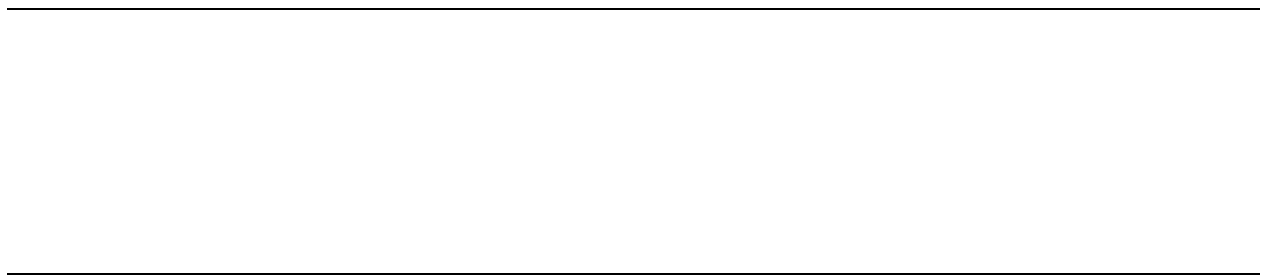




Imagine
Create

CALDERWOOD URBAN DEVELOPMENT PROJECT

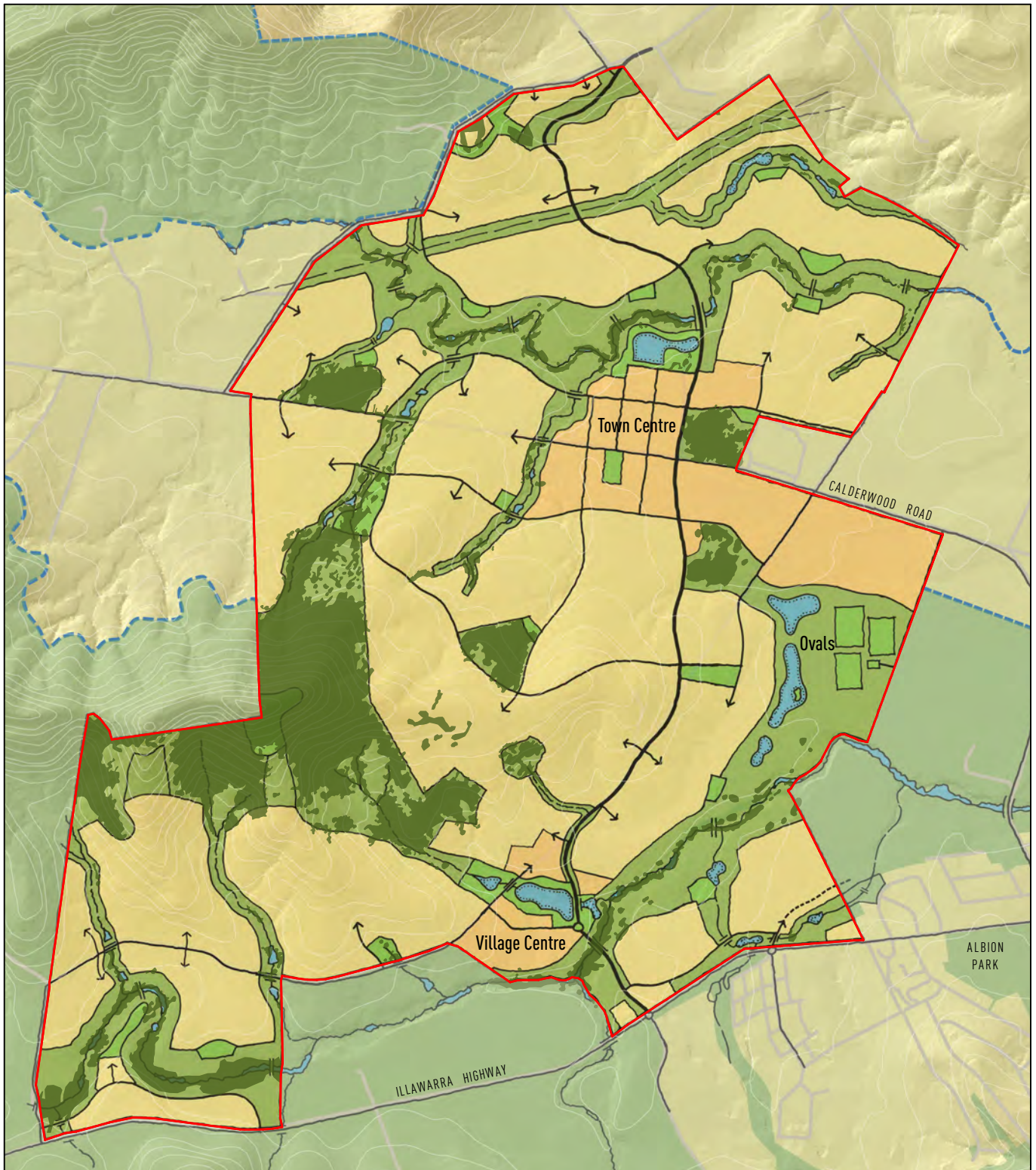
PREFERRED CONCEPT PLAN DRAWINGS



Concept Plan and State Significant Site Listing

Delfin Lend Lease

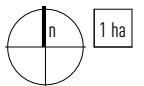
August 2010



Concept Plan

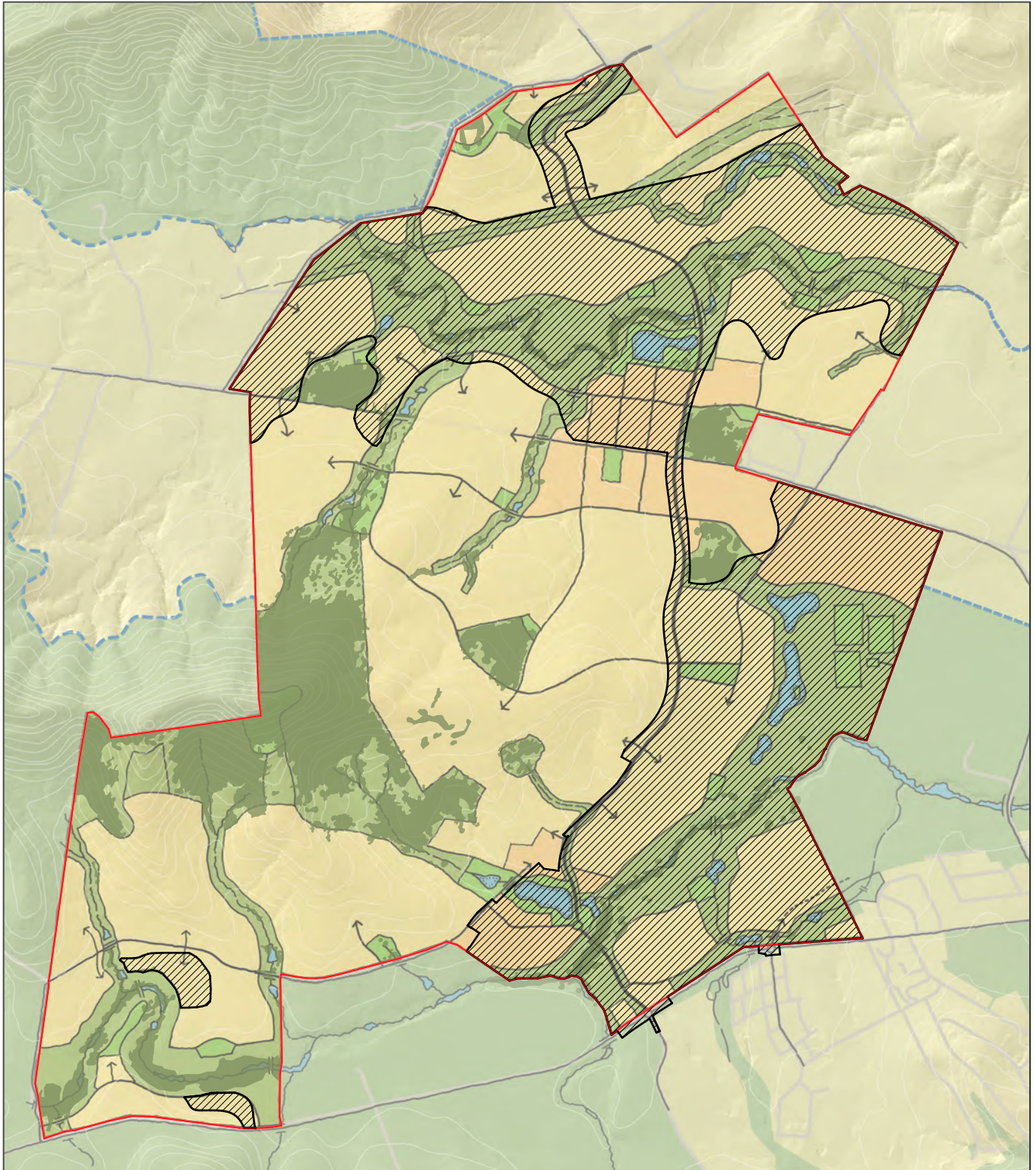
Part 3A | Calderwood Urban Development Project

- Town and Village Centres**
Mixed Uses including Retail, Employment, Residential, Learning and Community Amenities
- Residential Neighbourhoods**
- Parks**
eg Citywide, district and local parks
- Principal Open Space and Drainage**
eg Environmental Conservation, Environmental Management and Drainage Corridors
- Indicative Water Bodies**



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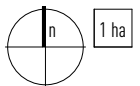
Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



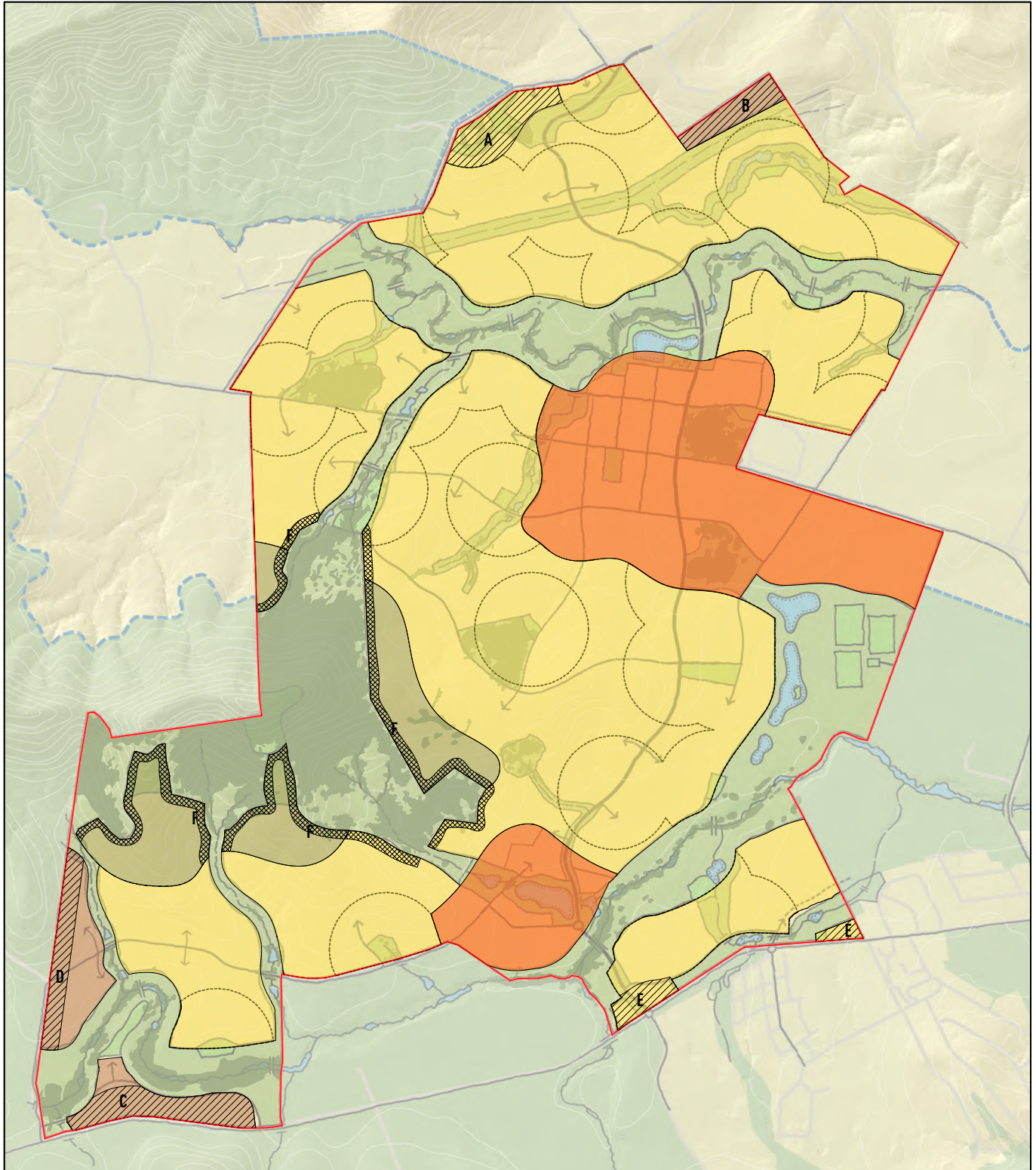
Part 3A Area

Part 3A | Calderwood Urban Development Project

 Area Subject to Part 3A



Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



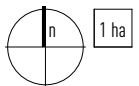
Residential Character Areas

Part 3A | Calderwood Urban Development Project

- Town and Village Centres**
Urban scale, higher density and diverse mixed use built form
- Indicative Parkland Node**
Generally within 2 minute walk of a Park or Bus Stop
- General Residential**
Residential scale and character
- Country Residential**
Residential character with decreased density
- Bushland Edge**
Responding to bushland interface

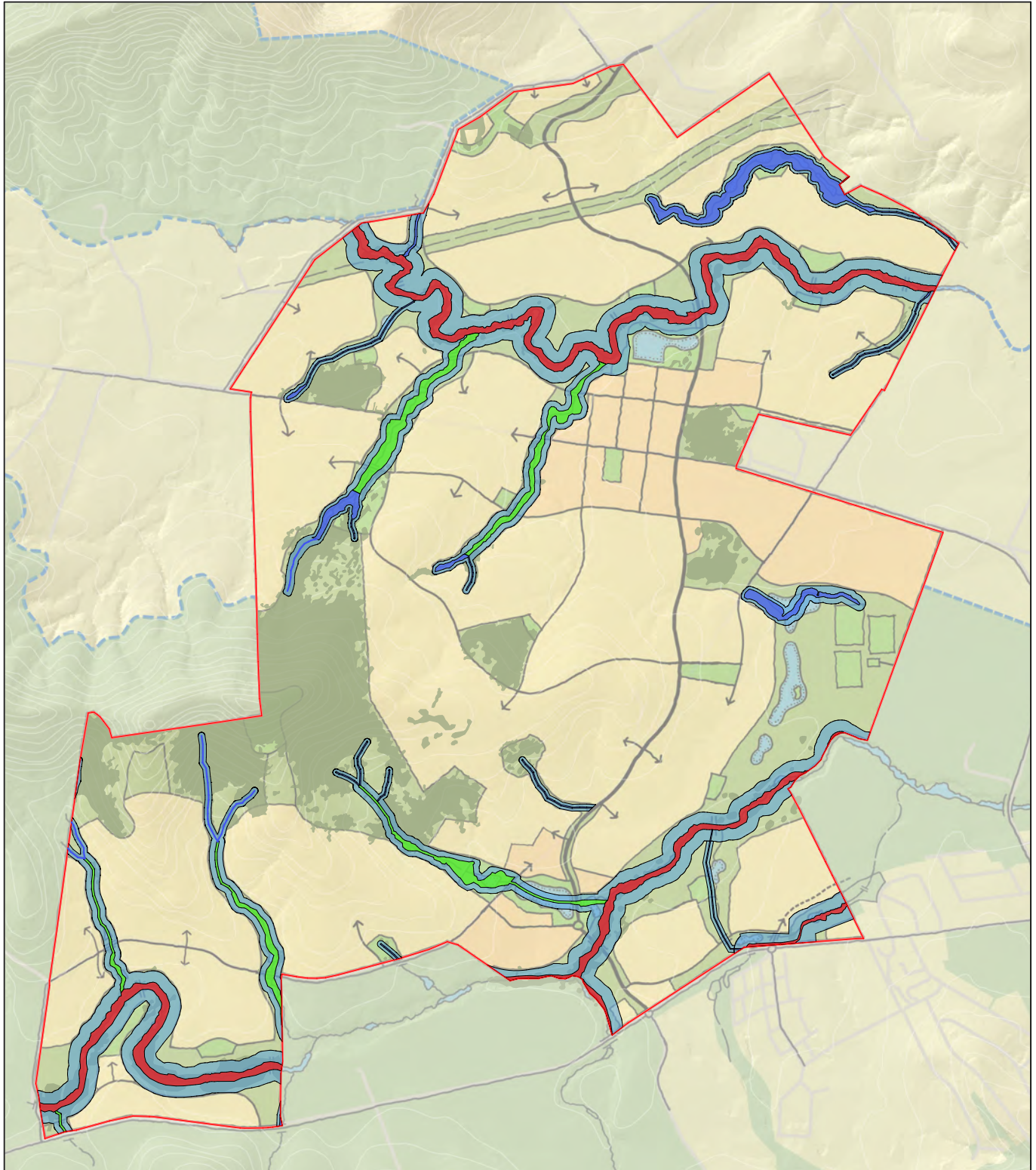
- A** Special Character Overlay
Marshall Mount House
- B** Special Character Overlay
Northern fringe
- C** Special Character Overlay
Southern Gateway
- D** Special Character Overlay
Western fringe

- E** Special Character Overlay
B4 Illawarra Highway
- F** Bush Edge Buffer Overlay







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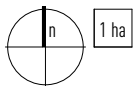
Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



Proposed Riparian Corridor Network

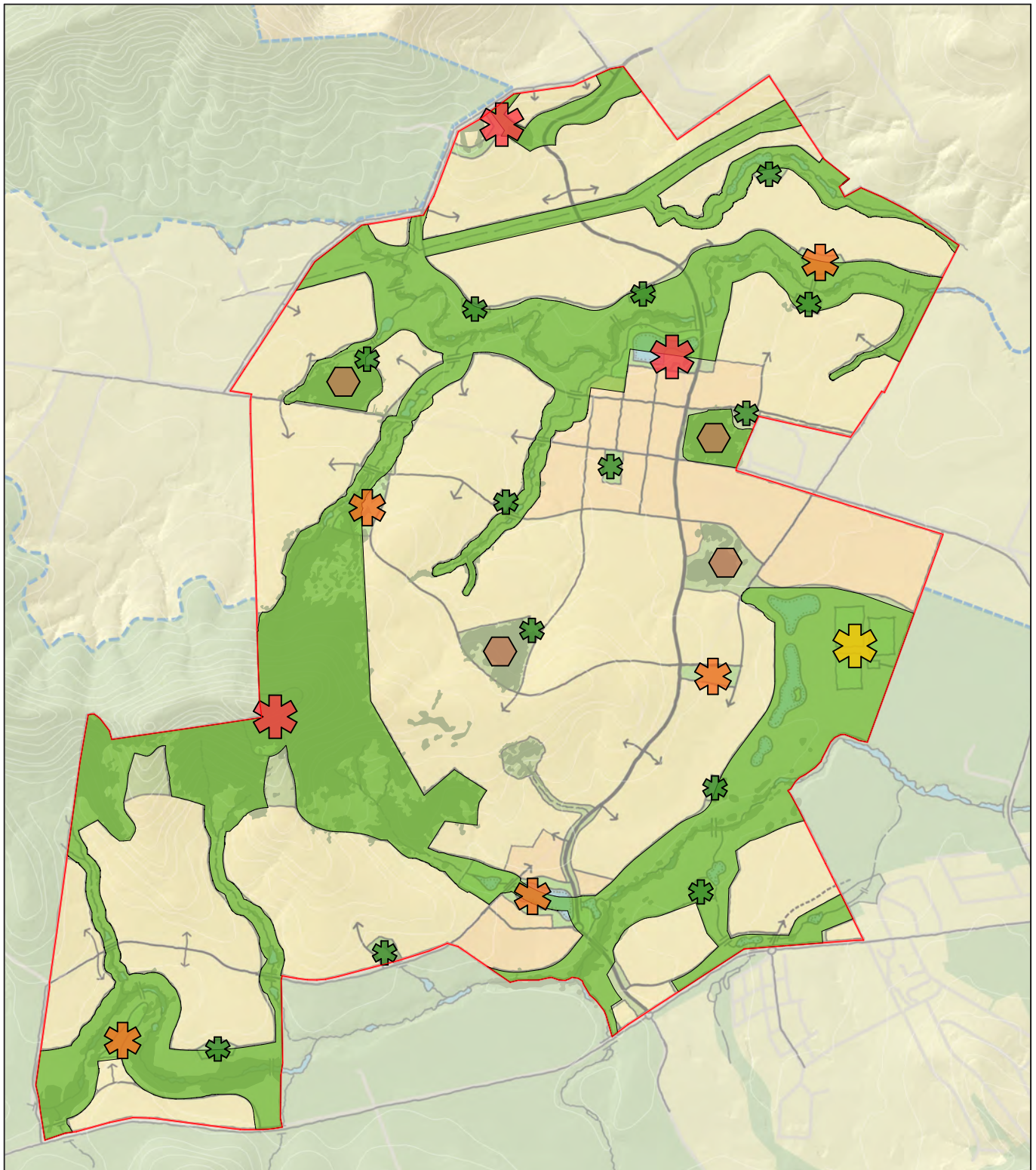
Part 3A | Calderwood Urban Development Project

-  **Top of Bank - Stream Order 3+**
Ground truth and ALS survey data
-  **Top of Bank - Stream Order 2**
Ground truth and ALS survey data
-  **Top of Bank - Stream Order 1**
Ground truth and ALS survey data
-  **Core Riparian Zone (CRZ)**
Size based on stream order



m 0 100 500 1,000

Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



Proposed Open Space Network

Part 3A | Calderwood Urban Development Project



Citywide Parks

Johnston's Spur, Town Centre Park, and Marshall Mount House Curtilage



District Parks

Indicative locations. Minimum size 1.0 ha



Local Parks

Indicative locations. Minimum size 0.2 ha



Main Sports Complex

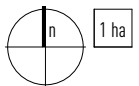
Three sports ovals



Environmental Reserves

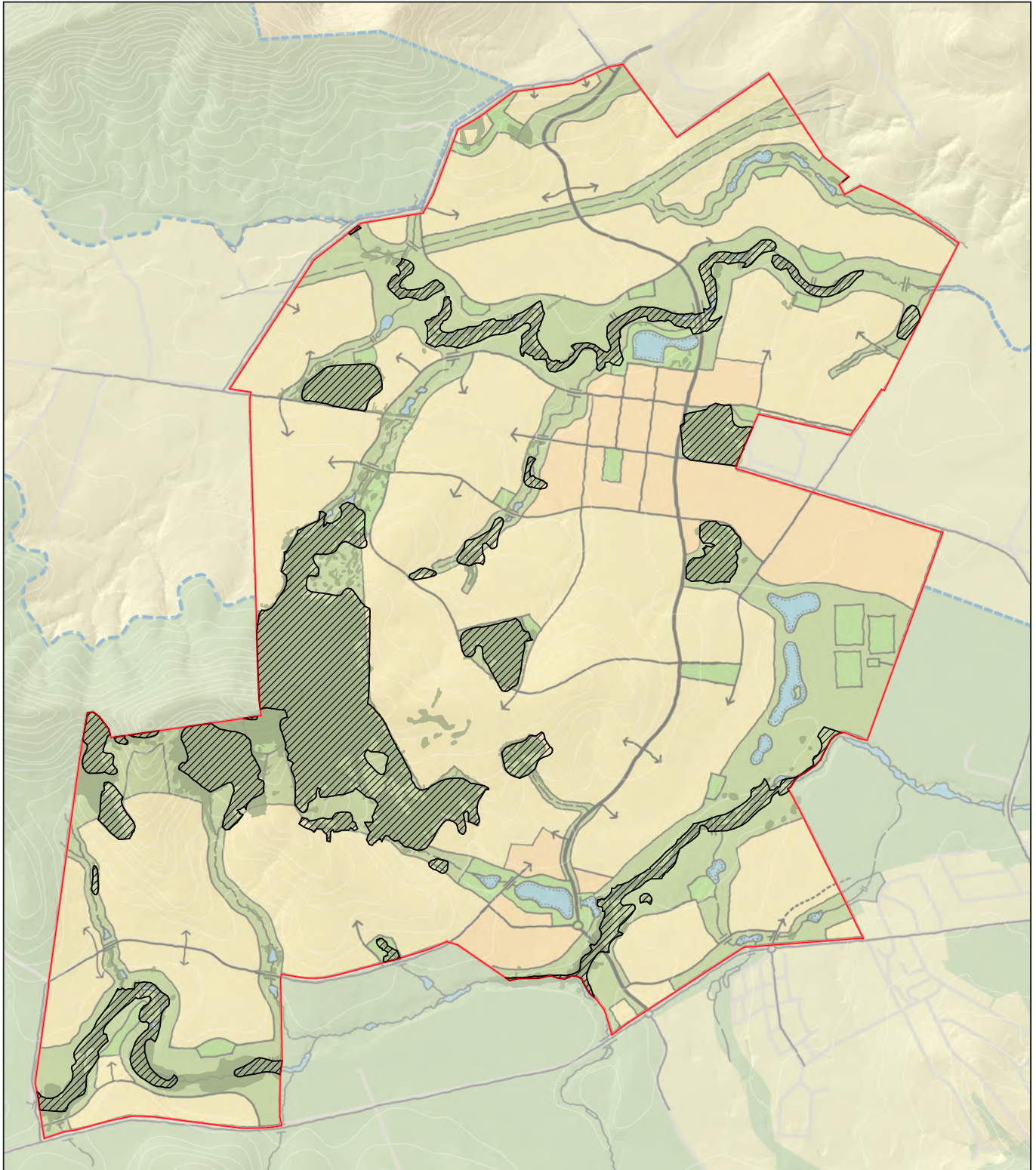


Open Space Corridors and Citywide Bushland



m 0 100 500 1,000

Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010

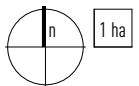


Environmentally Significant Lands

Part 3A | Calderwood Urban Development Project

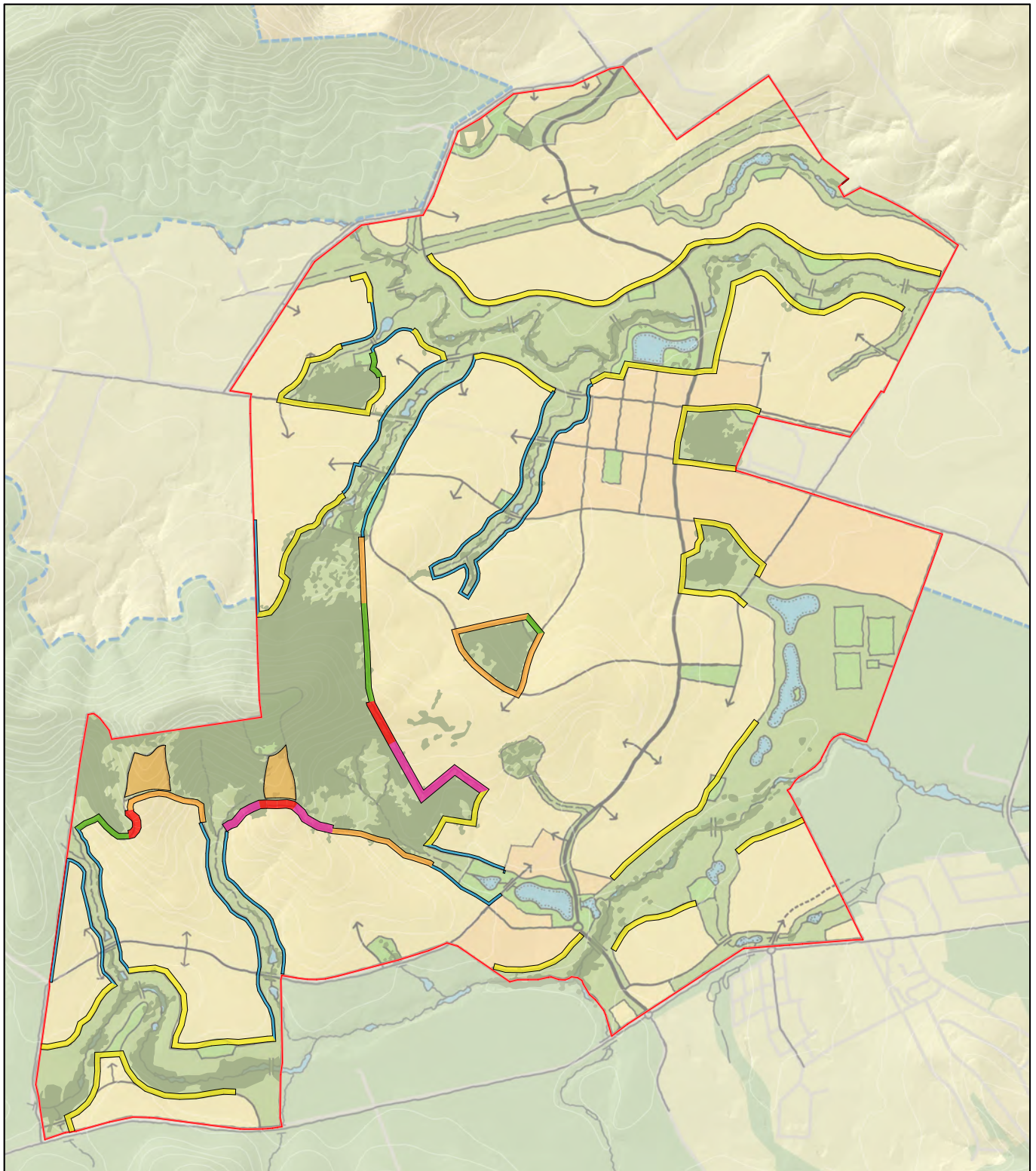


Environmentally Significant Lands
Primary and Support for Primary



m 0 100 500 1,000

Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



Bushfire Asset Protection Zones (APZ)

Part 3A | Calderwood Urban Development Project

10m APZ

35m APZ

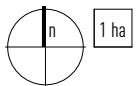
APZ to be determined at point of Subdivision

20m APZ

50m APZ

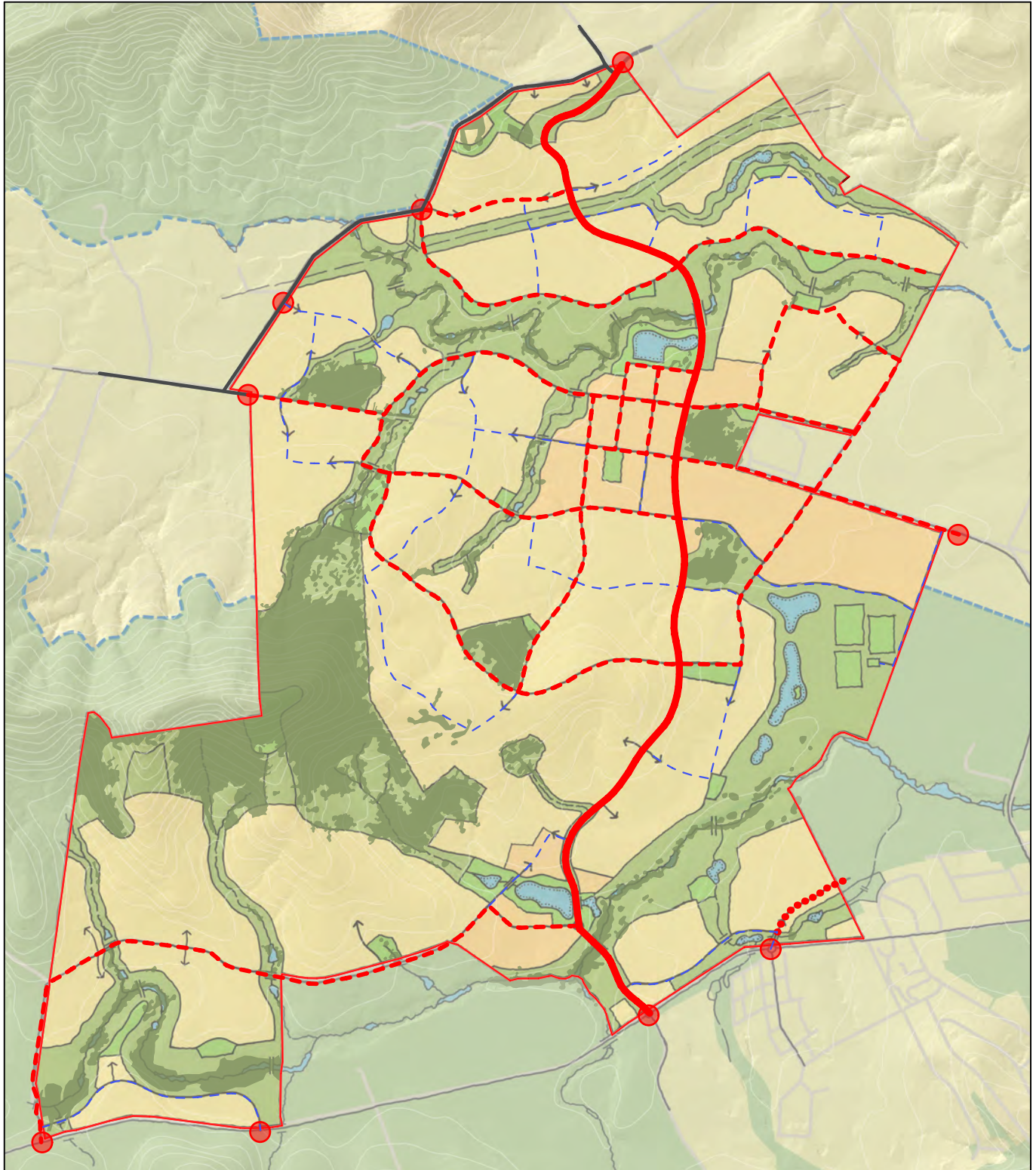
25m APZ

60m APZ








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Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010

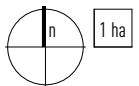


Road Layout and Hierarchy

Part 3A | Calderwood Urban Development Project

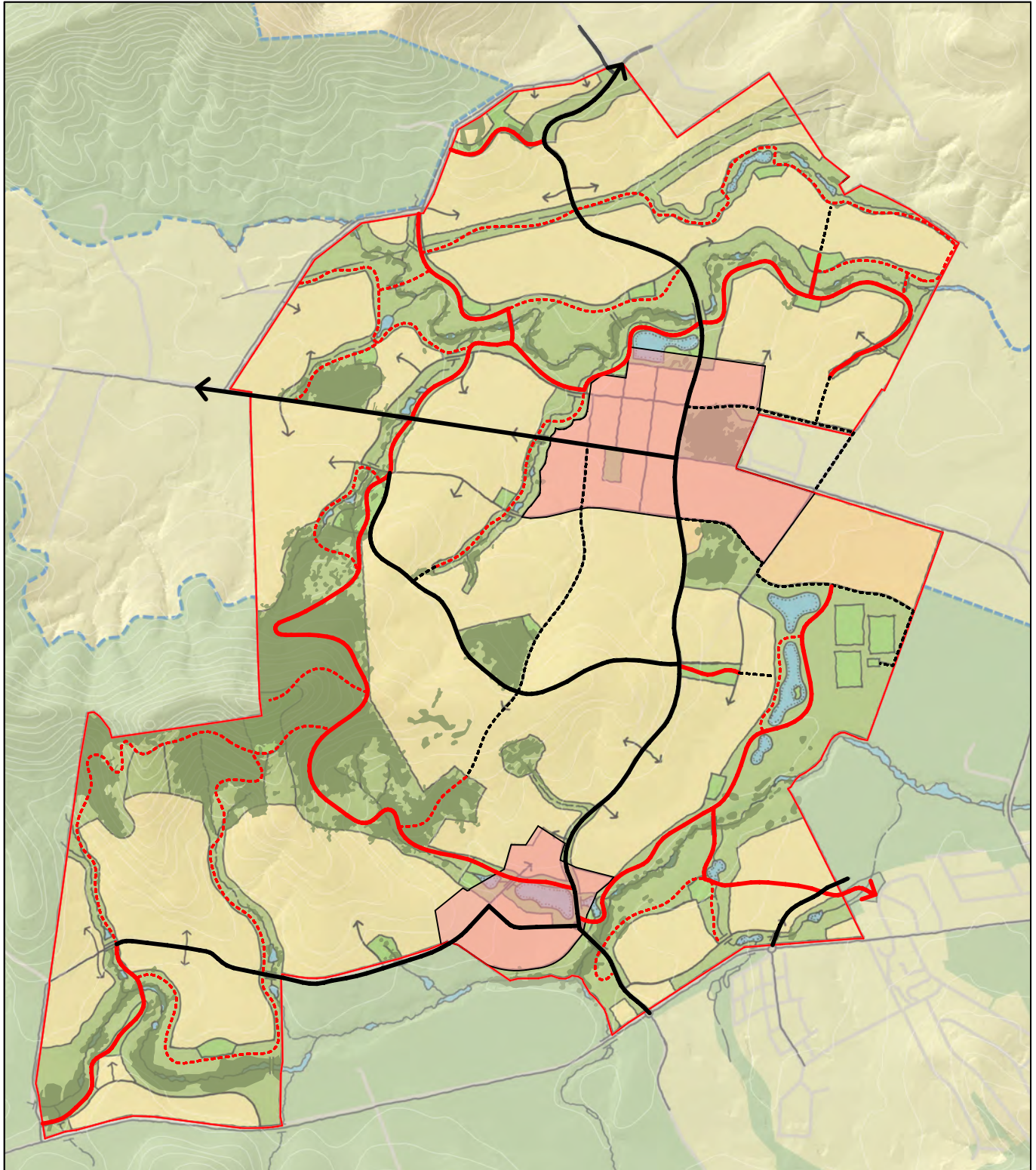
-  **Sub-Arterial Road**
2-4 lanes, Bus Route
-  **Major Collector Street**
Bus Route
-  **Minor Collector Street**
Principal Pedestrian Link
-  **Access Points**
Principal Links
-  **Indicative Crossing Points**

-  **Albion Park Bypass**
Indicative Route








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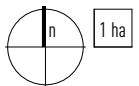


Proposed Pedestrian and Cycle Network

Part 3A | Calderwood Urban Development Project

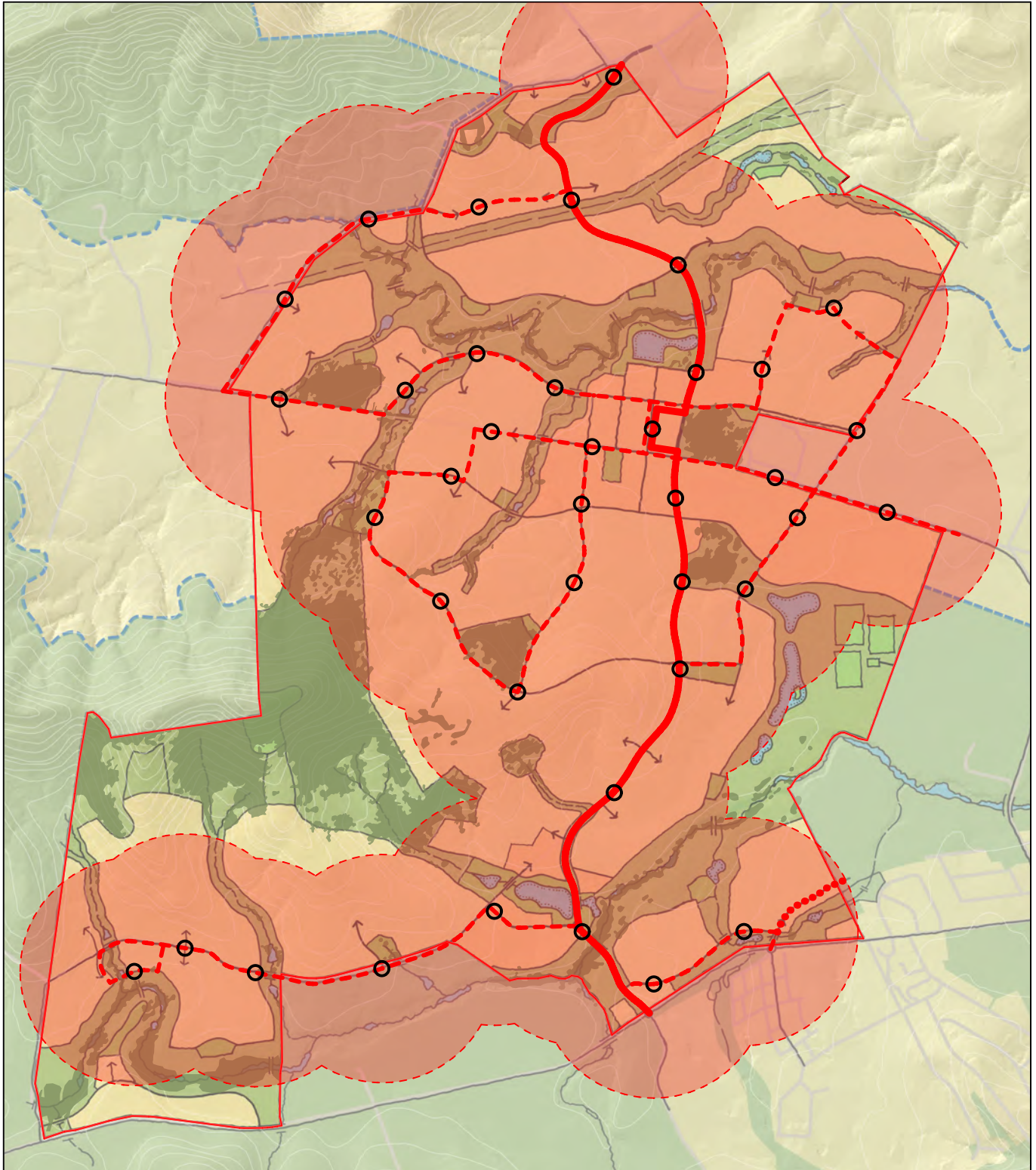
-  Pedestrian/Bicycle Friendly Zones
-  Primary/Commuter Path in Road Corridors
2.5m sealed
-  Secondary Path in Road Corridors
2.5m sealed
-  Primary Trail in Open Space Corridors
2.5m sealed
-  Secondary Trail in Open Space Corridors
1.5m gravel

 Indicative Crossing Points







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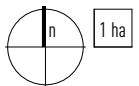


Bus Service

Part 3A | Calderwood Urban Development Project

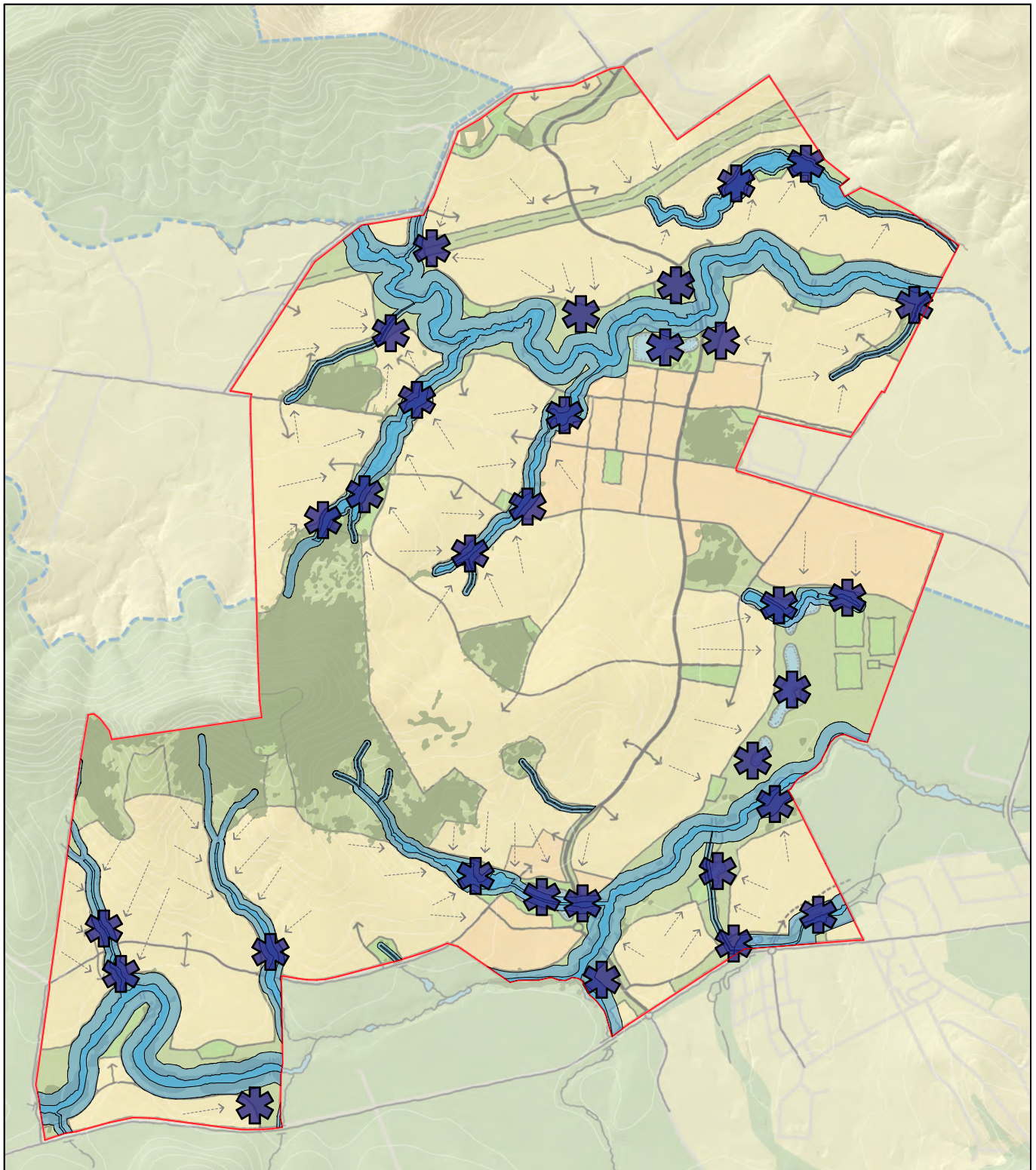
-  **Strategic Trunk Bus Route**
To be negotiated with future operator
-  **Approximate Bus Route**
To be negotiated with future operator
-  **Approximate Bus Stop Location**
To be negotiated with future operator
-  **400m Radius from Bus Stops**
Typically 5 minute walking radius

-  **Albion Park Bypass**
Indicative Route






m 0 100 500 1,000

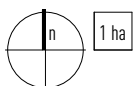
Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



Water Cycle Management

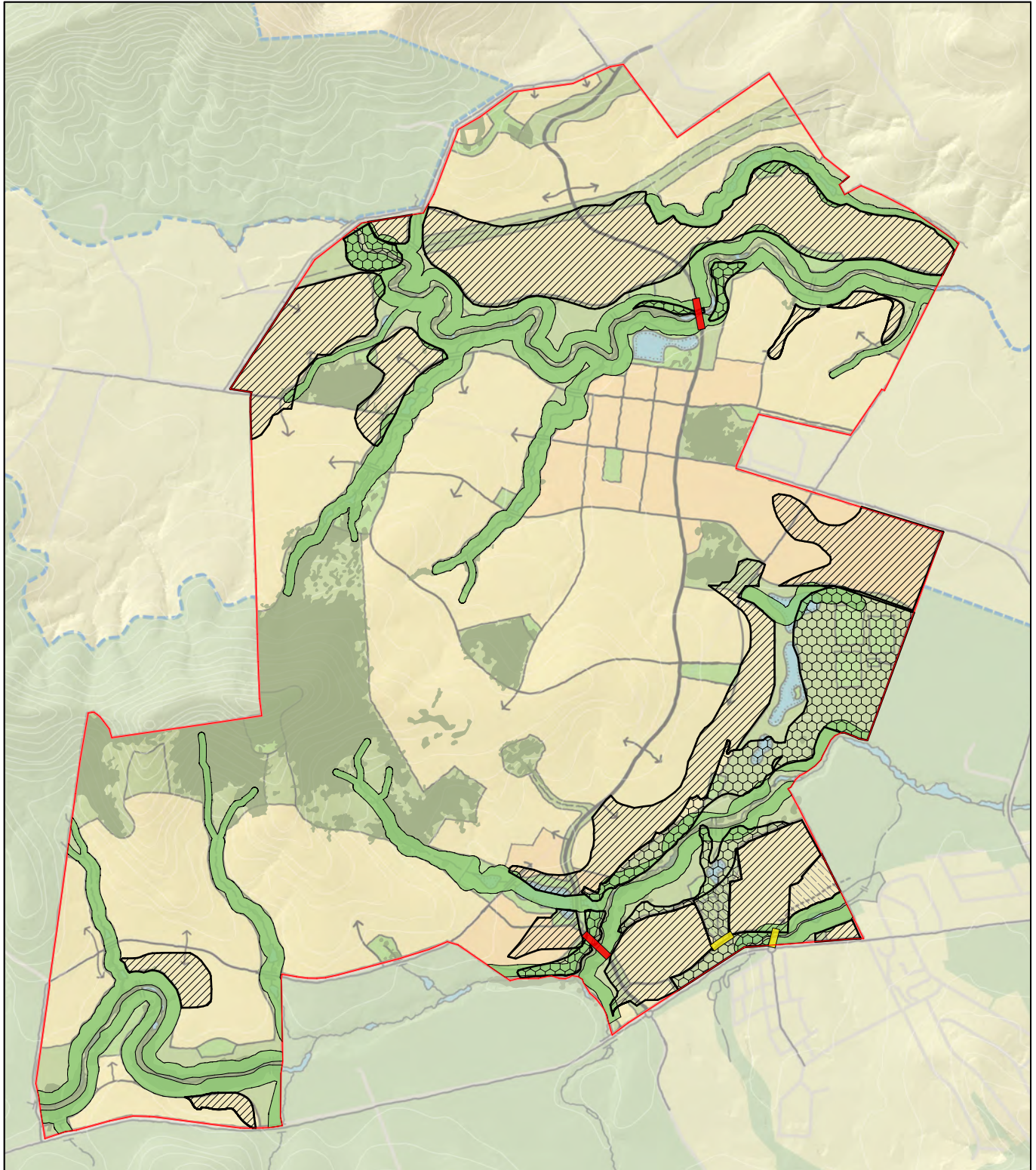
Part 3A | Calderwood Urban Development Project

- 
Indicative location of possible water bodies
 Both on-line and off-line ponds serving ornamental, water quality and water detention purposes
- 
Riparian Corridor - Top of Bank
 Based on ground truth and ALS survey data
- 
Core Riparian Zone (CRZ)
 Size based on stream order







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Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010

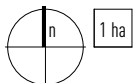


Flood Mitigation Plan

Part 3A | Calderwood Urban Development Project

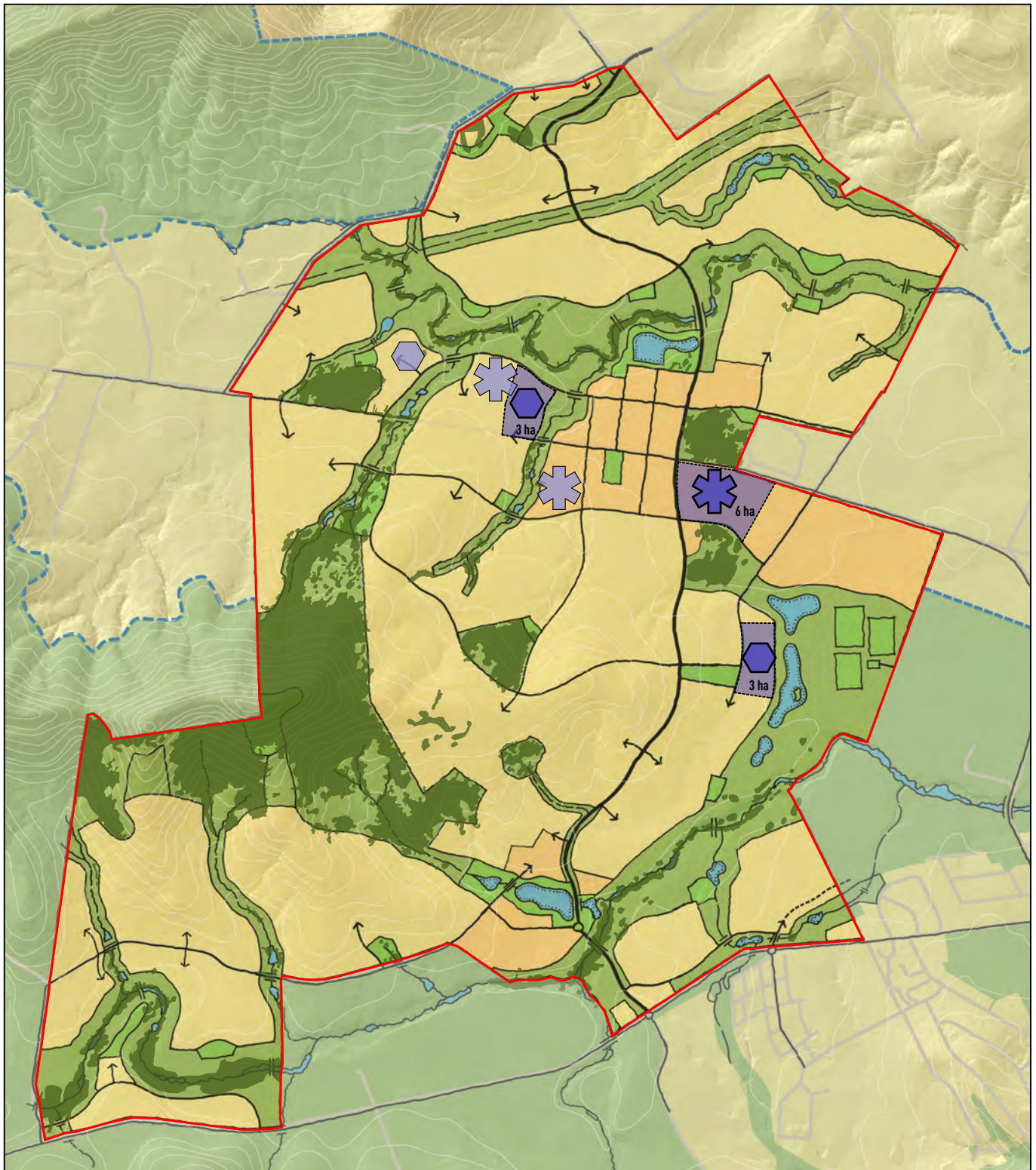
-  Floodplain regrade - increase elevation
-  Floodplain regrade - decrease elevation
-  Proposed Increased Roughness
-  Flood Planning Area

-  Proposed Road Bridge
-  Proposed Culvert Under Road







m 0 100 500 1,000

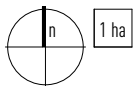
Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours August 2010



Possible School Sites

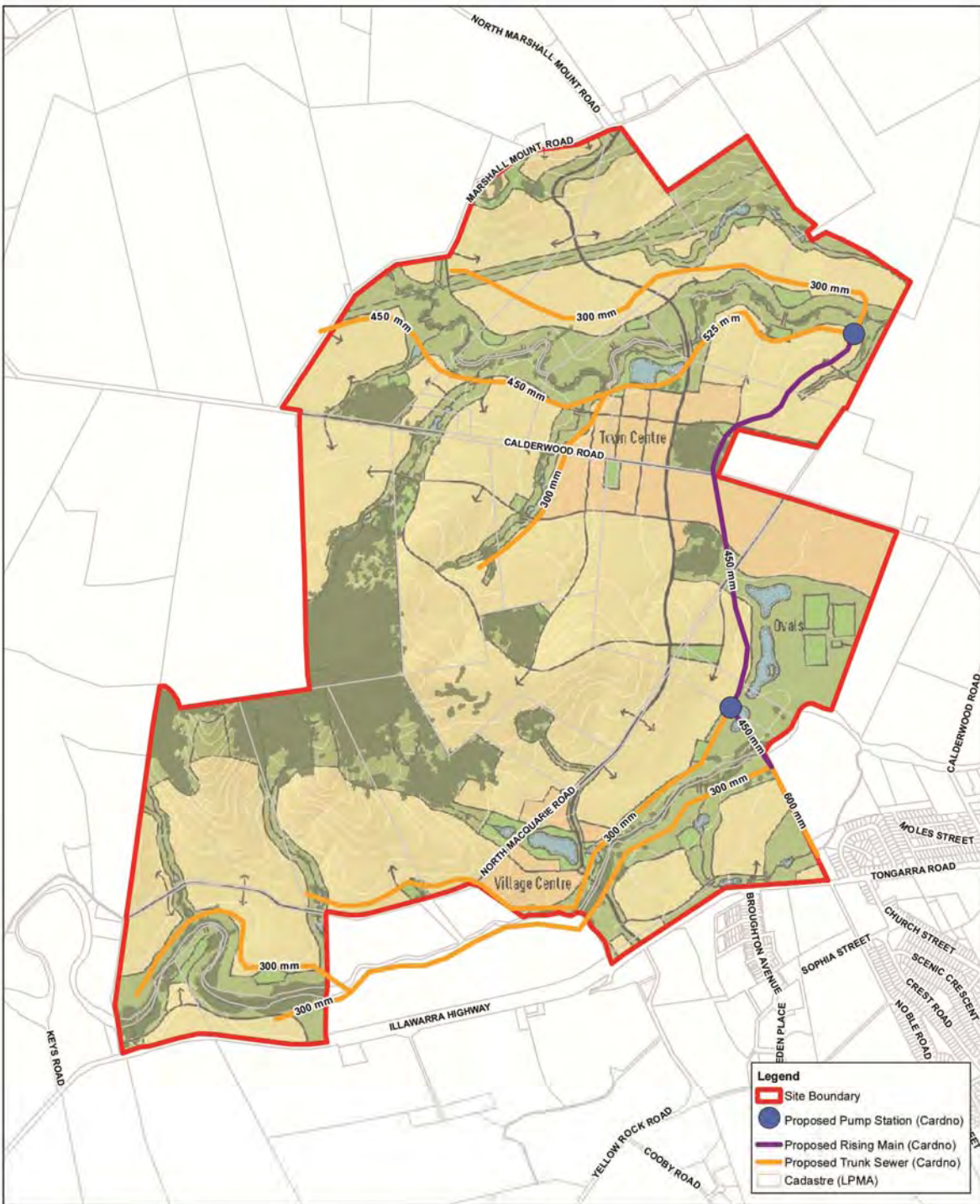
Part 3A | Calderwood Urban Development Project

-  Preferred High School Location
6 ha allocation
-  Preferred Primary School Location
3 ha allocation
-  Alternative High School Locations
-  Alternative Primary School Locations



m 0 100 500 1,000

Subject to verification and detailed site survey 1:20,000 @ A4 10m Contours July 2010



Legend

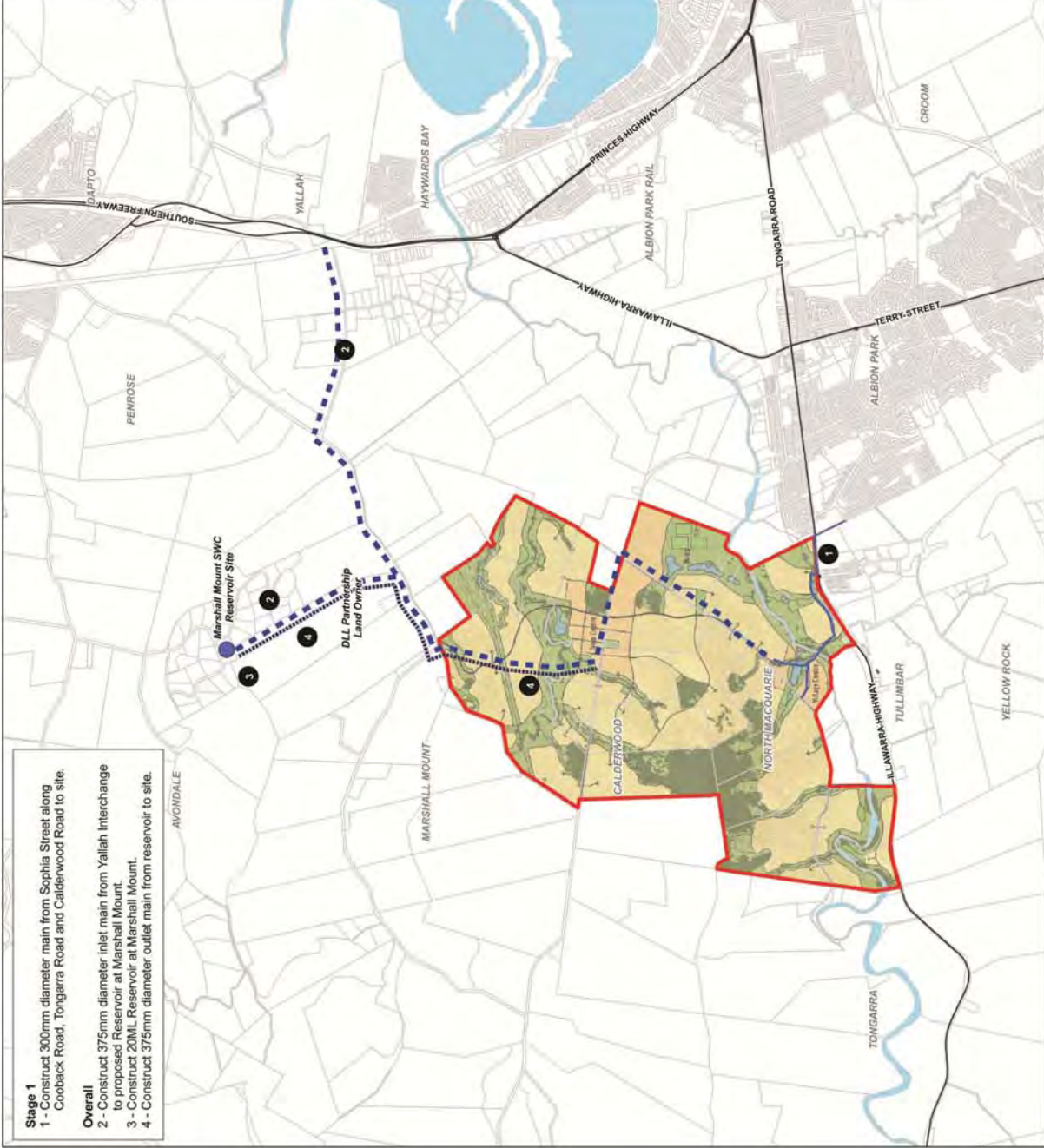
- Site Boundary
- Marshall Mount SMC Reservoir Site
- Proposed Outlet Main
- Proposed Trunk Water Main
- Stage 1 Proposed Lead-In Trunk Main (Cardno)
- Major Roads (LPMA)
- Catalytic (LPMA)

Concept Base Plan from Delfin Lend Lease
February 2010



FIGURE 6

Scale 1:30,000 (at A3)



Stage 1

- 1 - Construct 300mm diameter main from Sophia Street along Coback Road, Tongarra Road and Calderwood Road to site.

Overall

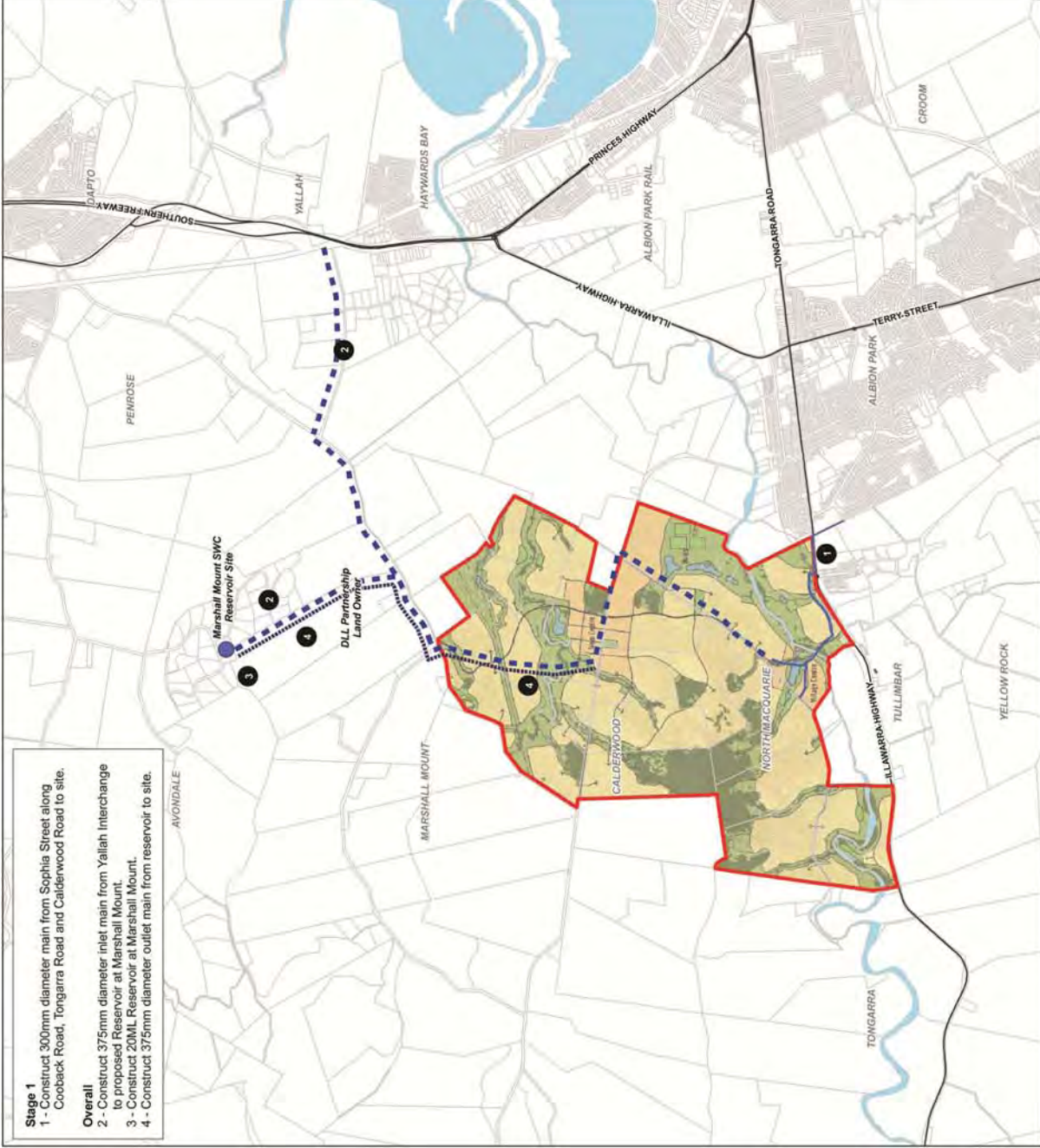
- 2 - Construct 375mm diameter inlet main from Yallah Interchange to proposed Reservoir at Marshall Mount.
- 3 - Construct 20ML Reservoir at Marshall Mount.
- 4 - Construct 375mm diameter outlet main from reservoir to site.

Stage 1

- 1 - Construct 300mm diameter main from Sophia Street along Cooback Road, Tongarra Road and Calderwood Road to site.

Overall

- 2 - Construct 375mm diameter inlet main from Yallah Interchange to proposed Reservoir at Marshall Mount.
- 3 - Construct 20ML Reservoir at Marshall Mount.
- 4 - Construct 375mm diameter outlet main from reservoir to site.



Legend

- Site Boundary
- Marshall Mount SWC Reservoir Site
- Proposed Outlet Main
- Proposed Trunk Water Main
- Stage 1 Proposed Lead-In Trunk Main (Cardno)
- Major Roads (LPMA)
- Cardno (LPMA)

Concept Base Plan from Delfin Lend Lease
February 2010



FIGURE 6

Scale 1:30,000 (at A3)



Map Prepared by: Cardno Watergroup
Date: 18 February 2010
Coordinate System: Zone 54 MGA/SDA 84
GIS Map REF: 11020501_06014_PotableWaterStrategy.mxd 03