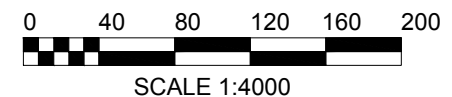


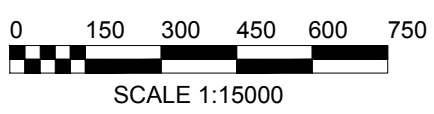
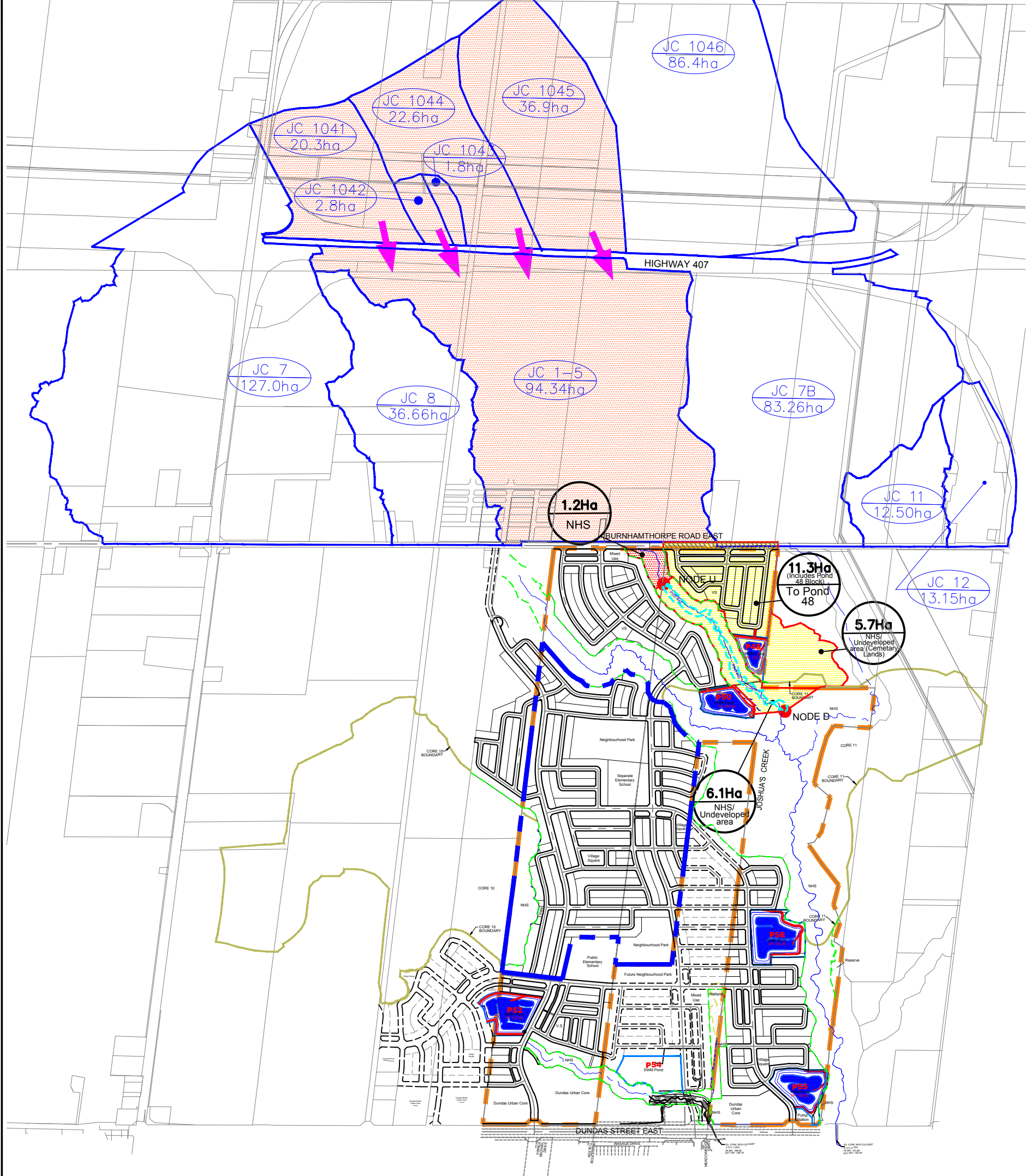
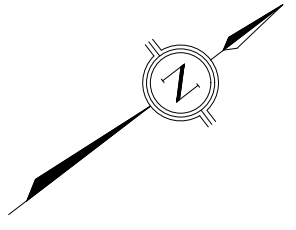
Existing Drainage Areas (Ha)				
Location	North of Burnhamthorpe Road	South of Burnhamthorpe Road		Total
		Drainage Areas (Ha)	Percentage of Total Drainage Area	
Wetland Upstream Node (Node U)	179.8	NHS	1.38	0.7%
		Tableland, West of PSW	2.52	1.4%
		Tableland, East of PSW	0.58	0.3%
Wetland Downstream Node (Areas Between Node U and Node D)	179.8	NHS	7.55	3.6%
		Tableland, West of PSW	4.16	2.0%
		Tableland (Mattamy Lands), East of PSW	9.33	4.4%
		Tableland (Other Lands), East of PSW	4.98	2.4%



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- Legend**
- Mattamy Phase 3 Lands
  - Subject Lands
  - EIR Subcatchment Boundaries
  - NHS Limit
  - Centreline of Creek
  - Floodlines Limit
  - PSW 45 Wetland Limit
  - Node U - Upstream End Of PSW 45
  - Node D - Downstream End of PSW 45
  - Drainage Direction
  - Drainage Area North of Burnhamthorpe (To Node U and Node D)
  - Sub-area Catchment Boundaries to PSW
  - Core 11 Boundary
  - NHS
  - Tableland, West of PSW
  - Tableland (Mattamy Lands), East of PSW
  - Tableland (Other Lands), East of PSW

MATTAMY PHASE 3 ADDENDUM TO THE  
 JOSHUA'S CREEK TRIBUTARIES EIR/FSS  
**FIGURE 7.10**  
**EXISTING DRAINAGE PATTERNS TO PSW 45 (SOUTH OF BURNHAMTHORPE ROAD)**  
 MAY 2020



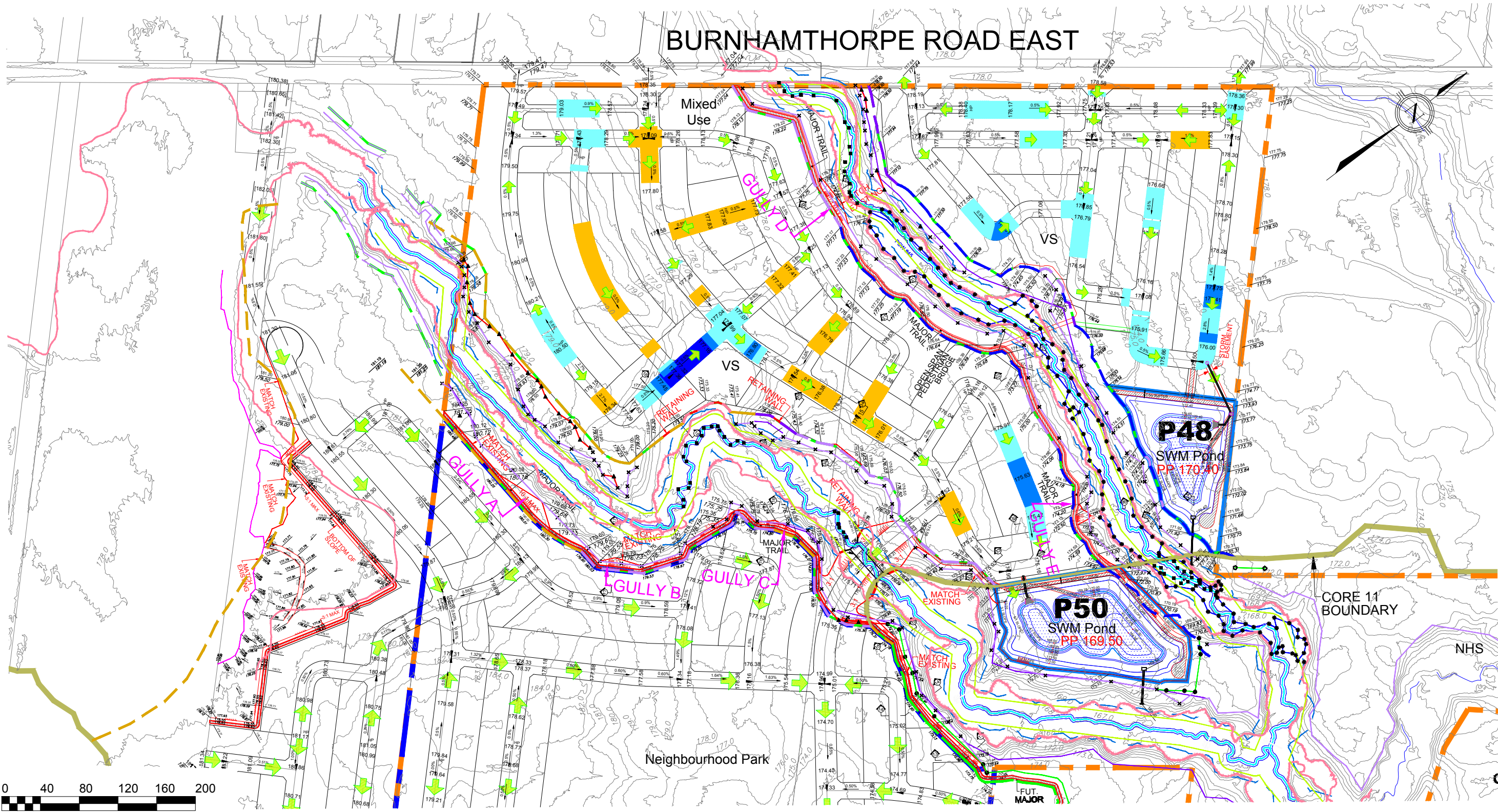
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- |                    |                             |   |  |
|--------------------|-----------------------------|---|--|
| <b>Legend</b>      | Mattamy Phase 3 Lands       | 8.2Ha Post Development Drainage           | Drainage Area South of Burnhamthorpe Road (To Node U and Node D) |
| Subject Lands      | EIR Subcatchment Boundaries | Drainage Area South of Burnhamthorpe Road | Drainage Area South of Burnhamthorpe Road (To Node D)            |
| Subcatchment Area  | Cross Sections Node         | NHS Limit                                 | Drainage Area North of Burnhamthorpe Road (To Node U and Node D) |
| Drainage Direction | Centreline of Creek         | PSW 45 Limit                              |  |

MATTAMY PHASE 3 ADDENDUM TO THE JOSHUA'S CREEK TRIBUTARIES EIR/FSS

**FIGURE 7.11**  
**POST DEVELOPMENT DRAINAGE AREA TO PSW 45**  
MAY 2020

# BURNHAMTHORPE ROAD EAST



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### Legend

- |  |  |  |                         |  |   |
|--|--|--|-------------------------|--|---|
|  | MATTAMY Phase 3 Lands                          |  | Meander Belt Allowance  |  | Surveyed Edge of Thicket/ Stream Veg (April 2015) |
|  | Subject Lands                                  |  | Regional Floodline      |  | Surveyed Edge of Dripline (April 2015)            |
|  | Core 10 and 11 Boundary                        |  | 15.0m Fisheries Setback |  | Surveyed Limit of Creek Centreline (April 2015)   |
|  | Existing Elevation                             |  | NHS Surveyed TOB        |  | Surveyed Edge of Wetland (April 2015)             |
|  | Proposed Elevation                             |  | Creek Centreline Limit  |  | Surveyed TOB (April 2015)                         |
|  | Existing Contour Elevation                     |  | NHS Limit               |  |   |
|  | Overland Flow Direction                        |  | 30m Wetland Buffer      |  |   |
|  | Thicket, Hedgerow & Cultural Meadow/Stream Veg |  | Dripline                |  |   |
|  |  |  | Wetland Limit           |  |   |

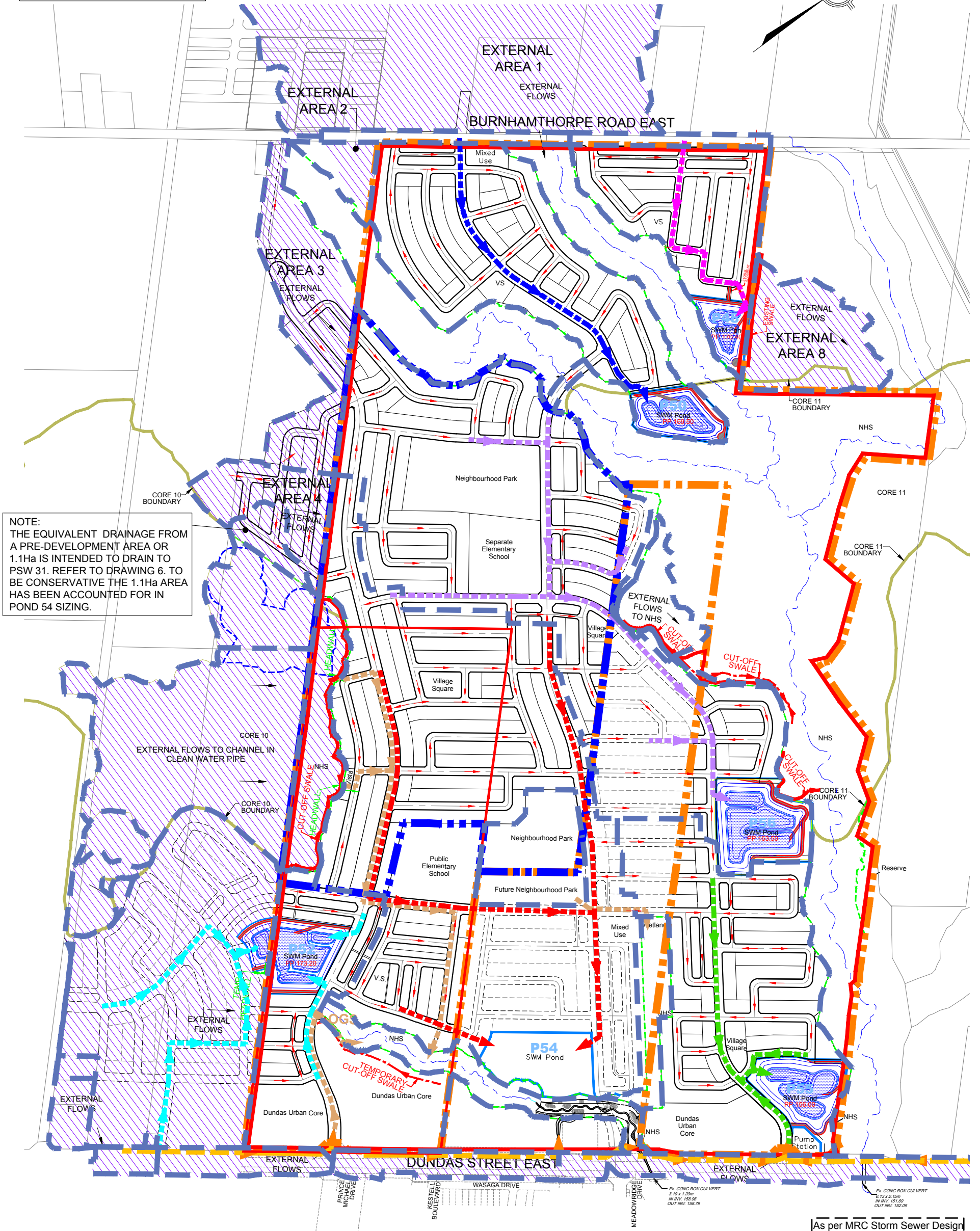
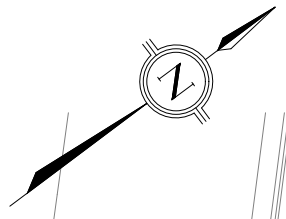
MATTAMY PHASE 3 ADDENDUM TO THE  
 JOSHUA'S CREEK TRIBUTARIES EIR/FSS

**FIGURE 7.12**

**FILLING OF LOCALIZED GULLIES**

MAY 2020

A suggested road and lot layout on the Diam Contractor Limited lands is shown on this and other figures in dashed lines. Discussions are ongoing with this adjacent landowner to coordinate road and lot layouts.

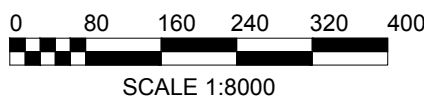


NOTE:  
THE EQUIVALENT DRAINAGE FROM A PRE-DEVELOPMENT AREA OR 1.1Ha IS INTENDED TO DRAIN TO PSW 31. REFER TO DRAWING 6. TO BE CONSERVATIVE THE 1.1Ha AREA HAS BEEN ACCOUNTED FOR IN POND 54 SIZING.

NOTE:  
Cut-off swale on neighbour property subject to permission otherwise swale to be located within subject lands.

NOTE:  
Temporary cut-off swale will drain to control manhole until Dundas Urban Core development

As per MRC Storm Sewer Design Dundas Street - Oak Park Blvd to Highway 403, Oct, 2010



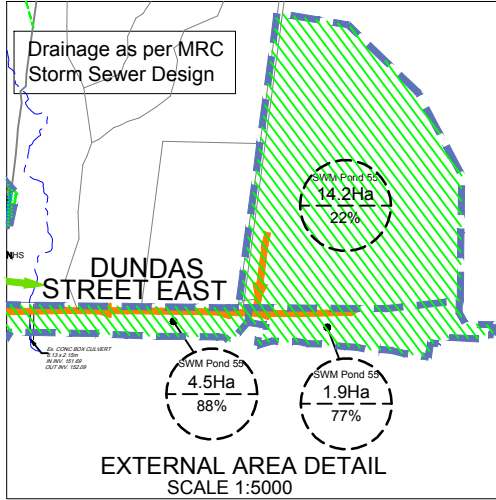
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Legend	
	Mattamy Phase 3 Lands
	Subject Lands
	FSS Study Area
	Storm Trunk to SWM Pond 48
	Storm Trunk to SWM Pond 50
	Storm Trunk to SWM Pond 52
	Storm Trunk to SWM Pond 56
	Storm Trunk to SWM Pond 54
	Storm Trunk to SWM Pond 55
	NHS Limit
	Existing Dundas Storm Sewer
	Cleanwater Pipe to Channel
	System Flow Direction
	Post Development Drainage
	Boundary
	External Drainage Area

MATTAMY PHASE 3 ADDENDUM TO THE JOSHUA'S CREEK TRIBUTARIES EIR/FSS

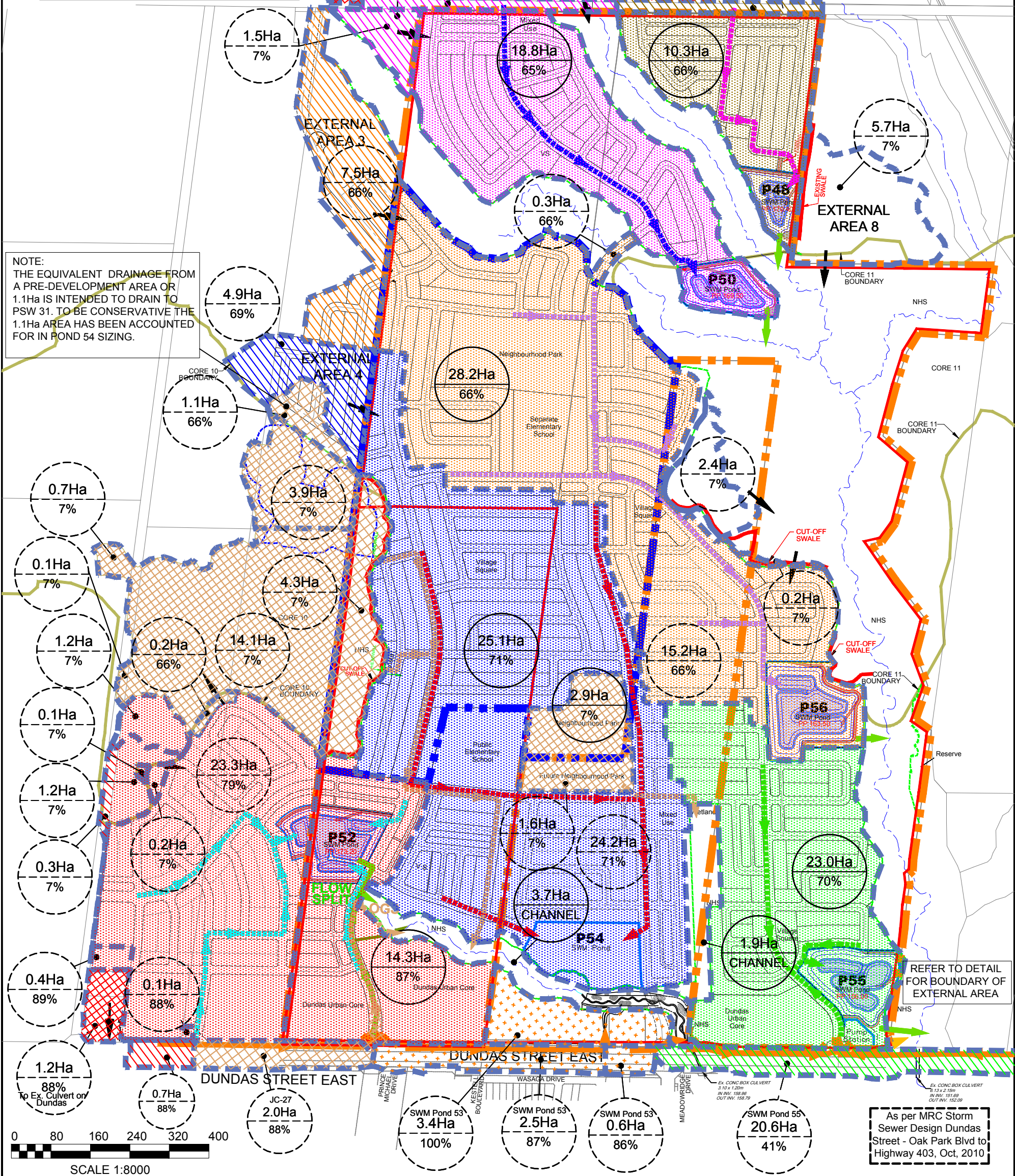
FIGURE 7.1R

CONCEPTUAL STORM SERVICING  
MAY 2020



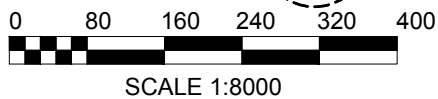
Lands north of Burnhamthorpe Road to be serviced by additional SWM Ponds; to be determined by EIR/FSS by others.

NOTE:  
ROAD AND LOT LAYOUTS OUTSIDE MATTAMY LANDS ARE BASED ON THE LATEST DRAFT PLANS RECEIVED FROM THE ADJACENT LAND OWNERS AS NOTED BELOW:  
- ARGO (JOSHUA'S CREEK) - DRAFT PLAN SUBMITTED IN DECEMBER 2019  
- REDOAK/CAPOAK LANDS - DRAFT PLAN SUBMITTED IN OCTOBER 2019  
- COSCORP (RAMPEN) LANDS - ROAD LAYOUT BASED ON COORDINATION WITH LAND OWNER



NOTE:  
THE EQUIVALENT DRAINAGE FROM A PRE-DEVELOPMENT AREA OR 1.1Ha IS INTENDED TO DRAIN TO PSW 31. TO BE CONSERVATIVE THE 1.1Ha AREA HAS BEEN ACCOUNTED FOR IN POND 54 SIZING.

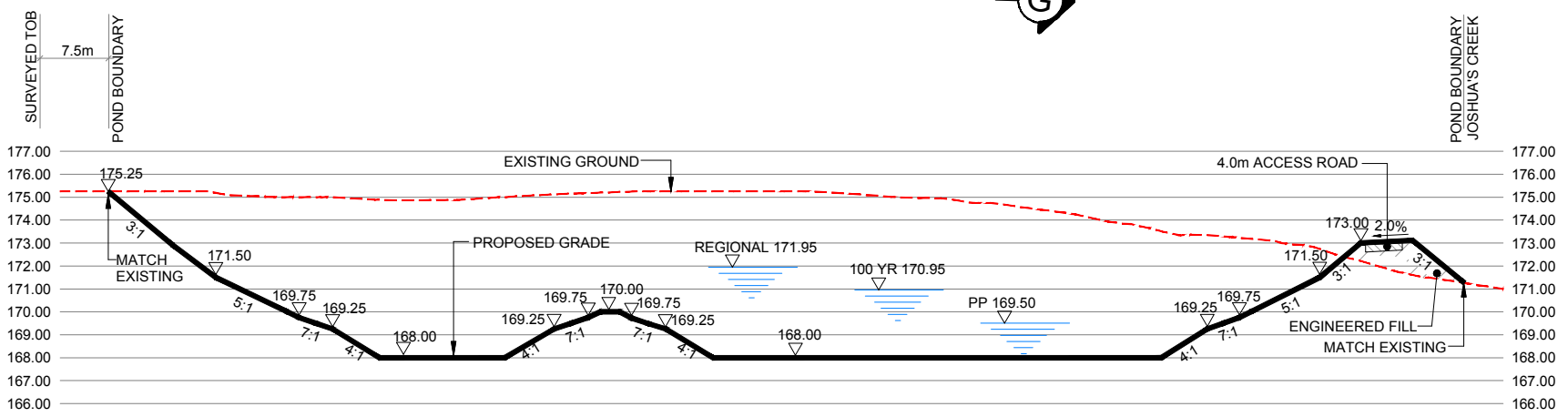
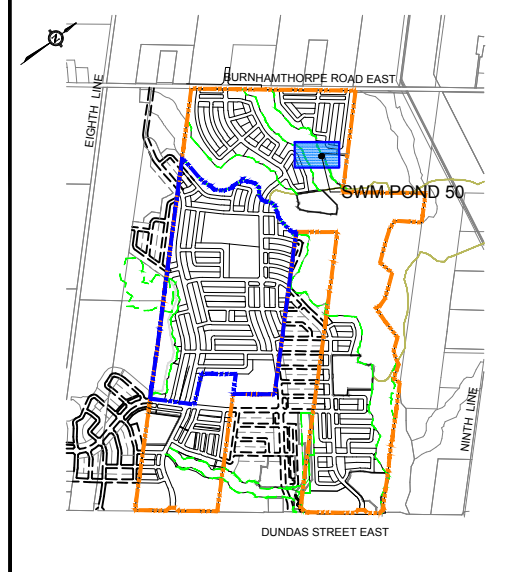
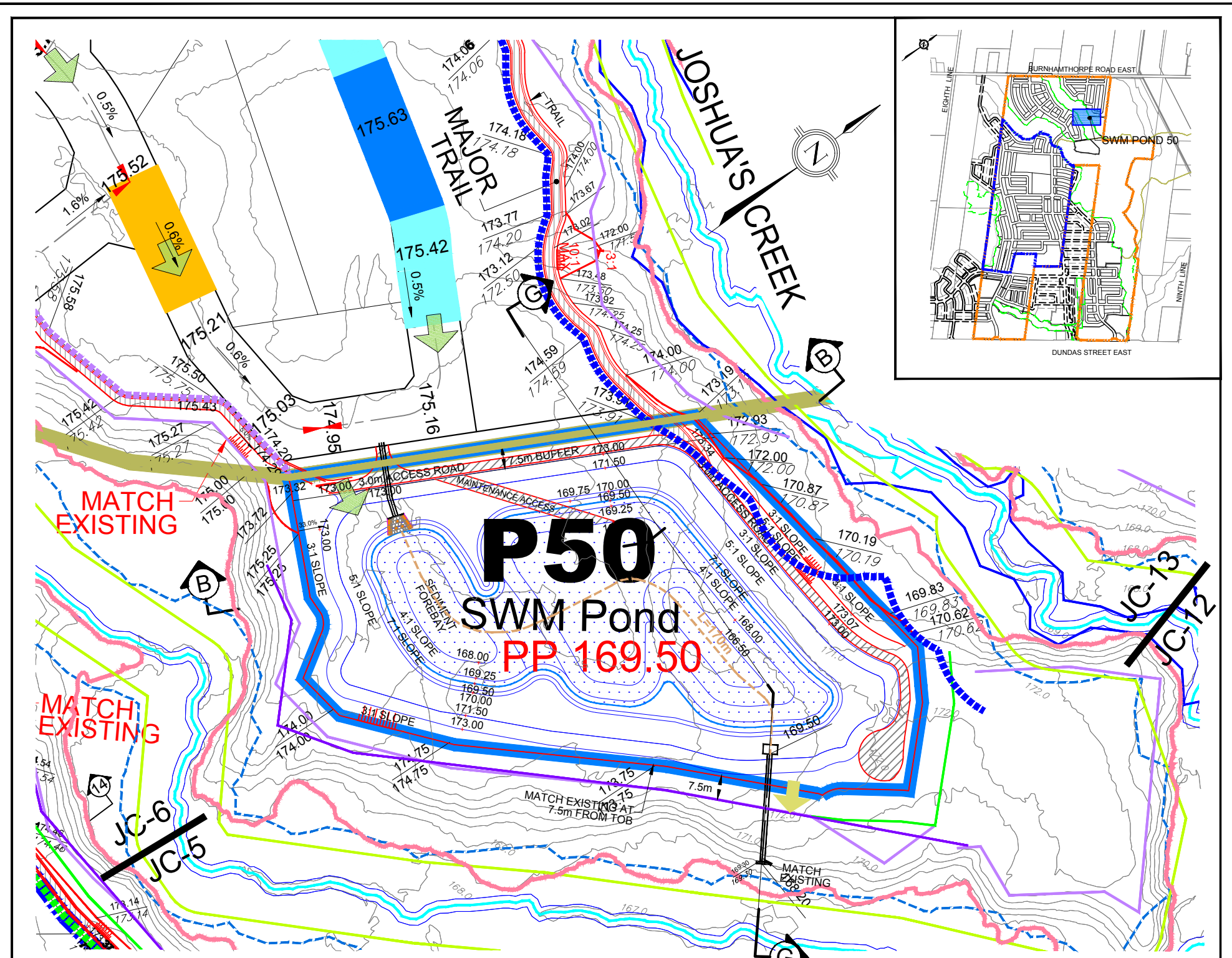
REFER TO DETAIL FOR BOUNDARY OF EXTERNAL AREA



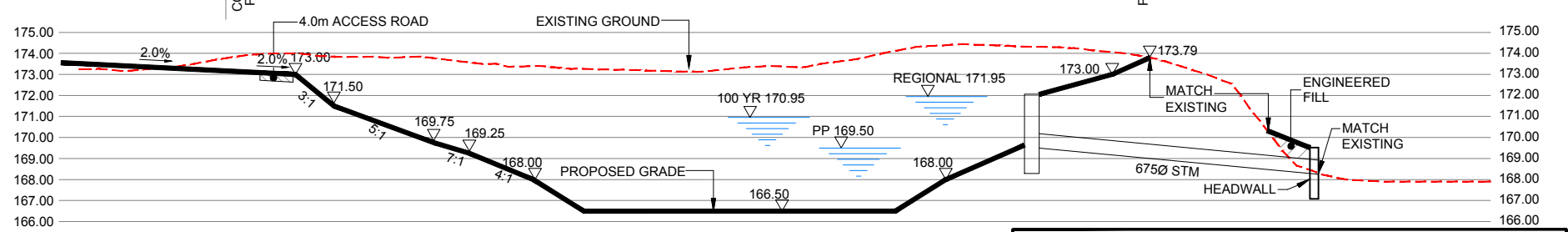
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- Legend**
- Mattamy Phase 3 Lands
  - Subject Lands
  - FSS Study Area
  - Post Development Drainage Boundary
  - Proposed Storm Trunk
  - Storm Outfall (By Others)
  - Clean Water Pipe
  - Existing Overland Flow Direction
  - NHS Limits
  - Post Development Drainage Area Imperviousness
  - External Drainage Area Imperviousness
  - Minor System Flow Direction
  - Total Post-Development Drainage Area to SWM Ponds
  - Drainage to Ex. Culvert
  - Total Post-Development External Drainage Area to SWM Ponds
  - Total Flows Directly to Channel in Clean Water Pipe
  - Drainage to SWM Pond 53

MATTAMY PHASE 3 ADDENDUM TO THE JOSHUA'S CREEK TRIBUTARIES EIR/FSS  
**FIGURE 7.2R**  
**Post Development Drainage Areas**  
MAY 2020



**SWM POND 50 SECTION B-B**  
SCALE HOR. 1:750  
VER. 1:300



**SWM POND 50 SECTION G-G**  
SCALE HOR. 1:750  
VER. 1:300

POND CHARACTERISTICS			
POND	ELEVATION (m)	VOLUME REQUIRED (m³)	VOLUME PROVIDED (m³)
PERMANENT POOL	169.50	3,756	3,756
EROSION CONTROL	169.70	1,272	1,291
100 YR	170.95	11,470	11,535
REGIONAL	171.95	21,700	22,183



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- Legend**
- NHS Limit
  - Core 11 Boundary
  - Existing Contour Elevation
  - Access Road
  - Permanent Pool
  - Proposed Grade
  - Existing Grade
  - Overland Flow Direction
  - Emergency Overflow Direction
  - Pond Inlet
  - Pond Outlet
  - 30m PSW Buffer
  - Dripline Limit
  - 15.0m Fisheries Setback
  - Regional Floodline Limit
  - 100 Year Floodline Limit
  - Meander Belt Allowance
  - Surveyed TOB
  - Creek Centreline Limit
  - L=220m Pond Length

MATTAMY PHASE 3 ADDENDUM TO THE JOSHUA'S CREEK TRIBUTARIES EIR/FSS

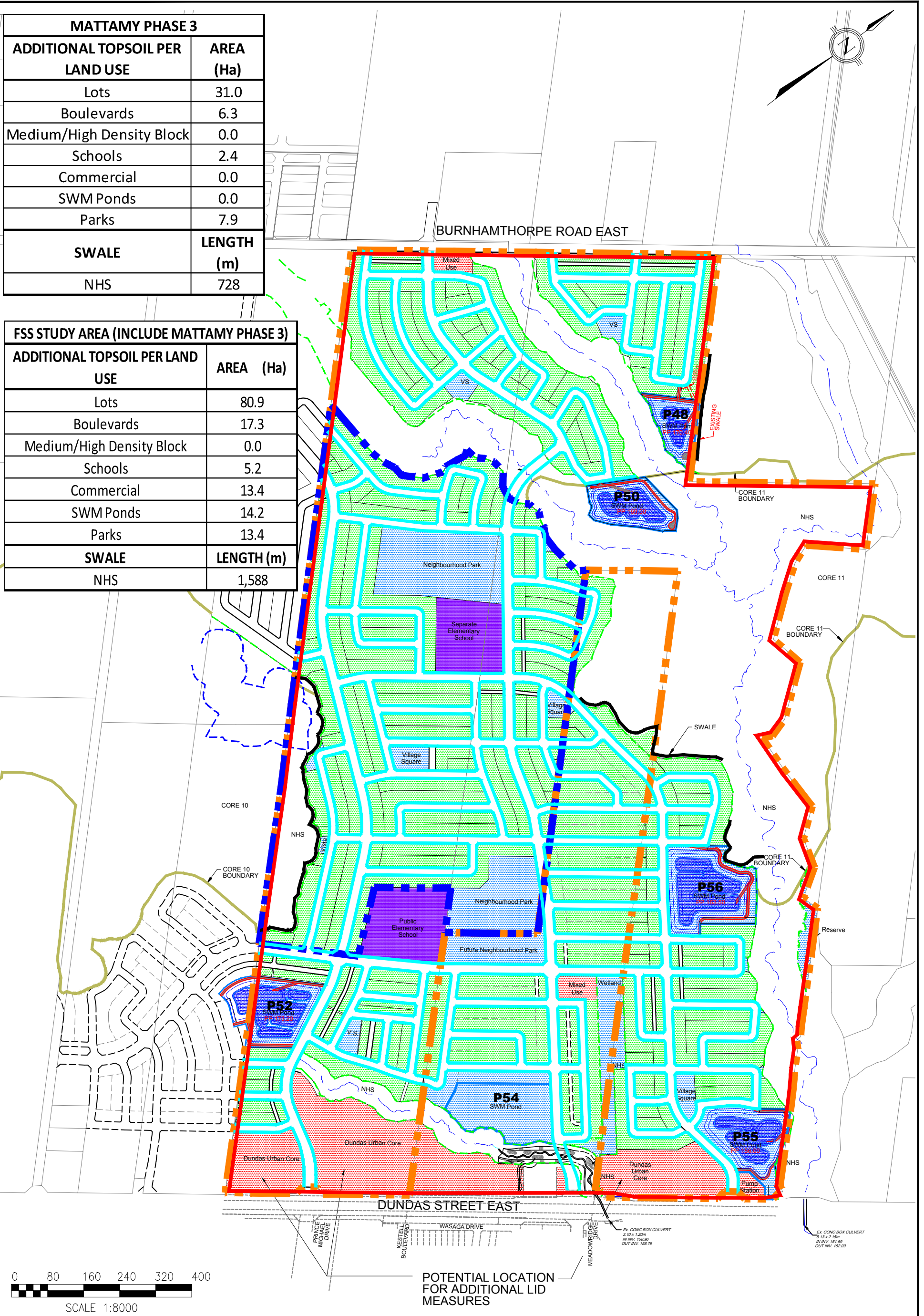
**FIGURE 7.3BR**

**SWM POND 50**

MAY 2020

MATTAMY PHASE 3	
ADDITIONAL TOPSOIL PER LAND USE	AREA (Ha)
Lots	31.0
Boulevards	6.3
Medium/High Density Block	0.0
Schools	2.4
Commercial	0.0
SWM Ponds	0.0
Parks	7.9
SWALE	LENGTH (m)
NHS	728

FSS STUDY AREA (INCLUDE MATTAMY PHASE 3)	
ADDITIONAL TOPSOIL PER LAND USE	AREA (Ha)
Lots	80.9
Boulevards	17.3
Medium/High Density Block	0.0
Schools	5.2
Commercial	13.4
SWM Ponds	14.2
Parks	13.4
SWALE	LENGTH (m)
NHS	1,588



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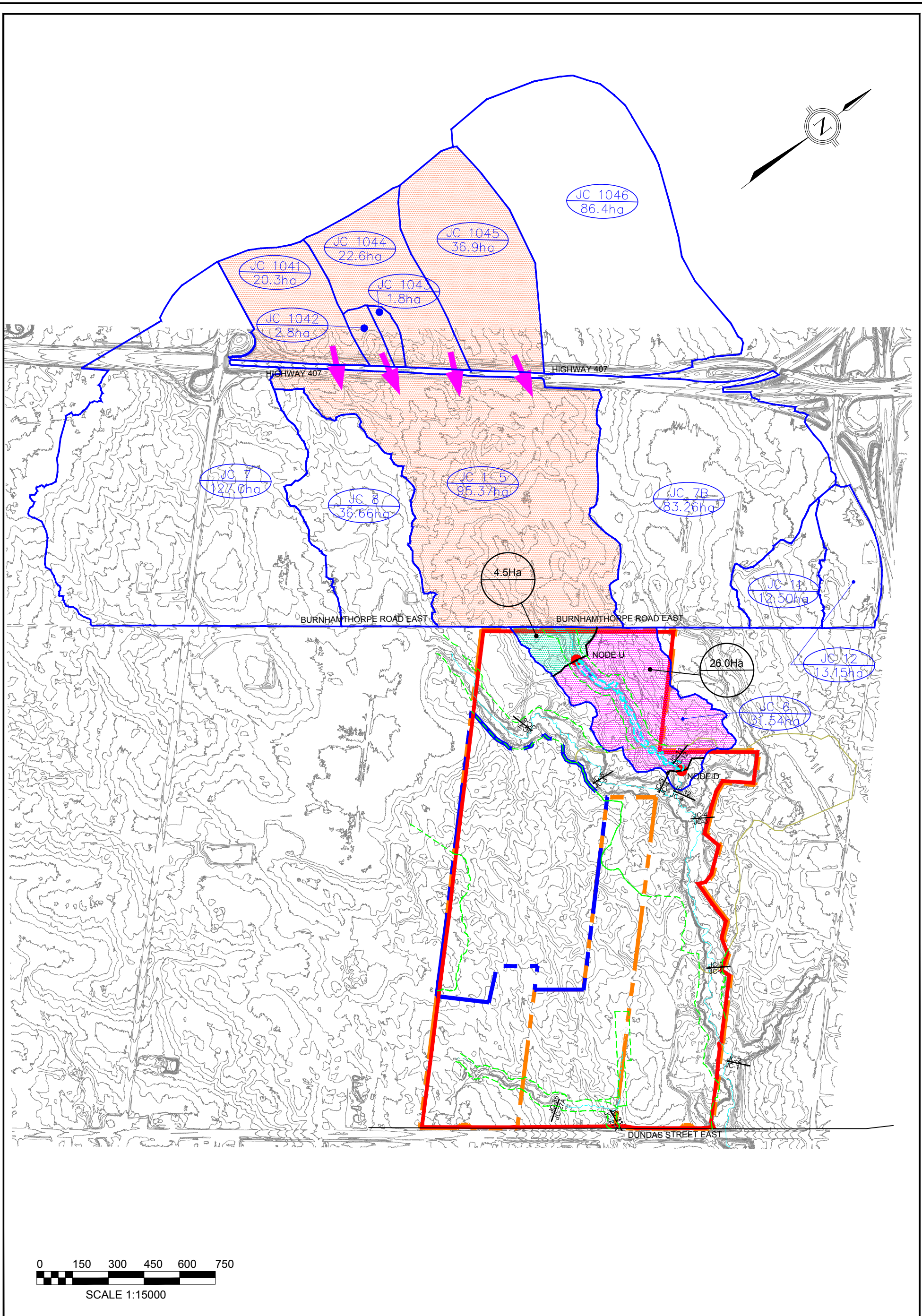
- Legend**
- Mattamy Phase 3 Lands
  - Subject Lands
  - FSS Study Area
  - NHS Limits
  - Swale
  - Additional Depth Topsoil Plus Tree Pits in Boulevard
  - Additional Depth Topsoil On Lots With Roof Drainage Directed to Pervious Areas
  - Additional Depth Topsoil in School
  - Additional Depth Topsoil in Pond/Park
  - Additional Depth Topsoil in Urban Areas

MATTAMY PHASE 3 ADDENDUM TO THE JOSHUA'S CREEK TRIBUTARIES EIR/FSS

**FIGURE 7.6R**

**CONCEPTUAL LOCATIONS OF LID MEASURES**

MAY 2020



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- |                             |   |                          |   |
|-----------------------------|---|--------------------------|---|
| <b>Legend</b>               | Mattamy Phase 3 Lands                   | Pre Development Drainage | Drainage Area South of Burnhamthorpe (To Node U and Node D) |
| Subject Lands               | FSS Study Area                          | NHS Limit                | Drainage Area South of Burnhamthorpe (To Node D)            |
| EIR Subcatchment Boundaries | Drainage Area Between Node U and Node D | PSW 45 Limit             | Drainage Area North of Burnhamthorpe (To Node U and Node D) |
| Subcatchment Area           | PSW Node                                | Core 11 Boundary         |   |
| Drainage Direction          |   |                          |   |

**MATTAMY PHASE 3 ADDENDUM  
 TO THE JOSHUA'S CREEK TRIBUTARIES  
 EIR/FSS**

**FIGURE 7.9**  
**PRE DEVELOPMENT DRAINAGE  
 AREAS TO PSW 45**  
 MAY 2020