

EXISTING PLAN SYMBOLS

- PROPERTY LINES/RIGHT-OF-WAY
- UTILITY EASEMENT
- TREE LINE
- SIGN
- DECIDUOUS TREE
- SHRUB
- CONIFEROUS TREE

EXISTING UTILITY SYMBOLS

- STORM SEWER
- CATCH BASIN
- STORM APRON
- STORM SEWER MANHOLE

BASS LAKE ESTATES 2ND ADDITION STREAM RESTORATION PROJECT

CITY OF PLYMOUTH, MN

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

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

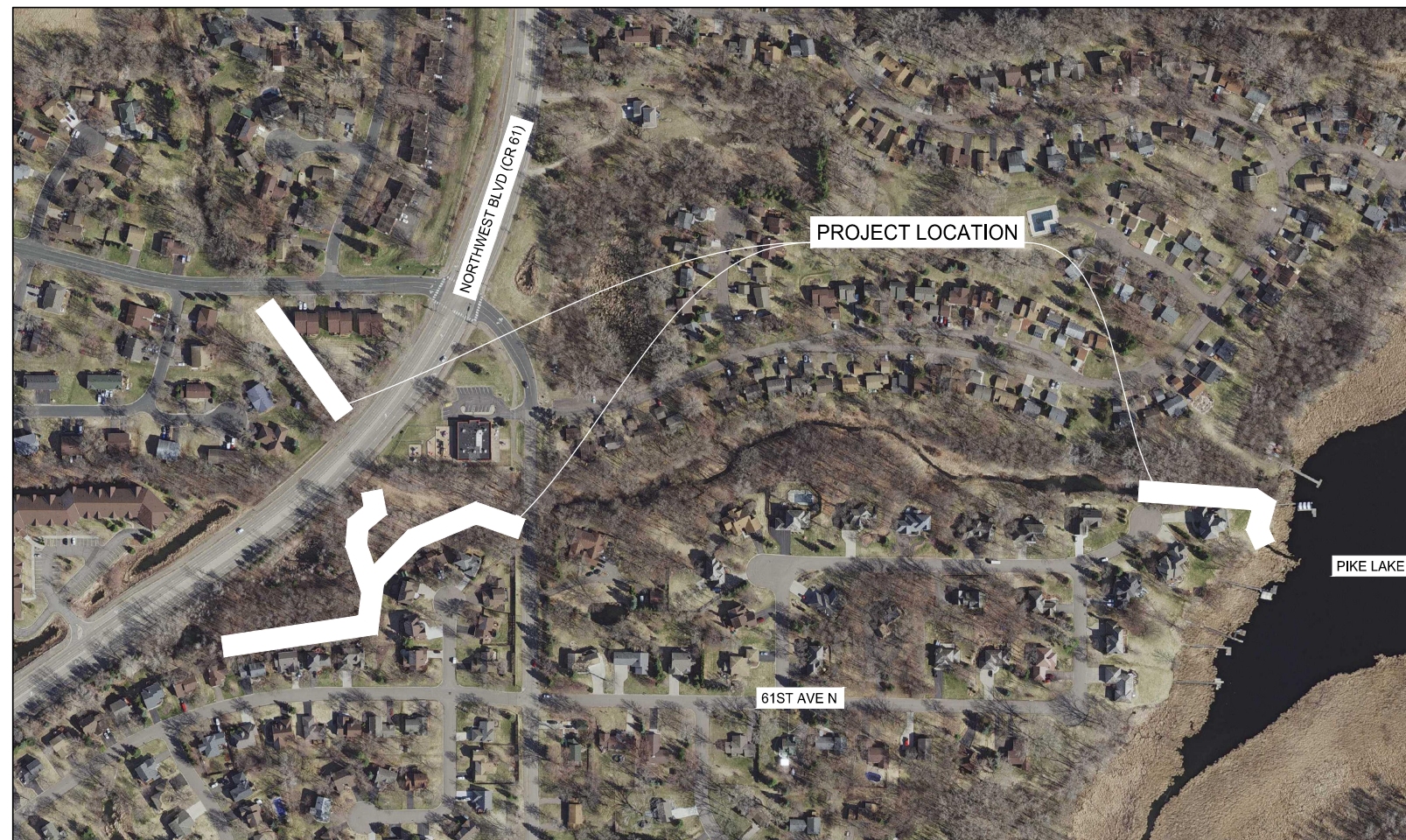
PLAN SET INDEX

SHEET NO.	SHEET TITLE
1	TITLE SHEET
2	GENERAL LAYOUT
3-4	MISCELLANEOUS DETAILS
5-7	EXISTING CONDITIONS & REMOVAL PLANS
8-13	SITE & GRADING PLANS

THIS PLAN SET CONTAINS 13 SHEETS

CONSTRUCTION PLAN FOR CREEK STABILIZATION
 LOCATED ON PIKE CREEK FROM ROBIN RD TO PIKE LAKE

FUNDING FOR THIS PROJECT RECEIVED FROM THE MINNESOTA BOARD OF WATER AND SOIL RESOURCES CLEAN WATER FUND GRANT AND FROM THE SHINGLE CREEK WATERSHED MANAGEMENT COMMISSION.



PROJECT LOCATION MAP



THIS PLAN SET HAS BEEN PREPARED FOR:

CITY OF PLYMOUTH
 3400 PLYMOUTH BLVD
 PLYMOUTH, MN 55447
 (763) 509-5000

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



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.

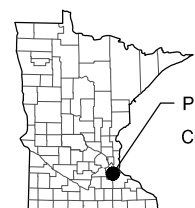
Jake H. Newhall
 JAKE H. NEWHALL, P.E.

DATE: 09/27/2022

LICENSE NUMBER: 49170

EXCAVATION NOTICE SYSTEM

A CALL TO GOPHER STATE ONE (651-454-0002) IS REQUIRED A MINIMUM OF 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.



PROJECT LOCATION
 COUNTY: HENNEPIN

SECT 2, TWP 118N, RNG 22W

HORIZONTAL DATUM: NAD83 (2011) ADJUSTMENT
 VERTICAL DATUM: NAVD88

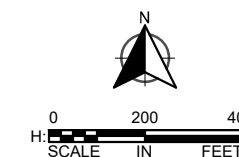
WORK DATES INFORMATION

NO WORK MAY TAKE PLACE WITHIN PIKE CREEK BETWEEN MARCH 15 - JUNE 15. ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF PIKE CREEK'S WATER'S EDGE AND THAT DRAIN TO THESE WATERS MUST BE STABILIZED WITHIN 24 HOURS BETWEEN MARCH 15 - JUNE 15.

UTILITY INFORMATION

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY 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."

GOPHER ONE CALL TICKET NUMBER: 222142049-222142050

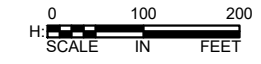
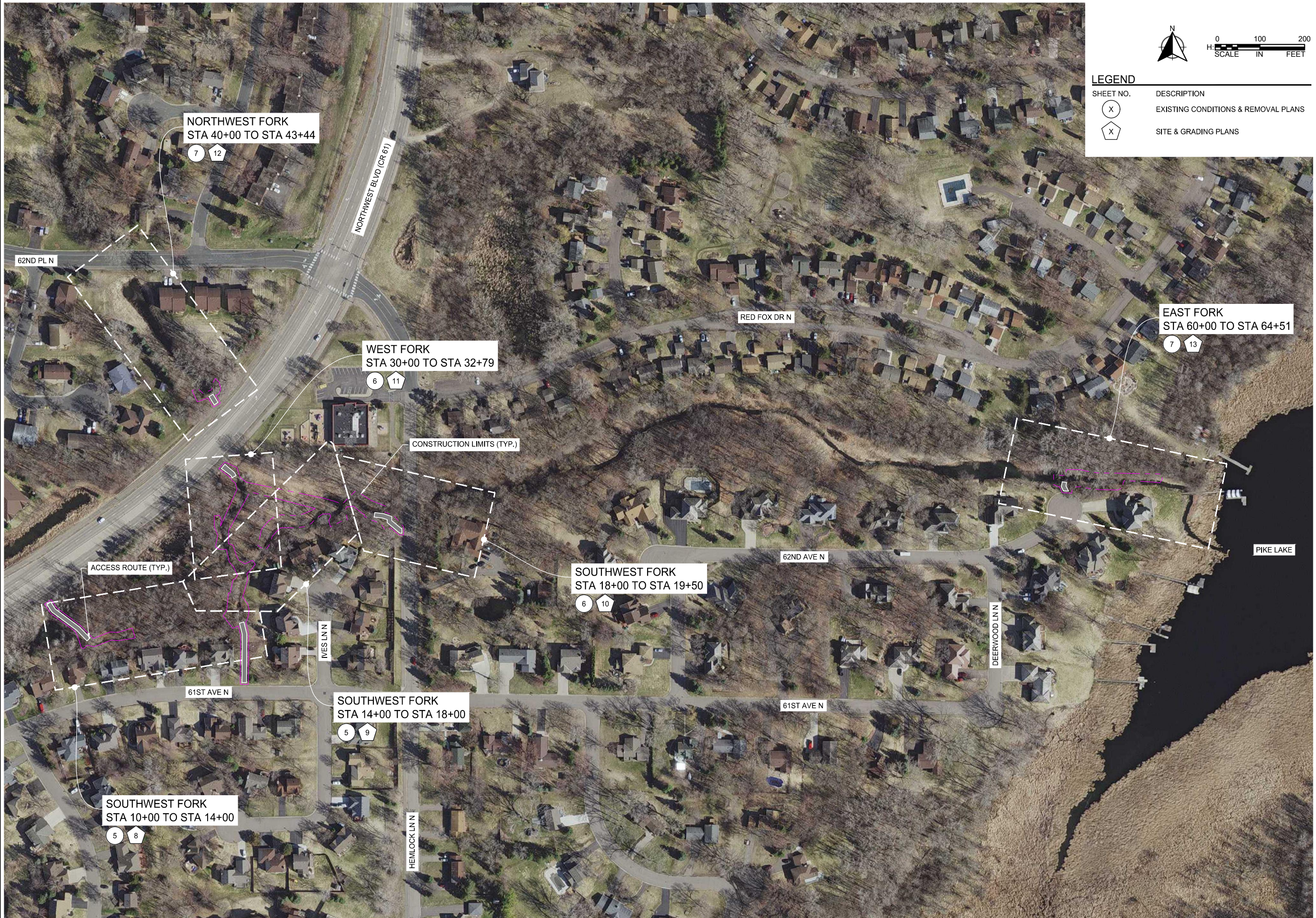


PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

WSB PROJ. NO. 018715-000
 CITY PROJ. NO. WR 22-0001

SHEET
 1
 OF
 13

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LEGEND

SHEET NO.	DESCRIPTION
(X)	EXISTING CONDITIONS & REMOVAL PLANS
(X)	SITE & GRADING PLANS

wsb City of Plymouth City of Maple Grove

SCALE: AS SHOWN DESIGN BY: KJF
 PLAN BY: BPM CHECK BY: JHN

REVISIONS	
NO.	DESCRIPTION

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Jake H. Newhall
 JAKE H. NEWHALL
 DATE: 09/27/2022 LIC. NO.: 49170

GENERAL LAYOUT

**BASS LAKE ESTATES 2ND ADDITION
 STREAM RESTORATION PROJECT
 CITY OF PLYMOUTH, MN**

CLIENT PROJECT NO.
 WR 22-0001

WSB PROJECT NO.
 018715-000

SHEET
 2 OF 13

MINIMUM RIPRAP REQUIRED

DIA. OF PIPE (IN.)	L (FT.)	QUANTITY (C.Y.)	CLASS
12	8	5	III
15	8	5	III
18	10	6	III
24	12	8	III
30	14	12	III
36	16	14	III
42	18	22	IV
48	20	26	IV
>48	22-28	30-40	IV

NOTE: ONE CUBIC YARD IS APPROXIMATELY 1.4 TONS.

RIP-RAP SHALL BE CONSTRUCTED WITH GRANITE ROCK AND SHALL BE HAND PLACED.

TIE THE LAST 6 JOINTS ON INLET AND OUTLET PIPES AND BED IN GRANULAR MATERIAL.

RIP-RAP OUT FROM THE APRON SHALL NOT BE HIGHER THAN THE APRON INVERT.

NONWOVEN GEOTEXTILE FABRIC EXTEND 1' UNDER FES

RIP-RAP REQUIRED AT ALL APRONS

**STANDARD DETAILS
RIPRAP DETAIL FOR FLARED END SECTIONS
CITY OF PLYMOUTH**

PUBLISHED 1-22
CITY PL. NO. ST-4
REVISED 1-17

PLAN VIEW

SIDE VIEW

ANCHOR POINT A, ANCHOR POINT B, APPROX. 20', LAKE OR MARSH, FLOATATION SILT CURTAIN STILL WATER TYPE, CARRIER FLOAT, STEEL TENSION CABLE, WATER SURFACE, VARIABLE LENGTH CURTAIN FABRIC, CURTAIN WEIGHT, BOTTOM, ANCHOR CABLE, ANCHOR, VARIABLE DEPTH (12' MAXIMUM)

**STANDARD DETAILS
FLOATATION SILT CURTAIN DETAIL
CITY OF PLYMOUTH**

PUBLISHED 1-22
CITY PL. NO. ST-17
REVISED 3-16

NOTES:

- DIG A 6"x6" TRENCH ALONG THE INTENDED FENCE LINE.
- DRIVE ALL POSTS INTO THE GROUND AT THE DOWNHILL SIDE OF THE TRENCH.
- LAY OUT SILT FENCE ON THE UPHILL SIDE ALONG THE FENCE LINE, AND BACK FILL.
- WOOD POSTS MAY BE SPACED UP TO 5 FEET APART. STEEL POSTS MAY BE SPACED UP TO 6 FEET APART.
- REMOVE SILT FENCE AFTER TURF IS ESTABLISHED.

POST (METAL OR WOOD 2"x2"), FILTER FABRIC (36" MAX. HT.) OPENING IN FABRIC WEAVE ≤ .212MM., BACK FILL 6"x6" TRENCH, UNDISTURBED SOIL, DIRECTION OF RUNOFF FLOW, 12" MIN.

**STANDARD DETAILS
SILT FENCE DETAIL
CITY OF PLYMOUTH**

PUBLISHED 1-22
CITY PL. NO. ST-18
REVISED 1-20

**STANDARD DETAILS
ROCK EXIT TO CONSTRUCTION SITE
CITY OF PLYMOUTH**

PUBLISHED 1-22
CITY PL. NO. ST-19
REVISED 1-20

EROSION CONTROL BLANKET INSTALLATION DETAIL

SCALE: NOT TO SCALE

ANCHOR TRENCH (SEE DETAIL AND NOTES BELOW), OVERLAP END JOINTS MINIMUM OF 6" AND STAPLE OVERLAP AT 1.5' INTERVALS., OVERLAP LONGITUDINAL JOINTS MINIMUM OF 6", STAPLE DENSITY SHALL BE A MINIMUM OF 3 U-SHAPED 8", 11 GAUGE METAL STAPLES PER SQUARE YARD (THIS MAY VARY AS DIRECTED BY THE CITY.), ANCHOR TRENCH: 1. DIG 6" X 6" TRENCH, 2. LAY BLANKET IN TRENCH, 3. STAPLE AT 1.5' INTERVALS, 4. BACKFILL WITH NATURAL SOIL AND COMPACT, 5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH

BIOROLL INSTALLATION DETAIL

SCALE: NOT TO SCALE

SEDIMENT LOGS, 2" x 2" WOOD STAKE, WOOD STAKE TO ONLY PENETRATE NETTING, NOT FILTER MATERIAL, FRONT VIEW, SECTION VIEW, SEDIMENT CONTROL LOG TYPE WOOD FIBER OR APPROVED EQUAL, PLACE GRAVEL OR EARTH TO FILL SEAM BETWEEN TUBE AND GROUND, DOWN SLOPE, SLOPE SURFACE, 2" x 2" WOOD STAKE, WOOD STAKE TO ONLY PENETRATE NETTING, NOT FILTER MATERIAL

LIVE STAKING DETAIL

SCALE: NOT TO SCALE

PREPARE 18" PLANTING HOLE, BULBS, CREATE UPSTREAM DEPRESSION TO COLLECT WATER, BURY 3/4 OF PLANTING, SOIL MUST BE FIRMED AROUND PLANTING TO ELIMINATE AIR POCKETS, PLANTING MUST BE TRIMMED IF MORE THAN 2 BUDS ARE ABOVE GROUND, 1' TO 3' SPACING FROM EACH PLANTING

wsb City of Plymouth City of Maple Grove

SCALE: AS SHOWN DESIGN BY: KJF
PLAN BY: BPM CHECK BY: JHN

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JAKE H. NEWHALL
DATE: 09/27/2022 LIC. NO.: 49170

**MISCELLANEOUS
DETAILS**

**BASS LAKE ESTATES 2ND ADDITION
STREAM RESTORATION PROJECT
CITY OF PLYMOUTH, MN**

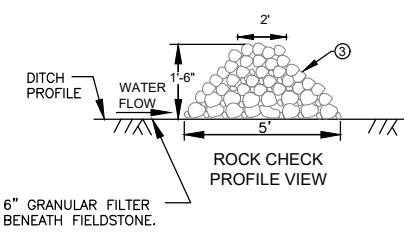
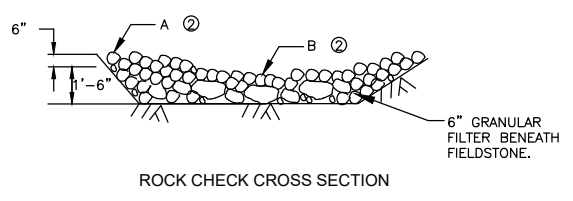
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SCALE: AS SHOWN PLAN BY: BPM DESIGN BY: KJF CHECK BY: JHN

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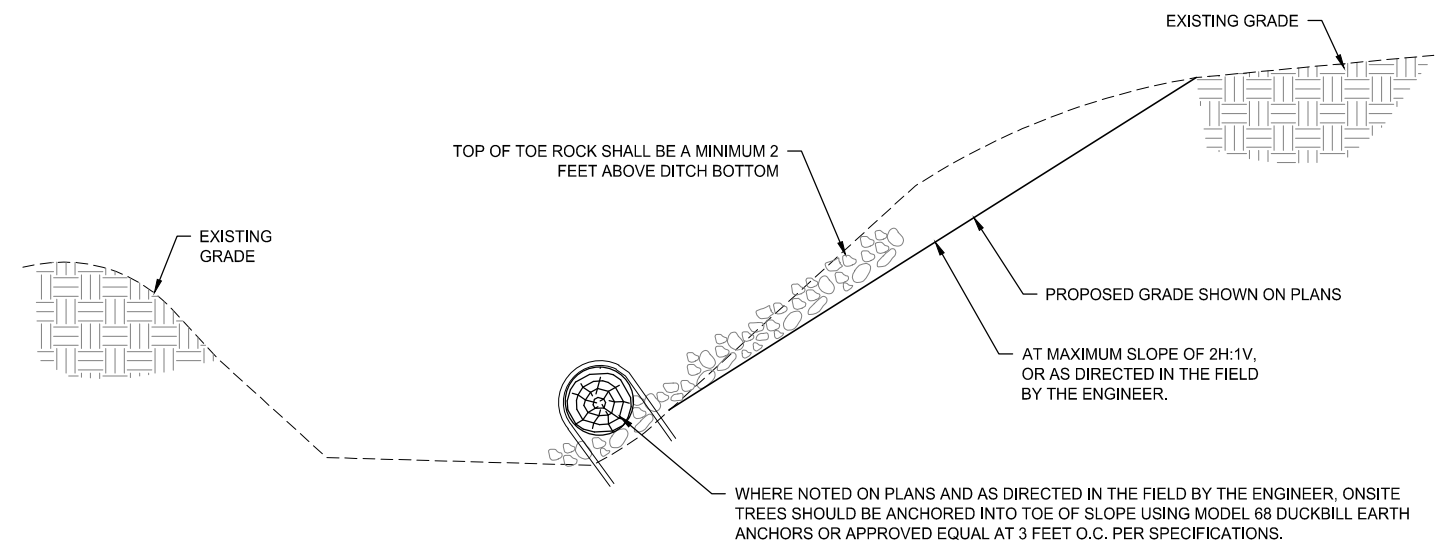
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- NOTES:
- SEE MNDOT SPECS 2573, 3601, 3733 & 3889
 - POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DITCH CHECK AND NOT AROUND THE ENDS.
 - CLASS I-IV RIPRAP FIELDSTONE (SPEC. 3601) WITH 6 INCHES OF GRANULAR FILTER (SPEC 3601 & 2511)

ROCK DITCH CHECK DETAIL
 SCALE: NOT TO SCALE



- NOTES:
- TREES USED TO ANCHOR SLOPE MAY NOT BE ROTTEN.
 - TREES USED TO ANCHOR SLOPE MUST A MINIMUM 12" IN DIAMETER.
 - ANCHORS USED MUST BE MODEL 68 DUCKBILL EARTH ANCHORS OR APPROVED EQUAL AND MUST BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

TOE ROCK AND TREE ANCHORED TO SIDE SLOPE
 SCALE: NOT TO SCALE

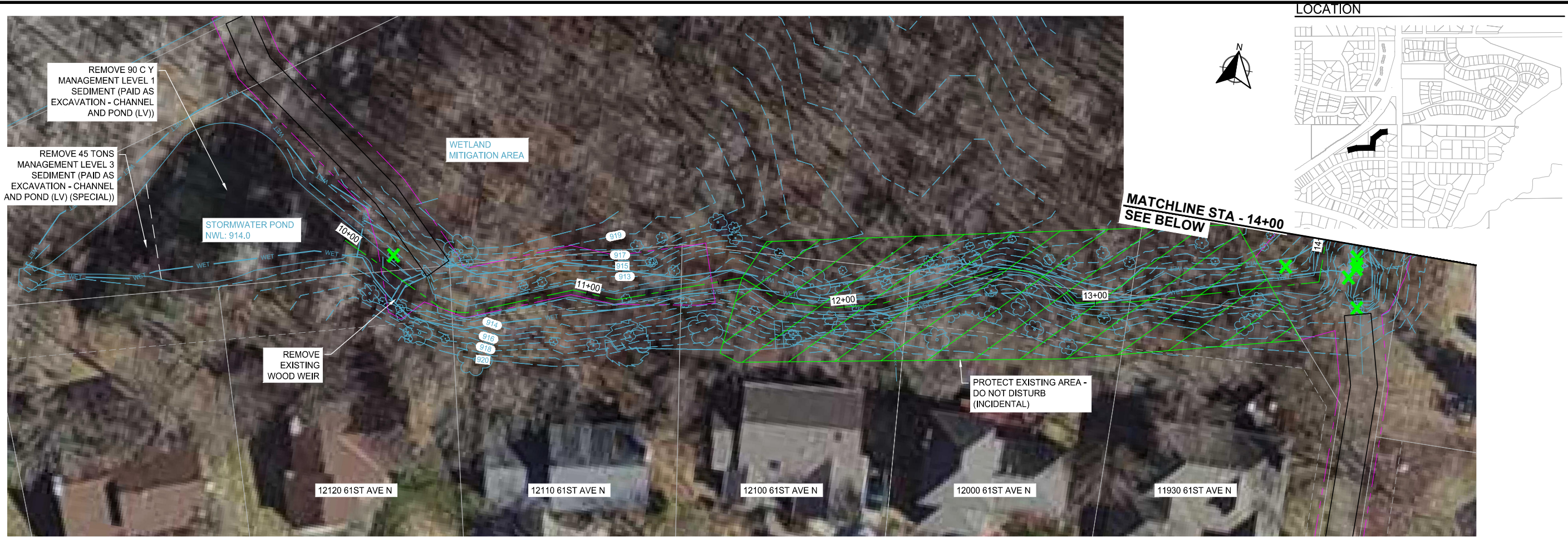
MISCELLANEOUS DETAILS

BASS LAKE ESTATES 2ND ADDITION
 STREAM RESTORATION PROJECT
 CITY OF PLYMOUTH, MN

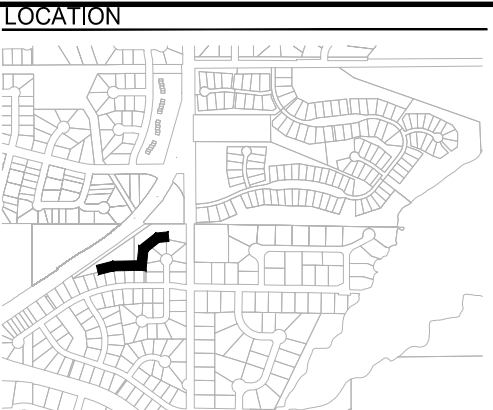
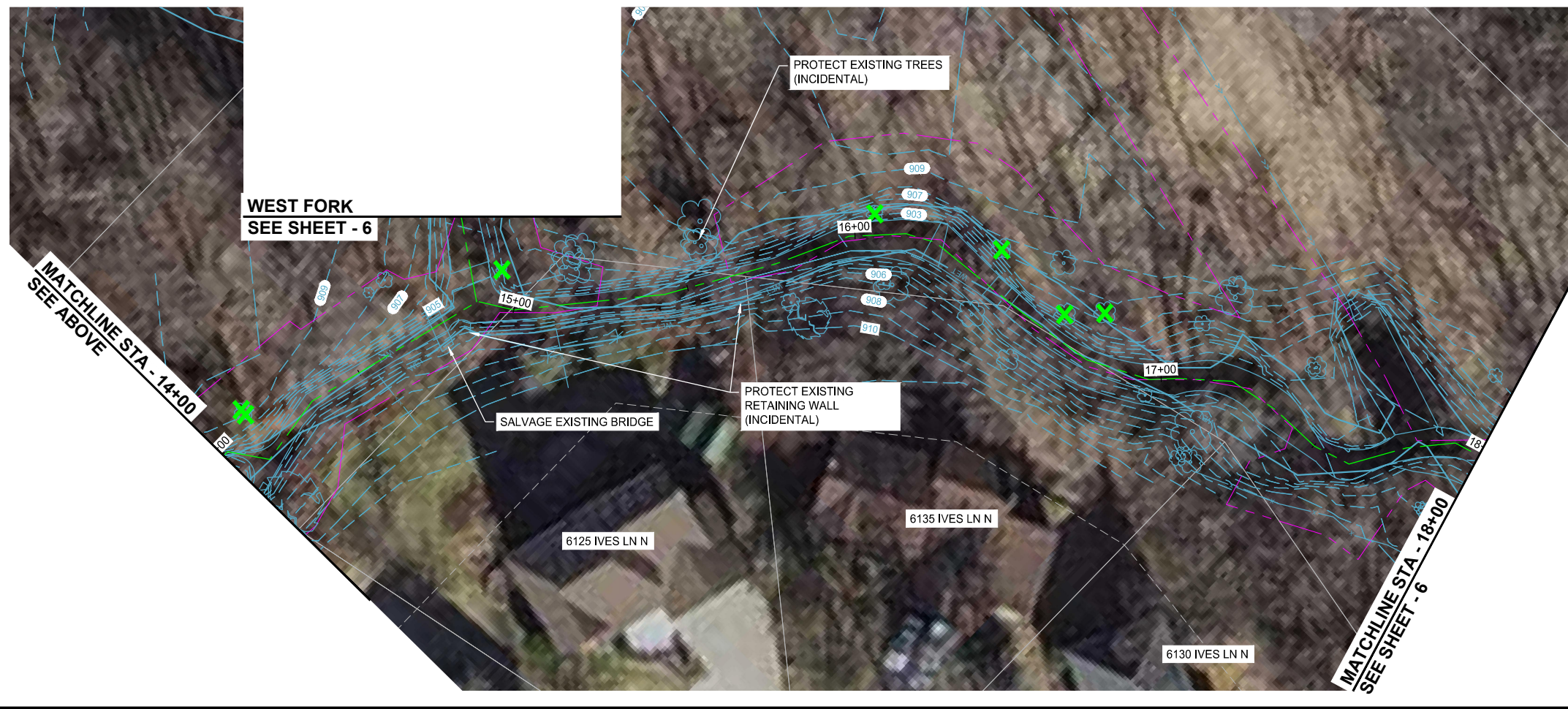
CLIENT PROJECT NO.
 WR 22-0001

WSB PROJECT NO.
 018715-000

SHEET
 4 OF 13



SOUTHWEST FORK



wsb City of Plymouth City of Maple Grove

SCALE: AS SHOWN
 PLAN BY: BPM
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EXISTING CONDITIONS & REMOVAL PLANS

- NOTES**
1. REMOVAL OF DOWNED TREES AND OTHER DEBRIS WITHIN DITCH SHALL BE INCIDENTAL TO PROJECT. TREES 6" IN DIAMETER OR LARGER TO BE REMOVED ARE SHOWN IN THE PLANS AND SHALL BE MARKED IN THE FIELD BY THE ENGINEER. TREES UNDER 6" IN DIAMETER SHALL BE REMOVED WHERE PROPOSED GRADING DICTATES AND AS DIRECTED BY THE ENGINEER IN THE FIELD. KNOWN TREE REMOVAL IS SHOWN ON THE PLANS. ADDITIONAL TREE REMOVAL MAY BE REQUESTED BY THE ENGINEER IN THE FIELD.
 2. ONSITE TREES TO BE ANCHORED INTO TOE OF SLOPE WHERE NOTED. MAY NOT BE ROTTEN. TREES WILL BE ANCHORED USING MODEL 68 DUCKBILL EARTH ANCHORS.
 3. BIOENGINEERING TECHNIQUES USED INCLUDE LIVE STAKES AND SEEDING SPECIAL (SEE SPECIFICATIONS).
 4. CONTRACTOR TO GRADE AROUND EXISTING STORM SEWER STRUCTURES AS DIRECTED BY THE ENGINEER.
 5. CONTRACTOR RESPONSIBLE FOR THE DAMAGE TO STREETS, CONCRETE CURB & GUTTER, TRAILS AND TREES NOT SHOWN FOR REMOVAL.
 6. CONTRACTOR TO COORDINATE ACCESS LIMITS WITH THE ENGINEER IN THE FIELD.
 7. WORK ASSOCIATED WITH PROTECTING AND/OR REMOVING AND REINSTALLING FENCES, RETAINING WALLS, STREET SIGNS, LAWN IRRIGATION SYSTEMS AND OTHER ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

LEGEND

	CONSTRUCTION LIMITS
	CLEARING AND GRUBBING (BY TREE)
	REMOVE STORM SEWER
	SALVAGE FENCE
	ACCESS ROUTE

**BASS LAKE ESTATES 2ND ADDITION
 STREAM RESTORATION PROJECT**

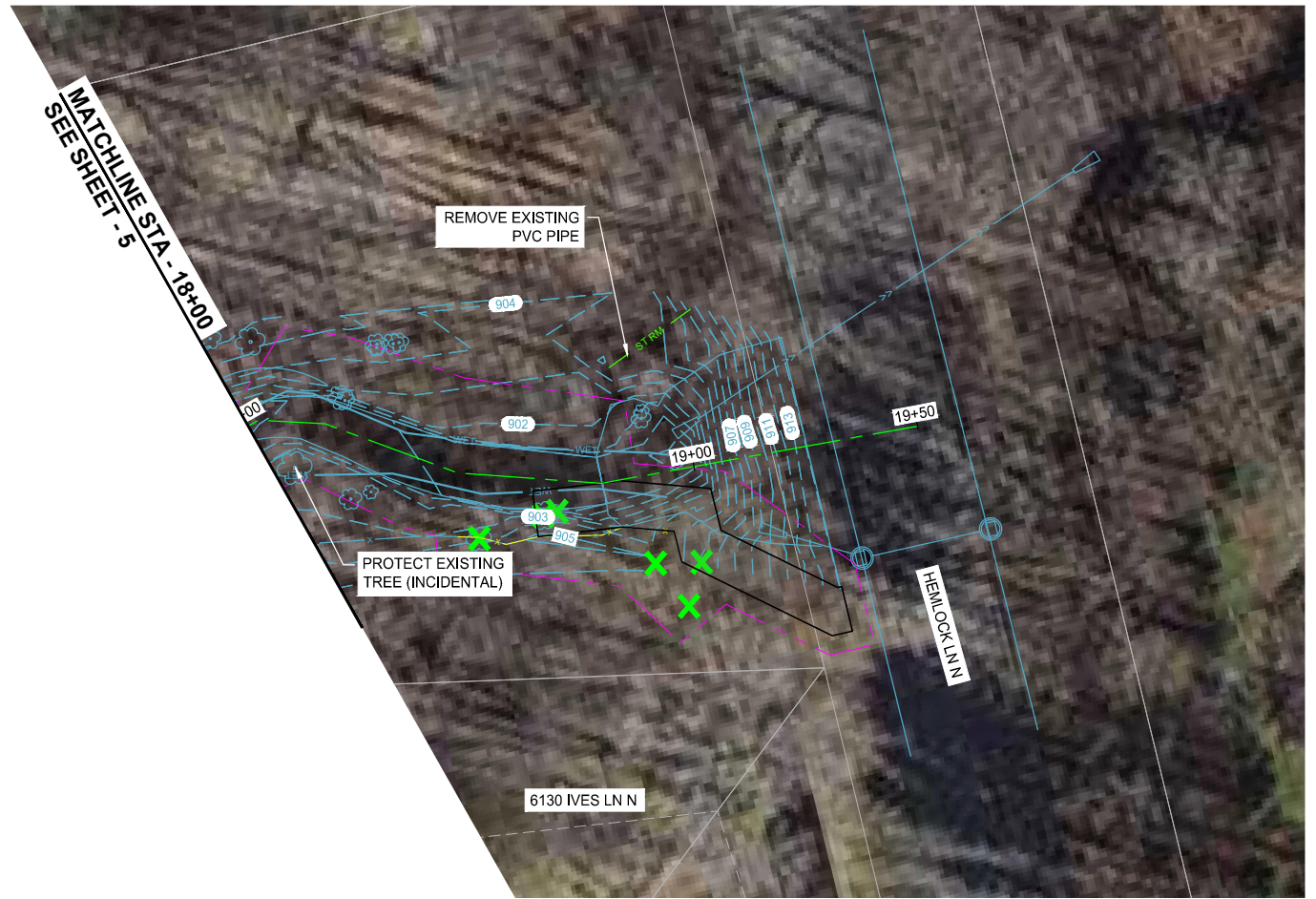
CITY OF PLYMOUTH, MN

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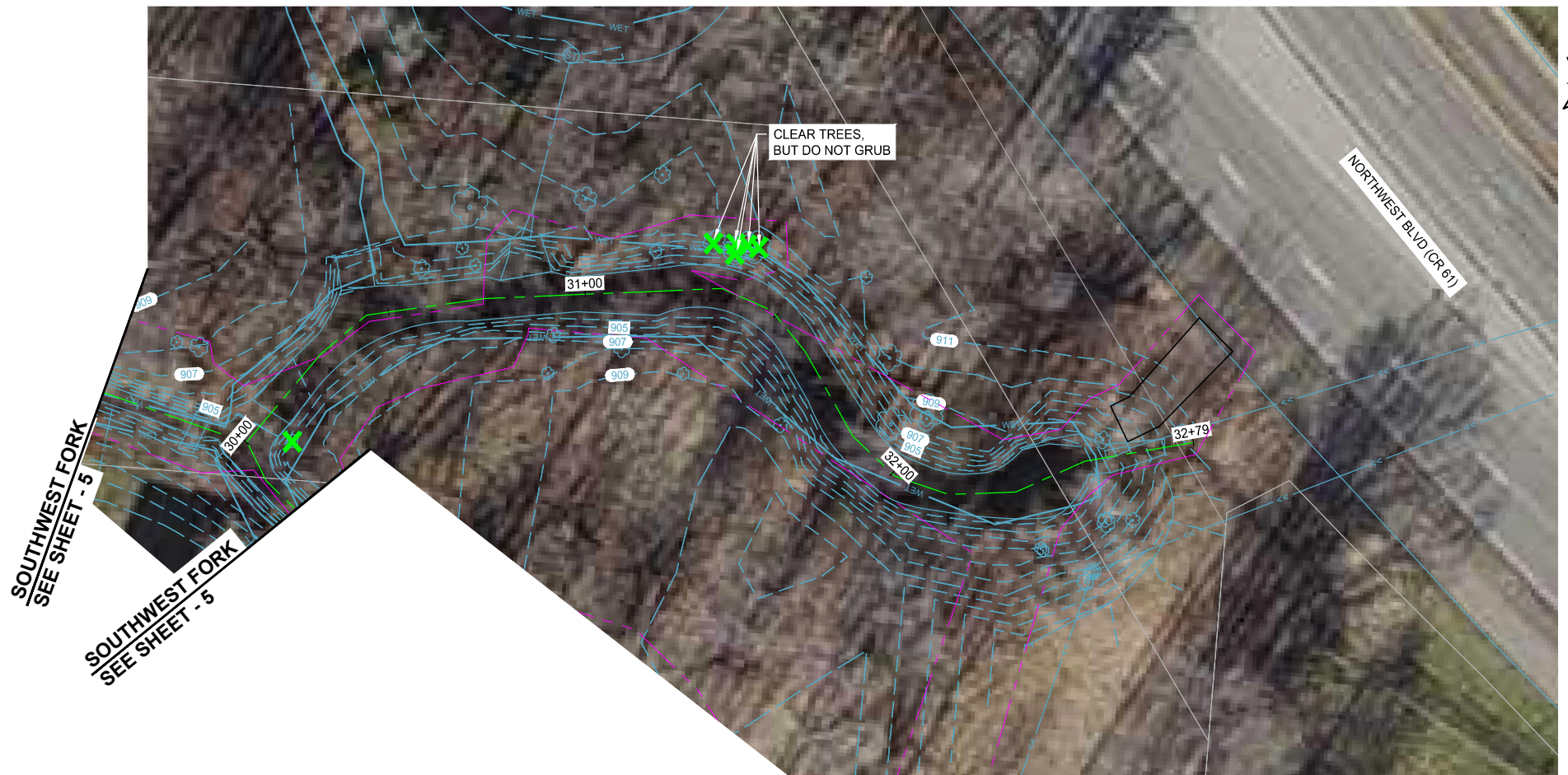
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SHEET
 5 OF 13

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SOUTHWEST FORK & WEST FORK



wsb City of Plymouth City of Maple Grove

SCALE: AS SHOWN
 PLAN BY: BPM

DESIGN BY: KJF
 CHECK BY: JHN

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Jake H. Newhall
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 DATE: 09/27/2022 LIC. NO.: 49170

EXISTING CONDITIONS & REMOVAL PLANS

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	REMOVE STORM SEWER
	SALVAGE FENCE
	ACCESS ROUTE

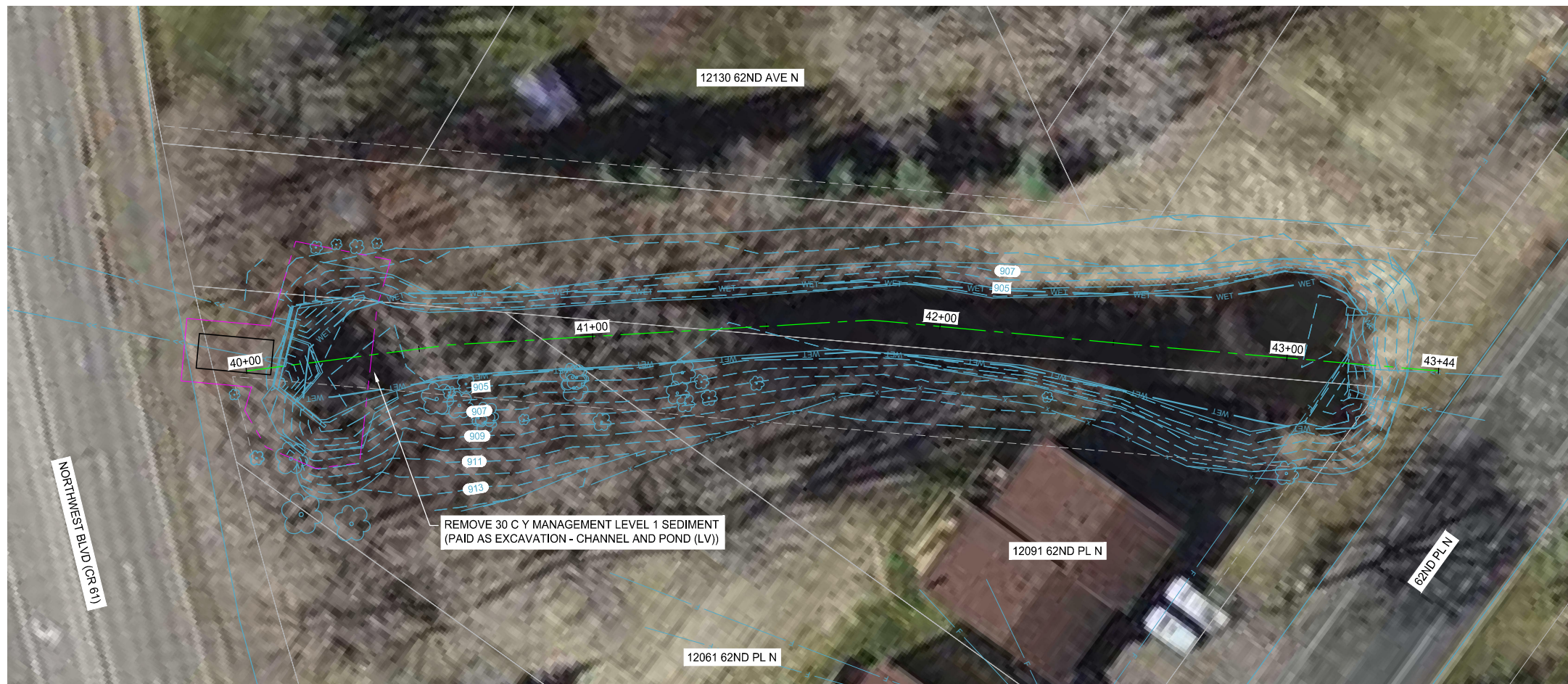
BASS LAKE ESTATES 2ND ADDITION
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 CITY OF PLYMOUTH, MN

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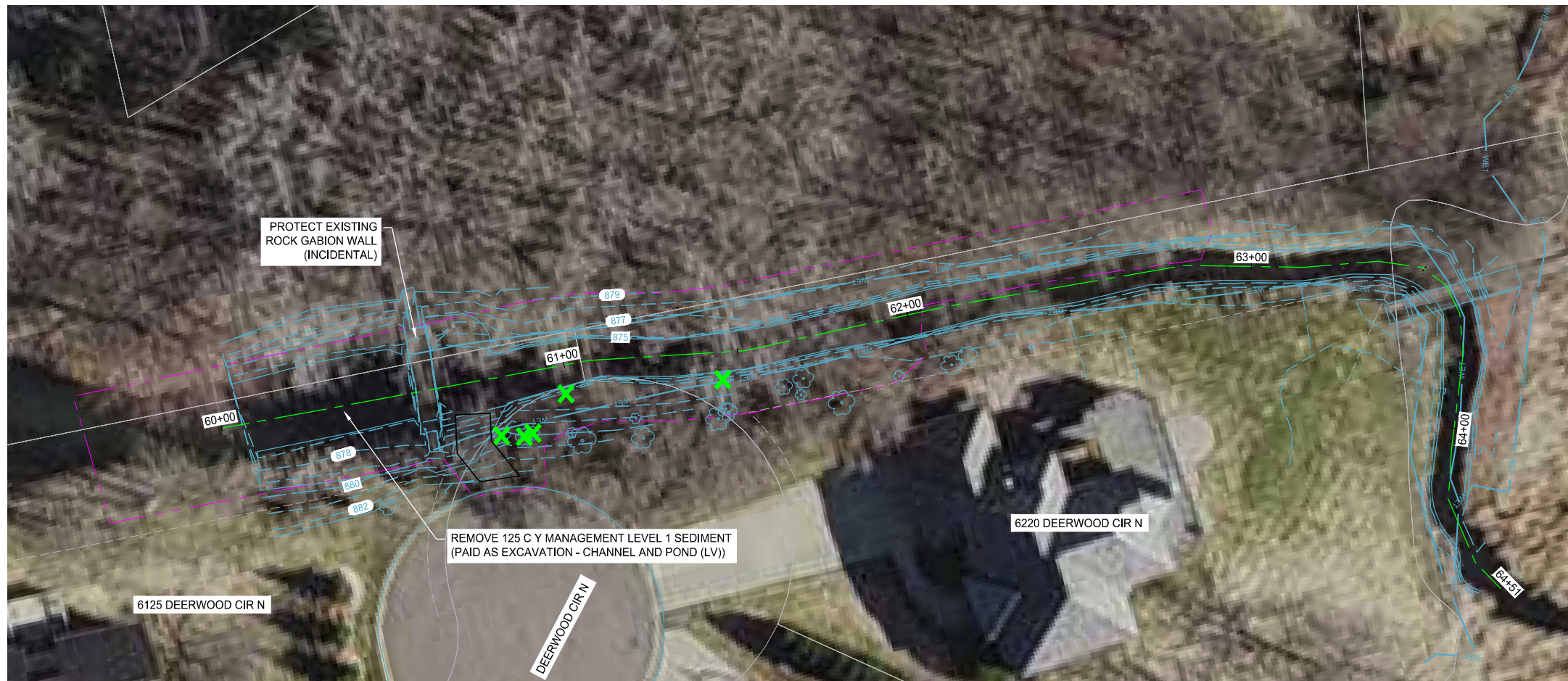
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 6 OF 13

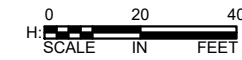
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NORTHWEST FORK & EAST FORK



LOCATION



wsb City of Plymouth City of Maple Grove
 SCALE: AS SHOWN
 PLAN BY: BPM
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 CHECK BY: JHN

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 JAKE H. NEWHALL
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EXISTING CONDITIONS & REMOVAL PLANS

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LEGEND

- CONSTRUCTION LIMITS
- X CLEARING AND GRUBBING (BY TREE)
- REMOVE STORM SEWER
- SALVAGE FENCE
- ACCESS ROUTE

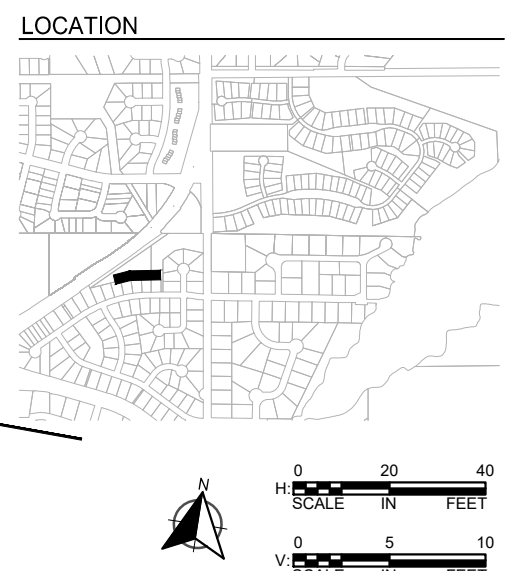
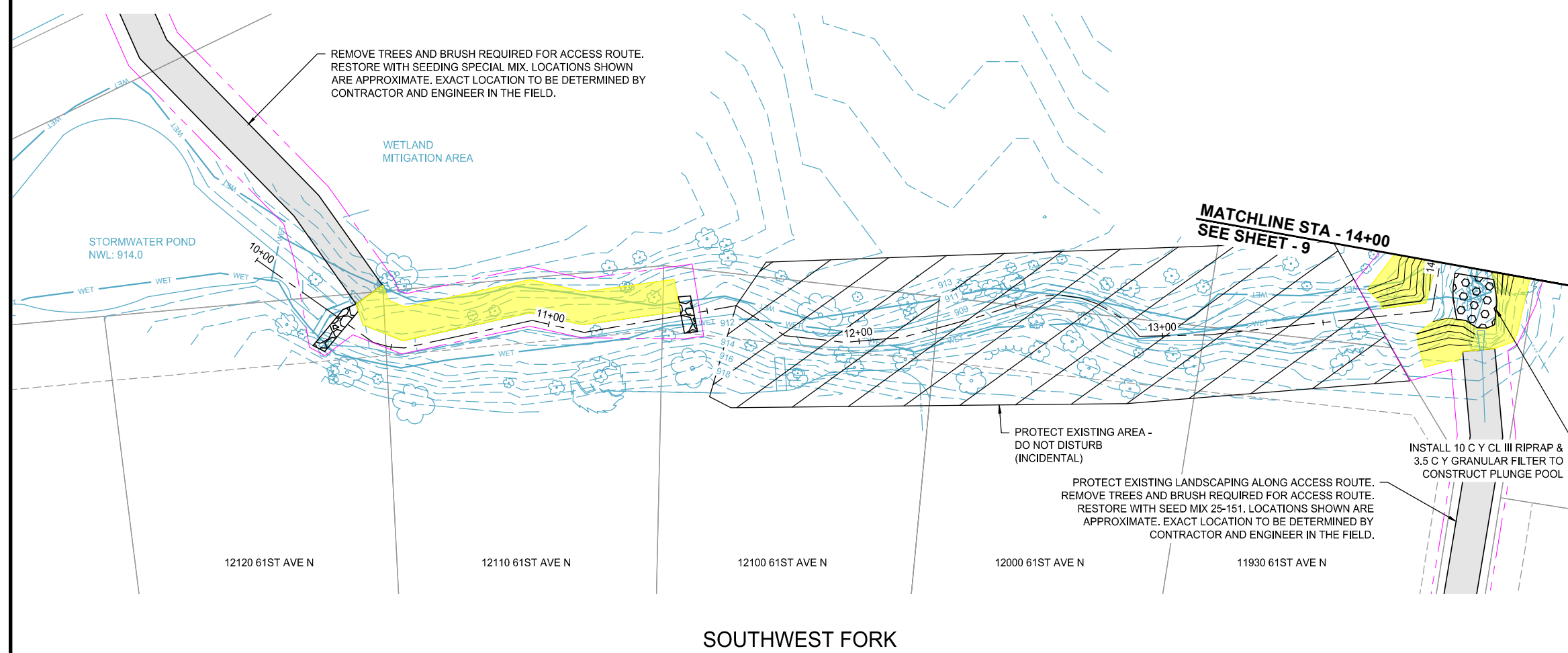
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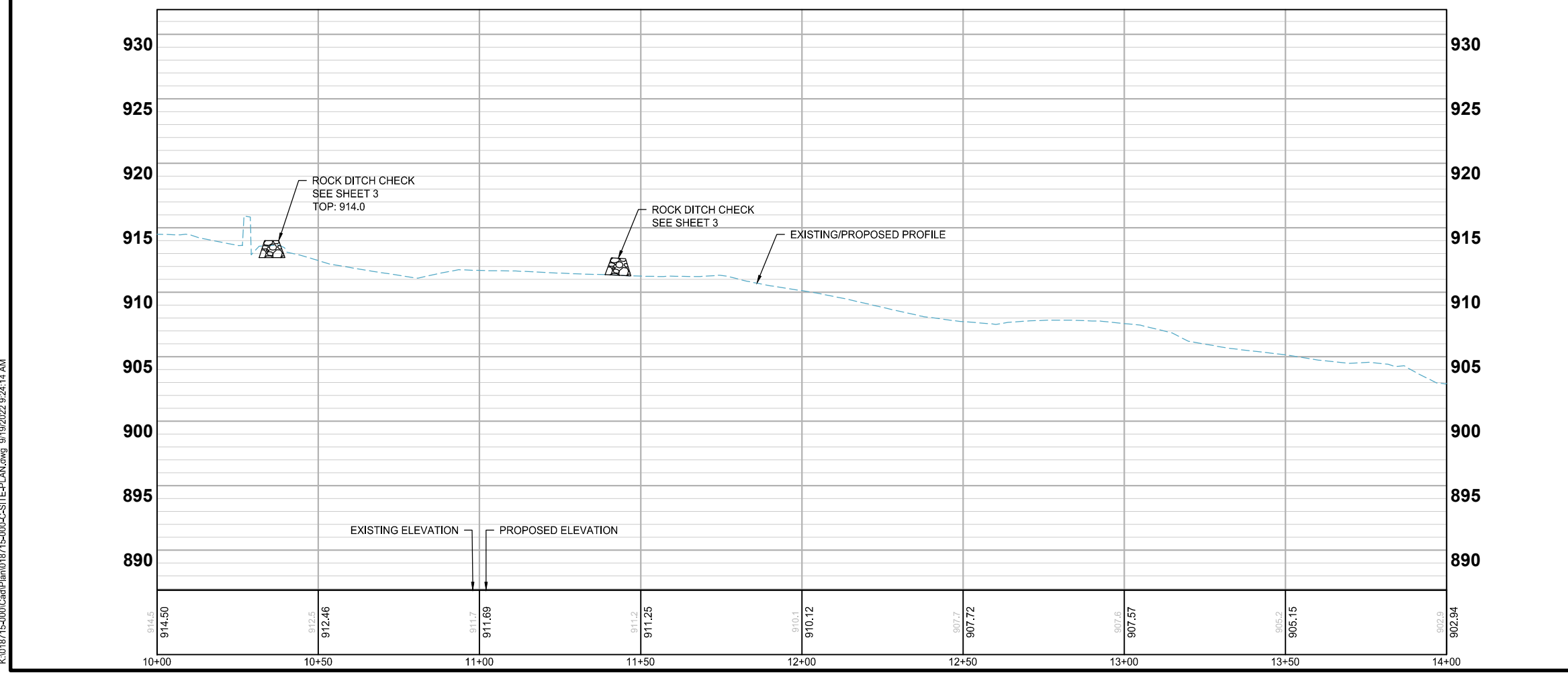
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SHEET
 7 OF 13

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- NOTES**
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 4. CONTRACTOR TO COORDINATE ACCESS LIMITS WITH THE ENGINEER IN THE FIELD.
 5. SOILS TRACKED FROM SITE MUST BE REMOVED FROM ALL PAVED SURFACES WITHIN 24 HOURS OF DISCOVERY DURING CONSTRUCTION.
 6. EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE BUT IN NO CASE LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. AREAS SHOULD BE RESTORED WITH SEED MIXES AS SHOWN ON THE PLANS & LEGEND IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.
 7. SCRAPED INVASIVE VEGETATION CANNOT BE STOCKPILED IN A WETLAND OR STREAM AREA AND SHOULD BE HAULED OFFSITE.
 8. FOR ALL RESTORATION PERFORMED PRIOR TO APRIL 15, RESTORE ALL DISTURBED AREAS WITH OATS COVER CROP (MNDOT SEED MIX 21-111, 100 LBS/ACRE).
 9. FOR RESTORATION PERFORMED AFTER APRIL 15, RESTORE ALL POND EDGES, WOODED AREAS WHERE DISTURBED OR AS DIRECTED BY THE ENGINEER IN THE FIELD WITH SEED MIXES OR SOD AS SHOWN IN THE PLANS AT THE MNDOT SPECIFIED RATE. TYPE 21-111 SEED (100 LBS/ACRE) AND CATEGORY 3N EROSION CONTROL BLANKET SHALL BE INSTALLED ALONG POND EDGES, BUFFERS, AND NON-MOWABLE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.



- LEGEND**
- CONSTRUCTION LIMITS
 - x-x- INSTALL FENCE
 - SF FLOATING SILT CURTAIN
 - ACCESS ROUTE
 - PLUNGE POOL
 - ROCK DITCH CHECK
 - BLEND SIDE SLOPE INTO DITCH BOTTOM, ADD RIPRAP TO TOE OF SLOPE (2 FEET HIGH) (HARD ARMORING)
 - BLEND SIDE SLOPE INTO DITCH BOTTOM (BIOENGINEERING)
 - RIPRAP CL III
 - TREE FROM ONSIDE ANCHORED INTO TOE OF SLOPE
 - 1019- EXISTING CONTOUR (MAJOR)
 - 1019- EXISTING CONTOUR (MINOR)
 - 1019- PROPOSED CONTOUR (MAJOR)
 - 1019- PROPOSED CONTOUR (MINOR)

wsb City of Plymouth City of Maple Grove

SCALE: AS SHOWN PLAN BY: BPM DESIGN BY: KJF CHECK BY: JHN

NO.	DATE	DESCRIPTION

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JAKE H. NEWHALL
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SITE & GRADING PLANS

**BASS LAKE ESTATES 2ND ADDITION
STREAM RESTORATION PROJECT**

CITY OF PLYMOUTH, MN

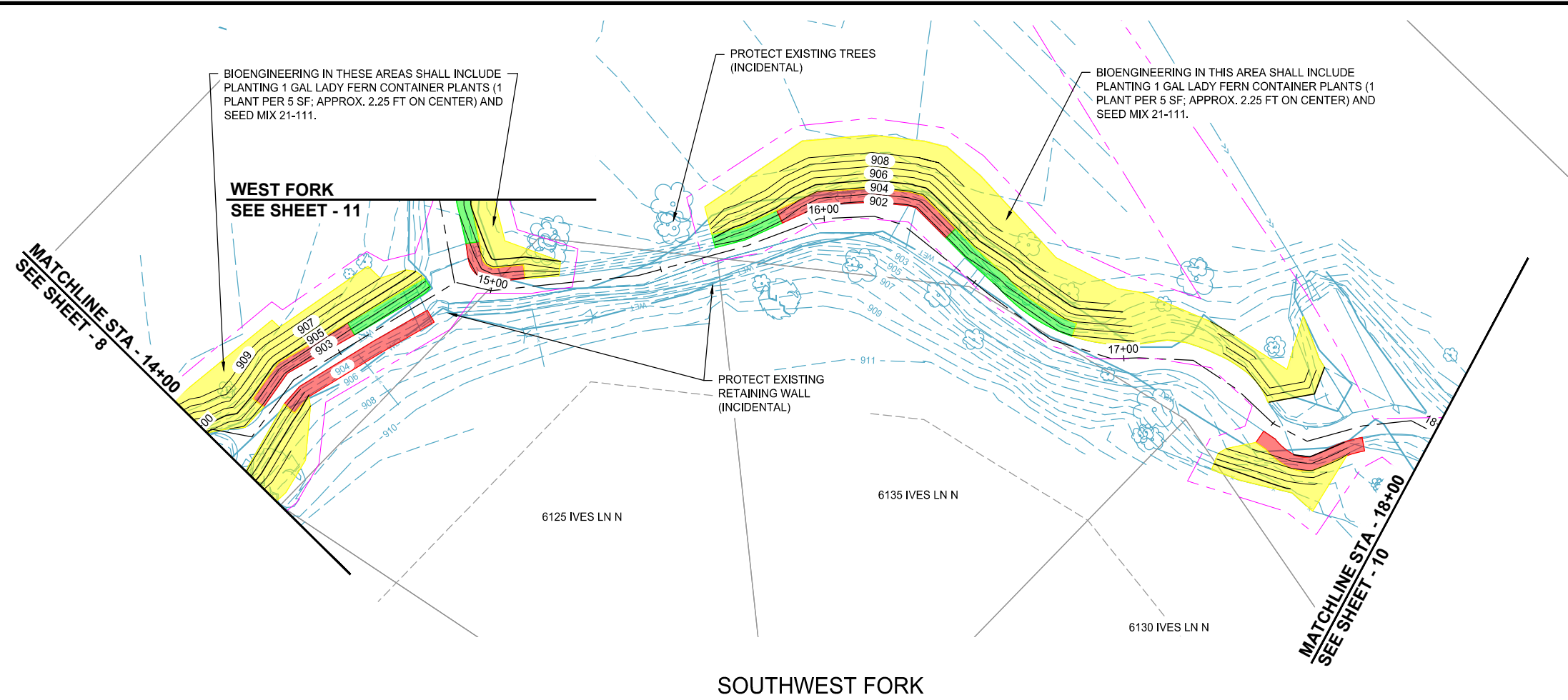
CLIENT PROJECT NO. WR 22-0001

WSB PROJECT NO. 018715-000

SHEET 8 OF 13

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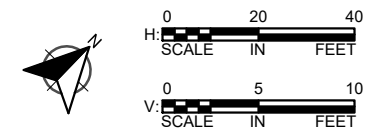


LOCATION



SCALE: AS SHOWN PLAN BY: BPM DESIGN BY: KJF CHECK BY: JHN

REVISIONS	
NO.	DESCRIPTION

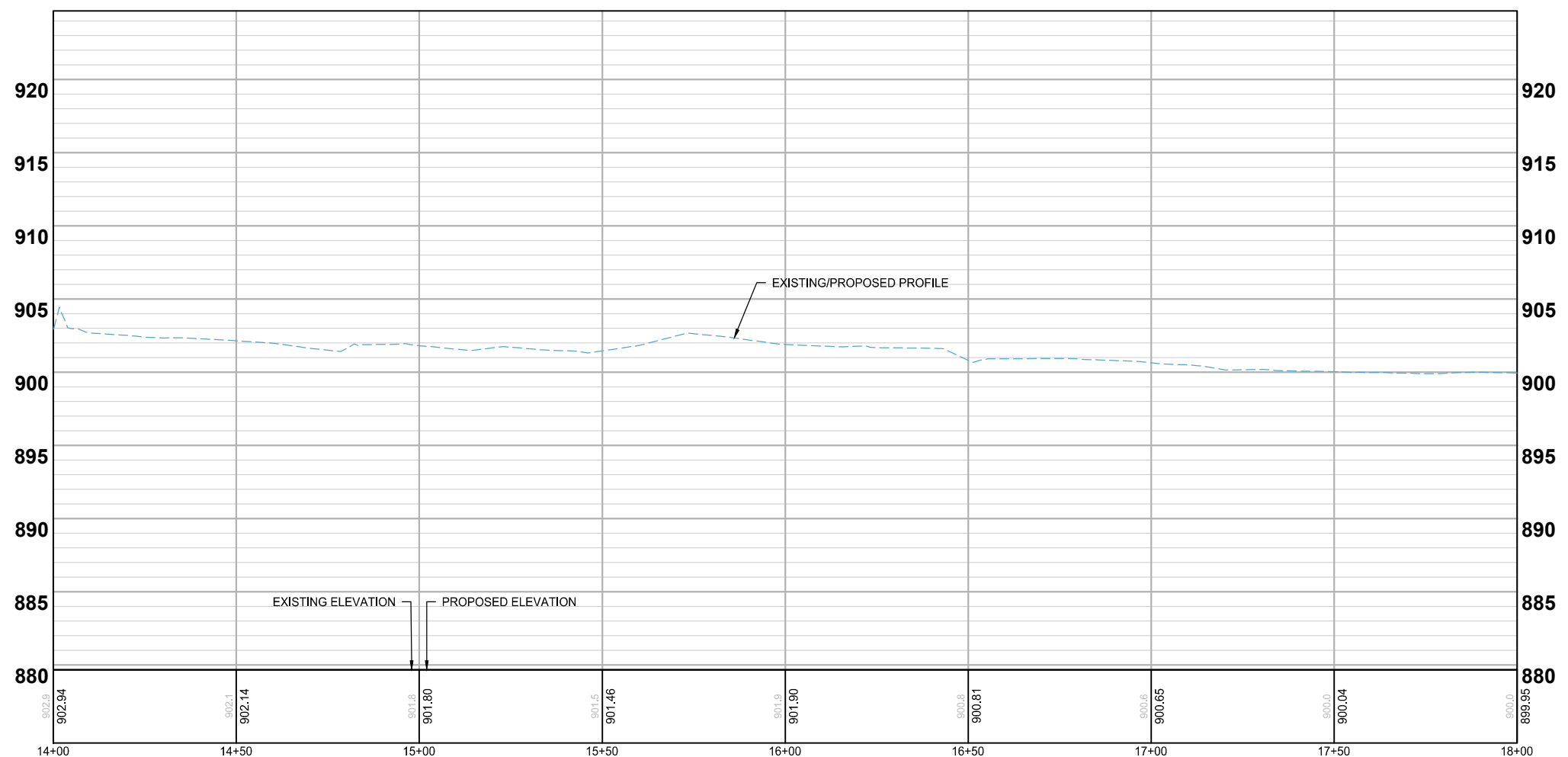


NOTES

1. ONSITE TREES TO BE ANCHORED INTO TOE OF SLOPE WHERE NOTED. MAY NOT BE ROTTEN. TREES WILL BE ANCHORED USING MODEL 68 DUCKBILL EARTH ANCHORS.
2. BIOENGINEERING TECHNIQUES USED INCLUDE LIVE STAKES AND SEEDING SPECIAL (SEE SPECIFICATIONS).
3. CONTRACTOR TO GRADE AROUND EXISTING STORM SEWER STRUCTURES AS DIRECTED BY THE ENGINEER.
4. CONTRACTOR TO COORDINATE ACCESS LIMITS WITH THE ENGINEER IN THE FIELD.
5. SOILS TRACKED FROM SITE MUST BE REMOVED FROM ALL PAVED SURFACES WITHIN 24 HOURS OF DISCOVERY DURING CONSTRUCTION.
6. EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE BUT IN NO CASE LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. AREAS SHOULD BE RESTORED WITH SEED MIXES AS SHOWN ON THE PLANS & LEGEND IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.
7. SCRAPED INVASIVE VEGETATION CANNOT BE STOCKPILED IN A WETLAND OR STREAM AREA AND SHOULD BE HAULED OFFSITE.
8. FOR ALL RESTORATION PERFORMED PRIOR TO APRIL 15, RESTORE ALL DISTURBED AREAS WITH OATS COVER CROP (MNDOT SEED MIX 21-111, 100 LBS/ACRE).
9. FOR RESTORATION PERFORMED AFTER APRIL 15, RESTORE ALL POND EDGES, WOODED AREAS WHERE DISTURBED OR AS DIRECTED BY THE ENGINEER IN THE FIELD WITH SEED MIXES OR SOD AS SHOWN IN THE PLANS AT THE MNDOT SPECIFIED RATE. TYPE 21-111 SEED (100 LBS/ACRE) AND CATEGORY 3N EROSION CONTROL BLANKET SHALL BE INSTALLED ALONG POND EDGES, BUFFERS, AND NON-MOWABLE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

LEGEND

- CONSTRUCTION LIMITS
- x-x- INSTALL FENCE
- SF- FLOATING SILT CURTAIN
- ACCESS ROUTE
- PLUNGE POOL
- ROCK DITCH CHECK
- BLEND SIDE SLOPE INTO DITCH BOTTOM, ADD RIPRAP TO TOE OF SLOPE (2 FEET HIGH) (HARD ARMORING)
- BLEND SIDE SLOPE INTO DITCH BOTTOM (BIOENGINEERING)
- RIPRAP CL III
- TREE FROM ONSIDE ANCHORED INTO TOE OF SLOPE
- 1019- EXISTING CONTOUR (MAJOR)
- 1019- EXISTING CONTOUR (MINOR)
- 1019- PROPOSED CONTOUR (MAJOR)
- 1019- PROPOSED CONTOUR (MINOR)



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.

JAKE H. NEWHALL
DATE: 09/27/2022 LIC. NO.: 49170

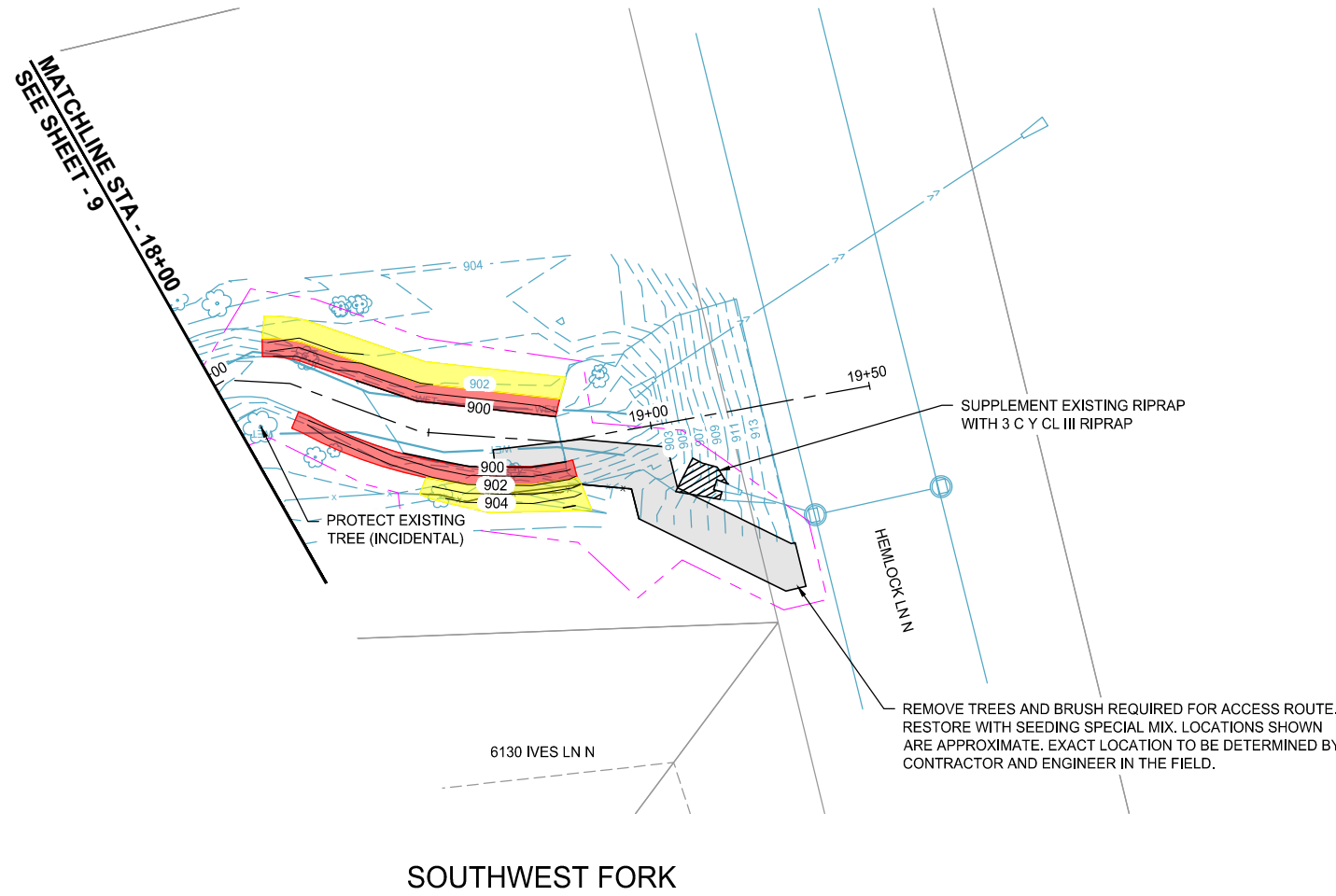
SITE & GRADING PLANS

**BASS LAKE ESTATES 2ND ADDITION
STREAM RESTORATION PROJECT**
CITY OF PLYMOUTH, MN

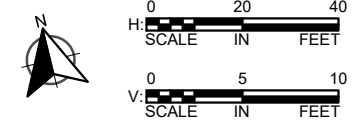
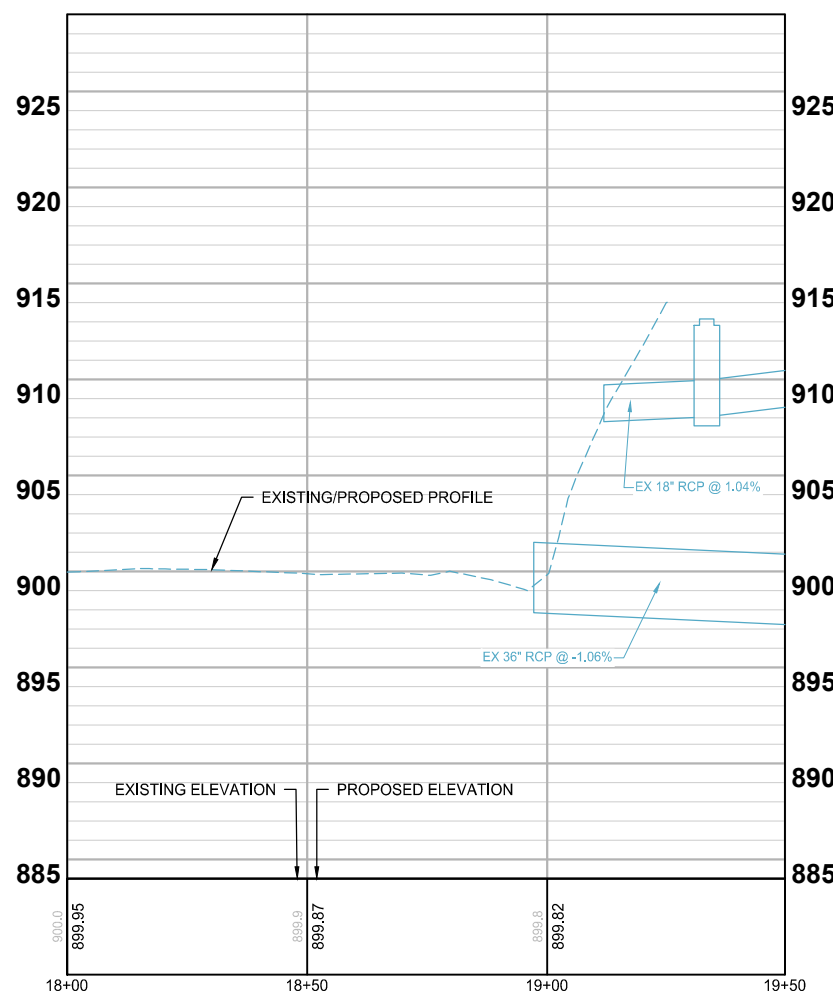
CLIENT PROJECT NO. WR 22-0001

WSB PROJECT NO. 018715-000

SHEET 9 OF 13



SOUTHWEST FORK



NOTES

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LEGEND

- CONSTRUCTION LIMITS
- x-x- INSTALL FENCE
- SF FLOATING SILT CURTAIN
- ACCESS ROUTE
- PLUNGE POOL
- ROCK DITCH CHECK
- BLEND SIDE SLOPE INTO DITCH BOTTOM, ADD RIPRAP TO TOE OF SLOPE (2 FEET HIGH) (HARD ARMORING)
- BLEND SIDE SLOPE INTO DITCH BOTTOM (BIOENGINEERING)
- RIPRAP CL III
- TREE FROM ONSIDE ANCHORED INTO TOE OF SLOPE
- 1019- EXISTING CONTOUR (MAJOR)
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- 1019- PROPOSED CONTOUR (MAJOR)
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SCALE: AS SHOWN
 PLAN BY: BPM
 DESIGN BY: KJF
 CHECK BY: JHN

REVISIONS	
NO.	DESCRIPTION

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SITE & GRADING PLANS

**BASS LAKE ESTATES 2ND ADDITION
 STREAM RESTORATION PROJECT
 CITY OF PLYMOUTH, MN**

CLIENT PROJECT NO. WR 22-0001

WSB PROJECT NO. 018715-000

SHEET 10 OF 13

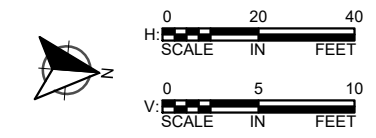
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REVISIONS	
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Jake H. Newhall
 JAKE H. NEWHALL
 DATE: 09/27/2022 LIC. NO.: 49170

LOCATION

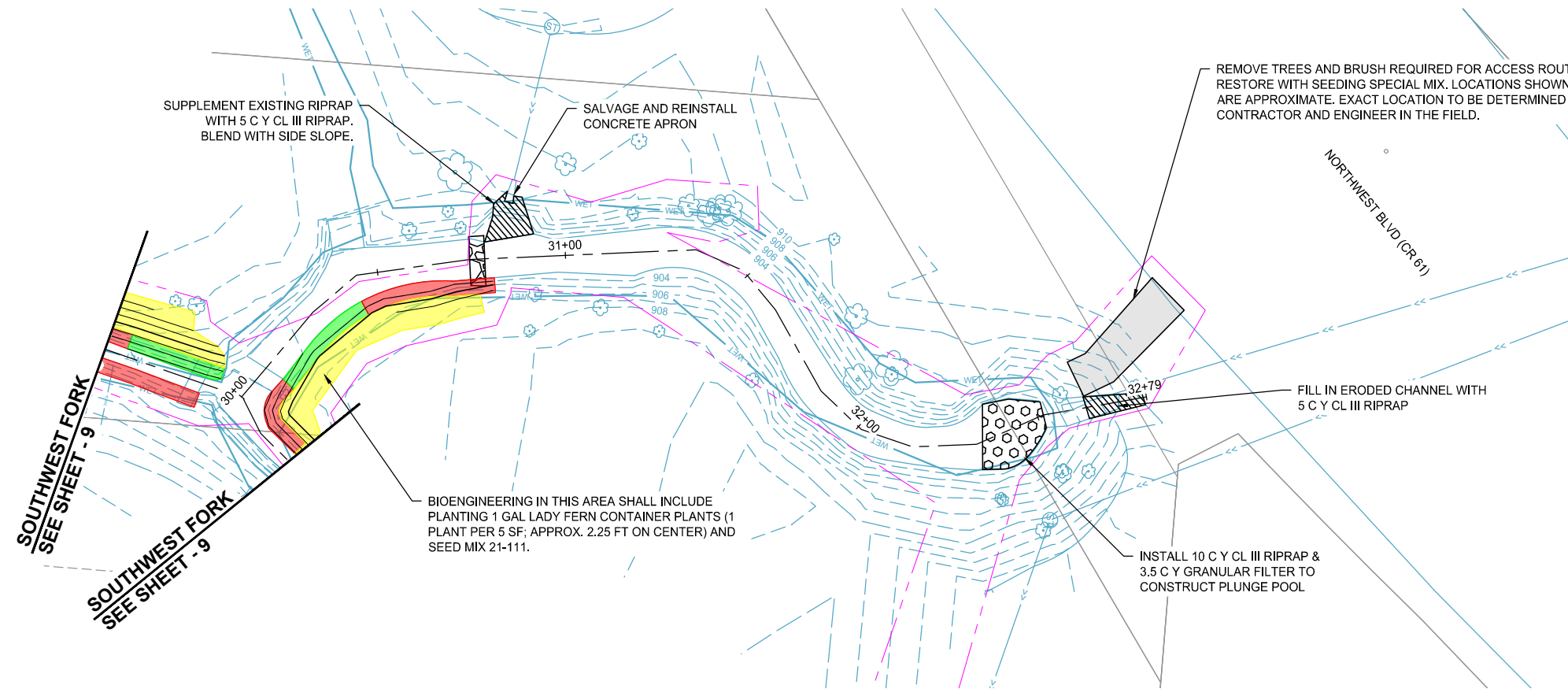


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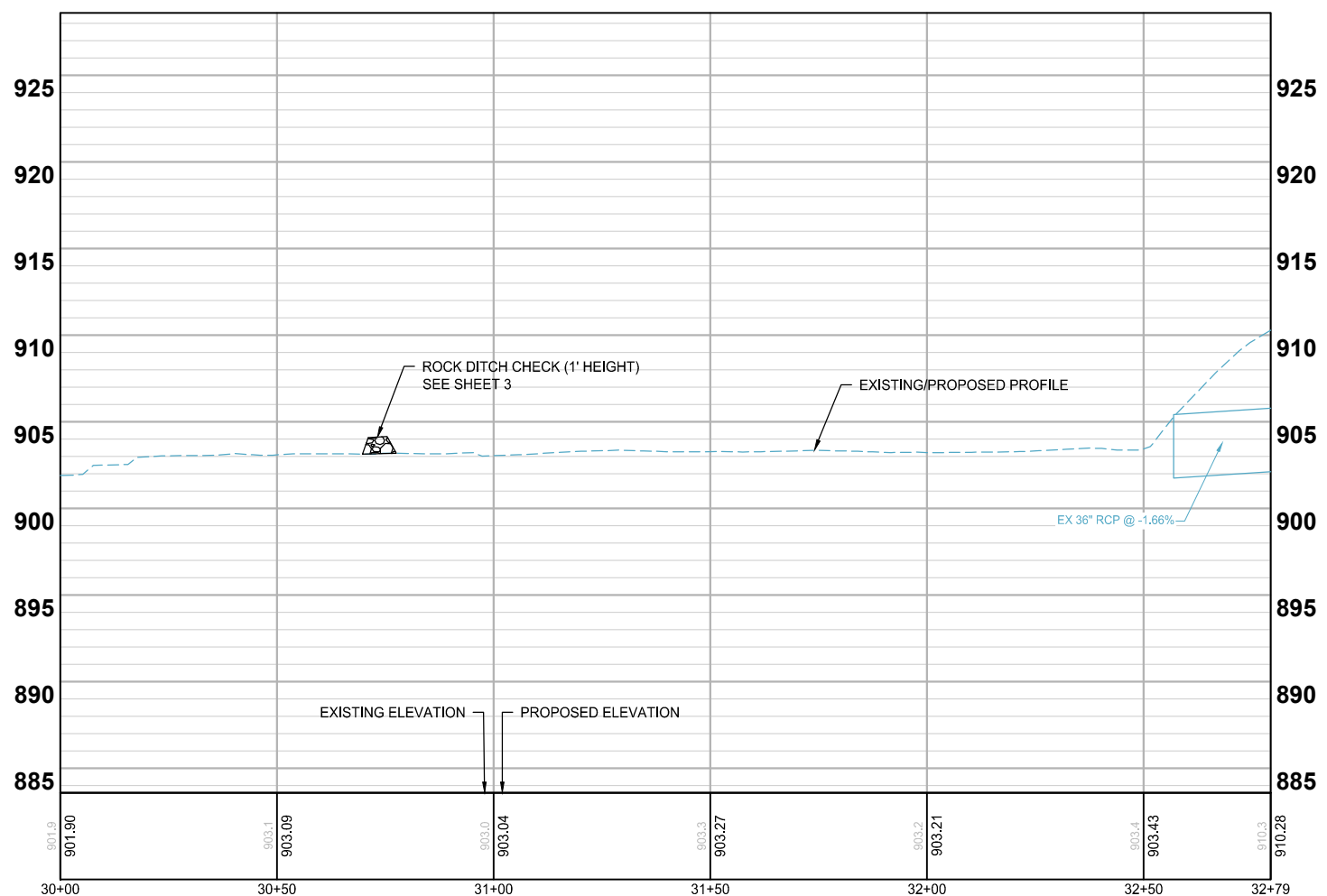
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LEGEND

- CONSTRUCTION LIMITS
- x-x- INSTALL FENCE
- SF- FLOATING SILT CURTAIN
- [Grey Box] ACCESS ROUTE
- [Circular Pattern Box] PLUNGE POOL
- [Rock Pattern Box] ROCK DITCH CHECK
- [Red Box] BLEND SIDE SLOPE INTO DITCH BOTTOM, ADD RIPRAP TO TOE OF SLOPE (2 FEET HIGH) (HARD ARMORING)
- [Yellow Box] BLEND SIDE SLOPE INTO DITCH BOTTOM (BIOENGINEERING)
- [Hatched Box] RIPRAP CL III
- [Green Box] TREE FROM ONSIDE ANCHORED INTO TOE OF SLOPE
- 1019- EXISTING CONTOUR (MAJOR)
- 1019- EXISTING CONTOUR (MINOR)
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WEST FORK



SITE & GRADING PLANS

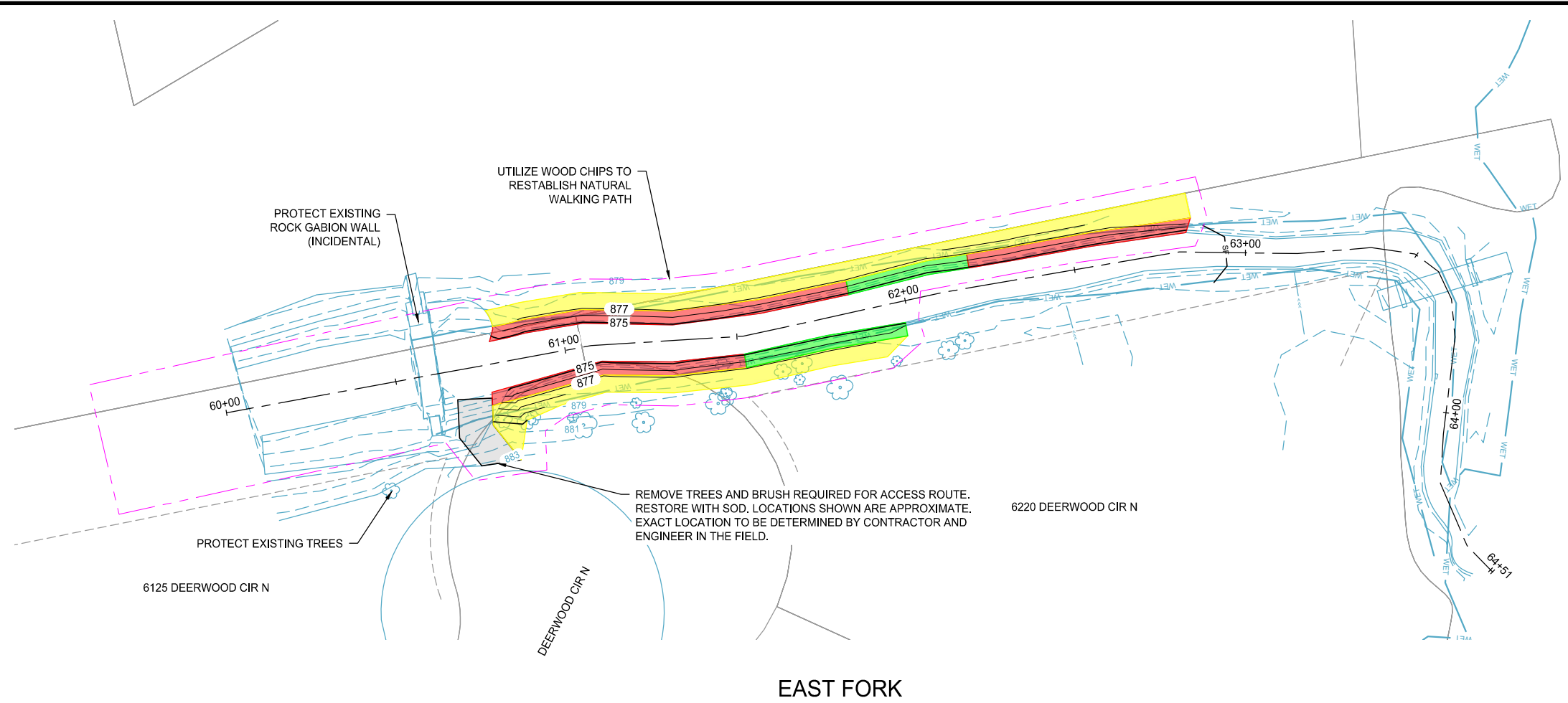
BASS LAKE ESTATES 2ND ADDITION
 STREAM RESTORATION PROJECT
 CITY OF PLYMOUTH, MN

CLIENT PROJECT NO. WR 22-0001

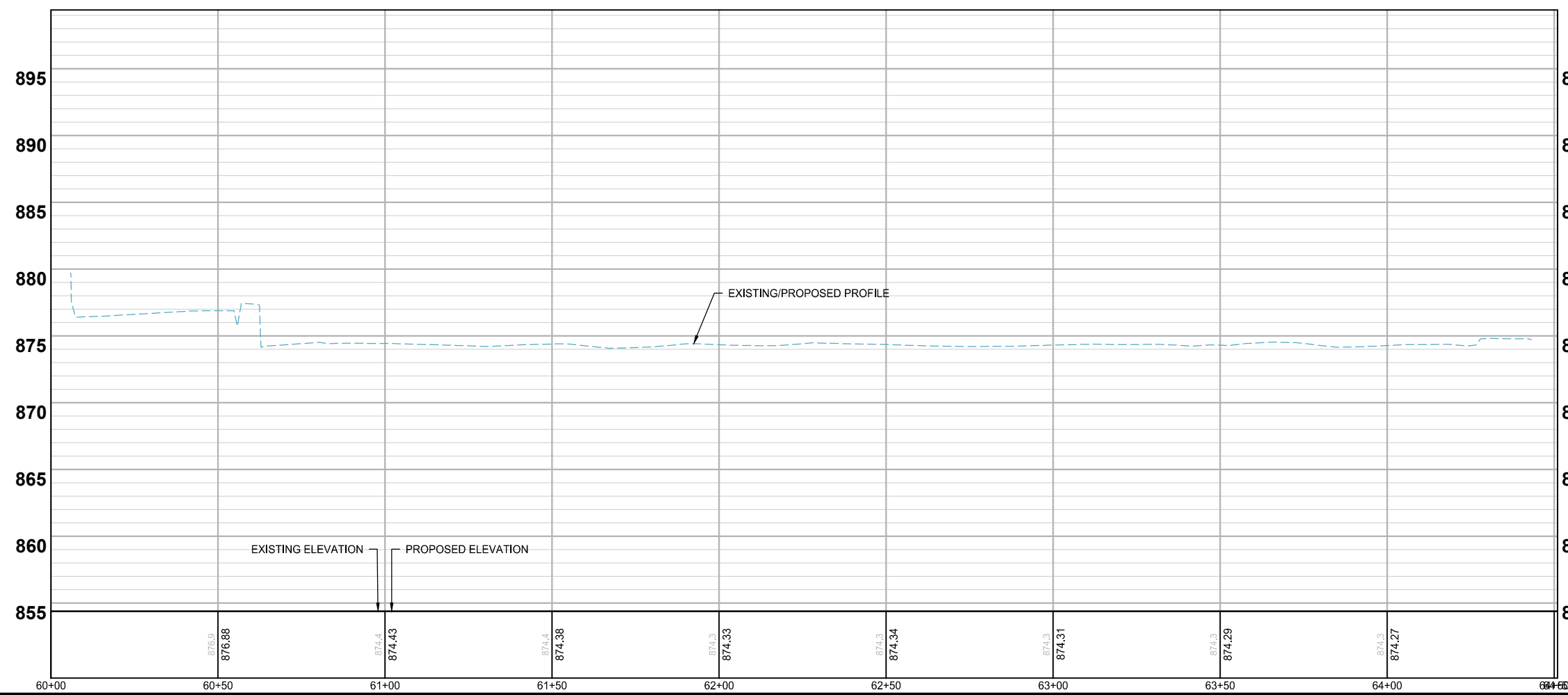
WSB PROJECT NO. 018715-000

SHEET 11 OF 13

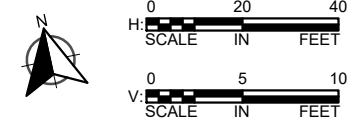
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EAST FORK



LOCATION



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SCALE: AS SHOWN PLAN BY: BPM
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