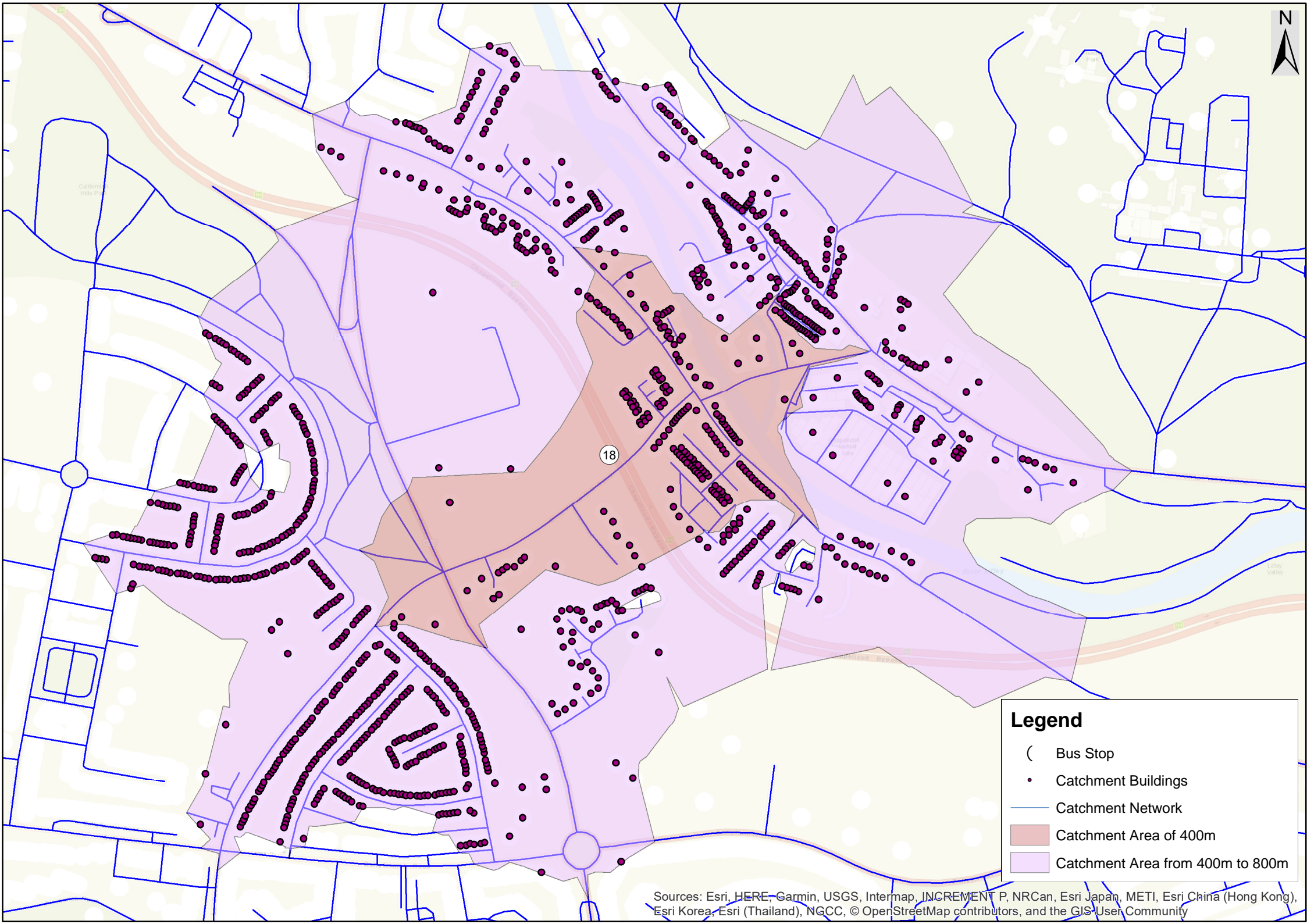
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**Legend**

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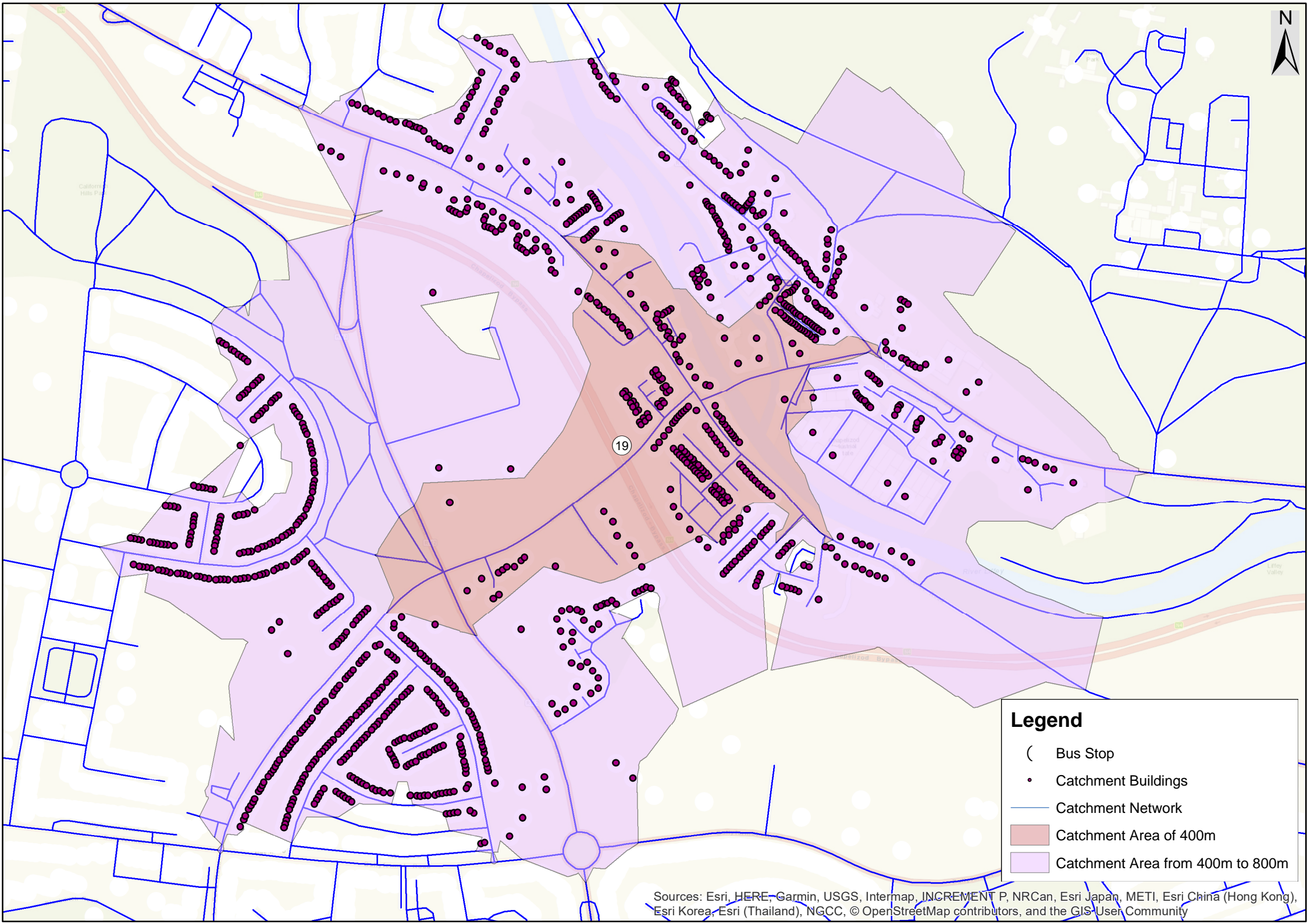


**Legend**

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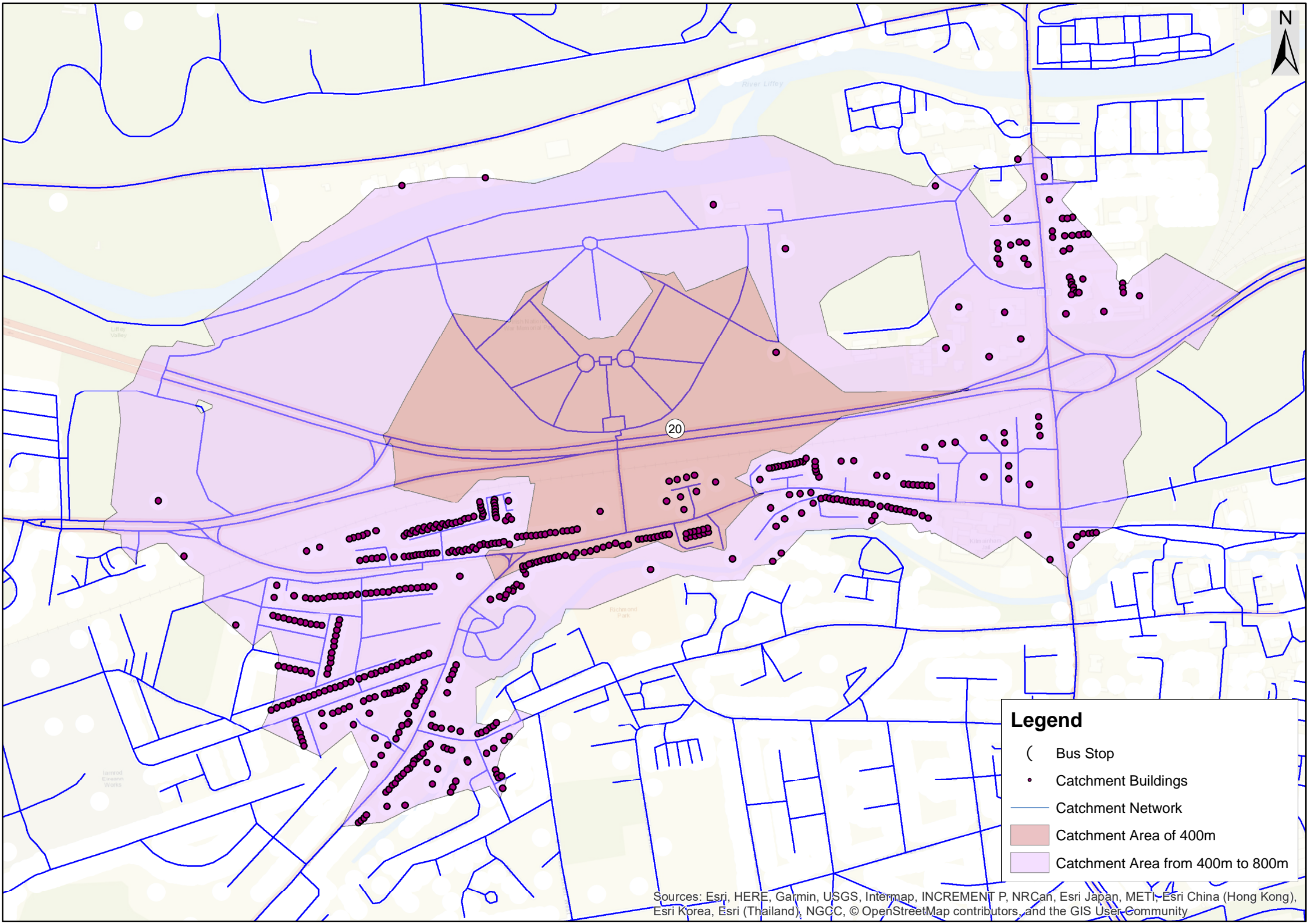




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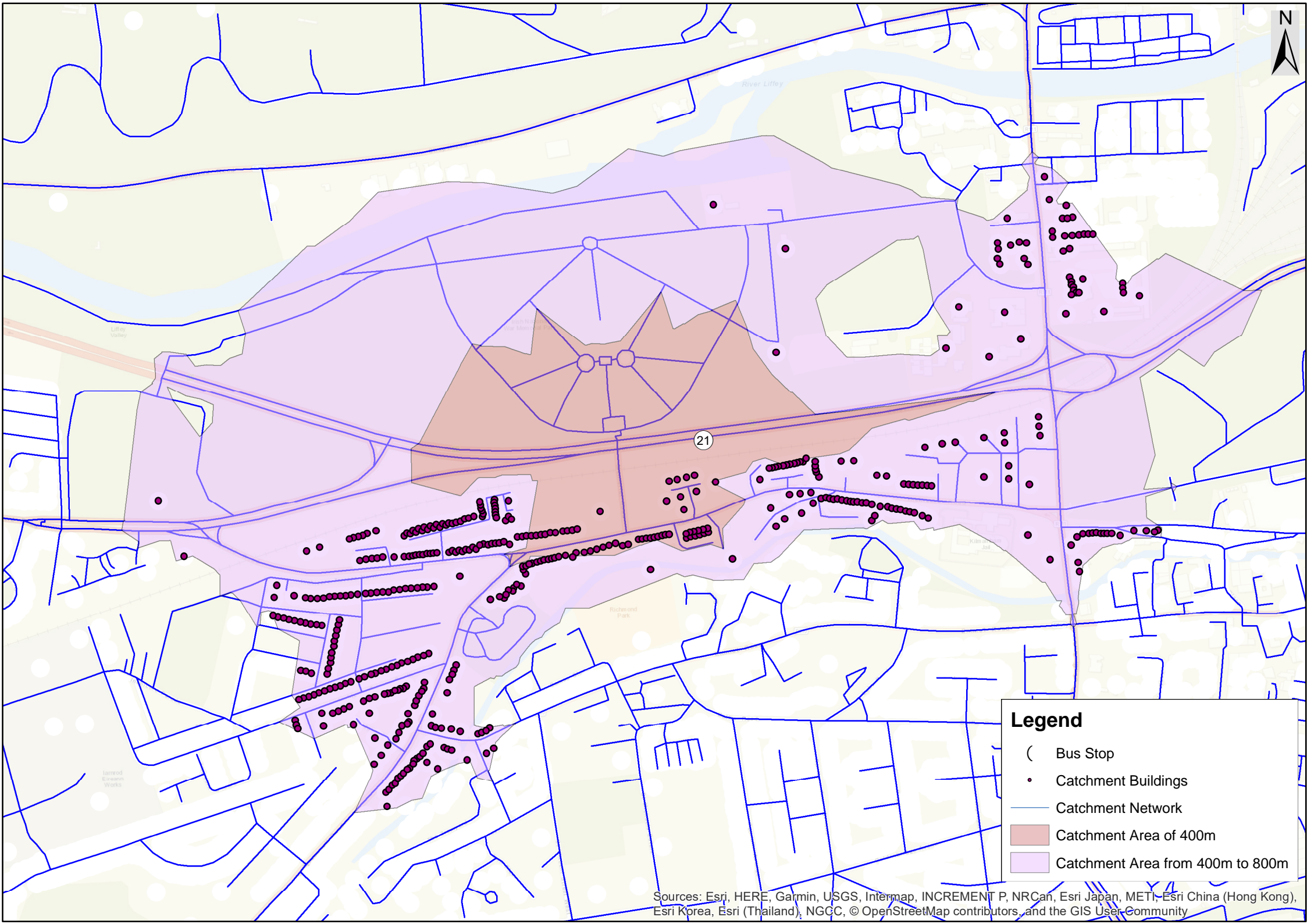


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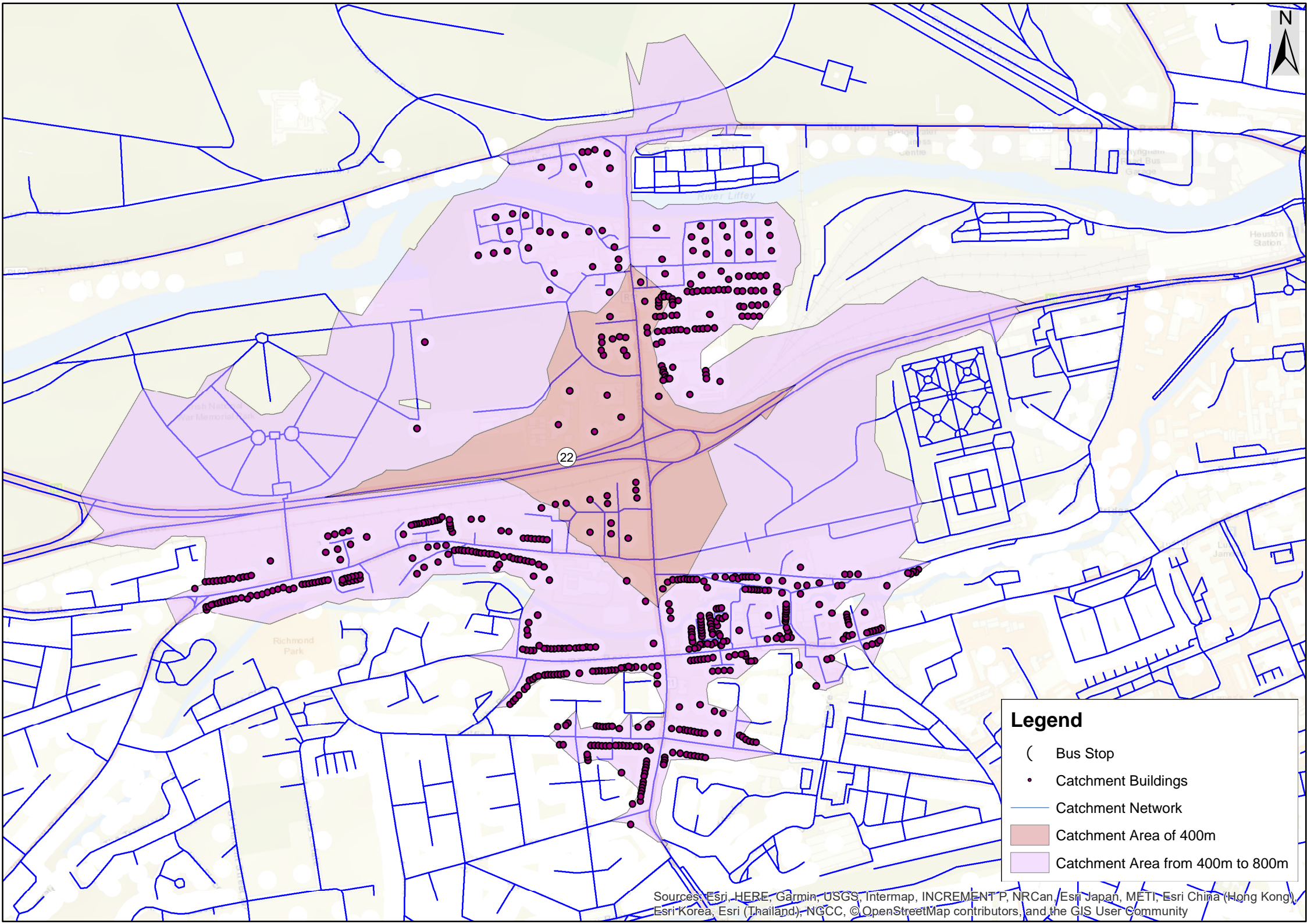




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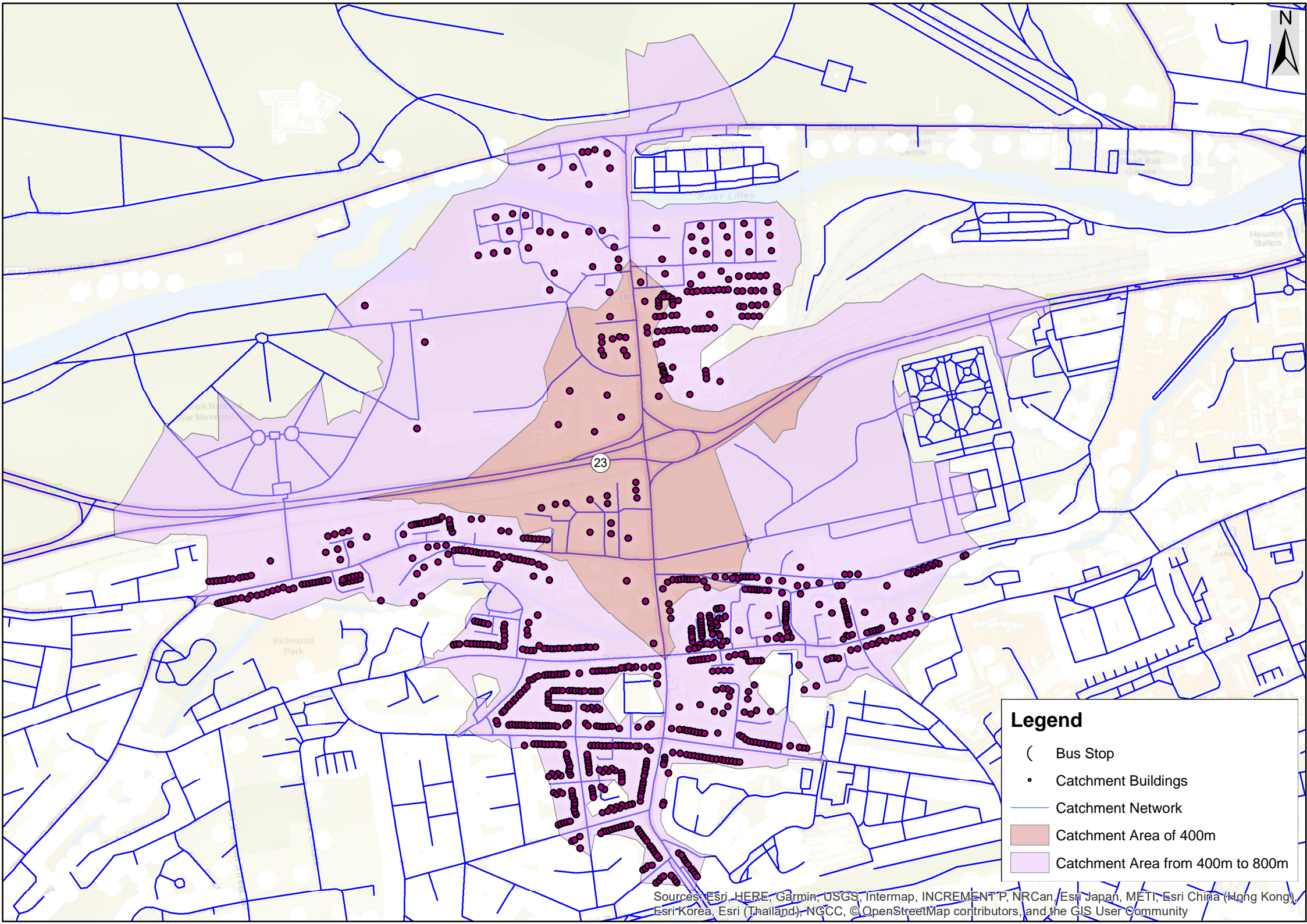
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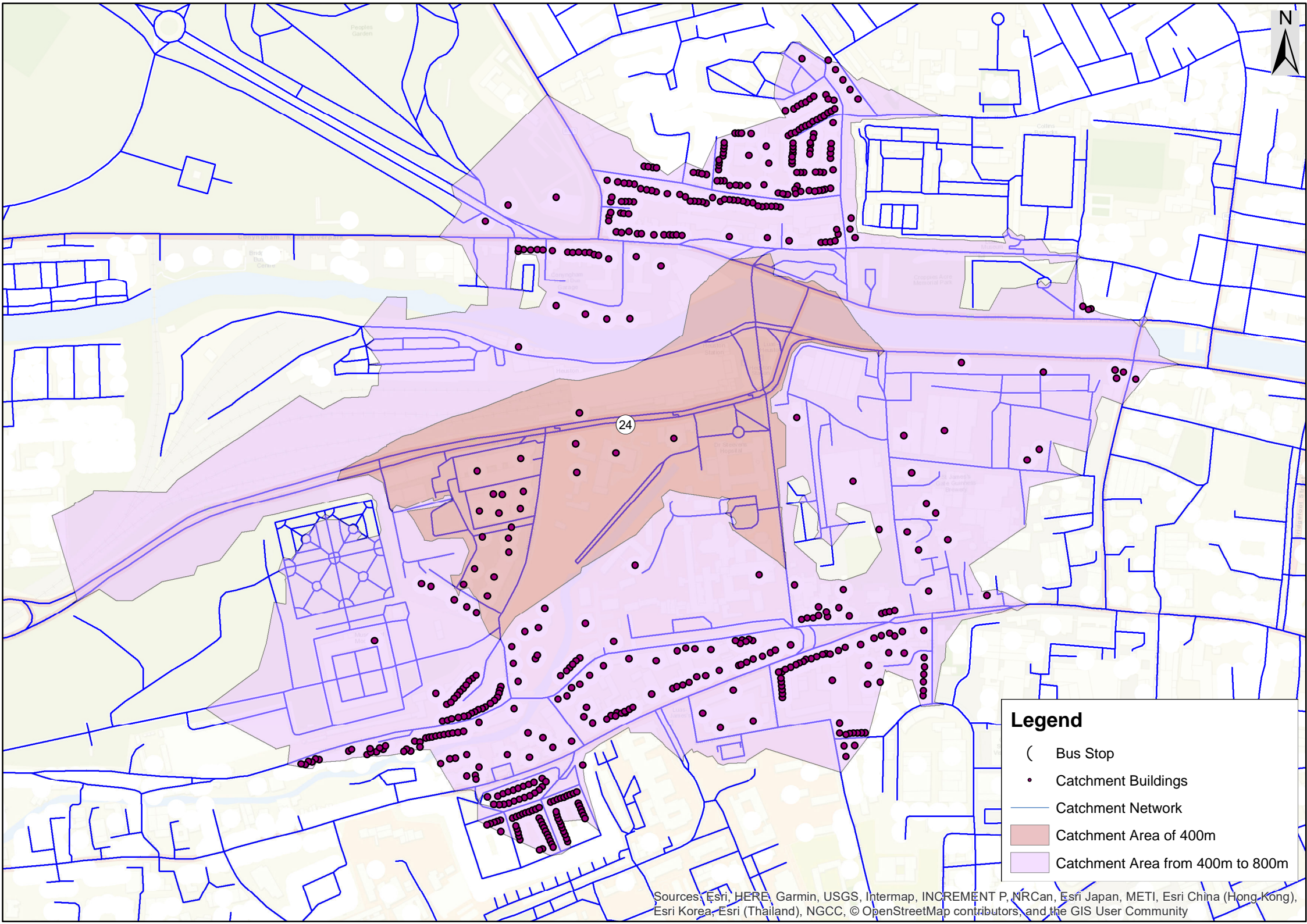




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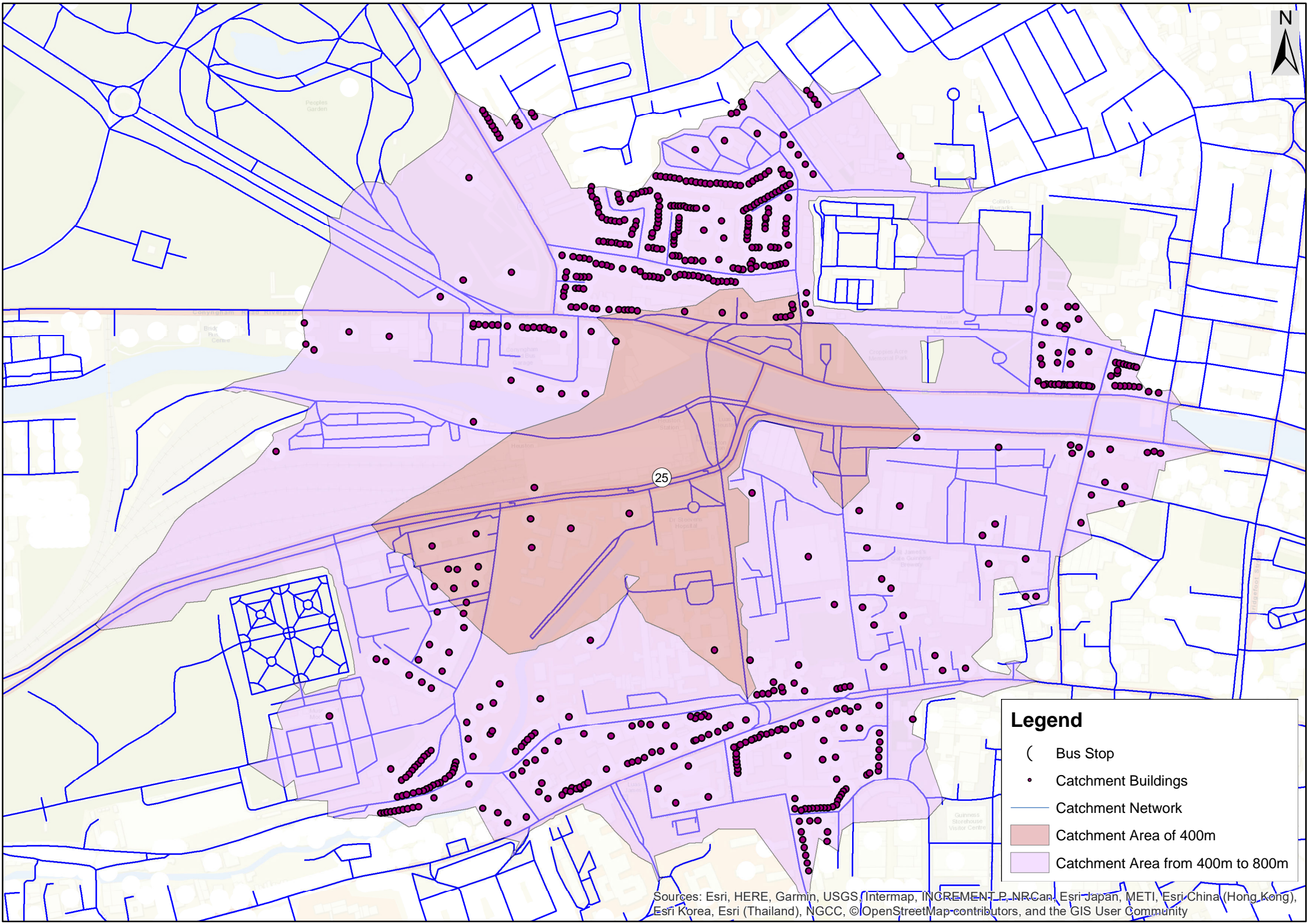




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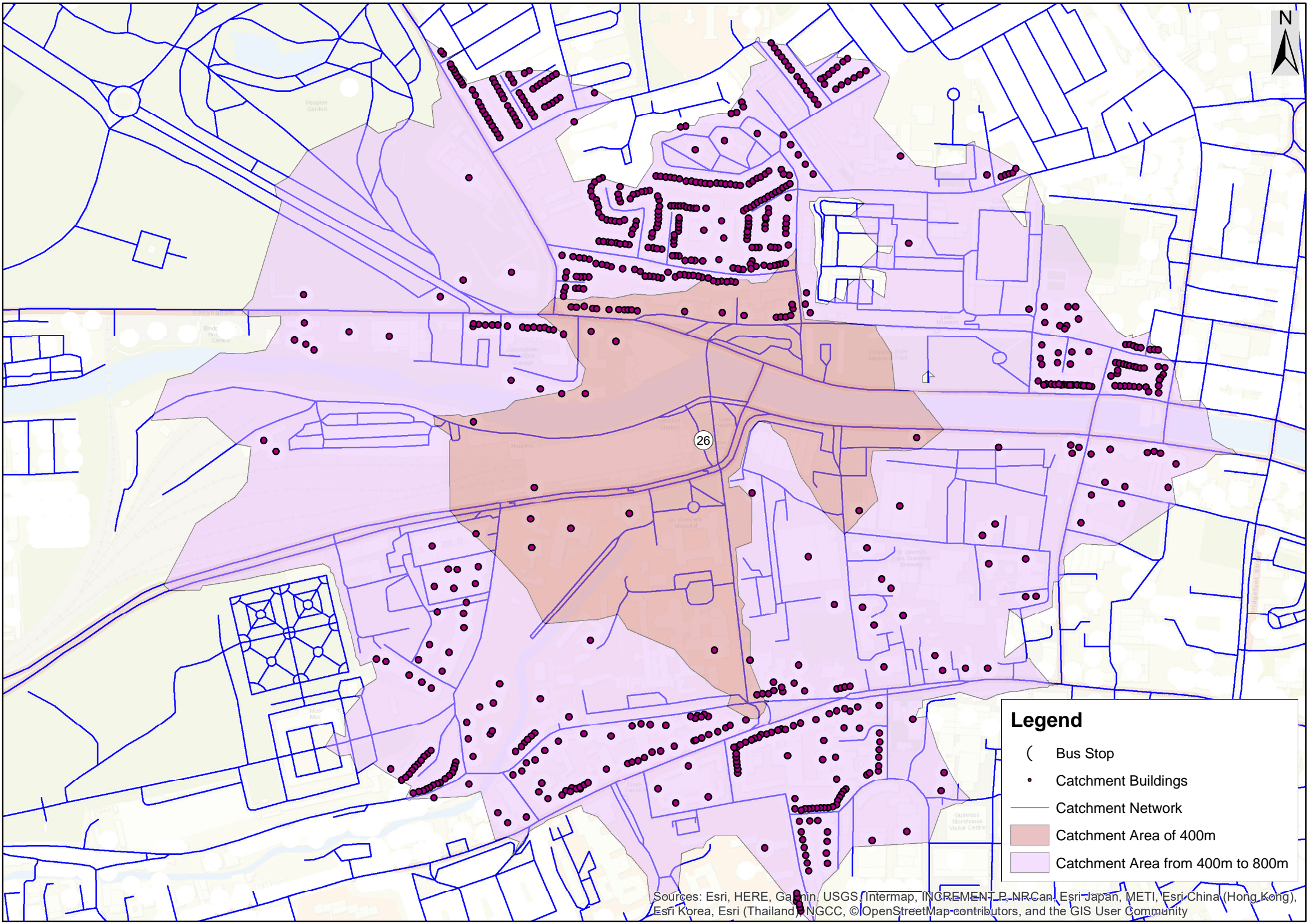


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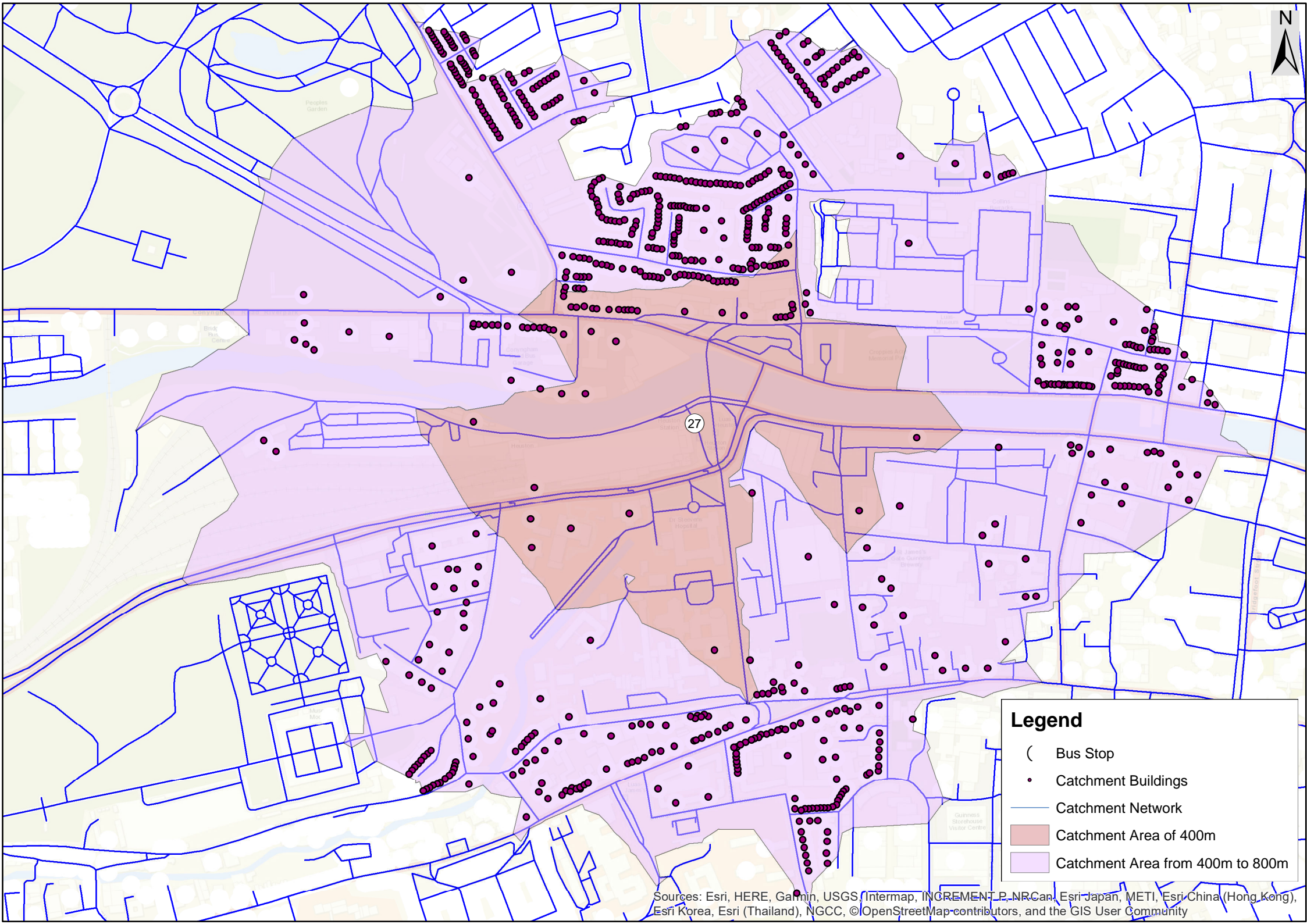




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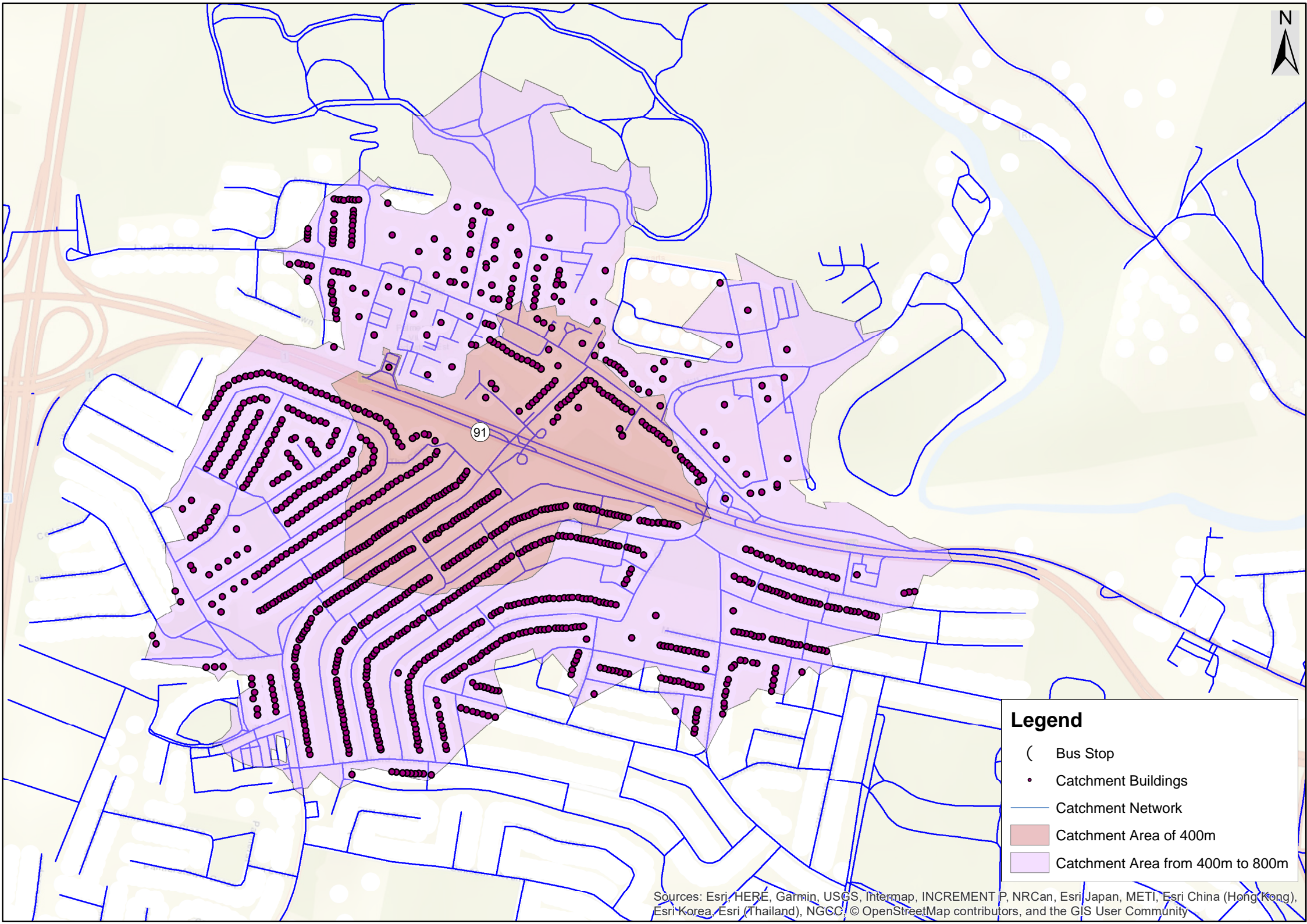




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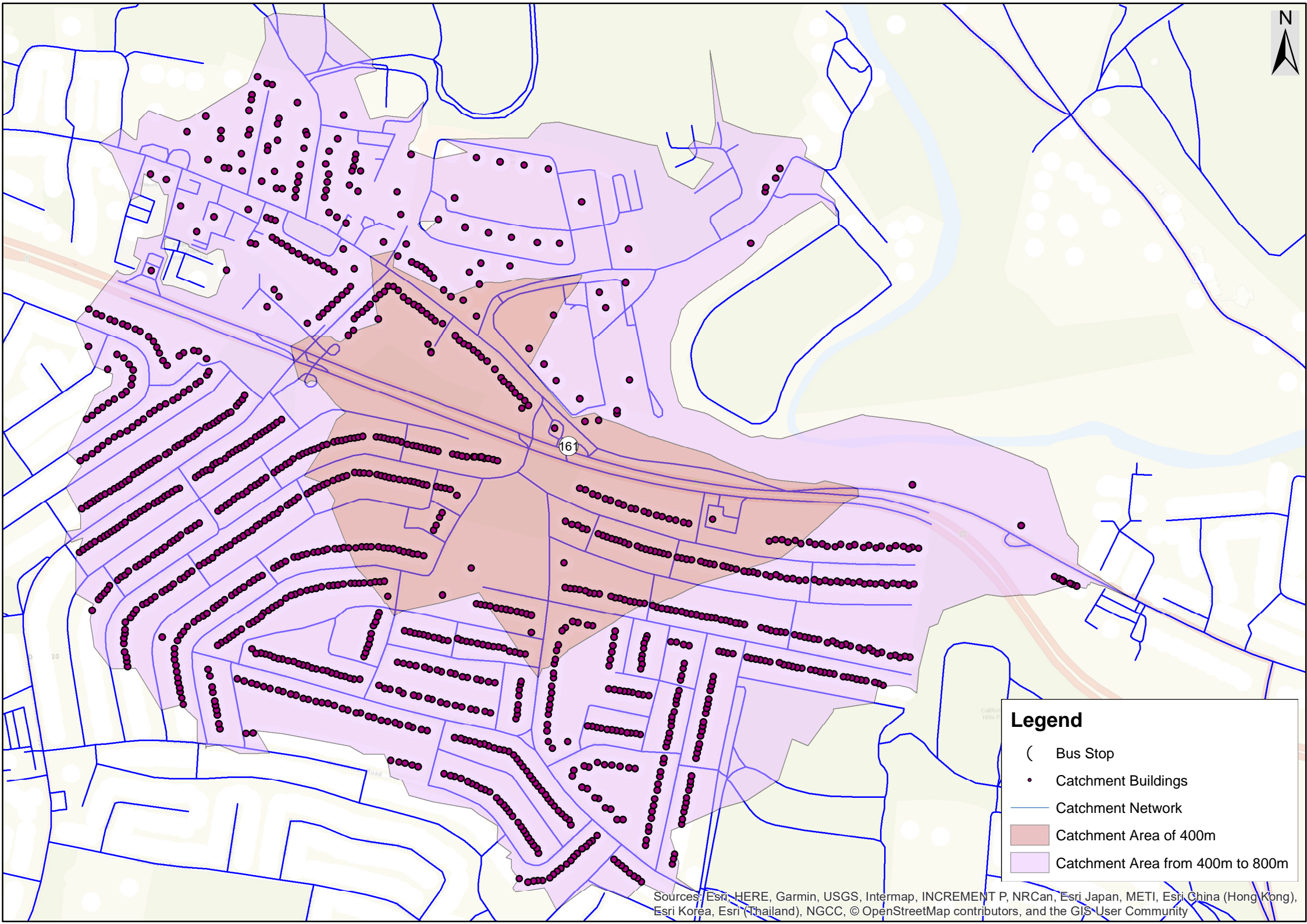
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### Legend

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