NOTE: ALL OF THE FOLLOWING WATER MAIN CONSTRUCTION MUST BE COORDINATED AND SEQUENCED WITH THE CONSTRUCTION OF THE NORTHWEST FLYOVER RAMP AT THIS LOCATION.

## PHASE A (RELOCATION OF WATER MAIN FROM UNDER EXISTING RAMP ROADWAY)

1. CONFIRM THAT CTA IS PREPARED FOR WATER MAIN SHUTDOWN, WHICH IMPACTS REST ROOM FACILITIES AT CTA STATION ENTRANCES OF UIC-HALSTED STATION AT PEORIA STREET AND HALSTED STREET.

2. CONTACT CDWM TO ARRANGE FOR THE SHUTDOWN OF THE 16" WATER MAIN CROSSING THE HIGHWAY AT GREEN STREET. (312) 744-5070. DEWATER THE

3. CUT AND CAP EXISTING 16" WATER MAIN TO THE NORTH IN GREEN STREET AT APPROXIMATELY STATION 51+08. CUT AND CAP EXISTING 16" WATER MAIN TO THE SOUTH IN VACATED GREEN STREET AT APPROXIMATELY 200' N.N.L. OF HARRISON STREET, EXACT LOCATIONS AND DEPTH OF EXISTING WATER MAINS TO BE VERIFIED IN FIELD BY CONTRACTOR.

4. INSTALL EXCAVATION SUPPORT SYSTEM AS NECESSARY TO COMPLETE THE WORK, EXCAVATE SLOPE AND REMOVE 16" WATER MAIN AND BEND FROM APPROXIMATELY STATION 50+12 TO STATION 50+28.

5. PROVIDE 1' LONG COUPON OF REMOVED 16" WATER MAIN TO THE ENGINEER FOR MEASUREMENT AND ASSESSMENT FOR PHASE C REHABILITATION.

6. CONNECT NEW 16" WATER MAIN TO EXISTING 16" WATER MAIN UNDER EXPRESSWAY WITH MJ SLEEVE, INSTALL 30" CASING PIPE AND 16" CARRIER PIPE FROM CONNECTION TO APPROXIMATELY STATION 50+28. INSTALL TEMPORARY

7. BACKFILL EXCAVATION, RESTORE PAVEMENT AND RE-OPEN RAMP TO TRAFFIC PRIOR TO REQUIRED OPENING TIME.

## PHASE B (PREPARATION FOR WATER MAIN REHABILITATION)

1. INSTALL BRACED EXCAVATION SUPPORT SYSTEM (NORTH SIDE) AS NECESSARY TO COMPLETE THE WORK. EXCAVATE SLOPE AND REMOVE 16-WATER MAIN FROM APPROXIMATELY STATION 50+28 TO STATION 51+07. PROVIDE LAUNCHING PIT ADEQUATELY SIZED FOR INSTALLATION OF LINER IN

2. INSTALL BRACED EXCAVATION SUPPORT SYSTEM (SOUTH SIDE) AS NECESSARY TO COMPLETE THE WORK, EXCAVATE AND REMOVE EXISTING RISER SHAFT AND 16" WATER MAIN FROM APPROXIMATELY STATION 47+36 TO STATION 47+52.

3. (SOUTH SIDE) INSTALL NEW 16" WATER MAIN AND CONNECT TO EXISTING 16" WATER MAIN UNDER EXPRESSWAY WITH MJ SLEEVE, INSTALL 30" CASING PIPE AND 16" CARRIER PIPE FROM CONNECTION TO STATION 47+36. INSTALL TEMPORARY 16" MJ CAP. PROVIDE RECEIVING PIT ADEQUATELY SIZED FOR INSTALLATION OF LINER IN PHASE C.

## PHASE C (WATER MAIN REHABILITATION)

1. CLEAN AND TELEVISE THE WATER MAIN TO BE REHABILITATED IN CONFORMANCE WITH THE SPECIAL PROVISIONS AND MANUFACTURER'S RECOMMENDATIONS, VERIFY THAT THE WATER MAIN IS READY FOR THE REHABILITATION PROCESS.

2 PERFORM THE WATER MAIN REHARD ITATION RETWEEN APPROXIMATELY STATION 47+36 TO STATION 50+27, ALLOW COMPLETE INSTALLATION PROCESS PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATION.

3. TELEVISE AND INSPECT THE LINER, VERIFY THAT THE LINER IS PROPERLY INSTALLED. FILL, FLUSH, AND PRESSURE TEST THE LINER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

4. AFTER APPROVAL OF THE PRESSURE TEST, DEWATER THE LINER IN PREPARATION FOR MAKING CONNECTIONS IN LATER PHASE, IF REQUIRED, CONNECTIONS, PROVIDE TEMPORARY CAPS AS REQUIRED AT THE 16" END OPENINGS OF THE LINER TO PREVENT ANY DEBRIS FROM ENTERING.

# PHASE D (INSTALLATION OF RISER VAULTS, CASINGS, AND NEW WATER MAIN)

NORTH SIDE

1. CONSTRUCT BASE AND WALLS OF NEW PRE-CAST RISER SHAFT, SEE SHEET 246, INSTALL 16" PIPE AND FITTINGS AS SHOWN IN THE RISER SHAFT, RESTRAIN TOP AND BOTTOM BASE BENDS, INSTALL 2" TAP FOR FLUSHING ON TOP OF PIPE IN RISER SHAFT. INSTALL ROOF SLAB.

2. INSTALL 16" PIPE AS SHOWN FROM THE RISER SHAFT TO THE NORTH IN GREEN STREET. INSTALL 16" VALVE AND PRECAST BASIN AT APPROXIMATELY STATION 51+03. ADJUST VALVE LOCATION AS REQUIRED IN FIELD TO COORDINATE WITH ADJACENT UTILITIES.

3. INSTALL 16" PIPE IN 30" SPLIT CASING PIPE (BOTTOM HALF) BETWEEN PROPOSED RISER SHAFT LOCATION AND POINT OF CONNECTION TO EXISTING LINED 16" WATER MAIN UNDER EXPRESSWAY. TEMPORARILY CAP AND BRACE SOUTH END OF NEW 16" WATER MAIN, INSTALL TEMPORARY 2" TAP FOR

4. BEFORE THE NEW WATER MAIN CAN BE FILLED, FLUSHED, AND PRESSURE TESTED. THE BRACED EXCAVATION AREA MUST BE BACKFILLED AROUND THE RISER SHAFT AND ALL PIPE STRUCTURAL RESTRAINT SYSTEMS MUST BE IN PLACE.

5. CONTACT COWM TO ARRANGE FOR THE SHUTDOWN OF THE 16" WATER MAIN IN GREEN STREET FROM VAN BUREN STREET TO 166" S.S.L. (312) 744-5070, NOTE; THERE ARE ACTIVE WATER SERVICES ON THIS SECTION OF WATER MAIN TO BE SHUT DOWN. THE CONNECTION WORK DESCRIBED IN NOTE ? MUST BE COMPLETED WITHIN 4 HOURS OF THE SHUTDOWN.

6. EXCAVATE AND DEMOLISH EXISTING VALVE BASIN AT 166' S.S.L. OF VAN BUREN STREET.

7. DEWATER EXISTING 16" WATER MAIN AND REMOVE 16" VALVE AT 166' S.S.L. OF VAN BUREN STREET. CONNECT NEW 16" WATER MAIN TO EXISTING WATER MAIN WITH 16" PIPE AND MJ SLEEVE. COWM WILL FILL, FLUSH, AND RESTORE WATER SERVICE TO EXISTING 16" WATER MAIN.

8. SLOWLY OPEN NEW 16" VALVE. FILL AND THOROUGHLY FLUSH NEW WATER MAIN TO REMOVE ALL AIR. 9, CLOSE 16" VALVE AND PRESSURE TEST NEW SECTION OF 16" WATER MAIN TO 100 PSI IN ACCORDANCE

WITH THE CONTRACT DOCUMENTS. 10. AFTER APPROVAL OF THE PRESSURE TEST, DEWATER THE NEW WATER MAIN IN PREPARATION FOR MAKING THE FINAL CONNECTION.

11. REMOVE CAP AND TEMPORARY FLUSHING TAP. CONNECT TO EXISTING LINED 16" WATER MAIN TO THE SOUTH UNDER EXPRESSWAY WITH 16" MJ SLEEVE OR APPROVED COUPLING FOR THE LINER USED.

12. INSTALL 30" SPLIT CASING PIPE (TOP HALF) BETWEEN CONNECTION POINT AND RISER SHAFT.

BACKFILL TRENCH.

13. CONSTRUCT BASE WALLS OF NEW PRE-CAST RISER SHAFT, SEE SHEET 246. INSTALL 16" PIPE AND FITTINGS AS SHOWN IN THE RISER SHAFT, RESTRAIN TOP AND BOTTOM BASE BENDS, INSTALL 2" TAP FOR FLUSHING ON TOP OF PIPE IN RISER SHAFT, INSTALL ROOF SLAB.

14. INSTALL 16" PIPE AS SHOWN FROM THE RISER SHAFT TO THE SOUTH IN VACATED GREEN STREET. INSTALL 16"X8" 2BMJ TEE, 8" MJ CHICAGO STANDARD GATE VALVE AND PRECAST BASIN, 8" DI PIPE, AND CHICAGO STANDARD FIRE HYDRANT AS SHOWN. 15. INSTALL 16" PIPE IN 30" SPLIT CASING PIPE (BOTTOM HALF) BETWEEN PROPOSED RISER SHAFT

LOCATION AND POINT OF CONNECTION TO EXISTING LINED 16" WATER MAIN UNDER EXPRESSWAY. TEMPORARILY CAP AND BRACE NORTH END OF NEW 16" WATER MAIN. INSTALL TEMPORARY 2" TAP FOR FLUSHING AT THIS LOCATION.

16. BEFORE THE NEW WATER MAIN CAN BE FILLED, FLUSHED, AND PRESSURE TESTED, THE BRACED EXCAVATION AREA MUST BE BACKFILLED AROUND THE RISER SHAFT AND ALL PIPE STRUCTURAL RESTRAINT SYSTEMS MUST BE IN PLACE

17. CONTACT CDWM TO ARRANGE THE SHUTDOWN OF THE 16" WATER MAIN IN VACATED GREEN STREET FROM HARRISON STREET TO 196' N.N.L. (312) 744-5070.

18. EXCAVATE AND DEMOLISH EXISTING VALVE BASIN AT 196' N.N.L. OF HARRISON STREET.

19. EXCAVATE AND DEMOLISH EXISTING VALVE BASIN AT 31' W.E.L. OF VACATED GREEN STREET. VALVE WAS PREVIOUSLY ABANDONED UNDER CONTRACT 60W26.

20. DEWATER EXISTING 16" WATER MAIN AND REMOVE 16" VALVE AT 196" N.N.L. OF HARRISON STREET. INSTALL 16" VALVE AND PRECAST BASIN AT APPROXIMATELY STATION 47+13. ADJUST VALVE LOCATION AS REQUIRED IN FIELD TO COORDINATE WITH ADJACENT UTILITIES, CONNECT NEW 16" WATER MAIN TO EXISTING WATER MAIN WITH 16" PIPE AND MJ SLEEVE. COWM WILL FILL, FLUSH AND RESTORE WATER SERVICE TO EXISTING 16" WATER MAIN.

21. SLOWLY OPEN NEW 16" VALVE, FILL AND THOROUGHLY FLUSH NEW WATER MAIN TO REMOVE ALL AIR.

22. CLOSE 16" VALVE AND PRESSURE TEST NEW SECTION OF 16" WATER MAIN TO 100 PSI IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. 23. AFTER APPROVAL OF THE PRESSURE TEST, DEWATER THE NEW WATER MAIN IN PREPARATION FOR

MAKING THE FINAL CONNECTION. 24. REMOVE CAP AND TEMPORARY FLUSHING TAP. CONNECT TO EXISTING LINED 16" WATER MAIN TO THE

NORTH UNDER EXPRESSWAY WITH 16" MJ SLEEVE OR APPROVED COUPLING FOR THE LINER USED.

25. INSTALL 30" SPLIT CASING PIPE (TOP HALF) BETWEEN CONNECTION POINT AND RISER SHAFT. BACKFILL TRENCH.

## PHASE E (RESTORATION OF WATER SERVICE)

1. CONTACT COWM TO OPERATE VALVES FOR FILLING AND FLUSHING 16" WATER MAIN CROSSING THE HIGHWAY (312) 744-5070

2. THOROUGHLY FLUSH WATER MAIN CROSSING USING 2" TAPS ON TOP BASE BENDS IN RISER SHAFTS AND NEW FIRE HYDRANT AT STATION 47+22. DISINFECT PER THE CONTRACT DOCUMENTS. AFTER APPROVAL OF DISINFECTION BY CDWM, RESTORE CTA SERVICES AND PUT WATER MAIN INTO SERVICE.

3. RESTORE ALL WATER MAIN TRENCHES PER THE DETAILED DRAWING.

BILL OF MATERIALS:

(NOTE: ALL PIPE AND FITTINGS USED SHALL BE RESTRAINED JOINT)

190' OF 16" MJ DI PIPE 4-16" DI MJ SLEEVES 76' OF 30" STEEL CASING PIPE 4-16" 2BMJ 1/4 BASE BENDS 2-16" MJ CHICAGO STANDARD GATE VALVES 290' WATER MAIN REHABILITATION 1-16"x8" 2BMJ TEE 1-8" MJ CHICAGO STANDARD GATE VALVE 1-CHICAGO STANDARD 8" MJ FIRE HYDRANT II' OF 8" MJ DI PIPE 1-8"x12" 2BMJ OFFSET

DESIGNED - HHO REVISED . SHEETS NO. 0168928-sht-WH-82.dom SECTION COUNTY WATER MAIN RELOCATION USER NAME + CooperM2 DRAWN HHC REVISED STATE OF ILLINOIS 90/94/290 2013-010R COOK 747 239 SEQUENCING NOTES PLOT SCALE - 48,8888 1/ -CHECKED REVISED DEPARTMENT OF TRANSPORTATION CONTRACT NO. 60W28 TO STA BLOT DATE + 4/35/3014 DATE 04/28/14 REVISED SHEET SHEETS STA. SLLINOIS FED. AID PROJECT