

- CONSTRUCTION NOTES:**
- EXISTING UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS FROM THE CITY/VILLAGE, ETC. ALL LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY UTILITIES AND HAVE ALL UTILITIES LOCATED PRIOR TO EXCAVATION.
 - THE CONTRACTOR SHALL SALVAGE AND STOCKPILE TOPSOIL FOR REPLACING IN ALL DISTURBED AREAS AS SPECIFIED.
 - THE CONTRACTOR SHALL MECHANICALLY COMPACT ALL TRENCHES, ESPECIALLY UNDER THE ROADWAYS, SIDEWALKS, DRIVEWAYS, ETC. AND INCLUDING TWO (2) FEET ON EACH SIDE OF THE PAVEMENT.
 - THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES UNTIL PERMANENT STABILIZATION AND FINAL ACCEPTANCE.
 - ALL MAILBOXES, SIGNS, ETC. REMOVED FOR CONSTRUCTION WILL BE REPLACED AS SOON AS POSSIBLE. THE CONTRACTOR SHALL PROVIDE TEMPORARY LOCATIONS FOR ANY MAILBOXES REMOVED FOR MORE THAN THREE (3) CONSECUTIVE DAYS.
 - ALL EQUIPMENT SHALL BE OPERATED WITHIN EASEMENTS, RIGHT-OF-WAY (ROW), AND/OR OTHER DESIGNATED AREAS.
 - CLEARING AND GRUBBING SHALL BE PER THE CONTRACT SITE LUMP SUM AS DIRECTED BY THE ENGINEER.
 - SAWCUT/COLD/CUT DRIVEWAYS AND STREETS AT LIMITS SHOWN.
 - ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED. THE SITE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL ITEMS AS DIRECTED BY THE ENGINEER AND/OR THE CITY/VILLAGE.

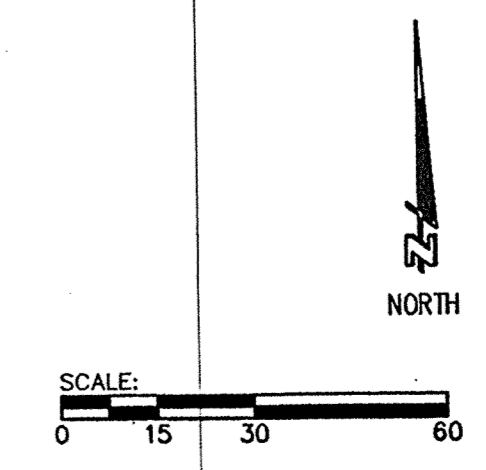
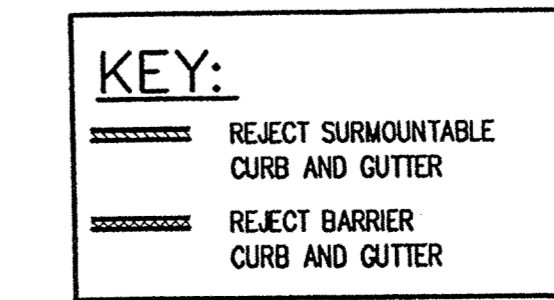
- CITY/VILLAGE WATER UTILITY SHALL BE CONTACTED BY THE CONTRACTOR TO OPERATE ALL HYDRANTS, VALVES, AND/OR CURB STOPS.
- THE CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR ALL STRUCTURES HAVING OPEN (INLET) TYPE CASTINGS.
- STORAGE LOCATIONS FOR MATERIALS SALVAGED OR NEW SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ENGINEER AND/OR OWNER.
- EROSION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MINNESOTA CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK, LATEST EDITION.
- ALL EROSION CONTROL PRACTICES INSTALLED SHALL BE MAINTAINED, REPAIRED, AND/OR CLEANED BY THE CONTRACTOR FOLLOWING ANY RAINFALL EVENT (AS MAY BE REQUIRED) OR AS DIRECTED BY THE ENGINEER.
- ALL DISTURBED AREAS SHALL BE RESTORED WITH TOPSOIL, SEED/SODDING, MULCH, AND/OR EROSION CONTROL BLANKETS AS SOON AS POSSIBLE AFTER INSTALLATION OF UTILITIES TO REDUCE EROSION POTENTIAL.
- THE CONTRACTOR SHALL NOT DISTURB ROW AND/OR PROPERTY IRONS. IF ANY IRONS ARE REMOVED, REMOVAL SHALL BE APPROVED BY THE ENGINEER, OR THE CONTRACTOR SHALL BE BILLED FOR THEIR REPLACEMENT. THE CHECKING AND/OR REPLACEMENT OF DISTURBED IRONS SHALL LIKEWISE BE BILLED TO THE CONTRACTOR.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATIONS, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 MATTHEW D. HIEB
 DATE _____ REG. NO. 26140

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL LAYOUT, DEVICES, MAINTENANCE, AND REMOVAL, INCLUDING MAINTAINING TRAFFIC ACCESSIBILITY ALONG THE PROJECT.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE PRIOR APPROVAL OF THE OWNER.
- SALVAGED MATERIALS SHALL BECOME THE PROPERTY OF OWNER.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF ALL EXISTING STRUCTURES.

- UTILITY NOTES:**
- ALL PROPOSED UTILITIES SHALL BE FURNISHED AND INSTALLED USING APPROVED MATERIALS, METHODS OF PLACEMENT, AND TESTING AS REQUIRED BY ALL GOVERNING STANDARDS AND SPECIFICATIONS OF THE CITY/VILLAGE, DOT, AND/OR OTHER PERMITTING AGENCIES.
 - ALL PROPOSED PAVEMENT CONSTRUCTION SHALL BE FURNISHED AND INSTALLED USING APPROVED MATERIALS, METHODS OF PLACEMENT, AND TESTING AS REQUIRED BY ALL GOVERNING STANDARDS AND SPECIFICATIONS OF THE CITY/VILLAGE AND/OR DOT.
 - THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
 - ALL PUBLIC UTILITIES SHOWN ARE APPROXIMATE IN DEPTH AND LOCATION AND MUST BE VERIFIED BY THE CONTRACTOR. OTHER UTILITIES MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE DEPTH(S) AND LOCATION(S) OF SAID UTILITIES.
 - ALL WATER SERVICES SHALL BE TYPE "K" COPPER WITH A MINIMUM SIZE OF TWO (2) INCHES, UNLESS OTHERWISE NOTED.
 - ALL WATERMAIN SHALL BE DUCTILE IRON PIPE, CLASS 52.
 - ALL SANITARY SEWER SERVICES SHALL BE EIGHT (8) INCH PVC, SDR 26, UNLESS OTHERWISE NOTED.
 - SANITARY SEWER MANHOLES SHALL BE 48 INCH DIAMETER WITH TYPE "A" CASTINGS, UNLESS OTHERWISE NOTED.
 - ALL SEWER SERVICE LATERALS SHALL BE LAID AT A MINIMUM GRADE OF 1/4 INCH PER FOOT, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS MINIMUM SLOPE ON ALL LATERALS.
 - ALL STORM SEWER PIPE AND CONNECTIONS SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III, UNLESS OTHERWISE NOTED AND/OR APPROVED IN WRITING BY BOTH THE ENGINEER AND THE CITY/VILLAGE ENGINEER (SEE SPECIFICATIONS).
 - ALL STORM SEWER ENDWALLS SHALL BE INSTALLED WITH A REQUIRED TRASH GUARD OF THE APPROPRIATE SIZE.
 - THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OVER THE WATERMAIN OF EIGHT (8) FEET FROM THE PROPOSED GRADE, UNLESS OTHERWISE NOTED.
 - INSULATION REQUIRED OVER THE WATERMAIN AND WATER SERVICE LATERALS, WHERE STORM SEWER CROSSES, SHALL BE 4"x4" RIGID EXTRUDED POLYSTYRENE BOARD CLOSED CELL (DOW CHEMICAL) OR APPROVED EQUAL.
 - THE CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION FROM THE WATERMAIN OF TEN (10) FEET TO THE STORM SEWER AND/OR SANITARY SEWER. THE CONTRACTOR SHALL ALSO MAINTAIN A MINIMUM VERTICAL SEPARATION FROM THE WATERMAIN OF 18 INCHES TO THE STORM SEWER AND/OR SANITARY SEWER, WHETHER THE WATERMAIN CROSSES OVER OR UNDER THE STORM SEWER AND/OR SANITARY SEWER. ANY DEFLECTION OF THE WATERMAIN SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE WATERMAIN. INSULATE AS REQUIRED.
 - WATERMAIN BENDS MAY BE REMOVED BY DEFLECTING THE WATER PIPE BY A MAXIMUM OF FIVE (5) DEGREES PER SECTION. MAINTAIN SEPARATION REQUIREMENTS FROM THE SEWER AT ALL TIMES.
 - ALL PUBLIC FACILITIES (UTILITIES, ROADWAY, ETC.) SHALL BE INSPECTED BY THE DEVELOPER'S REPRESENTATIVE AND ACCEPTED BY THE CITY/VILLAGE. THE CITY/VILLAGE SHALL INSPECT AND ACCEPT ALL CONNECTIONS TO PUBLIC FACILITIES. THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE CITY/VILLAGE DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE FOR EACH CONNECTION TO PUBLIC FACILITIES.
 - ALL COMBINATION CONCRETE CURB AND GUTTER SHALL BE 18 INCHES IN WIDTH AND BARRIER TYPE, UNLESS OTHERWISE NOTED.
 - ALL CURB AND GUTTER RADI ARE MEASURED TO THE BACK OF THE CURB AND SHALL BE THREE (3) FEET, UNLESS OTHERWISE NOTED.
 - EXACT LOCATIONS OF ALL SERVICE LATERALS SHALL BE FIELD DETERMINED BY THE ENGINEER.
 - THE CONTRACTOR SHALL INSTALL A WATERTIGHT PLUG AT THE CONNECTION(S) WITH EXISTING SANITARY MANHOLE(S) ON THE OUTLET INVERT SIDE.
 - THE WATERTIGHT PLUG SHALL REMAIN IN PLACE UNTIL PERMANENT WATERTIGHT CASTINGS ARE INSTALLED, AND ALL TESTING OF THE SANITARY SEWER HAS BEEN COMPLETED AND PASSED.
 - ALL SEWER PIPE LENGTHS ARE MEASURED FROM THE CENTER TO THE CENTER OF THE MANHOLES.
 - ALL FIRE HYDRANTS SHALL INCLUDE VALVE AND PIPING, SEE DETAIL.
 - ALL VALVES SHALL BE GATE TYPE VALVES. NO BUTTERFLY VALVES SHALL BE ALLOWED.
 - ALL FIRE HYDRANTS SHALL BE INSTALLED WITH AN EIGHT (8) FOOT MINIMUM BURY DEPTH.
 - ALL FIRE HYDRANTS SHALL BE PLACED FIVE (5) FEET BEHIND THE BACK OF CURB, UNLESS OTHERWISE NOTED. SEE DETAIL.
 - THE HYDRANT LEAD IS MEASURED FROM THE VALVE CENTER TO THE WATERMAIN CENTER.
 - THE PROPOSED WATERMAIN SHALL BE CONTINUOUSLY INSTALLED WITH CONDUCTIVITY STRAPS RATED FOR 600 AMPS.



DATE	BY	DESCRIPTION
08/14/05	JRK	ASBUILT
10/19/05	JRK	REVISED PER CITY AT PRECON.
10/17/05	JRK	RELEASED FOR CONSTRUCTION
09/12/05	JRK	REVISED PER CITY COMMENTS
09/07/05	MDH	RELEASED FOR BIDDING
08/31/05	MDH	RELEASED FOR SUBMITTAL
07/29/05	MDH	RELEASED FOR EDA REVIEW
		REVISION DESCRIPTION:

DRAWN BY: JRK	CHECKED BY: JRK
DATE: 07/29/05	DWG FILE: 344-SITE
REF FILE: 344-001	JOB NUMBER: 344-001

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PROJECT:
 NEW FACILITY FOR
 MEDICAL EXTRUSION TECHNOLOGIES
 CITY OF ELK RIVER, SHERBURNE COUNTY, MINNESOTA

SHEET NO. C1.1