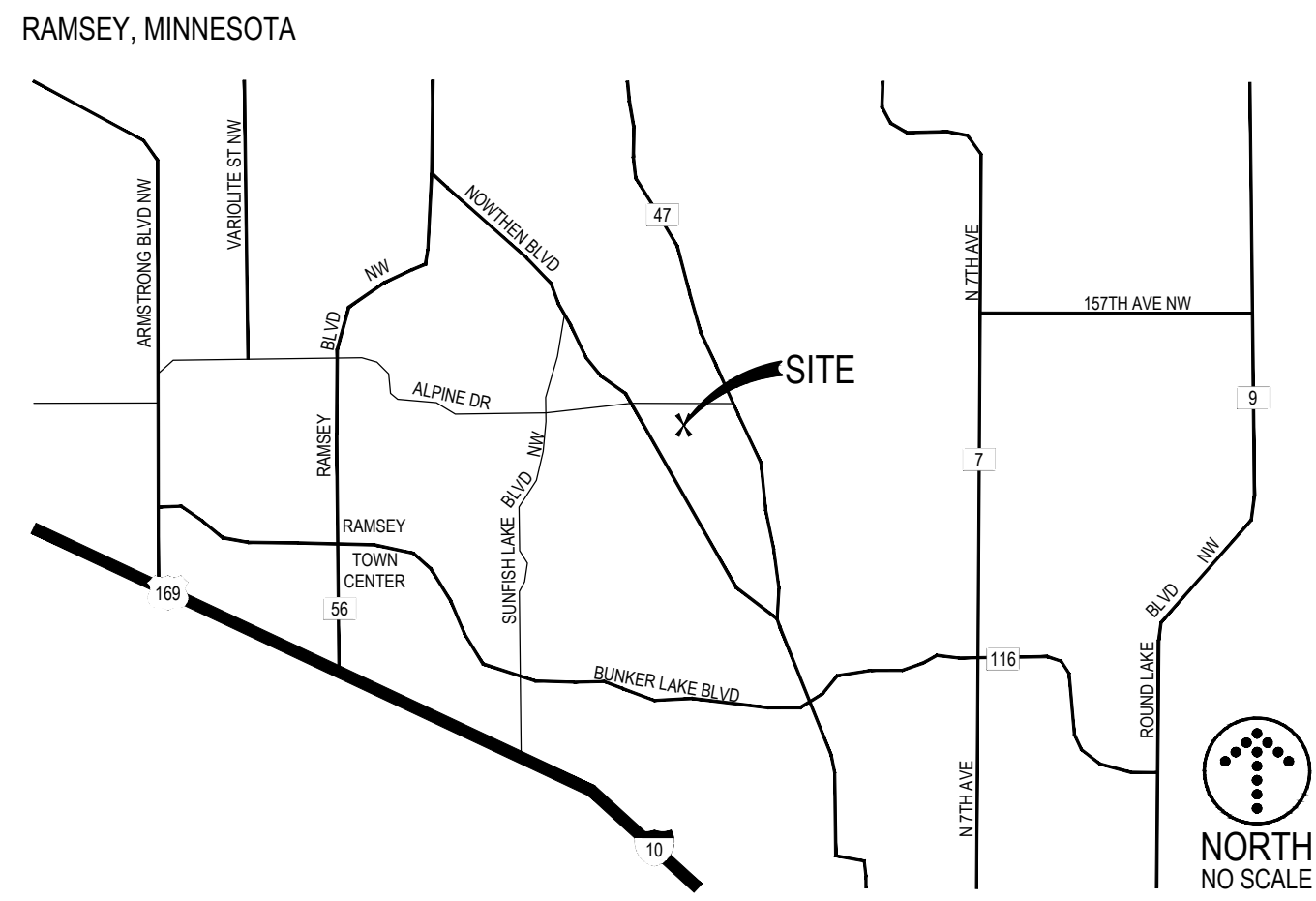


AREA LOCATION MAP



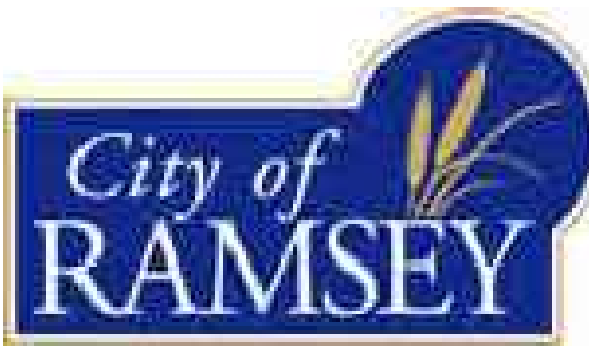
# HARVEST ESTATES 2ND ADD.

## RAMSEY, MINNESOTA

DEVELOPER

**MEADOWCREEK BUILDERS**  
10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL (612) 867-6533

MUNICIPALITY



ABBREVIATIONS

D	Angle	LB.	Pound
&	And	LGU	Local Government Unit
@	At	LB.	Pound
100 YR.	100 Year Flood Elevation	LT	Longitudinal
A.B.	Anchor Bolt	LT	Light / Lighting
A.D.	Area Drain	MAINT.	Maintenance
A/C	Air Conditioning Unit	MAS.	Masonry
ADD.	Addendum	MATL.	Material
ADDL.	Additional	MAX.	Maximum
ADJ.	Adjacent / Adjust	MECH.	Mechanical
AHU	Air Handling Unit	MED.	Medium
ALT.	Alternate	MFR.	Manufacturer
ALUM.	Aluminum	MH	Manhole
ANOD.	Anodized	MIN.	Minimum / Minute
APPROX.	Approximate	MISC.	Miscellaneous
ARCH	Architect / Architectural	MNDOT	Minnesota Department Of Transportation
AUTO.	Automatic	MOD.	Module / Modular
AVG.	Average	MUL.	Mulch
B.C.	Back of Curb	N.	North
BW	Bottom of Wall	N.I.C.	Not In Contract
BFE	Basement Floor Elevation	NO. OR #	Number
BIT	Bituminous (Asphaltic)	NOM	Nominal
BLDG	Building	NTS	Not to Scale
BM	Benchmark	NWE	Normal Water Elevation
BSMT.	Basement	NWL	Normal Water Level
C.F.	Cubic Feet	O.C.	On Center
C.F.S.	Cubic Feet Per Second	O.G.	Outside Dimension
C.G.	Corner Guard	O.H.	Overhead Electric
C.J.	Control Joint	OH.	Overhead
C.L.	Centerline	OH/WL	Ordinary High Water Level
C.M.U.	Concrete Masonry Unit	OPNG.	Opening
C.O.	Cleanout	ORIG.	Original
C.O.E.	U.S. Army Corps Of Engineers	P.C.	Point of Curvature
C.Y.	Cubic Yards	P.I.	Point of Intersection
CB	Catch Basin	P.V.	Post Indicator Valve
CBMH	Catch Basin Manhole	P.L. OR P.L.	Property Line
CEM.	Cement	P.O.B.	Point of Beginning
CIP	Cast Iron Pipe	P.S.F.	Pounds Per Square Foot
OMP	Corrugated Metal Pipe	P.S.I.	Pounds Per Square Inch
CONC.	Concrete (Portland)	P.T.	Point of Tangency
CONN.	Connection	P.V.C.	Point of Vertical Curvature
CONST.	Construction	P.V.I.	Point of Vertical Intersection
CONT.	Continuous	P.V.T.	Point of Vertical Tangency
CONTR.	Contractor	PE	Polyethylene
COF.	Copper	PED.	Pedestal / Pedestrian
OU.	Cubic	PERF.	Perforated
D.S.	Down Spout	PREP.	Preparation
DEG.	Degree	PROJ.	Project
DEMO.	Demolition / Demolish	PROP.	Proposed
DEPT.	Department	PVC	Poly-Vinyl-Chloride (Piping)
DET.	Detail	PVMT.	Pavement
DIA.	Diameter	QTR.	Quarter
DIAG.	Diagonal	QTY.	Quantity
DIM.	Dimension	R	Radius
DIP	Ductile Iron Pipe	RAD.	Radius
DN	Down	RE	Rim Elevation (Casting)
DWG.	Drawing	R.D.	Roof Drain
E	East	R.E.	Remove Existing
E.J.	Expansion Joint	R.O.	Rough Opening
E.O.	Emergency Overflow	R.P.	Radius Point
E.O.S.	Emergency Overflow Swale	RC	Reinforced Concrete Pipe
E.W.	Each Way	R.S.	Rough Slab
EA.	Each EL. Elevation	RSD	Roof Storm Drain
ELEC.	Electrical	REG.	Regarding
ELEV.	Elevation	REINF.	Reinforced
EMER.	Emergency	REQD.	Required
ENGR.	Engineer	REV.	Revision / Revised
ENTR.	Entrance	RGU	Regulatory Government Unit
EQ.	Equal	ROW OR R/W	Right of Way
EQUIP.	Equipment	S	South
EQUIV.	Equivalent	S.F.	Square Feet
EXIST.	Existing	SAN.	Sanitary Sewer
EXP.	Expansion	SECT.	Section
F & I	Furnish and Install	SE	Split Entry / Side Exit
F.B.O.	Furnished by Others	SEWO	Split Entry Walk Out / Side Exit Walk Out
F.C.	Face of Curb	SHT.	Sheet
F.D.	Floor Drain	SIM.	Similar
F.D.C.	Fire Department Connection	SINT.	Sealant
F.V.	Field Verify	SPEC.	Specification
FB	Full Basement	SQ.	Square
FBWO	Full Basement Walk Out	SSD	Subsurface drain
FBLO	Full Basement Look Out	STMH	Storm Sewer Manhole
FDN.	Foundation	STD	Standard
FES	Flared End Section	STRUC.T.	Structural
FFE	Finished Floor Elevation	SYM.	Symmetrical
FLR.	Floor	T	Thickness
FLR (1)	Floor	T/R	Top of Rim
FUT.	Future	T/W	Top of Wall
G.B.	Grade Break	TEMP.	Temporary
G.C.	General Contractor	THK.	Thick / Thickness
GAL.	Gallon	T.J.	Tooled Joint
GALV.	Galvanized	TNH	Top Nut Hydrant
GFE	Garage Floor Elevation	TYP.	Typical
GL.	Glass	U.N.O.	Unless Noted Otherwise
GR.	Grade	V.B.	Vapor Barrier
H.	Height	V.C.	Vertical Curve
H.P.	High Point	V.I.F.	Verify In Field
HDPEP	High Density Polyethylene Pipe	VER.	Verify
HGT.	Height	VER.	Vertical
HORIZ.	Horizontal	VEST.	Vestibule
HVAC	Heating, Ventilation, Air Conditioning	W	Width
HYD	Hydrant	W.P.T.	Working Point
I.D.	Inside Dimension OR Identification	W.W.F.	Welded Wire Fabric
I.E. or IE	Invert Elevation	W	With
IN. OR (1)	Inches	W/O	Without
INFO.	Information	WO	Walk Out
INL.	Inlet Elevation	VER.	Wetland
INSUL.	Insulation	WP	Waterproof
INV.	Invert Elevation	WETL.	Wetland
JT.	Joint	YD	Yard
L.F.	Linear Feet	YR.	Year
L.P.	Low Point / Liquid Petroleum		

SYMBOLS

EXISTING	DESCRIPTION	NEW	DESCRIPTION
	MAJOR CONTOUR		MAJOR CONTOUR
	MINOR CONTOUR		MINOR CONTOUR
	SPOT ELEVATION		SPOT ELEVATION
	BUILDING		BUILDING
	CANOPY / OVERHANG		CANOPY / OVERHANG
	CONCRETE		UNDERGROUND STRUCTURE
	BITUMINOUS		CONCRETE CURB
	LANDSCAPING		EDGE OF PAVEMENT
	GRAVEL		FENCING
	PAVING BLOCK		GUARD RAIL
	PAVING BLOCK		CONCRETE RETAINING WALL
	STORM SEWER LINE		MODULAR RETAINING WALL
	SANITARY SEWER LINE		FIELDSTONE RETAINING WALL
	WATER MAIN		EXIT LOCATION
	OVERHEAD ELECTRIC		LIGHT STANDARD
	UNDERGROUND TELEPHONE		POWER POLE
	UNDERGROUND ELECTRIC		SLOPE DIRECTION
	GAS LINE		CATCH BASIN
	CONCRETE CURB		MANHOLE
	FENCING		BOLLARD
	RETAINING WALL		STORM SEWER
	SET 1/2" X 1/4" IRON PIPE		SANITARY SEWER-WASTE
	IRON MONUMENT FOUND		FORCE MAIN
	SURVEY DISK (BENCHMARK)		ROOF DRAIN SYSTEM
	POWERPOLE		GATE VALVE
	GUY WIRE		FIRE LINE (IF SEPARATE)
	GUARD POST		FIRE DEPT. CONNECTION
	GAS METER		SOIL SUBDRAIN
	TRANSFORMER		GAS LINE-UNDERGROUND
	WATER SHUT-OFF VALVE		ELECTRIC-UNDERGROUND
	TRAFFIC SIGN		TELEPHONE-UNDERGROUND
	FLAG POLE		UNDERGROUND CABLE/TV
	LIGHT POLE		LAWN SPRINKLER SLEEVE
	TREES		
	TREE LINE		
	MANHOLE		
	CATCH BASIN		
	FIRE HYDRANT		
	WATER VALVE		
	FLARED END SECTION		
	MAILBOX		
	NOTE NUMBER		
	MEASURED DISTANCE		
	DISTANCE PER RECORDED PLAT		
	SOIL BORING		

EROSION CONTROL SYMBOLS

SYMBOL	DESCRIPTION
	SILT FENCE
	COMPOST/BIO LOG
	INLET PROTECTION
DRAWING SYMBOLS	
SYMBOL	DESCRIPTION
	NOTE REFERENCE
	PARKING STALL COUNT
	LARGE SHEET DETAIL
	COORDINATE POINT
	REVISION - ADDENDUM, BULLETIN, ETC.
	REVISED AREA (THIS ISSUE)

LEGAL DESCRIPTION

LOT 25, BLOCK 1, HARVEST ESTATES, RAMSEY COUNTY, MINNESOTA  
CONTAINING 279,515 SQ. FT. - 6.42 AC.

BENCHMARK

TOP NUT HYDRANT BETWEEN LOTS 26 & 27, BLOCK 1 HARVEST ESTATES  
TN HYD. = 895.70

OWNER

**CITY OF RAMSEY**  
7550 SUNWOOD DRIVE  
RAMSEY, MINNESOTA, 55303  
TEL 763-427-1410  
FAX 763-467-5543  
CONTACT: TIM GLADHILL

PROJECT CONTACTS

**CIVIL ENGINEER LANDFORM**  
105 SOUTH FIFTH AVENUE, SUITE 513  
MINNEAPOLIS, MN 55401  
TEL 612-252-9070  
FAX 612-252-9077  
CONTACT: RANDY HEDLUND

**SURVEYOR LANDFORM**  
105 SOUTH FIFTH AVENUE, SUITE 513  
MINNEAPOLIS, MN 55401  
TEL 612-252-9070  
FAX 612-252-9077  
CONTACT: LYNN CASWELL

**LANDSCAPE ARCHITECT LANDFORM**  
105 SOUTH FIFTH AVENUE, SUITE 513  
MINNEAPOLIS, MN 55401  
TEL 612-252-9070  
FAX 612-252-9077  
CONTACT: RANDY HEDLUND

CIVIL / LANDSCAPE SHEET INDEX & REVISION MATRIX

SHEETS ISSUED BY DATE		01.03.19	03.20.19
C0.1	CIVIL TITLE & LANDSCAPE SHEET	X	X
C1.1	EXISTING CONDITIONS & DEMOLITION	X	X
C2.1	SITE PLAN	X	X
C2.2	BUILDABLE AREA EXHIBIT	X	X
C3.1	GRADING, DRAINAGE, & EROSION CONTROL	X	X
C3.2	SWPPP NOTES	X	X
C4.1	SANITARY SEWER & WATERMAIN	X	X
C4.2	STORM SEWER	X	X
C6.1	STREET PROFILES	X	X
C7.1	CIVIL CONSTRUCTION DETAILS	X	X
C7.2	CIVIL CONSTRUCTION DETAILS	X	X
C7.3	CIVIL CONSTRUCTION DETAILS	X	X
C7.4	CIVIL CONSTRUCTION DETAILS (PED. RAMPS)	X	X
C7.5	CIVIL CONSTRUCTION DETAILS (PED. RAMPS)	X	X
L2.1	LANDSCAPE PLAN	X	X
L2.2	LANDSCAPE DETAILS	X	X

CERTIFICATIONS

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.

RANDY HEDLUND, P.E.  
LICENSE NUMBER: 19576 DATE: 20 MARCH 2019

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

JARED LEE  
LICENSE NUMBER: 44369 DATE: 20 MARCH 2019

PROJECT

**HARVEST ESTATES 2ND ADDITION**  
RAMSEY, MINNESOTA

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

CERTIFICATION

**PRELIMINARY NOT FOR CONSTRUCTION**

I hereby certify that this plan 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.

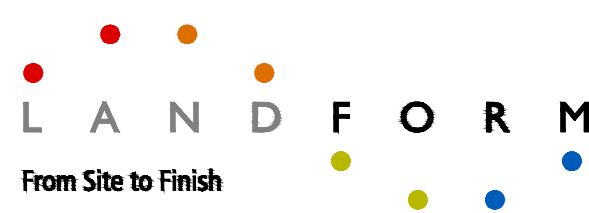
Randy Hedlund  
License No. 19576  
Date: 20 March 2019

Signature shown in this plan on file with the State of Minnesota Professional Services, LLC office and is available upon request.

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEYOND INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

CONSTRUCTION DOCUMENTS

03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C001KRZ141029MCB

PROJECT NO. KRZ141029MCB

CIVIL & LANDSCAPE TITLE SHEET

**C0.1**

SHEET NO. 1/16  
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**LEGAL DESCRIPTION**

LOT 25, BLOCK 1, HARVEST ESTATES, ANOKA COUNTY, MINNESOTA.  
CONTAINING 279,515 SQ. FT. - 6.42 AC.

**EXISTING CONDITIONS**

1. BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM PROFESSIONAL SERVICES LLC, MINNEAPOLIS, MN, ON DECEMBER 18, 2018. EXPRESSLY FOR THIS PROJECT, CITY OF RAMSEY, MINNESOTA RECORD DRAWINGS, AND UTILITY SERVICE PROVIDERS. LANDFORM OFFERS NO WARRANTY, EXPRESSED OR WRITTEN, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

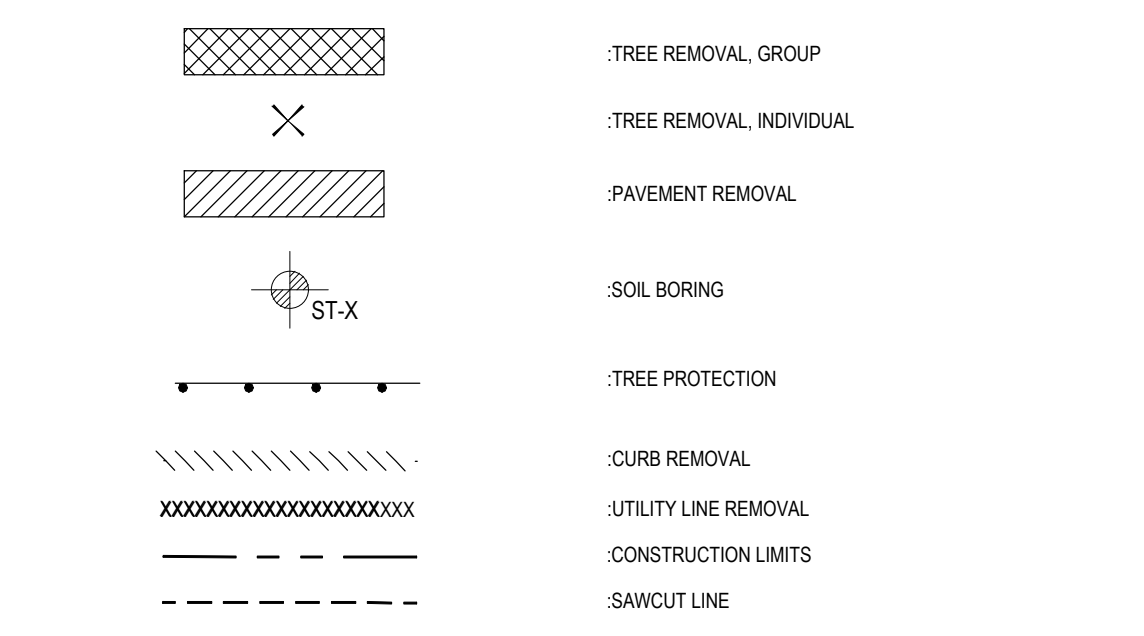
**GENERAL NOTES**

1. FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM AT 612.252.9070.

**DEMOLITION AND CLEARING NOTES**

- OBTAIN PERMITS FOR DEMOLITION, CLEARING, AND DISPOSAL PRIOR TO BEGINNING.
- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING DEMOLITION AND CLEARING.
- SEE SHEET C3.1 FOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT MUST BE IN PLACE PRIOR TO DISTURBANCES TO SITE.
- DIMENSIONS SHOWN FOR REMOVAL ARE APPROXIMATE. COORDINATE WITH NEW CONSTRUCTION TO ENSURE APPROPRIATE REMOVAL OF EXISTING FACILITIES.
- REFER TO DETAILS FOR PAVEMENT SAWCUT. REMOVE CONCRETE WALKS AND CURBING TO THE NEAREST EXISTING JOINT BEYOND CONSTRUCTION LIMITS.
- PROVIDE BARRICADES, LIGHTS, SIGNS, TRAFFIC CONTROL, AND OTHER MEASURES NECESSARY FOR PROTECTION AND SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION. (SEE SHEET C6.1)
- PROTECT STRUCTURES, UTILITIES, TREES, PLANT MATERIAL, SOIL, AND ADJACENT PROPERTY FROM DAMAGE DURING CONSTRUCTION UNLESS NOTED FOR REMOVAL. DAMAGE SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST.
- REMOVE TREES NOTED, INCLUDING ROOT STRUCTURES, FROM THE SITE. COORDINATE WITH OWNER TO MARK TREES TO BE SAVED OR TRANSPORTED PRIOR TO CLEARING. PROTECT TREES INDICATED WITH TREE PROTECTION FENCING PER DETAIL L2.2.
- REMOVE EXISTING SITE FEATURES INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES, PAVING, CURBING, WALKWAYS, FENCING AND LIGHTING, WITHIN THE CONSTRUCTION LIMITS UNLESS NOTED OTHERWISE.
- REMOVE EXISTING WATERMAIN TO EXISTING TEE FROM EXISTING CROSS.
- REMOVE EXISTING SANITARY SEWER MANHOLES AND SANITARY SEWER PIPE AND SERVICE TO EXISTING MANHOLE, PER CITY SPECIFICATIONS.
- REMOVE EXISTING STORM SEWER MANHOLE AND STORM SEWER PIPE TO EXISTING MH, PER CITY SPECIFICATIONS.
- REMOVE EXISTING HYDRANT.
- HAIL DEMOLITION DEBRIS OFF-SITE TO A FACILITY APPROVED BY REGULATORY AUTHORITIES FOR THE HANDLING OF DEMOLITION DEBRIS, UNLESS NOTED OTHERWISE.
- BULKHEAD OPENING LEFT AFTER REMOVAL OF STORM SEWER PIPE. INSIDE AND OUTSIDE SURFACES SHALL HAVE SMOOTH FINISH. REDO INVERT TO TROUGH FROM REMOVED PIPE.

**LEGEND**



**EXISTING TREE INVENTORY**

Tree #	Species	DBH	Condition	Tree #	Species	DBH	Condition
787	Spruce, white	5.0	Good	817	Ash, green	8.0	Good
788	Spruce, white	7.0	Good	818	Ash, green	10.0	Fair
789	Spruce, white	5.0	Good	819	Ash, green	10.0	Good
790	Oak, red	7.5	Good	821	Hackberry	9.0	Good
792	Basswood	13.1	Fair	822	Pine, Scots	14.0	Good
793	Basswood	9.0	Good	823	Pine, Scots	16.0	Good
794	Basswood	8.0	Good	824	Pine, Scots	16.5	Good
798	Maple, sugar	8.0	Good	825	Ash, green	12.0	Good
803	Maple, Norway	8.5	Good	828	Ash, green	11.0	Good
804	Maple, silver	28.0	Fair	829	Maple, silver	18.0	Fair
808	Ash, green	11.5	Good	830	Birch, paper	15.0	Good
809	Ash, green	11.5	Good	833	Elm, Siberian	9.5	Fair
810	Ash, green	12.0	Good	834	Juniper	9.0	Good
816	Ash, green	10.5	Good	835	Elm, Siberian	15.0	Fair

**DEVELOPER**

**MEADOWCREEK BUILDERS**  
10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL: (612) 867-6533

**MUNICIPALITY**



**PROJECT**

**HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

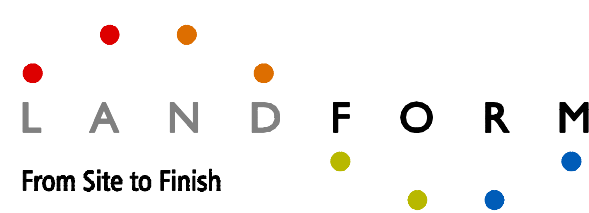
DATE	ISSUE / REVISION	REVIEW
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20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

**CERTIFICATION**

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer in the State of Minnesota.  
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**CONSTRUCTION DOCUMENTS**  
03.20.2019

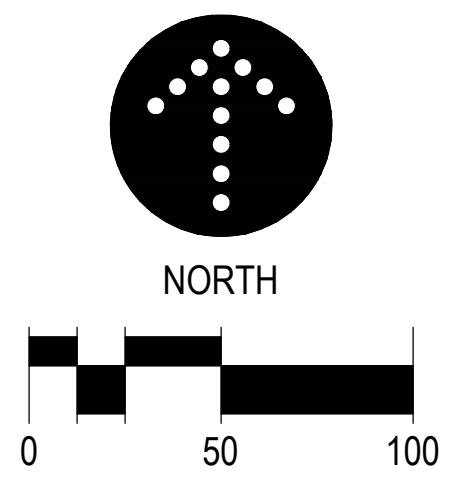


105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C101KRZ141029MCB  
PROJECT NO. KRZ141029 MCB

**EXISTING CONDITIONS & DEMOLITION PLAN**

**C1.1**





**GENERAL NOTES**

- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM PROFESSIONAL SERVICES, LLC AT 612.252.9070.

**SITE PLAN NOTES**

- OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WITHIN, OR USE OF, PUBLIC RIGHT-OF-WAY.
- THE DIGITAL FILE, WHICH CAN BE OBTAINED FROM THE ENGINEER, SHALL BE USED FOR STAKING. DISCREPANCIES BETWEEN THE DRAWINGS AND THE DIGITAL FILE SHALL BE REPORTED TO THE ENGINEER. THE BUILDING FOOTPRINT, AS SHOWN ON THESE DRAWINGS, AND THE DIGITAL FILE, SHALL BE COMPARED TO THE STRUCTURAL DRAWINGS PRIOR TO STAKING.
- DIMENSIONS SHOWN ARE TO BACK OF CURB AND EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.
- PROPOSED 3RD STALL GARAGE WALL IS SHOWN AT THE SETBACK LINE. EAVES CANNOT GO INTO THE SETBACK SO THE FOUNDATION SIDEWALL WILL LIKELY NEED TO BE PUSHED BACK. BUILDINGS SHOWN ARE FOR CONCEPT PURPOSES ONLY AND ARE NOT AN EXACT REPRESENTATION OF WHAT MAY BE BUILT.

**ZONING AND SETBACK SUMMARY**

EXISTING ZONING - R1 RESIDENTIAL ZONE (MUSA)	PROPOSED ZONING - R1A RESIDENTIAL ZONE (MUSA)
PROPOSED BUILDING SETBACK INFORMATION IS AS FOLLOWS: FRONT YARD = 30 FT. REAR = 30 FT. SIDE (CORNER) = 30 FT. SIDE (LIVING) = 10 FT. SIDE (GARAGE) = 6 FT.	PROPOSED BUILDING SETBACK INFORMATION IS AS FOLLOWS: FRONT YARD = 25 FT. REAR = 20 FT. SIDE (LIVING) = 10 FT. SIDE (GARAGE) = 5 FT.
LOT COVERAGE INFORMATION IS AS FOLLOWS: LOT AREA MINIMUM = 10,665 S.F. = 0.25 ACRE LOT WIDTH MINIMUM = 80 FT. TOTAL SITE AREA = 279,515 S.F. = 6.42 ACRES	LOT COVERAGE INFORMATION IS AS FOLLOWS: LOT AREA MINIMUM = 6,534 S.F. = 0.1500 ACRE LOT WIDTH MINIMUM = 65 FT. TOTAL SITE AREA = 279,515 S.F. = 6.42 ACRES

**AREA SUMMARY**

TOTAL SITE AREA	279,515 SQ. FT.	6.42 AC.
RIGHT OF WAY AREA	43,172 SQ. FT.	0.99 AC.
NET AREA	236,343 SQ. FT.	5.43 AC.
NET DENSITY		2.8 U/A
IMPERVIOUS SURFACE (NET WITH 2 CAR GARAGE)		31%

**LOT AREA TABLE**

Parcel #	Area	LOT/BLOCK
1	10536	1/1
2	11013	2/1
3	12221	3/1
4	13051	4/1
5	13487	5/1
6	16980	6/1
7	10665	1/2
8	13162	2/2
9	13202	3/2
10	19710	4/2
11	14825	5/2
12	20582	6/2
13	22082	7/2
14	30322	8/2
15	14504	9/2
16	43172	RIGHT OF WAY

**DEVELOPER**

**MEADOWCREEK BUILDERS**  
10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL: (612) 867-6533

**MUNICIPALITY**



**PROJECT**

**HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

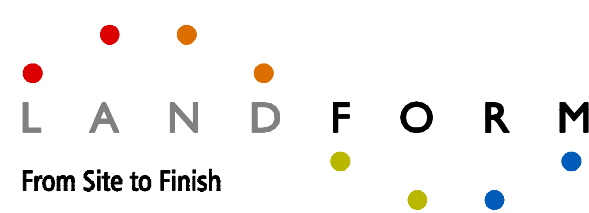
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**CONSTRUCTION DOCUMENTS**  
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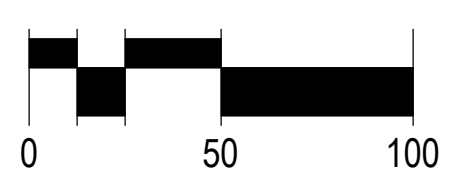
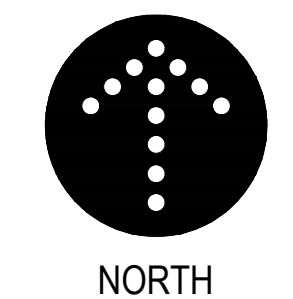
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PROJECT NO. KRZ141029 MCB

**SITE PLAN**

**C2.1**



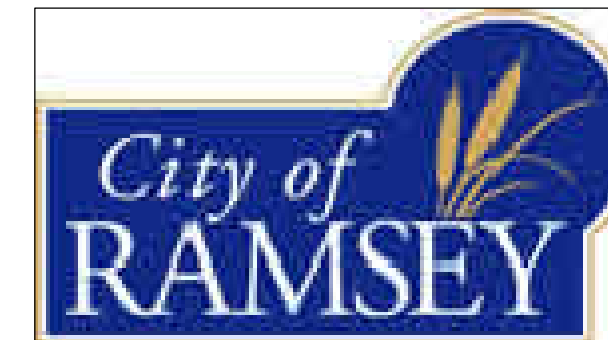
Know what's Below.  
Call before you dig.



BUILDABLE AREA

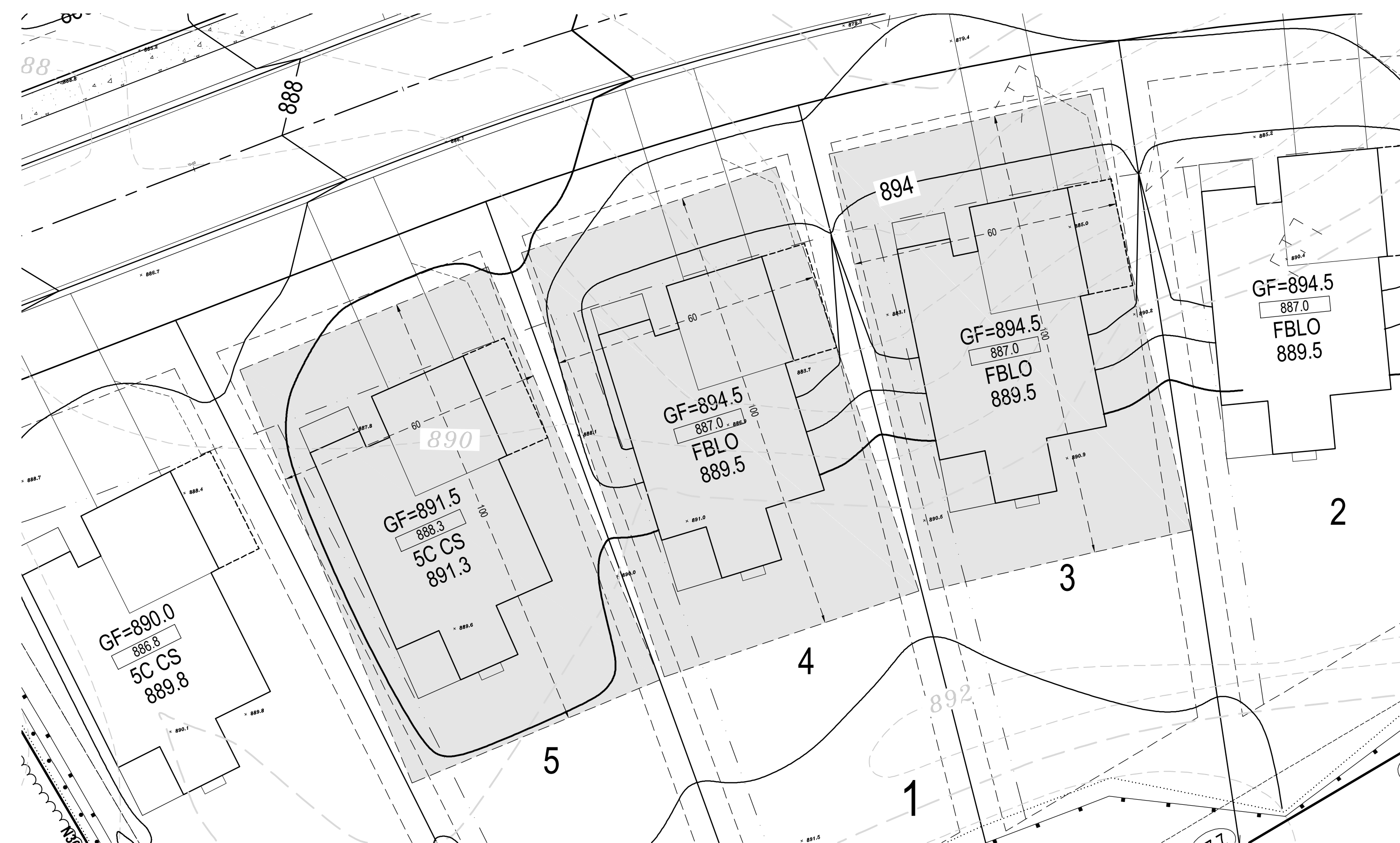
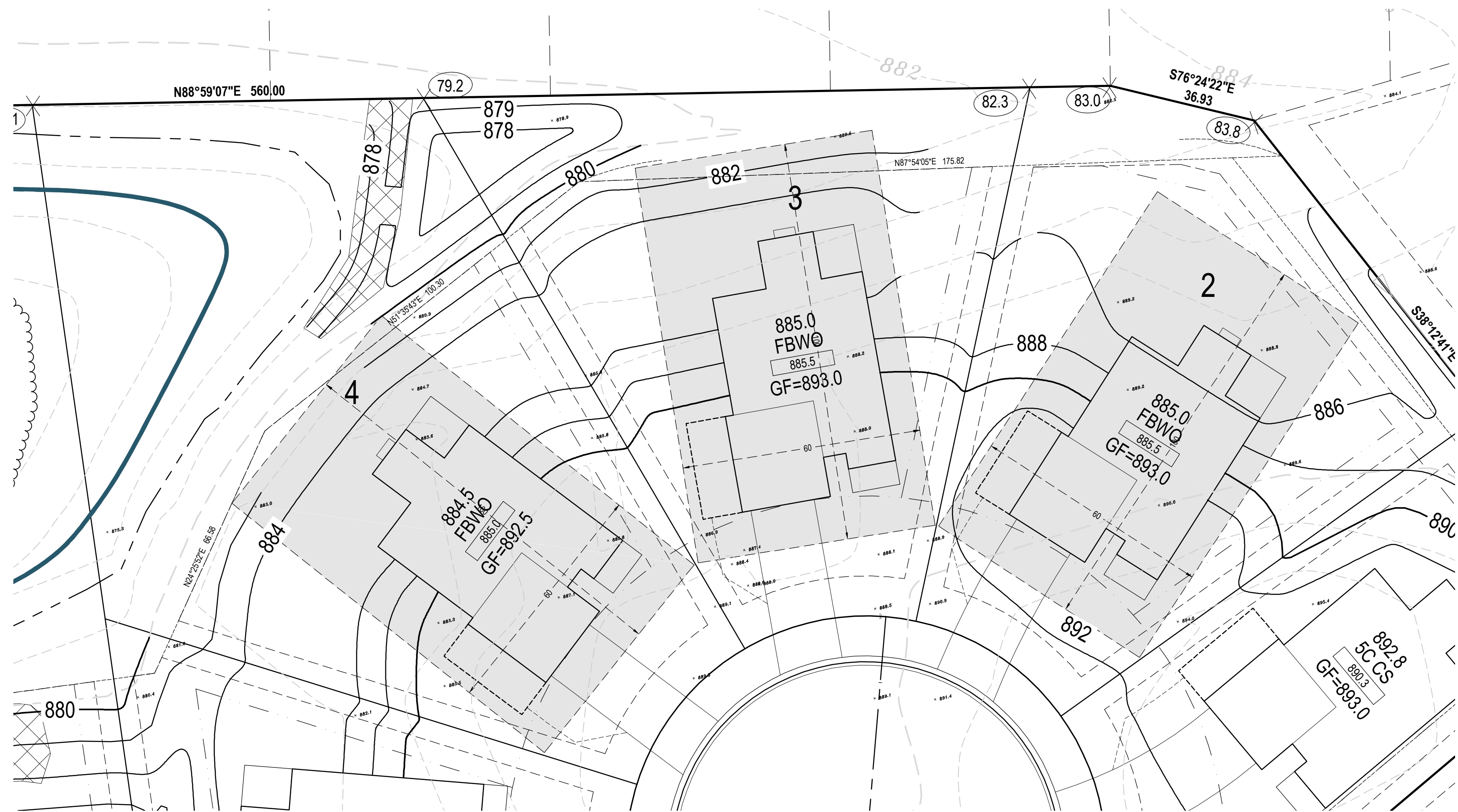
MEADOWCREEK BUILDERS

10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL: (612) 867-6533



HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL



I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer in the State of Minnesota. License No. 15522.

Signature shown in blue ink. Original of original. Wet signed copy of this plan on file in the office of the Engineer. This plan is available upon request.

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

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CONSTRUCTION DOCUMENTS  
03.20.2019



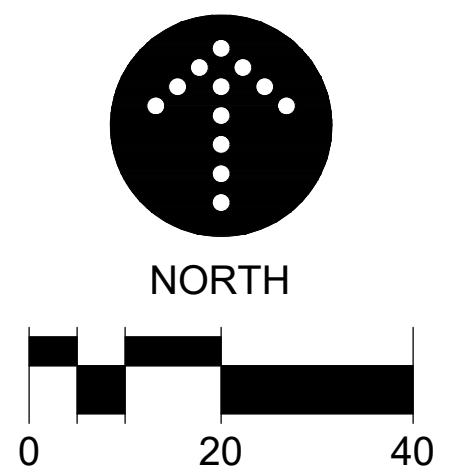
105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C202KRZ141029MCB  
PROJECT NO. KRZ141029.MCB

BUILDABLE AREA  
EXHIBIT  
**C2.2**



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BUILDABLE AREA

MEADOWCREEK BUILDERS

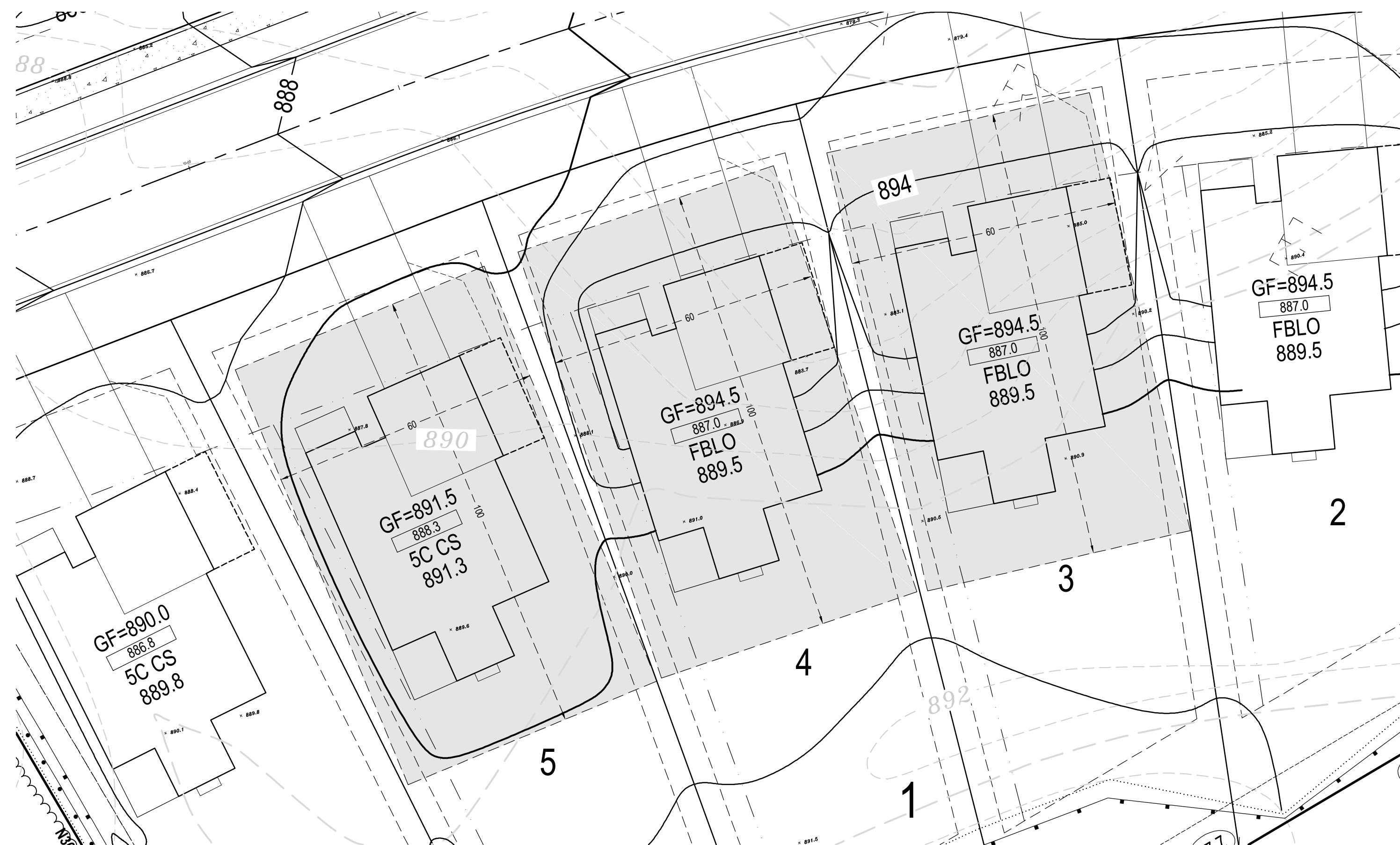
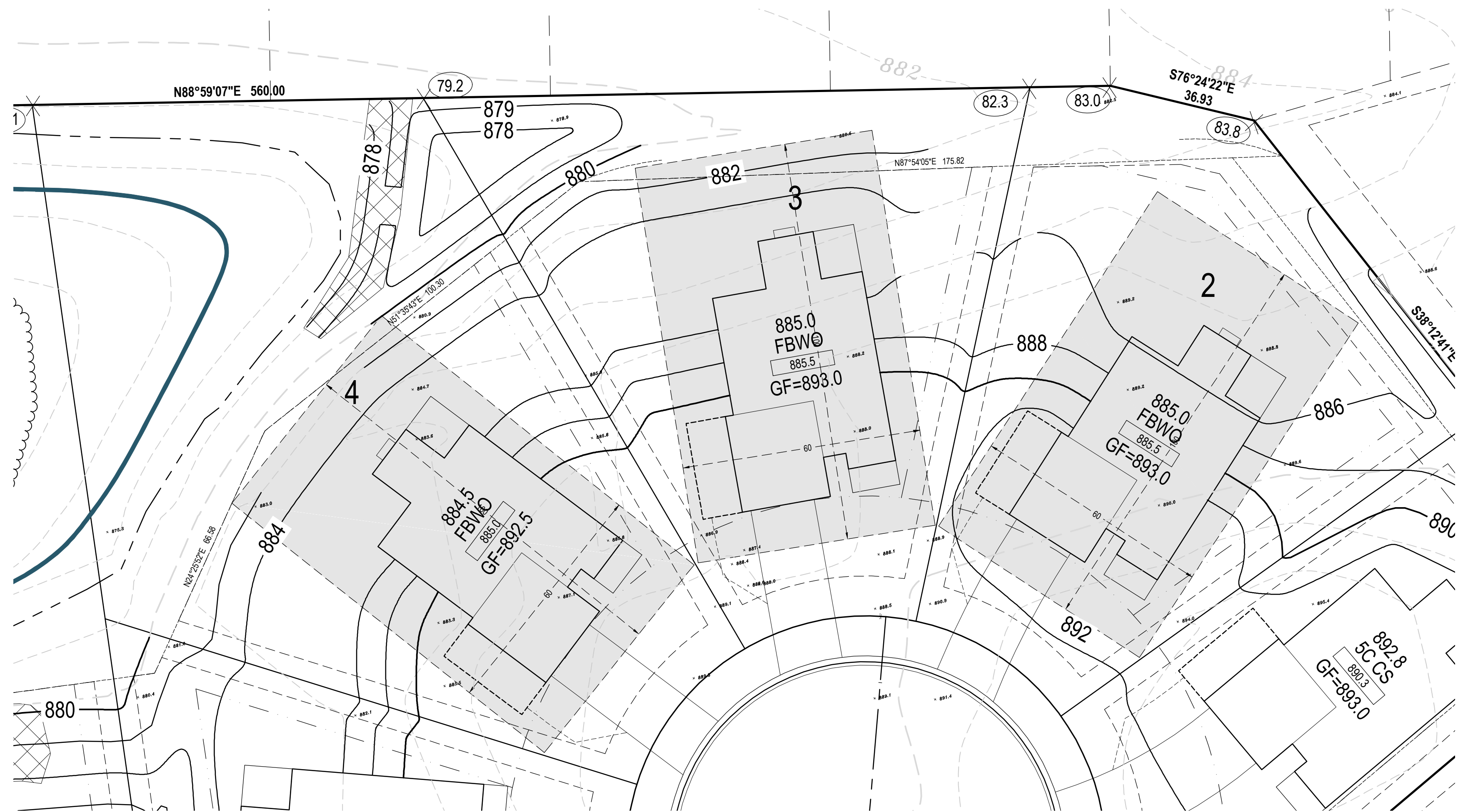
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HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA

CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL



I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer in the State of Minnesota.

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

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CONSTRUCTION DOCUMENTS  
03.20.2019



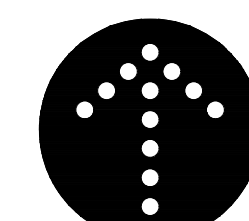
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PROJECT NO. KRZ141029.MCB

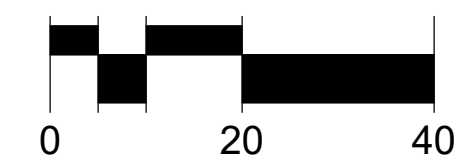
BUILDABLE AREA  
EXHIBIT  
**C2.2**  
SHEET NO. 4/16



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NORTH





**EROSION PREVENTION AND SEDIMENT CONTROL NOTES**

- INSTALL PERIMETER SEDIMENT CONTROLS PRIOR TO BEGINNING WORK AND MAINTAIN FOR DURATION OF CONSTRUCTION. REMOVE CONTROLS AFTER AREAS CONTRIBUTING RUNOFF ARE PERMANENTLY STABILIZED AND DISPOSE OF OFF SITE.
- LIMIT SOIL DISTURBANCE TO THE GRADING LIMITS SHOWN. SCHEDULE OPERATIONS TO MINIMIZE LENGTH OF EXPOSURE OF DISTURBED AREAS.
- MANAGEMENT PRACTICES SHOWN ARE THE MINIMUM REQUIREMENT. INSTALL AND MAINTAIN ADDITIONAL CONTROLS AS WORK PROCEEDS TO PREVENT EROSION AND CONTROL SEDIMENT CARRIED BY WIND OR WATER.
- REFER TO SWPPP NOTES ON SHEET C3.2 FOR ADDITIONAL REQUIREMENTS.
- CONSTRUCT INFILTRATION BASIN AFTER REMAINDER OF SITE HAS BEEN STABILIZED.
- SEED, SOD, MULCH AND FERTILIZER SHALL MEET THE FOLLOWING SPECIFICATIONS, AS MODIFIED.
 

ITEM	SPECIFICATION NUMBER
SOD	MINDOT 3876
SEED	MINDOT 3876
	MN TYPE 22-111 @ 30.5 LB/AC - TEMPORARY
	MN TYPE 25-121 @ 61 LB/AC - PERMANENT
- MULCH FERTILIZER
 

	MINDOT 388
	MINDOT TYPE 1 @ 2 TON/AC
- SOIL WILL BE SCARIFIED PRIOR TO RESEEDING TO REDUCE SOIL COMPACTION.
- SCRAPE ADJACENT STREETS CLEAN DAILY. STREET SWEEPING IS REQUIRED A MINIMUM OF 1 TIME PER WEEK OR AS DIRECTED BY THE CITY ENGINEER.
- INLET PROTECTION SHALL BE REMOVED PRIOR TO WINTER FREEZE AND REPLACED IN SPRING IF SITE STABILIZATION IS NOT ACHIEVED (AT THE DIRECTION OF THE CITY ENGINEER).

**GRADING NOTES**

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING GRADING.
- REFER TO THE GEOTECHNICAL REPORT PREPARED BY NORTHERN TECHNOLOGIES, INC., DATED FEBRUARY 15, 2015, FOR ADDITIONAL INFORMATION ON BACKFILL MATERIAL, GROUNDWATER CONDITIONS, AND COMPACTION REQUIREMENTS.
- REMOVE TOPSOIL FROM GRADING AREAS AND STOCKPILE SUFFICIENT QUANTITY FOR REUSE.
- REMOVE SURFACE AND GROUND WATER FROM EXCAVATIONS.
- AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION, AND COMPACTION AND PROVIDE PERIODIC REPORTS TO THE OWNER.
- PLACE AND COMPACT FILL USING LIFT THICKNESS MATCHED TO SOIL TYPE AND COMPACTION EQUIPMENT TO OBTAIN SPECIFIED COMPACTION THROUGHOUT THE LIFT.
- ALL SITE GRADING MUST BE COMPLETED, CERTIFIED BY THE ENGINEER AND ALL OFF ROAD GRADING EQUIPMENT REMOVED BEFORE STARTING ANY UTILITY WORK.
- SITE IS LOCATED WITHIN THE BOUNDARIES OF THE LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION.
- MAXIMUM SLOPE SHALL BE 4:1.
- RESTORATION WORK SHALL BE COMPLETED WITHIN 7 DAYS OF GRADING COMPLETION.
- PROPOSED 3RD STALL GARAGE WALL IS SHOWN AT THE SETBACK LINE. EAVES CANNOT GO INTO THE SETBACK SO THE FOUNDATION SIDEWALL WILL LIKELY NEED TO BE PUSHED. BUILDINGS SHOWN ARE FOR CONCEPT PURPOSES ONLY AND ARE NOT AN EXACT REPRESENTATION OF WHAT MAY BE BUILT.

**LEGEND**

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	INLET PROTECTION	6 EACH
	SILT FENCE	1,600 L.F.
	TREE PROTECTION	550 L.F.
	VEHICLE TRACKING PAD	1 EACH
	EROSION CONTROL BLANKET	4,910 SQ.FT.
	Denotes EMERGENCY OVERFLOW	

**LOT BY LOT TABULATION**

Lot	Block	House Type	Garage Floor Ele	Driveway Grade (%)	Lowest Floor Ele	Lowest Opening Ele (living space)	100 Year Flood Ele	Emergency Overflow	Highest Anticipate d Water, Table or Mottled Soil
1	1	5C CS	892.5	6.4	889.3	893.0	878.0	889.0	
2	1	FBLO	894.5	8.4	887.0	890.2	878.0	889.0	
3	1	FBLO	894.5	6.5	887.0	890.2	878.0	889.0	
4	1	FBLO	894.5	8.8	887.0	890.2	878.0	889.0	
5	1	5C CS	891.5	7.3	888.3	892.0	878.0	889.0	
6	1	5C CS	890.0	8.5	886.8	890.5	878.0	889.0	
1	2	5C CS	893.0	5.7	889.8	893.5	878.0	887.5	
2	2	FBWO	893.0	4.5	885.5	885.5	878.0	887.5	
3	2	FBWO	893.0	4.5	885.5	885.5	878.0	887.5	
4	2	FBWO	892.5	4.4	885.0	884.5	878.0	887.5	
5	2	FBWO	892.5	4.6	885.0	885.0	878.0	887.5	
6	2	FBWO	894.5	6.7	887.0	885.0	878.0	887.5	
7	2	FBWO	893.5	5.1	886.0	886.0	878.0	887.5	
8	2	FBWO	892.5	6.8	885.0	885.0	878.0	887.5	
9	2	5C CS	888.0	3.5	880.5	888.5	878.0	887.5	

**BUILDING TYPE**  
 FBWO = FULL BASEMENT WALK OUT  
 FBLO = FULL BASEMENT LOOKOUT WINDOWS  
 5C CS = CRAWL SPACE

**XXX.X** : REAR ELEVATION  
**FBWO/FB** : UNIT TYPE  
**XXXX** : MINIMUM BASEMENT ELEVATION  
**GF=XXX.X** : FRONT GARAGE FLOOR ELEVATION  
**DRP 1C** : DENOTES NUMBER OF COURSES GARAGE FLOOR IS DROPPED FROM TOP OF FOUNDATION

NOTES:  
 1. GARAGE LOCATION INDICATED BY DRIVEWAY.

**PAD DETAIL** NO SCALE

**NPDES AREA SUMMARY**

	EXISTING	PROPOSED
PERVIOUS	6.26 ACRES	4.62 ACRES
IMPERVIOUS	0.16 ACRES	1.80 ACRES
TOTAL	6.42 ACRES	6.42 ACRES

DISTURBED AREA = 4.93 ACRES

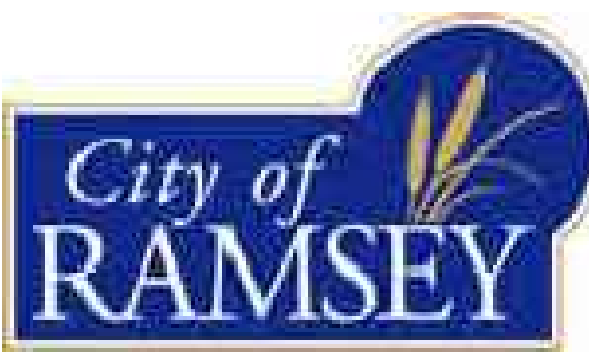
**Cut/Fill Summary - Contour to Contour - Run Date 01/02/2019**

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Volume-Cut Fill	1.000	1.000	213333.98 Sq. Ft.	3485.00 Cu. Yd.	25056.02 Cu. Yd.	21571.03 Cu. Yd.<Fill>
Totals			213333.98 Sq. Ft.	3485.00 Cu. Yd.	25056.02 Cu. Yd.	21571.03 Cu. Yd.<Fill>

**DEVELOPER**

**MEADOWCREEK BUILDERS**  
 10122 EWING LANE  
 BROOKLYN PARK, MN 55443  
 TEL (612) 867-6533

**MUNICIPALITY**



**PROJECT**

**HARVEST ESTATES  
 2ND ADDITION  
 RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

**CERTIFICATION**

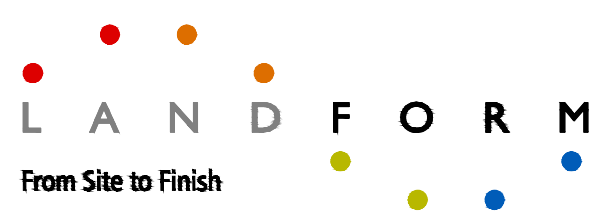
I hereby certify that the plan shown on this sheet was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Ronald C. Hoiland  
 License No. 19576

Signature shown on this plan is a reproduction of original. Wet signed copy of this plan on file with the Minnesota Professional Services, LLC office and is available upon request.

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**CONSTRUCTION DOCUMENTS**  
 03.20.2019



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 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

FILE NAME C301KRZ141029MCB  
 PROJECT NO. KRZ141029 MCB

**GRADING DRAINAGE AND EROSION CONTROL**

**C.1**

SHEET NO. 5/16  
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## NPDES PERMIT AND SWPPP COMPONENTS

1. THE CURRENT MINNESOTA CONSTRUCTION STORMWATER GENERAL PERMIT (PERMIT) DATED AUGUST 1, 2018 IS REFERENCED IN THIS DOCUMENT AS THE PERMIT.

THE SWPPP INCLUDES THE FOLLOWING COMPONENTS:

- CONSTRUCTION DOCUMENTS PREPARED BY LANDFORM
- STORMWATER MANAGEMENT PLAN NARRATIVE PREPARED BY LANDFORM
- MAINTENANCE PLAN FOR PERMANENT STORMWATER BMPs
- GEOTECHNICAL REPORT PREPARED BY BRAUN INTERTEC

ALL COMPONENTS MUST BE KEPT ON SITE BY THE OPERATOR. THE OPERATOR SHALL CONTACT CIVIL ENGINEER IF THEY DO NOT HAVE ALL OF THE ABOVE DOCUMENTS.

## SITE INFORMATION

SITE LOCATION: LATITUDE: 45.245734, LONGITUDE: -93.410825

DISTURBED AREA = 4.9 AC.  
PRE-CONSTRUCTION IMPERVIOUS AREA WITHIN DISTURBED AREA = 0.2 AC.  
POST-CONSTRUCTION IMPERVIOUS AREA WITHIN DISTURBED AREA = 1.8 AC.  
NET CHANGE IN IMPERVIOUS AREA WITHIN DISTURBED AREA = 1.6 AC.

TYPE OF STORMWATER MANAGEMENT:

- INFILTRATION

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES ARE ON SHEET C3.1

## SITE EVALUATION / ASSESSMENT / PLANNING

1. THE OPERATOR SHALL HAVE PRIMARY RESPONSIBILITY AND SIGNIFICANT AUTHORITY FOR THE DEVELOPMENT, IMPLEMENTATION, MAINTENANCE, INSPECTION AND AMENDMENTS TO THE APPROVED SWPPP. DUTIES INCLUDE BUT ARE NOT LIMITED TO:
  - ENSURING FULL COMPLIANCE WITH THE SWPPP AND THE PERMIT
  - IMPLEMENTING ALL ELEMENTS OF THE SWPPP, INCLUDING BUT NOT LIMITED TO:
    - IMPLEMENTING PROMPT AND EFFECTIVE EROSION AND SEDIMENT CONTROL MEASURES
    - IMPLEMENTING ALL NON-STORM WATER MANAGEMENT, AND GOOD HOUSEKEEPING BMPs ENSURING THAT NO MATERIALS OTHER THAN STORM WATER ARE DISCHARGED IN QUANTITIES, WHICH WILL HAVE AN ADVERSE EFFECT ON RECEIVING WATERS OR STORM DRAIN SYSTEMS, ETC.
  - CONDUCTING ROUTINE INSPECTIONS AND MAINTENANCE.
  - ENSURING ELIMINATION OF ALL UNAUTHORIZED DISCHARGES
  - COORDINATING TO ENSURE ALL OF THE NECESSARY CORRECTIONS / REPAIRS ARE MADE IMMEDIATELY, AND THAT THE PROJECT COMPLIES WITH THE SWPPP, THE PERMIT, AND APPROVED PLANS AT ALL TIMES.

## STORMWATER POLLUTION PREVENTION MANAGEMENT MEASURES

1. OPERATOR MUST DEVELOP POLLUTION PREVENTION MANAGEMENT MEASURES, IMPLEMENT GOOD HOUSEKEEPING BMPs, MUST FOLLOW ALL APPLICABLE FEDERAL, STATE, AND LOCAL BUILDING CODES, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND THE GENERAL CONDITIONS AND GENERAL REQUIREMENTS OF THE CONSTRUCTION CONTRACT.
2. THE OPERATOR SHALL MINIMIZE THE EXPOSURE TO STORMWATER OF ANY OF THE PRODUCTS, MATERIAL, OR WASTES STORED ON SITE THAT MAY WASH DOWNSTREAM OR CONTAMINATE STORMWATER.
3. BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER.
4. CHEMICALS AND LANDSCAPE MATERIALS SHALL BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS.
5. OPERATOR TO TRACK PROGRESS OF THE FOLLOWING ITEMS ON SITE MAPS: PORTABLE TOILETS, MATERIAL STORAGE AREAS, VEHICLE AND EQUIPMENT FUELING AND MAINTENANCE AREAS, CONCRETE WASHOUTS, PAINT AND STUCCO WASHOUTS, DUMPSTERS OR OTHER TRASH AND DEBRIS CONTAINERS, SPILL KITS, STOCKPILES, ANY OTHER NON-STRUCTURAL NON-STORM WATER MANAGEMENT BMPs, ANY TEMPORARILY REMOVED STRUCTURAL BMPs, ANY CHANGES TO THE STRUCTURAL BMPs.
6. SOLID WASTE: COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.
7. HAZARDOUS WASTE: OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE OR MATERIALS MUST BE IN COMPLIANCE WITH MN, R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
8. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER.
9. CONCRETE AND OTHER WASHOUT WASTE: OPERATOR MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.
10. EXTERNAL VEHICLE WASHING: EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGRASING IS ALLOWED ON SITE.
11. OPERATOR SHALL TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE THEY WILL BE LOADED OR UNLOADED AS DETAILED IN THE PERMIT.

## SWPPP CONTACT AND TRAINING INFORMATION

1. OWNER:  
CITY OF RAMSEY  
ATTN: TIM GLADHILL  
7550 SUNWOOD DRIVE  
RAMSEY, MN 55303  
PHONE# 763-427-1410
2. OPERATOR:  
NORTHWEST ASPHALT  
1451 STAGECOACH RD  
SHAKOPEE, MN 55379  
952-445-1003
3. LONG TERM MAINTENANCE AND OPERATION:  
CITY OF RAMSEY, MN  
7550 SUNWOOD DR.  
RAMSEY, MN 55303  
763-427-5543
4. SWPPP DESIGNER:  
RANDALL HEDLUND, P.E.  
HEDLUND ENGINEERING SERVICES  
105 SOUTH FIFTH AVENUE, SUITE 513  
MINNEAPOLIS, MN 55401  
612-252-9070  
RHEDLUND@LANDFORM.NET  
CERTIFICATION: U OF MN, DESIGN OF CONSTRUCTION SWPPP, EXP. MAY 31, 2016
5. SWPPP INSPECTOR/MANAGER:  
FRED VOLZ  
HEDLUND ENGINEERING SERVICES  
105 SOUTH FIFTH AVENUE, SUITE 513  
MINNEAPOLIS, MN 55401  
612-252-9070  
FVOLZ@LANDFORM.NET  
CERTIFICATION: U OF MN, DESIGN OF CONSTRUCTION SWPPP, EXP. MAY 31, 2016
6. BMP INSTALLATION AND REPAIR:  
TO BE DETERMINED.

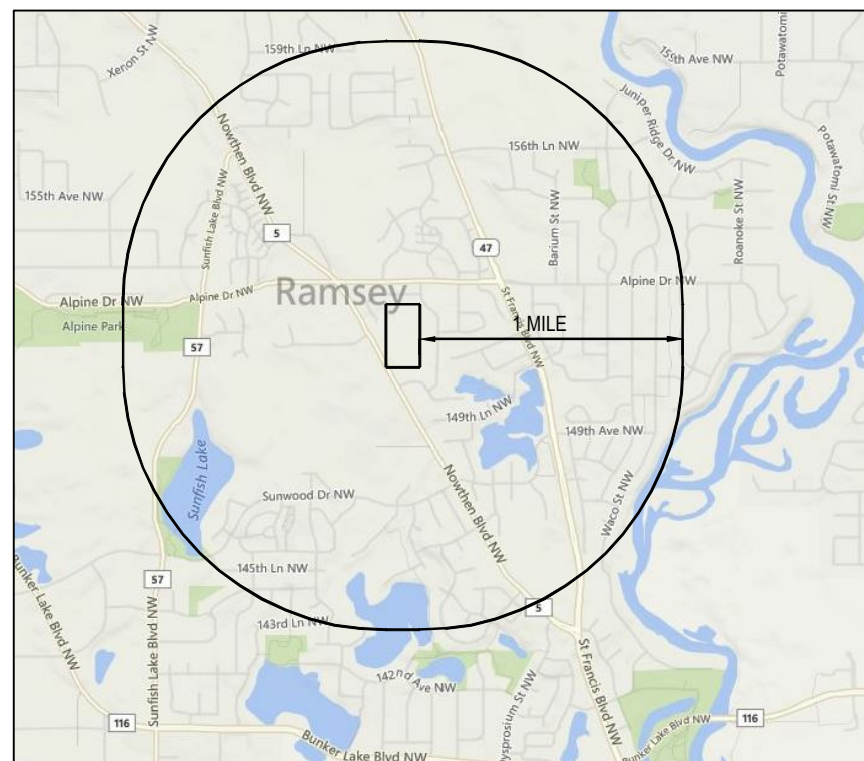
## DESCRIPTION OF CONSTRUCTION ACTIVITY

1. CONSTRUCTION ACTIVITY INCLUDES EROSION AND SEDIMENT CONTROL, BMPs INSTALLATION, CLEARING AND GRUBBING, SITE GRADING, UTILITY INSTALLATION, BUILDING CONSTRUCTION, PAVING, AND LANDSCAPING.

## SCHEDULE OF BMP INSTALLATION AND CONSTRUCTION ACTIVITY

1. INSTALL PERIMETER SEDIMENT CONTROL BMPs PRIOR TO START OF OTHER SITE WORK. REFER TO GRADING, DRAINAGE, PAVING AND EROSION CONTROL SHEET(S) FOR INITIAL LOCATIONS OF BMPs.
2. PROTECT INFILTRATION AREAS WITH CONSTRUCTION FENCING. INSTALL FENCING PRIOR TO SITE GRADING OR WITHIN 24-HOURS OF EXCAVATING AN INFILTRATION BASIN.
3. CONSTRUCT TEMPORARY / PERMANENT SEDIMENTATION BASINS PRIOR TO UPLAND DISTURBANCE. INSTALL PERIMETER SEDIMENT CONTROL BMPs AROUND NORMAL WATER LEVELS WITHIN 48-HOURS OF COMPLETION OF BASIN GRADING.
4. STABILIZE OUTLETS FROM TEMPORARY / PERMANENT SEDIMENTATION BASINS WITHIN 24-HOURS OF OUTLET CONSTRUCTION.
5. PERFORM WORK IN PHASES TO MINIMIZE DISTURBED AREA AT ANY ONE TIME. OPERATOR TO DEVELOP PHASING PLAN PRIOR TO START OF WORK.
6. STRIP TOPSOIL FROM AREAS TO BE DISTURBED AND STOCKPILE WITH PERIMETER SEDIMENT CONTROL BMPs. PROVIDE STABILIZATION IF STOCKPILE IS LEFT LONGER THAN 14 DAYS.
7. ROUGH GRADE SITE.
8. INSTALL UTILITIES.
9. INSTALL SMALL UTILITIES (GAS, ELECTRIC, COMMUNICATIONS).
10. FINAL GRADE PAVEMENT AREAS AND COMPACT SUBGRADE.
11. LAY DOWN PAVEMENT AGGREGATE AND COMPACT.
12. INSTALL CURB AND GUTTER. BACKFILL AFTER A MINIMUM OF THREE DAYS AND PROVIDE A MINIMUM OF TWO ROLLS OF SOD AT THE BACK OF CURB.
13. CONSTRUCT BUILDING / ADDITION AND SITE FEATURES.
14. CONSTRUCT SITE WALKS AND PATIOS.
15. PROVIDE FINAL STABILIZATION.
16. CONNECT INFILTRATION / FILTRATION PRACTICES TO STORM SEWER INLETS.
17. REMOVE TEMPORARY BMPs AND DISPOSE OF PROPERLY.

## WATERS WITHIN ONE MILE OF SITE



## STORMWATER POLLUTION MITIGATION MEASURES

1. RUM RIVER IS IMPAIRED BASED ON THE CURRENT USEPA 303(g) CLEAN WATER ACT LIST; IS WITHIN 1 MILE OF THIS SITE, AND STORMWATER DISCHARGES TO IT.
2. TMDLS HAVE BEEN ESTABLISHED FOR THIS IMPAIRED WATER AS FOLLOWS:
  - MERCURY IN FISH TISSUE
3. THIS SITE WILL MEET THESE TMDLS USING THE FOLLOWING METHODS:
  - STORMWATER MANAGEMENT POND

## EROSION PREVENTION AND SEDIMENT CONTROL

1. SEE GRADING, DRAINAGE, PAVING AND EROSION CONTROL SHEETS FOR THE LOCATION AND TYPE OF TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPs. SEE GRADING AND DRAINAGE, UTILITY, AND LANDSCAPE SHEETS FOR THE LOCATION AND TYPE OF PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs.

### 2. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL FEATURES AND SOIL

APPROPRIATE CONSTRUCTION PRACTICES (E.G. CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING) SHALL BE USED TO MINIMIZE EROSION.

AREAS NOT TO BE DISTURBED (BUFFERS, INFILTRATION BASINS, ETC.) SHALL BE PROTECTED WITH CONSTRUCTION OR SILT FENCE BEFORE WORK BEGINS.

OPERATOR SHALL DEVELOP METHODS TO MINIMIZE SOIL COMPACTION OUTSIDE OF BUILDING PADS, PAVEMENT AREAS AND UTILITY TRENCHES AND SHALL USE TRACKED EQUIPMENT WHEREVER PRACTICABLE.

TOPSOIL SHALL BE SALVAGED AND REUSED TO THE EXTENT PRACTICABLE.

OPERATOR MUST NOT DISTURB MORE LAND THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED.

SEDIMENT CONTROL PRACTICES SHALL BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UPGRADE LAND DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH THE PERMIT.

THE TIMING OF THE INSTALLATION OF SEDIMENT CONTROL PRACTICES MAY BE ADJUSTED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES. ANY SHORT-TERM ACTIVITY MUST BE COMPLETED AS QUICKLY AS POSSIBLE AND THE SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IMMEDIATELY AFTER THE ACTIVITY IS COMPLETED. HOWEVER, SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE ACTIVITY IS NOT COMPLETE.

### 4. CONTROL STORM WATER FLOWING ONTO AND THROUGH THE PROJECT

THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, SHALL BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER.

STABILIZATION OF THE LAST 200 LINEAL FEET SHALL BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER.

STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES SHALL BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS SHALL BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

### 5. STABILIZE SOILS

ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES, MUST BE STABILIZED. STABILIZATION MUST BE STARTED IMMEDIATELY TO LIMIT SOIL EROSION WHEN THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED AND WILL NOT RESUME FOR 14 CALENDAR DAYS.

WHEN THE SITE HAS A DISCHARGE POINT WITHIN ONE MILE OF, AND FLOWS TO, A SPECIAL OR IMPAIRED WATER, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED IMMEDIATELY TO LIMIT SOIL EROSION IN THAT PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY SOIL STOCKPILES SHALL HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN SURFACE WATERS, INCLUDING STORM WATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORM WATER.

TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G. CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) AND THE CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES ARE EXEMPT FROM THIS REQUIREMENT.

### 6. PROTECT SLOPES

OPERATOR SHALL AVOID WORK ON SLOPES WITH A GRADE OF 3:1 OR GREATER WHEN PRACTICABLE. GRADING ON SLOPES WITH A GRADE OF 3:1 OR STEEPER WILL REQUIRE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).

### 7. PROTECT STORM DRAIN INLETS

ALL STORM DRAIN INLETS SHALL BE PROTECTED BY APPROPRIATE BMPs DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE TEMPORARILY REMOVED IF A SPECIFIC SAFETY CONCERN HAS BEEN IDENTIFIED.

### 8. PROVIDE ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS

AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM.

### 9. ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS

PRIOR TO DISTURBING SOILS ON A PROJECT SITE, ESTABLISH SEDIMENT CONTROL BMPs ON ALL DOWNGRADE PERIMETERS AND WHERE SITE DISCHARGES TO PUBLIC WATERS.

### 10. RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES

DEWATERING OR BASIN DRAINING OF TURBID OR SEDIMENT LADEN WATER RELATED TO CONSTRUCTION ACTIVITIES SHALL BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN OR TREATED WITH THE APPROPRIATE BMP PRIOR TO ENTERING THE SURFACE WATER.

DISCHARGE SHALL NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS, ADVERSELY AFFECT RECEIVING WATER OR IMPACT WETLANDS, OR DOWNSTREAM PROPERTIES. DISCHARGE POINTS SHALL BE ADEQUATELY PROTECTED FROM EROSION AND SCOUR BY ACCEPTED ENERGY DISSIPATION MEASURES.

DISCHARGE WATER CONTAINING OIL OR GREASE SHALL BE TREATED TO REMOVE OIL OR GREASE PRIOR TO DISCHARGE TO SURFACE WATERS.

REFER TO PERMIT REQUIREMENTS FOR TEMPORARY OR PERMANENT SEDIMENT BASINS.

### 11. ESTABLISH STABILIZED CONSTRUCTION EXITS

VEHICLE TRACKING PADS SHALL BE ESTABLISHED AS SHOWN ON THE GRADING, DRAINAGE, PAVING AND EROSION CONTROL SHEET TO MINIMIZE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE ONTO ADJACENT STREETS.

### 12. INFILTRATION BASIN PROTECTION

OPERATOR MUST NOT EXCAVATE INFILTRATION SYSTEMS TO FINAL GRADE OR WITHIN THREE FEET OF FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS HAVE BEEN INSTALLED.

WHEN EXCAVATING AN INFILTRATION SYSTEM TO WITHIN THREE FEET OF FINAL GRADE, OPERATOR SHALL MARK OFF AND PROTECT THE AREA FROM HEAVY CONSTRUCTION EQUIPMENT TO PREVENT COMPACTION OF SOILS.

### 13. DEWATERING AND BASIN DRAINING

PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING TO A TEMPORARY OR PERMANENT SEDIMENT BASIN. DISCHARGES MUST NOT CAUSE EROSION OR SCOUR NEAR THE DISCHARGE POINTS.

### 14. REMOVE SEDIMENT FROM SURFACE WATERS

ALL SEDIMENT DEPOSITS AND DELTAS MUST BE REMOVED FROM SURFACE WATERS (INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS) AND THE REMOVAL AREAS RESTABILIZED WITHIN SEVEN (7) DAYS.

## TEMPORARY SEDIMENTATION BASIN(S)

1. THIS PROJECT DOES HAVE MORE THAN 5 ACRES DRAINING TO A COMMON LOCATION AND THE SITE DRAINS TO AN IMPAIRED OR SPECIAL WATER. THEREFORE A TEMPORARY SEDIMENT BASIN IS NOT REQUIRED. REFER TO C3.1 SHEET FOR FURTHER INFORMATION.

2. TEMPORARY SEDIMENT BASINS SHALL PROVIDE TREATMENT TO RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

- A. SEDIMENTATION BASINS MUST PROVIDE LIVE STORAGE OF RUNOFF RESULTING FROM THE 2-YR 24-HR RAINFALL EVENT FROM EACH ACRE DRAINED TO THE BASIN WITH A MINIMUM OF 1,800 CF/ACRE LIVE STORAGE VOLUME. (WHERE NO CALCULATION HAS BEEN PERFORMED, EACH BASIN SHALL PROVIDE AT LEAST 3,600 CF/ACRE OF LIVE STORAGE.) SEDIMENTATION BASINS MUST INCLUDE A STABILIZED EMERGENCY OVEFLOW TO PREVENT BASIN INTEGRITY FAILURE.
- B. DISCHARGE FROM TEMPORARY SEDIMENTATION BASINS WILL BE WITHDRAWN FROM THE SURFACE IN ORDER TO MINIMIZE THE DISCHARGE OF POLLUTANTS.

3. DISCHARGE FROM BASIN DRAINING SHALL NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES. CONTRACTOR WILL VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND THAT NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE.

4. ANY DISCHARGE OBSERVED TO BE OCCURRING DURING THE INSPECTION SHALL BE RECORDED, DESCRIBED, AND PHOTOGRAPHED.

5. IF ANY PROPOSED TEMPORARY BMPs ARE NOT WORKING AS PLANNED REFER TO THE 'STORMWATER COMPLIANCE ASSISTANCE TOOLKIT FOR SMALL CONSTRUCTION OPERATORS' MPCA, 2017 FOR ADDITIONAL INFORMATION. OPERATOR SHALL CONTACT THE SWPPP DESIGNER FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

## POST CONSTRUCTION / PERMANENT BMPs

1. SEE GRADING AND DRAINAGE, UTILITY, AND LANDSCAPE SHEETS FOR POST CONSTRUCTION AND PERMANENT STORMWATER BMPs.

## INSPECTIONS AND MAINTENANCE

1. PERMITTEES MUST ENSURE A TRAINED PERSON WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5-INCH IN 24 HOURS.

2. INSPECTIONS SHALL INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS.

3. PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AS DETAILED IN THE PERMIT.

4. BMP MAINTENANCE:

- FOLLOW THE DESIGNER'S OR MANUFACTURER'S RECOMMENDED MAINTENANCE PROCEDURES FOR ALL BMPs.

- REMOVE SEDIMENT FROM BMPs WHEN THE DEPTH OF SEDIMENT HAS REACHED 1/2 THE HEIGHT OF THE BMP AND PROPERLY DISPOSE OF SEDIMENT INTO CONTROLLED AREAS TO PREVENT SOIL FROM RETURNING TO THE BMP DURING SUBSEQUENT RAIN EVENTS.

- REMOVE SEDIMENT FROM PAVED ROADWAYS AND FROM AROUND BMPs PROTECTING STORM DRAIN INLETS.

- ENSURE THAT CONSTRUCTION SUPPORT ACTIVITIES, INCLUDING BORROW AREAS, WASTE AREAS, CONTRACTOR WORK AREAS, AND MATERIAL STORAGE AREAS AND DEDICATED CONCRETE AND ASPHALT BATCH PLANTS ARE CLEANED AND MAINTAINED.

- REPLACE DAMAGED BMPs THAT NO LONGER OPERATE EFFECTIVELY.

5. ADD BMPs AS NEEDED DURING CONSTRUCTION TO MINIMIZE EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.

## RECORDKEEPING / RECORD RETENTION

1. THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS SHALL BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OWNER / OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

2. ALL OWNER(S) MUST KEEP THE SWPPP ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION (NOT). THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.

3. THE FOLLOWING IS A LIST OF RECORDS THAT SHALL BE KEPT AT THE PROJECT SITE AVAILABLE FOR INSPECTORS TO REVIEW:

- COPY OF THE SWPPP, WITH ANY MODIFICATIONS
- INSPECTION AND MAINTENANCE RECORDS
- PERMANENT OPERATION AND MAINTENANCE AGREEMENTS
- CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS
- ANY OTHER PERMITS REQUIRED FOR THE PROJECT
- RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION
- ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
- ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS.

## LOG OF CHANGES TO THE SWPPP / AMENDMENTS

1. THE OWNER / OPERATOR(S) MUST AMEND THE SWPPP AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, SUCH AS ADDITIONAL OR MODIFIED BMPs, DESIGNED TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS AS DETAILED IN THE PERMIT.

## FINAL STABILIZATION

1. THE OWNER / OPERATOR(S) MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION AS DEFINED IN THE PERMIT.

## TERMINATION OF COVERAGE

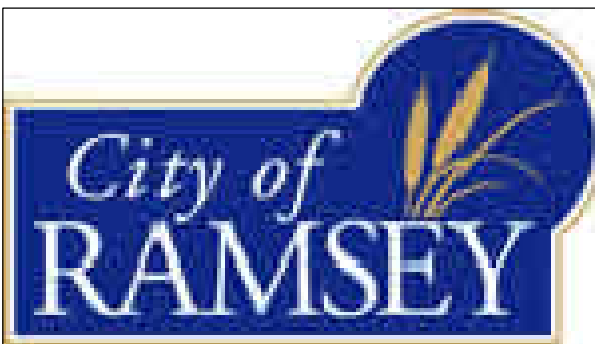
1. OWNER / OPERATOR(S) WISHING TO TERMINATE COVERAGE UNDER THIS PERMIT MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. COMPLIANCE WITH THIS PERMIT IS REQUIRED UNTIL A NOT IS SUBMITTED. REFER TO THE PERMIT FOR DETAILS.

## DEVELOPER

## MEADOWCREEK BUILDERS

10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL: (612) 867-6833

## MUNICIPALITY



## PROJECT

# HARVEST ESTATES 2ND ADDITION RAMSEY, MINNESOTA

## ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

## CERTIFICATION

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer. (Professional Engineer, LLC, official seal is located at the bottom of this page.)

Signature shown in red ink is a reproduction of original. Wet signed copy of this plan on file with the Minnesota Department of Transportation, LLC, office and is available upon request.

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEYOND INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

## CONSTRUCTION DOCUMENTS

03.20.2019

LANDFORM  
From Site to Finish

105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C304###.DWG

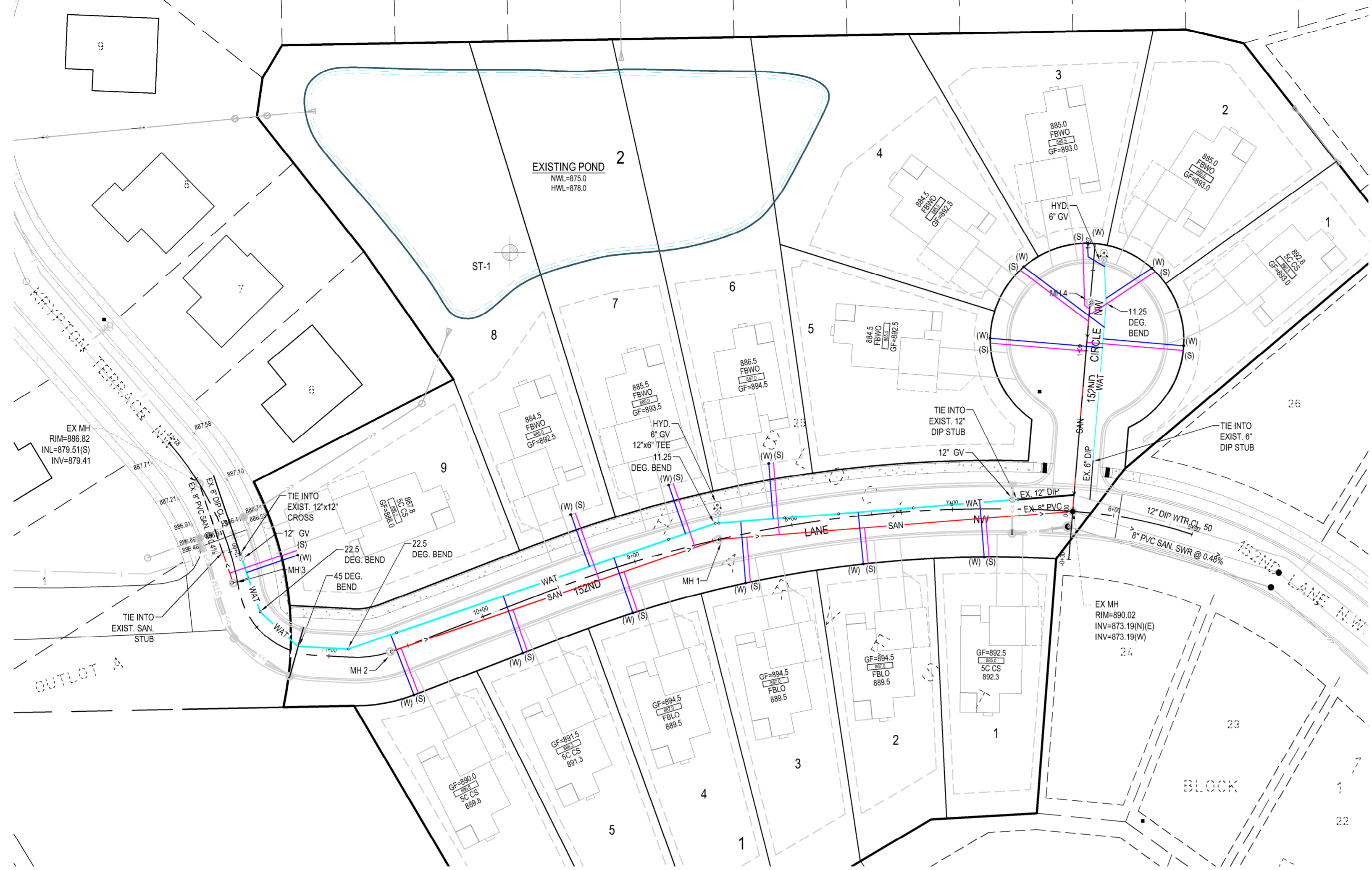
PROJECT NO. KRZ141029.MCB

## MN SWPPP NOTES

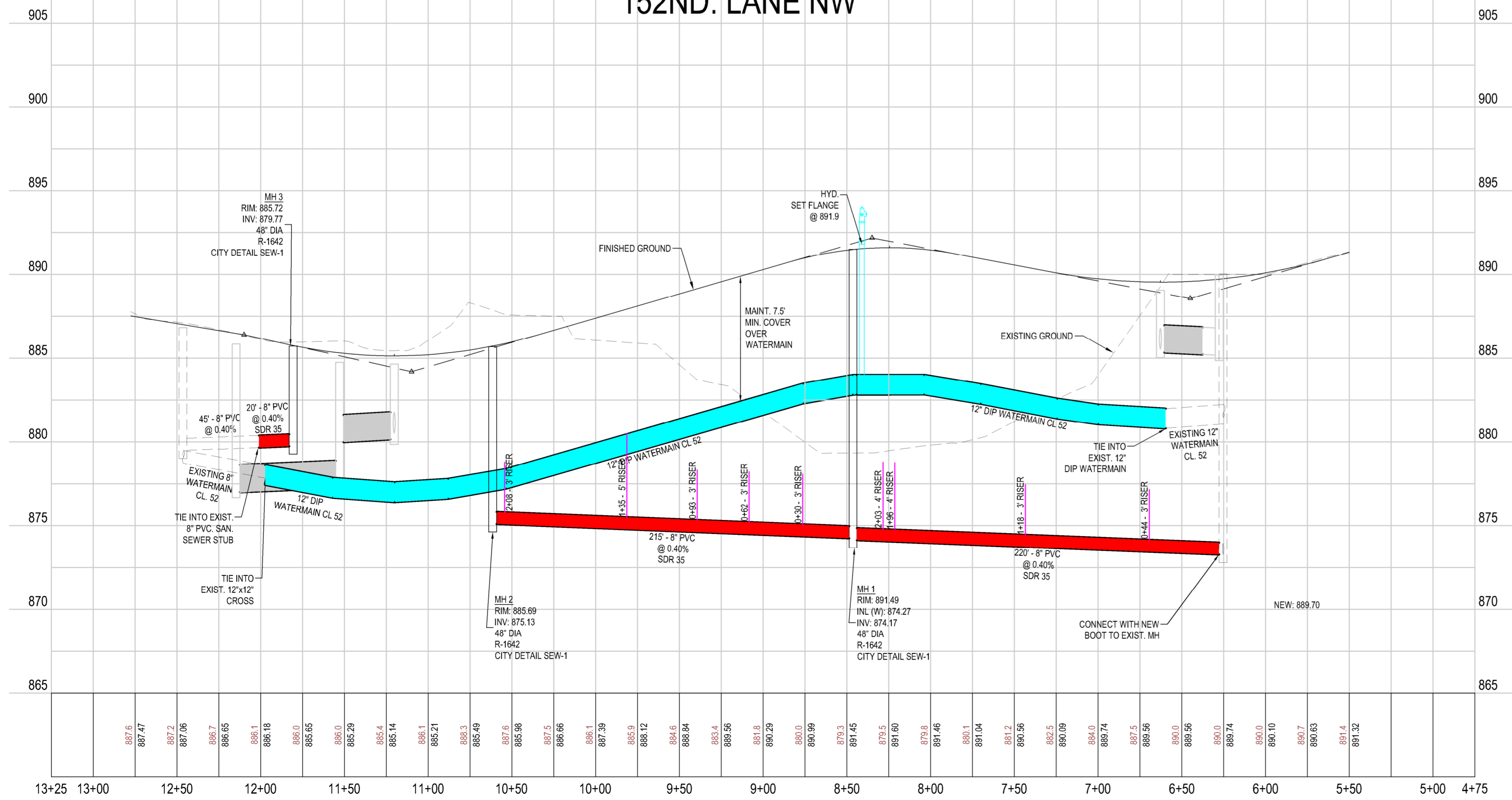
# C3.2

SHEET NO. 6/16

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152ND. LANE NW



GENERAL NOTES

- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM PROFESSIONAL SERVICES AT 612.252.9070.

UTILITY NOTES

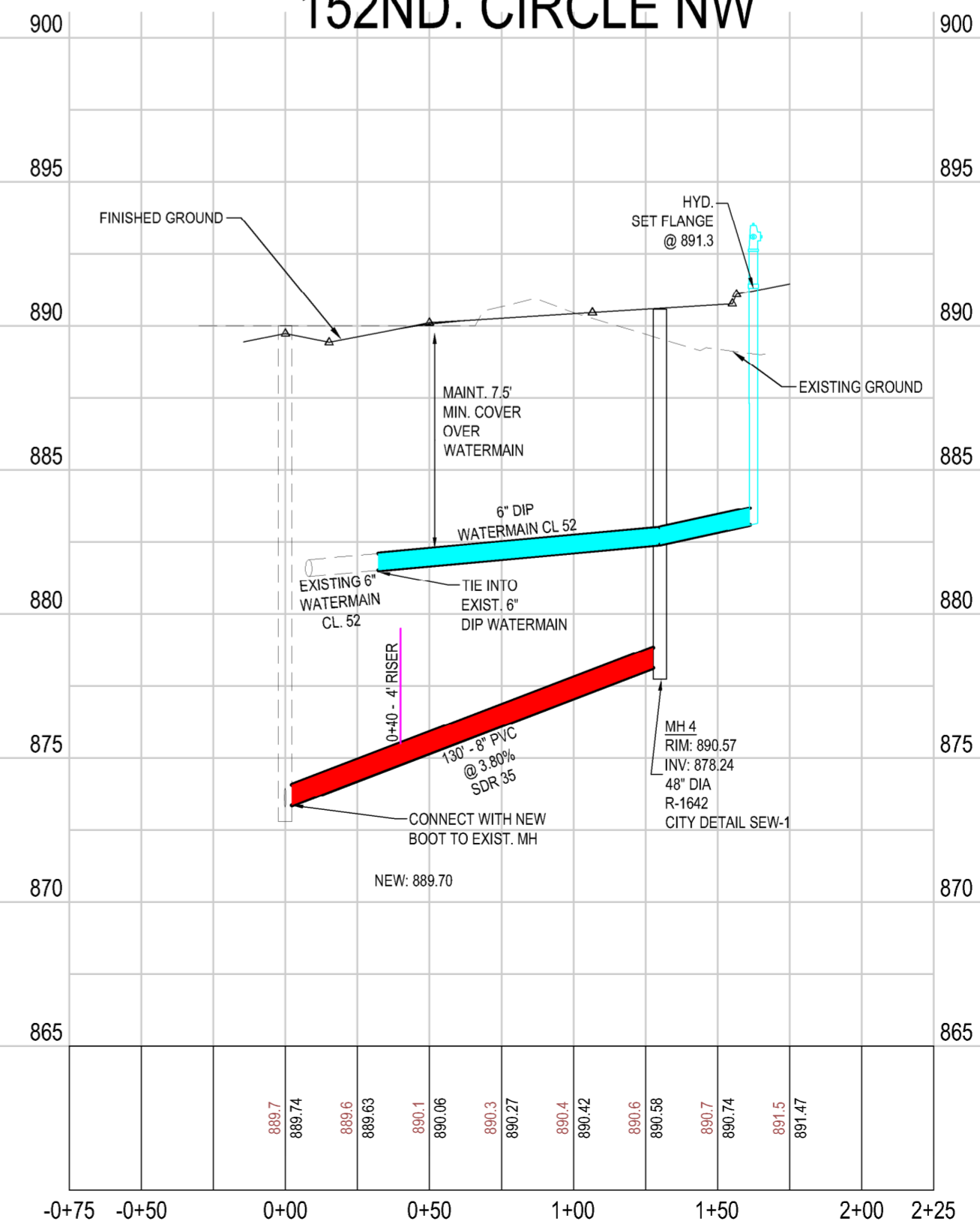
- PIPE MATERIALS  
WATERMAIN: DIP CLASS 52 AND CLASS 53 (ANSI A21.51/AWWA C151)  
COPPER TYPE K (ASTM B88)  
SANITARY SEWER: PVC SDR 35 (ASTM D3034, D2665, & F891)  
STORM SEWER: RCP 12'-18" CLASS 5 (ASTM C76)
- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
- CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL UTILITY POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF THERE IS ANY DISCREPANCY.
- CONTRACTOR TO POTHOLE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION OF NEW UTILITIES TO VERIFY DEPTHS OF EXISTING LINES. CONTACT ENGINEER IMMEDIATELY IF ANY CONFLICTS ARE DISCOVERED.
- PROVIDE MEANS AND MEASURES TO PROTECT ADJACENT PROPERTY FROM DAMAGE DURING UTILITY INSTALLATION.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR END OF END SECTION.
- INSTALL TRACER WIRE WITH ALL NON-CONDUCTIVE UTILITIES.
- CONNECT TO CITY UTILITIES IN ACCORDANCE WITH CITY OF RAMSEY STANDARDS.
- MAINTAIN 7.5 FEET OF COVER ON WATER.
- DEFLECT WATER TO MAINTAIN 18-INCH MINIMUM OUTSIDE SEPARATION AT SEWER CROSSINGS. CENTER PIPE LENGTHS TO PROVIDE GREATEST SEPARATION BETWEEN JOINTS.
- CONTACT THE CITY OF RAMSEY UTILITIES, AT 763.433.9881 FOR FLUSHING AND PRESSURE TEST INSPECTIONS.
- THE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PER MINNESOTA RULES, PART 4714.
- CATCH BASINS IN CURB AND GUTTER ARE SLUMPED 2 INCHES BELOW THE GUTTER GRADE.
- COORDINATE WITH PRIVATE UTILITIES TO PROVIDE ELECTRIC, NATURAL GAS, AND COMMUNICATIONS SERVICES TO BUILDING.
- PROVIDE CONDUITS FOR CABLE TELEVISION AND OTHER ELECTRONIC COMMUNICATION.
- ADJUST STRUCTURES TO FINAL GRADE WHERE DISTURBED. COMPLY WITH REQUIREMENTS OF UTILITY. MEET REQUIREMENTS FOR TRAFFIC LOADING IN PAVED AREAS.
- REFER TO C1.1 FOR NOTES REGARDING REMOVALS OF EXISTING UTILITIES AND STRUCTURES.

SANITARY SEWER AND WATER SERVICE CALCULATIONS

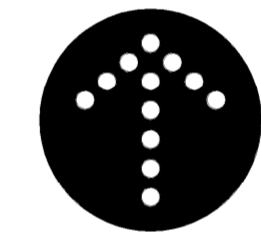
LOT#	BLOCK 1	(S) WYE	(S) INV	(W) STA	(W) ELEV.	L.F. OF 1" COPPER	LFE
1	1	0+54	879.9	6+81	889.9	34	885.0
2	1	1+29	880.9	7+59	891.1	32	887.0
3	1	2+03	882.0	8+36	891.9	38	887.0
4	1	0+62	880.4	9+11	890.4	36	887.0
5	1	1+35	878.3	9+85	888.2	37	888.3
6	1	2+08	876.2	10+59	886.2	40	885.8
1	2	1+05	880.7	1+08	890.7	50	890.3
2	2	1+23	880.5	1+54	891.0	35	885.5
3	2	1+26	880.6	1+66	891.2	20	885.5
4	2	1+18	879.6	1+47	890.9	62	884.5
5	2	1+00	879.5	1+03	890.6	70	884.5
6	2	1+82	882.1	8+08	892.1	34	887.0
7	2	0+15	880.3	8+67	891.6	32	885.0
8	2	0+78	879.9	9+28	889.9	34	885.0
9	2	0+59	880.8	11+88	886.4	34	885.3

NOTE: S. WYE STATIONS CALCULATED FROM DOWNSTREAM SAN. MH  
W. C.S. STATIONS CALCULATED FROM STREET CENTERLINE

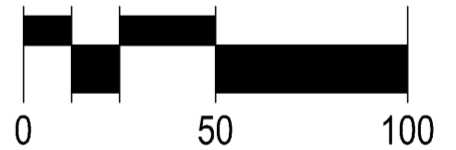
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DEVELOPER

MEADOWCREEK BUILDERS

10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL (612) 867-6533

MUNICIPALITY



PROJECT

HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

CERTIFICATION

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer in the State of Minnesota.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
Signature showing approval of original. Wet signed copy of this plan on file with Landform Professional Services, LLC office and is available upon request.  
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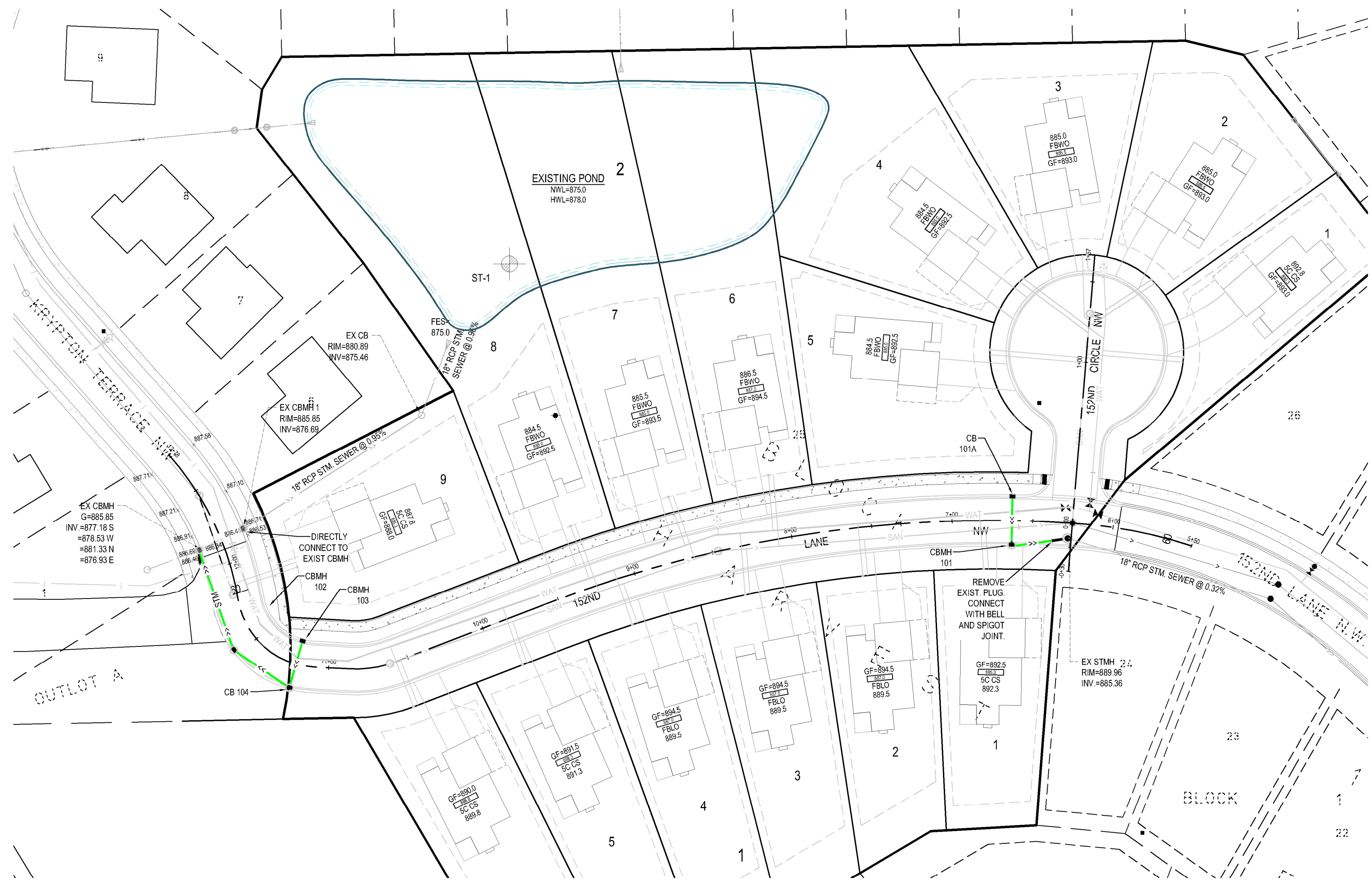
CONSTRUCTION DOCUMENTS  
03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C401KRZ141023MCB  
PROJECT NO. KRZ141023.MCB

SANITARY SEWER  
WATERMAIN  
**C4.1**



**GENERAL NOTES**

1. FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM PROFESSIONAL SERVICES AT 612.252.9070.

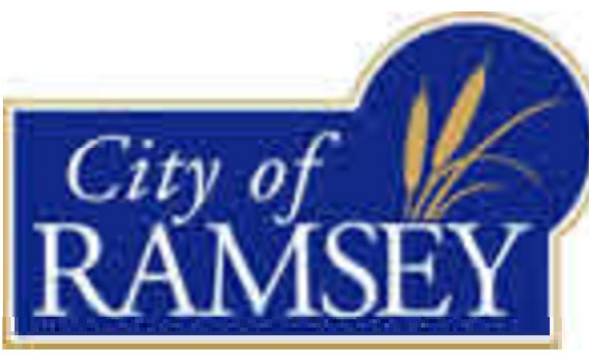
**UTILITY NOTES**

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 WATER SERVICE: COPPER TYPE K (ASTM B88)  
 SANITARY SEWER: PVC SDR 35 (ASTM D3034, D2685, & F891)  
 SAN. SEWER SERVICE: PVC SDR 35, SDR 26, SCHEDULE 40 (ASTM D1785, D3034, D2685, & F891)  
 STORM SEWER: PVC SCHEDULE 40 (ASTM D1785, D3034, D2685, & F891)  
 RCP 12"-18" CLASS 5 (ASTM C7)
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**DEVELOPER**

**MEADOWCREEK BUILDERS**  
 10122 EWING LANE  
 BROOKLYN PARK, MN 55443  
 TEL: (612) 867-6533

**MUNICIPALITY**



**PROJECT**

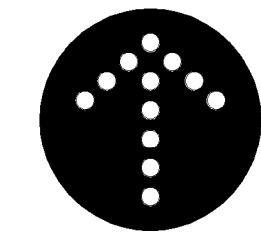
**HARVEST ESTATES  
 2ND ADDITION  
 RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

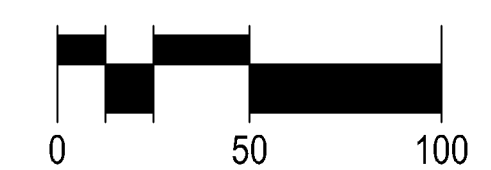
DATE	ISSUE / REVISION	REVIEW
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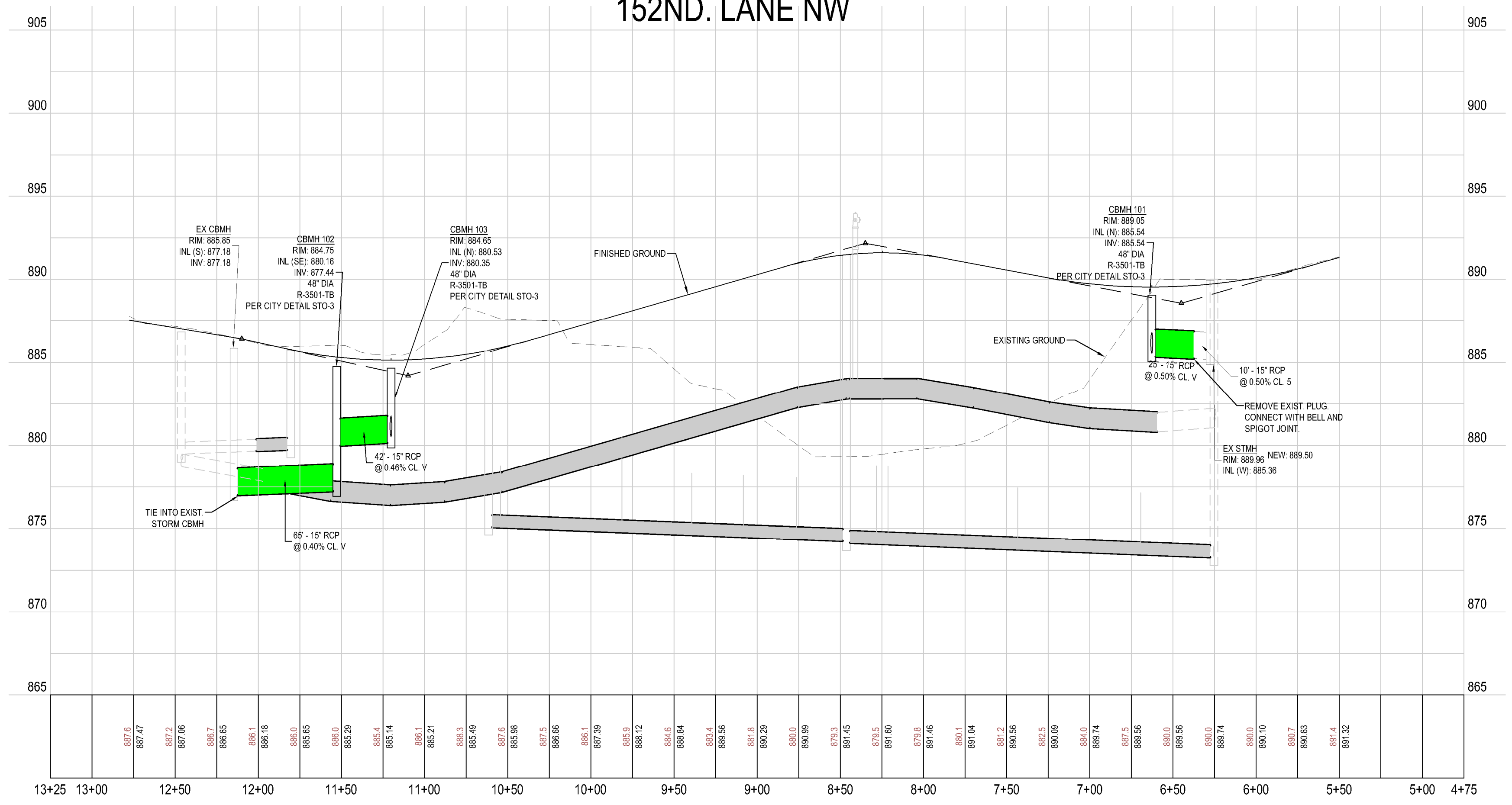
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 Call before you dig.**



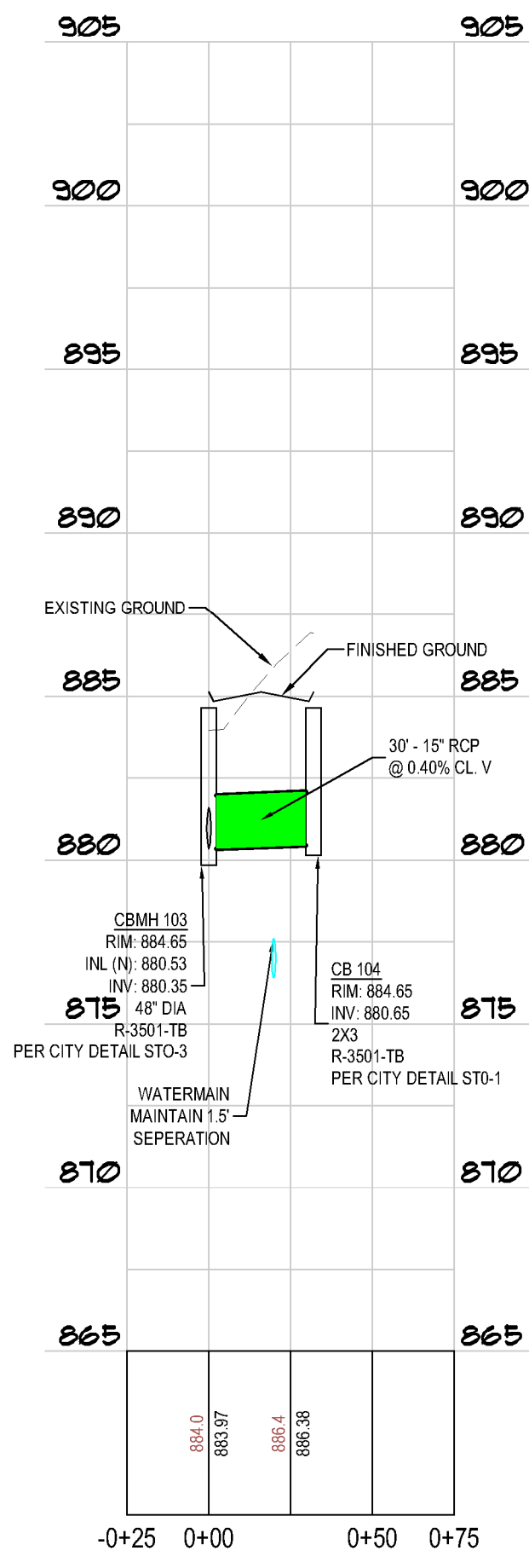
**NORTH**



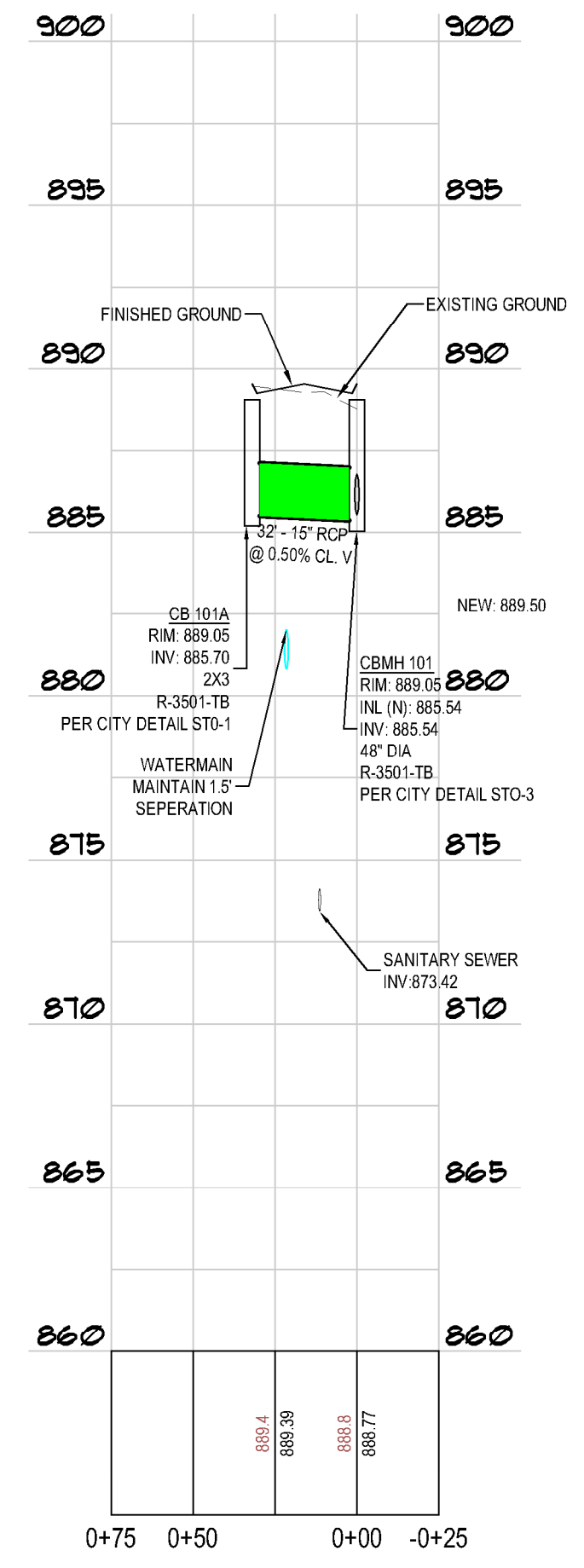
**152ND. LANE NW**



**CB 104-CBMH 103**



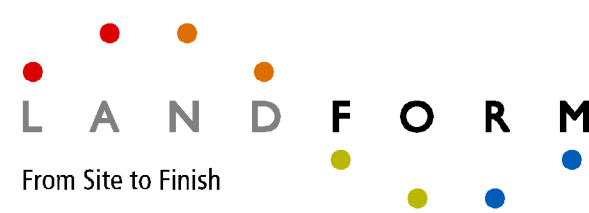
**CB 101A-CBMH 101**



**CERTIFICATION**

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer in the State of Minnesota.  
**PRELIMINARY NOT FOR CONSTRUCTION**  
 Signature shown in red ink is a reproduction of original. Web-based copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

**CONSTRUCTION DOCUMENTS**  
 03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

FILE NAME: C402KRZ141029MCB  
 PROJECT NO.: KRZ141029.MCB

**STORM SEWER**  
**C4.2**  
 SHEET NO. 8/16



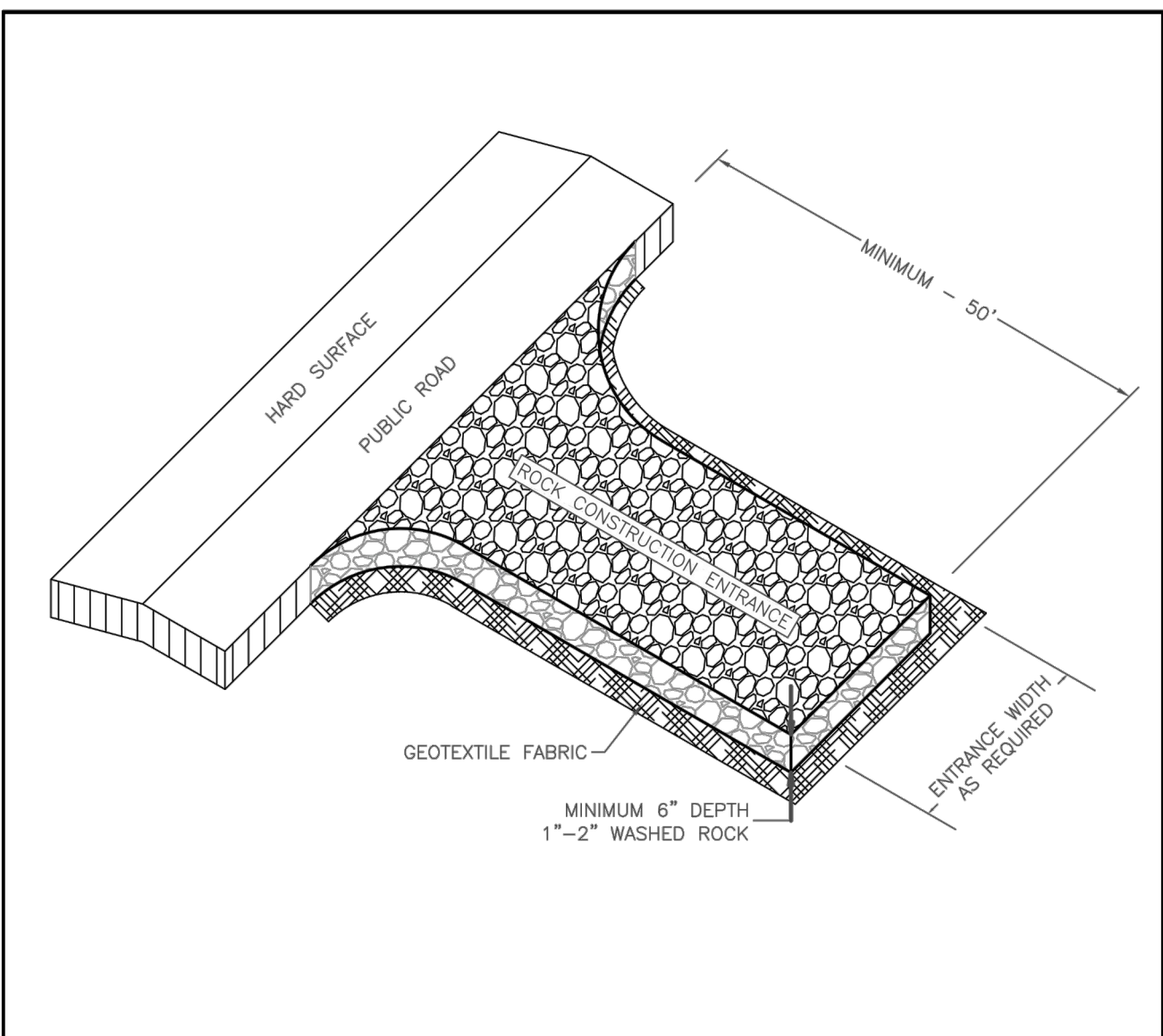


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01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

APPROVED: 11 - 2015		STANDARD DETAILS: WATER TIGHT CASTING
	CITY PLATE No.	SEW-2

WATER TIGHT CASTING

NO SCALE



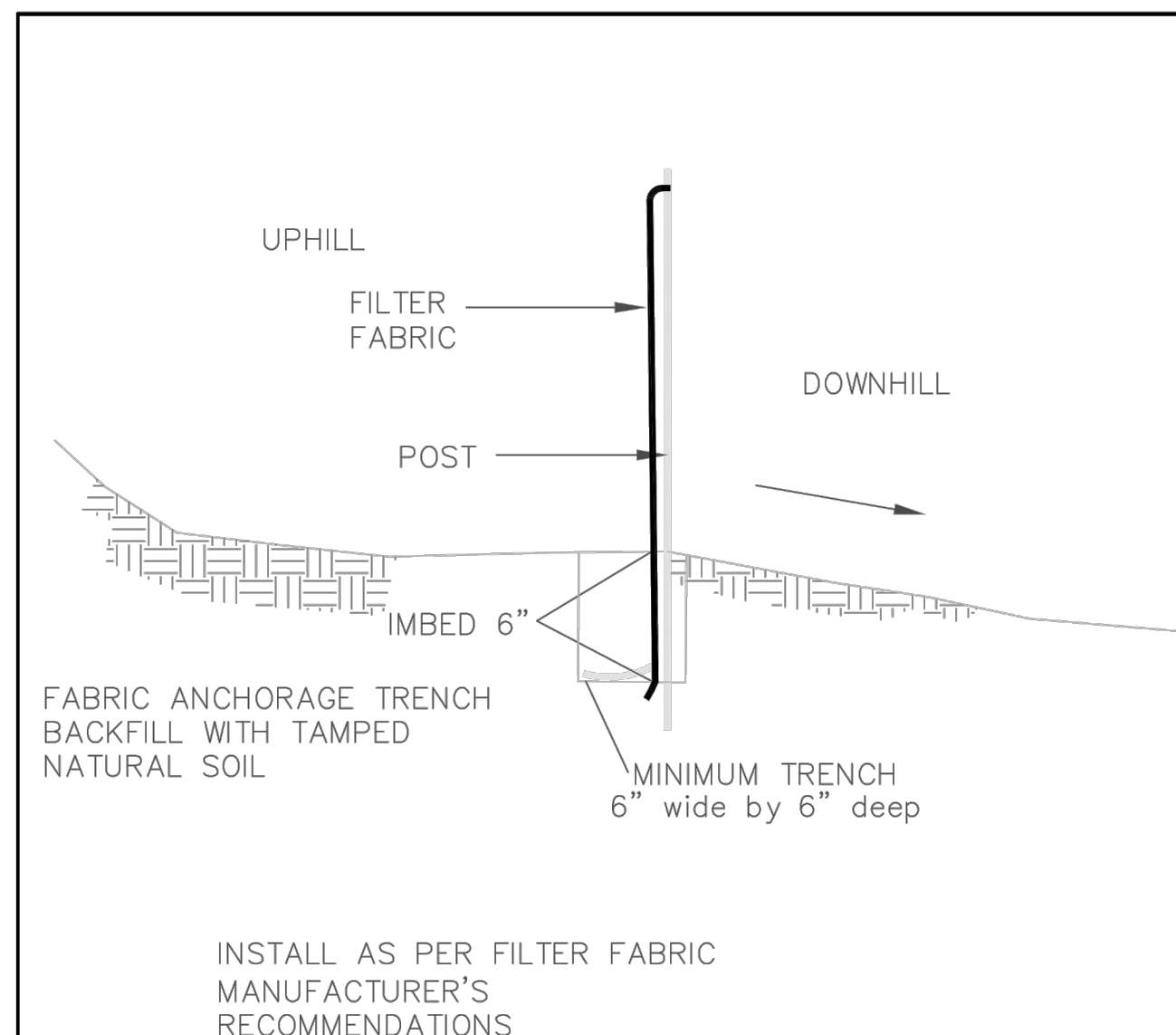
- NOTE:
1. MINIMUM CONSTRUCTION ENTRANCE WIDTH EQUAL TO PROPOSED ROADWAY WIDTH.
  2. WIDTH OF RADIUS AS REQUIRED TO ENSURE VEHICLES DO NOT TRACK ONTO PUBLIC ROAD.
  3. MAINTENANCE AS REQUIRED TO PREVENT TRACKING ONTO PUBLIC ROADS. THIS MAY REQUIRE TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ENTRANCE AS NEEDED.

NOT TO SCALE

APPROVED: 1 - 2016		STANDARD DETAILS: ROCK CONSTRUCTION ENTRANCE
	CITY PLATE No.	ERO-5

ROCK CONSTRUCTION ENTRANCE

NO SCALE



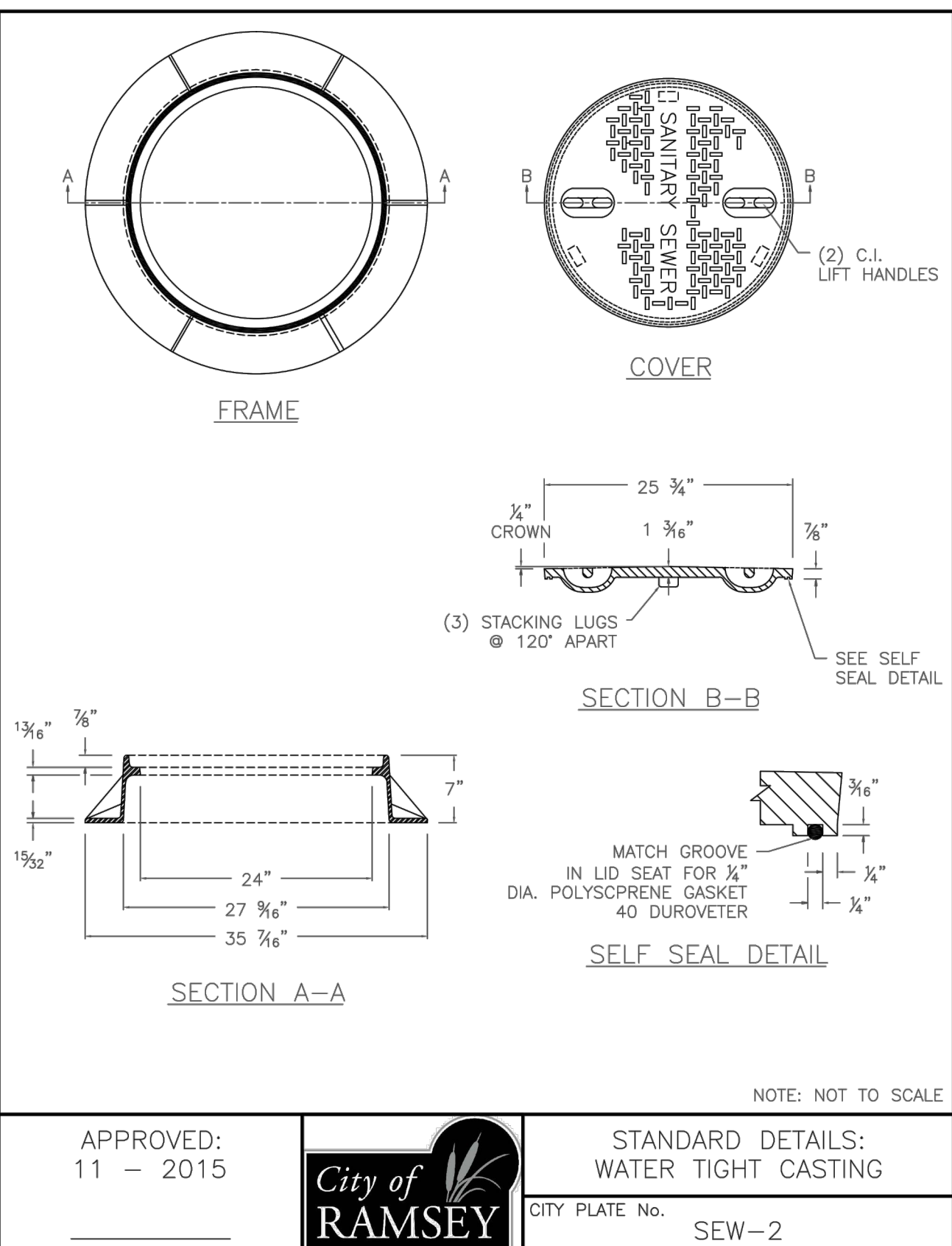
INSTALL AS PER FILTER FABRIC  
MANUFACTURER'S  
RECOMMENDATIONS

SILT FENCE DETAIL  
NO SCALE

APPROVED: 1 - 2016		STANDARD DETAILS: SILT FENCE
	CITY PLATE No.	ERO-1

INLET PROTECTION

NO SCALE

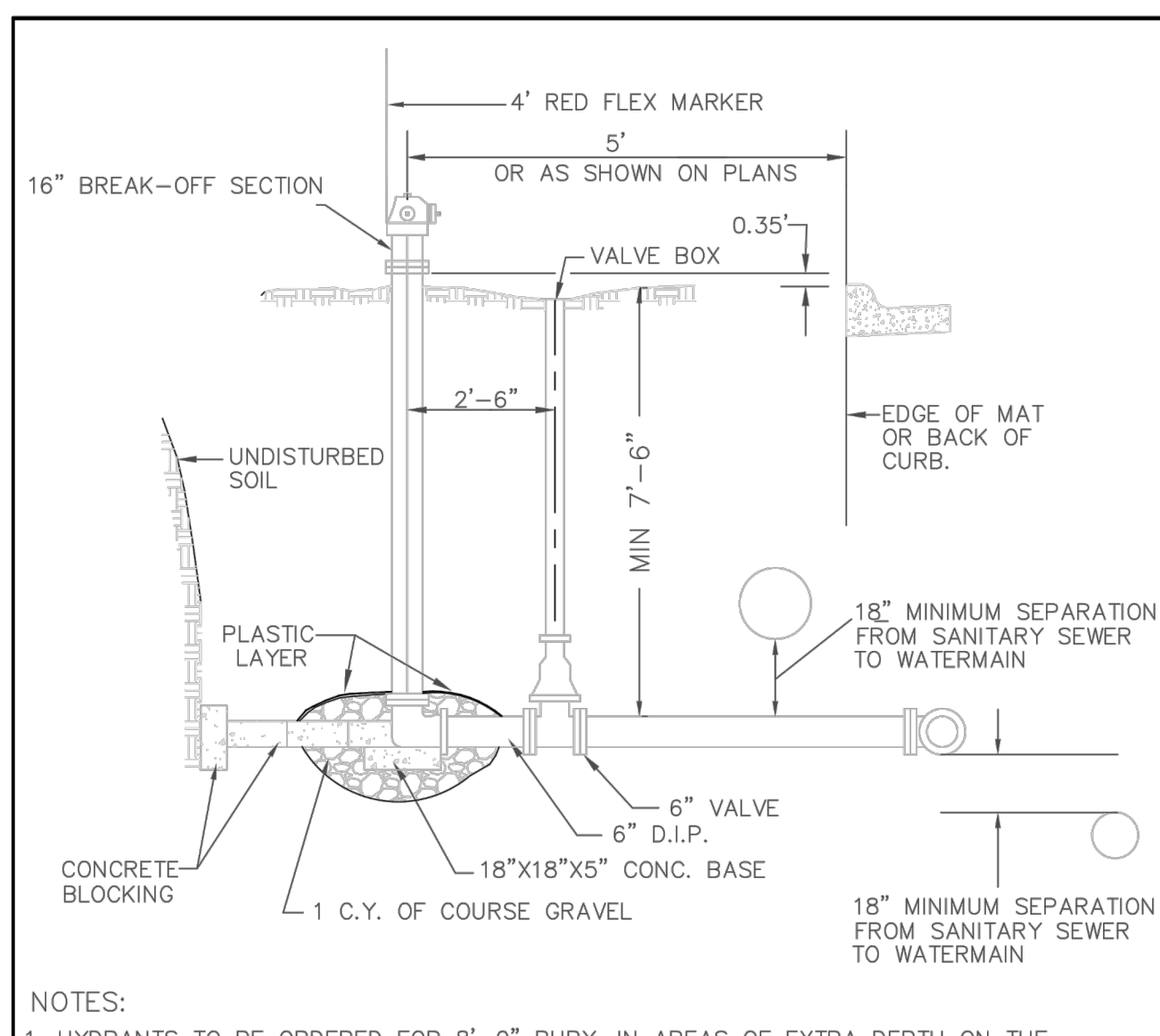


NOTE: NOT TO SCALE

APPROVED: 4 - 2016		STANDARD DETAILS: WATER SERVICE
	CITY PLATE No.	WAT-2

WATER SERVICE

NO SCALE

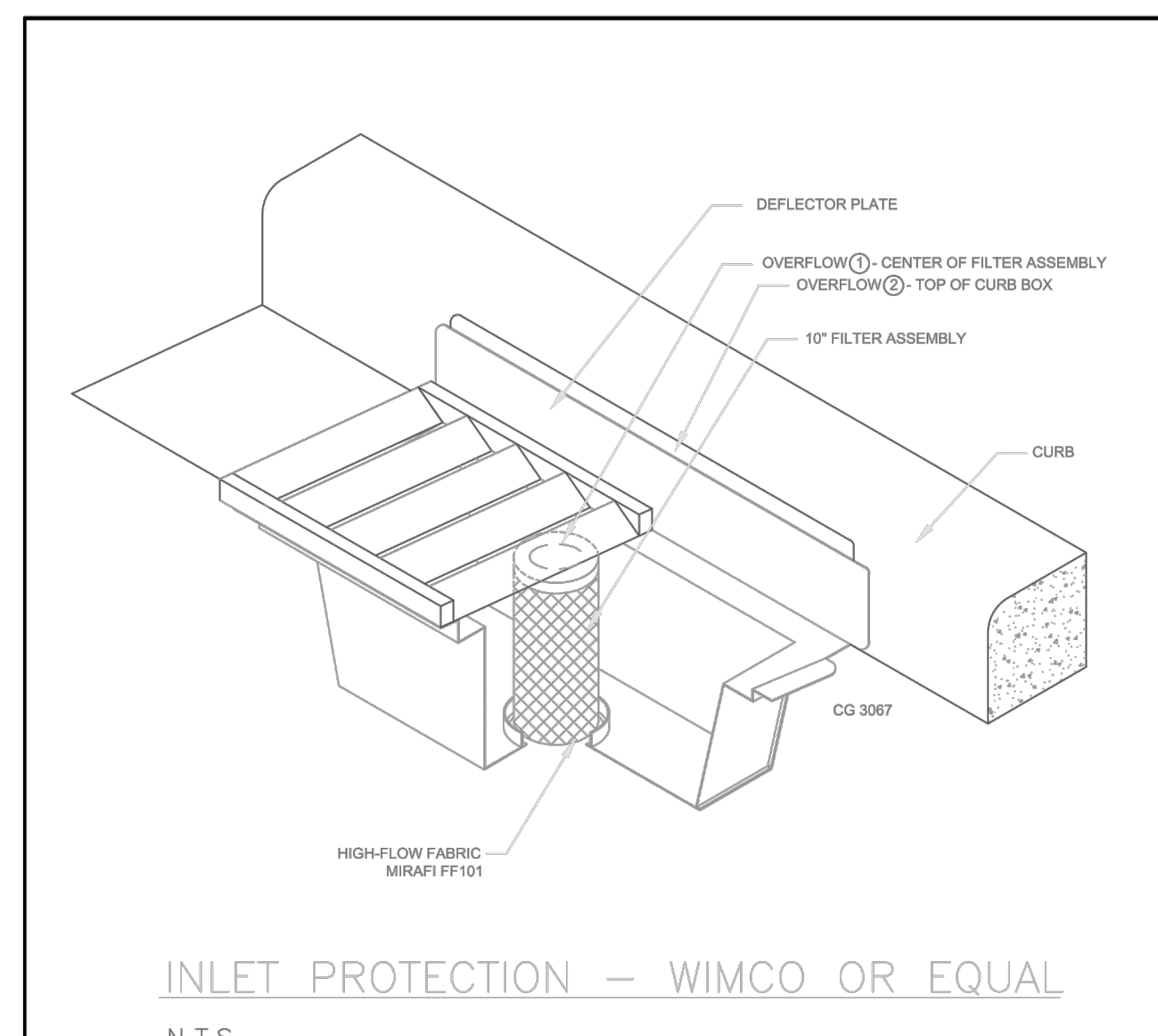


- NOTES:
1. HYDRANTS TO BE ORDERED FOR 8'-0" BURY. IN AREAS OF EXTRA DEPTH ON THE WATERMAIN, HYDRANTS EXTENSIONS MAY BE REQUIRED.
  2. HYDRANTS SHALL BE BLOCKED OR TIED TO THE TEE AT MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION. RESTRAINED JOINT PIPE AND RETAINING GLANDS MAY BE USED.
  3. TOP NUT OF HYDRANT 2.5' ABOVE TOP BACK OF CURB OR BITUMINOUS SURFACE.
  4. HYDRANTS BURIED BELOW WATER TABLE, DRAIN HOLES NEED TO BE PLUGGED AND HYDRANT MARKED BY PAINTING 5" CAP YELLOW.
  5. BRUSH PAINT ALL HYDRANTS AFTER INSTALLATION IS COMPLETE.

NO SCALE

APPROVED: 4 - 2016		STANDARD DETAILS: HYDRANT
	CITY PLATE No.	WAT-1

HYDRANT



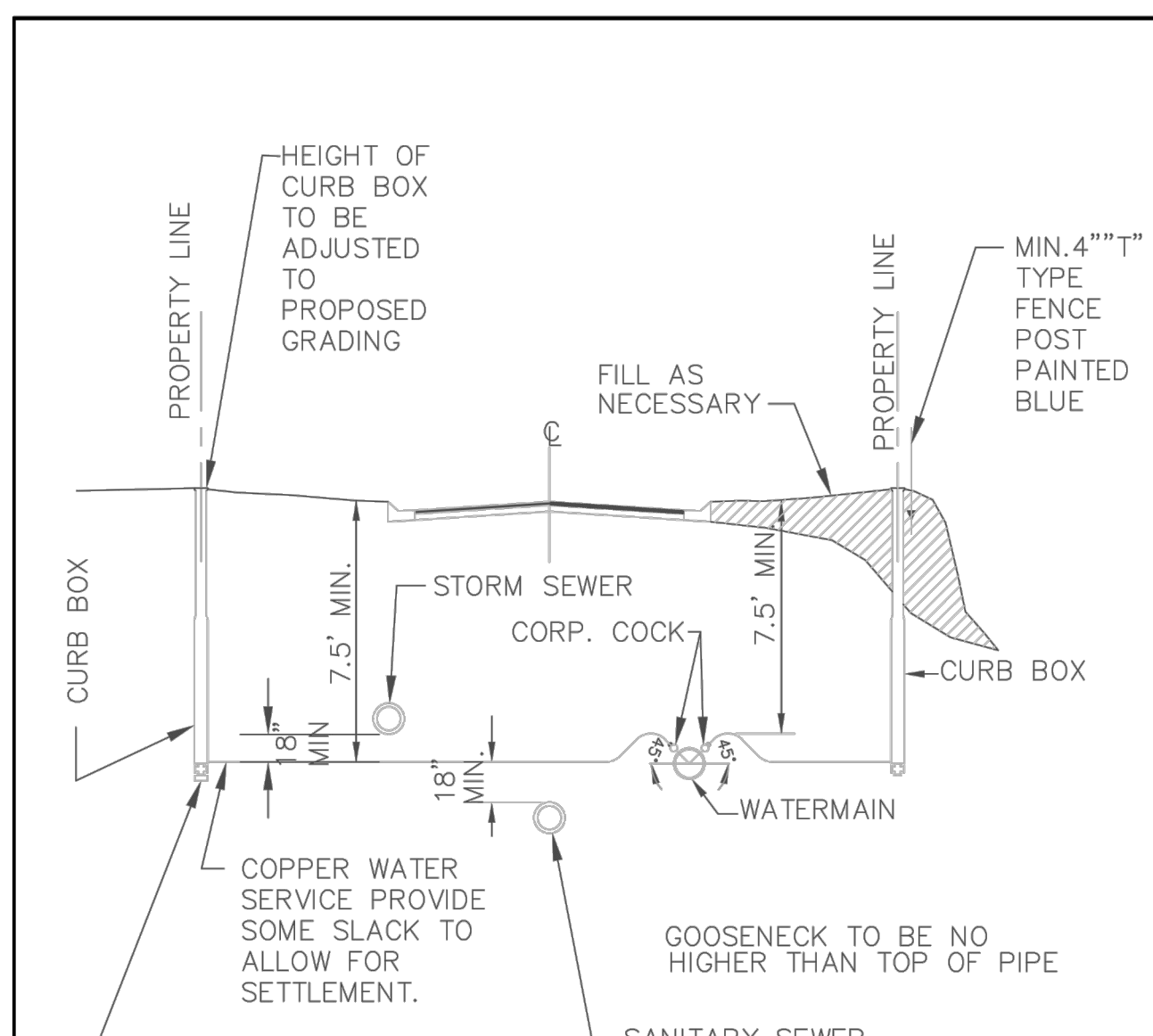
INLET PROTECTION - WIMCO OR EQUAL  
N.T.S.

NOTE:  
THIS INLET PROTECTION SHALL BE USED IMMEDIATELY FOLLOWING CURB & GUTTER CONSTRUCTION. INLET PROTECTION SHALL REMAIN INSTALLED AND MAINTAINED UNTIL ALL HOME CONSTRUCTION IS COMPLETE.

APPROVED: 1 - 2016		STANDARD DETAILS: INLET PROTECTION
	CITY PLATE No.	ERO-2

SILT FENCE

NO SCALE



WATER SERVICE

NTS

APPROVED: 11 - 2015		STANDARD DETAILS: WATER TIGHT CASTING
	CITY PLATE No.	SEW-2

WATER TIGHT CASTING

NO SCALE

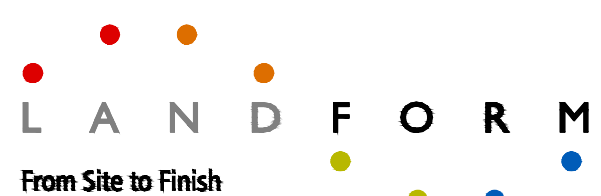
I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer resident in the State of Minnesota.

**PRELIMINARY NOT FOR CONSTRUCTION**

Signature shown on this plan on file with Minnesota Professional Services, LLC office and is available upon request.

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEYOND INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

CONSTRUCTION DOCUMENTS  
03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C701KRZ141029MCB

PROJECT NO. KRZ141029 MCB

CIVIL CONSTRUCTION  
DETAILS

C1.1



DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer in the State of Minnesota.  
 Signature shown in blue ink. A reproduction of original. Wet signed copy of this plan on file with the Minnesota Professional Services, LLC office and is available upon request.  
**PRELIMINARY NOT FOR CONSTRUCTION**



# TABLE A MODIFIED CLASS 5 SPECIFICATIONS

% PASSING

1"	100
3/4"	90 - 100
3/8"	50 - 80
No.4	35 - 70
No.10	20 - 60
No.40	10 - 35
No.200	5 - 10

NOTES:

1. THE AGGREGATE BASE CONSTRUCTION WILL BE ACCEPTED FOR PAYMENT IN ACCORDANCE WITH THE PROVISIONS IN TABLE A.
2. IF THE AGGREGATE BASE FAILS TO MEET THE REQUIREMENTS OF TABLE A THE MATERIAL CAN BE CORRECTED IN PLACE OR REMOVED AND REPLACED WITH MATERIAL THAT MEET THE REQUIREMENTS OF TABLE A.
3. IN THE EVENT THAT RECYCLED MATERIAL IS USE IT MUST MEET MNDOT REQUIREMENTS FOR RECYCLED BASE.

APPROVED:  
2 - 2003

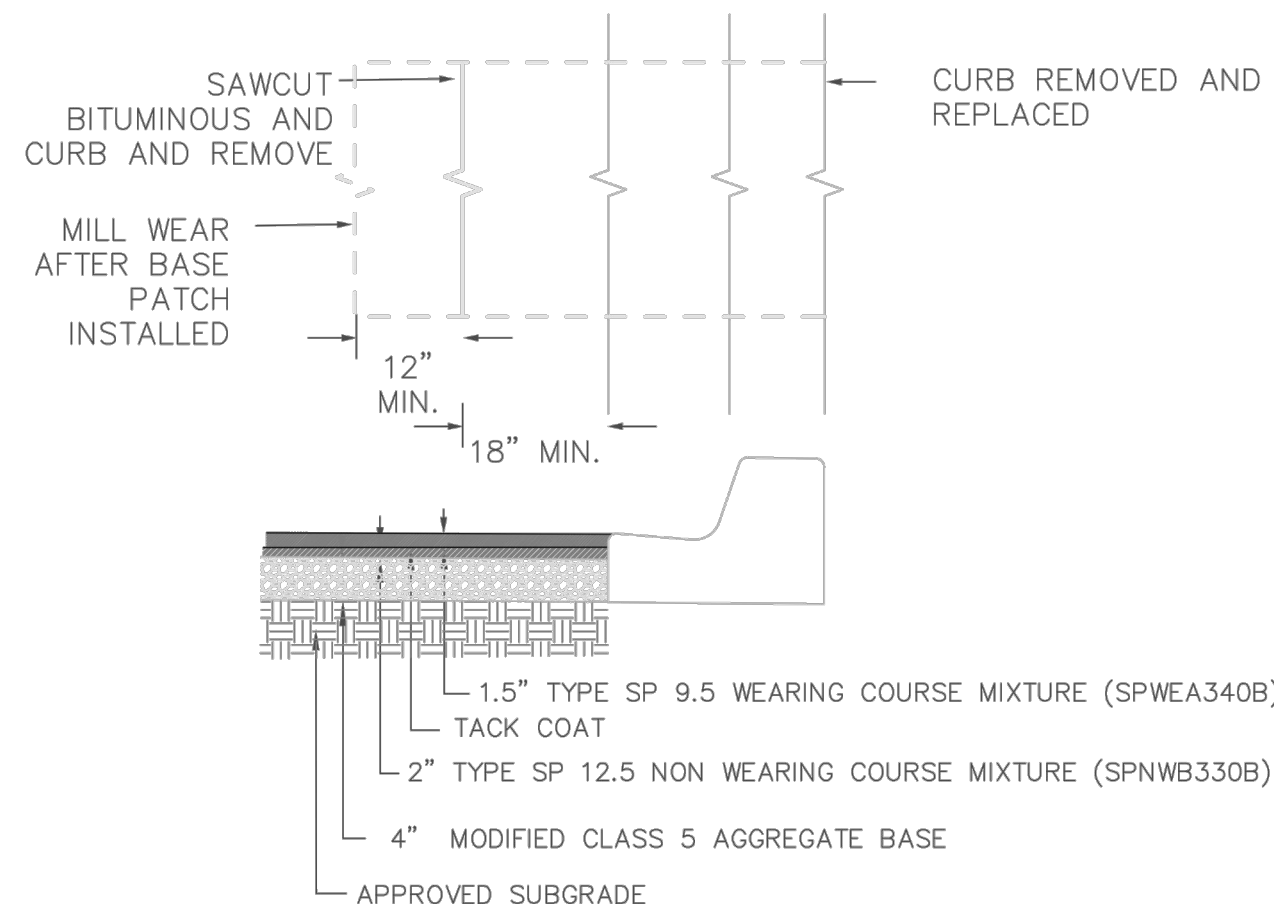


STANDARD DETAILS:  
MODIFIED CLASS 5  
SPECIFICATIONS  
CITY PLATE No. STR-26

5

MODIFIED CLASS 5 SPECIFICATIONS

NO SCALE



NOTES:

1. BITUMINOUS SHALL BE SAWCUT AND REMOVED AFTER CURB IS REPLACED.
2. CLASS 5 AND BITUMINOUS COURSES SHALL BE MECHANICALLY COMPACTED.
3. SEE CITY PLATE STR-26 FOR MODIFIED CLASS 5 SPECIFICATIONS.

APPROVED:  
6 - 2016

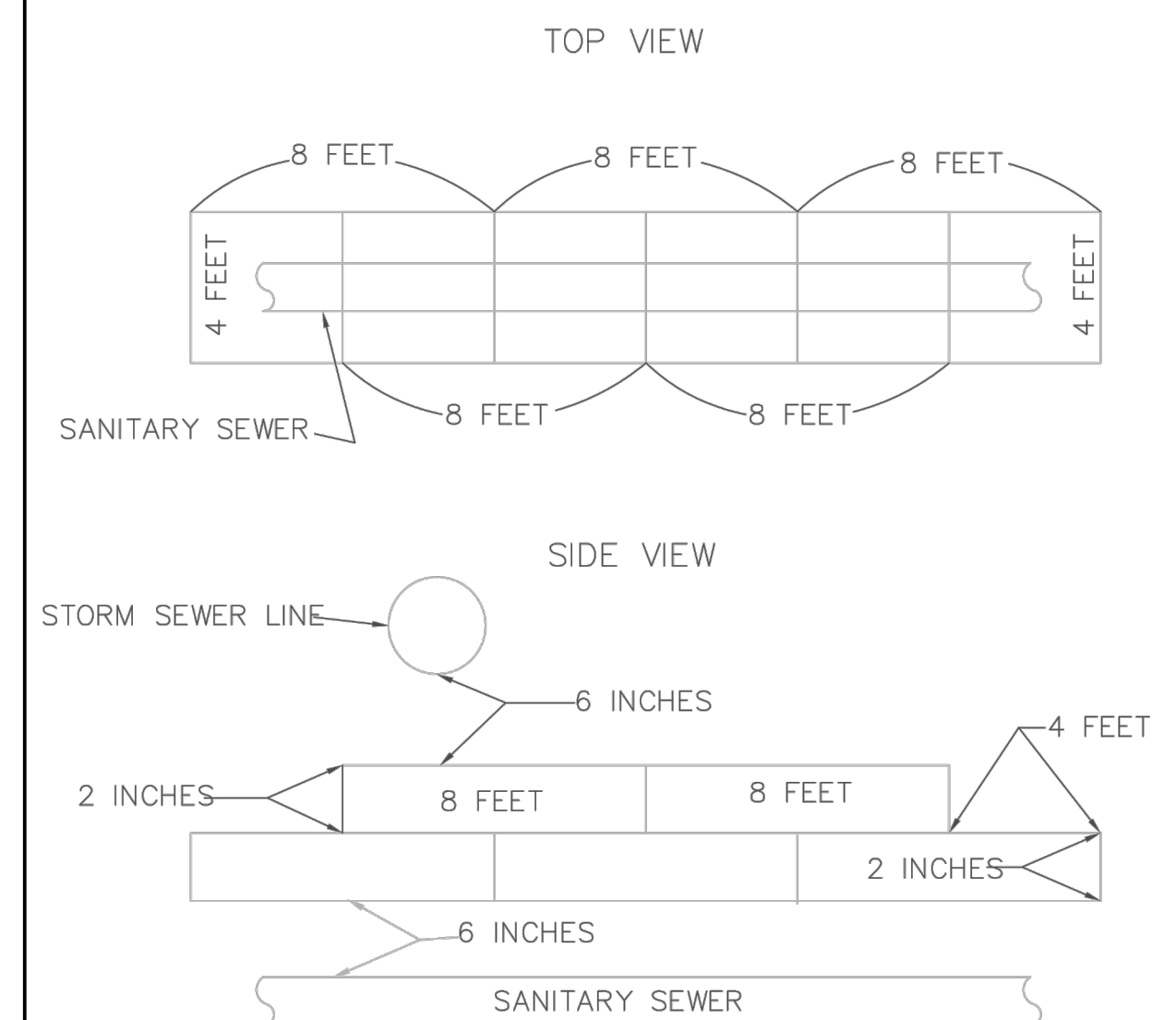


STANDARD DETAILS:  
STREET PATCHING STANDARDS  
CITY PLATE No. STR-25

3

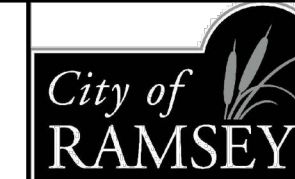
STREET PATCHING STANDARDS

NO SCALE



- NOTES: 1) SHEETS ARE 2 INCHES BY 4 FEET  
2) SURFACE PREPARATION SHALL BE SMOOTH AND ROCK FREE  
3) JOINTS WILL BE OVERLAPPED BY 4 FEET  
4) POLYSTYRENE INSULATION OR APPROVED EQUAL

APPROVED:  
9 - 2011

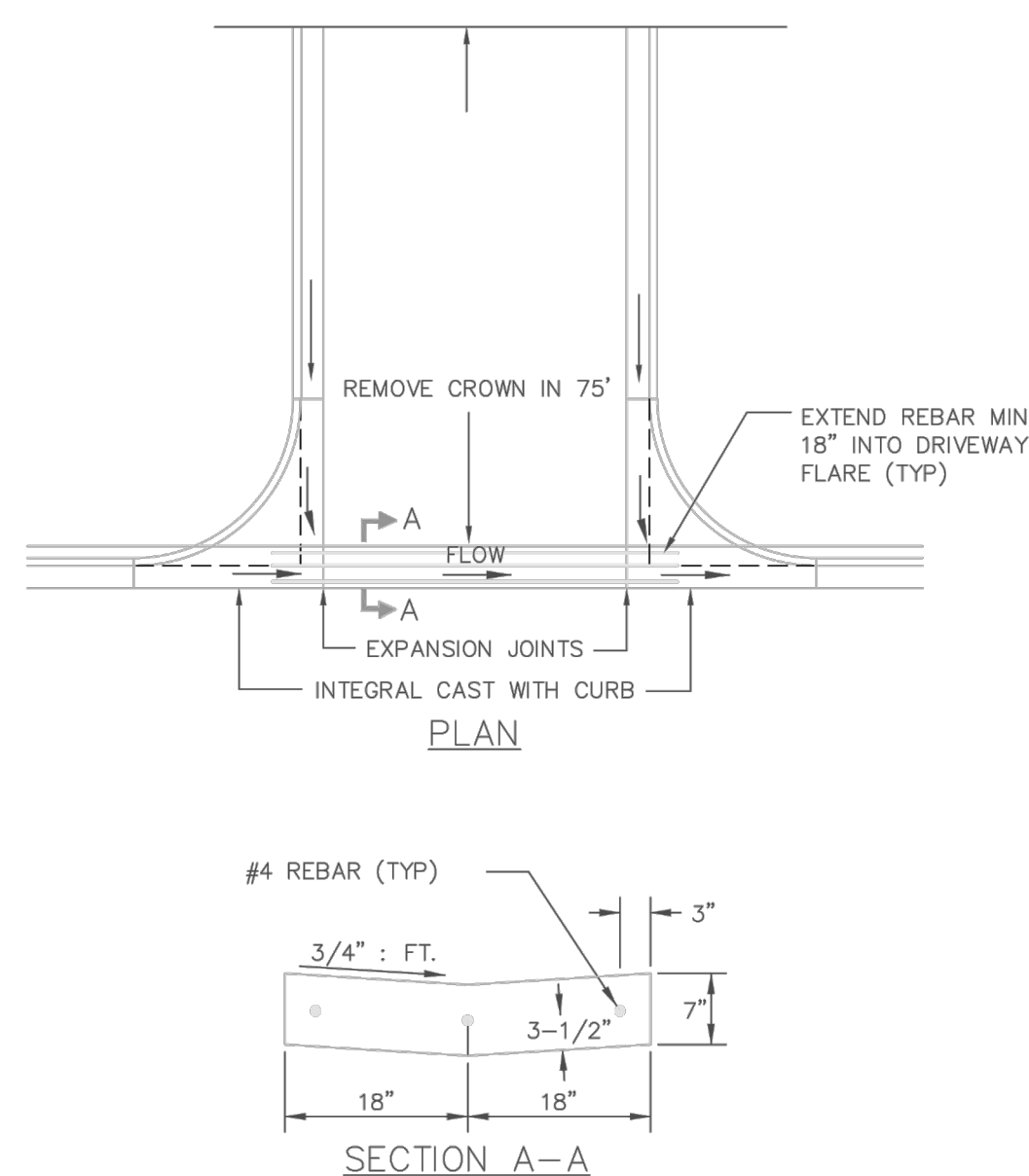


STANDARD DETAILS:  
SANITARY SEWER INSULATION  
CITY PLATE No. SEW-6

1

SANITARY SEWER INSULATION

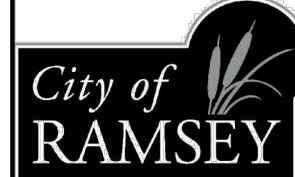
NO SCALE



NOTES:

1. WITH REMOVAL OF EXISTING CURB AT A STREET, MILL BITUMINOUS TO A DEPTH OF 1.5" AND A WIDTH OF 18" IN EXISTING STREET.
2. TO BE USED WHENEVER CROSS DRAINAGE IS < 2%

APPROVED:  
4 - 2007

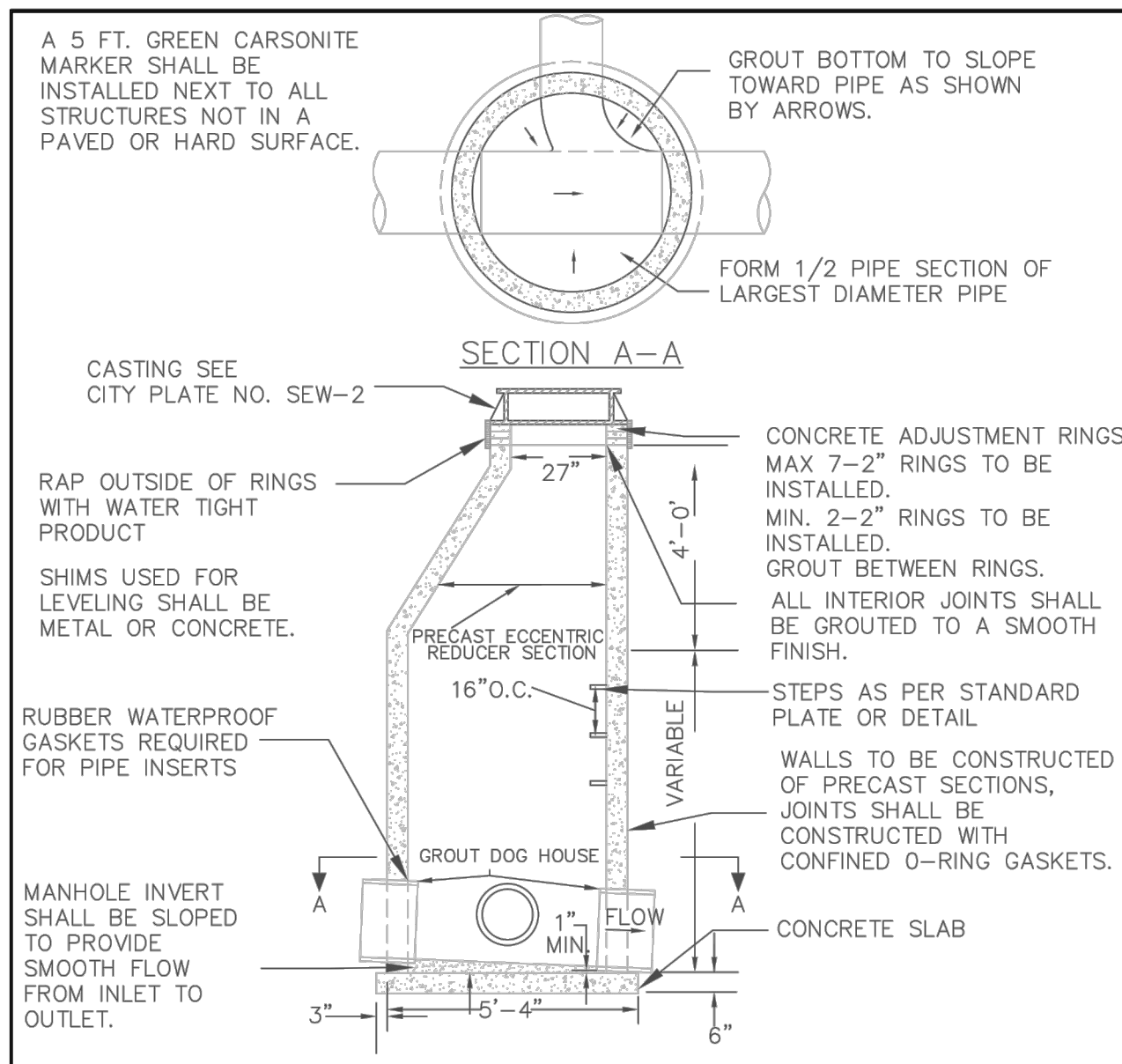


STANDARD DETAILS:  
CROSS GUTTER  
CITY PLATE No. STR-2

6

CROSS GUTTER

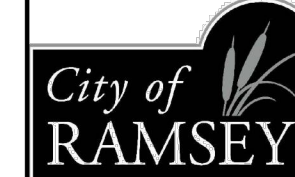
NO SCALE



NOTES:

1. A 10 GAGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL SEWER LINES.
2. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE.
3. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS.
4. 6" BASE FOR ALL MANHOLES LESS THAN 14 FT. OF DEPTH, INCREASE BASE THICKNESS 2" PER 6 FT. OF DEPTH BEYOND 14 FT.
5. 5" PRECAST BASE MAY BE USED FOR MANHOLES LESS THAN 14 FT. DEEP.
6. ALL INVERTS TO BE 0.10' ABOVE OUTLET.

APPROVED:  
1 - 2016

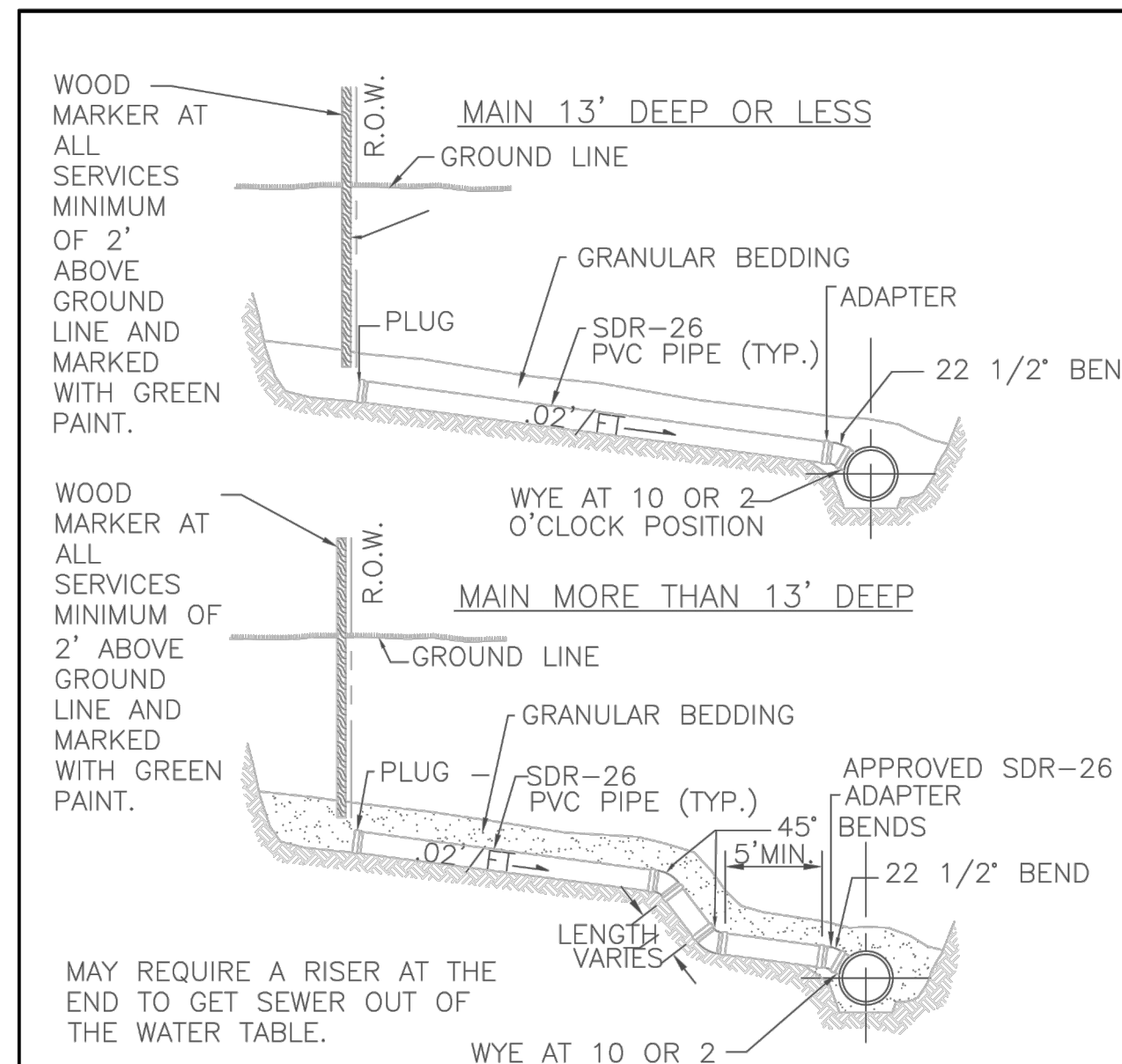


STANDARD DETAILS:  
SANITARY MANHOLE  
CITY PLATE No. SEW-1

4

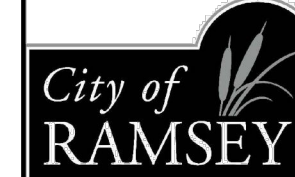
CURB AND GUTTER

NO SCALE



- NOTES: 1. 10 GAGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL SEWER LINES  
2. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE.  
3. TRACER WIRE ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS.

APPROVED:  
4 - 2016



STANDARD DETAILS:  
SANITARY SEWER SERVICE  
CITY PLATE No. SEW-3

2

SANITARY SEWER SERVICE

NO SCALE



DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

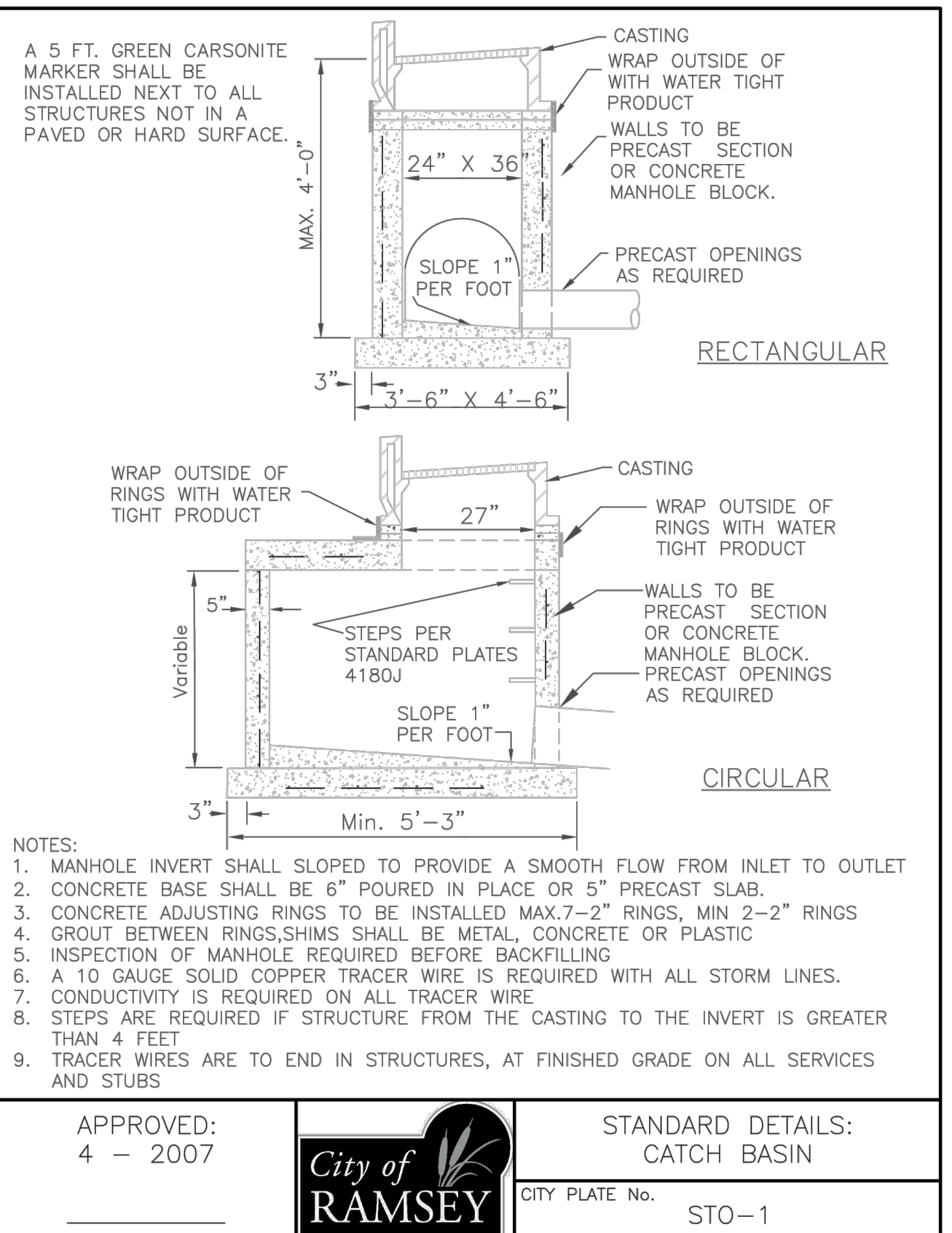
APPROVED:		STANDARD DETAILS:
1 - 2016		CATCH BASIN
	CITY PLATE No.	STO-1

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer resident in the State of Minnesota.

**PRELIMINARY NOT FOR CONSTRUCTION**

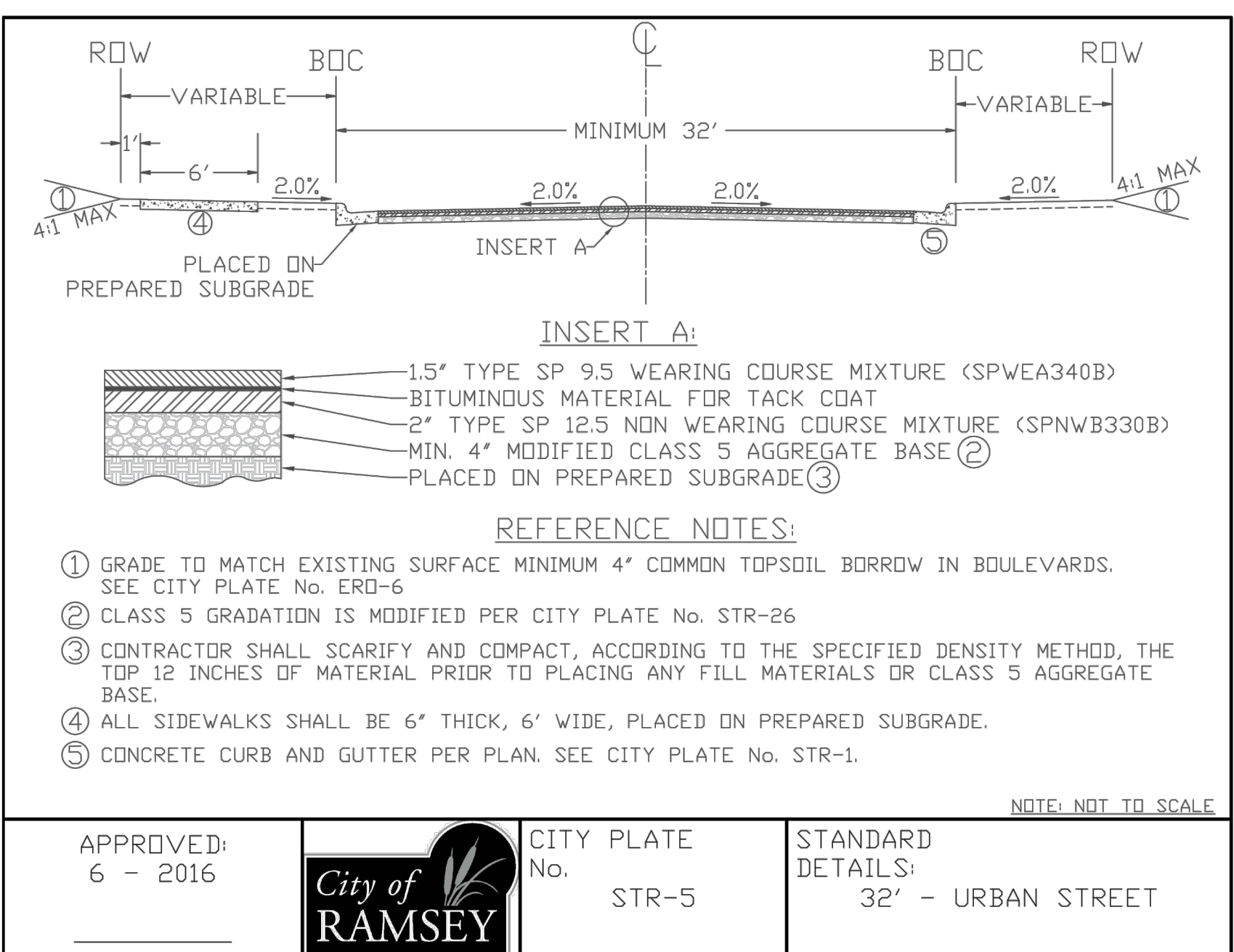
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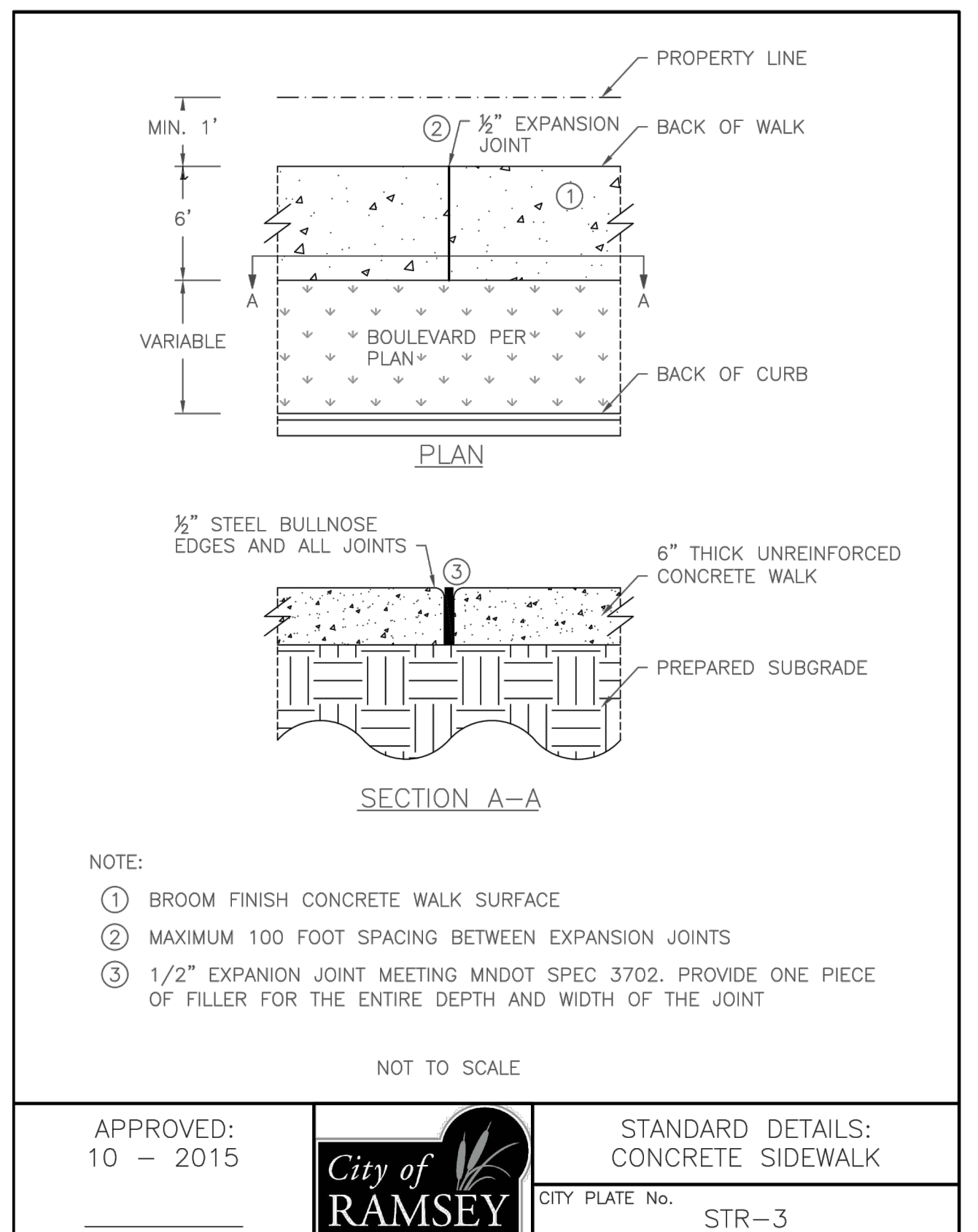
APPROVED:		STANDARD DETAILS:
4 - 2007		CATCH BASIN
	CITY PLATE No.	STO-1

1 CATCH BASIN NO SCALE



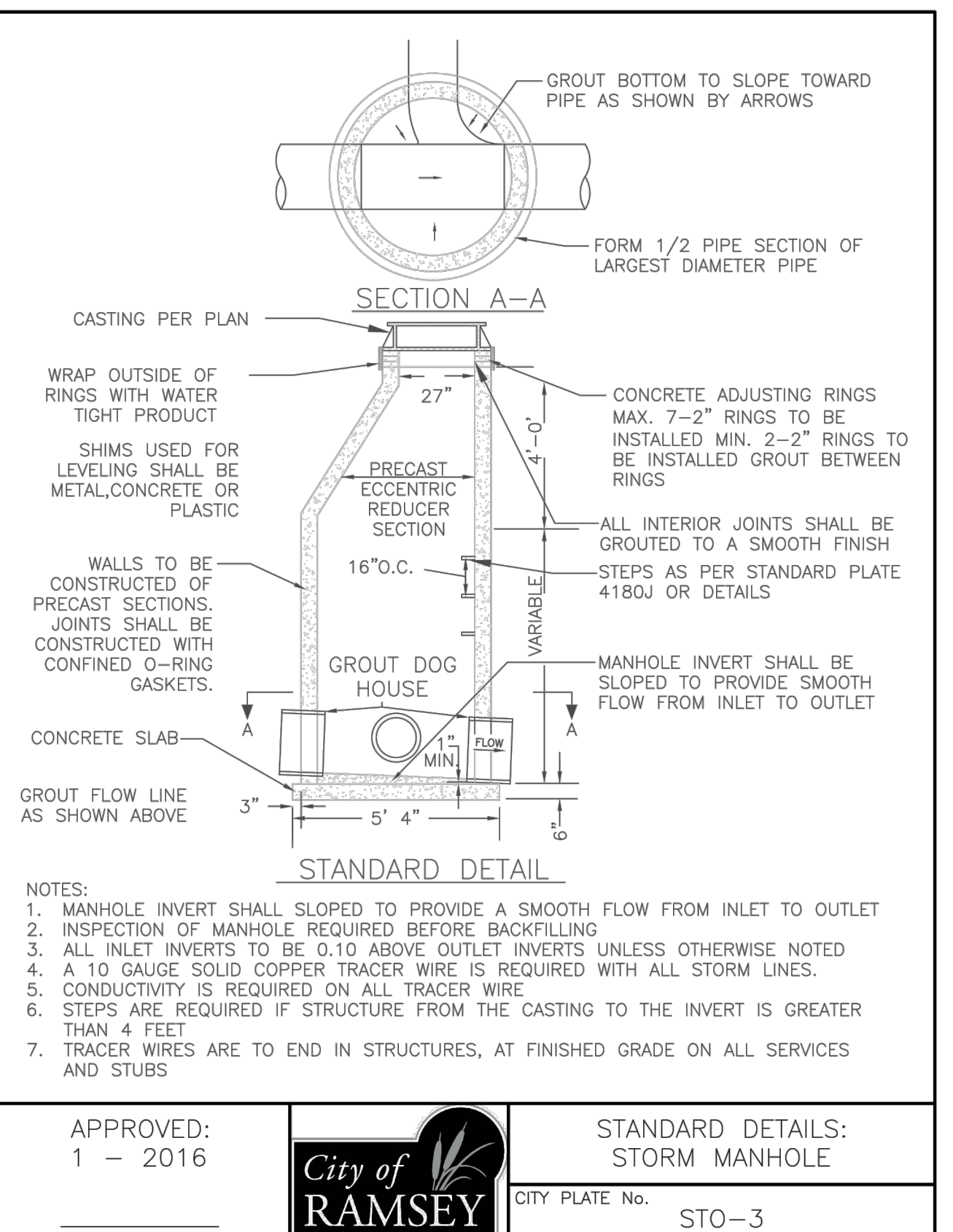
APPROVED:		CITY PLATE No.	STANDARD DETAILS:
6 - 2016		STR-5	32' - URBAN STREET

3 URBAN STREET NO SCALE



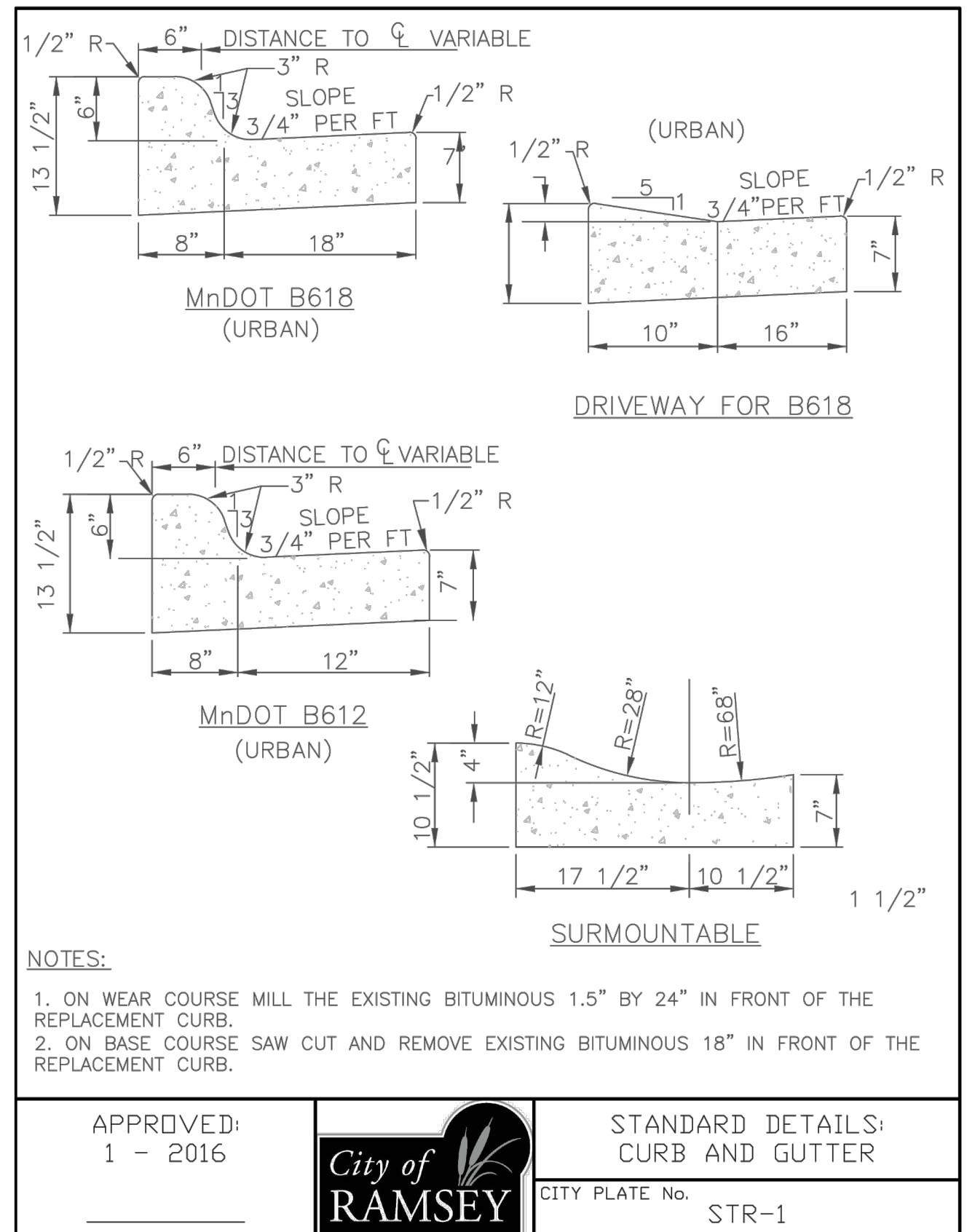
APPROVED:		STANDARD DETAILS:
10 - 2015		CONCRETE SIDEWALK
	CITY PLATE No.	STR-3

4 CONCRETE SIDEWALK NO SCALE



APPROVED:		STANDARD DETAILS:
1 - 2016		STORM MANHOLE
	CITY PLATE No.	STO-3

2 STORM MANHOLE NO SCALE



APPROVED:		STANDARD DETAILS:
1 - 2016		CURB AND GUTTER
	CITY PLATE No.	STR-1

5 CURB AND GUTTER NO SCALE







**LANDSCAPE NOTES**

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
- COORDINATE INSTALLATION WITH CONTRACTORS PERFORMING RELATED WORK.
- SEED MIXTURES SHALL BE AS DEFINED IN CURRENT MNDOT SEEDING MANUAL. NATIVE SEEDS SHALL BE OF MINNESOTA (OR AS SPECIFIED) ORIGIN AND CERTIFIED BY THE MINNESOTA CROP IMPROVEMENT ASSOCIATION (MICA). PROVIDE VERIFYING DOCUMENTATION TO THE OWNER 30 DAYS MINIMUM PRIOR TO INSTALLATION.
- UTILIZE SEED MIX 35-221, WHICH IS A NATIVE DRY PRAIRIE MIX FOR BASIN AREAS.
- PLANT MATERIAL SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE OF HARDY STOCK, FREE FROM DISEASE, INFESTATION, DAMAGE, AND DISFIGURATION. FOR DISCREPANCY BETWEEN THE NUMBER OF PLANTS ON THE SCHEDULE AND THE NUMBER SHOWN ON THE DRAWING, THE DRAWING SHALL GOVERN.
- PLANTING SOIL SHALL CONSIST OF 4 PARTS TOPSOIL TO 1 PART PEAT HUMUS, WITH 3 POUNDS OF COMMERCIAL FERTILIZER PER CUBIC YARD.
- SPREAD A MINIMUM OF 4 INCHES OF TOPSOIL AND SEED/SOD ALL TURF AREAS DISTURBED BY CONSTRUCTION.
- PLACE PLANTS ACCORDING TO LAYOUT WITH PROPER NOMINAL SPACING.
- SEE DETAILS FOR DEPTH OF PLANTING SOIL.
- INSTALL A 6-FOOT DIAMETER SHREDDED HARDWOOD MULCH DISH AROUND TREES NOT PLACED WITHIN A SHRUB OR PERENNIAL PLANTING BED. VINYL EDGING IS NOT REQUIRED.
- CONIFEROUS TREE SPECIES SHALL BE PLACED PER PLAN. VARIABLE HEIGHTS WITHIN EACH SPECIES (SEE PLANT SCHEDULE BELOW) SHALL BE RANDOMLY PLACED THROUGHOUT SITE. NO GROUPING SHALL CONTAIN CONIFERS OF THE SAME SINGLE HEIGHT.
- DEVELOPER SHALL DISCLOSE TO ANY POTENTIAL BUYER THAT DECIDUOUS TREES SHALL BE NO LESS THAN 2.5 INCHES IN CALIPER WHEN PLANTED AND CONIFEROUS TREES MUST BE 6 FEET IN HEIGHT IN ACCORDANCE WITH THE APPROVED REFORESTATION PLAN. DEVELOPER SHALL PROVIDE A COPY OF THE APPROVED LANDSCAPE PLAN TO ANY BUYER OF THESE LOTS.
- DEVELOPER IS REQUIRED TO INSTALL ALL TREE PLANTINGS AS A STAGE I IMPROVEMENT WITH THE EXCEPTION OF THE TWO (2) REQUIRED FRONT YARD TREES, WHICH MAY BE INSTALLED BY THE BUILDER.

**SOD / SEED**

- SEE EROSION CONTROL PLAN FOR SEEDING OF ALL OTHER DISTURBED AREAS.
- BOULEVARD AREAS, WHETHER THERE IS SIDEWALK PRESENT OR NOT, SHALL BE FINISHED WITH SOD. REMAINING PORTIONS OF LOTS CAN BE FINISHED WITH SOD, SEED, HYDROSEED, OR OTHER ACCEPTABLE GROUND COVER.

**EXISTING TREE INVENTORY**

Tree #	Species	DBH	Condition	Saved	Tree #	Species	DBH	Condition	Saved
787	Spruce, white	5.0	Good	X	817	Ash, green	8.0	Good	
788	Spruce, white	7.0	Good	X	818	Ash, green	10.0	Fair	
789	Spruce, white	5.0	Good	X	819	Ash, green	10.0	Good	
790	Oak, red	7.5	Good	X	821	Hackberry	9.0	Good	
792	Basswood	13.1	Fair	X	822	Pine, Scots	14.0	Good	
793	Basswood	9.0	Good	X	823	Pine, Scots	16.0	Good	
794	Basswood	8.0	Good	X	824	Pine, Scots	16.5	Good	
798	Maple, sugar	8.0	Good	X	825	Ash, green	12.0	Good	
803	Maple, Norway	8.5	Good		828	Ash, green	11.0	Good	
804	Maple, silver	28.0	Fair		829	Maple, silver	18.0	Fair	
808	Ash, green	11.5	Good		830	Birch, paper	15.0	Good	
809	Ash, green	11.5	Good		833	Elm, Siberian	9.5	Fair	
810	Ash, green	12.0	Good		834	Juniper	9.0	Good	
816	Ash, green	10.5	Good		835	Elm, Siberian	15.0	Fair	

**TREE PLANTING LIST**

DECIDUOUS TREES						
KEY	COUNT	COMMON NAME	SCIENTIFIC NAME	MATURE SIZE	SIZE/ROOT	SYMBOL
ACMO	1	NORTHWOOD MAPLE	ACER RUBRUM 'NORTHWOODS'	50'H x 35'W	2.5' B&B	
TIRE	3	REDMOND LINDEN	TILIA AMERICANA 'REDMOND'	50'H x 30'W	2.5' B&B	
BENA	7	RIVER BIRCH	BETULA NIGRA	50'H x 40'W	2.5' B&B	
CEOC	6	COMMON HACKBERRY	CELTIS OCCIDENTALIS	75'H x 50'W	2.5' B&B	
QUBI	3	SWAMP WHITE OAK	QUERCUS BICOLOR	60'H x 50'W	2.5' B&B	

CONIFEROUS TREES						
KEY	COUNT*	COMMON NAME	SCIENTIFIC NAME	MATURE SIZE	SIZE/ROOT	SYMBOL
PINI	7	AUSTRIAN PINE	PINUS NIGRA	50'H x 20'W	6' B&B	
PIGD	8	BLACK HILLS WHITE SPRUCE	PICEA GLAUCA DENSATA	45'H x 20'W	6' B&B	
ABBA	22	BALSAM FIR	ABIES BALSAMEA	60'H x 35'W	6' B&B	

**DEVELOPER**

**MEADOWCREEK BUILDERS**

10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL (612) 867-6533

**MUNICIPALITY**



**PROJECT**

**HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAN SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

**CERTIFICATION**

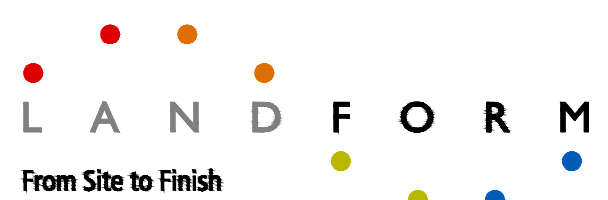
I hereby certify that the plan shown on this sheet was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Signature shown on this plan is a reproduction of original. Wet signed copy of this plan on file in the office of the Professional Services, LLC office and is available upon request.

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**CONSTRUCTION DOCUMENTS**  
03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME L201KRZ141029MCB

PROJECT NO. KRZ141029 MCB

**LANDSCAPE PLAN**

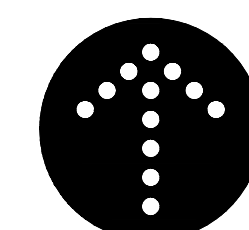
**L2.1**

SHEET NO. 15/16

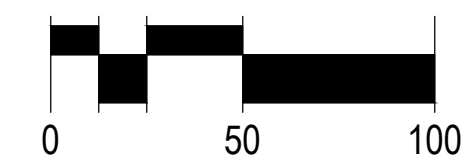
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Call before you dig.

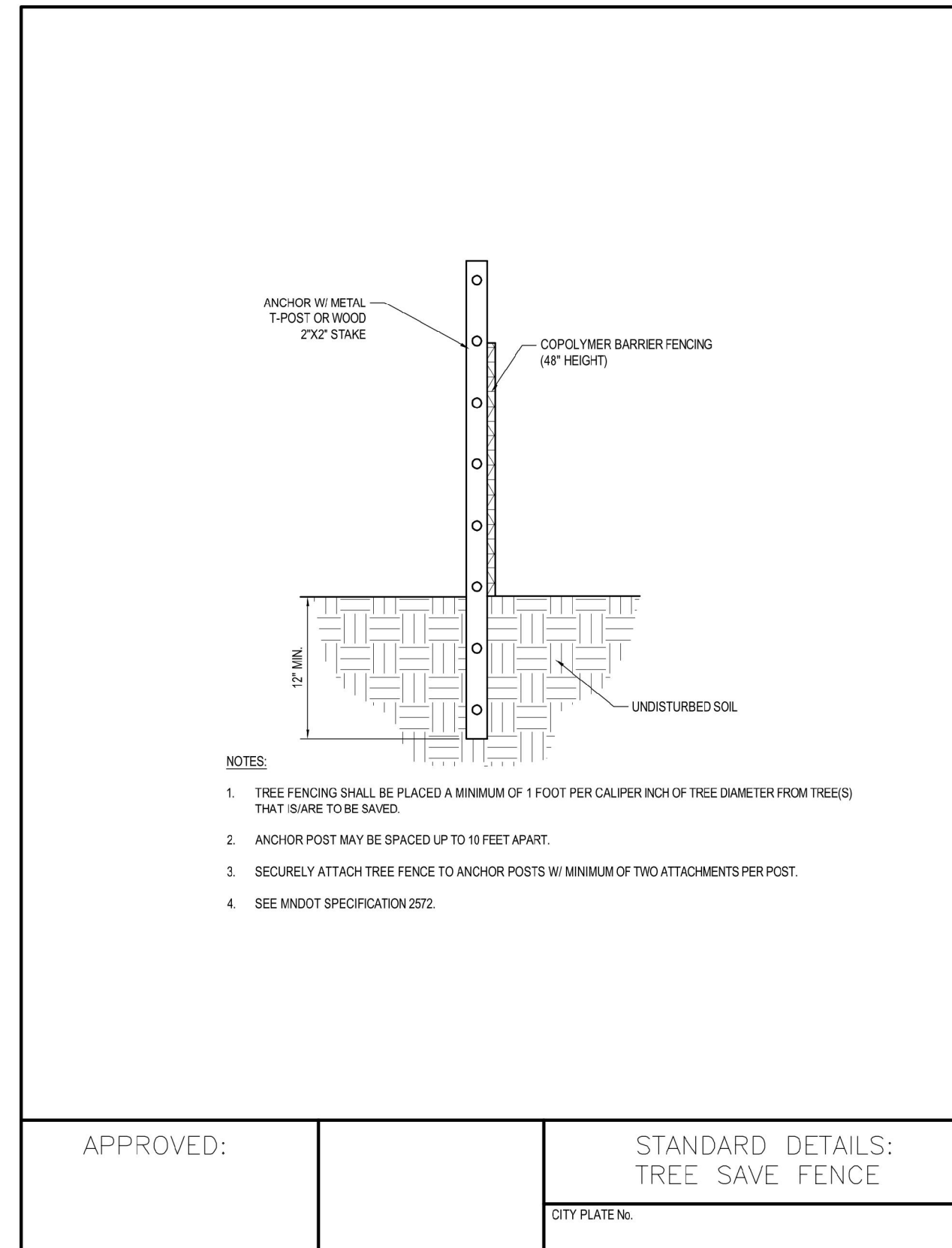


NORTH





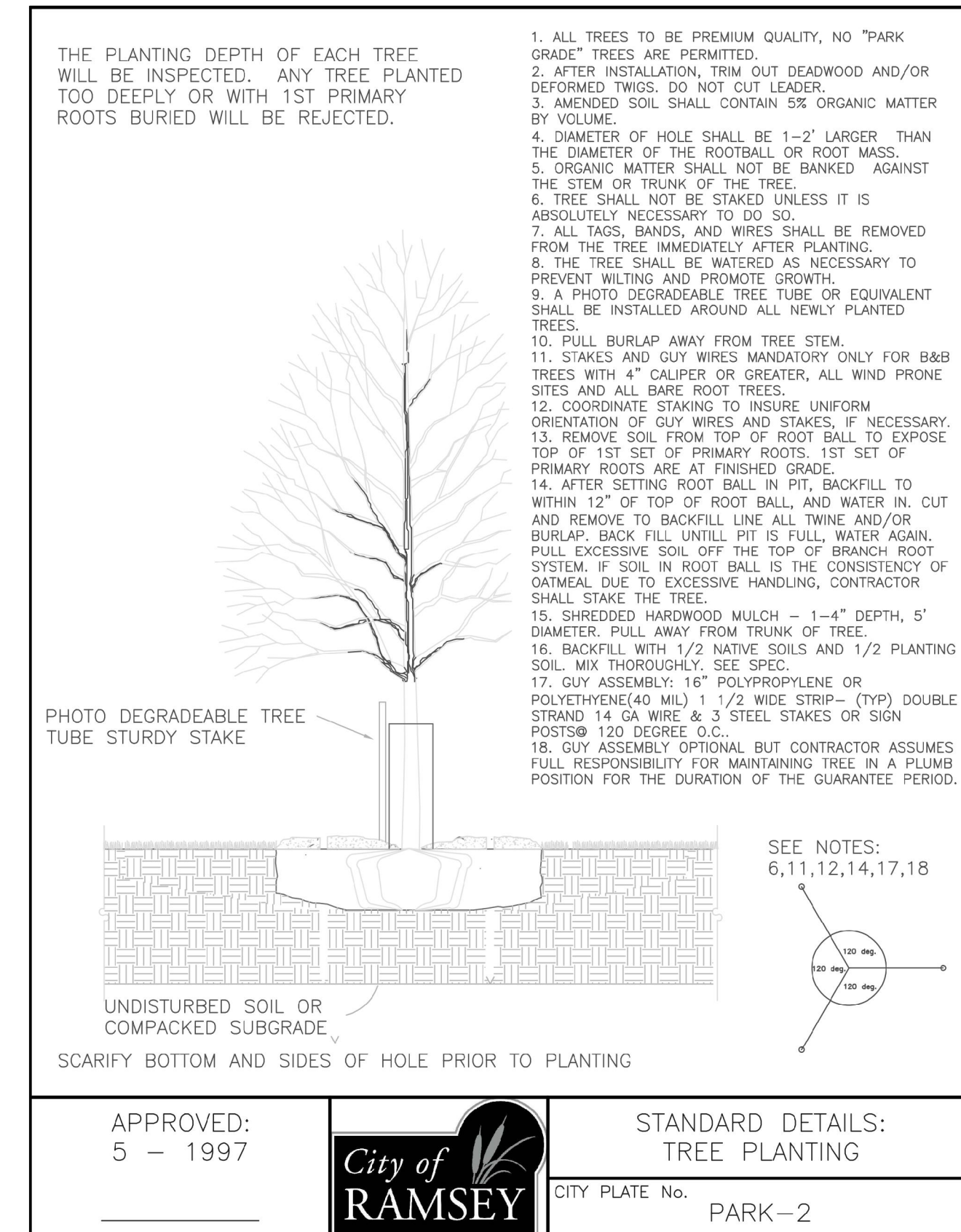
DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL



2

TREE SAVE FENCE

NO SCALE



1

TREE PLANTING

NO SCALE

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly licensed professional under the laws of the state of Minnesota.

Janice Ison  
License No. 44369

Signature shown on this plan is a reproduction of original. Web signed copy of this plan on this firm's website is not a valid document. Original documents are available upon request.

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CONSTRUCTION DOCUMENTS  
03.20.2019



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Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME C202KRZ141029MCB

PROJECT NO. KRZ141029.MCB

LANDSCAPE  
DETAILS  
**L2.2**



**LANDSCAPE NOTES**

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
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- INSTALL A 6-FOOT DIAMETER SHREDDED HARDWOOD MULCH DISH AROUND TREES NOT PLACED WITHIN A SHRUB OR PERENNIAL PLANTING BED. VINYL EDGING IS NOT REQUIRED.
- CONIFEROUS TREE SPECIES SHALL BE PLACED PER PLAN. VARIABLE HEIGHTS WITHIN EACH SPECIES (SEE PLANT SCHEDULE BELOW) SHALL BE RANDOMLY PLACED THROUGHOUT SITE. NO GROUPING SHALL CONTAIN CONIFERS OF THE SAME SINGLE HEIGHT.
- DEVELOPER SHALL DISCLOSE TO ANY POTENTIAL BUYER THAT DECIDUOUS TREES SHALL BE NO LESS THAN 2.5 INCHES IN CALIPER WHEN PLANTED AND CONIFEROUS TREES MUST BE 6 FEET IN HEIGHT IN ACCORDANCE WITH THE APPROVED REFORESTATION PLAN. DEVELOPER SHALL PROVIDE A COPY OF THE APPROVED LANDSCAPE PLAN TO ANY BUYER OF THESE LOTS.
- DEVELOPER IS REQUIRED TO INSTALL ALL TREE PLANTINGS AS A STAGE I IMPROVEMENT WITH THE EXCEPTION OF THE TWO (2) REQUIRED FRONT YARD TREES, WHICH MAY BE INSTALLED BY THE BUILDER.

**SOD / SEED**

- SEE EROSION CONTROL PLAN FOR SEEDING OF ALL OTHER DISTURBED AREAS.
- BOULEVARD AREAS, WHETHER THERE IS SIDEWALK PRESENT OR NOT, SHALL BE FINISHED WITH SOD. REMAINING PORTIONS OF LOTS CAN BE FINISHED WITH SOD, SEED, HYDROSEED, OR OTHER ACCEPTABLE GROUND COVER.

**EXISTING TREE INVENTORY**

Tree #	Species	DBH	Condition	Saved	Tree #	Species	DBH	Condition	Saved
787	Spruce, white	5.0	Good	X	817	Ash, green	8.0	Good	
788	Spruce, white	7.0	Good	X	818	Ash, green	10.0	Fair	
789	Spruce, white	5.0	Good	X	819	Ash, green	10.0	Good	
790	Oak, red	7.5	Good	X	821	Hackberry	9.0	Good	
792	Basswood	13.1	Fair	X	822	Pine, Scots	14.0	Good	
793	Basswood	9.0	Good	X	823	Pine, Scots	16.0	Good	
794	Basswood	8.0	Good	X	824	Pine, Scots	16.5	Good	
798	Maple, sugar	8.0	Good	X	825	Ash, green	12.0	Good	
803	Maple, Norway	8.5	Good		828	Ash, green	11.0	Good	
804	Maple, silver	28.0	Fair		829	Maple, silver	18.0	Fair	
808	Ash, green	11.5	Good		830	Birch, paper	15.0	Good	
809	Ash, green	11.5	Good		833	Elm, Siberian	9.5	Fair	
810	Ash, green	12.0	Good		834	Juniper	9.0	Good	
816	Ash, green	10.5	Good		835	Elm, Siberian	15.0	Fair	

**TREE PLANTING LIST**

DECIDUOUS TREES						
KEY	COUNT	COMMON NAME	SCIENTIFIC NAME	MATURE SIZE	SIZE/ROOT	SYMBOL
ACMO	1	NORTHWOOD MAPLE	ACER RUBRUM 'NORTHWOODS'	50'H x 35'W	2.5' B&B	
TIRE	3	REDMOND LINDEN	TILIA AMERICANA 'REDMOND'	50'H x 30'W	2.5' B&B	
BENA	7	RIVER BIRCH	BETULA NIGRA	50'H x 40'W	2.5' B&B	
CEOC	6	COMMON HACKBERRY	CELTIS OCCIDENTALIS	75'H x 50'W	2.5' B&B	
QUBI	3	SWAMP WHITE OAK	QUERCUS BICOLOR	60'H x 50'W	2.5' B&B	

CONIFEROUS TREES						
KEY	COUNT*	COMMON NAME	SCIENTIFIC NAME	MATURE SIZE	SIZE/ROOT	SYMBOL
PINI	7	AUSTRIAN PINE	PINUS NIGRA	50'H x 20'W	6' B&B	
PIGD	8	BLACK HILLS WHITE SPRUCE	PICEA GLAUCA DENSATA	45'H x 20'W	6' B&B	
ABBA	22	BALSAM FIR	ABIES BALSAMEA	60'H x 35'W	6' B&B	

**DEVELOPER**

**MEADOWCREEK BUILDERS**

10122 EWING LANE  
BROOKLYN PARK, MN 55443  
TEL (612) 867-6533

**MUNICIPALITY**



**PROJECT**

**HARVEST ESTATES  
2ND ADDITION  
RAMSEY, MINNESOTA**

**ISSUE / REVISION HISTORY**

DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAN SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL

**CERTIFICATION**

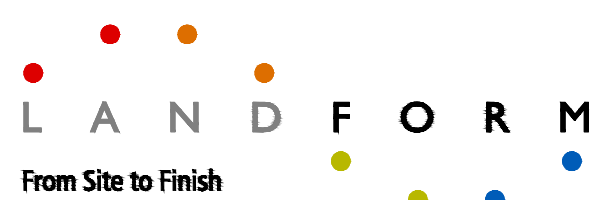
I hereby certify that the plan shown on this sheet was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Signature shown on this plan is a reproduction of original. Wet signed copy of this plan on file in the office of the Professional Services, LLC office and is available upon request.

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**CONSTRUCTION DOCUMENTS**  
03.20.2019



105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net

FILE NAME L201KRZ141029MCB

PROJECT NO. KRZ141029 MCB

**LANDSCAPE PLAN**

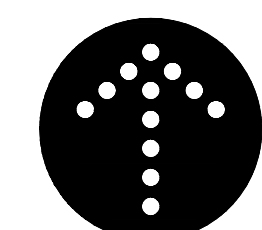
**L2.1**

SHEET NO. 15/16

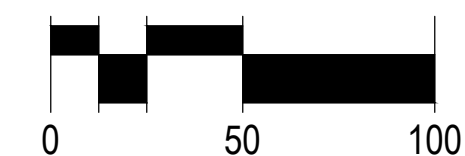
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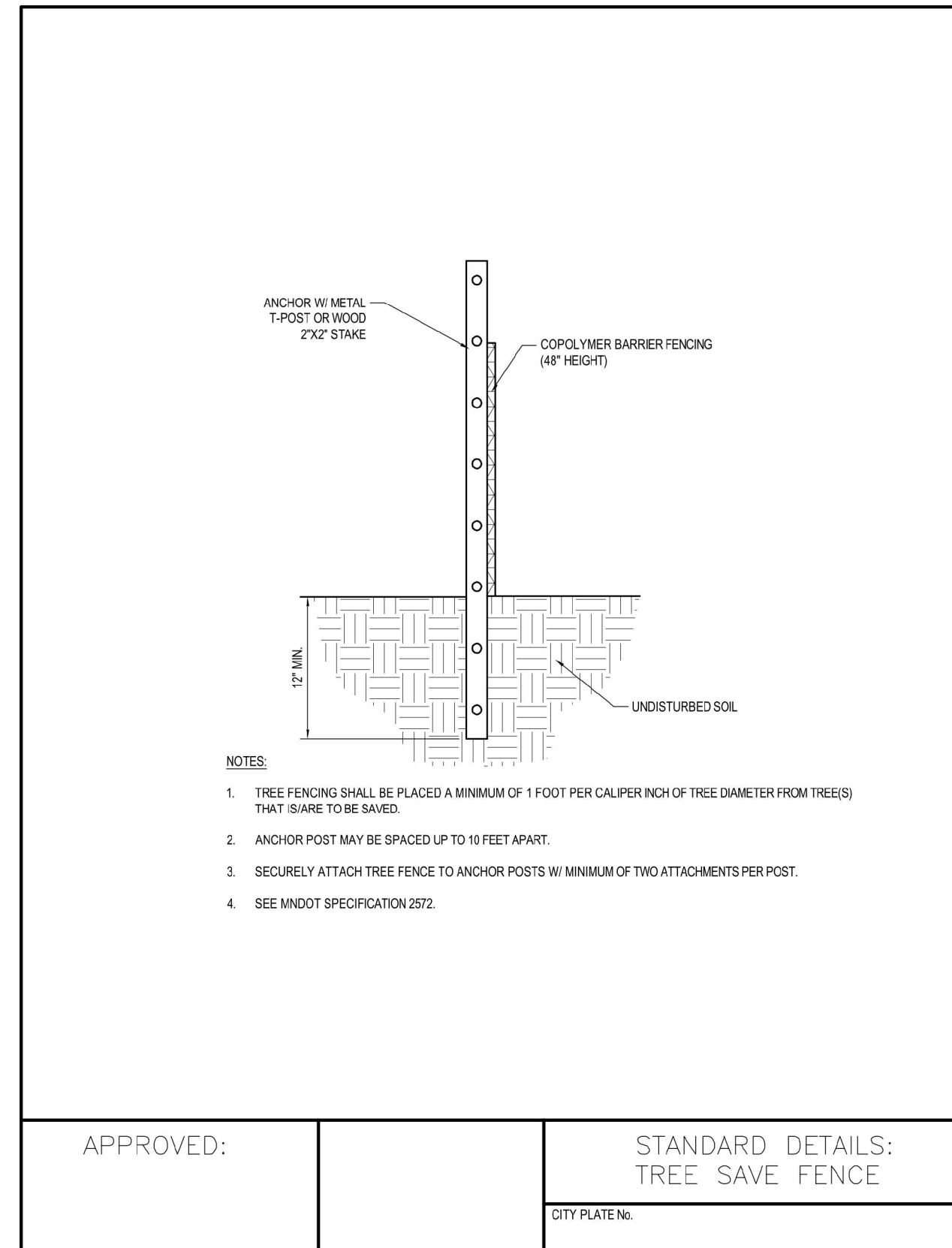


NORTH



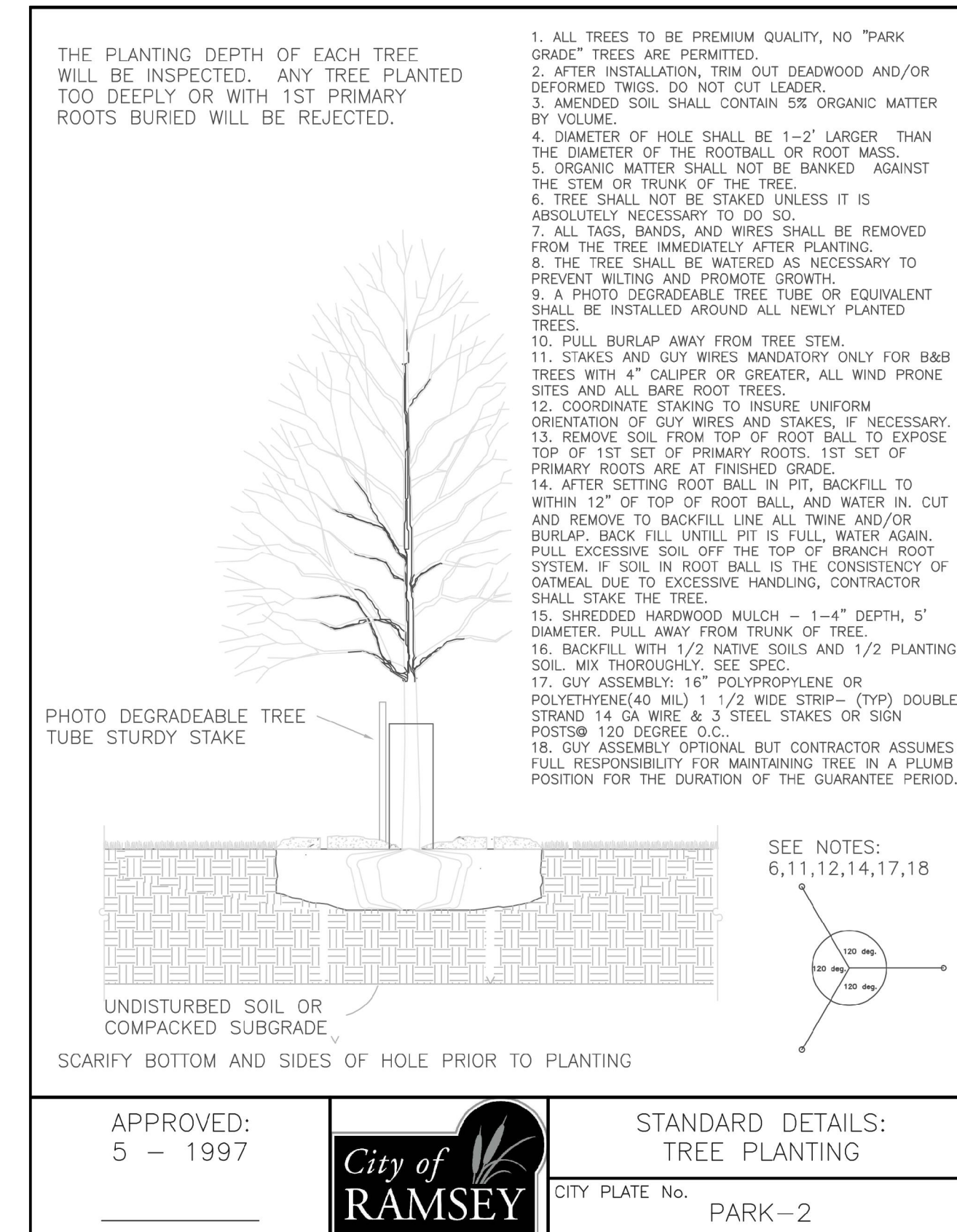


DATE	ISSUE / REVISION	REVIEW
01 JAN 2019	PRELIMINARY PLAT SUBMITTAL	RCH
20 MAR 2019	CONSTRUCTION DOCUMENTS	CAL



2 TREE SAVE FENCE

NO SCALE



1 TREE PLANTING

NO SCALE

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly licensed professional under the laws of the state of Minnesota.

James Lee  
License No. 44369

Signature shown on this plan is a reproduction of original. Web signed copy of this plan on this firm's website is available upon request. Professional Services, LLC office and is available upon request.

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FILE NAME C202KRZ141029MCB

PROJECT NO. KRZ141029.MCB

LANDSCAPE  
DETAILS  
**L2.2**