XEROX BUILDING 801
HENRIETTA, NEW YORK

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
WORK PLAN
ADDENDUM

MAY 15 1992

-w- revised page 8 (8/14/92)

Prepared for

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Xerox Building 801
RI/FS WORK PLAN ADDENDUM
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The undersigned individuals have reviewed and approve the Xerox Building 801 RI/FS Work Plan as amended by the April 1992 addendum prepared by H&A of New York. No modifications have been made to the text of the QAPP, however selected tables have been modified to reflect significant changes made to the work plan. Quality assurance procedures described in the QAPP remain applicable to the extent that they pertain to the revised work plan. The specific work activities and associated procedures contained in the QAPP are superceeded by the activities and procedures presented in this Work Plan Addendum.

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RI/FS WORK PLAN ADDENDUM
PART I
CHANGES TO SECTION 3

3.1 REMEDIAL INVESTIGATION/FEASIBILITY STUDY SCOPE

The task descriptions in Section 3.1 are replaced with the following:

- Task 1 - Scoping;
- Task 2 - Community Relations;
- Task 3 - Site Characterization;
  - Supplemental Hydrogeologic Reconnaissance: pump test and groundwater quality monitoring.
  - Supplemental Soil Borings
  - Air Pathway Analysis
- Task 4 - Impact Assessment (Public Health and Habitat - Based) and Remedial Investigation Report;
- Task 5 - Treatability Studies;
- Task 6 - Development and Screening of Remedial Alternatives; and
- Task 7 - Detailed Analysis of Remedial Alternatives and Feasibility Study Report.

3.4.1.1 Task 3.1.1 - Pumping Test

The entire contents of section 3.4.1.1 is replaced by the following:

As discussed in Section 2, comparison of groundwater information from deep wells at the site with the adjacent shallow wells indicates that an upward vertical gradient exists in the vicinity of the Building 801 site. The clay confining layer that separates the upper and lower water bearing zones exists at a depth of approximately 20 feet. Quantification of the hydrogeologic properties and leakage rate across the clay layer is important in evaluating the nature and degree of interaction between the upper and lower aquifer.

To obtain the data necessary to evaluate aquifer interaction and confining layer characteristics a pumping test of the lower aquifer will be performed. To accomplish this two new wells (one pumping well and one observation well) will be installed. The pumping well will be located near existing piezometer cluster P-1,2,3. This well will be constructed using approximately 10 feet of 4-inch I.D., continuous-slot, PVC well screen and the appropriate length and type of riser. The screen will be set in the lower aquifer with the bottom at a depth of approximately 40 feet. A sand pack of appropriate grain size and composition will fill the annulus of the well up to the approximate base of the confining layer. A bentonite seal, no less than three feet in thickness will be placed above the sand pack insuring that the well annulus is sealed within the confining layer and that the well bore does not act as a conduit for groundwater flow. The remainder of the annulus will be backfilled to the surface with bentonite/cement grout and the well will be finished and protected at the surface appropriately. Standard hollow-stem auger drilling and well installation procedures will be used.

The observation well will be installed in a manner identical to that described above, except that 2-inch I.D. machine-slot PVC screen and comparable riser will be used. This well will be located approximately 20 to 50 feet from the pumping well with the exact distance to be determined following analysis of all existing and preliminary data. This existing data will include geologic logs and sieve analysis. In addition, preliminary data acquisition will include approximating the hydraulic conductivity of the lower aquifer by performing a series of rising head slug tests using existing nearby deep wells. This information will also be used in approximating the pumping rate (to select an appropriate pump) and estimate test duration and response.

Two weeks prior to initiating the pumping test, the IRM recovery system will be turned off and the local water table allowed to equilibrate. During the test water levels will be monitored in the pumping well, deep observation well and the three shallow aquifer piezometers located adjacent to the pumping well. Water levels may also be monitored in other nearby existing monitoring wells.

Since groundwater in the lower aquifer is not contaminated, it will be pumped directly to the north-south trending draining ditch which flows to Allen Creek. The water will be discharged to the ditch at a point no less than 100 feet from the pumping well. The appropriate discharge permits and/or waivers will be obtained prior to initiating the test and any required sampling will be performed in compliance with such permits or waivers.

(3.4.1.1 continued)

Upon completion of the pumping test, all data will be compiled and analyzed using the appropriate methods. This analysis will be performed to determine the hydraulic properties of the lower aquifer, rate at vertical leakage through the confining layer and evaluate the interaction between the aquifers.

3.4.1.2 <u>Task 3.1.2 - Groundwater Flow and Quality</u>

Section 3.4.1.2 is replaced by the following:

Xerox will continue quarterly monitoring of water levels and groundwater quality using the existing monitoring well network. This work was previously agreed upon between Xerox and the NYSDEC as part of the IRM for containing contaminated groundwater.

Water levels will be measured, and the wells will be checked quarterly for the presence of light and dense non-aqueous phase liquid prior to purging. During the first quarter of 1992, each existing well except the six piezometers (P1 through P6) will be purged and sampled, and analyzed for volatile organics (EPA Method 8240 or Method 524.2), mineral spirits, total dissolved solids, and either alkalinity or hardness. In addition, groundwater samples from the five lawn area recovery wells (RW-1 through RW-5) will also be analyzed for the 23 Target Compound List (TCL) metals and one sample from each of two wells (i.e., one Building 801 area well and one lawn area well) will be analyzed for all of the TCL compounds. A summary of the water analysis plan for the first quarter is presented in Table 3.1.

Upon review and evaluation of the first quarter results, a data summary will be prepared and submitted to NYSDEC along with the complete data package and data validation report. A revised sampling and analysis plan, possibly reducing the number of samples and analytical parameters for the remaining routine quarterly sampling, will also be submitted to NYSDEC for review.

Sections 3.4.2, 3.4.2.1 and 3.4.2.2 are replaced by the following and sections 3.4.2.3 and 3.4.2.4 have been added

3.4.2 Task 3.2 - Soil Borings

Soil borings will be installed at several locations in and around Building 801. Each boring is intended to provide one or more of the types of information necessary for evaluating potential remedial options for the site. The types of information include 1) geotechnical: to evaluate the impact various potential remedial options may have on building integrity, 2) Chemical: to further define the horizontal and vertical distribution of contaminants and 3) Hydrogeologic: to develop greater understanding of aquifer characteristic and groundwater flow. A summary of the subsurface exploration program is presented in Table 3.2.

To optimize the effectiveness of the program and obtain the maximum amount of useful information, the borings will be installed in two separate phases. Information acquired during Phase I will be used to refine the proposed Phase II program. Refinements may include boring location, depth, drilling technique, well construction details or field sampling/screening protocols.

It should be noted that in this work plan, letters have been used to temporarily identify individual boring locations. The locations are shown on Figures 3.1 and 3.2. Upon completion, each boring or monitoring well will be assigned a sequential number based upon the order in which it was completed. This is intended to eliminate possible confusion if modification or expansion of either phase of the program is necessary.

All drill cuttings from borings in and downgradient of the suspected contaminant source areas will be stored onsite, in one of the roll-off containers which will be used in the vacuum extraction pilot test. Cuttings from borings located up or across-gradient of the source areas are not expected to require special handling. If, however, these cuttings are suspected of being contaminated based on field screening, they will be stored onsite.

3.4.2.1 Boring Installation

The boring locations and depths have been selected based on the types of information each is intended to provide. All borings, with the exception of deep borings situated in the immediate vicinity of the suspected sources, will be drilled using conventional hollow stem auger drilling techniques. Borings outside Building 801 will be drilled using 4-1/4 or 6-1/2-inch I.D. augers. Indoor borings will be drilled using 4-1/4 or 2-1/2-inch I.D. augers. In each boring, soil will be sampled continuously using either 2 or 3-inch diameter split spoons driven by 140 lb. hammer dropping 30 inches, in conformance with ASTM Method D-1586. Each soil core recovered will immediately be screened for the presence of volatile organic compounds using an organic vapor analyzer (OVA). The core will then be characterized and logged by the attending geologist and, if appropriate, samples will be retained for chemical or physical laboratory analysis. An example of the boring log form is provided in Appendix A, Attachment A. In some borings shelby tubes or lined split spoons will be used to collect undisturbed soil samples for geotechnical analysis.

Upon completion, each boring will be either backfilled with cement/bentonite grout or completed as a well. Well construction specifications will depend on the location, depth and purpose of every well. These are discussed on the following section.

(3.4.2.1 continued)

In source area borings proposed primarily to collect chemical information, it is anticipated that a minimum of four samples will be retained for laboratory analysis. Based on the properties of the contaminants expected to be present (i.e. both lighter and denser than water compounds), one sample in each boring will be collected near the water table and one from the upper- aquifer/clay layer interface; a depth of approximately 20 to 24 feet. The remaining samples from each boring will be collected at relatively consistent intervals between the upper and lower samples. The need for additional samples will be determined as the drilling program progresses. The current soil analysis plan is summarized in Table 3.3.

Deep borings (i.e. those drilled through the clay confining layer) located in the source area will require the use of non-conventional drilling techniques. At present only one boring (D on Figure 3.1) of this type is proposed. To complete this boring conventional hollow stem auger and split spoon sampling techniques will be utilized above the confining clay layer. This drilling will be performed using 6-1/2-inch I.D. augers. When the clay layer is reached, the augers will be carefully withdrawn to minimize caving. A 9-inch diameter steel casing will then be set in the clay and the annulus grouted using cement/bentonite grout. When the grout has set, 4-1/4-inch hollow-stem augers will be used to continue drilling through the center of the steel casing. The boring will be continued to the bedrock interface, an anticipated depth of approximately 40 feet. A 2-inch I.D., deep observation well will then be installed in accordance with the methodology described in the following section. Based on the drilling conditions encountered, it may be necessary to complete the lower portion of the boring using 2-1/2-inch I.D. augers. This would require a reduction in the well diameter to 1.0 inches.

3.4.2.2 <u>Well Construction</u>

Deep wells proposed for the site include one (1) pumping well and five (5) observation wells. The pumping well will be constructed using approximately 10 feet of 4-inch diameter No. 10, continuous slot, PVC screen and the appropriate length of riser. The observation wells will be constructed using 10 feet of 2-inch diameter, No. 10 machine slot PVC screen and riser. All deep wells will be set with the bottom at the bedrock interface, a depth of approximately 40 feet. A sand pack of appropriate grain size and composition will be used to fill the well annulus up to approximately the base of the confining clay layer. A bentonite seal, no less than 3 feet thick, will be placed above the sand pack to ensure that the well is sealed within the clay layer. The remainder of the annulus will be backfilled with bentonite/cement grout and the well will be appropriately finished and protected at the surface. Proposed deep pumping and deep observation well construction details are illustrated in Figures 3.3 and 3.4.

The proposed shallow wells are all observation wells. Each will be constructed using a 10-foot length of either 1.0 or 2.0-inch diameter No. 10, machine slot, PVC well screen and riser. Each will be set at the top of the confining clay layer, a depth of approximately 24 feet. A sand pack of appropriate grain size and composition will be used to fill the well annulus to approximately 2 feet above the top of the screen. A bentonite seal, no less than 2 feet thick, will be placed above the sand pack and the remainder of the annulus will be backfilled using bentonite/cement grout. Indoor wells and outdoor wells in paved areas will be completed using flush mounted road boxes. Protective steel casings will be used to complete all other wells. Figures 3.5 and 3.6 are schematic diagrams illustrating shallow well construction requirements.

(3.4.2.2 continued)

Upon completion, the location and elevation of each observation well and boring will be accurately surveyed.

3.4.2.3 Phase I Borings

Phase I of the drilling program involves the installation of 13 borings. The boring locations are shown on Figures 3.1 and 3.2. The purpose and specifications for each are presented below and summarized in Table 3.2.

Borings A, B and C have been proposed to provide geotechnical/geologic information only. Specifically they will be used to obtain stratigraphic information and samples for geotechnical testing. The stratigraphic information will include such characteristics as type of deposit, thickness and horizontal continuity of strata, persistence and thickness of the clay confining layer and depth to bedrock. Selected samples will be retained for analysis of grain size, vertical permeability, consolidation and compaction. During drilling, soil samples will be screened for possible VOC content as described above. However, unless the presence of VOC is suspected, none of the samples will be retained for chemical analysis.

Borings A and B will be completed as observation wells. These wells will be located either across or upgradient of the source area and therefore will not be sampled. Water levels in both wells will be monitored periodically to provide more complete information with regard to groundwater flow in the confined aquifer.

Borings D, E, F, G and H will be installed in and around the suspected source area and are primarily intended to provide chemical information. Borings D and E will be located immediately outside and north of Building 801 as shown in Figure 3.2. Boring D will penetrate to a depth of approximately 40 feet. Since this boring is situated in approximately the center of the plume and will penetrate through the clay confining layer, the non-conventional drilling method described in Section 3.2.1 will be used. This boring will continue to a depth of approximately 40 feet and an observation well, screened in the lower aquifer, will be installed. The well will be completed using the procedure as described in Section 3.4.2.2.

Boring E will penetrate only to the top of the confining layer using 4-1/4-inch I.D. hollow stem auger. Conventionally drilling techniques will be used, and the boring will be sealed with grout when completed.

Borings F, G and H will be located inside Building 801. Borings F and G are expected to be located outside the suspected area of contamination. Their purpose is primarily to confirm that assumption. If conditions permit, both borings will penetrate to the top of the clay confining unit. It is anticipated this because a smaller drill rig will be used inside the building, 2-1/2-inch, rather than 4-1/4-inch I.D. hollow stem augers will have to be used. If drilling is successful, two, 1-inch I.D. PVC observation wells will be installed. These will be used to collect water table elevation data both before and during the proposed two phase vacuum extraction pilot test. If dewatering of the area during the pilot test is extensive, one or both of these wells may be used as air inlet wells.

(3.4.2.3 continued)

Boring H will be located in or adjacent to one of the sumps inside the former electroplating laboratory. This boring will also penetrate to the top of the confining clay layer and will be drilled in the same manner is that describe for other shallow borings. Upon completion, Boring H will be grouted to the surface and no well will be installed.

Borings I and J have been proposed for the installation of two wells which will be used in conducting a test of the lower aquifer. The construction details related to the wells are provided in Section 3.4.2.2. Both are located outside of the source area and will be installed using conventional hollow stem auger techniques.

Boring K is located along the north-south drainage ditch which flow toward Allen Creek. This is also a shallow boring (i.e. drilled to the top of the clay) intended to evaluate the drainage ditch as a potential groundwater contaminant source. Upon completion this boring will be backfilled with bentonite/cement grout.

Borings L and M will be drilled to install two additional shallow piezometers in the lawn area north of Building 801. This work was previously agreed to with NYSDEC. Both borings will be approximately 10 feet deep and the piezometers will be constructed in the same manner as existing piezometers P-3 and P-6. Boring L will also be used to collect a representative lawn-area sample for TCL analysis.

3.4.2.4 Phase II Borings

Modification of the Phase II drilling program may be required following completion of the Phase I program. The results of the first Phase I boring program will be submitted to the Department with final recommendation for the Phase II program for review and approval prior to implementation. The Phase II program, as currently anticipated, is presented below.

Borings N, O and P will be drilled in the source area inside Building 801 to collect additional chemical data. The drilling procedure will be the same as that described for indoor borings installed in Phase I. Multiple small diameter piezometers or vacuum probes may be installed in each boring to monitor the influence of the two-phase vacuum extraction test. However, details regarding the number or type of probes will not be determined until the Phase I drilling has been completed.

Boring Q has been proposed to permit installation of a shallow observation well. This well will provide another groundwater elevation measuring point in the shallow aquifer and provide a more complete and accurate understanding of groundwater flow conditions. Other upgradient wells are further from the suspected source area and are located adjacent to drainage ditches. These ditches may affect the water levels measured in these wells. One background soil sample for chemical analysis may be collected from this boring for comparison with downgradient TCL results. The shallow well at this location will be installed using the same procedures as described in Section 3.4.2.2.

(3.4.2.4 continued)

Boring R will be installed in the source area outside Building 801 and will be used to collect additional source area chemical data. This will be a shallow boring which, it is expected, will also be used to install the extraction well for the two-phase vacuum extraction pilot test. The well is likely to be constructed of 2.0-inch diameter continuous-slot stainless steel screen and riser however other details will not be determined until after the data from Phase I borings D and H has been evaluated.

3.4.3 Task 3.3 - Surface Water Quality

Section 3.4.3 is replaced by the following:

The diversion manhole along the edge of the northwest parking lot will be sampled to determine the effectiveness of the surface water diversion implemented during the IRM. In addition, during the first quarter of 1992, surface water samples will be collected and analyzed from each of eight locations labeled SW/SED in Figure 2.24, as previously agreed upon with the NYSDEC.

A summary of the surface water analysis plan for the first quarter is included in Table 3.1. Upon review and evaluation of the first quarter results a data summary will be prepared and submitted to NYSDEC along with the complete data package and data validation report. A revised sampling and analysis plan, possibly reducing the number of samples and analytical parameters for the remaining routine quarterly sampling will also be submitted for review.

3.4.4 Task 3.4 - Sample Analyses

Section 3.4.4 is replaced by the following:

Soil, groundwater and surface water sample analyses for the Xerox Building 801 RI/FS will follow SW846 protocols with modifications as specified in the Quality Assurance Project Plan (Appendix B). Chemical laboratory analysis will be conducted by General Testing Corporation of Rochester,New York. The analytical scope of work is summarized on Tables 3.1 and 3.3. A complete round of surface water and groundwater samples will be collected and analyzed during the first quarter of 1992. A modified sampling and analysis plan for the remaining quarters will be submitted following the first quarter.

Method detection limits (MDLs) for volatile organic compound analyses in the aqueous samples will be the low MDLs applicable to Method 524.2 for locations not shown to be contaminated previously. Normal MDLs will apply to samples analyzed by Method 8240 (i.e. samples from location where contamination has been previously encountered). Method 8240 will be used to analyze soil samples for volatile organics.

Sections 3.5.2 and 3.5.2.1 are replaced by the following:

3.5.2 Task 4.2 - Habitat-Based Assessment

A habitat-based environmental assessment will be conducted in accordance with the NYSDEC Division of Fish and Wildlife "Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites" (June 1991) (FWIA). Based on current information, it is anticipated that the assessment will describe the existing environmental (Step I); identify the potential hazards to habitats and provide an impact assessment of potential risks from contaminants (Step II); evaluate the anticipated remedial alternatives with respect to their effects on habitats impacted by existing contaminants (Step III); determine what modifications to the selected remedial design will be required in areas where protection of fish and wildlife resources is warranted (Step IV); and determine what monitoring requirements are necessary to ensure that Step IV requirements are implemented and effective (Step V). Determination of the need for Step IV and V will be made after Steps I through III are completed. Anticipated major elements associated with each step (I through III) are described below. Decisions may be made to eliminate certain elements of the assessment. In such cases sufficient information will be provided to support any such decision.

3.5.2.1 Description of Existing Environment - Step 1

A site description will be developed to address the existing environmental conditions, characterize the resources, and identify hazard thresholds. The description will use existing data acquired from state and federal agency resource files, aerial photography (scale 1:15,000 preferred), USGS topographic maps (scale 1:24,000), and from information obtained from a two-day visit. The site visit will be conducted by an ecologist experienced in identifying, characterizing, and evaluating terrestrial, wetland, and general aquatic conditions. The ecologist will concentrate field characterization activities on the site and on the 0.5-mile zone surrounding the site. Information on dominant vegetation species, cover types, associated common wildlife, and the presence of significant habitats (as defined by NYSDEC) will be recorded as appropriate within this zone. Aquatic habitats of Allen Creek are capable of supporting nonsport fish populations within a 0.5-mile radius. No laboratory analyses are included in this task.

The ecologist will also complete a more general reconnaissance level survey of fish, wildlife, vegetation cover types, and significant habitat conditions within 2-miles of the site that are potentially affected by contaminants. The purpose of these surveys will be to identify and characterize the presence, location, and uses of special resources within each zone, and to ensure that existing data and information for the areas actually reflect present conditions.

Within the 2-mile zone, the ecologist will note major vegetative communities, typical plant species, likely fish and wildlife uses, and common wildlife species observed during the field survey. All other habitat conditions and characteristics will be derived from existing information, photographs, reports, and maps obtained from the appropriate New York State, Federal, local agencies or sources. The current aquatic habitat and fish population conditions in the Erie Canal and Allen Creek will be based on existing water quality and aquatic life survey data obtained from the NYS Division of Fish and Wildlife and U.S. Environmental Protection Agency.

(3.5.2.1 continued)

Terrestrial and aquatic habitats along the Erie Canal and Allen Creek flood plain that are potentially affected by contaminants and are downstream of the 2-mile radius intersection point will be based upon existing environmental data, maps, and aerial photographs. Characterization will involve describing the important potentially affected fish and wildlife species associated with the delineated cover types and their uses and/or dependicies of the cover types. General habitat quality will be described, factors affecting habitat quality will be identified, and documented cases or incidents of hazardous waste stresses to local fish, wildlife and vegetation populations or habitats will be described. The field ecologist will be alert for evidence of environmental stresses (e.g. chlorotic or stunted vegetation), during the field reconnaissance activities. Potential stress areas or pathways will be identified and described for follow-up evaluations and documentation. New York State Standards, Criteria, and Guidelines (SCGs) that will be used to determine whether the contaminant concentrations represent potential risks or hazards to biota and their supporting habitats. Methods for evaluating environmental risks to terrestrial and aquatic biota (includes vascular plants) will involve comparing contaminant concentrations reported from surface water, sediments, and soil sampling results to one of two sources: (1) New York State and Federal regulatory criteria and guidelines established for protecting biota from harmful effects or (2) concentrations reported in the technical literature as causing chronic or acute toxic effects.

If contaminants concentrations exceed established limits, guidelines, or mandated standards for the chlorinated organic compounds used at Xerox Building 801, then the species or habitats will be considered at risk. If the compound are attributable to operations at the Xerox site, further, more-detailed studies and/or analyses may be necessary to determine the probability and significance of the potential environmental risks in the hazard identification step. Potential risks to regulated freshwater wetlands and streams, significant habitats, and endangered and threatened species will also be evaluated using the same approach proposed for fish, wildlife, and plant species of interest.

3.6 Task 5 - Treatability Studies

The last paragraph of Section 3.6 (page 3-27) is replaced by the following:

An emerging or innovative technology that has only been tested under laboratory or limited field conditions may require a substantial amount of treatability testing. Examples of potentially applicable technologies for which treatability studies would be considered are: Two-Phase Vacuum Extraction and Soil Washing/Soil Flushing. Two-phase vacuum extraction offers particular promise based on results from a pilot-scale test in silty clay soils at a Xerox facility in Irvine, CA. Both soil and groundwater can be managed as the water and vadose zone air are simultaneously extracted and treated. Treatability testing for one and two-phase vacuum extraction will be conducted by Xerox. First, vacuum extraction tests will be conducted on the soil now stored in roll-offs outside adjacent to the north wall of Building 801. Secondly, a two-phase vacuum extraction test will be conducted using a test well inside/beside Building 801 to address contamination beneath the building. The extracted VOCs will be treated using activated carbon as is being done at numerous Xerox sites in New York State. A work plan for vacuum extracting the soil stored in roll-offs is included herein as Appendix E. The scope of work for testing the two-phase vacuum extraction system will be presented to NYSDEC as a work plan prior to conducting the treatability effort.

Section 3.6.1.2, 3.6.1.3, 3.6.1.4 and 3.6.1.5 are replaced by the following:

3.6.1.2 Dual-Phase Vacuum Extraction Outside Building 801

If the pilot two-phase vacuum extraction system is successful for the areas beneath or adjacent to Building 801, a second dual-phase vacuum extraction pilot test in the lawn area outside Building 801 will be proposed. The same type of two-phase vacuum extraction system used for the first test would be used. This test would be performed independently and would not be part of the current RI/FS. A work plan would be submitted for agency approval prior to initiation.

3.6.1.3 Movement and Treatment of Previously Excavated Soils

A vacuum extraction pilot test will be performed on soil presently being staged in roll-offs north of Building 801 near the water tank. This soil was excavated during July 1990 to install the subsurface water, air and electrical conduits needed as part of the groundwater pump and treat IRM installed with NYSDEC approval. The soil was then transferred to roll-off containers equipped with watertight seals and vacuum extraction system piping during the week of September 4, 1990. Xerox will conduct a pilot vacuum extraction test as described in Appendix E, using a skid-mounted vacuum extraction system located adjacent to the roll-offs.

To document the effectiveness of the vacuum extraction system in remediating the excavated soil, representative soil samples will be collected for chemical analysis. If the results indicate that the volatile contaminant concentrations are below applicable limits, the vacuum extraction project will be considered complete. The excavated soil would then be removed from the roll-offs and stored on the Xerox site, with the volume and location being documented. If the analytical results from this confirmation sampling indicate that VOC concentrations are still above the applicable limits, the VES will be restarted and operation would continue until the desired results are achieved.

3.6.1.4 Stream Sediment Remediation

The feasibility of using vacuum extraction, two phase vacuum extraction or any other pertinent remedial technology to expedite remediation of contaminated stream sediments will be evaluated.

3.6.1.5 Off-site Soil Remediation

The feasibility of using vacuum extraction, two phase vacuum extraction or any other pertinent remedial technology to expedite remediation of contaminated off-site soils will be evaluated.

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RI/FS WORK PLAN ADDENDUM
SECTION 3 TABLES

ALL OTHER TABLES IN SECTION 3 OF THE WORK PLAN REMAIN UNCHANGED

TABLE 3.1

XEROX CORPORATION
BUILDING 801

WATER ANALYSIS SUMMARY

Parameter	Method	Type	Samples	MS/MSD Pairs (4)	Duplicates	Equipment Blanks	Trip Blanks
Volatile Organic Chemicals	8240	Groundwater	19 (1)	2	1	1 (2)	1 (2)
		Surface Water	8	1	1	1	1
Volatile Organic Chemicals	524.2	Groundwater	10	1	1	1	1
		Surface Water					
TCL Volatile Organics	8240	Groundwater	2 (3)	1			
		Surface Water					
TCL Semi-Volatile Organics	8270	Groundwater	2 (3)	1			
		Surface Water					
Mineral Spirits	8015	Groundwater	29	2	2	2	
		Surface Water	8	1	1	1	
TCL Pesticides/PCBs	8080	Groundwater	2 (3)	1			
		Surface Water					
TCL Metals	6010	Groundwater	6	1	1		
		Surface Water	8	1	1		
Total Cyanide	335.2/ 9012	2	1	1			
Hardness		Groundwater	29		2		
		Surface Water	8				
Total Dissolved Solids		Groundwater	29		2		
		Surface Water	8				

Notes:

(1) This table summarizes the first quaterly sampling round of 1992, as previously agreed to by NYSDEC. The number of samples and types of analyses performed will be ammended after the first quater's results have been reviewed. A revised sampling and analysis plan will be submitted to NYSDEC for approval.

(2) The number to trip blanks and equipment blanks may vary, depending on the number of days required for sampling and the method used.

(3) Collection of one of these samples may be deferred until after a well is installed in or adjacent to Building 801.

(4) Number may vary based on Laboratory's Standard Operating Procedures.

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TABLE 3.2

XEROX CORPORATION
BUILDING 801

SUBSURFACE EXPLORATION SUMMARY

LOCATION	DRILLING PHASE	DEPTH (ft.)	WELL COMPLETION AND TYPE	INDOOR OR OUTDOOR	PURPOSE
A	1	40	Yes (F)	O	G, H
B	1	40	Yes (S)	O	G, H
C	1	40	No	O	G
D	1	40	Yes (F)	O	G, H, C
E	1	24	No	O	G, C
F	1	24	Yes (F)	I	G, H, C
G	1	24	Yes (F)	I	H, C
H	1	24	Yes (F)*	I	G, H, C
I	1	40	Yes (S)	O	H, P
J	1	40	Yes (S)	O	H, O, B
K	1	24	No	O	C
L	1	10	Yes (S)	O	H, C
M	1	10	Yes (S)	O	H
N	2	24	Yes (F)*	I	G, H, C
O	2	24	Yes (F)*	I	G, H, C
P	2	24	Yes (F)*	I	G, H, C
Q	2	24	Yes (S)	O	G, H, C
R	2	24	Yes (F)	O	G, H, C

Key to Symbols

F = flush mount well completion
S = stick-up well completion
O = outdoor boring or well
I = indoor boring or well
G = geotechnical evaluation
H = hydrologic evaluation
C = chemical analyses
P = pumping well (4-inch diameter)
OB = observation well for aquifer test (4-inch diameter)
* = Probable multi-level piezometers or vacuum probes

dec:gma\70290-41\3table.wp

TABLE 3.3

XEROX CORPORATION
BUILDING 801

SOIL ANALYSIS SUMMARY

Parameter	Method	Drilling Phase	Soil (1) Samples	MS/MSD Pairs (2)	Duplicates	Equipment Blanks (3)	Trip Blanks (3)
Volatile Organic Chemicals	8240	I	23	2	2	2	5
		II	16	1	1	1	5
TCL Volatile Organics	8240	I	2	1	1	1	
		II	1	--			
TCL Semi-Volatile Organics	8270	I	2	1			
		II	1 (4)	--			
Mineral Spirits	8015	I	7	1	1	1	
		II	4	1	1	1	
Total Organic Carbon	Mod. Walkley-Black	I	6				
		II					
TCL Pesticides/ PCBs	8080	I	2	1			
		II	1 (4)	--			
TCL Metals	6010	I	2	1			
		II	1 (4)				
Total Cyanide	335.2/ 9012	I	2	1			
		II	1 (4)	--			

Notes:

(1) Does not include samples that will be collected from the roll-offs as part of the vacuum extraction pilot test.

(2) Number may vary based on Laboratory's Standard Operating Procedure.

(3) Number may vary based on number of days required for sampling and the method used.

(4) Sample may not be required if Phase I TCL results indicate compounds are not present in the source area.

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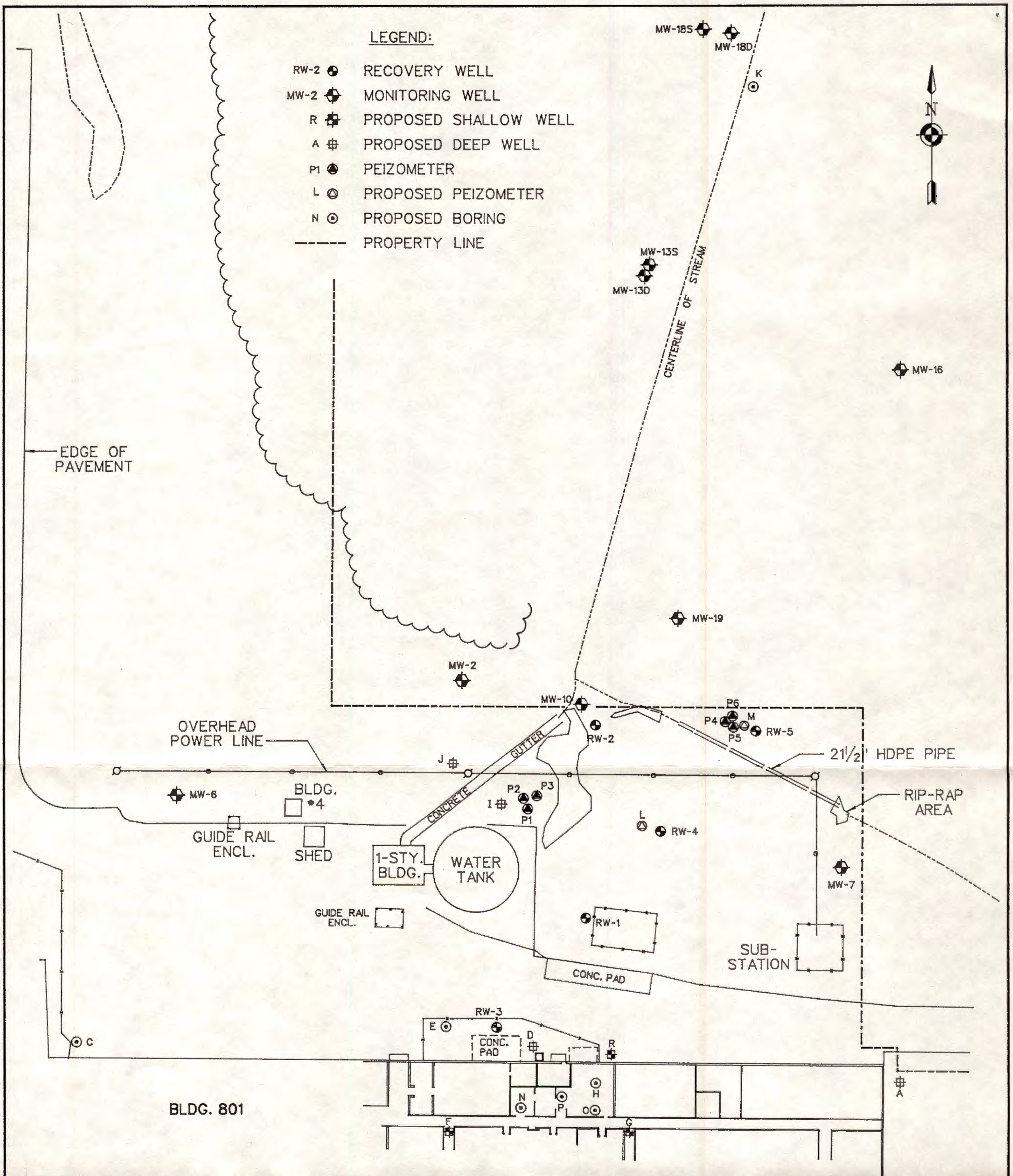
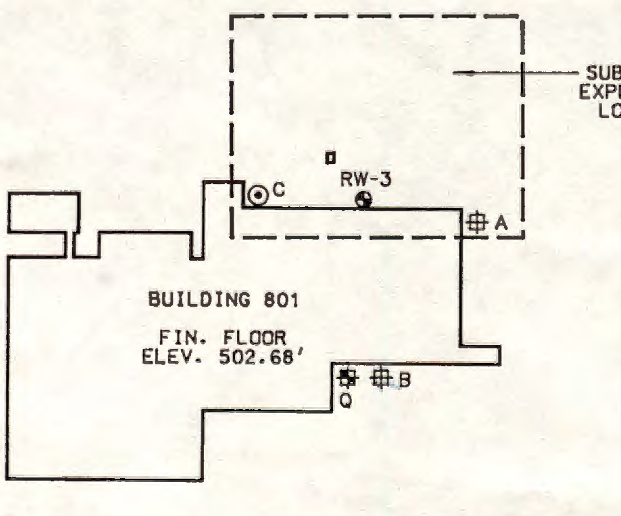
70290-41\3table.wp

RI/FS WORK PLAN ADDENDUM
SECTION 3 FIGURES





GEOTECHNICAL BORINGS
NO SCALE

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XEROX CORPORATION
BUILDING 801
HENRIETTA, NEW YORK

SUBSURFACE EXPLORATION PLAN

SCALE: 1" = 60'

APRIL 1992

FILE No. 70290-41

FIGURE 3.1

FILE No. 70290-41

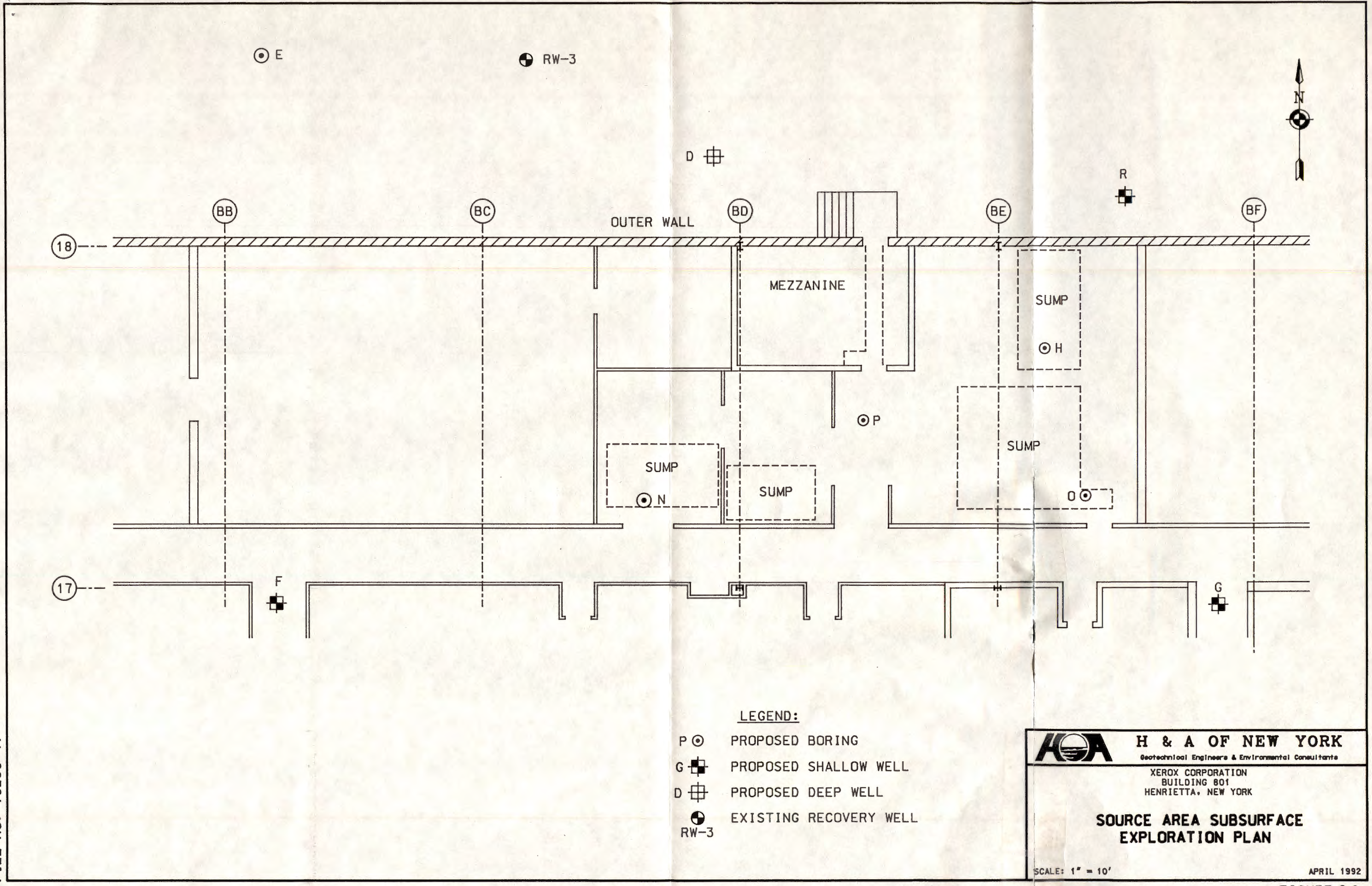
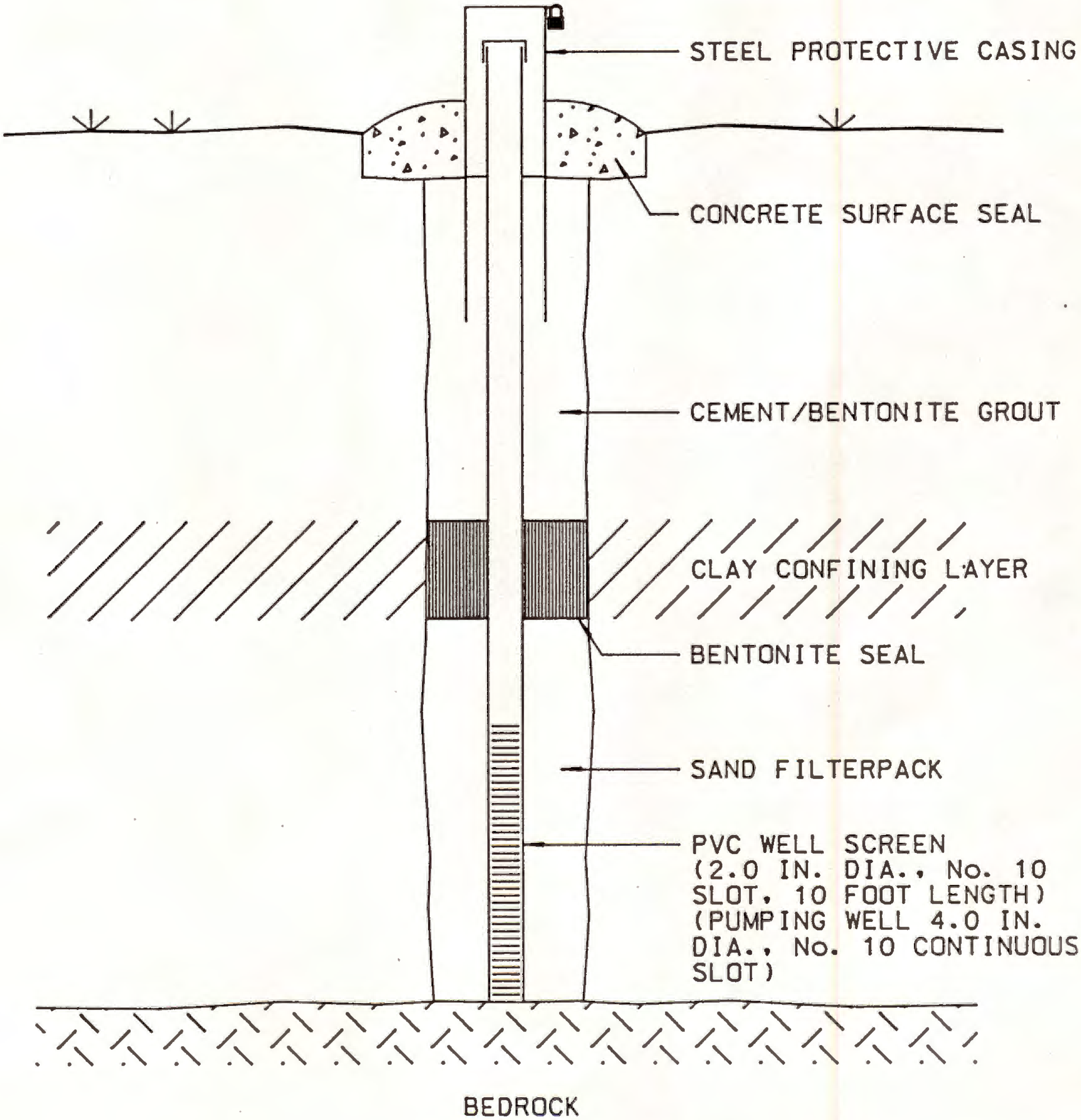


FIGURE 3.2



H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

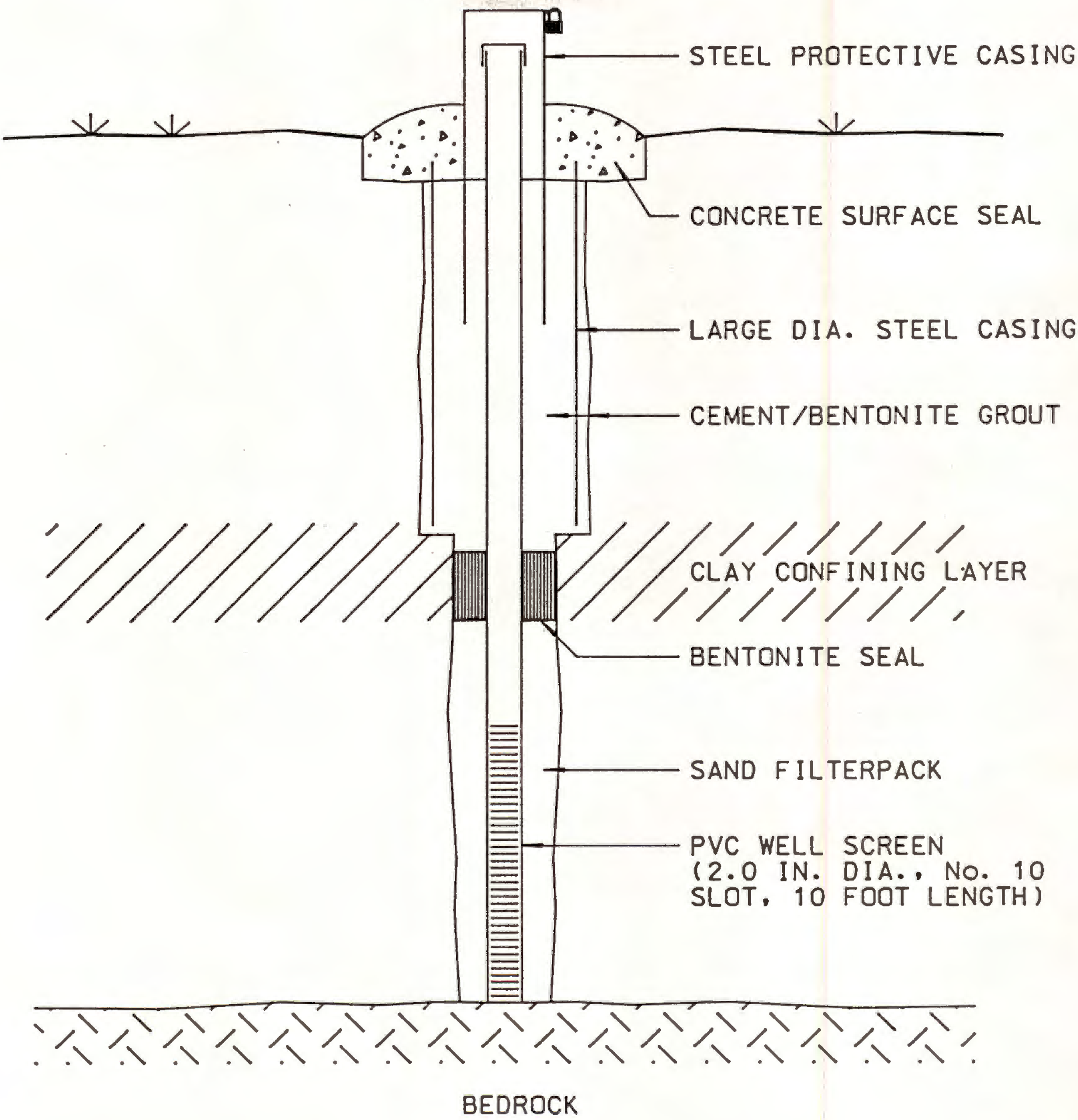
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
DEEP OBSERVATION/PUMPING WELLS

NO SCALE

FILE No. 70290-41

FIGURE 3.3



H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

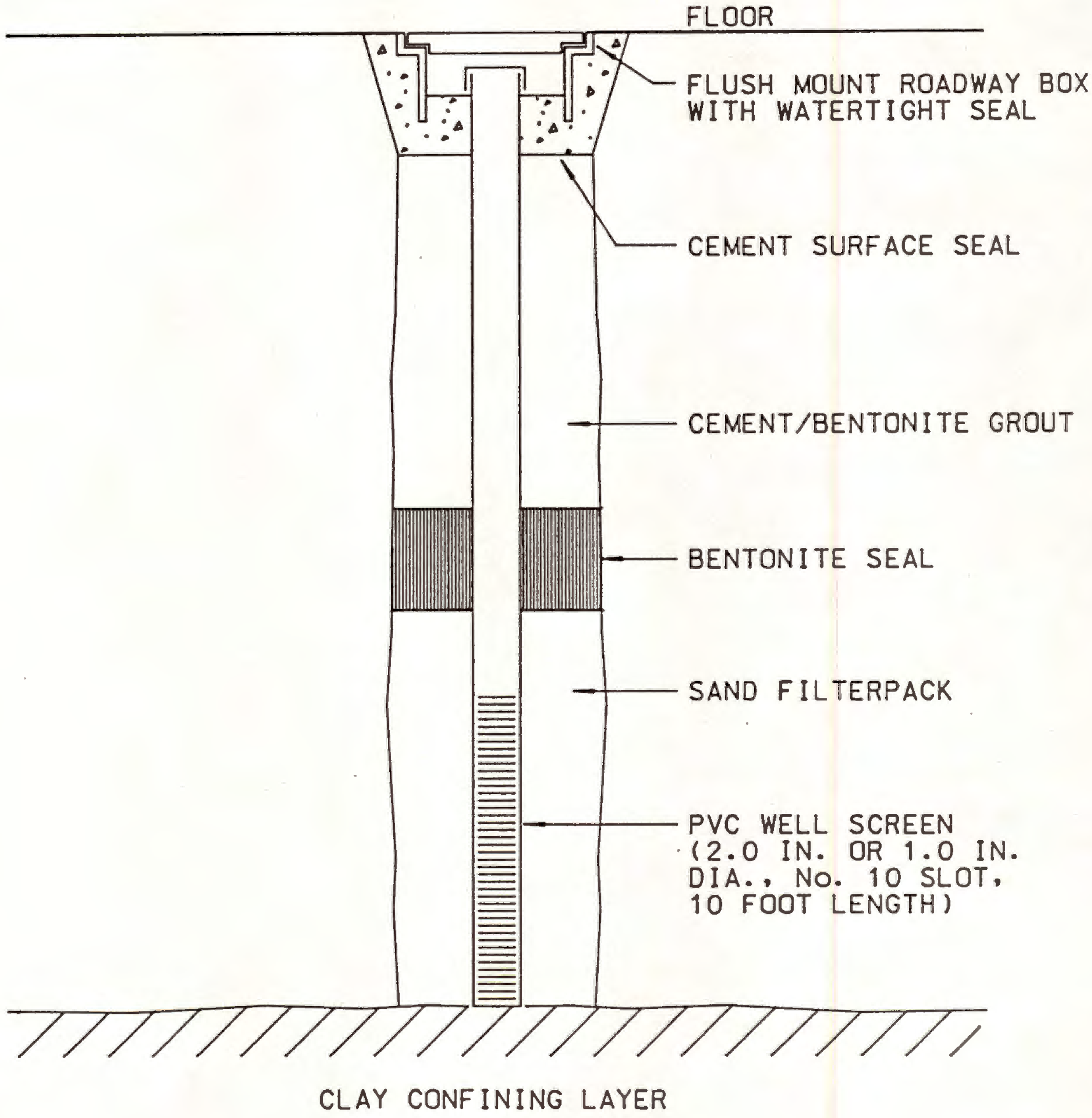
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
DEEP OBSERVATION WELL
(SOURCE AREA)

NO SCALE

FILE No. 70290-41

FIGURE 3.4



H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

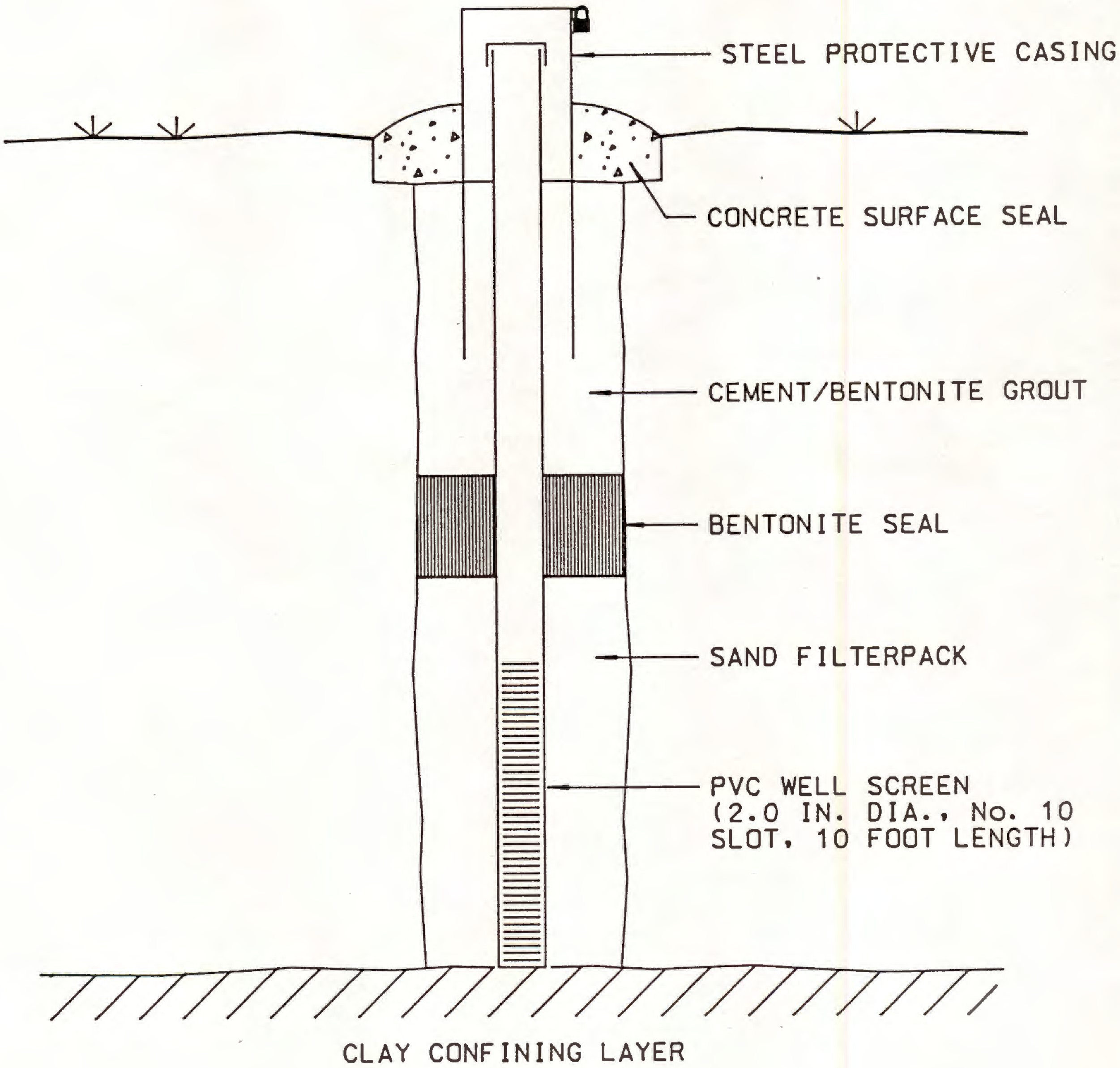
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
INDOOR SHALLOW OBSERVATION WELL

NO SCALE

FILE No. 70290-41

FIGURE 3.5



H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
OUTDOOR SHALLOW OBSERVATION WELL

NO SCALE

FILE No. 70290-41

FIGURE 3.6

RI/FS WORK PLAN ADDENDUM
PART II
CHANGES TO SECTION 4

Section 4 is modified as follows:

SECTION 4

PROJECT MANAGEMENT APPROACH

Section 4.1 and 4.2 are replaced by the following:

4.1 PROJECT ORGANIZATION

The management and technical staff that will be assigned to this project by H&A of New York and their areas of responsibility are identified in Figure 4.1. The responsibilities of key personnel are further described below. Addresses and telephone numbers of key personnel are provided in Table 4.1.

Project Director:

Mr. Lawrence P. Smith, P.E., is a Vice President and Partner of H&A of New York. Mr. Smith will serve as Associate-in-Charge for the RI/FS and has overall responsibility for H&A's performance and contractural obligations. Mr. Smith will also serve as a Senior Technical Advisor because of his extensive experience relative to chlorinated organic contaminants, site remediation and specifically two phase vacuum extraction.

Project Manager:

Mr. David E. Costolnick is a Senior Hydrogeologist with H&A and will serve as Project Manager for the RI/FS. He will be responsibile for work quality and for ensuring that all work performed conforms to be requirements of the Work Plan. He will also set and monitor project schedules, budget and day to day activities, and will be responsible for all communications between H&A and Xerox or NYSDEC.

Project Hydrogeologist:

Mr. Joshua Goldowitz is a Senior Hydrogeologist and will serve as a technical specialist for the RI/FS. He will also act as the Assistant Project Manager and will monitor the performance of all field activities and data evaluation. In the absence of the project manager, Mr. Goldowitz will have responsibility for decisions pertaining to the performance or modification of day to day activities.

QA/QC Officer:

Mr. David Hagen is a Senior Hydrogeologist with H&A and will act as QA/QC officer on this project. Mr. Hagen has an MS in Geology with six years of experience in the Environmental field. He also has a B.S. in Biology and 20 Semester hours in Chemistry. He has previously served as the project manager on several large, miltifaceted environmental projects. Mr. Hagen will interface with the project manager and data validator to monitor project activities and identify and rectify any QA/QC problems that may arise.

(4.1 continued)

Health and Safety Officer:

Ms. Cathy Foley is the Health and Safety officer for H&A's Rochester, NY office and has been responsible for preparing the modified Health and Safety Plan for this project. Ms. Foley will be responsible for ensuring that all H&A personnel involved in this project have adequate health and safety tranining and that activities are performed in compliance with the health and safety plan.

Data Validator:

Mr. Denis Conley is a Staff Scientist with H&A and will serve as the Data Validator for this RI/FS. Mr. Conley holds a BA in Biology and a BS in Applied Chemistry and formerly served as a laboratory director. He is an Approved Data Validator in the State of New York and currently coordinates and reviews all analytical work for H&A's Rochester Office.

4.2 PROJECT SCHEDULE

The draft RI Report will be submitted to NYSDEC for review approximately 40 weeks after H&A receives notice-to-proceed from Xerox and NYSDEC. It is anticipated that the draft FS report will be submitted for review approximately 28 weeks later. Figure 4.2 illustrates the anticipated project schedule. All requests to modify the schedule will be submitted to NYSDEC for review and approval.

RI/FS WORK PLAN ADDENDUM
SECTION 4 TABLES

Table 4.1	Project Contact List (new)

TABLE 4.1

PROJECT CONTACT LIST

Name, Title	Address/Telephone Number
A.R. Mancini Xerox Corporation Project Manager	Building 0304-13S 800 Phillips Road Webster, New York 14580 (716) 422-3683
D.E. Costolnick H&A of New York Project Manager	189 N. Water Street Rochester, New York 14604 (716) 232-7386
T. Caffoe New York Department of Environmental Conservation Region 8	6274 East Avon-Lima Road Avon, New York 14414 (716) 226-2466
D.J. Hagen H&A QA/QC Officer	(716) 232-7386
J. Goldowitz Sr. Hydrogeologist/Asst. Proj. Mgr.	(716) 232-7386
C.A. Foley H&A Health and Safety Officer	(716) 232-7386
D.M. Conley Data Validator	(716) 232-7386

RI/FS WORK PLAN ADDENDUM
SECTION 4 FIGURES

PROJECT ORGANIZATION
XEROX BUILDING 801 RI/FS

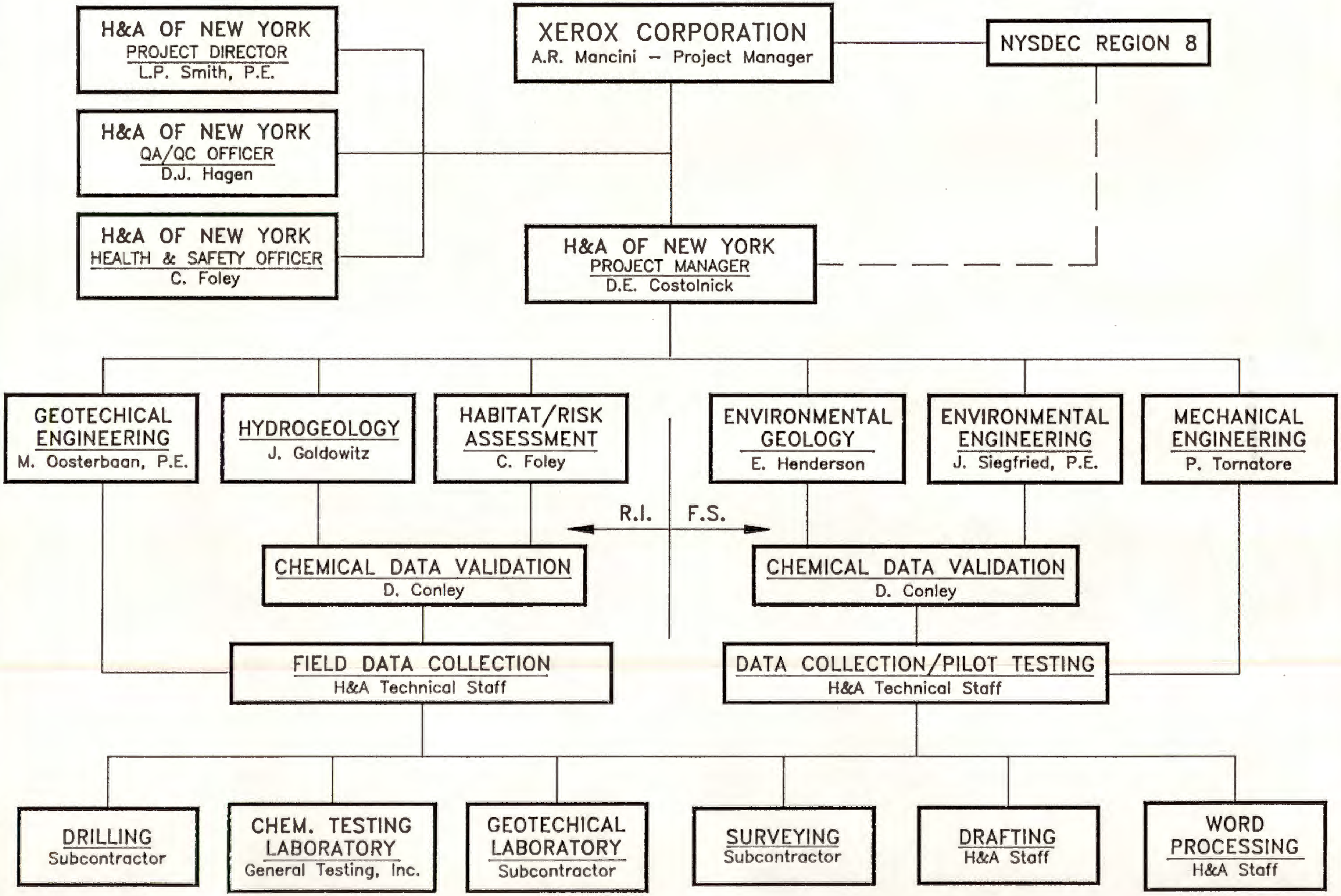
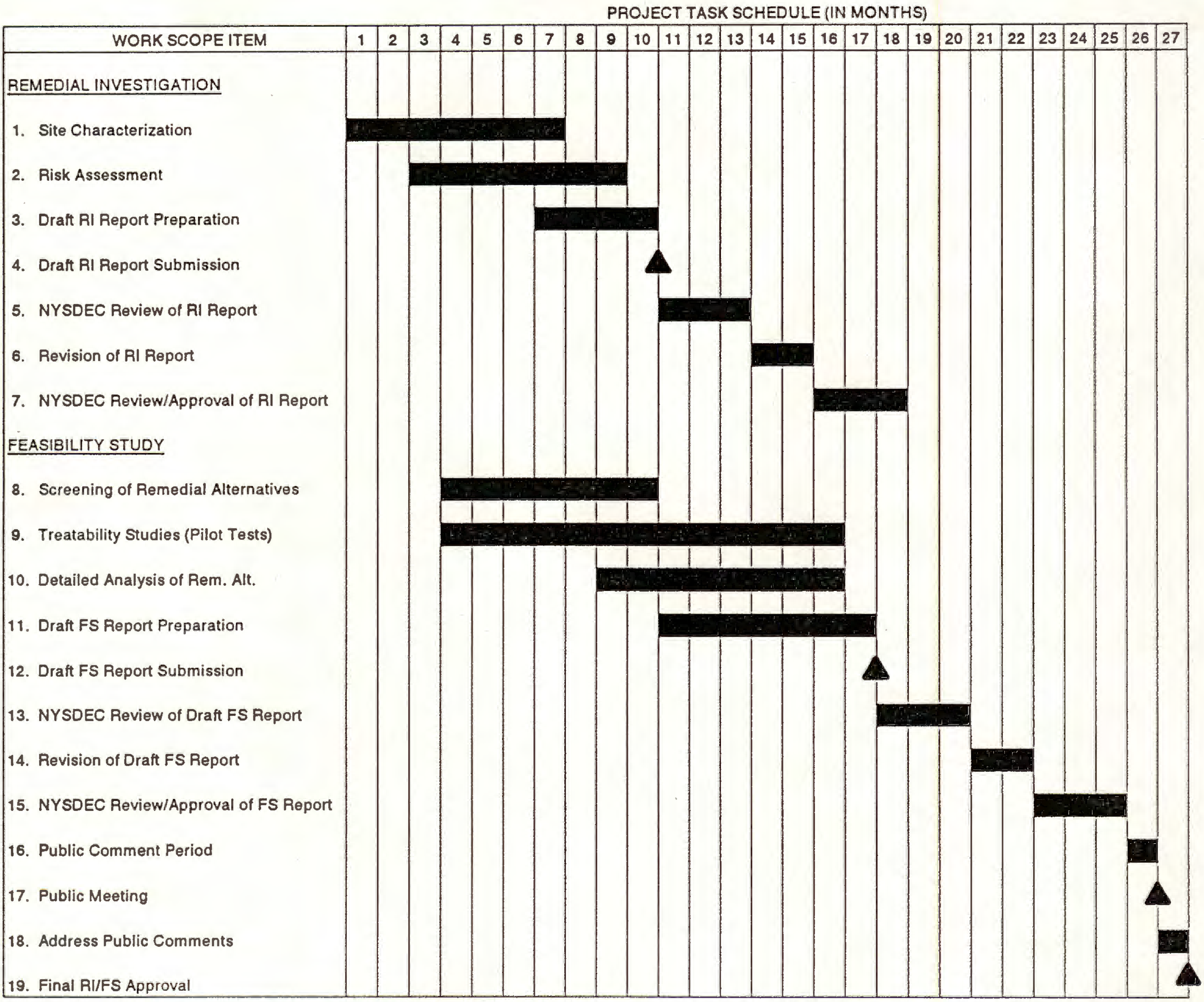


FIGURE 4.1

ESTIMATED SCHEDULE FOR COMPLETION OF RI/FS
XEROX BUILDING 801
HENRIETTA, NEW YORK



Notes:

1. Time frame is an estimate only and subject to change based on conditions encountered, during implementation of activities.
2. Estimates provided for NYSDEC review times are subject to change due to NYSDEC personnel changes, workloads and unanticipated additional requirements.
3. Risk assessment will be submitted as part of the RI report.

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Figure 4.2

RI/FS WORK PLAN ADDENDUM
PART III
CHANGES TO APPENDIX A

Appendix A, Section 2 is modified as follows:

APPENDIX A
SECTION 2
SOIL BORING AND SAMPLE COLLECTION

Sections 2.1, 2.2 and 2.2.2 are replaced by the following:

2.1 Objectives

Soil borings will be installed at several locations in and around Building 801. Each boring is intended to provide one or more of the types of information necessary for evaluating potential remedial options for the site. The types of information include 1) geotechnical: to evaluate the impact various potential remedial options may have on building integrity, 2) Chemical: to further define the horizontal and vertical distribution of contaminants and 3) Hydrogeologic: to develop greater understanding of aquifer characteristic and groundwater flow.

Section 2.2.1 is replaced by the following:

2.2.1 General

To optimize the effectiveness of the program and obtain the maximum amount of useful information, the borings will be installed in two separate phases. Information acquired during Phase I will be used to refine the proposed Phase II program. Refinements may include boring location, depth, drilling technique, well construction details or field sampling/screening protocols.

It should be noted that in this work plan letters have been used to temporarily identify individual boring locations. The locations are shown on Figures 2.1 and 2.2. Upon completion, each boring or monitoring well will be assigned a sequential number based upon the order in which it was completed. This is intended to eliminate possible confusion if modification or expansion of either phase of the program is necessary.

All drill cuttings from borings in and downgradient of the suspected contaminant source areas will be stored onsite, in one of the roll-off containers which will be used in the vacuum extraction pilot test. Cuttings from borings located up or across-gradient of the source areas are not expected to require special handling. If, however, these cuttings are suspected of being contaminated based on field screening, they will be stored onsite.

Section 2.2.2 is replaced by the following:

2.2.2 Boring Installation Procedures

The boring locations and depths have been selected based on the types of information each is intended to provide. All borings, with the exception of deep borings situated in the immediate vicinity of the suspected sources, will be drilled using conventional hollow stem auger drilling techniques. Borings outside Building 801 will be drilled using 4-1/4 or 6-1/2-inch I.D. augers. Indoor borings will be drilled using 4-1/4 or 2-1/2-inch I.D. augers. In each boring, soil will be sampled continuously using either 2 or 3-inch diameter split spoons driven by 140 lb. hammer

(2.2.2 continued)

dropping 30 inches, in conformance with ASTM Method D-1586. Each soil core recovered will immediately be screened for the presence of volatile organic compounds using an organic vapor analyzer (OVA). The core will then be characterized and logged by the attending geologist and, if appropriate, samples will be retained for chemical or physical laboratory analysis. An example of the boring log form is provided in Appendix A Section 5 Attachment A. In some borings shelby tubes or lined split spoons will be used to collect undisturbed soil samples for geotechnical analysis.

Upon completion, each boring will be either backfilled with cement/bentonite grout or completed as a well. Well construction specifications will depend on the location, depth and purpose of every well. These are discussed on the following section.

In source area borings proposed primarily to collect chemical information, it is anticipated that a minimum of four samples will be retained for laboratory analysis. Due to the properties of the contaminants expected to be present (i.e. both lighter and denser than water compounds), one sample in each boring will be collected near the water table and one from the upper- aquifer/clay layer interface; a depth of approximately 20 to 24 feet. The remaining samples from each boring will be collected at relatively consistent intervals between the upper and lower samples. The need for additional samples will be determined as the drilling program progresses. A summary of the presently anticipated soil analysis plan is presented in Table 2.1.

Deep borings (i.e. those drilled through the clay confining layer) located in the source area would require the use of non-conventional drilling techniques. At present only one boring (D on Figure 2.1) of this type is proposed. To complete this boring conventional hollow stem auger and split spoon sampling techniques will be utilized above the confining clay layer. This drilling will be performed using 6-1/2-inch I.D. augers. When the clay layer is reached, the augers will be carefully withdrawn to minimize caving. A 9-inch diameter steel casing will then be set in the clay and the annulus grouted using cement/bentonite grout. When the grout has set, 4-1/4-inch hollow stem augers will be used to continue drilling through the center of the steel casing. The boring will be continued to the bedrock interface, an anticipated depth of approximately 40 feet. A 2-inch I.D., deep observation well will then be installed in accordance with the methodology described in the following section. Based on the drilling conditions encountered, it may be necessary to complete the lower portion of the boring using 2-1/2-inch I.D. augers. This would require a reduction in the well diameter to 1.0 inches.

RI/FS WORK PLAN ADDENDUM
APPENDIX A, SECTION 2
TABLES

Appendix A, Table 2.1 Soil Analysis Summary (replaces W.P. Table 2.1)

APPENDIX A, TABLE 2.1

XEROX CORPORATION
BUILDING 801

SOIL ANALYSIS SUMMARY

Parameter	Method	Drilling Phase	Soil (1) Samples	MS/MSD Pairs (2)	Duplicates	Equipment Blanks (3)	Trip Blanks (3)
Volatile Organic Chemicals	8240	I	23	2	2	2	5
		II	16	1	1	1	5
TCL Volatile Organics	8240	I	2	1	1	1	
		II	1	--			
TCL Semi-Volatile Organics	8270	I	2	1			
		II	1 (4)	--			
Mineral Spirits	8015	I	7	1	1	1	
		II	4	1	1	1	
Total Organic Carbon	Mod. Walkley-Black	I	6				
		II					
TCL Pesticides/ PCBs	8080	I	2	1			
		II	1 (4)	--			
TCL Metals	6010	I	2	1			
		II	1 (4)				
Total Cyanide	335.2/ 9012	I	2	1			
		II	1 (4)	--			

Notes:

(1) Does not include samples that will be collected from the roll-offs as part of the vacuum extraction pilot test.

(2) Number may vary based on Laboratory's Standard Operating Procedure.

(3) Number may vary based on number of days required for sampling and the method used.

(4) Sample may not be required if Phase I TCL results indicate compounds are not present in the source area.

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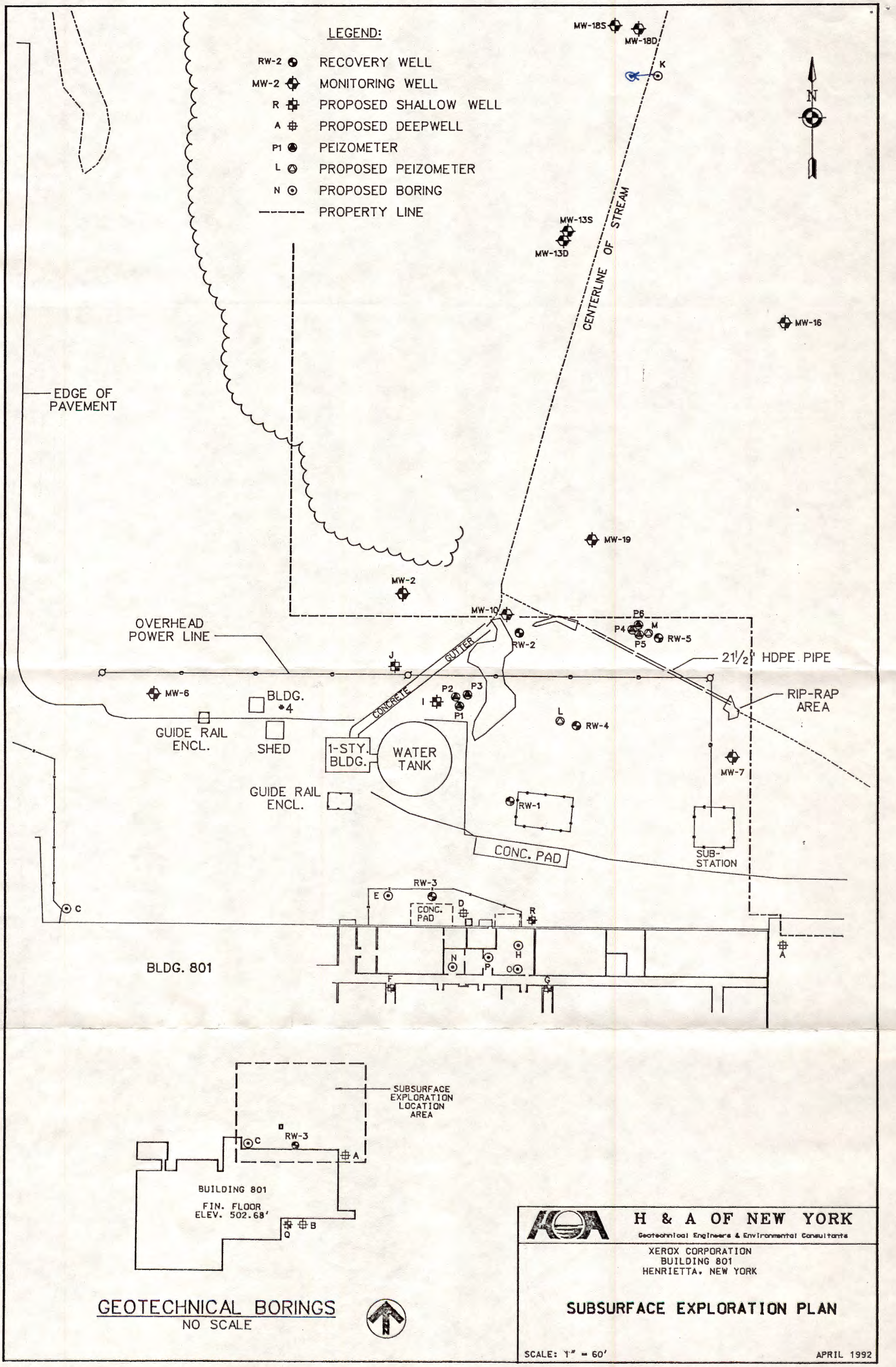
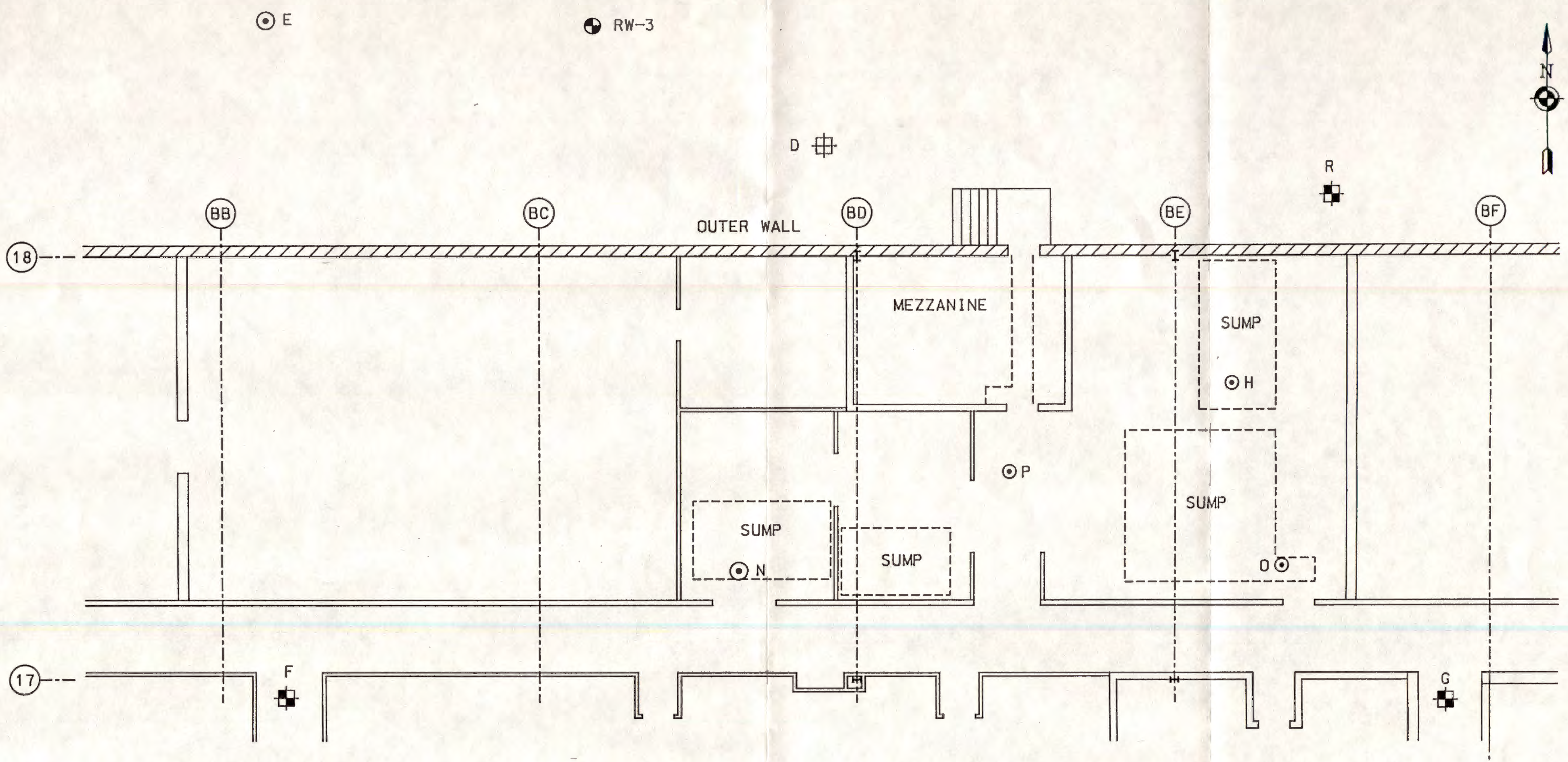
RI/FS WORK PLAN ADDENDUM
APPENDIX A, SECTION 2
FIGURES

App. A, Sec. 2, Figure 2.1	Subsurface Exploration Plan (replaces W.P. Figure 2.1)
App. A, Sec. 2, Figure 2.2	Source Area Subsurface Exploration Plan (replaces W.P. Figure 2.2)



FILE No. 70290-41

APPENDIX A, SECTION 2, FIGURE 2.1



LEGEND:

P ⊙ PROPOSED BORING
G PROPOSED SHALLOW WELL
D PROPOSED DEEP WELL
RW-3 EXISTING RECOVERY WELL

FILE No. 70290-41

H & A OF NEW YORK
Geotechnical Engineers & Environmental Consultants

XEROX CORPORATION
BUILDING 801
HENRIETTA, NEW YORK

SOURCE AREA SUBSURFACE EXPLORATION PLAN

SCALE: 1" = 10'

APRIL 1992

APPENDIX A, SECTION 2, FIGURE 2.2

Appendix A, Section 3 is modified as follows:

APPENDIX A
SECTION 3
MONITORING WELL INSTALLATION

Sections 3.1, 3.21 and 3.22 are replaced by the following:

3.1 MONITORING WELL INSTALLATION

Deep wells proposed for the site include one (1) pumping well and five (5) observation wells. The pumping well will be constructed using approximately 10 feet of 4-inch diameter No. 10, continuous slot, PVC screen and the appropriate length of riser. The observation wells will be constructed using 10 feet of 2-inch diameter, No. 10 machine slot PVC screen and riser. All deep wells will be set with the bottom at the bedrock interface, a depth of approximately 40 feet. A sand pack of appropriate grain size and composition will be used to fill the well annulus up to approximately the base of the confining clay layer. A bentonite seal, no less than 3 feet thick, will be placed above the sand pack to ensure that the well is sealed within the clay layer. The remainder of the annulus will be backfilled with bentonite/cement grout and well will be appropriately finished and protected at the surface. Proposed deep pumping and deep observation well construction details are illustrated in Figures 3.1 and 3.2.

The proposed shallow wells are all observation wells. Each will be constructed using a 10-foot length of either 1.0 or 2.0-inch diameter No. 10, machine slot, PVC well screen and riser. Each will be set at the top of the confining clay layer, a depth of approximately 24 feet. A sand pack of appropriate grain size and composition will be used to fill the well annulus to approximately 2 feet above the top of the screen. A bentonite seal, no less than 2 feet thick, will be placed above the sand pack and the remainder of the annulus will be backfilled using bentonite/cement grout. Indoor wells and outdoor wells in paved areas will be completed using flush mounted road boxes. Protective steel casings will be used to complete all other wells. Figures 3.3 and 3.4 are schematic diagrams illustrating shallow well construction requirements.

Upon completion, the location and elevation of each observation well and boring will be accurately surveyed.

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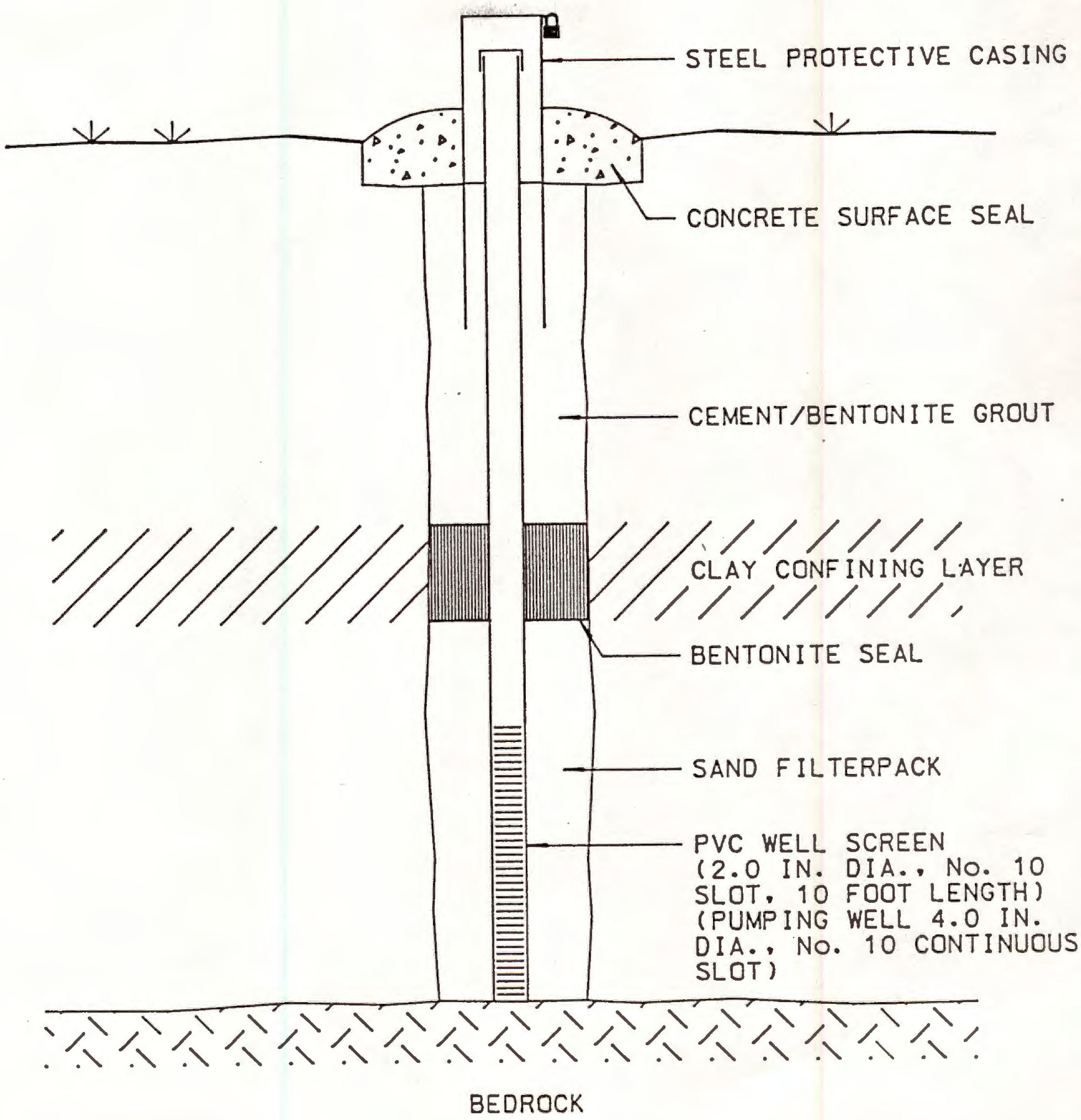
RI/FS WORK PLAN ADDENDUM
APPENDIX A, SECTION 3
FIGURES



H & A OF NEW YORK

Geotechnical Engineers & Environmental Consultants

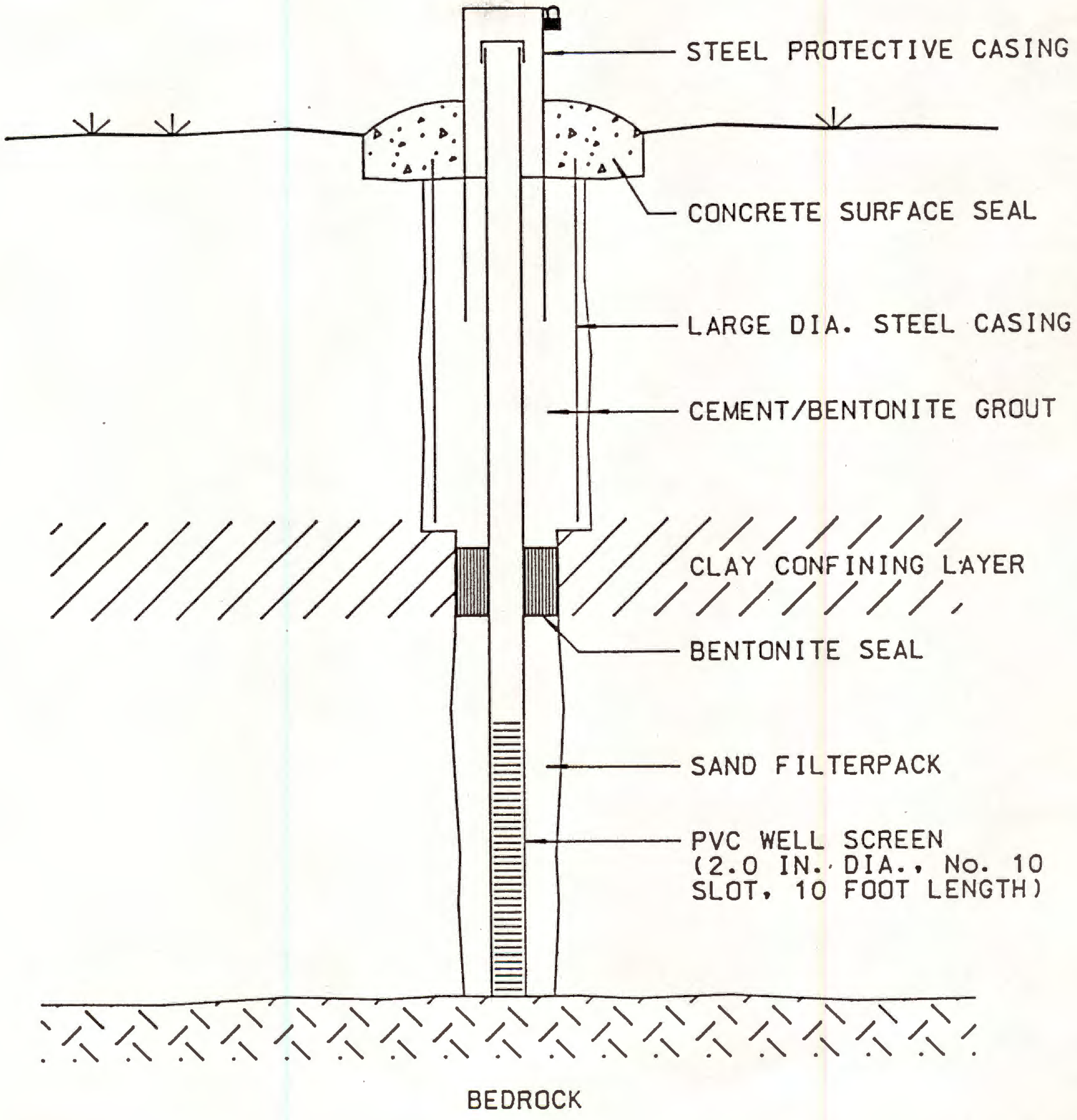
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
DEEP OBSERVATION/PUMPING WELLS

NO SCALE

FILE No. 70290-41

APPENDIX A, SECTION 3, FIGURE 3.1



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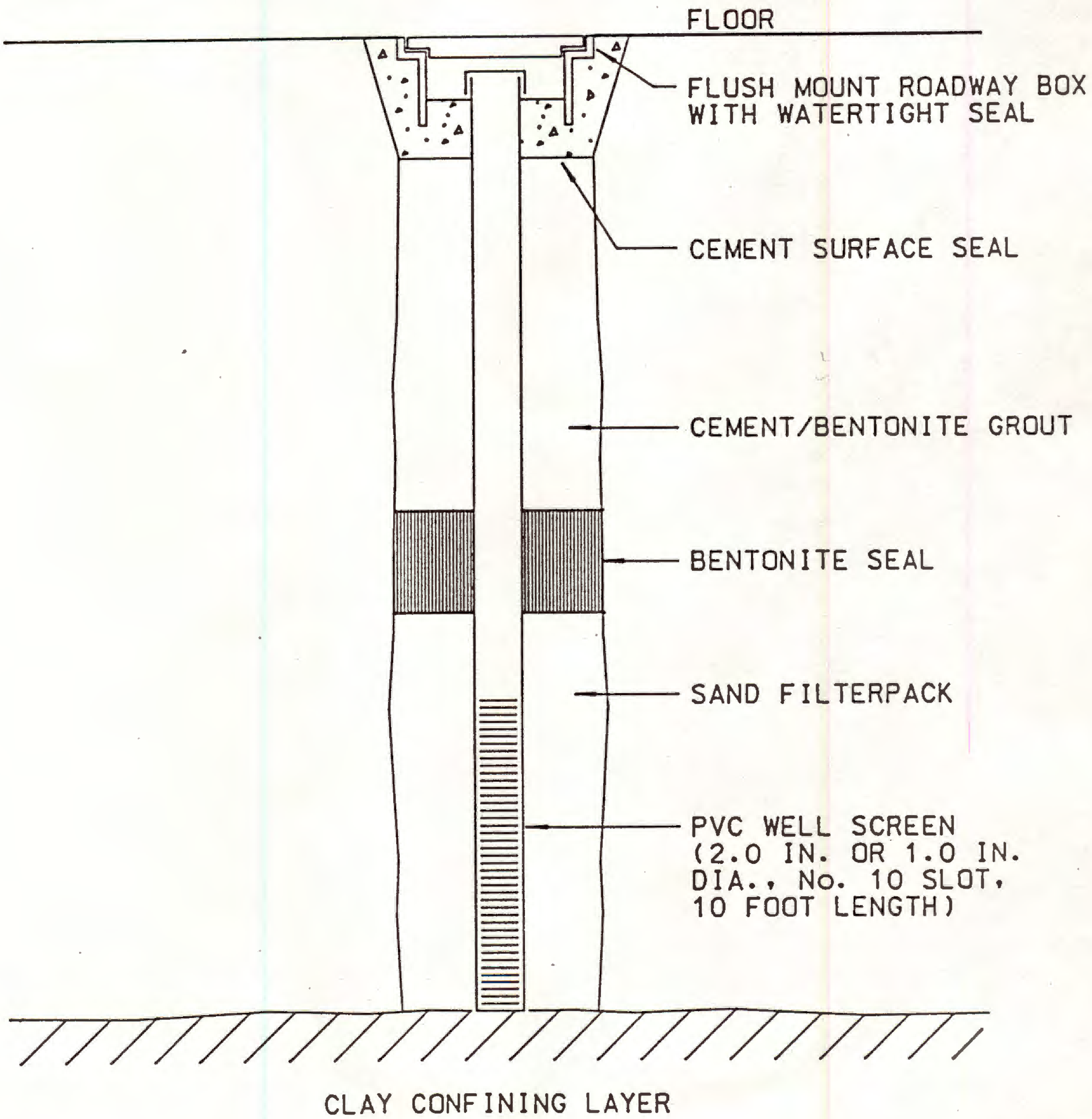
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
DEEP OBSERVATION WELL
(SOURCE AREA)

NO SCALE

FILE No. 70290-41

APPENDIX A, SECTION 3, FIGURE 3.2



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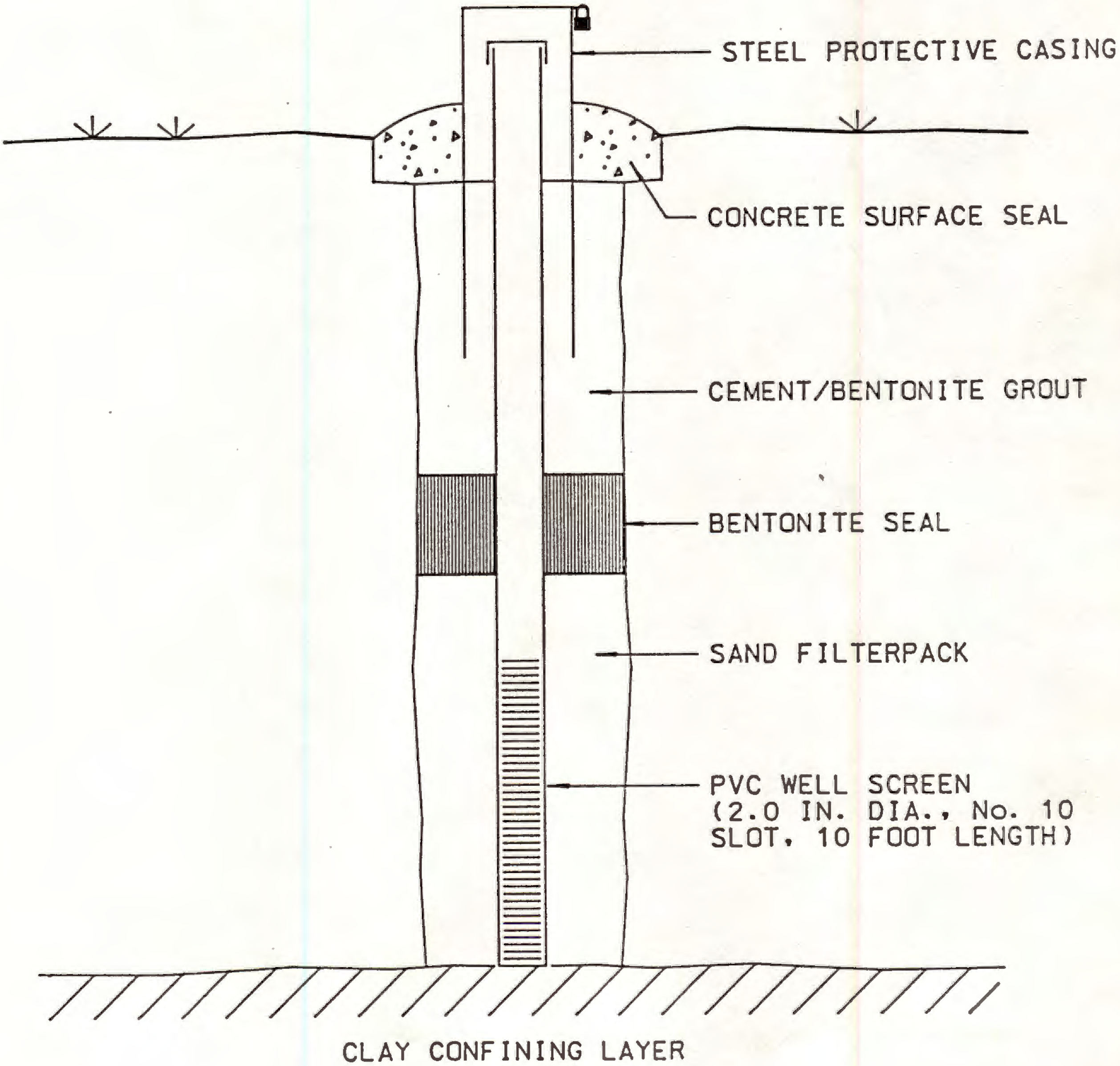
XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
INDOOR SHALLOW OBSERVATION WELL

NO SCALE

FILE No. 70290-41

APPENDIX A, SECTION 3, FIGURE 3.3



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XEROX CORPORATION
BUILDING 801

SCHEMATIC DIAGRAM
OUTDOOR SHALLOW OBSERVATION WELL

NO SCALE

FILE No. 70290-41

APPENDIX A, SECTION 3, FIGURE 3.4

RI/FS WORK PLAN ADDENDUM
PART IV
APPENDIX B
TABLES

Appendix B, Table 6.2	Soil Analyses Summary
Appendix B, Table 6.2 A	Water Analyses Summary
	(Both replace W.P. Table 6.2)

APPENDIX B, TABLE 6.2

XEROX CORPORATION
BUILDING 801

SOIL ANALYSIS SUMMARY

Parameter	Method	Drilling Phase	Soil (1) Samples	MS/MSD Pairs (2)	Duplicates	Equipment Blanks (3)	Trip Blanks (3)
Volatile Organic Chemicals	8240	I	23	2	2	2	5
		II	16	1	1	1	5
TCL Volatile Organics	8240	I	2	1	1	1	
		II	1	--			
TCL Semi-Volatile Organics	8270	I	2	1			
		II	1 (4)	--			
Mineral Spirits	8015	I	7	1	1	1	
		II	4	1	1	1	
Total Organic Carbon	Mod. Walkley-Black	I	6				
		II					
TCL Pesticides/ PCBs	8080	I	2	1			
		II	1 (4)	--			
TCL Metals	6010	I	2	1			
		II	1 (4)				
Total Cyanide	335.2/ 9012	I	2	1			
		II	1 (4)	--			

Notes:

(1) Does not include samples that will be collected from the roll-offs as part of the vacuum extraction pilot test.

(2) Number may vary based on Laboratory's Standard Operating Procedure.

(3) Number may vary based on number of days required for sampling and the method used.

(4) Sample may not be required if Phase I TCL results indicate compounds are not present in the source area.

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APPENDIX B, TABLE 6.2A

XEROX CORPORATION
BUILDING 801

WATER ANALYSIS SUMMARY

Parameter	Method	Type	Samples	MS/MSD Pairs (4)	Duplicates	Equipment Blanks	Trip Blanks
Volatile Organic Chemicals	8240	Groundwater	19 (1)	2	1	1 (2)	1 (2)
		Surface Water	8	1	1	1	1
Volatile Organic Chemicals	524.2	Groundwater	10	1	1	1	1
		Surface Water					
TCL Volatile Organics	8240	Groundwater	2 (3)	1			
		Surface Water					
TCL Semi-Volatile Organics	8270	Groundwater	2 (3)	1			
		Surface Water					
Mineral Spirits	8015	Groundwater	29	2	2	2	
		Surface Water	8	1	1	1	
TCL Pesticides/PCBs	8080	Groundwater	2 (3)	1			
		Surface Water					
TCL Metals	6010	Groundwater	6	1	1		
		Surface Water	8	1	1		
Total Cyanide	335.2/ 9012	2	1	1			
Hardness		Groundwater	29		2		
		Surface Water	8				
Total Dissolved Solids		Groundwater	29		2		
		Surface Water	8				

Notes:

(1) This table summarizes the first quaterly sampling round of 1992, as previously agreed to by NYSDEC. The number of samples and types of analyses performed will be ammended after the first quater's results have been reviewed. A revised sampling and analysis plan will be submitted to NYSDEC for approval.

(2) The number to trip blanks and equipment blanks may vary, depending on the number of days required for sampling and the method used.

(3) Collection of one of these samples may be deferred until after a well is installed in or adjacent to Building 801.

(4) Number may vary based on Laboratory's Standard Operating Procedures.

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