

ALL CASTINGS (MANHOLES AND VALVE BOXES) MUST BE ADJUSTED TO 1/2" BELOW THE FINISHED ASPHALT BASE COURSE ELEVATION BEFORE PAVING OF THE ASPHALT BASE. NO CUTS WILL BE ALLOWED IN THE ASPHALT BASE. ADJUSTMENTS TO MEET FINAL WEAR COURSE ELEVATIONS WILL BE ACCOMPLISHED USING GLUE IN STEEL ADJUSTING RINGS. THE CITY WILL IMPOSE A \$1000/PATCH CHARGE TO THE DEVELOPER FOR EVERY PATCH LOCATION (NEEDED FOR CASTING ADJUSTMENT OR OTHER PAVEMENT REPAIR) IN THE BASE COURSE BITUMINOUS PAVEMENT.

**SANITARY SEWER NOTES**

1. PROPOSED SANITARY SEWER PIPE SHALL BE:
  - 1.1. POLYVINYL CHLORIDE (PVC) SDR 35
2. FIELD VERIFY SIZE, ELEVATION AND LOCATION OF EXISTING SANITARY SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
3. CONTRACTOR TO CONTACT CITY ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO CONNECTION TO EXISTING PUBLIC SANITARY SEWER.

**WATERMAIN NOTES**

1. PROPOSED WATERMAIN PIPE SHALL BE:
  - 1.1. DUCTILE IRON PIPE (DIP) CLASS 52
2. ALL WATERMAIN VALVES SHALL BE OPERATED ONLY BY ELK RIVER MUNICIPAL UTILITY FORCES (763.635.1361)
3. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING WATERMAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
4. MAINTAIN A MINIMUM OF 7.5 FEET OF COVER OVER ALL WATERMAIN PIPE.
5. PROVIDE PREFORMED INSULATION, PPG FOAMGLASS, OR APPROVED EQUAL WHERE SANITARY SEWER OR STORM SEWER CROSSES WITHIN 18" OF WATERMAIN.

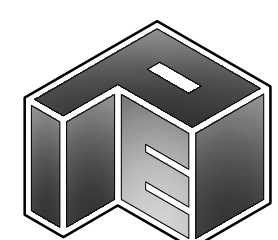
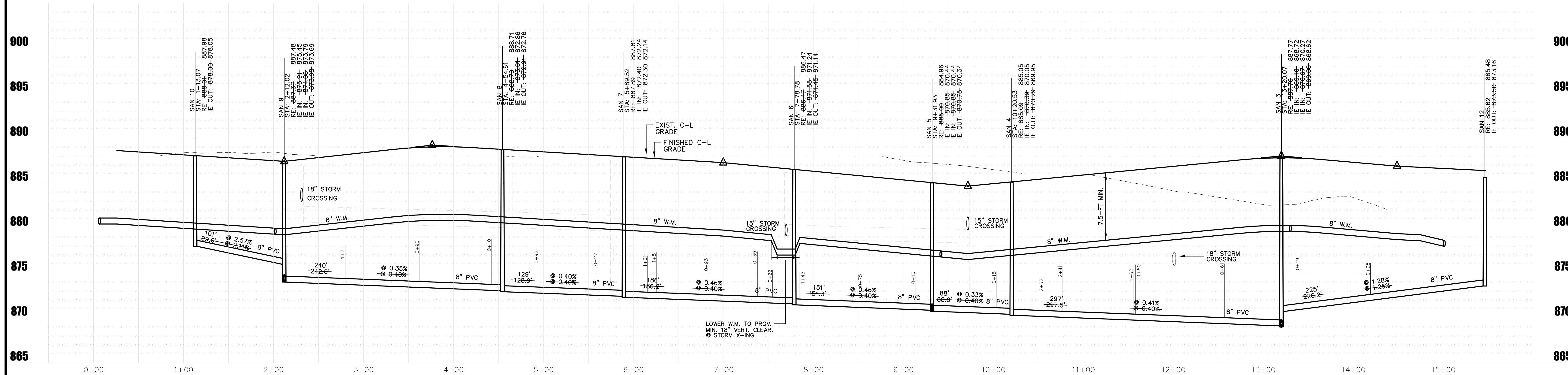
**LEGEND**

- EXISTING STORM SEWER
- EXISTING WATER MAIN
- - - EXISTING SANITARY SEWER
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- EXISTING FLARED-END SECTION
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING WETLAND
- PROPOSED WATER PIPE
- PROPOSED SANITARY SEWER PIPE
- PROPOSED STORM SEWER PIPE
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FLARED-END SECTION
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED OUTFALL STABILIZATION (ARTICULATED BLOCK - E.G. FLEXAMAT OR APPROVED EQUAL)
- SOIL BORING (NTI, LLC)

**GENERAL NOTES**

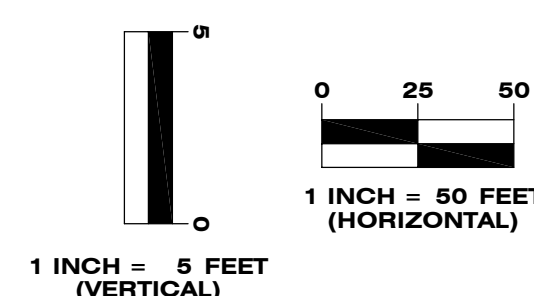
1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CONTACT COPPER STATE ONE-CALL AT (651) 454-0002 FOR EXISTING UTILITY LOCATIONS.
3. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING SANITARY SEWER, STORM SEWER, AND WATERMAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY OF ELK RIVER STANDARD SPECIFICATIONS & DETAIL PLATES WHICH GOVERN OVER ALL OTHER REFERENCED SPECIFICATIONS.
5. USE TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE PROVISIONS OF "THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AS NECESSARY WHENEVER GRADING, UTILITY, OR PAVING OPERATIONS ENDOURCH ONTO ADJACENT STREETS.
  - 5.1. TRAFFIC CONTROL REQUIRED FOR TRAIL DISRUPTION.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION.
7. SEE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL EROSION CONTROL DETAILS AND SITE SEQUENCING NOTES.
8. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT REQUIRED.

**OGDEN STREET & OGDEN CIRCLE**



**PLOWE**  
ENGINEERING, INC.  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
PHONE: (651) 361-8210  
FAX: (651) 361-8701

SITE PLANNING  
& ENGINEERING



**RIVERPLACE  
SECOND ADDITION**  
ELK RIVER, MINNESOTA  
PLAN/PROFILE  
SANITARY SEWER & WATERMAIN

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.  
*Adam Sinkel*  
ADAM SINKEL  
DATE: 07.29.2020 LIC. NO. 43963

DATE	REVISION DESCRIPTION
6-15-18	CITY REVIEW COMMENTS; CONSTRUCTION PLANS
7-11-18	FINAL PLAT SUBMITTAL
8-7-18	GRADES ADJ.
7-11-19	FINAL PLANS
7-29-20	RECORD DRAWINGS

DRAWN BY: A.G.  
DESIGN BY: A.G.  
CHKD BY: C.W.P.  
PROJ. NO. 18-1747  
**C3.1**