

BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS

September 2, 1999

REPLY TO:
Solid Waste Management
P.O. Box 340
Lecanto, Florida 34460

Kim B. Ford, P.E.
Solid Waste Section
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Citrus County Central Landfill,
Permit No. SO09-274381

Dear Mr. Ford:

This is to update you on operation and maintenance activities that have occurred in the past few months at our landfill, to request approval to accept street sweepings for use as daily cover, and to request approval for possible temporary storage and processing of gypsum drywall at the site during the grant-supported study of drywall recycling.

CONTAMINATED STORMWATER PIPELINE

Installation of the HDPE replacement for an existing PVC pipeline to carry contaminated stormwater from the lined area to the leachate storage tanks has been completed. One copy of the project drawing, which was prepared by County staff, is attached. The project was installed according to the drawing. I believe this provides the alignment and connection detail you requested. Comanco Environmental Inc. was the installation contractor.

LEACHATE TREATMENT TANK INTERIOR

The interior of the leachate treatment tanks was cleaned, inspected, repaired and entirely repainted this year. In general, the condition after eight years of service was good. However, 12 areas required spot welding or welded steel patch repairs. One set of the project specifications is attached. Photographs of repair locations are available in our files. The contractor was Under Pressure Sandblasting and Painting, Inc.

LEACHATE STORAGE TANK INTERIOR

The interior of the leachate storage tanks was cleaned, inspected, repaired and re-coated as needed this year. Approximately 2,050 square feet of coating required replacement, primarily due to poor adhesion resulting from problems with the initial installation. One crack was discovered in the floor of the north tank, which was

3600 W. SOVEREIGN PATH
LECANTO, FLORIDA 34461

ADMINISTRATION OFFICE
Suite 212
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352-527-5479 Fax

ENGINEERING DIVISION:
Suite 241
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- Land Section
Suite 205
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- Permits & Compliance Sec.
Suite 204
352-527-5448 Phone
352-527-5319 Fax
- Project Management Sec.
Suite 241
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352-527-5482 Fax
- Survey Section
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1300 S. LECANTO HIGHWAY
LECANTO, FLORIDA 34461

MAINTENANCE OPERATIONS:
• Facilities Maint. Section
PO Box 143
Lecanto, FL 34460
352-527-0333 Phone
352-527-0654 Fax

- Fleet Management Section
PO Box 215
Lecanto, FL 34460
352-746-6888 Phone
352-746-5011 Fax

AQUATIC SERVICES
PO Box 440
Lecanto, FL 34460
352-746-2694 Phone
352-746-9189 Fax

ROAD MAINTENANCE
PO Box 167
Lecanto, FL 34460
352-746-4107 Phone
352-746-1203 Fax

UTILITIES DIVISION
PO Box 440
Lecanto, FL 34460
352-746-2694 Phone
352-746-1676 Fax

SOLID WASTE MANAGEMENT
230 W. Gulf to Lake Highway
PO Box 340
Lecanto, FL 34460
352-746-5000 Phone
352-527-1204 Fax



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sealed prior to re-coating. The same coating materials (supplied by Tnemec) as were originally applied were used in the repair. Photographs of the project are available in our files. Under Pressure Sandblasting and Painting was the contractor.

VALVE ADDITIONS

Gate valves were added to each inlet line and each exit line for the leachate storage tanks. County crews installed a total of five valves. This improves our ability to segregate flows.

ELECTRICAL MODIFICATIONS RELATED TO PHASE 1A

At the time that Phase 1A construction was complete, and Smith Technology declared bankruptcy, there were several items that required follow-up attention. That work has now been completed. The items that were modified include:

1. providing a new three-phase electrical service to the stormwater lift station and leachate storage tanks, retaining separate service for the master lift station and leachate treatment plant;
2. installing new, appropriately sized, leachate meters and display units, and
3. determining how to appropriately monitor methane in the leachate and stormwater lift stations, with the recommendation that portable metering is preferable to the fixed installation of the original design.

LINER REPAIR

Several small (<1/4-inch to about 1-foot) holes in the liner were repaired recently by Comanco. They also repaired one leachate cleanout/gas vent pipe on which the top end flange had become disconnected.

FILL AREA

The southeast section of Phase 1 up to the 130-foot elevation has been completed and has received intermediate cover and mulch for stabilization. We are currently filling along the lower end of Phase 1, adjacent to Phase 1A.

RECYCLE ALLEY IMPROVEMENTS

Additional waste drop-off containers have been added to accommodate increased traffic. The surface in several locations in recycle alley has been repaired or upgraded to accommodate increased traffic. The area is now regularly swept with a vehicle-mounted magnet to remove nails etc.

STREET SWEEPINGS

In response to correspondence from the Department dated April 27, 1999, Citrus County is prepared to have all street sweepings (none currently produced), stormwater sediments and catch basin sediments collected by County crews delivered to the

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Central Landfill for disposal. It is our intent to use this material as daily cover. We understand that this change in our procedures does not require a permit modification application.

We have not been contacted by the cities of Inverness or Crystal River or FDOT desiring to use our facility for this purpose, however we are prepared to take such material as they may generate in Citrus County and put it to the same use in our landfill.

DRYWALL RECYCLING PROJECT

As you know, Citrus County was awarded an innovative recycling grant dealing with reuse of gypsum drywall. It is possible that we may need to use an area at the site, probably near recycle alley, for temporary storage and perhaps processing of drywall. Plans have not been finalized, therefore we do not have specifics on location, amount or duration, other than the project must be completed within less than a year. Please indicate what information you may require prior to implementation.

Please contact me if you have any questions.

Sincerely,

Susan J. Metcalfe
Director

CC: Kenneth Saunders, Director, Public Works Department
Larry Brock, Director, Road Maintenance Division
Bob Butera, FDEP, Tampa

BID NO. 99-45
TECHNICAL SPECIFICATIONS

GENERAL INFORMATION

The Leachate Treatment Facility is located at the Citrus County Central Landfill, 230 W. Gulf to Lake Highway (SR 44), Lecanto, Florida.

The adjacent closed landfill gas monitoring points, at times, have methane gas readings at or above the LEL within the plant area. Site conditions and tank configuration indicate that this project would require a confined space entry permit. The Contractor will comply with the provisions of 29 CFR Part 1910 at all times, and provide primary rescue capability and monitoring equipment.

In addition to the confined space entry requirements, the Leachate Treatment Facility is a designated no smoking area.

SCOPE OF SERVICE

The Contractor shall provide all labor, equipment and materials for confined space entry into three 48,000 gallon leachate treatment facility processing tanks (See Attachment One for schematic) for refurbishing. Services shall consist of, but not limited to the following:

I. INVESTIGATE CONDITIONS OF TANKS / PROPOSED REPAIRS

It is the intent of the County to maintain plant processing for as long as possible. One tank will be taken off-line at a time during the initial stages of the project. As the tanks are taken off-line, the Contractor will provide the County with a description of any defect areas to the original walls of the tanks and propose repairs in accordance with specifications listed as follows:

A. Welding Guidelines:

- All weld repairs shall be completed by a licensed welder.
- Weld repairs will be required in any location where greater than 25 percent wall penetration has occurred and/or where good coating adhesion/coverage cannot be obtained.

Technical Specifications – 2
Bid No. 99-45

- In areas where a high concentration of defects occur, and/or where a hole is located, the use of a cover plate of carbon steel (patch) should be used. The cover plate should be, at a minimum, 0.25 inches thick and seal welded around the entire edge of the plate. The weld should be of acceptable quality, free of weld splatter and surface porosity. Grinding all weld repairs flush to obtain a level surface to improve the quality of the coating is recommended.
- All welding repairs shall fill in areas to the original wall thickness and comply with N.A.C.E. Standards for Tanks Designed for Immersion Service.
- Surface preparation for the areas to be welded shall be the same as described herein for the coating material.
- Use of a protective tarp on the tank bottom is recommended to avoid mechanical damage to the coating system and equipment on the floor of the tank(s).

B. Electrically insulating the SS Air Headers

- If the corrosion is very aggressive, then insulation kits for the SS air header flange and supports should be installed.

II. SURFACE PREPARATION

- Remove all soluble residue by high pressure water blast cleaning at a minimum of 3000 PSI, 3-5 gallons per minute.
- For all areas where coatings have failed and where rust and loose old coatings are present, remove all rust, rust stain, old coatings and remaining foreign contaminants by Near White Blast Cleaning (SSPC-SP10). Blast cleaning should provide a minimum surface profile of 2.0 - 3.0 mils.
- For all areas where existing coatings are sound and are not scheduled for removal, scarify the existing coating surface by Brush-Off Blast Cleaning (SSPC-SP7). All surfaces must be deglossed and abraded by this process.

Technical Specifications – 3
Bid No. 99-45

III. COATING SYSTEM

- Spot prime all areas of bare metal with an industry standard epoxy coating to a dry film thickness of 3.0 - 5.0 mils. Tnemec Hi-Build Epoxoline Series 66 is recommended. Equivalent products, if proposed, must meet the performance requirements of AWWA C210 for non potable water contact.
- Apply intermediate coat on all spot primed areas with an industry standard immersion epoxy to a dry film thickness of 4.0 - 6.0 mils DFT. Tnemec H.S. Epoxy Series 104 is recommended. Equivalent products, if proposed, must meet the performance requirements of AWWA C210 for non potable water contact.
- Application of one full coat to all tank interior surfaces with an industry standard immersion epoxy to a dry film thickness of 6.0 - 8.0 mils DFT. Tnemec H.S. Epoxy Series 104 is recommended. Equivalent products, if proposed, must meet the performance requirements of AWWA C210 for non potable water contact.
- The Contractor shall follow all manufacturers recommendations for application temperature, curing temperature and time.

Note: According to product specifications, the minimum surface temperature application for the recommended project is 50 deg. F for the primer and 60 deg. F for the coating material.

The average daily air temperature in Citrus County is shown on the table below:

<u>MONTHS</u>	<u>TEMPERATURE-DEGREES F.</u>
January	55
February	58
March	63
April	68
May	75

Technical Specifications - 4
Bid No. 99-45

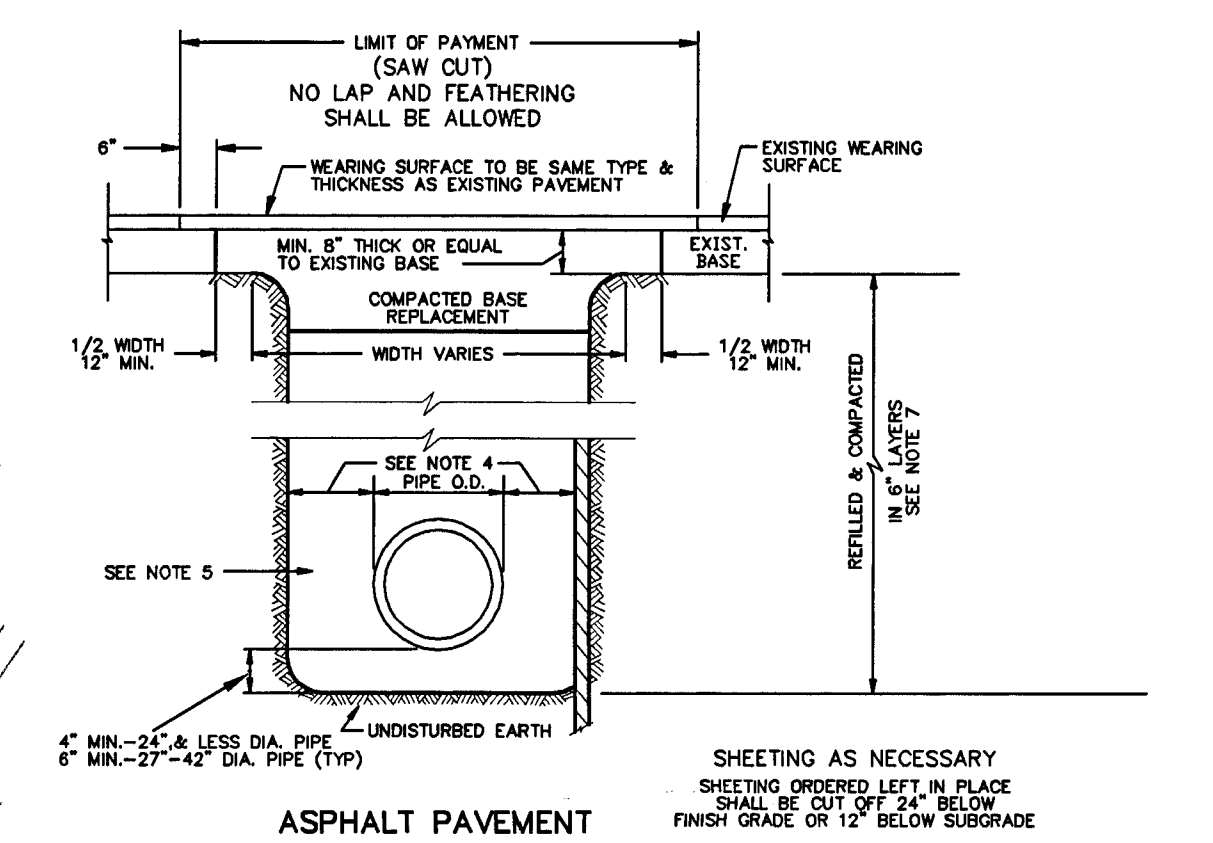
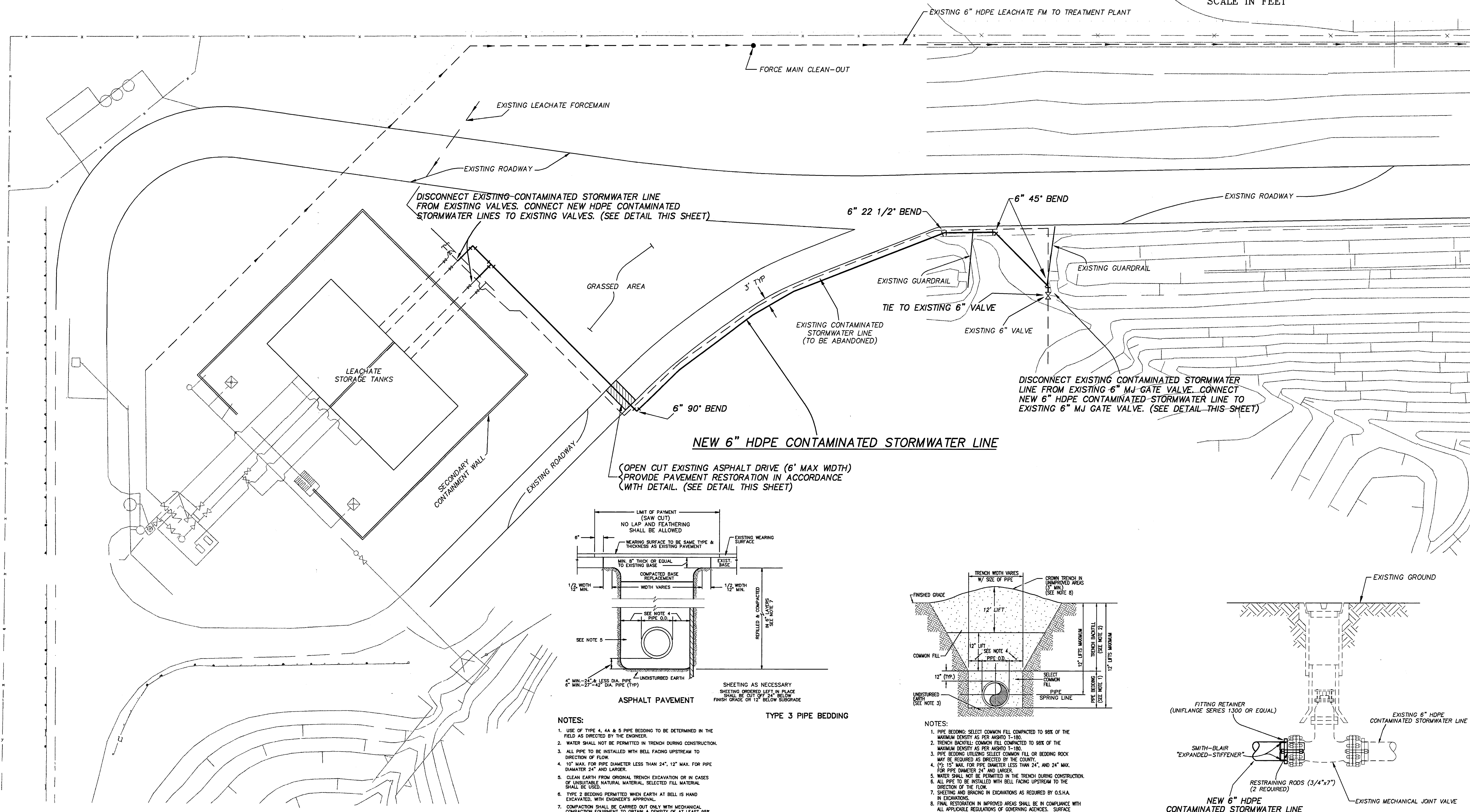
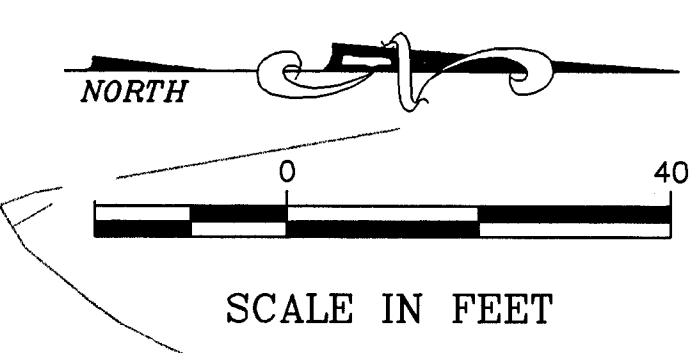
IV. COATING APPLICATION TESTING

- The Contractor shall test the coating material after application. Holiday (skips or misses) testing should be completed using the high voltage spark test with a non-sudsing wetting agent.
- The applied voltage would be equal to 100 volts per mil of coating thickness.
- The Contractor shall conduct field verification of equipment operation prior to testing.

V. ACCEPTABLE COATING MATERIAL

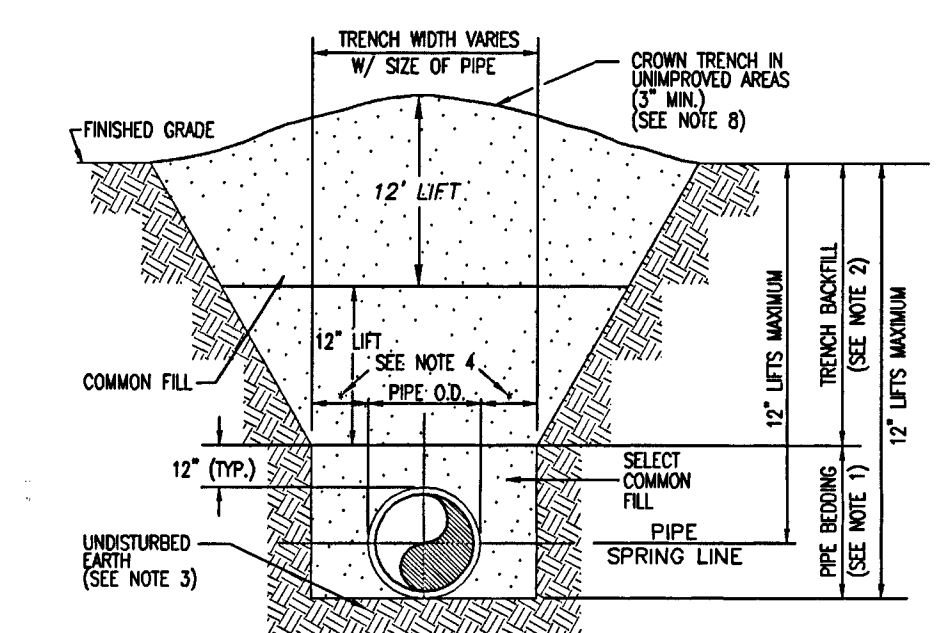
Bidder's shall include with the bid submittal, a copy of the manufacturer's current specifications for the primer and coating material, material identification numbers and Material Safety Data Sheet(s).

Acceptable products for the coating material shall be as specified in Item III. Herein. Other materials will not be considered until after the bid opening. At that time, any proposed alternate will be reviewed for quality and compatibility with existing coating system, in comparison to the specified paints, and will only be accepted if the County feels that the proposed system is an approved equal. If the alternate is determined to be unequal in quality, performance and durability, the bid will be considered a conditional bid, therefore, non-acceptable.



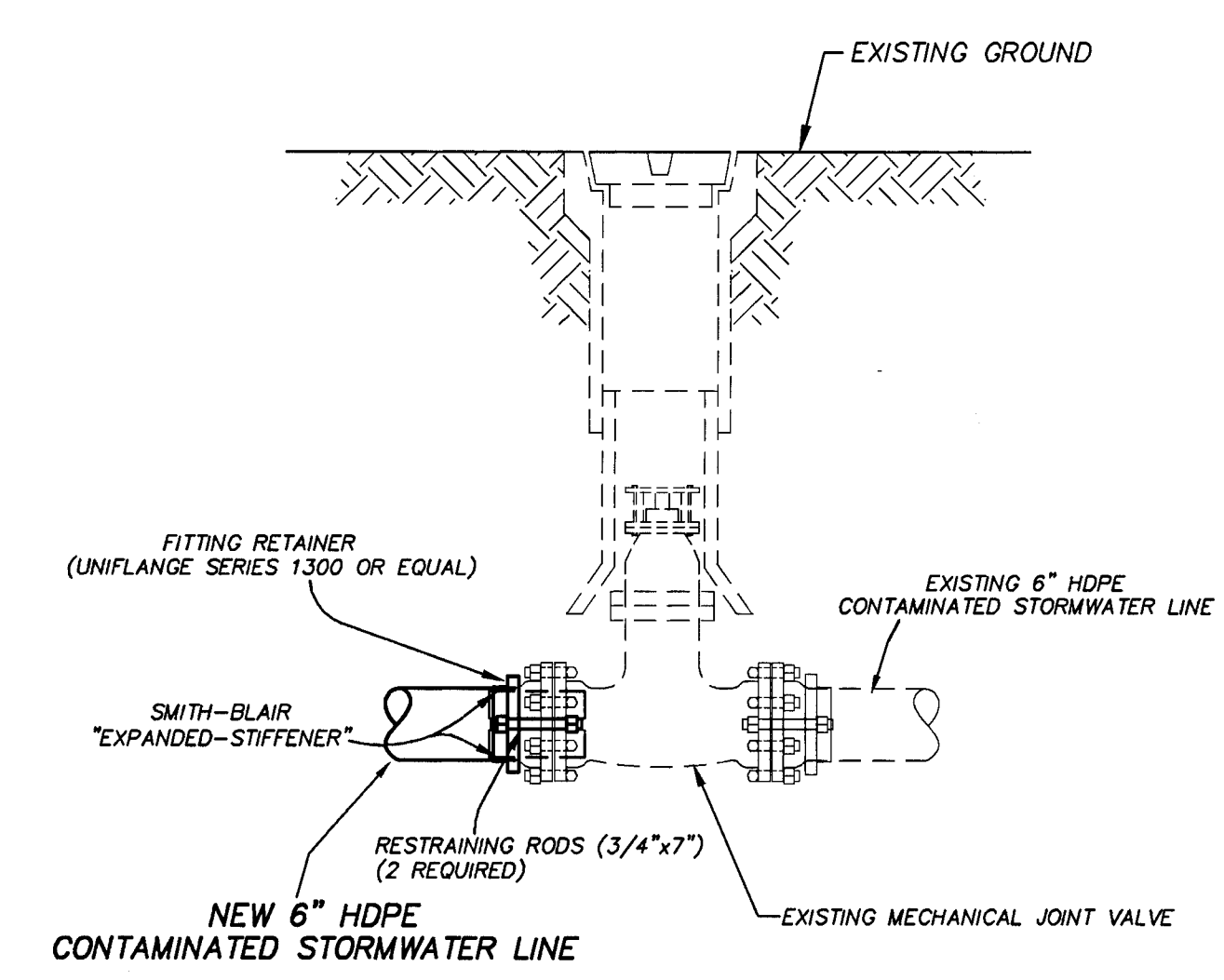
- NOTES:
1. USE OF TYPE 4, 4A & 5 PIPE BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE ENGINEER.
2. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
3. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO DIRECTION OF FLOW.
4. 10\"/>

TYPICAL DITCH EXCAVATION AND PAVEMENT REPLACEMENT



- NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER ASTM D-1557.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER ASTM D-1557.
3. PIPE BEDDING: UTILIZE SELECT COMMON FILL OR BEDDING ROCK MAY BE REQUIRED AS DIRECTED BY THE COUNTY.
4. (1) 15\"/>

TYPE B BEDDING AND TRENCHING DETAIL



HDPE TO EXISTING VALVE CONNECTION DETAIL

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SEP 07 1999
SOUTHWEST DISTRICT TAMPA

CITRUS COUNTY DEPARTMENT OF PUBLIC WORKS UTILITIES DIVISION

1300 S. LECANTO HWY. LECANTO, FLORIDA 34461 (352) 746-2694

Table with columns: NO., DATE, REVISION, APP'D. BY

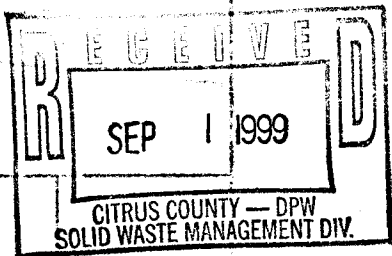
AUTHORIZED BY: DATE

REGISTERED ENGINEER NO. STATE OF FLORIDA DATE

LANDFILL

TYPICAL UTILITIES SECTION

SCALE: DATE: PLAN SET: FILE NAME: SEC xx TWP: xRGE:xx SHEET



ON THE
241 NO.