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November 9, 2011

Village of Orland Park
Department of Public Works
15655 Ravinia Avenue
Orland Park, Illinois 60462

Attn: Mr. Edward Wilmes
Director of Public Works

Re: Proposal for Engineering Design (Phase II) Services
U.S. Route 45 (LaGrange Road) Segment 1 and Segment 3 Water Main and Sanitary Forcemain

Dear Mr. Wilmes

McDonough Associates (MAI) was asked to examine the utility drawings for the IDOT improvements of Segment 1 (179th to 159th) and Segment 3 (143rd to Creek Road) of US Route 45 (LaGrange Road) and identify impacts to the Village utilities. We presented our findings to Mr. John Ingram, William Cunningham and Brian Cassidy of your department, and discussed solutions to avoiding the conflicts. We were asked to submit a proposal for developing plans and special provisions to be included in the IDOT Improvement contract to correct and avoid the conflicts. We appreciate the opportunity to prepare this proposal to prepare plans to relocate the Village of Orland Park utilities that are in conflict.

The village utilities that were identified in conflict with the proposed road improvement and will be included in our plans for relocation are:

1. Sanitary Sewer Forcemain, 4" and 6", between 164th Street and 165th Street (Approx. Sta. 129+00 to 135+00 in Segment 1)

The two sanitary sewer forcemains as currently located are under the proposed east curb and will be in conflict with the curb, due to grading, and the curb inlets and catch basins. We will develop plans and special provisions to relocate these forcemains further east near the existing sanitary sewer running north-south along the east ROW. The plans will include air release valves and vault or vaults constructed on the southern east-west section near station 129+00 (see exhibit 1).

2. Watermain, 16", between 160th Street and 165th Street (Approx. Sta. 129+00 to 158+00 in Segment 1)

The existing 16" watermain as currently located is under the proposed west curb and will be in conflict with the curb inlets and catch basins. We will develop plans and special provisions to



relocate approximately 2,900 LF of 16" watermain into the middle of the proposed SB west-most roadway lane to minimize conflict areas. An existing VOP sanitary sewer and the IDOT proposed Storm Sewer in the west side parkway will prohibit relocation of the main to the west of the current location. The connection at 165th Street will be made on the south side of the intersection, and a new 12" connection will be run straight across LaGrange to the east to eliminate an existing north then west jog and older pipe under new pavement. All valve vaults and fire hydrants will be adjusted or relocated to match the proposed improvements, or as indicated by the Village upon review (see Exhibit 2).

3. 2 - 12" Watermains at ComEd Easement North of METRA tracks (Approx. Sta. 320+00 to 325+00 in Segment 3)

The existing water main in this area enter the LaGrange Road ROW at the south side of the ComEd ROW and split into 2 parallel 12" mains, an older main currently under the current east lane of LaGrange and a newer main that parallels LaGrange Road. The west main crosses the ComEd ROW under the outside lane of the northbound existing pavement then parallels the north side of the ComEd ROW to the northwest then turns north into an easement west of the Lagrange Road ROW. This west 12" main north south section will be in the middle of the two proposed inside northbound lanes, and any maintenance would require a 2-lane closure and complete 2 lane pavement repair. The east 12" main will be located under the east half of the east most proposed northbound lane pavement. Staff discussions determined that the older western pipe should be abandoned, but the east main will remain. The work at this area will consist of developing plans for the installation of a new cut-in valve and valve vault on the existing 12" watermain in the proposed right-of-way, a new tee and fire hydrant just to the north of the valve, and a new connection and bends eliminating the tapping tee and valve on the east main turn to the north, all near station 320+75. The work will include the development of plans for the construction of a 12" lateral in casing across LaGrange Road north of the ComEd ROW connecting the east and west watermain with a new inserted tee and valve and valve vault vault and firehydrant on the east side of the road and a new valve on the west side with a new 90 degree bend connection at station 325+00. The work will also include the abandonment and fill of the west watermain between station 320+75 and 325+00 (see Exhibit 3).

The design documents are proposed to be included as part of the IDOT-funded U.S. 45 (LaGrange Road) improvements project. We will coordinate the work with the various agencies having authority over the work. We will provide specifications and summary of quantities and cost following the State format. We will perform our in-house Quality reviews. We will provide up to 5 sets of drawings for Village final approval, then provide the final documents to IDOT for incorporation into the IDOT Projects. We will make submittals to IEPA and IDNR for permits as needed, and will help the Village to provide any information other jurisdictional agencies may require.

We propose a lump sum fee for these professional services of \$74,400.00. Any additional services requested by the Village that would result in a change of Scope will not commence unless given prior authorization. The Village will be invoiced monthly on the basis of percent complete.

These services will commence immediately upon receipt of the Village issued purchase order or written notice to proceed and will be completed in conjunction with the IDOT project schedule. If you have any questions regarding this proposal, please contact the undersigned. Thank you for the opportunity to be of service.



Very truly yours,
McDONOUGH ASSOCIATES INC.

A handwritten signature in black ink, appearing to read "Timothy D. Werner". The signature is fluid and cursive, written over a light background.

Timothy D. Werner, P.E.
Director of Engineering

Encls: Area Exhibits

cc: Mike Hannemann, MAI
Al Swanson, MAI
File