Section 20 - Condition Assessment Protocol

- Introduction One of the elements of the HRSD's Management, Operation, and Maintenance (MOM) involves collection of condition assessment information on HRSD's active and planned to be abandoned pipelines including interceptor force mains, gravity sewer mains, and treatment plant process piping. HRSD has established protocols and guidelines for condition assessment data collection activities during the following:
 - A. Pre-Planning Phase
 - B. PER and Design Phase
- II. <u>Pre-Planning Phase</u> Condition assessment during a project Pre-Planning Phase is intended to inform condition-based decisions for the following applications:
 - A. Defining the extent (scope) of pipeline replacement
 - B. Identifying potential connection locations
 - C. Assessing pipelines to be abandoned which may provide information useful for estimating remaining useful life (RUL) of similar active pipelines in the system.
- III. <u>PER and Design Phase</u> Capital Improvement Projects provide opportunities to collect pipeline condition data that assists HRSD to better understand the failure risk and condition investigation needs of other pipelines of similar diameter and material in the system. The FIRM shall perform the following:
 - A. Develop a project specific Condition Assessment Plan describing condition assessment goals and extents during the Planning Phase to be reviewed and coordinated with HRSD Departments:
 - 1. Design and Construction
 - 2. Asset Management
 - 3. Operations
 - B. Incorporate the project Condition Assessment Plan into the construction documents and/or Bridging Documents for Design-Build projects, including the following:
 - Identify condition assessment opportunities such as system diversions and/or bypass operations which may provide interior or exterior access to normally inaccessible active pipelines.
 - 2. State responsible parties and/or notification protocols (typically

- 7 days advance notice) for condition assessment data collection activities.
- IV. <u>Pipe Coupon Data Collection Form</u> HRSD developed a pipe coupon data collection form template (**Attachment A**) that is intended to fully document pipe coupons or samples obtained from active pipelines. The FIRM's on-site representative is to complete this form when coupons are obtained, submit the referenced form(s) in Enterprise Project Management (Unifier) system, and coordinate with the HRSD Asset Management Departments to transfer pipe coupon(s).
- V. <u>Technical Specifications</u> Technical specifications for the collection of condition assessment data will be assigned as follows:
 - A. HRSD's Asset Management Department will generally be responsible for collecting condition data that requires the deployment of internal / external condition assessment technologies.
 - B. If the FIRM or Contractor are made responsible for condition assessment data collection, the FIRM is to insert applicable condition assessment technical specifications into the HRSD administered construction documents.
- VI. <u>Condition Assessment Guidelines</u> HRSD has developed guidelines to assist internal HRSD staff (or FIRM) in planning condition assessment for the scenarios identified in Section A. These guidelines will be provided by the respective HRSD Project Manager to the FIRM based on the project specific needs. These guidelines may be utilized for interceptor system pipelines and treatment plant piping as appropriate.

VII. Attachments:

A. Coupon Data Collection Form

End of Section