

CITY OF RAMSEY

RTC 9TH POND LINING IMPROVEMENTS

CITY IMPROVEMENT PROJECT NO. 19-06

GOVERNING SPECIFICATIONS

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

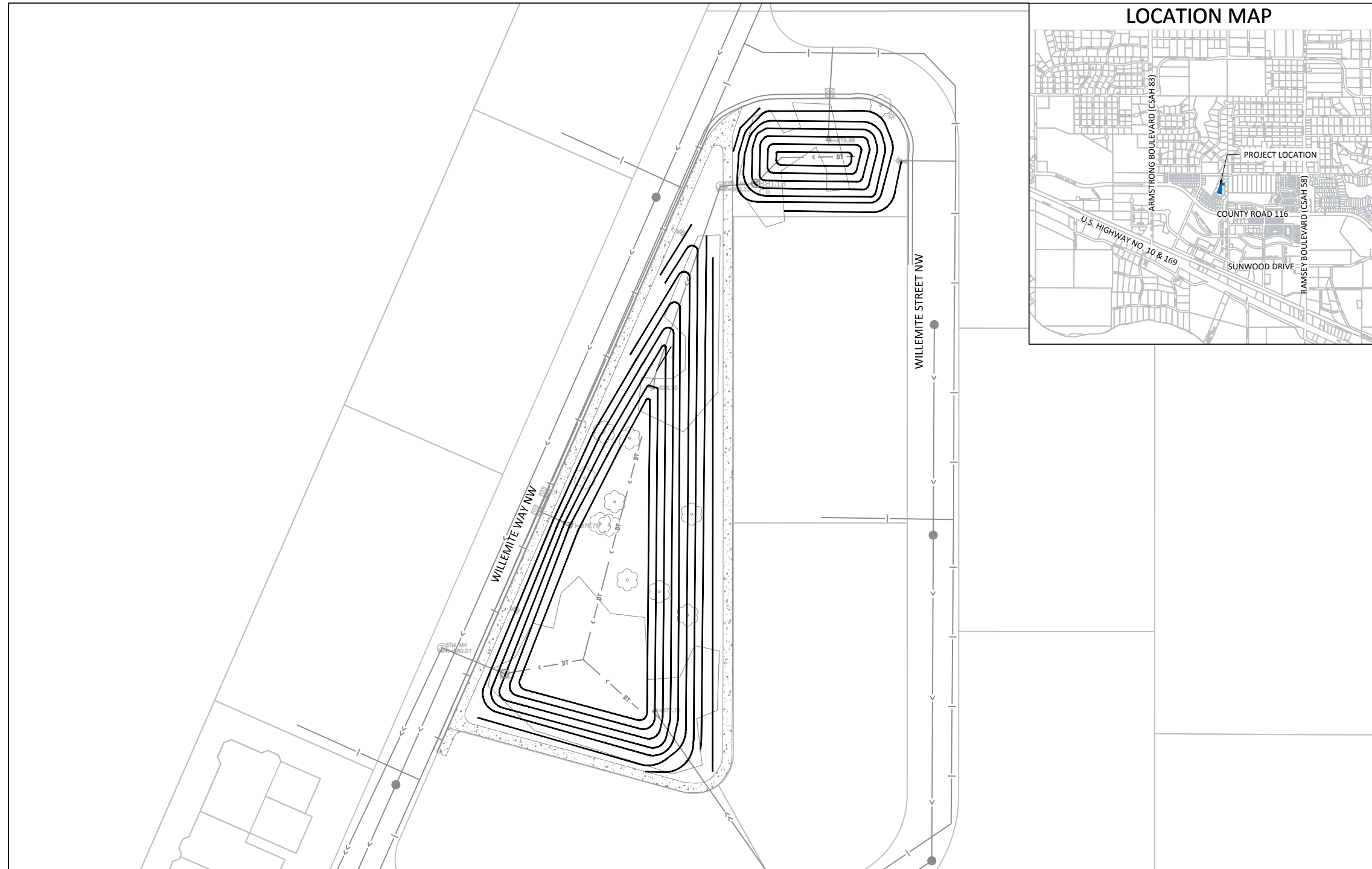
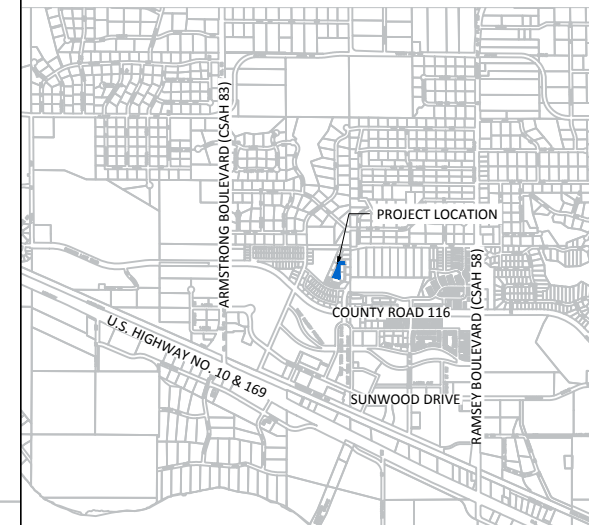
ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

SHEET INDEX

THIS PLAN CONTAINS 6 SHEETS

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	EXISTING CONDITIONS & REMOVALS
4	PROPOSED GRADING
5	RESTORATION
6	DETAILS

LOCATION MAP



LEGEND

	LIGHT POLE		EASEMENT
	TREE		RIGHT OF WAY
	TREE		ELECTRIC
	SHRUB		OVERHEAD ELECTRIC
	SIGN		GAS
	VALVE		TELECOMMUNICATIONS
	UTILITY PEDESTAL		STORM SEWER
	HAND HOLE		SANITARY SEWER
	REMOVE TREE		WATERMAIN
	3'X2' CATCH BASIN		SAWCUT PAVEMENT
	MANHOLE		TREE LINE
	INLET PROTECTION		FENCE
	HYDRANT		LANDSCAPING
	VALVE		RETAINING WALL
			5' CONTOUR LINE
			1' CONTOUR LINE
			SILT FENCE

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

BRUCE WESTBY, P.E.
RAMSEY CITY ENGINEER

40116 DATE 5/1/19
LIC. NO.

DATE	REVISION



CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL 1-800-252-1166 OR 651-454-0002



Call before you dig
811
651 454-0002 Metro
800 252-1166 Outstate
www.gopherstateonecall.org

STATEMENT OF ESTIMATED QUANTITIES

19-06 RTC 9TH POND LINING IMPROVEMENTS

ITEM NO.	NOTE	MNDOT NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY
1		2021.501	MOBILIZATION	LS	1
2		2101.511	CLEARING & GRUBBING	LS	1
3		2104.501	REMOVE SEWER PIPE (4" DRAINTILE)	LF	260
4		2104.521	SALVAGE & INSTALL PIPE STORM SEWER	LF	64
5		2104.523	SALVAGE & INSTALL PIPE APRON	EA	4
6		2104.523	SALVAGE & INSTALL CASTING	EA	2
7	1	2105.501	COMMON EXCAVATION (EV)	CY	945
8		2105.604	GEOMEMBRANE SYSTEM (GEOSYNTHETIC CLAY LINER)	SY	1,951
9		2105.604	GEOTEXTILE FABRIC TYPE IV	SY	86
10	1	2105.607	GRANULAR EMBANKMENT (CV)	CY	638
11		2501.515	15" RC PIPE APRON	EA	2
12		2501.602	TRASH GUARD FOR 15" RC PIPE APRON	EA	2
13		2503.511	15" RC PIPE SEWER, DESIGN 3006 CLASS III	LF	26
14	5	2503.602	CONNECT TO EXISTING STORM SEWER	EA	2
15		2511.501	RANDOM RIP RAP CLASS III	CY	20
16		2573.53	STORM DRAIN INLET PROTECTION	EA	7
17	3	2574.508	FERTILIZER TYPE 3	LB	135
18	2	2575.502	SEED MIXTURE 33-261	LB	25
19	4	2575.511	MULCH MATERIAL TYPE 1	TON	0.14
20		2575.519	DISK ANCHORING	ACRE	0.14
21		2575.523	EROSION CONTROL BLANKET CATEGORY 3	SY	2,464
22		2575.605	SEEDING	ACRE	0.64

NOTE:

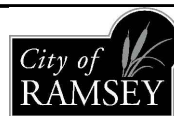
- EV TO CV CONVERSION FACTOR = 1.2.
- SEED MIXTURE 33-261 APPLICATION RATE OF 35 LB/ACRE.
- FERTILIZER TYPE 3 APPLICATION RATE OF 200 LB/ACRE.
- MULCH MATERIAL TYPE 1 APPLICATION RATE OF 2 TON/ACRE.
- MANHOLE CORING AND GROUTING IS INCIDENTAL TO PAY ITEM.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. IT IS NOT GUARANTEED ANY OR ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

DATE	REVISION

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Engineer
Date 5/1/19 Lic. No. 40116

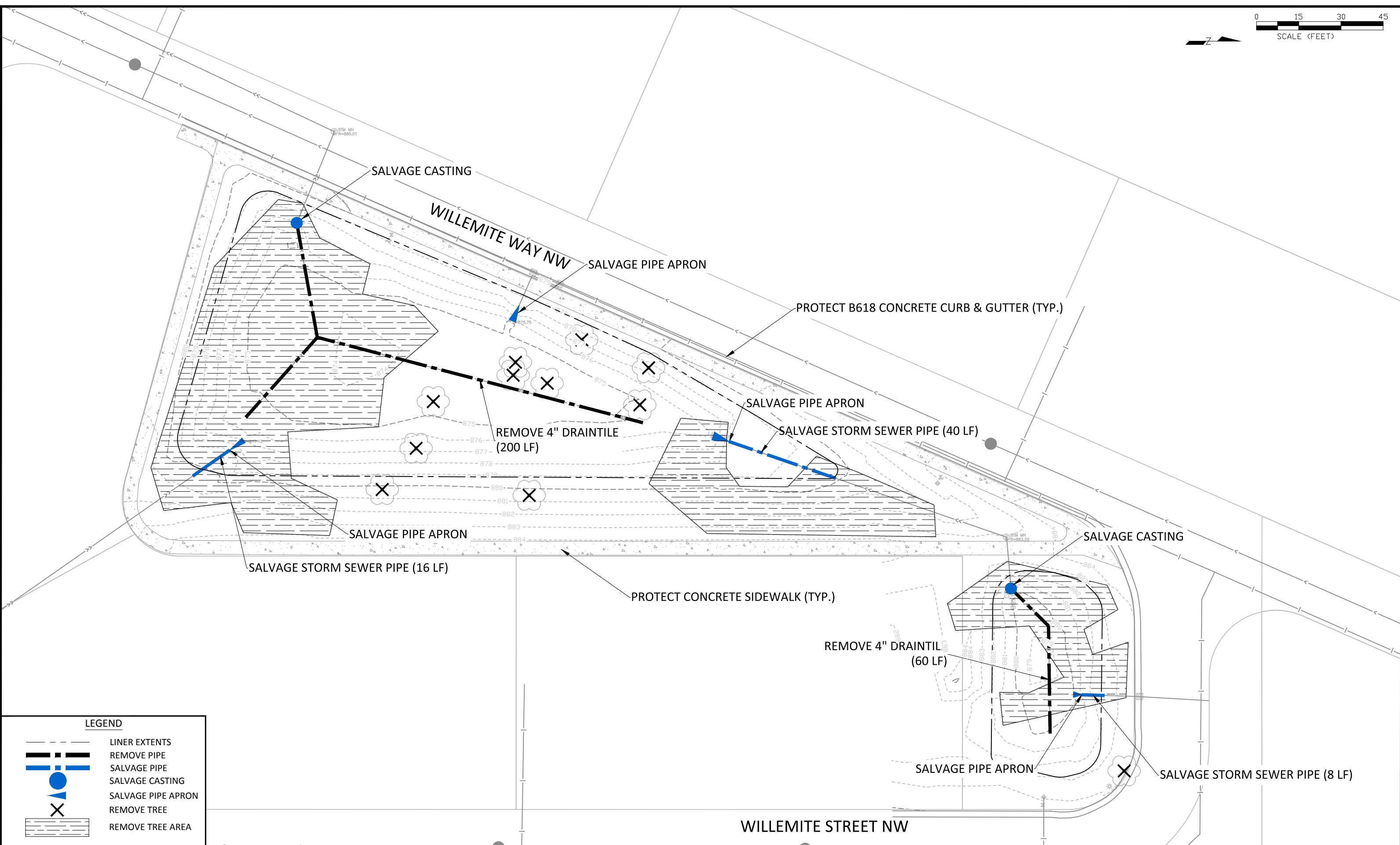
DESIGNED BY: JF	DATE: 5/1/19
DRAWN BY: JF	FILE No. 19-06
CHECKED BY: BRW	



CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STATEMENT OF ESTIMATED QUANTITIES

RTC 9TH POND LINING IMPROVEMENTS
CITY PROJECT NO. 19-06
CITY OF RAMSEY, MINNESOTA



LEGEND

- LINER EXTENTS
- REMOVE PIPE
- SALVAGE PIPE
- SALVAGE CASTING
- SALVAGE PIPE APRON
- REMOVE TREE
- REMOVE TREE AREA

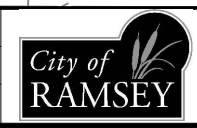
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EXISTING CONDITIONS & REMOVALS

RTC 9TH POND LINING IMPROVEMENTS
CITY PROJECT NO. 19-06
CITY OF RAMSEY, MINNESOTA

INSTALL SALVAGED CASTING
CONNECT TO STORM MANHOLE (CORE DRILL)
INV. 874.90

10' - 15" RCP @ 1.00%

INSTALL 15" PIPE APRON W/TRASH GUARD
INV. 875.00

WILLEMITE WAY NW

INSTALL SALVAGED PIPE APRON INV. 875.75

INSTALL SALVAGED PIPE APRON INV. 875.70

INSTALL SALVAGED STORM SEWER PIPE (40 LF)

INSTALL SALVAGED CASTING
CONNECT TO STORM MANHOLE (CORE DRILL)
INV. 876.50

16' - 15" RCP @ 9.38%

INSTALL 15" PIPE APRON W/TRASH GUARD
INV. 878.00

INSTALL SALVAGED PIPE APRON INV. 877.12

INSTALL SALVAGED STORM SEWER PIPE (16 LF)

GEOSYNTHETIC CLAY LINER (1,556 SY)
INSTALL TO 879 ELEVATION.
PLACE 1 FOOT OF COVER MATERIAL OVER LINER
PER SPECIFICATIONS.

GEOSYNTHETIC CLAY LINER (395 SY)
INSTALL TO 883 ELEVATION.
PLACE 1 FOOT OF COVER MATERIAL OVER LINER
PER SPECIFICATIONS.

SALVAGE STORM SEWER PIPE (8 LF)

INSTALL SALVAGED PIPE APRON INV. 879.86

WILLEMITE STREET NW

LEGEND

- EXISTING 1' CONTOUR
- PROPOSED 1' CONTOUR
- INSTALL STORM PIPE
- INSTALL CASTING
- INSTALL PIPE APRON
- POND LINER AREA

NOTE:
EXCAVATE 1-FOOT BELOW FINISH GRADE TO LIMITS SHOWN FOR GEOSYNTHETIC LINER. LINER IS TO BE PLACED PER SPECIFICATION AND MANUFACTURER RECCOMENDATION.
1-FOOT OF CLEAN MATERIAL MEETING SPECIFICATIONS IS REQUIRED TO BE PLACED ON THE LINER. NO CONSTRUCTION EQUIPMENT IS TO BE PLACED ON LINER WITHOUT COVER MATERIAL.
IF SALVAGED MATERIAL FROM ON-SITE IS USED, IT MUST BE CLEAN OF ALL DEBRIS.

DATE	REVISION
May 01, 2019 - 3:28pm	

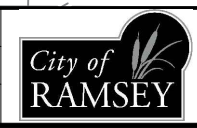
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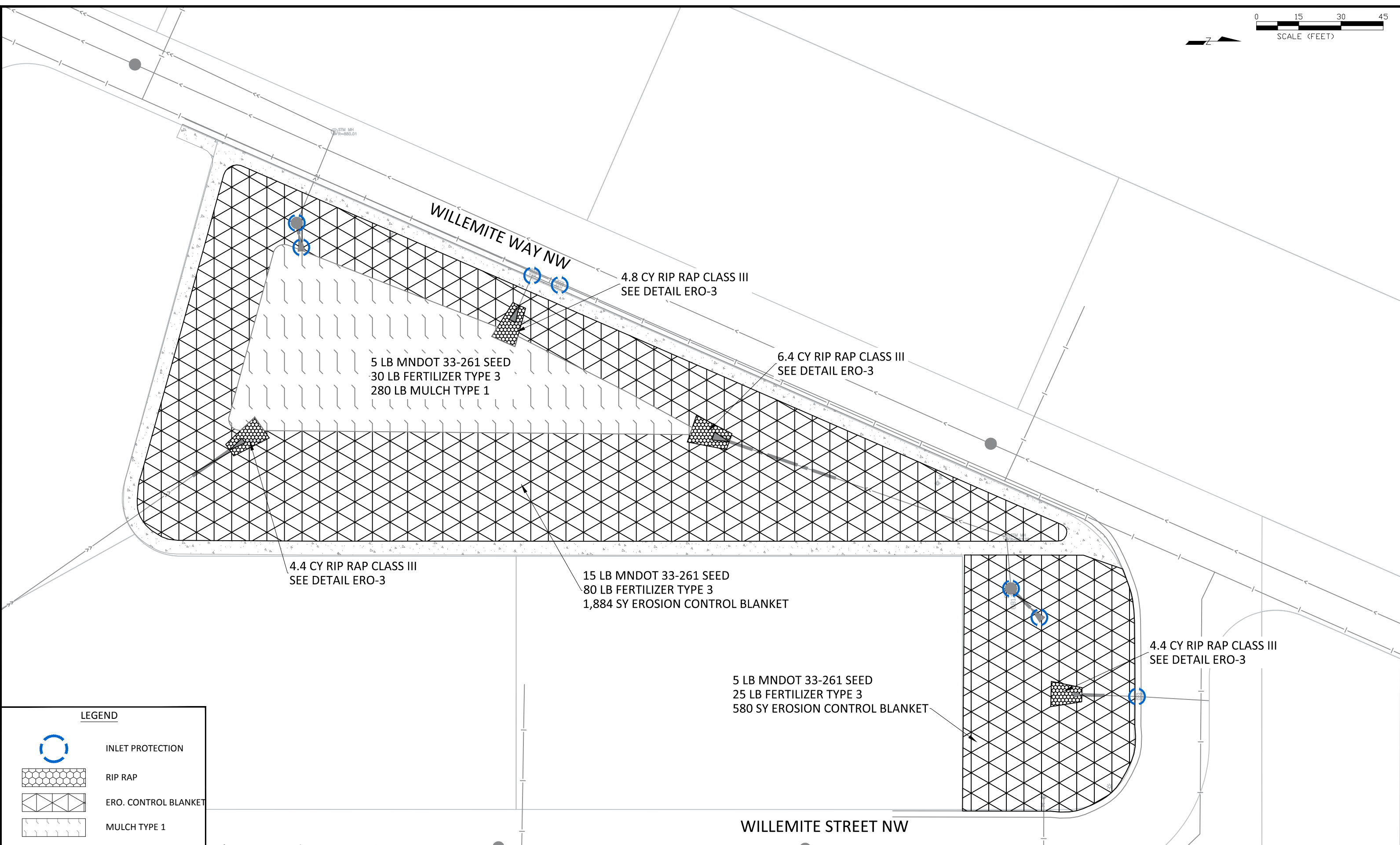
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PROPOSED GRADING

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LEGEND

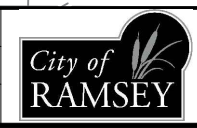
-  INLET PROTECTION
-  RIP RAP
-  ERO. CONTROL BLANKET
-  MULCH TYPE 1

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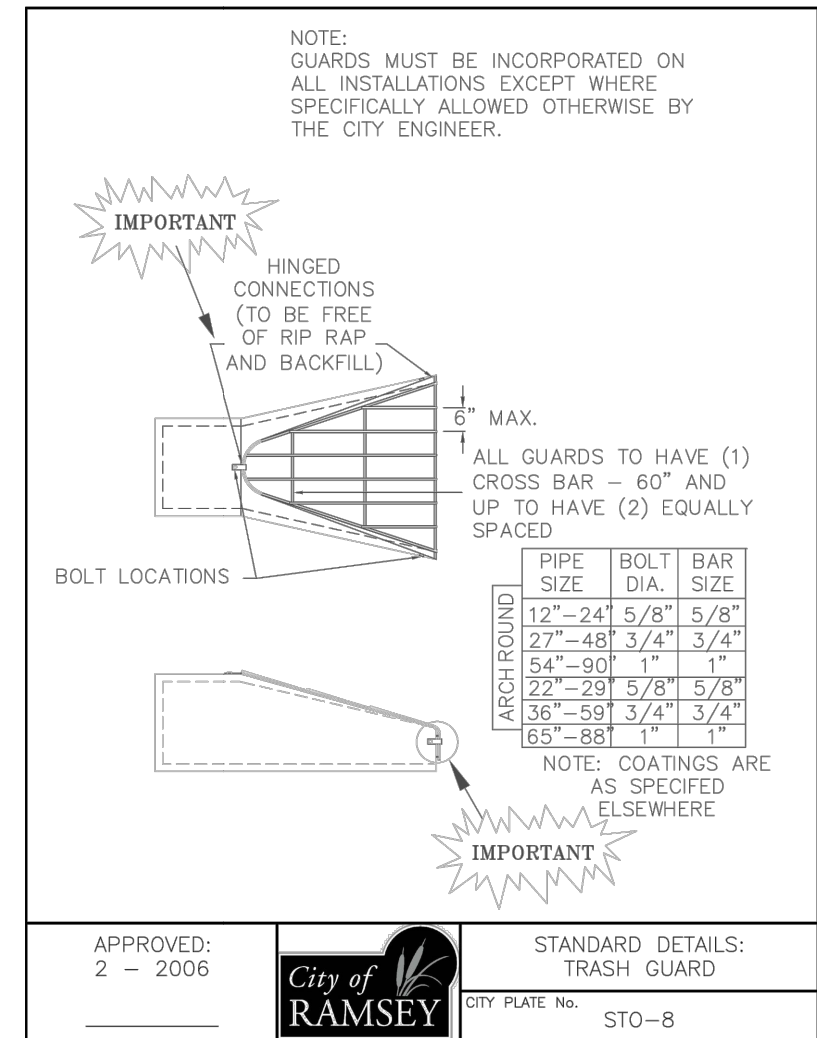
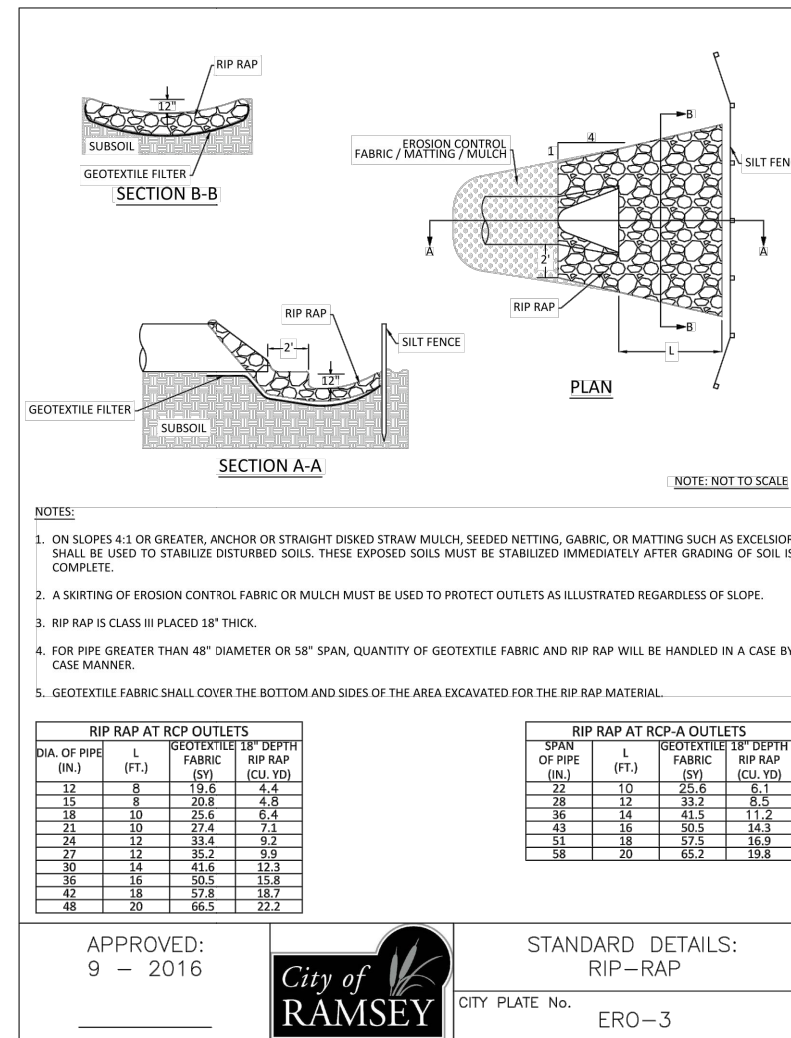
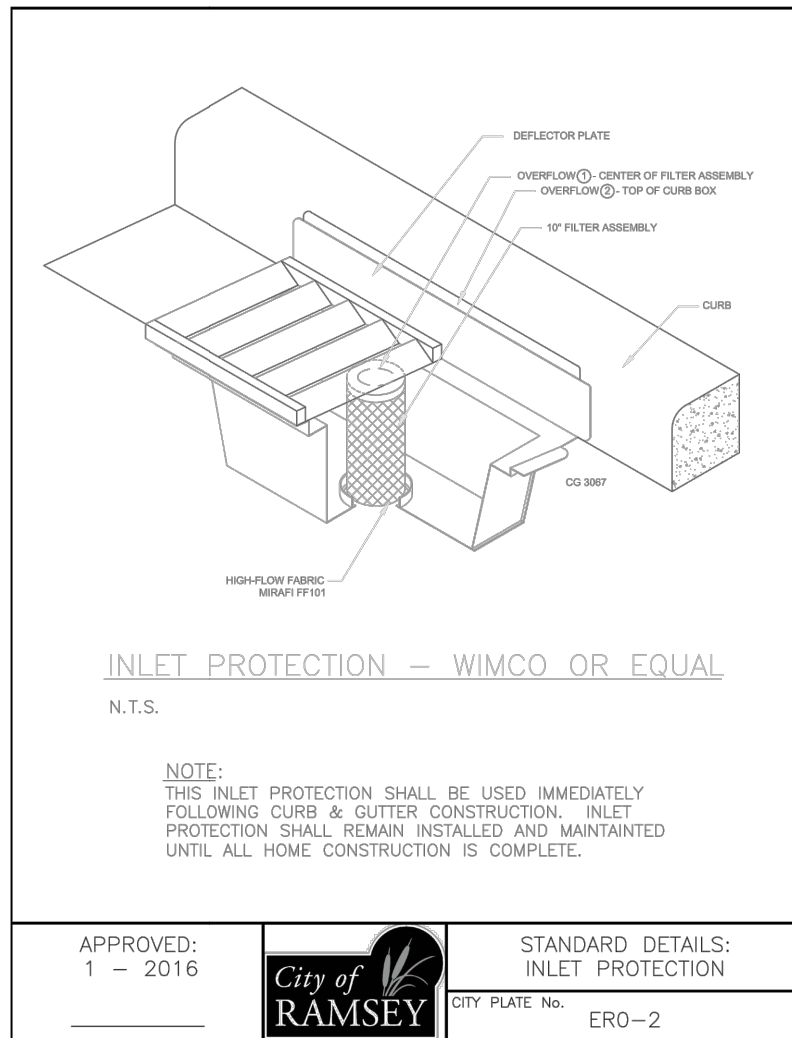
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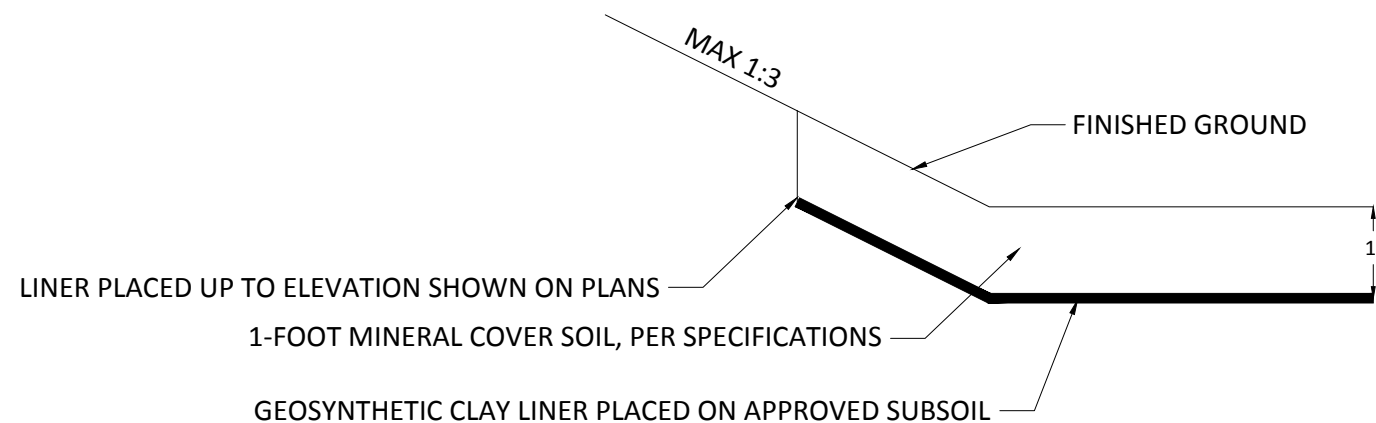
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RESTORATION

RTC 9TH POND LINING IMPROVEMENTS
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POND LINER DETAIL



EXCAVATION BELOW FINISHED GRADE PAID AS COMMON EXCAVATION (EV).
1-FOOT COVER SOIL PAID AS GRANULAR EMBANKMENT (LV).

ALL OVERLAPPING, SEAMING MATERIALS, GCL COLLARS REQUIRED FOR STRUCTURES NECESSARY FOR PLACEMENT OF GCL PER MANUFACTURER AND SPECIFICATIONS IS INCIDENTAL.

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