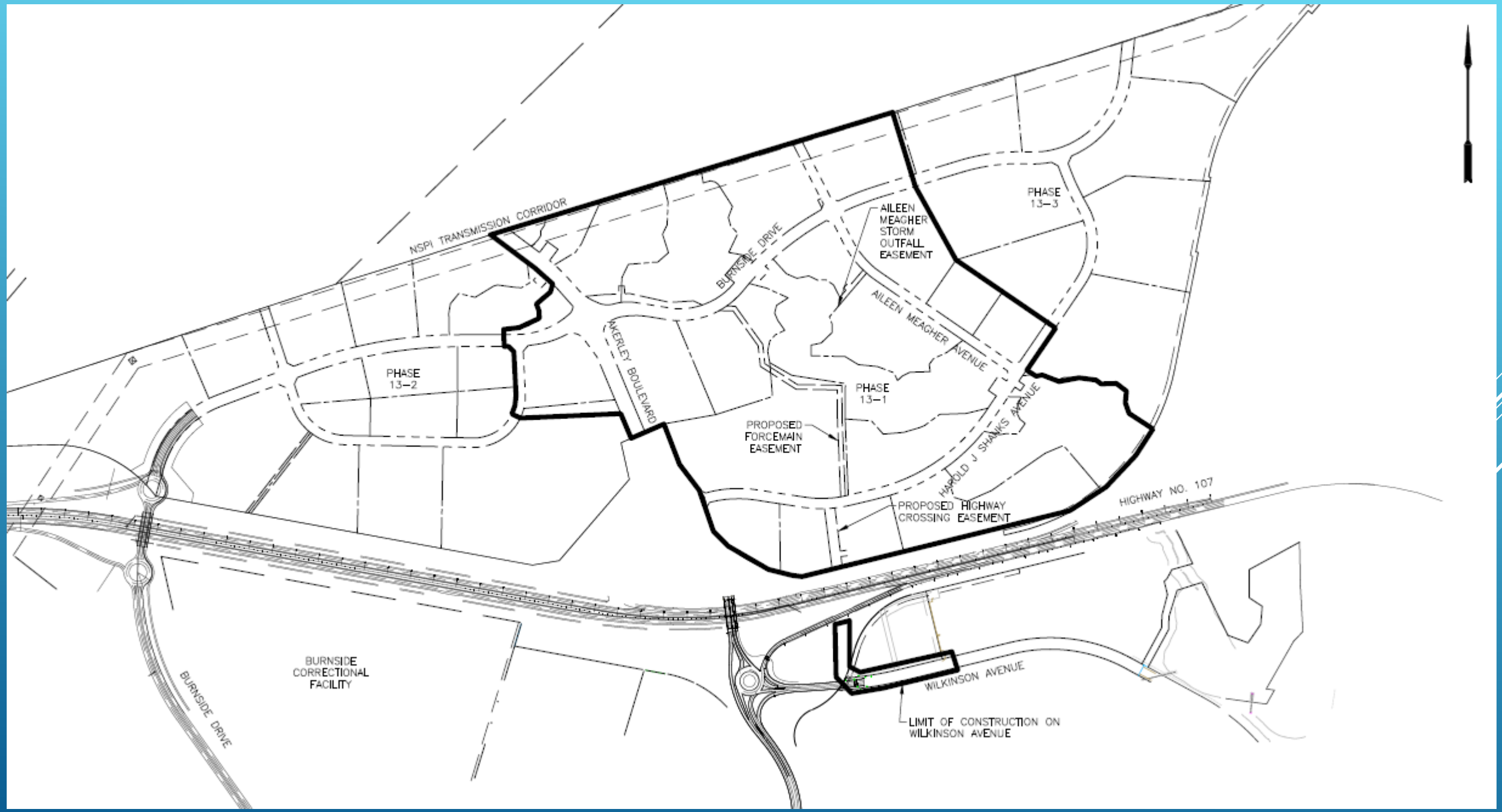
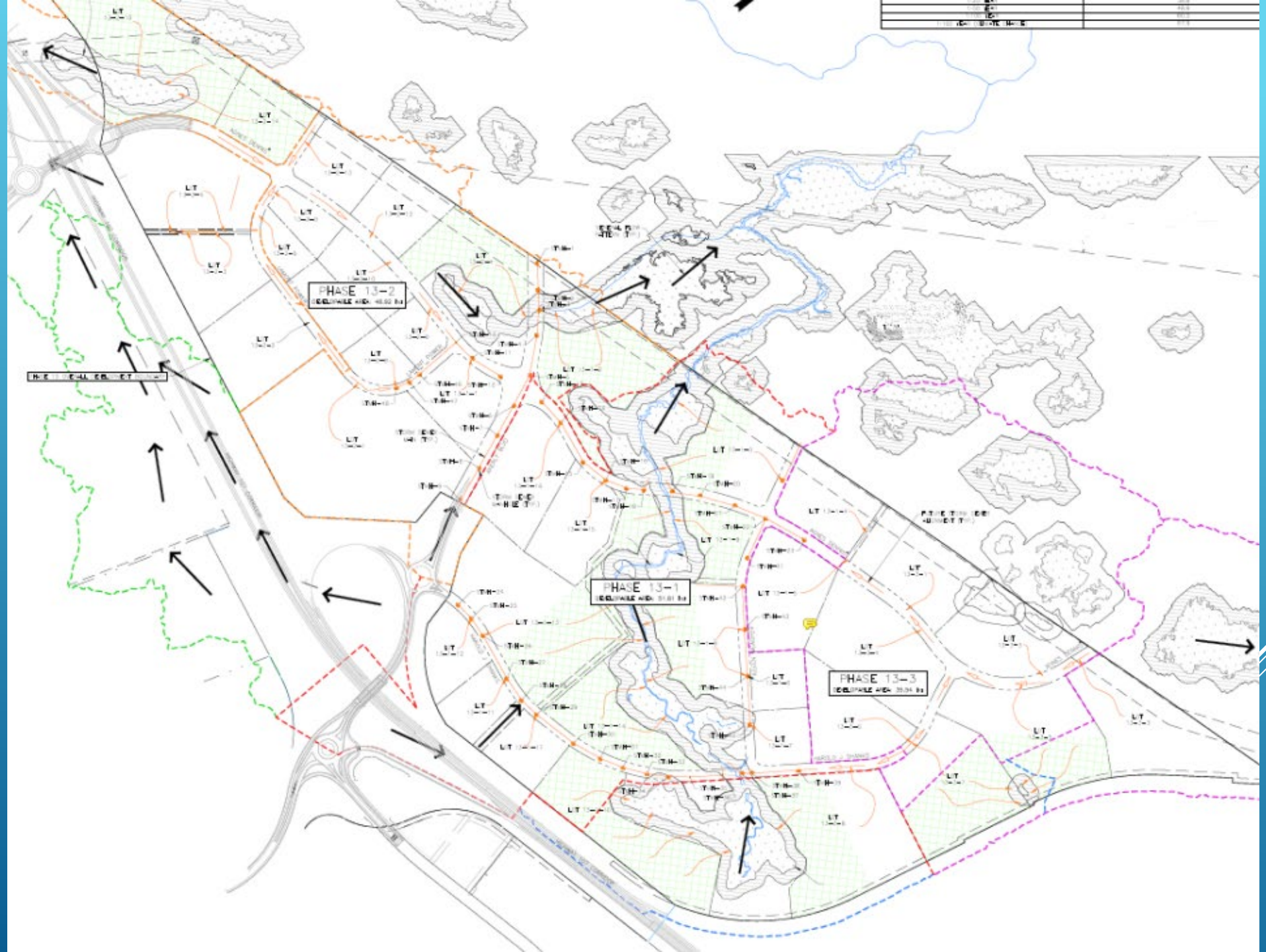
Item 10.2.1

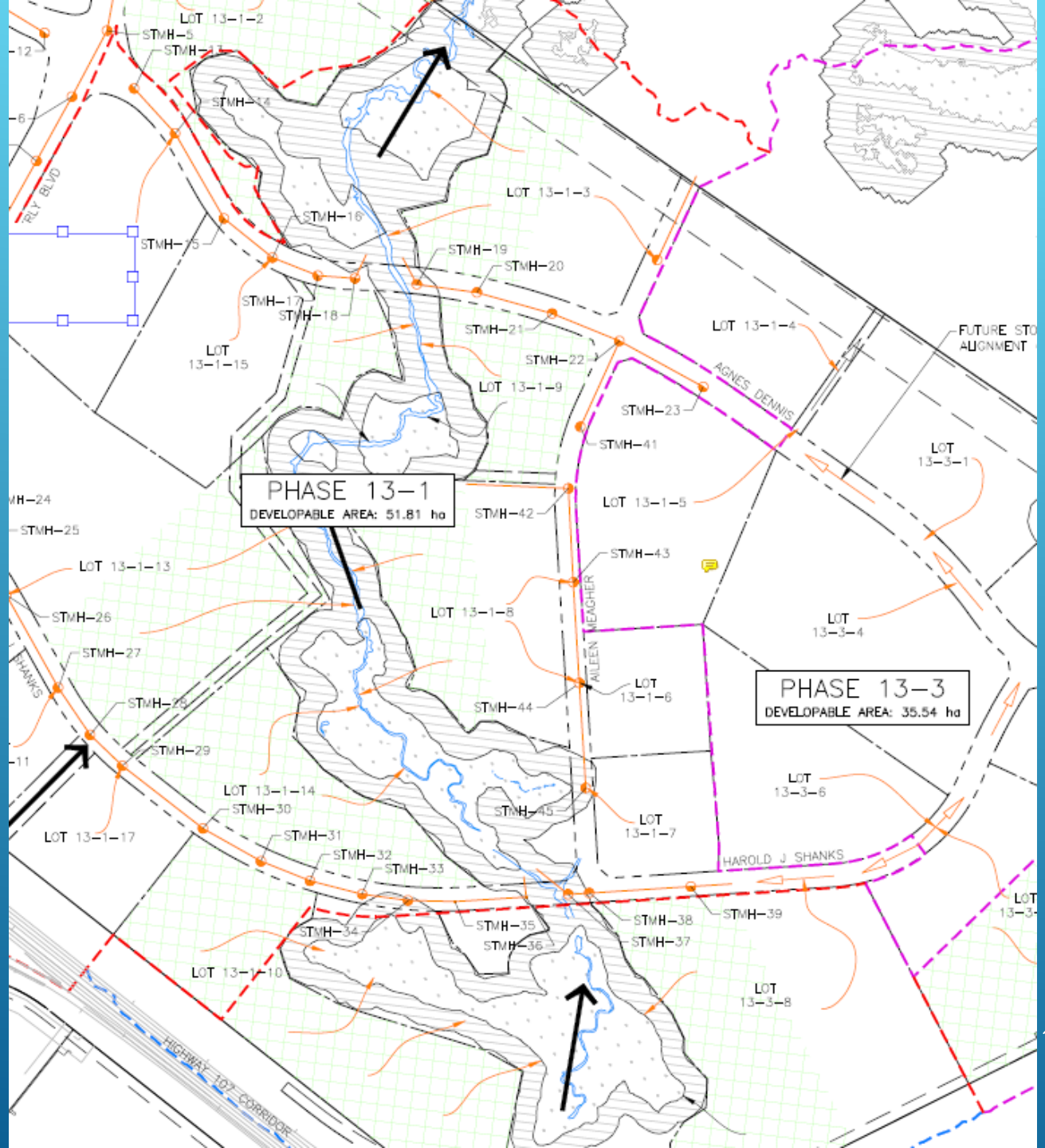
BURNSIDE PHASE 13

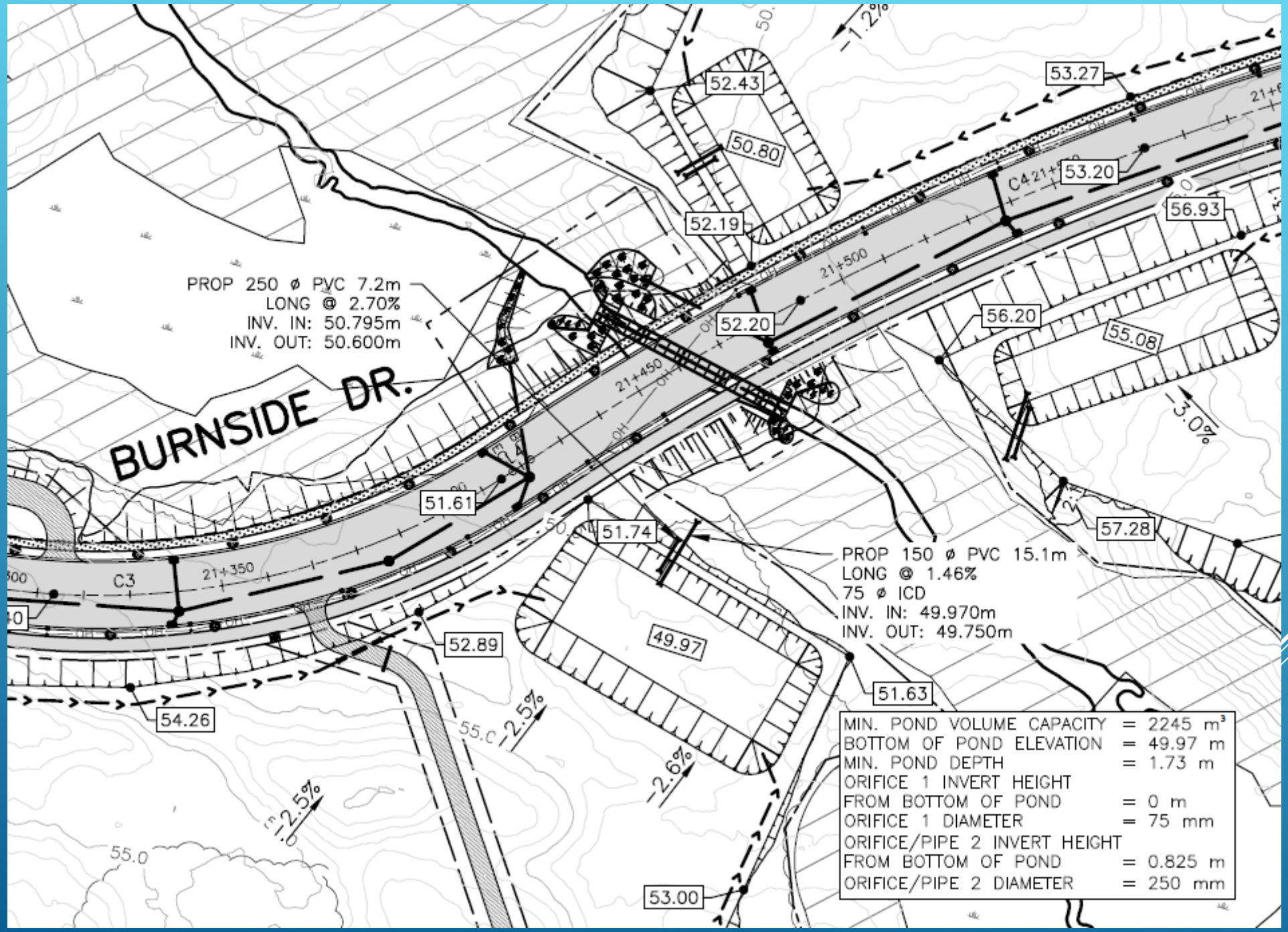
Regional Watershed Advisory Board


Lake William
HWY 118
Municipal Dexter Quarry
McGregor Brook
HWY 107
Phase 13
Lake Charles
HWY 107
Phase 12

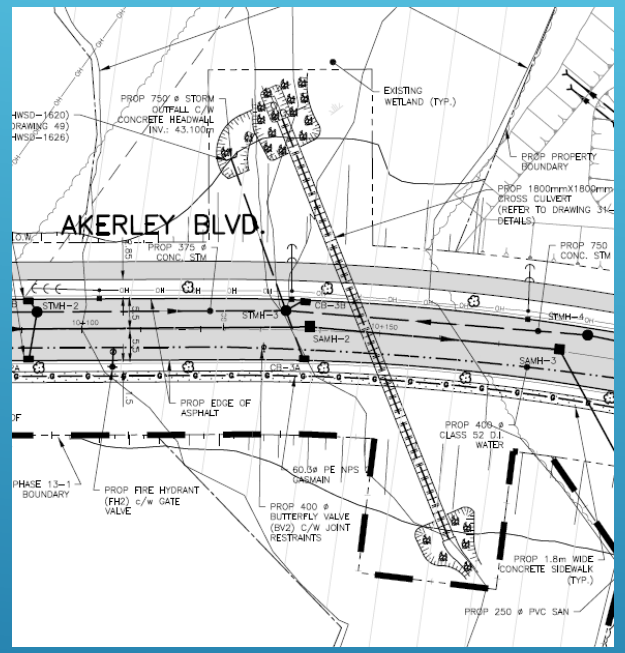

NSPI TRANSMISSION CORRIDOR
PHASE 13-2
BURNSIDE DRIVE
AILEEN MEAGHER STORM OUTFALL EASEMENT
PHASE 13-3
AILEEN MEAGHER AVENUE
AKERLEY BOULEVARD
PHASE 13-1
PROPOSED FORCEMAIN EASEMENT
HAROLD J SHANKS AVENUE
PROPOSED HIGHWAY CROSSING EASEMENT
HIGHWAY NO. 107
BURNSIDE CORRECTIONAL FACILITY
BURNSIDE DRIVE
WILKINSON AVENUE
LIMIT OF CONSTRUCTION ON WILKINSON AVENUE


PHASE 13–2
PHASE 13–1
PHASE 13–3

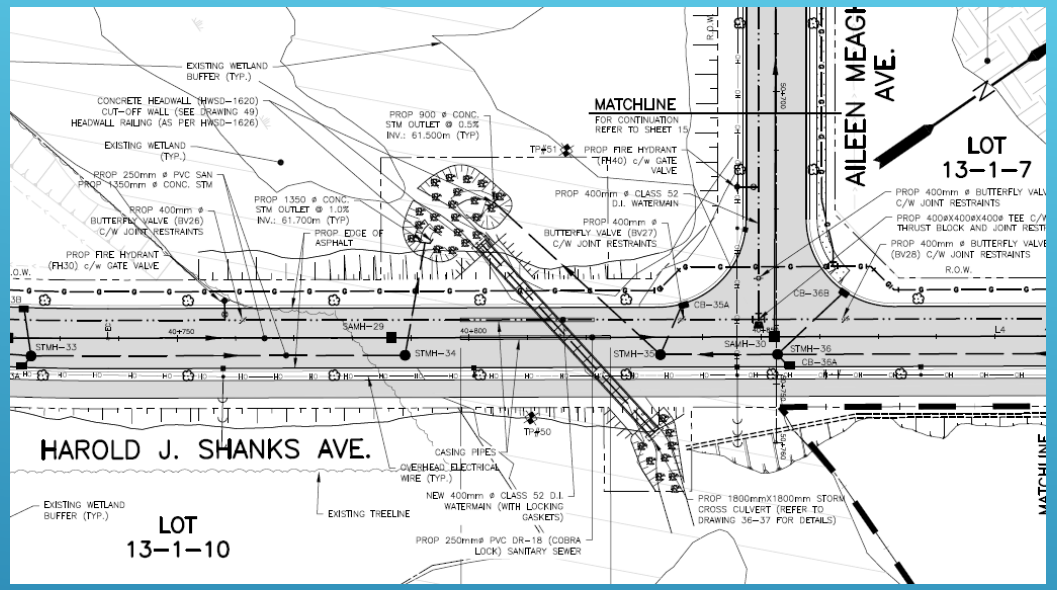

PHASE 13–1
DEVELOPABLE AREA: 51.81 ha
PHASE 13–3
DEVELOPABLE AREA: 35.54 ha
LOT 13–1–2
LOT 13–1–3
LOT 13–1–4
LOT 13–1–5
LOT 13–1–6
LOT 13–1–7
LOT 13–1–8
LOT 13–1–9
LOT 13–1–10
LOT 13–1–13
LOT 13–1–14
LOT 13–1–15
LOT 13–1–17
LOT 13–3–1
LOT 13–3–4
LOT 13–3–6
LOT 13–3–8
STMH–5
STMH–14
STMH–16
STMH–17
STMH–18
STMH–19
STMH–20
STMH–21
STMH–22
STMH–23
STMH–24
STMH–25
STMH–26
STMH–27
STMH–28
STMH–29
STMH–30
STMH–31
STMH–32
STMH–33
STMH–34
STMH–35
STMH–36
STMH–37
STMH–38
STMH–39
STMH–41
STMH–42
STMH–43
STMH–44
STMH–45
AGNES DENNIS
AILEEN MEAGHER
HAROLD J SHANKS
HIGHWAY 107 CORRIDOR
FUTURE ST
ALIGNMENT


BURNSIDE DR.
PROP 250 ø PVC 7.2m
LONG @ 2.70%
INV. IN: 50.795m
INV. OUT: 50.600m
PROP 150 ø PVC 15.1m
LONG @ 1.46%
75 ø ICD
INV. IN: 49.970m
INV. OUT: 49.750m
MIN. POND VOLUME CAPACITY = 2245 m³
BOTTOM OF POND ELEVATION = 49.97 m
MIN. POND DEPTH = 1.73 m
ORIFICE 1 INVERT HEIGHT
FROM BOTTOM OF POND = 0 m
ORIFICE 1 DIAMETER = 75 mm
ORIFICE/PIPE 2 INVERT HEIGHT
FROM BOTTOM OF POND = 0.825 m
ORIFICE/PIPE 2 DIAMETER = 250 mm
52.43
50.80
53.27
53.20
52.19
56.93
52.20
56.20
55.08
51.61
51.74
57.28
52.89
49.97
51.63
54.26
53.00
C3
C4
21+350
21+450
21+500
-1.2%
-3.0%
-2.5%
-2.6%
-2.5%

Akerley Blvd



Harold J Shanks



CULVERTS

How will stormwater be managed during construction?

Contractor is required to prepare and submit an Environmental Protection Plan developed (EPP) by an independent Environmental Engineer to HRM standards that will clearly identify how construction runoff will be managed and treated throughout the construction period.

How will it be collected, contained, and treated, and to where will it ultimately be discharged?

In accordance with the EPP which is presently under development by the Contractor's consultant. EPP will be prepared in accordance with HRM's standards.

During the subsequent operational phase of the development, following the installation of infrastructure, to where will stormwater from this site be directed? Will this site be connected to the existing stormwater collection system in Burnside, or will stormwater from the new site be discharged to the environment in some local location (to natural watercourses or lakes)?

Stormwater from the development will discharge to its natural location, in a watercourse (McGregor's Brook) with outfalls in several locations. Each drainage basin was designed to mimic the natural drainage area and to limit peak runoff to predevelopment conditions. In the short term, prior to sale and development of each individual lot, temporary storage basins have been provided for each lot to reduce the runoff rate to the preconstruction rate. Once a lot is sold, the developer of that lot will be responsible for the permanent storm water management features including stormwater retention to meet the net -zero increase in runoff.

If it will be connected to the existing Burnside stormwater collection system, does that system have adequate capacity to convey and treat the additional stormwater prior to discharge (which I believe is currently to Lakes Micmac/Banook)?

New collection system is not connected to the existing Burnside collection system.

If there are to be any new discharge points for stormwater to the natural environment, where will they be, how will that stormwater be treated, and what are the predicted impacts to the receiving waters?

There are three new discharge points to MacGregor's Brook. During construction, the Contractor will manage runoff via the EPP measures that have been designed for the project. After completion of construction of the development and before the final development of each individual lot, temporary storage ponds have been provided to reduce runoff rate. Final development of the individual lots will require adherence to HRM's policies for net-zero runoff and treatment requirements.