

**SITE REMEDIATION PROJECT
LUZERNE ROAD SITE
SITE NUMBER 5-57-010
West Glens Falls
WARREN COUNTY, NEW YORK**

WORK PLAN

**Prepared for:
New York State Department of Environmental Conservation
Bureau of Central Remedial Action
50 Wolf Road
Albany NY 12205**

**Prepared by:
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1. Site Sketch Map
2. Work Areas

APPENDIX

- A. Project Schedule

1.0 INTRODUCTION

The Tyree Organization, Ltd. (Tyree) has prepared this Work Plan in support of site remediation activities at the Luzerne road Site (New York State Department of Environmental Conservation (NYSDEC) Site I.D. No. 5-57-010), which is located in the town of Queensbury, Warren County, New York. A site sketch map showing current conditions is presented as Figure 1.

This work plan is based on the requirements outlined in Title 6 of the New York State Codes of Rules and Regulations Part 375 as well as the New York State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series (STARS) Guidance Document, August 1992.

1.1 Objectives

The objectives of the site remediation activities are to excavate the PCB contaminated soil from the three properties with offsite disposal/treatment, collect samples for field screening via immunoassay testing, and confirmatory laboratory analysis, and backfill and restore the properties.

1.2 Applicable Permits

The Town of Queensbury does not require permitting for the project activities.

2.0 SEQUENCE OF WORK

This section details the specific work activities that will be conducted in support of the site remedial activities. The section detail is divided according to the sequence of performing the tasks.

2.1 Project Plan Preparation

Site remediation work such as that specified for the Luzerne Road site requires the preparation of several project plans. The three plans to be developed are: a Work Plan, a Health and Safety Plan (HASP), and a Sampling and Analysis Plan (SAP).

The project-specific Work Plan (this document) identifies the project objectives, sequence of work, major and minor site elements, quality control methods and procedures, and waste material handling and disposal methodologies.

The HASP will be designed to address the requirements and designated protocols to be followed during the performance of site remedial activities. The HASP will be reviewed and signed by all personnel prior to entering either the exclusion zone or the contaminant reduction zone. The HASP is provided as a separate document.

The SAP will be the guiding document for the sampling, analysis, and data reporting for site media (soil and water). Included within the SAP are specific methods and procedures for the sampling and analysis of: excavated soils; soil excavation; treated construction water and decontamination fluids; and air samples. The SAP will also present sample custody procedures, as well as identify sampling team(s) and equipment.

2.2 Pre-Construction Meeting

A pre-construction meeting will be held to review the project objectives and methods and to discuss potential logistical constraints. Personnel representing the NYSDEC, Tyree, and Tyree's major subcontractors will attend the meeting. The site layout and health and safety procedures will be reviewed as part of the meeting. The Underground Facilities Protection Organization will be contacted a minimum of 72 hours prior to the pre-construction meeting, so that the underground mark-outs can be incorporated as part of the discussion of site logistics.

2.3 Site Mobilization/Establishment of Work Areas

After the pre-construction meeting, mobilization to the site will commence. The preparation for setting up the jobsite will include establishing the decontamination pad, soil staging areas and contractor staging area. The staging areas for the containment of excavated contaminated soils will be constructed according to the specifications, and will be located as identified on Figure 2. The decontamination pad and contractor equipment staging areas will be setup and constructed according to the layout identified on Figure 2. The proposed work area layout for the project is shown in Figure 2.

Appropriate measures (e.g., barricades and temporary fencing) will be taken to physically isolate work areas at the site from the remaining portion of the property. Water generated from the decontamination process will be transferred to an on-site containment tank and stored prior to sampling to determine waste disposal options.

2.4 Soil Excavation

Excavation to remove the PCB contaminated soils will commence after all site preparation activities have been completed. At each of the three excavation areas, the soils are anticipated to be comprised of primarily sand. This soil type will allow the excavation to be performed in even layers. The layer of a few inches will be scraped off and the accumulated soils staged for disposal. This process will be performed until soil tests determine the extents of excavation.

The excavated soils will be transferred to the staging areas with the heaviest contaminated soils (as determined through field screening) to be segregated as hazardous and the lesser contaminated segregated as non-hazardous. The soils will be screened for volatile organic compounds using a photo-ionization detector.

The excavation will be backfilled with clean select fill brought to the site from a borrow source. The borrow materials will be properly certified as to their physical and chemical composition prior to delivery to the site. The excavation will be backfilled with successive one-foot lifts of fill materials. Each lift will be compacted with a walk-behind tamper for compaction. All methods of excavation to be performed at the site will conform to OSHA regulations.

2.5 Sampling and Analysis of Site Media

Sampling of site media will be performed in the field and in the laboratory. Samples for field analysis will be soils collected from the excavations. These soils will be analyzed for PCBs

with immunoassay test kits. For confirmatory and quality control measures, 10 % of the field analyses will be submitted to the laboratory for analysis via EPA method 8082.

Samples for laboratory analysis will be collected from several sources during site remedial activities. Pre-construction and post-construction soil samples will be collected from the site as a quality control check on the conduct of the work. These samples will be analyzed for PCBs using USEPA Method 8082. Confirmatory soil samples will be collected from locations determined by a Department Representative and analyzed for PCBs by USEPA Method 8082 to ensure that the removal of soils exceeding established cleanup criterion has been satisfied. Soil samples will also be collected from the excavated contaminated soils to determine the placement into a waste category. Waste liquids generated from site activities and decontamination operations will be temporarily stored on-site in appropriate containers. These liquids will be removed off-site to appropriate disposal facilities.

2.6 Handling, Transport and Disposal of Wastes

The waste streams generated at the site will be properly handled, classified and approval from the NYSDEC for each classification will be obtained prior to offsite shipment. The wastes will be handled to prevent spills, and cross contamination to clean areas. The water wastes will be containerized into drums and appropriately classified. The drums will be secured at specific staging areas prior to offsite shipment. Tyree will prepare the manifests for each waste stream to be shipped offsite.

Soils will be segregated into hazardous and non-hazardous waste categories during excavation based upon field screening and field analysis. The separate wastes will be temporarily stockpiled at the individual sites on liner material and covered at all times to prevent fugitive migration. Soils showing chemicals of concern concentrations that exceed the cleanup criterion will be loaded on permitted trucks and transported for disposal at approved facilities. The copies of the facility permits are attached. The hazardous waste will be sent to CWM Model City Facility located in Model City, New York. The non-hazardous waste will be sent to Seneca

Meadows Landfill located in Angelica, NY (facility permits are attached). The proposed trucking routes into and out of the site are shown in Figure 2.

2.7 Site Restoration

Upon completion of the excavation activities, site restoration will take place. This will consist of fine grading and topsoil placement in both the main excavation areas and the cap and grubbed areas where the surface has been disturbed. In the areas of construction where topsoil was placed, sodding will be performed.

2.8 Soil Erosion/Sedimentation/Surface water management Controls

The control of soil erosion and sedimentation will be achieved using silt fences around the perimeter the main soil excavations, and the soil staging areas. In addition, systemic controls will be implemented to reduce the potential for soil erosion and/or sedimentation. Such controls include delaying excavation if heavy rain events are forecasted, and efficiently excavating, staging, and confirmatory sampling soils to expedite the backfill process. Infiltration of clean surface water will be prevented by berms to eliminate runoff, and covering contaminated areas with poly sheeting to prevent contact. Any standing clean water will be removed from the working areas to avoid potential contamination of the clean water. The water will be removed to clean portions of the site in suitable drainage areas.

2.9 Construction water management/ Environmental controls

The generation of construction water will be kept to a minimum. Appropriate controls will be established to minimize water. The groundwater intrusion to the excavation is not

expected. Should water buildup in the excavation inhibit work and require removal, the water will be containerized after removal and stored for offsite disposal. Decontamination water that is containerized will also be stored for offsite disposal. Surface water intrusion to the work areas will be prevented via berming with soil and poly sheeting where appropriate.

Controls will be provided over environmental conditions at the construction site and adjacent areas. All vehicles and equipment will be equipped to minimize noise levels to the greatest degree practical. The equipment used will conform to all current federal, local and state laws and regulations. The discharge of noxious substances by construction operations will be prevented by all methods, means and facilities necessary. Erosion and dust control are described in other sections. Pest and odor controls will be enacted as needed to prevent infestation and odor generation during construction activities.

2.10 Dust Control Measures

To minimize the potential effects of fugitive dusts generated during excavation activities, Tyree will have a water source available for use in dry, windy conditions. The need for dust control will be largely determined by real time dust monitoring. When the monitoring exceeds the action levels, potable water will be sprayed over exposed dust source areas. A truck-mounted polyethylene water tank and a power sprayer will be mobilized to the site should conditions warrant. Dust monitoring will be performed continuously during activities involving excavation, disturbance of contaminated soil and demolition. Monitoring will be performed using a real-time aerosol monitor measuring total particulates.

3.0 SITE SECURITY

Tyree will maintain day and night security throughout the contract period. Security shall be maintained and enforced by the site superintendent during normal working hours, and by uniformed professional security personnel during non-working hours. Security checks shall be at 8-hour intervals during weekends and holidays, and a minimum of two at 8-hour intervals during normal non -working hours. The security post will be located at the site gate, which will enable tight control of site security. A sign will be posted indicating that all persons entering the site must sign in at the field office.

Security personnel will, at a minimum: require display of proper identification by each person entering the site; require personnel to print full name and employer, signing in and out, as required; and maintain logs of people, equipment, and vehicles entering and leaving the site. Security personnel will be unarmed. The security personnel will maintain a log of all security incidents.

Perimeter fences and gates will be checked on a daily basis to ensure there are no breaks or gaps. Vandalism to fences and gates will be reported immediately. In the event of an emergency, the security personnel will contact the appropriate law enforcement, fire department, and/or emergency medical units and response teams.

4.0 QUALITY CONTROL

The quality control procedures described below will ensure that the project activities are conducted in accordance with the stringent requirements set forth by the rules and regulations governing work at inactive hazardous waste sites in New York State.

4.1 Corporate QC Overview

It is the policy of The Tyree Organization, Ltd. (Tyree) to provide environmental products and services with consistently high quality such that they will reliably perform their intended function resulting in recognition as a quality leader in the industry. Achievement of this policy involves all staff, who are individually responsible for the quality of their work, resulting in a continually improving environment for all. This level of quality is achieved through adoption of a system of procedures that reflect the competence of Tyree to clients, property owners, and vendors. The purpose of this internal policy is to provide information and procedures on the full range of Tyree's internal and external activities. Any required client/contract procedures that are not adequately addressed in this document will be implemented by the Project Manager project-by-project basis and documented in the project-specific plans.

4.2 Project QC

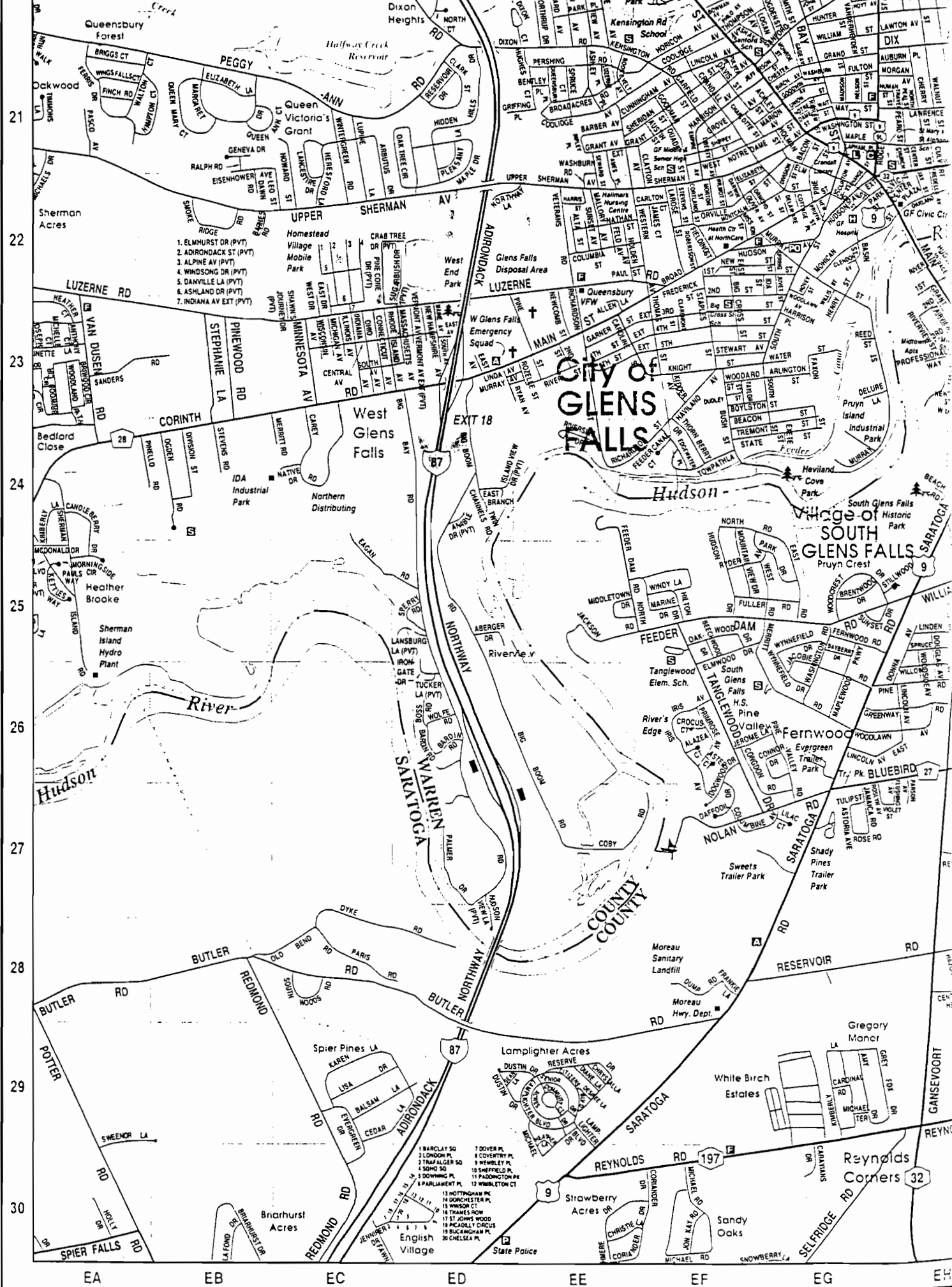
The project-specific QC elements of this site remediation project are detailed in the SAP, which has been submitted as a separate document. The SAP details the field and laboratory methods and procedures that govern the handling, sampling, analysis, and reporting of environmental project data for the project.

5.0 SCHEDULE

The proposed project schedule is included as Appendix A. Tyree believes that this project can be completed in approximately 4 weeks from mobilization. The schedule has been prepared with the assumption that no constraints exist regarding access to and egress from the site, and that the work will be initiated in September 2000.

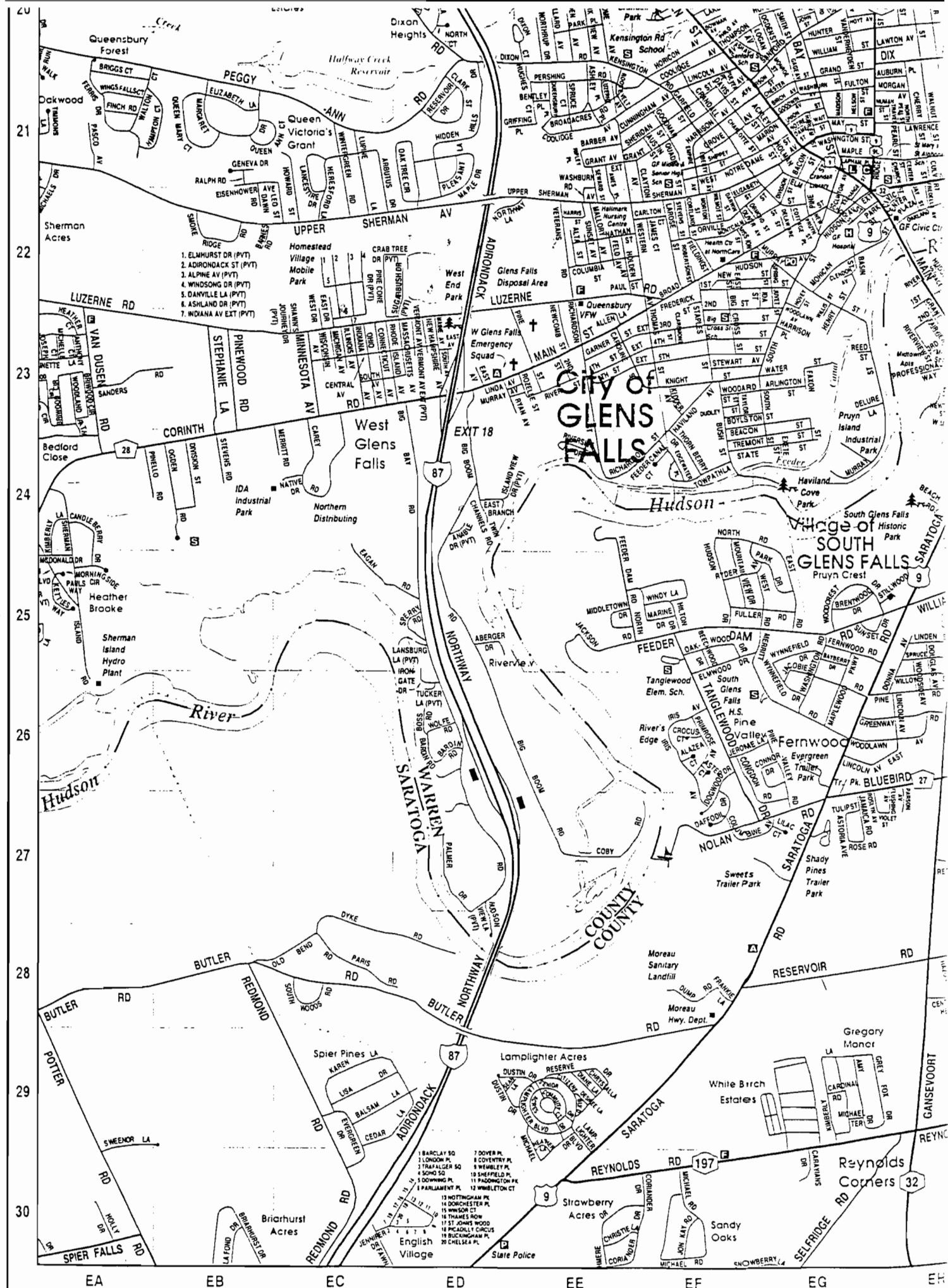
FIGURES

CONTINUES ON MAP 12



- 1 ELMHURST DR (PVT)
- 2 ADIRONDACK ST (PVT)
- 3 ALPINE AV (PVT)
- 4 WINDSONG DR (PVT)
- 5 DANVILLE LA (PVT)
- 6 ASHLAND DR (PVT)
- 7 INDIANA AV EXT (PVT)
- 8 BARCLAY SQ
- 9 LONDON PL
- 10 TRAFALGER SQ
- 11 SOMERSET PL
- 12 DOWNING PL
- 13 PARLIAMENT PL
- 14 WASHINGTON CT
- 15 DOVER PL
- 16 COVENTRY PL
- 17 WIMBORNE PL
- 18 SHEFFIELD PL
- 19 PADDINGTON PL
- 20 WIMBLETON CT
- 21 NOTTINGHAM PK
- 22 DORCHESTER PL
- 23 WINSON CT
- 24 THAMES SQ
- 25 ST JOHN'S WOOD
- 26 MCARDLE CIRCUS
- 27 BUCKINGHAM PL
- 28 CHELSEA PL

CONTINUES ON MAP 12



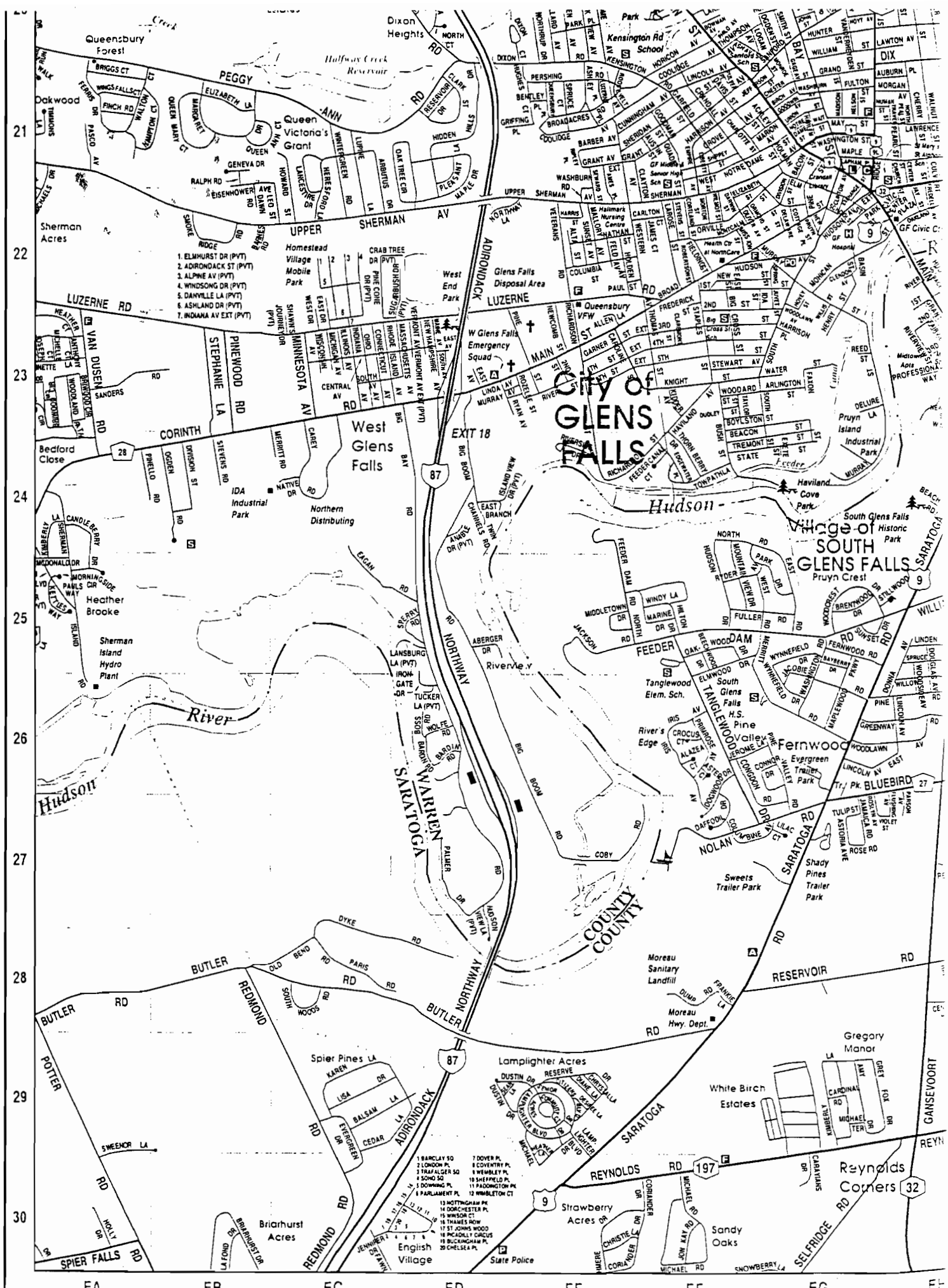
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2. ADIRONDACK ST (PVT)
3. ALPINE AV (PVT)
4. WINDSONG DR (PVT)
5. DAKVILLE LA (PVT)
6. ASHLAND DR (PVT)
7. INDIANA AV EXT (PVT)

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|------------------------|------------------|
| 1. BARCLAY SQ | 7. DOVER PL |
| 2. LONDON SQ | 8. COVENTRY PL |
| 3. TRAFALGER SQ | 9. WEMBLEY PL |
| 4. SOND SQ | 10. SHEPHERD PL |
| 5. DOWNING PL | 11. PRINCETON PK |
| 6. PARLIAMENT CT | 12. WIMBLETON CT |
| 13. NOTTINGHAM PK | |
| 14. BOSTON CT | |
| 15. WINSOR CT | |
| 16. THAMES ROW | |
| 17. ST. JOHN WOOD | |
| 18. PICCADILLY CIRCUIS | |
| 19. BUCKINGHAM PL | |
| 20. CHELSEA PL | |

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| 1. BRANCH RD | 7. DOVER PL |
| 2. LONDON SQ | 8. COVENTRY PL |
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CONTINUES ON MAP 12



- 1. ELMHURST DR (PVT)
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- 4. WINDSONG DR (PVT)
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- 16. THAMES ROW
- 17. ST. JOHN'S WOOD
- 18. PICADILLY CIRCUS
- 19. BUCKINGHAM PL
- 20. CHELSEA PL
- 21. DOVER PL
- 22. COVENTRY PL
- 23. WEMBLEY PL
- 24. SHEFFIELD PL
- 25. PADDOINGTON PK
- 26. WIMBLETON CT

General Computation Sheet

Calculation Set No.

Preliminary

Final

Void

Sheet ___ of ___ Project No.

Name of Project Luzerne Rd. Landfill RI System

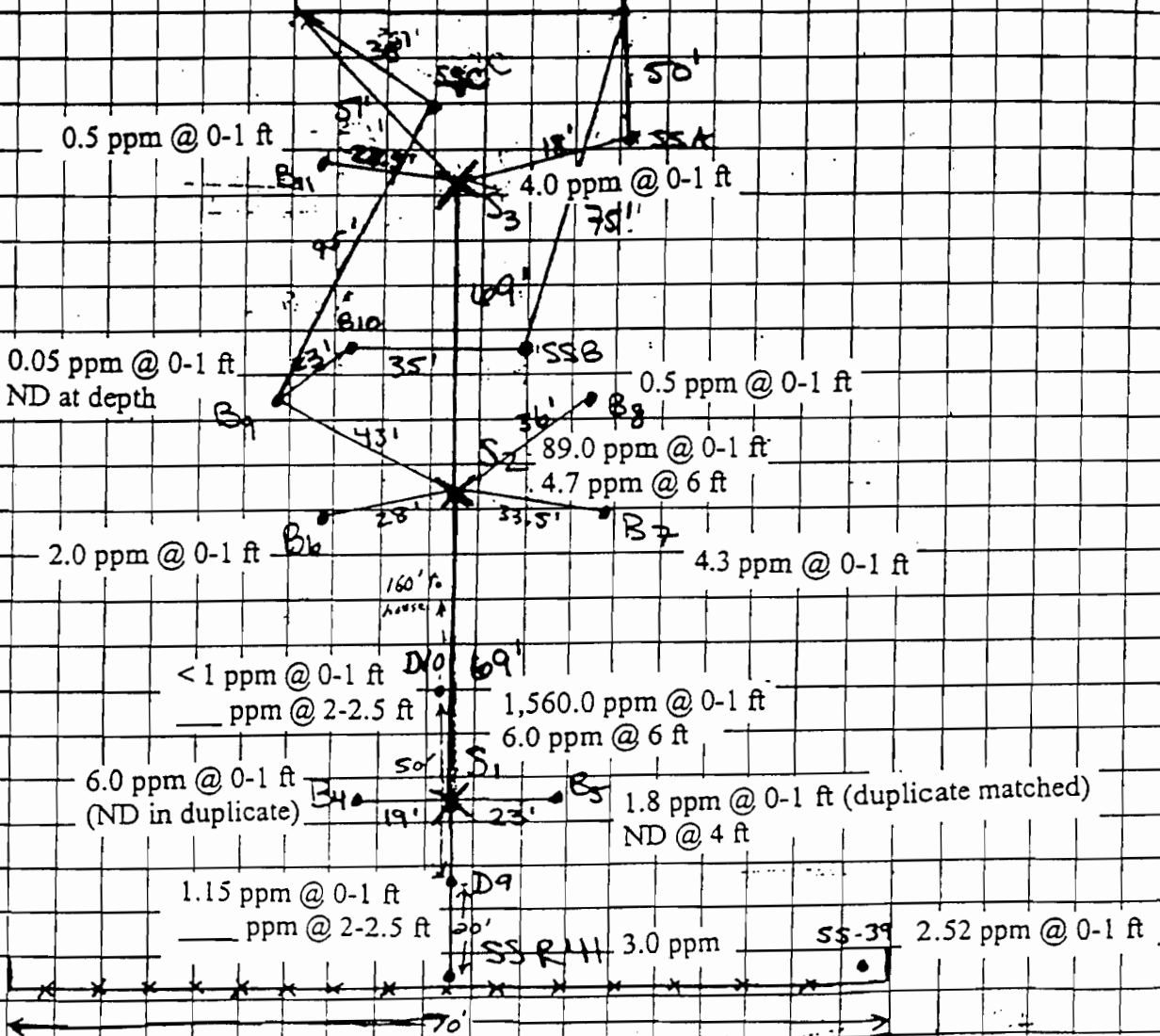
Rev. Completed By Checked By

Subject 694 Sherman Ave

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Sherman Ave.

HOUSE



Key: X = geoprobe point

• = surface soil sample

xxxx = fence

* * * * * House and street locations are approximate.

② Drawing not to scale. Dimensions are field verified.

