

East Ridge Business Park Expansion: Servicing

COUNCIL PRESENTATION JULY 13, 2021

Agenda

- ▶ Overview of Master Plan: Preferred servicing strategy
- ▶ What has changed?
- ▶ Stormwater Management (SWM), grading & drainage
- ▶ Wastewater servicing
- ▶ Water servicing
- ▶ Utilities
- ▶ Phasing
- ▶ Estimated costs
- ▶ Next steps



East Ridge Business Park (as of 2019)



**MUNICIPALITY OF BROCKTON
EAST RIDGE BUSINESS PARK (WALKERTON)
SERVICING MASTER PLAN
STUDY AREA LOCATION**

DATE
June 2019

PROJECT No.
12154

SCALE
AS SHOWN

FIGURE No.
2.2

PREFERRED ALTERNATIVE (as of September 2019)



MUNICIPALITY OF BROCKTON
EAST RIDGE BUSINESS PARK (WALKERTON)
SERVICING MASTER PLAN
PREFERRED ALTERNATIVE - MUNICIPAL SERVICING

DATE
June 2019

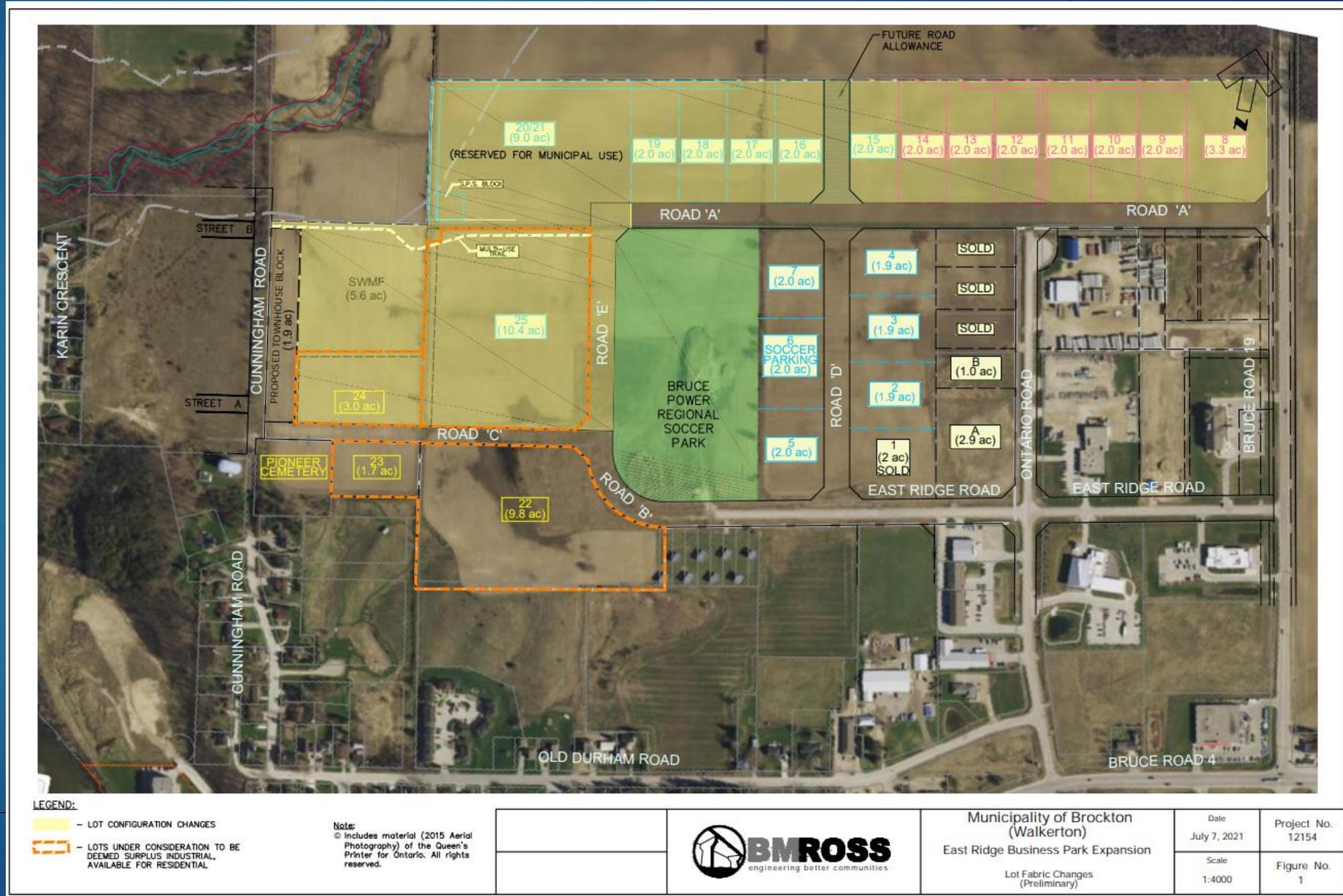
PROJECT No.
12154

SCALE
AS SHOWN

FIGURE No.
11.1

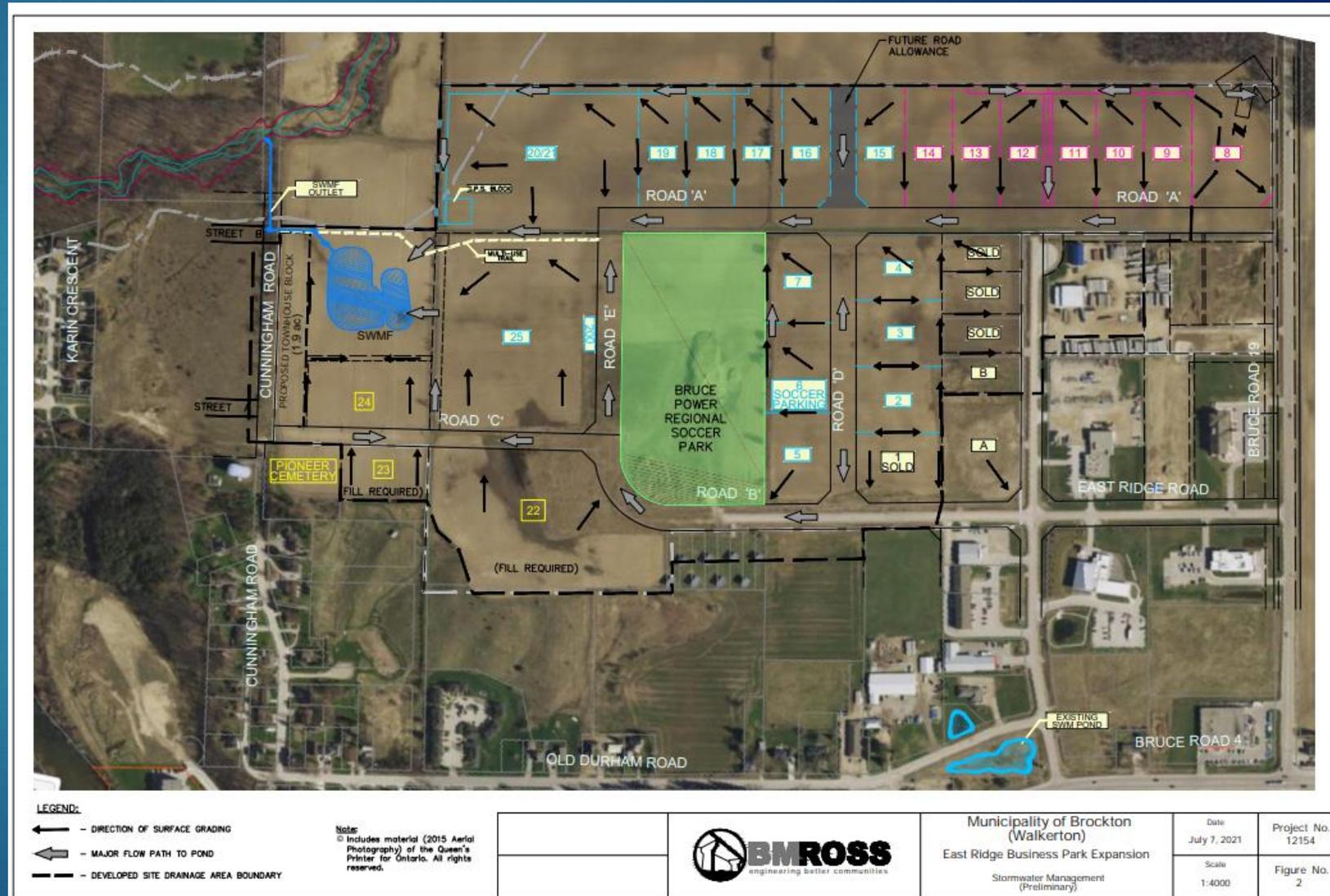
What has changed since March 9, 2021?

- ▶ Future road allowance for extension of Road D
- ▶ Lots 22-25 being considered for residential use
- ▶ Combined Lot 20/21 to be reserved for Municipal use
- ▶ Road E
- ▶ Keep soccer parking lot but connect to Road D
- ▶ Note: lot fabric shown simply based on 2 acre parcels (actual sizes sold will vary)



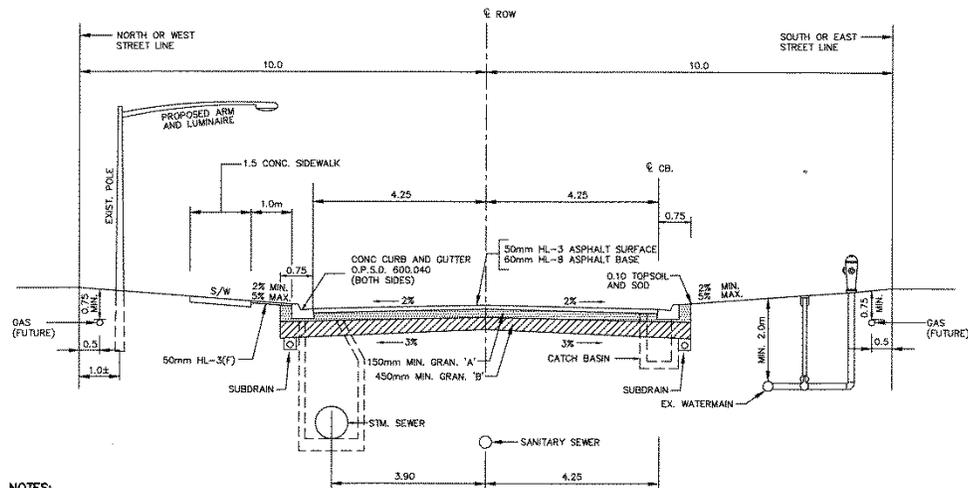
SWM

- ▶ Lot 8 drains to Bruce Road 19
- ▶ Rest of expansion area to drain to the SWM Block
- ▶ Roads A & D ditches
- ▶ Regrading portion of East Ridge Road ditch
- ▶ Road B, C & E storm sewer
- ▶ Perimeter ditch along north sides Lots 9 to 13 and 17 to 21
- ▶ Reduced SWM Block size
- ▶ Shrunk Lot 24 to fit pond in SWM Block
- ▶ Pond depth to service adjacent Cunningham Road



Roads

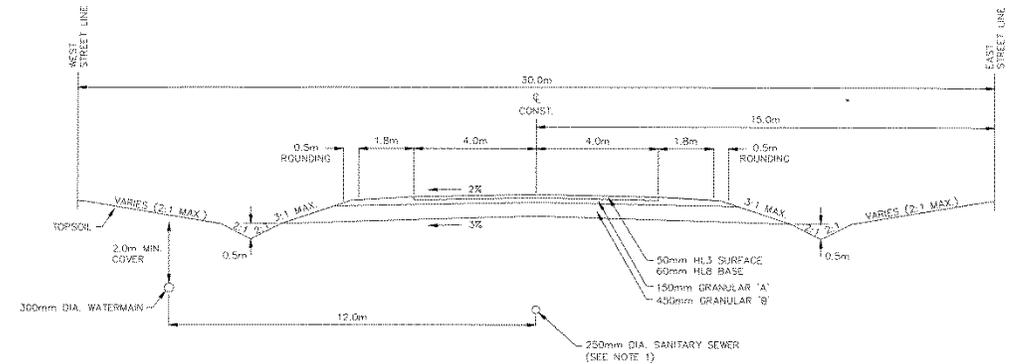
- ▶ Urban road section: Road B, Road C, & Road E (i.e. curb & gutter, storm sewer and sidewalk)
- ▶ Rural road section: Road A & Road D (i.e. ditches)



- NOTES:**
- ROAD CROSSINGS DEPTHS FOR UTILITIES - HYDRO 1.2 MIN.
- BELL, TELEPHONE, UNION GAS, CABLE TV 1.0 MIN.
- WATER 2.0 MIN.
 - ALL WATER SERVICE BOXES TO BE SET AT PROPERTY LINE.

TYPICAL SECTION - URBAN INDUSTRIAL
(EAST RIDGE ROAD, ROAD C)

N.T.S.



- NOTES:**
- 100mm DIA. LOW PRESSURE SEWER IS REQUIRED ON ROAD A FROM THE WESTERLY END OF ROAD A TO ROAD D. ALL OTHER LOCATIONS TO HAVE 250mm DIA. GRAVITY SANITARY SEWER.

TYPICAL SECTION - RURAL INDUSTRIAL
(ROAD D)

N.T.S.

Sanitary Sewer (March 9)

- ▶ New gravity sewer:
 - ▶ Road D
 - ▶ Portion of Road A to Road D
 - ▶ Portion of Road A to Ontario Road
- ▶ Low pressure sewer on Road A west of Road D (grinder pumps)
- ▶ Road B: Extend sewer to the west, if needed.
- ▶ Road C: New sewer (outlet to adjacent future subdivision)



MUNICIPALITY OF BROCKTON
EAST RIDGE BUSINESS PARK (WALKERTON)
WASTEWATER SERVICING

DATE
March 2021

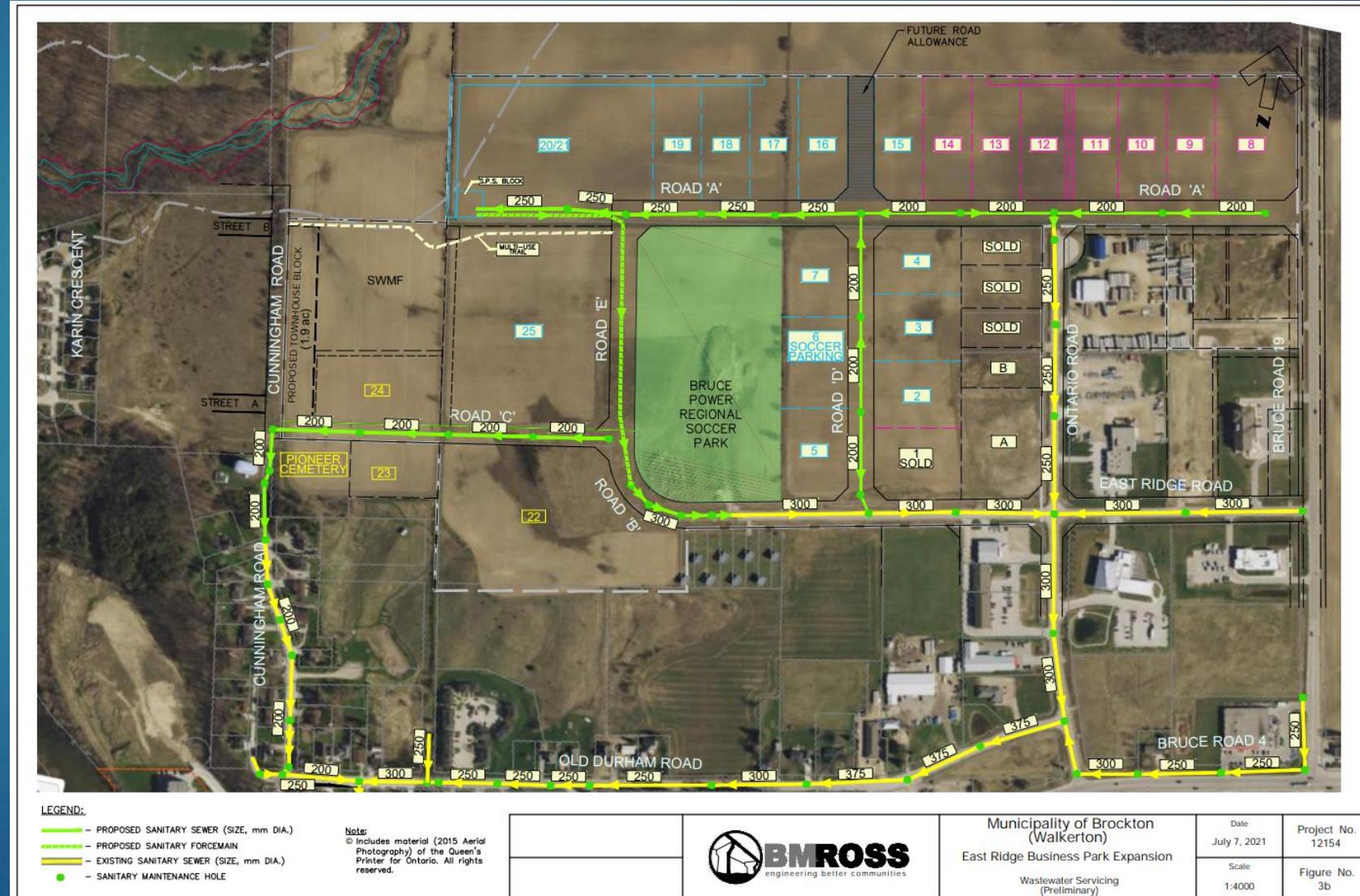
PROJECT No.
12154

SCALE
AS SHOWN

FIGURE No.
6.7

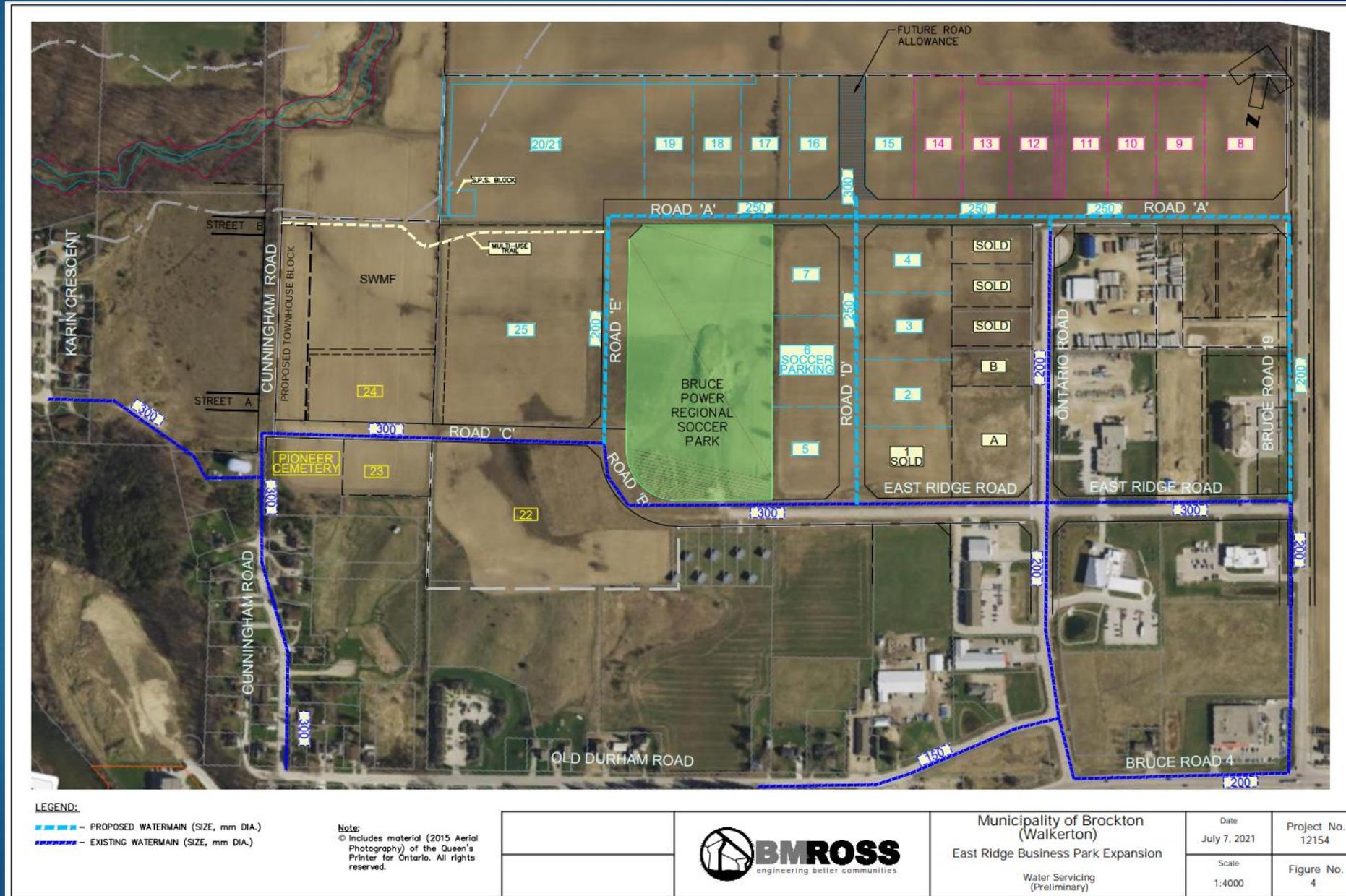
Sanitary Sewer (July 6)

- ▶ New gravity sewer:
 - ▶ Portion of Road D to East Ridge Road
 - ▶ Portion of Road D to SPS
 - ▶ Portion of Road A to SPS
 - ▶ Portion of Road A to Ontario Road
- ▶ Sewage pumping station on Road A west of Road D (discharge to East Ridge Road)
- ▶ Road B: Extend sewer to the west, if needed.
- ▶ Road C: New sewer (outlet to Cunningham Road)



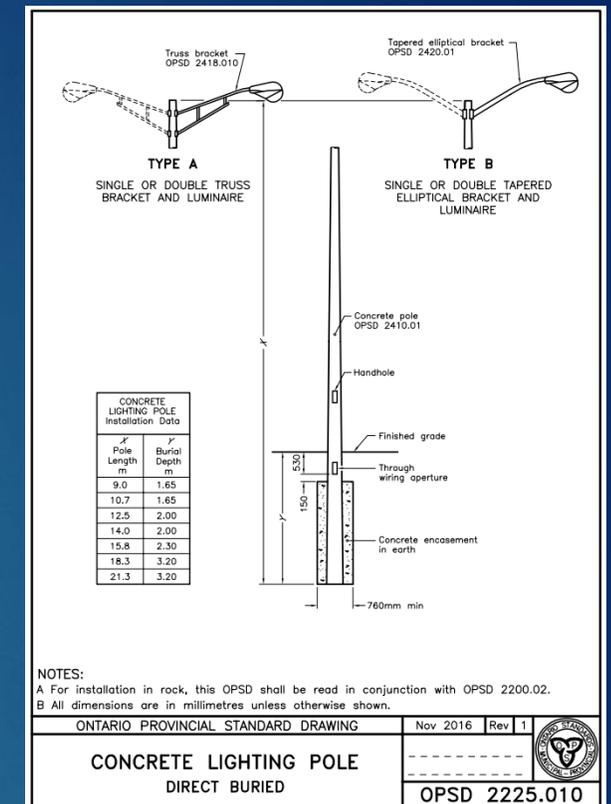
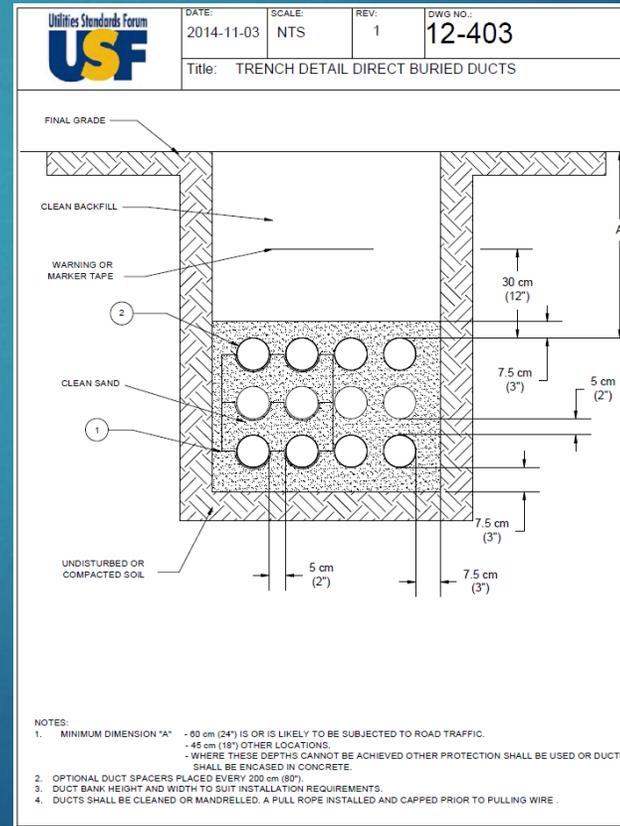
Watermain

- ▶ New 250mm dia. on Road A & Road D
- ▶ New 200mm dia. loop connections to both ends of the Road A watermain

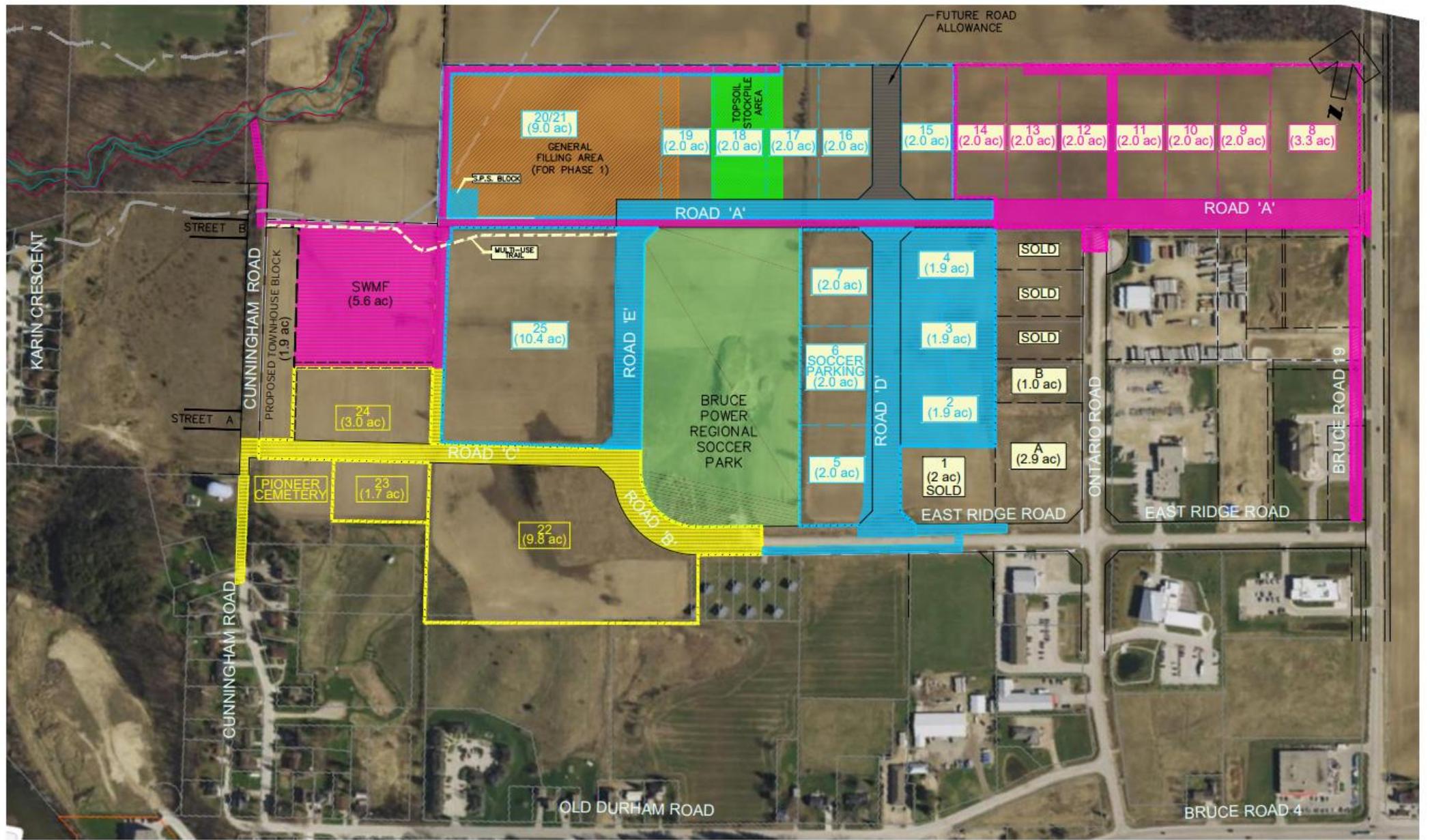


Utilities

- ▶ Electrical
 - ▶ Exists along Road B and Road C
 - ▶ Required along Road A & Road D
- ▶ Street lighting, including Road E
- ▶ Natural gas (Enbridge)
- ▶ Communications



PHASING



LEGEND:

- PHASE 1
- PHASE 2
- PHASE 3

Note:

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Municipality of Brockton
(Walkerton)
East Ridge Business Park Expansion

Construction Phasing
(Preliminary)

Date
July 7, 2021

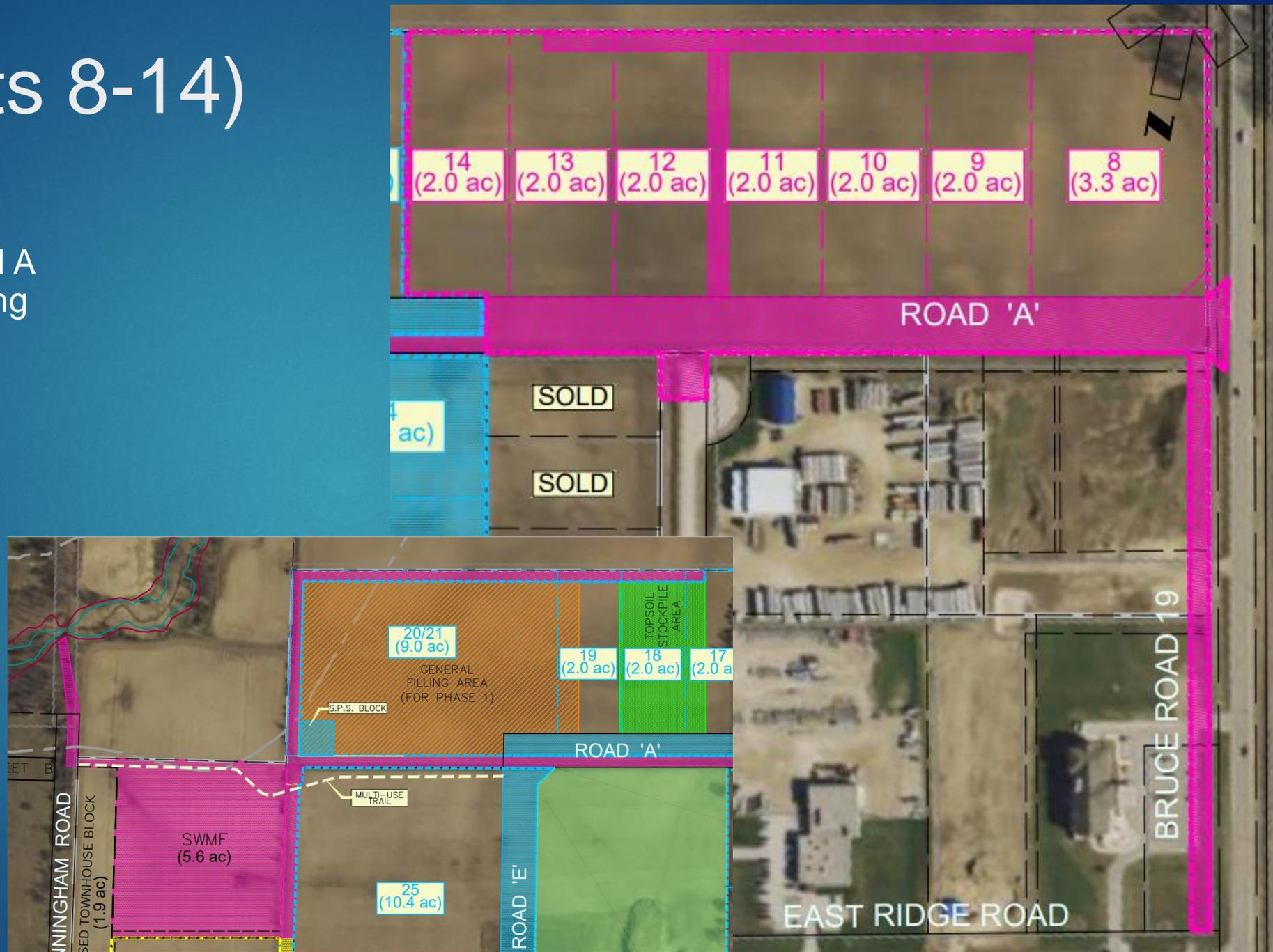
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Project No.
12154

Figure No.
5

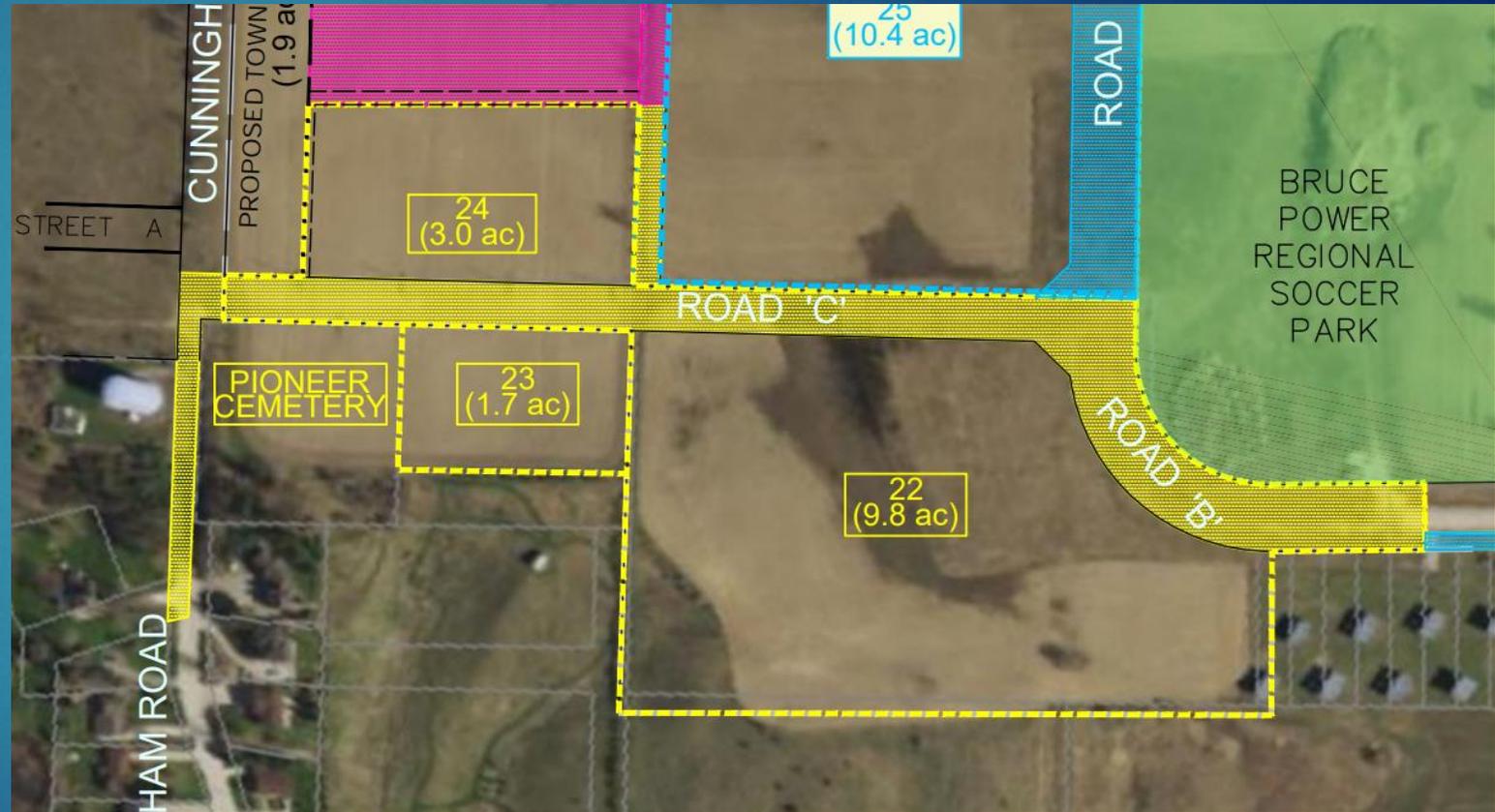
Phase 1 (Lots 8-14)

- ▶ SWMF including outlet sewer/ditch to tributary
- ▶ Pre-grading work of Road A and adjacent lots, including
 - ▶ Filling of Lots 19-21
 - ▶ Topsoil stockpile
- ▶ Road A, including:
 - ▶ Ditches
 - ▶ Ditch to SWMF
 - ▶ Storm sewer to SWMF
 - ▶ Sanitary sewer
 - ▶ Watermain, including along Bruce Road 19
 - ▶ Utilities, including street lighting
- ▶ 15.3 acres + SWMF



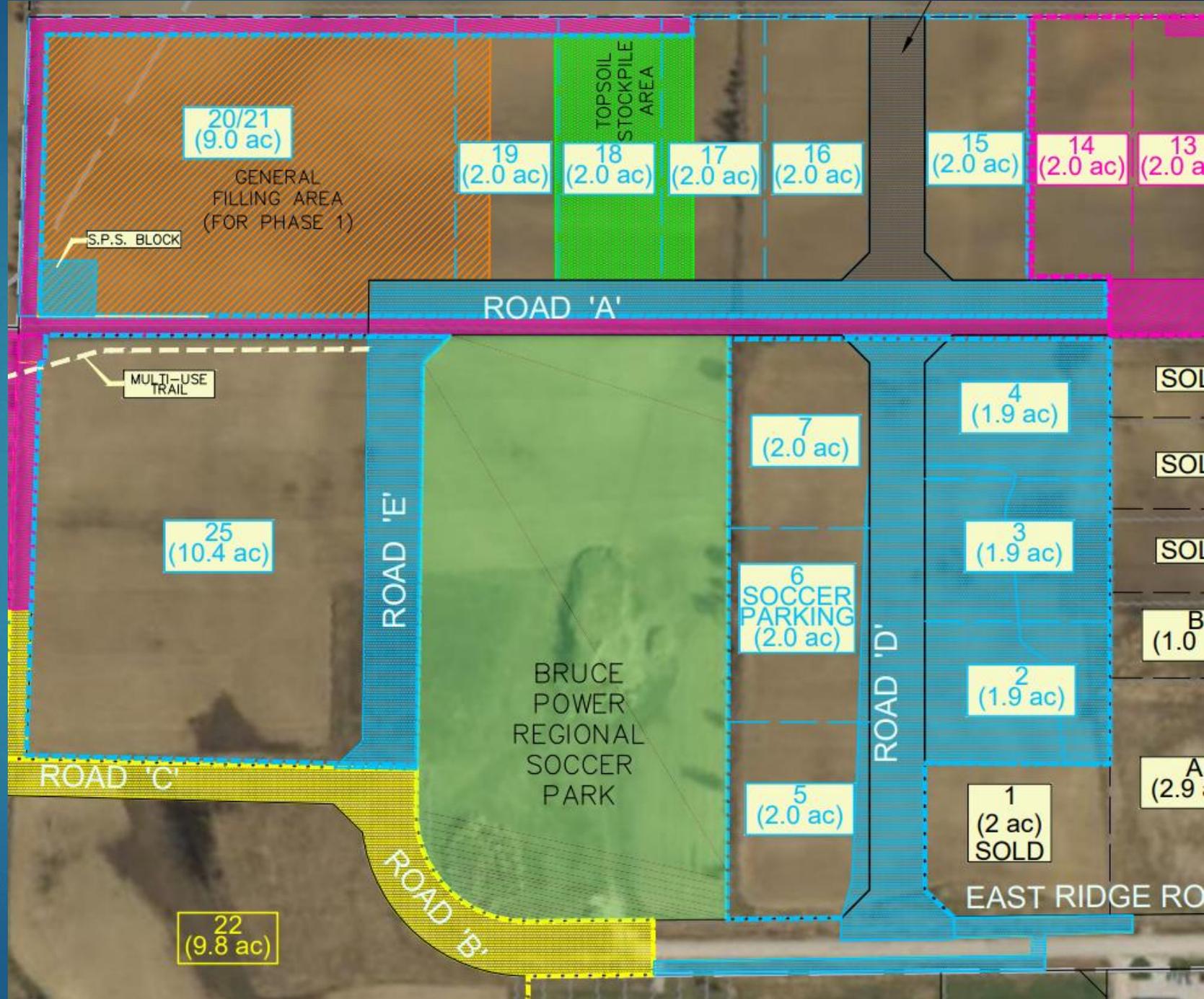
Phase 2 (Lots 22-24)

- ▶ Road B and C, including:
 - ▶ Road C ditch to SWMF
 - ▶ Storm Sewer to SWMF
 - ▶ Curb and gutter
 - ▶ Storm Sewer
 - ▶ Sanitary sewer
 - ▶ Utilities, including street lighting
- ▶ Note: Watermain and overhead hydro already exist
- ▶ 14.5 acres + Cemetery



Phase 3 (Lots 1 to 7, 15-21, & 25)

- ▶ SPS and forcemain
- ▶ Road A and Road D, including
 - ▶ Sanitary sewer
 - ▶ Watermain
 - ▶ Ditches
 - ▶ Utilities, including street lighting
- ▶ Regrading of East Ridge Road ditches
- ▶ Road E, including
 - ▶ Watermain
 - ▶ Storm Sewer
 - ▶ Street Lighting
- ▶ 41.1 acres + Lot 1



East Ridge Business Park Expansion

Date: November 25, 2020

Municipality of Brockton

Rev. March 4, 2021

Project No. 12154

Rev. July 12, 2021

High Level Opinion of Probable Cost Summary

FOR COMPARATIVE DISCUSSION PURPOSES ONLY

Item	March 2021	July 2021
Phase 1 (Easterly half of Road A + SWMF) - Lots 8 to 14		
Stormwater Management Works	\$613,200	\$1,377,600
Road A, Ontario Road to Bruce Road 19	\$890,000	\$934,500
Road A, Ontario Road to west of Ontario Road	\$313,500	\$329,175
Drainage Ditch (end of Road A to SWMF)	\$33,600	\$35,280
Other Drainage Ditches	\$73,000	\$76,650
East Watermain Loop	\$174,000	\$182,700
Subtotal	\$2,097,300	\$2,935,905
Phase 2 (Road B & Road C) - Lots 22-24		
Road B/C – East Ridge Road (urban section)	\$1,629,600	\$1,911,000
Spill channel, Road C to SWMF	\$9,000	\$9,450
Cunningham Road sanitary sewer	\$150,000	\$157,500
Subtotal	\$1,788,600	\$2,077,950
Phase 3 (SPS + westerly half of Road A + Road D + Road E) - Lots 1-7, 15-21 &		
SPS & forcemain		\$960,000
Road A, west of Ontario Road to Road D	\$313,500	\$329,175
Road A, Road D to Road E	\$725,000	\$761,250
Extra cost for sanitary sewer, Road D to SPS		\$140,000
Road A lot perimeter Drainage Ditch	\$58,500	\$61,425
Pre-grading of Road D lots (3±m lowering of hill)	\$237,400	\$249,270
Road D	\$1,033,800	\$1,085,490
Existing Drainage Ditch regrading (south end Road D westerly to Road B)	\$11,200	\$11,760
Road E (urban section, excl. a sanitary sewer)		\$700,000
West Watermain Loop (along Road E)	\$111,000	\$116,550
Subtotal	\$2,490,400	\$4,414,920
Total	\$6,376,300	\$9,428,775

Costs

Notes:
1. Pricing based on 2020 tender prices + added 5% to account for increased 2021 prices
2. Excess Soils Regulation should not impact cost for soil management so long as all soils managed within the business park expansion area.
3. Excludes services on Roads B & C (unknown what developments will require)
4. Assuming Road C sanitary sewer will outlet through a new sewer south down Cunningham Road
5. Excludes SWMF landscaping. Would be part of a future contract.
6. Excludes cost for a recreational trail through the SWM block.
7. Assumed seed and cover restoration of disturbed areas.
8. Excludes utilities (hydro, gas, communications) and street lighting. Approximately \$140,000 natural gas. Assuming street lights mounted on hydro poles spaced 50m apart, and total 2km of roadway, would need 40 lights x \$1,500 (?) = \$60,000
9. Excludes HST
10. Excludes approvals fees (e.g. SVCA; MECP)
11. Road D and adjacent lot pre-grading includes placing excavated soil on Road A lot areas. Restoration of fill areas excluded.
12. Assumes limited size of services; some industries may require larger services (e.g. for fire suppression).
13. Using a 10% contingency allowance and 12% engineering (20% engineering for SPS)
14. Excludes lot entrances and driveway culverts
15. Added \$60,000 construction to SWMF cost to go deeper for servicing the Cunningham Road townhouses

Cost Increases

- ▶ General budget increases compared to March 2021 budget estimate
 - ▶ \$320,000 for general 5% inflation factor
 - ▶ \$735,000 for current SWMF design
 - ▶ \$200,000 for Road B/C (mostly due to more extensive/larger drainage works)
 - ▶ \$1,800,000 for additional work for new servicing scheme
 - ▶ \$960,000 for a SPS
 - ▶ \$140,000 for additional sanitary sewer for the SPS option
 - ▶ \$700,000 for Road E
 - ▶ \$3,055,000 total

Cost Increases

- ▶ SWMF budget increases

- ▶ \$110,000 for deeper and larger area required for pond, partially attributed to servicing future adjacent proposed townhouse Block
- ▶ \$625,000 for much larger and much more extensive inlet/outlet storm sewers and structures, and dual inlet drainage works

- ▶ Comments

- ▶ Due to time constraints in preparing this budget update, additional effort is needed to confirm these anticipated budget increases.
- ▶ Street lighting: \$60,000
- ▶ Natural gas: \$140,000
- ▶ SWMF landscaping
- ▶ Walking trail

Next Steps Tentative (Phase 1)

- ▶ SVCA Permit application for channel outlet improvements: mid-July
- ▶ Finalize design (SWMF, Road A): by late-July
- ▶ SVCA Permit application for SWMF: early-August
- ▶ Prepare tender package: by mid-August
- ▶ Tendering: closing at end-September
- ▶ Outlet channel improvements: by end-September
- ▶ Construction: Fall 2021 to June 2022

Next Steps Tentative (Phase 2)

- ▶ Finalize design (Road B & Road C): by mid-August
- ▶ MECP ECA application: by mid-August (for Phases 1 & 2)
- ▶ Prepare tender package: by early-September
- ▶ Tendering: closing mid-October
- ▶ Construction: Fall 2021 to July 2022

Next Steps tentative (Phase 3)

- ▶ Update Master Plan: by end-December
- ▶ SPS, forcemain and revised sewer design: by Feb, 2022
- ▶ MECP approvals review (9-12 months): late- to end- 2022
- ▶ Tendering: by end-2022
- ▶ Construction: by late-2023