



**NOTES:**

- FOR WATER MAIN GENERAL NOTES, CONSTRUCTION SEQUENCING NOTES, LOCATION PLANS AND PROFILE AND WATER MAIN AND STRUCTURE DETAILS, SEE SHEET NOS. 238 THROUGH 245.
- RISER SHAFT FOR THE RELOCATED WATER MAIN SHALL BE DESIGNED AND CONSTRUCTED OF PRECAST REINFORCED CONCRETE TO THE MINIMUM REQUIREMENTS SHOWN ON THE DRAWINGS. SPECIAL PROVISION FOR PRECAST CONCRETE RISER, REQUIRED REFERENCES AND AS SHOWN. AT CONTRACTOR'S OPTION, RISER SHAFT MAY BE CONSTRUCTED OF CAST-IN-PLACE CONCRETE.
- RISER SHAFT, PIPE SUPPORTS AND THRUST RESTRAINTS FOR THE RELOCATED WATER MAIN, INCLUDING EMBEDMENTS INTO RISER STRUCTURE AND ALL CONNECTIONS SHALL BE DESIGNED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER EMPLOYED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS, DRAWINGS AND DETAILS SEALED AND SIGNED BY THE CONTRACTOR'S ILLINOIS LICENSED STRUCTURAL ENGINEER.
- TEST PRESSURE FOR WATER MAINS = 100 PSI, THRUST RESTRAINTS AND RISER SHALL BE DESIGNED FOR 1.5 TIMES THE MAXIMUM TEST PRESSURE.
- ALL REINFORCING BARS SHALL BE EPOXY COATED, ASTM A615, GRADE 60.
- CONCRETE STRENGTH SHALL MEET OR EXCEED 5000 PSI AT 28 DAYS.
- EXTERIOR SURFACES OF RISER SHAFT SHALL BE WATERPROOFED FOR WATER/TIGHT STRUCTURE.
- CONCRETE COVER:
  - CONCRETE PLACED AGAINST EARTH - 3"
  - CONCRETE IN CONTACT WITH EARTH OR WATER - 2"
- SOFT CLAYS OCCUR IN THE SOIL PROFILE FOR THE BORINGS IN THIS AREA. CONTRACTOR SHALL REVIEW GEOTECHNICAL REPORT AND BORING LOGS IN HIS SELECTION OF METHODS TO SUPPORT THE EXCAVATION AND FOR THE DESIGN OF THE RISER SHAFT AND THRUST RESTRAINTS. SURFACE AND SUBSURFACE WATER SHALL NOT BE PERMITTED TO ENTER THE EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) AND THE VARIOUS INFRASTRUCTURE DEPARTMENTS OF THE CITY OF CHICAGO, INCLUDING, BUT NOT LIMITED TO, THE CHICAGO DEPARTMENT OF TRANSPORTATION (CDOT), THE OFFICE OF UNDERGROUND COORDINATION (OUC) AND THE DEPARTMENT OF WATER MANAGEMENT (IDWM).
- DURING CONSTRUCTION, SOFT CLAY IS EXPECTED AT THE BASE OF THE EXCAVATION. THE FOUNDATION SOIL MAY BECOME UNSTABLE DURING CONSTRUCTION AND THE CONTRACTOR MAY REQUIRE A WORKING PLATFORM TO PROPERLY CONSTRUCT THE PRECAST RISER SHAFT. THE NEED FOR A WORKING PLATFORM TO PROPERLY CONSTRUCT THE PRECAST RISER SHAFT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL BE CONSIDERED INCLUDED WITHIN THE COST OF THE PRECAST CONCRETE RISER.
- EXACT LOCATIONS OF EXISTING WATER MAINS AND EXISTING BELOW GRADE STRUCTURES AND UTILITIES SHALL BE DETERMINED IN THE FIELD PRIOR TO EXCAVATION FOR WATER MAINS. ANY CONFLICTS WITH EXISTING STRUCTURES AND UTILITIES DUE TO FIELD CONDITIONS ENCOUNTERED THAT WILL IMPACT CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, SO AS NOT TO DELAY CONSTRUCTION, ALONG WITH DETAILED LOCATIONS OF CONFLICTING STRUCTURES AND UTILITIES AND SUGGESTED SOLUTIONS TO RESOLVE THE CONFLICT FOR ENGINEER REVIEW AND APPROVAL. ANY CHANGES REQUIRED AS A RESULT OF FIELD CONDITIONS ENCOUNTERED SHALL BE CONSIDERED INCLUDED WITHIN THE COST OF THE RESPECTIVE PAY ITEM.
- CONTRACTOR SHALL PROTECT EXISTING BURIED AND ABOVE GROUND STRUCTURES AND UTILITIES THAT ARE TO REMAIN DURING CONSTRUCTION OF THE WATER MAIN AND RISER SHAFT. THE COST OF SUCH PROTECTION SHALL BE INCLUDED WITHIN THE COST OF THE 16-INCH WATER MAIN RELOCATION PAY ITEM.
- ALL WORK TO CONFORM TO IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, UNLESS OTHERWISE SPECIFIED. USE MORE STRINGENT REQUIREMENT WHERE REQUIREMENTS CONFLICT.



DESIGNED BY: **AMN**  
 USER NAME: **1-CougarHQ**  
 PLOT SCALE: **1/8"=1'-0"**  
 PLOT DATE: **4/24/2014**

DESIGNED - **AAC**  
 DRAWN - **HMC**  
 CHECKED - **REB**  
 DATE - **04/28/14**

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

WATER MAIN RELOCATION RISER SHAFT		E.-M. DATE	SECTION	COUNTY	TOTAL SHEET SHEETS: NO.
SCALE:	SHEET OF SHEETS STA.	RD/24/290	2013-010R	COOK	741/246
					CONTRACT NO. 60W28
					ILLINOIS/HD PROJECT