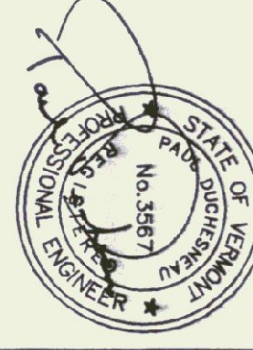


Champlain Consulting ENGINEERS
 85 PREM ROAD, P.O. BOX 453 COLCHESTER, VERMONT 05448
 PHONE: (802) 663-8060 FAX: (802) 664-1878



D&W
 DORE AND WHITTIER, INC.
 Architects • Project Managers
 1400 HANCOCK STREET
 COLCHESTER, VT 05448
 Phone: (817) 471-2897 Fax: (817) 471-2516

STATE OF VERMONT
 DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
 AGENCY OF ADMINISTRATION
 MONTPELIER, VERMONT

AGENCY OF TRANSPORTATION
 HIGHGATE MAINTENANCE FACILITY
 HIGHGATE VERMONT

REVISIONS

DATE:	08/03/01
DRAWN BY:	CCE
APPR. BY:	PD

SCALE: 1" = 50'

DATE: 08/03/01

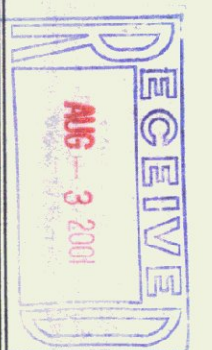
DRAWN BY: CCE

APPR. BY: PD

EXISTING CONDITIONS
 MAINTENANCE GARAGE

1 OF 7
 C-1

Approved By: *[Signature]*
 Permit #: *0534*
 DATE: *8/16/01*



GENERAL NOTES:

- (1) This plan is for topographic purposes only and is not to be construed as a property boundary survey. Property lines are shown for reference only.
- (2) The General Contractor shall verify all existing field conditions. The Project Engineer shall be notified immediately where discrepancies exist between the project drawings and actual field conditions.
- (3) The General Contractor shall contact the State at the end of each workday. All underground utilities located on the project shall be located and marked prior to construction.
- (4) Where operations on the project require the use of heavy machinery, the General Contractor shall be responsible for obtaining all necessary permits and approvals from the State and local authorities.
- (5) It is the General Contractor's responsibility to ensure that the project design reflects the latest revisions.

JOB SITE SAFETY NOTES:

- (1) PROVIDE ADEQUATE SAFETY FOR ALL WORKERS AND THE GENERAL PUBLIC ON AND NEAR THE JOB SITE AT ALL TIMES.
- (2) FOLLOW THE SAFETY PROCEDURES SET FORTH BY THE VERMONT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (VOSH) AT ALL TIMES.
- (3) ALL EXCAVATION AND HOLE SHALL BE FULLY COVERED OR BARBED AT THE END OF EACH WORKING DAY.
- (4) AT THE END OF EACH WORKDAY, ALL UNFINISHED WORK SHALL BE PROTECTED AND THE UNFINISHED WORK SHALL BE PROTECTED FROM ENTERING OR USING THE UNFINISHED AREA.

LEGEND

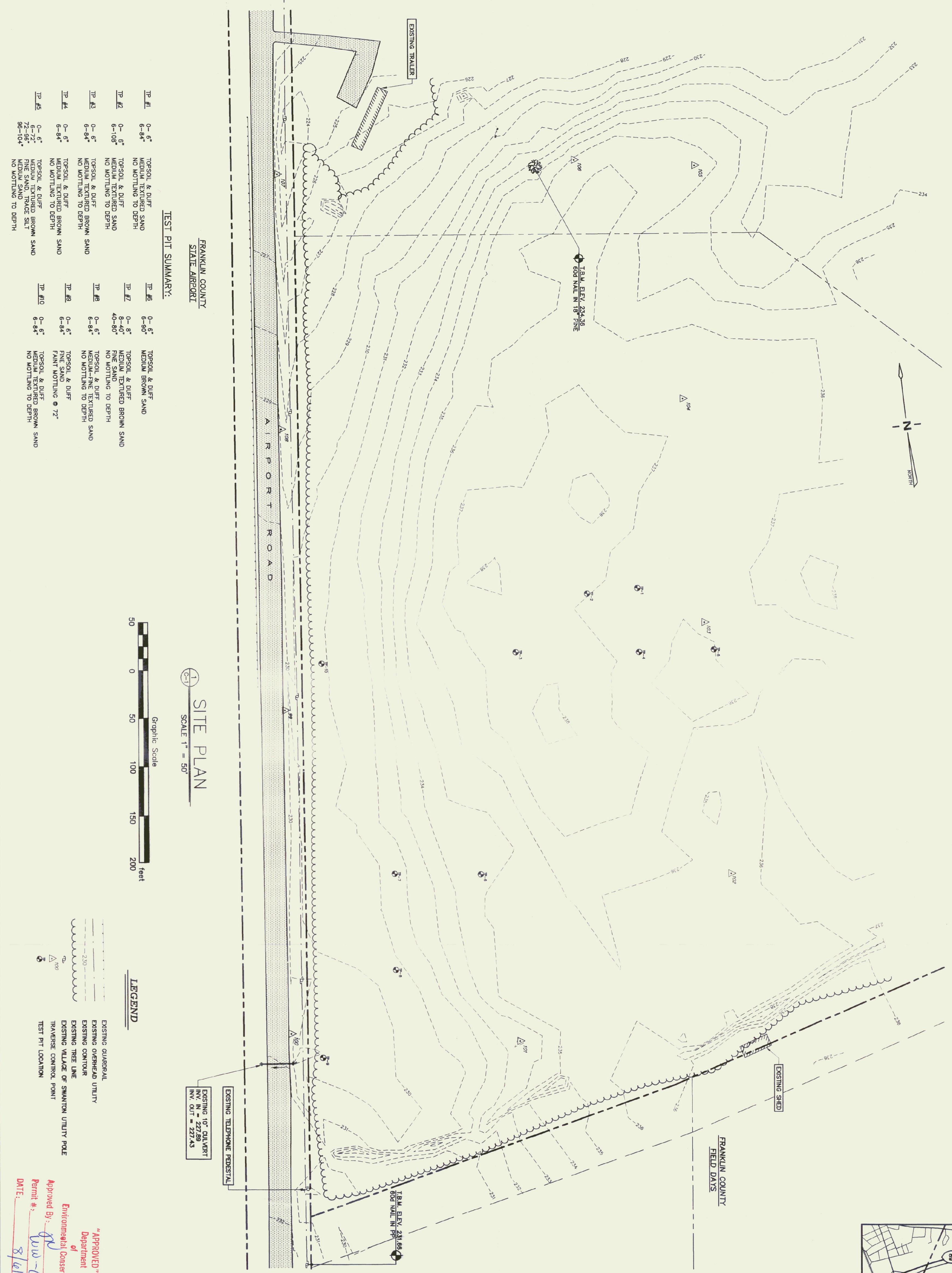
- EXISTING QUADRETERIAL
- EXISTING OVERHEAD UTILITY
- EXISTING CONTOUR
- EXISTING TREE LINE
- EXISTING VILLAGE OF SWANTON UTILITY POLE
- TRAVERSE CONTROL POINT
- TEST PIT LOCATION



SITE PLAN
 SCALE 1" = 50'

TEST PIT SUMMARY:

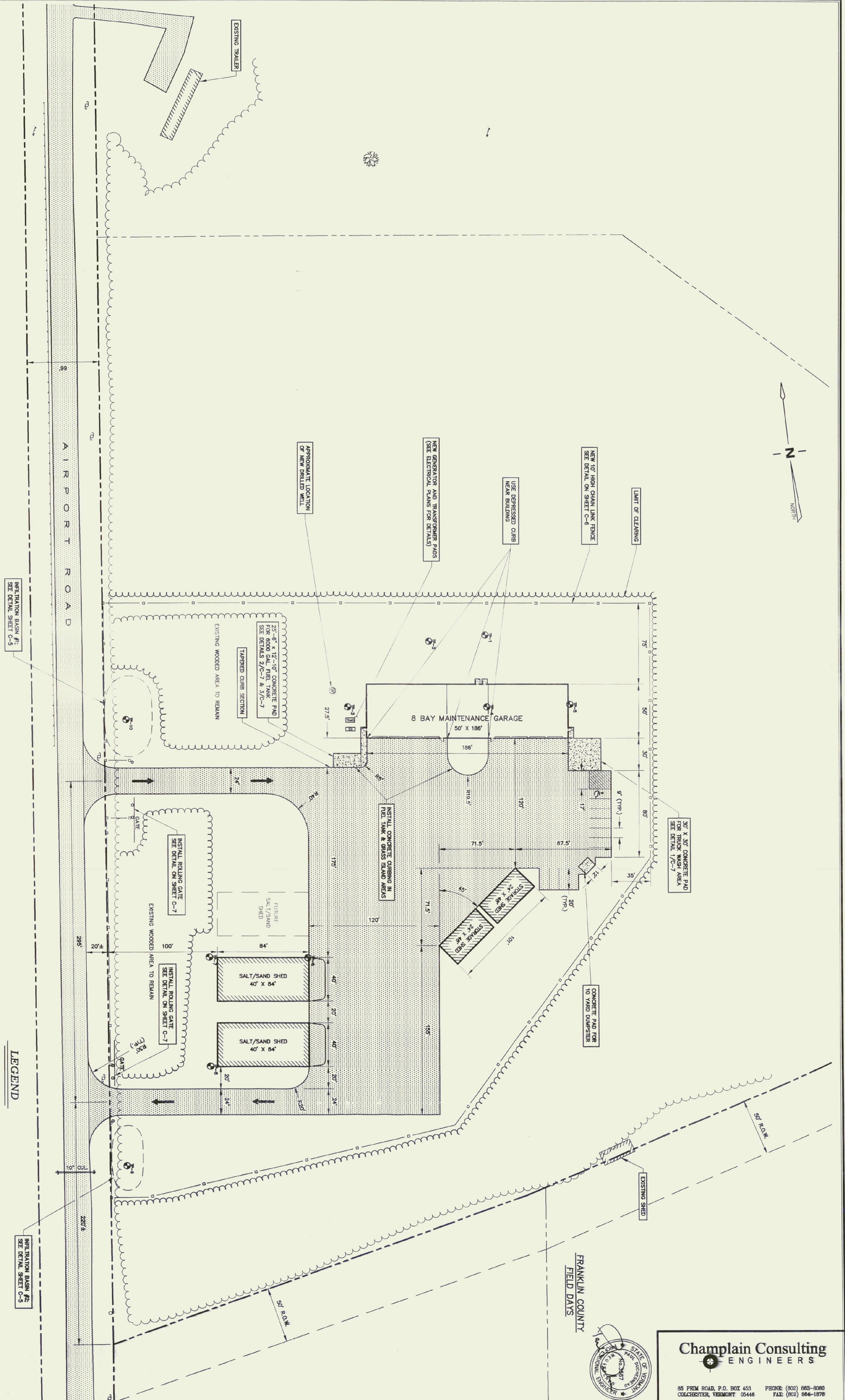
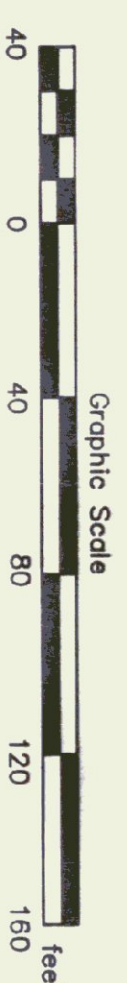
TEST PIT #	DEPTH	SOIL TYPE	NOTES
TP #1	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #2	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #3	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #4	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #5	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #6	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #7	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #8	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #9	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH
TP #10	0-6"	TOPSOIL & DUFF	NO MOTTLING TO DEPTH



FRANKLIN COUNTY
STATE AIRPORT

SITE PLAN

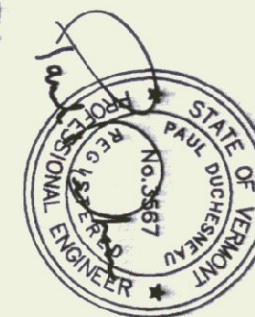
SCALE 1" = 40'



LEGEND

- EXISTING:
 - BOUNDARY
 - TREE LINE
 - VILLAGE OF SWANTON UTILITY POLE
- PROPOSED:
 - 10' HIGH CHAIN LINK FENCE
 - LIMIT OF CLEARING
 - DRILLED WELL
 - TEST PIT LOCATION

Approved By: *[Signature]*
 Permit #: *WV-6-0534*
 DATE: *5/16/01*



Champlain Consulting ENGINEERS

85 FROM ROAD, P.O. BOX 453 COLCHESTER, VERMONT 05446
 PHONE: (802) 863-9080 FAX: (802) 864-1878

D&W
 DORE AND WHITTIER, INC.
 Architects • Project Managers

1795 WILKINSON RD., STE. 5
 S. BURLINGTON, VT 05403
 Phone: (802) 863-1428
 Fax: (802) 863-6955

1400 HANCOCK STREET
 QUINCY, MA 01906
 Phone: (617) 471-2897
 Fax: (617) 471-2516

REVISIONS

SCALE: 1" = 40'
DATE: 08/03/01
DRAWN BY: CCE
APPR. BY: PD

HIGHGATE MAINTENANCE GARAGES

SITE PLAN

C-2
 2 OF 2

AGENCY OF TRANSPORTATION
 HIGHGATE MAINTENANCE FACILITY
 HIGHGATE VERMONT



STATE OF VERMONT
 DEPARTMENT OF BUILDINGS
 AND GENERAL SERVICES
 AGENCY OF ADMINISTRATION
 MONTPELIER, VERMONT



BASES OF DESIGN:
 12 EMPLOYEES @ 15 gal/EMPLOYEE = 180 gal
 WATER SAVING ALLOWANCE = 9 X 180 = 162 gal
 REQUIRED DISPOSAL AREA = 162 gal / 1.5 gal per sq ft = 108 sq ft
 USE 1 - 27' X 4' TRENCH = 108 sq ft OF DISPOSAL AREA FOR
 PRIMARY AND REPLACEMENT DISPOSAL FIELDS
 INSTALL A NEW 1000 GALLON PRECAST CONCRETE SEPTIC TANK

PERIODIC MAINTENANCE NOTES:

- SEPTIC TANK**
- The depth of sludge and scum in the septic tank shall be measured annually by the Owner. The septic tank shall be pumped if the sludge is over 18" deep or the scum is over 6" deep.
 - After being pumped, the septic tank shall be inspected for clogging after the septic tank has been pumped.
 - The effluent filter should be rinsed clean regularly.

WASTEWATER DISPOSAL AREA

- Maintain turf conditions throughout the summer months by mowing the grass to 2 1/2" - 3" in length; reseed all bare spots.
- At least once per year, open the distribution box and remove all settled solids as necessary.

TEST PIT SUMMARY:

TP #1	0-6"	TOPSOIL & DUFF
TP #1	6-84"	MEDIUM TEXTURED SAND NO MOTTLING TO DEPTH
TP #2	0-6"	TOPSOIL & DUFF
TP #2	6-108"	MEDIUM TEXTURED SAND NO MOTTLING TO DEPTH

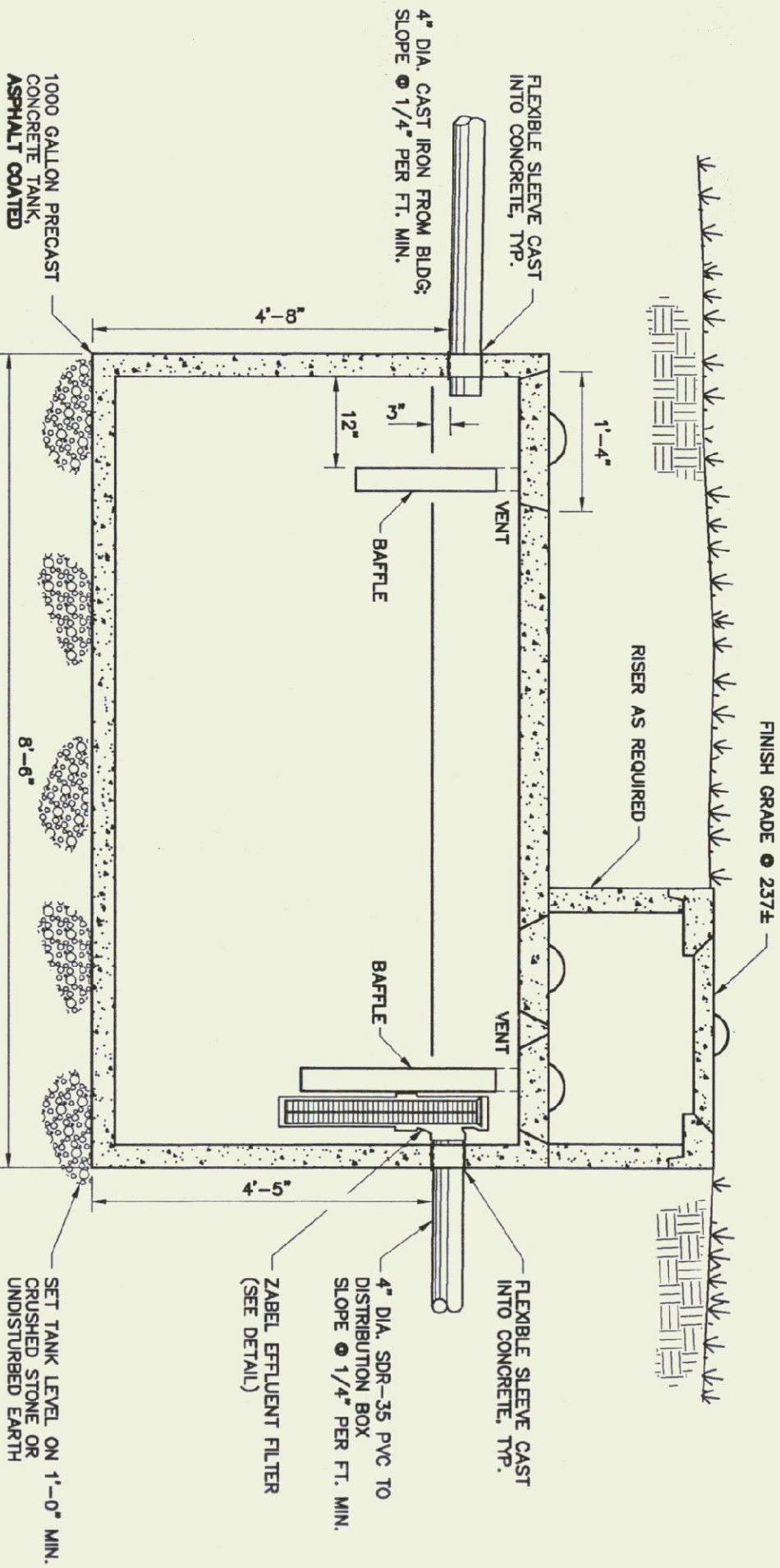
PERCOLATION TEST SUMMARY:

PT #1	1 MIN./INCH
PT #2	1 MIN./INCH

DEPTH OF PERC. TESTS: 30"
 SOILS INVESTIGATION COMPLETED BY CHAMPLAIN CONSULTING
 ENGINEERS ON 05/29/01.

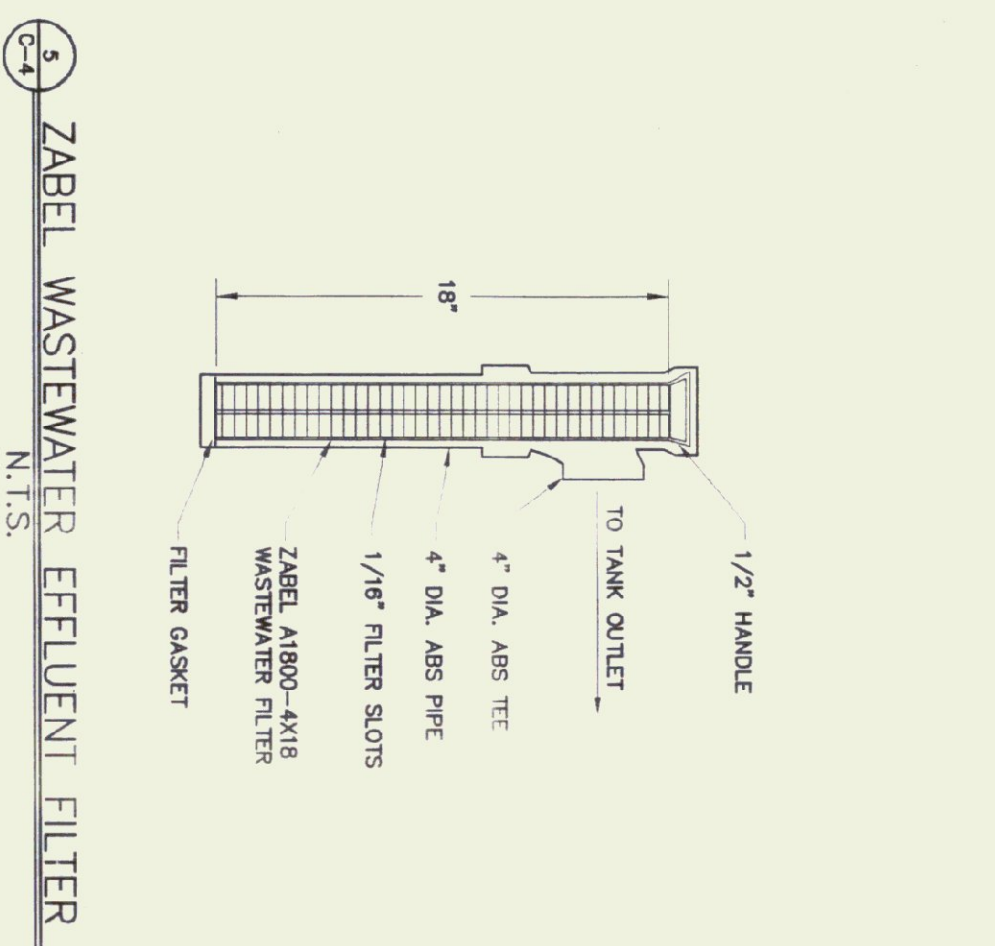
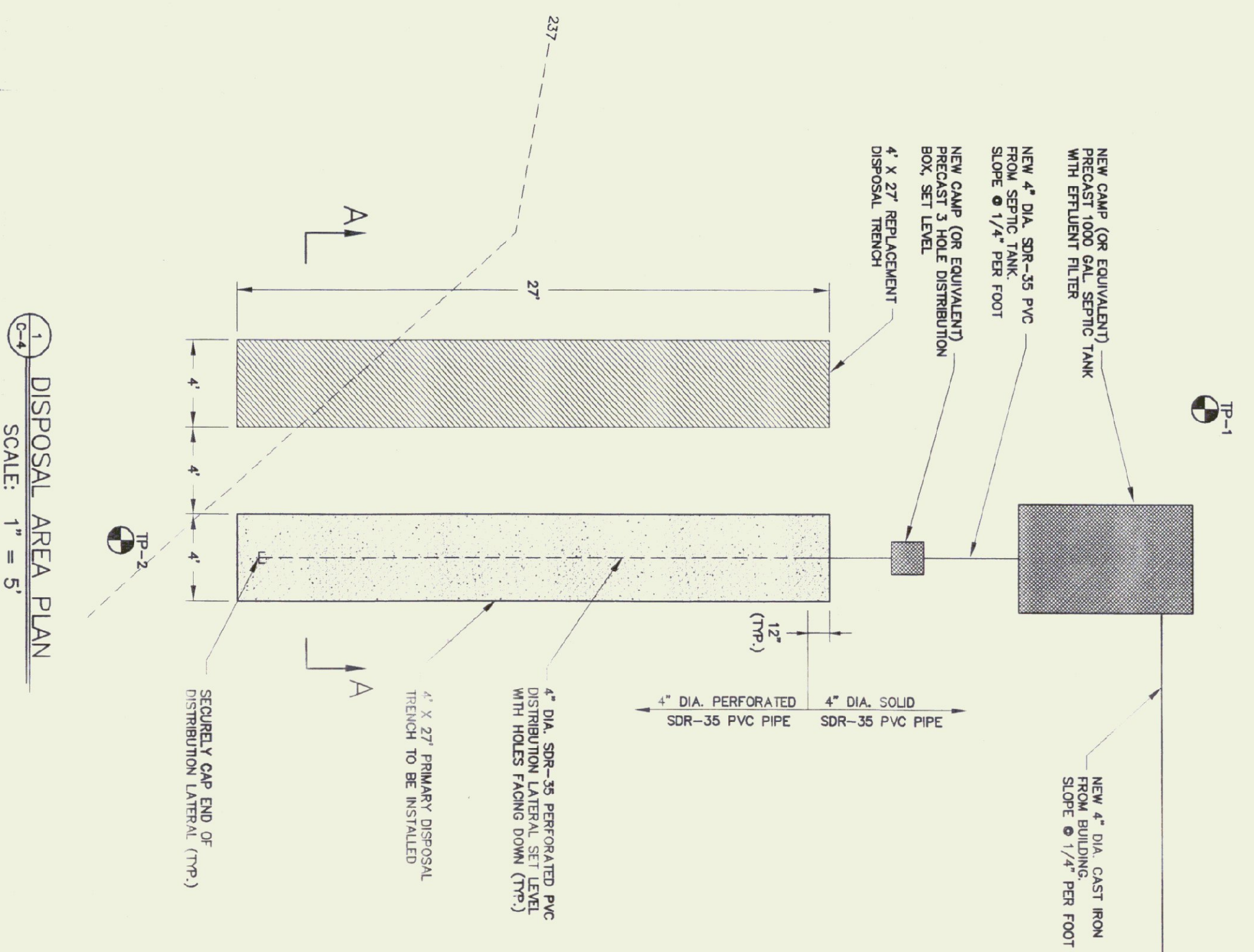
CONSTRUCTION NOTES:

- The wastewater disposal system design shall be reviewed with the General Contractor prior to commencement of construction, and reviewed during the critical phases of construction by a registered professional engineer. The General Contractor shall be responsible for establishing the construction schedule. Forty-eight (48) hours advance notice is required for all construction reviews.
- The sides and bottom of the disposal trenches shall be rocked to securely dry, smooth soil surfaces after excavation is completed. All loose material shall be removed from the disposal trenches.
- The distribution lines shall be placed on the crushed stone bedding with no slope, and covered with crushed stone as per the disposal trench detail.
- The area around the wastewater disposal system shall be disposed of to provide diversion of surface runoff water from the disposal area.



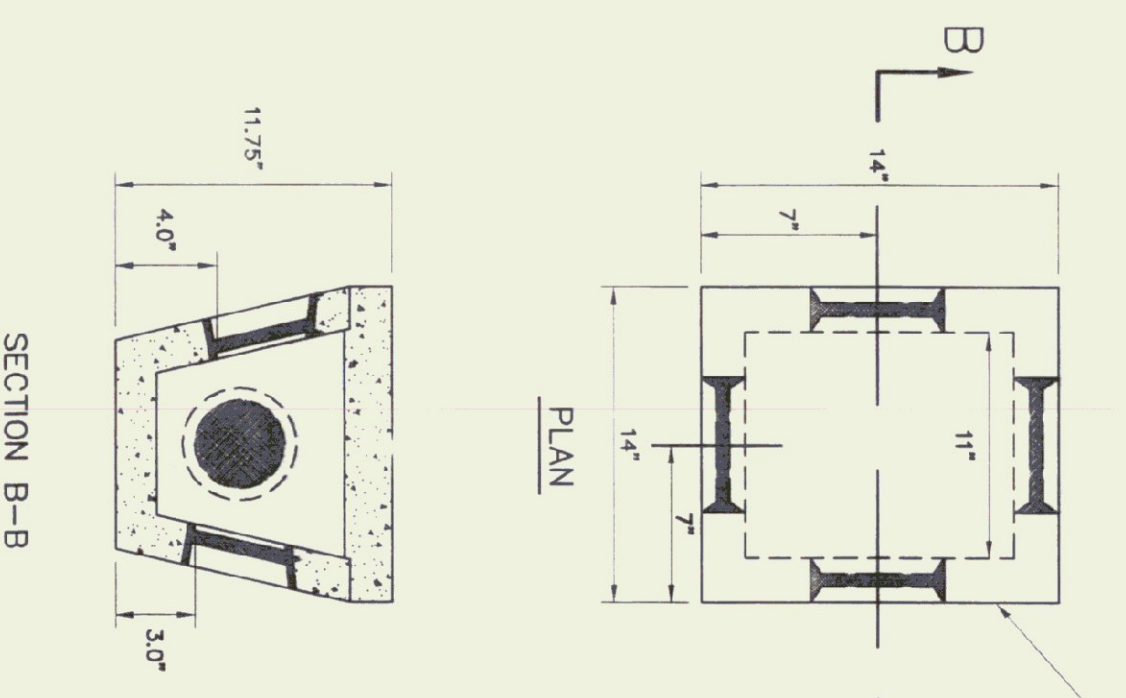
3 TYPICAL SEPTIC TANK WITH OUTLET FILTER
 N.T.S.

1 DISPOSAL AREA PLAN
 SCALE: 1" = 5'



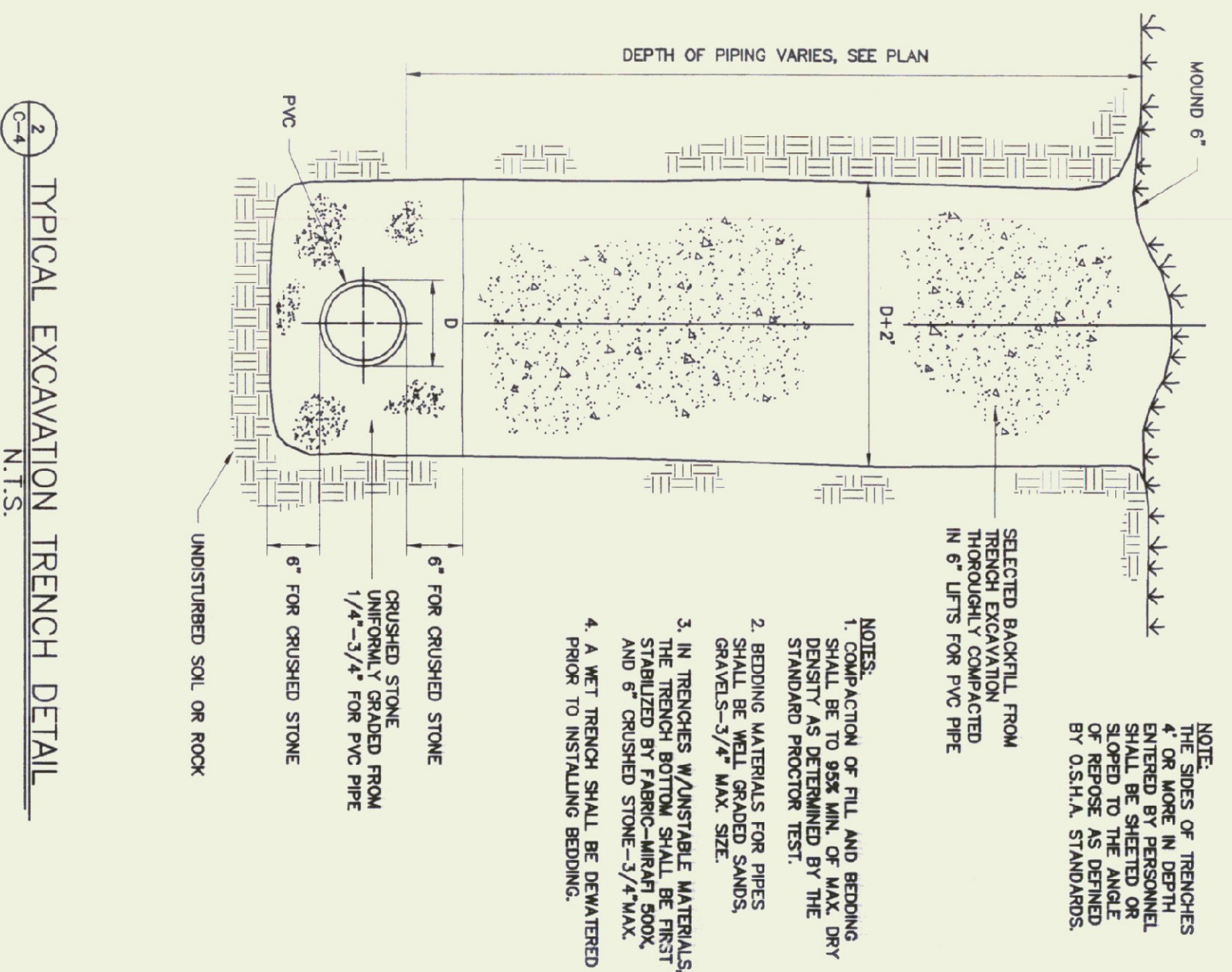
4 ZABEL WASTEWATER EFFLUENT FILTER
 N.T.S.

6 PRECAST CONCRETE DISTRIBUTION BOX DETAIL
 N.T.S.



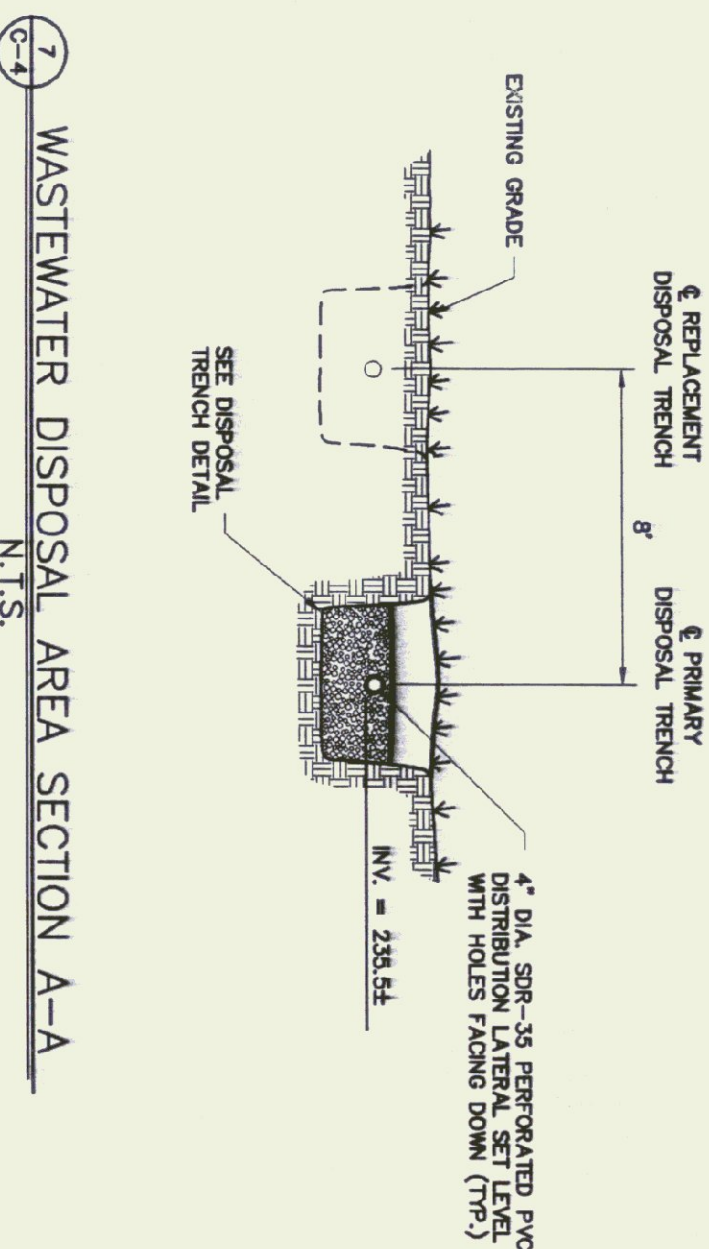
SECTION B-B

2 TYPICAL EXCAVATION TRENCH DETAIL
 N.T.S.

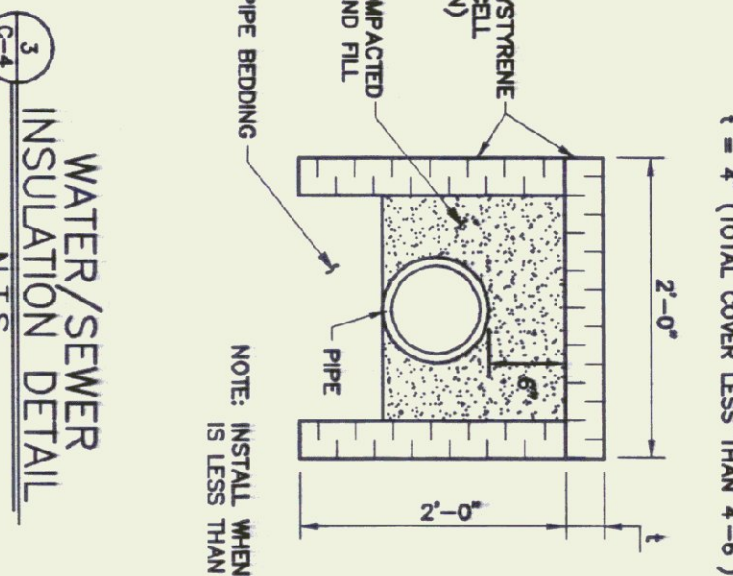


- NOTES:**
- COMPACTION OF FILL AND BEDDING SHALL BE TO 95% MIN. OR MAX. DRY STANDARD PROCTOR TEST.
 - SEEDING MATERIALS FOR PRESS GRAVES - 3/4" MAX. SIZE.
 - IN TRENCHES, MAINTAINABLE MATERIALS, THE TRENCH BOTTOM SHALL BE FIRST STABILIZED BY FIBRO-MAN 500K AND 5" CRUSHED STONE - 3/4" MAX. PRIOR TO INSTALLING BEDDING.
 - A WET TRENCH SHALL BE DRAINED.

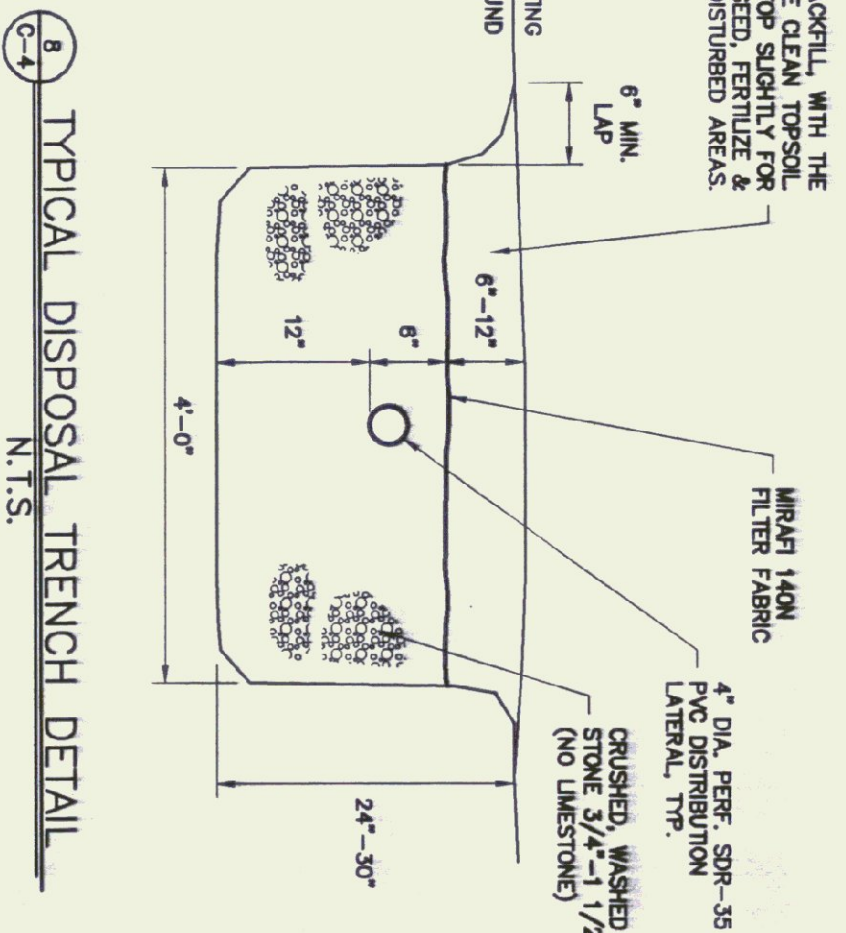
7 WASTEWATER DISPOSAL AREA SECTION A-A
 N.T.S.



3 WATER/SEWER INSULATION DETAIL
 N.T.S.

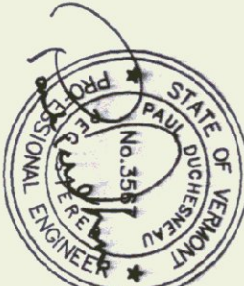
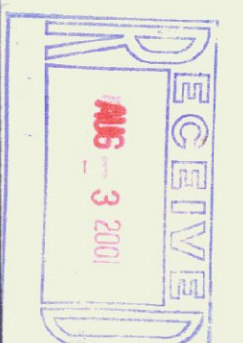


8 TYPICAL DISPOSAL TRENCH DETAIL
 N.T.S.



APPROVED
 Environmental Conservation
 Department

Approved By: *[Signature]*
 Permit #: *WD-6-0534*
 DATE: *8/16/01*



Champlain Consulting ENGINEERS

86 PRIM ROAD, P.O. BOX 453 COLCHESTER, VERMONT 05448
 PHONE: (802) 863-8060 FAX: (802) 864-1878



D&W DORE AND WHITTIER, INC.
 Architects • Project Managers

1795 WILLISTON RD., STE 5 S. BURLINGTON, VT 05403
 Phone: (802) 863-1428 Fax: (802) 863-6555
 1400 HANCOCK STREET QUINCY, MA 02169
 Phone: (617) 471-2897 Fax: (617) 471-2516

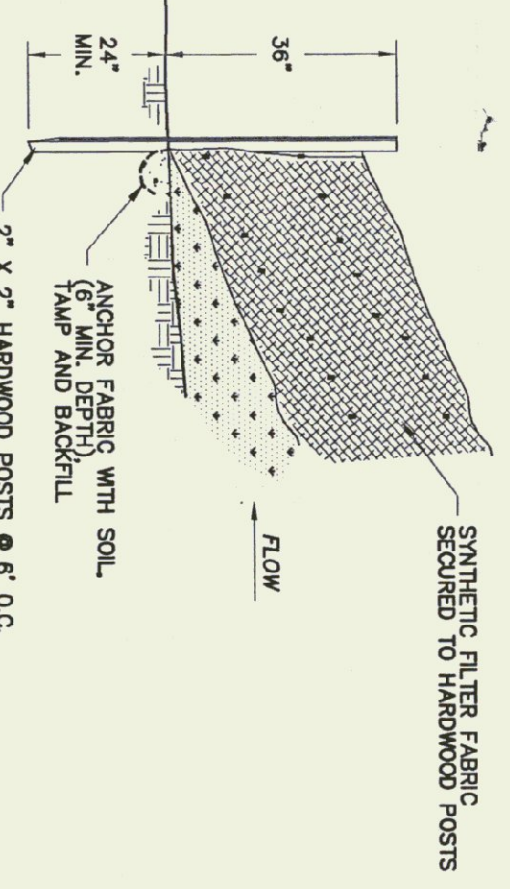
AGENCY OF TRANSPORTATION
 HIGHGATE MAINTENANCE FACILITY
 HIGHGATE VERMONT

SCALE: AS NOTED
 DATE: 08/03/01
 DRAWN BY: CCE
 APPR. BY: PD

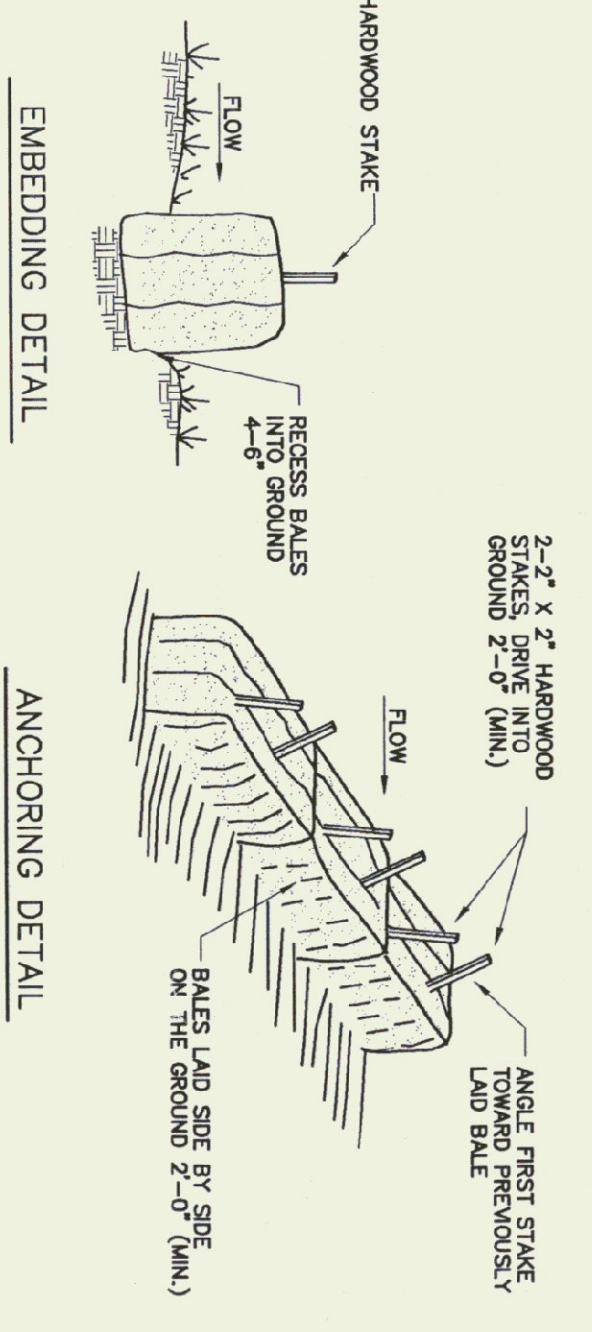
REVISIONS
 HIGHGATE
 MAINTENANCE GARAGE
 WASTEWATER PLAN

C-4
 4 OF 7

MAINTENANCE SCHEDULE:
 The basin should be inspected for sediment build-up, which causes a loss in infiltration rate. Maintenance should be performed to remove sediment. Live vegetation is the most effective way to maintain good infiltration rates. Bermuda grass in particular has been shown to withstand long periods of submergence and drought without a decline in soil cover. Sedimentation from any stormwater in the basin's collection area should be prevented. Use a silt fence or other sediment control measure at the sediment source. The pond should be inspected for erosion after intense rainfall. Erosion control measures such as riprap should be used as necessary.



1-1 SILT FENCE DETAIL
 N.T.S.



2-2 BALED HAY EROSION CHECKS
 N.T.S.

SEEDING SPECIFICATION

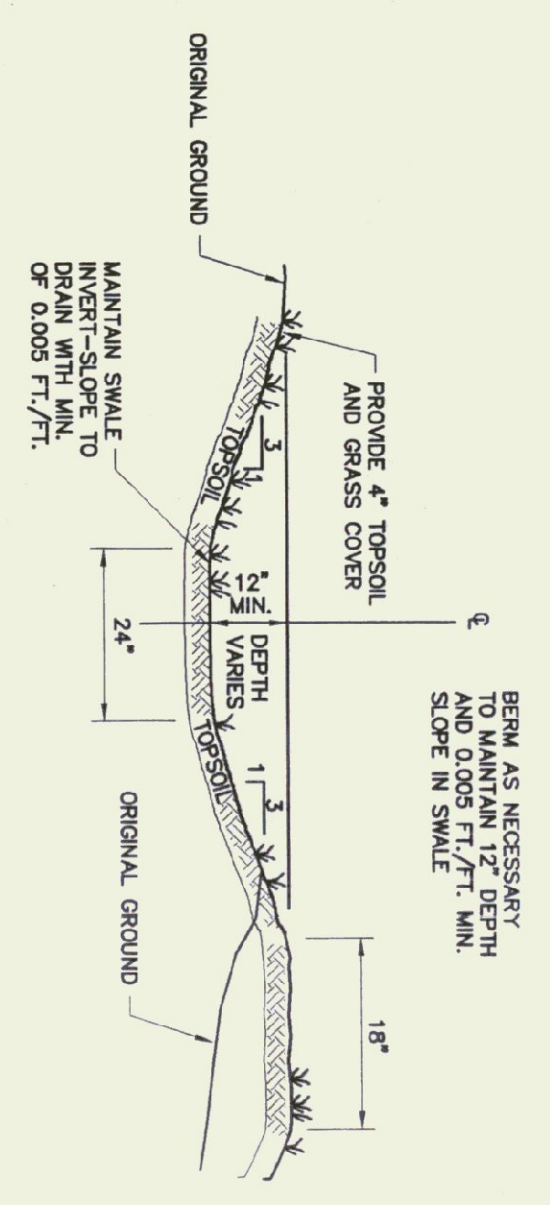
BY WEIGHT	PER ACRE	TYPE OF SEED
37.5	37.5	GREENING RED FESCUE
31.25	31.25	KENTUCKY BLUEGRASS
31.25	31.25	WINTER HAWK; PERENNIAL RYE

CONSERVATION MIX GRASS SEED - FOR USE IN ALL OTHER AREAS

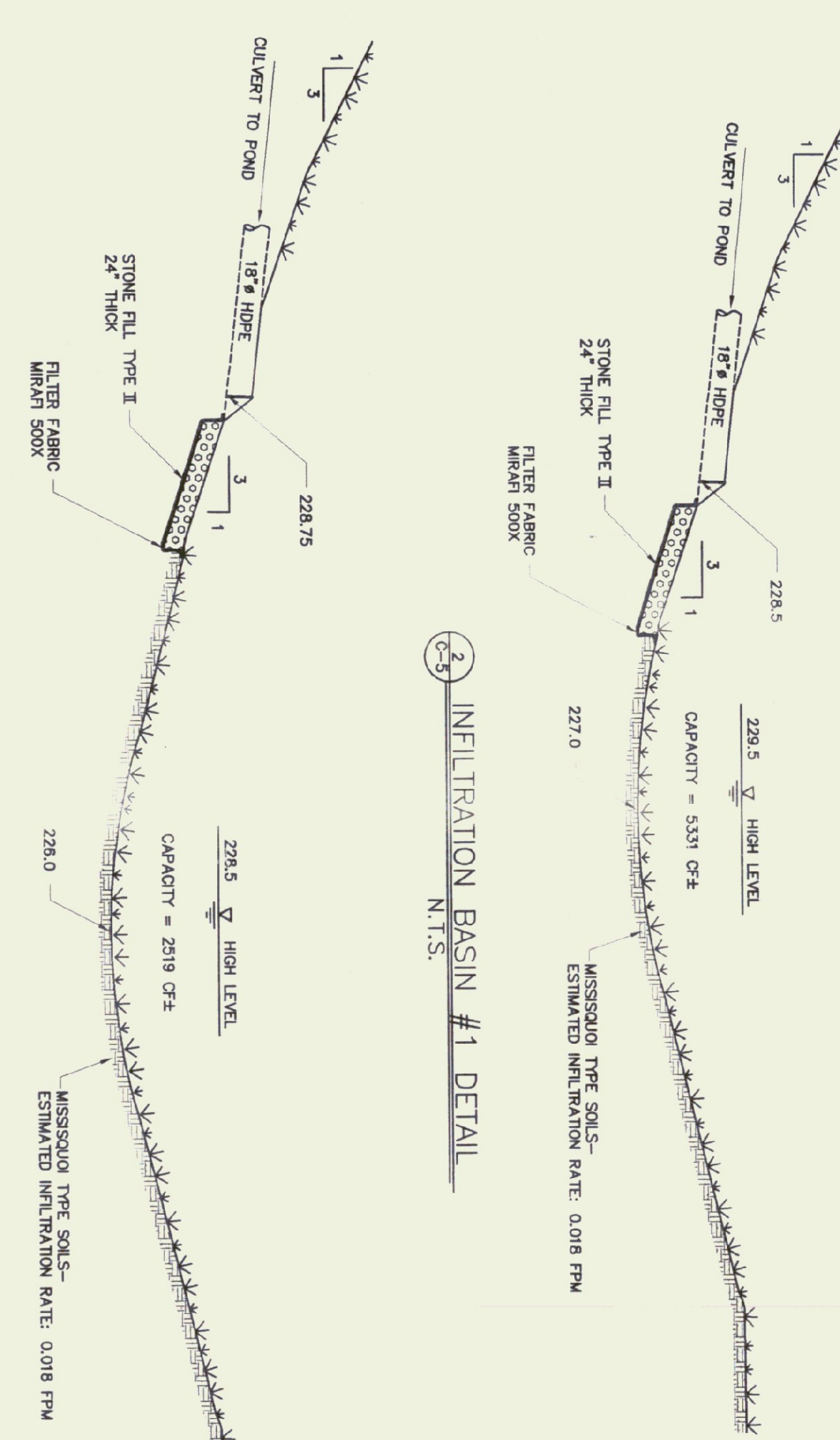
BY WEIGHT	PER ACRE	TYPE OF SEED
15	15	GREENING RED FESCUE
23	23	KENTUCKY BLUEGRASS
11	11	ANNUAL RYE GRASS (VARIETY: PENNINE, MANHATTAN)
6	6	OR SIMILAR VARIETY
10	10	HIGHLAND BENTGRASS

APPLY MULCH - 2 BALES PER 1000 S.F.
 STRAW BRIDLE OR NETTING AS NEEDED.
 MAINTENANCE, GUARANTEE AND ACCEPTANCE OF SEEDING
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF THE SEEDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF THE SEEDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF THE SEEDING.

5 SITE RESTORATION
 N.T.S.

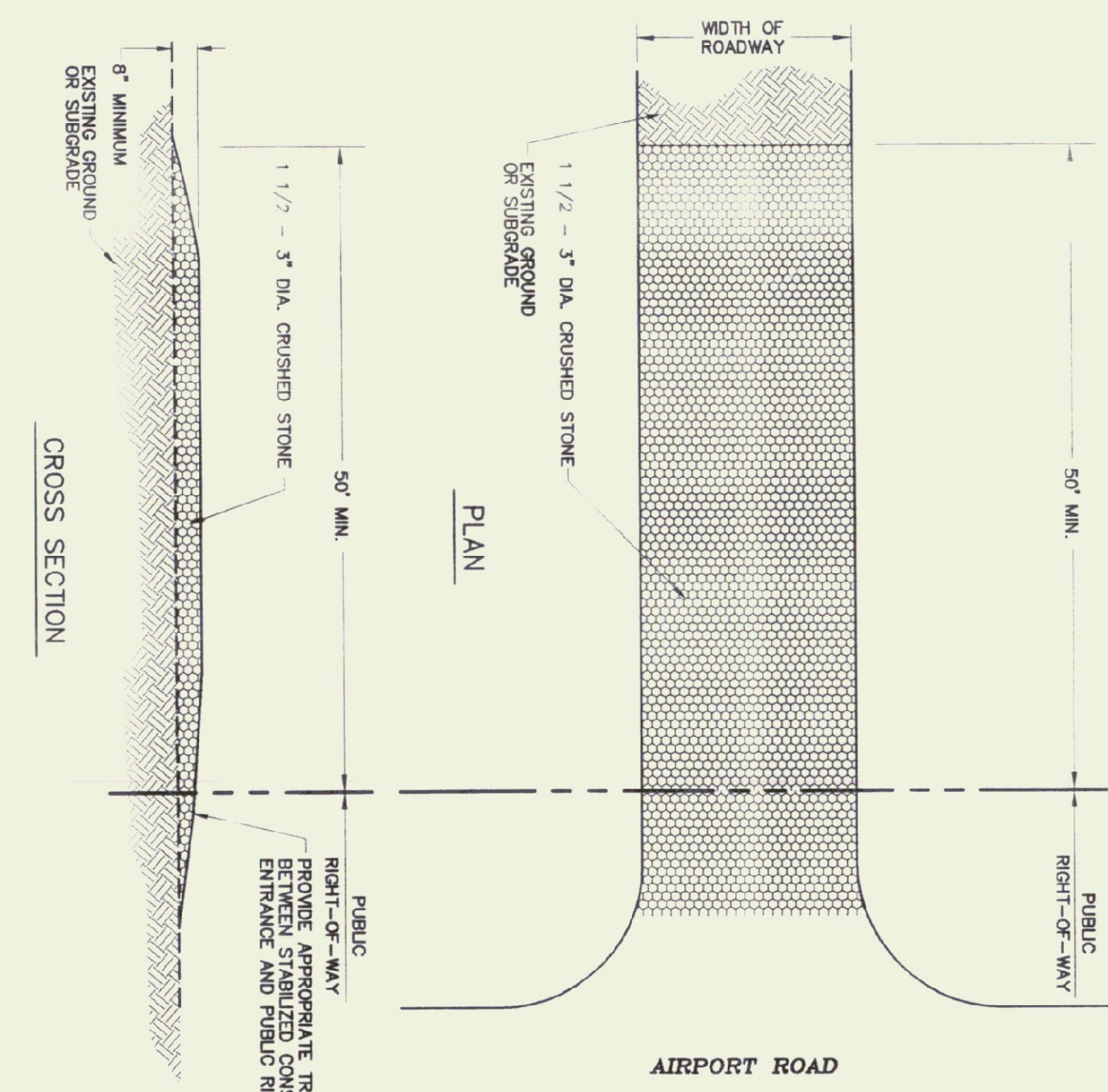


6 TYPICAL DRAINAGE SWALE
 N.T.S.



2-1 INFILTRATION BASIN #1 DETAIL
 N.T.S.

2-2 INFILTRATION BASIN #2 DETAIL
 N.T.S.

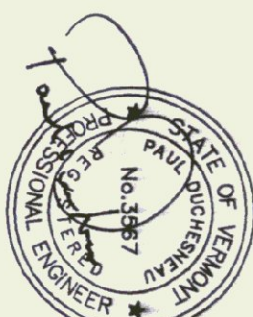


7 TEMPORARY STABILIZED CONSTRUCTION ENTRANCE DETAIL
 N.T.S.

EROSION CONTROL

- General Notes
 - The Contractor shall construct and maintain all erosion measures in accordance with the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites, Special Publication no. 3.
 - Construction Sequence
 - The Contractor shall be responsible for establishing all erosion control measures. The Contractor shall have erosion control materials and installation equipment on site at all times.
 - Silt fences shall be installed along the base of the fill slopes. The silt fence shall be 50 feet on center to prevent silt from washing into the drainage system during construction. Hay bales shall be removed when vegetation is established.
 - Dust shall be controlled through the application of calcium chloride or water.
 - Excavated material from earth excavation and ditch digging shall be disposed of offsite or used for project fill material if determined suitable by the Owner's Representative.
 - All temporary erosion control measures required for any proposed winter work shall be installed prior to October 1. These measures shall be in place prior to the commencement of any site work or earth-moving.
 - Temporary Measures
 - Hoy Bale Check Dam and Inlet Protection - Bales shall be placed in a row with ends tightly butting the adjacent bales. Each bales shall be secured in place by stakes driven through the bales. The first stake in each hole shall be driven toward the previously laid hole to force the bales together.
 - Bales shall be repaired or replaced as needed. Once vegetation is established and the silt fence no longer needed for erosion control, they shall be removed. Sediment deposits shall then be removed and placed in an upland area where there is no danger of further erosion.
 - Silt Fence - The silt fence shall be constructed in accordance with the construction detail. The silt fence shall be placed 10 feet from the toe of the slope or as shown on the plan. The ends of the fence shall be placed uphill to form a horseshoe shape to trap all runoff.
 - The silt fences shall be inspected periodically for damage or buildup of sediment. All silt fences shall be maintained and repaired. Sediment deposits shall be removed from the fence as they accumulate and placed in an area where there is no danger of further erosion.
 - Erosion Matting - Erosion matting shall be placed on all grass-lined slopes with profile defined. The matting shall be placed and maintained in accordance with the Vermont Agency of Transportation Standard Specifications Sections 654 and 755.07.
 - Dust Control - During construction, dust will be controlled with water distributed by hand. The water shall be applied in accordance with the Vermont Agency of Transportation Standard Specifications Sections 654 and 755.07.
 - All stockpile material (topsoil, borrow, etc.) will have a hay bale dike or silt fence constructed around the perimeter. The perimeter shall be constructed on the uphill side of disturbed areas. If possible, during windy conditions, stockpiled material shall be covered or watered appropriately to prevent wind erosion.
 - Stakes greater than 1/3 shall have erosion control matting installed to stabilize the slope and reduce the erosion potential. Inset matting over mulched slopes so that all ports are in contact with the soil and mulch. Pin matting with wire staples 3 feet o.c. to ensure full bonding with soil surface.
 - Permanent Measures
 - Grass Lined Slopes - All slopes that are not stone-lined shall be topsoiled, seeded, fertilized and mulched until permanent vegetation is established.
 - Restoration - As soon as construction is completed in a given area, it shall be topsoiled, seeded, fertilized and mulched.
- After the finished grade has been established and the fertilizer spread, plant the specific seed mixture and work firmly into the soil. Apply seed on the prepared seed bed with approved mechanical seeders or hydroseeding equipment. The surface of all green turf to grade, smooth, and free from holes or other irregularities. Thoroughly water all newly planted areas immediately after planting using a fine spray. Protect banks and stabilize from erosion and rapid erosion that occurs. Some water or other graded material shall be applied to the surface of the slope. The slope shall be maintained until the vegetation is established. Unless otherwise specified by the Engineer, the period of season, seeding will be conducted only during the period from April 15th to October 15th. Seeding shall not proceed before other phases of the work have progressed sufficiently and shall not interfere with other phases of work.
- After seeding, which shall be applied at a rate of 2 tons per acre.

Champlain Consulting ENGINEERS
 66 PRIM ROAD, P.O. BOX 463 COLCHESTER, VERMONT 05446
 PHONE: (802) 863-8080 FAX: (802) 864-1878



D&W DORE AND WHITTIER, INC.
 Architects • Project Managers
 1795 WILLISTON RD, STE 5 QUINCY, MA 02169
 Phone: (602) 863-1428 Fax: (602) 863-9955
 1400 HANCOCK STREET QUINCY, MA 02169
 Phone: (617) 471-2897 Fax: (617) 471-2516

STATE OF VERMONT
 DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
 AGENCY OF ADMINISTRATION
 MONTPELIER, VERMONT

AGENCY OF TRANSPORTATION
 HIGHGATE MAINTENANCE FACILITY
 HIGHGATE VERMONT

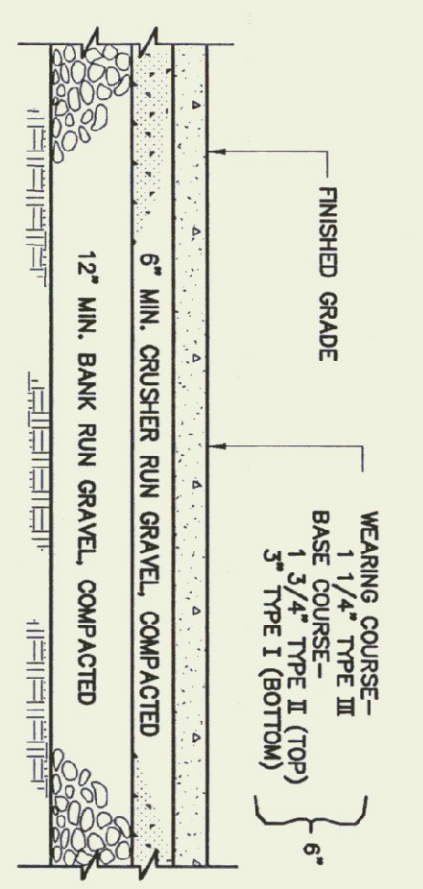
REVISIONS

SCALE:	N.T.S.
DATE:	08/03/01
DRAWN BY:	CCE
APPR. BY:	PD

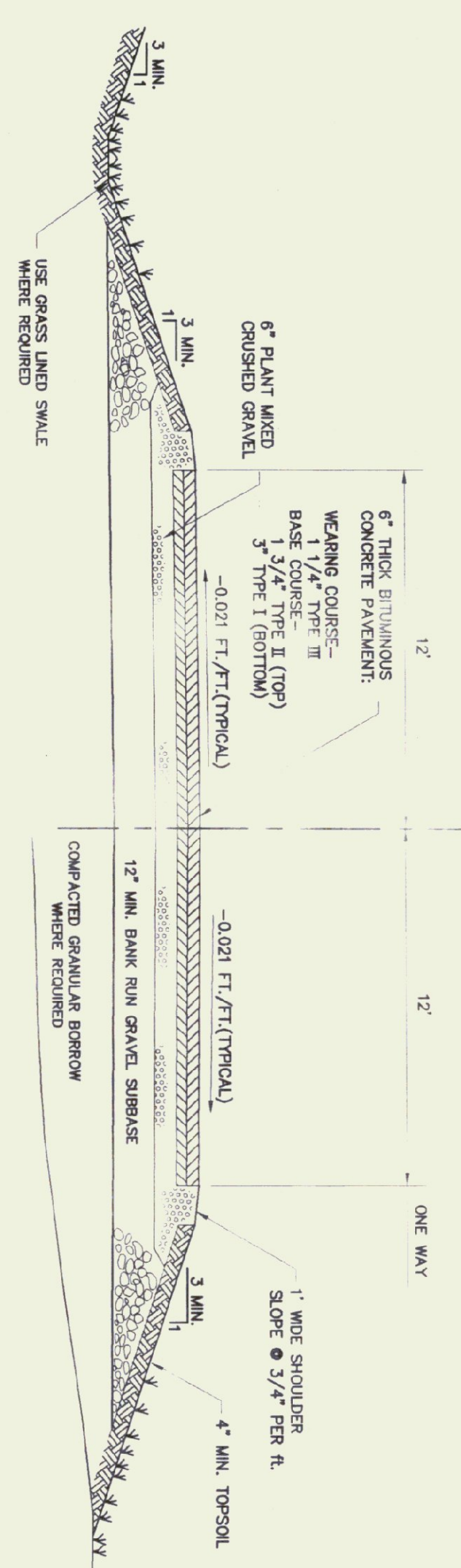
HIGHGATE MAINTENANCE GARAGE EROSION CONTROL AND STORMWATER



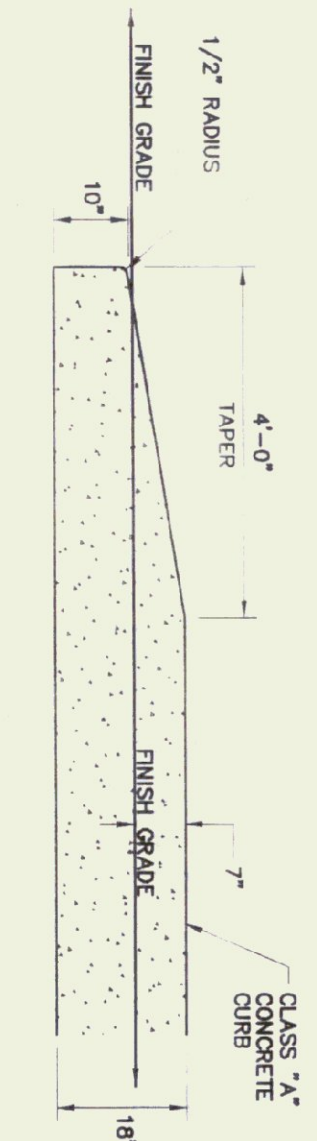
C-5 5 OF 7



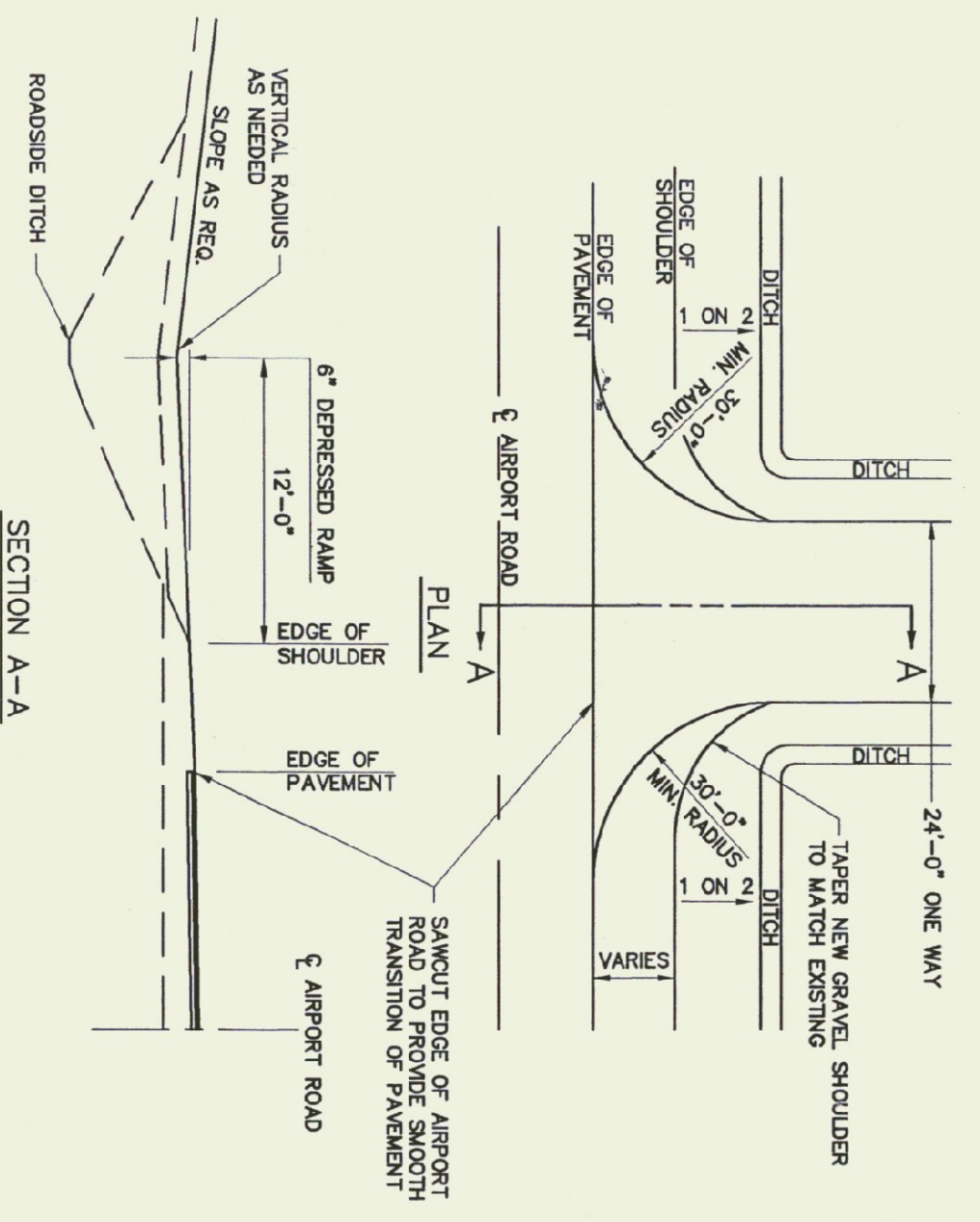
1 TYPICAL PAVEMENT SECTION
N.T.S.



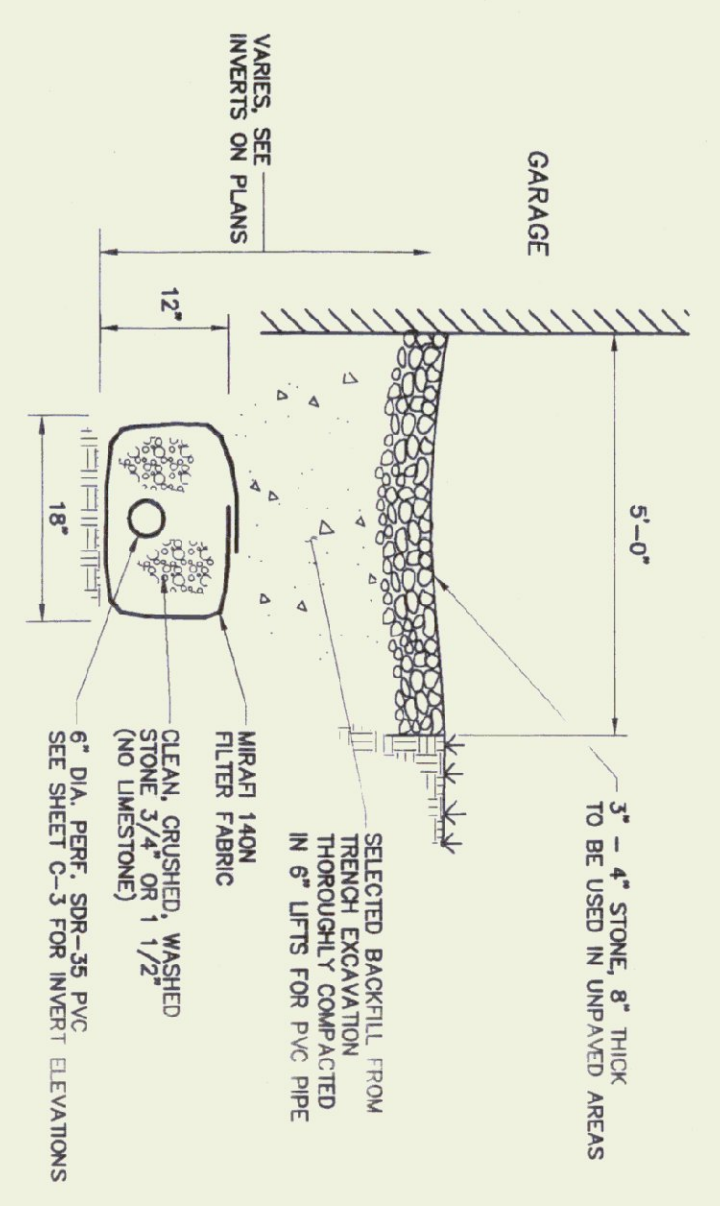
2 TYPICAL COMMERCIAL ENTRANCE CROSS-SECTION
N.T.S.



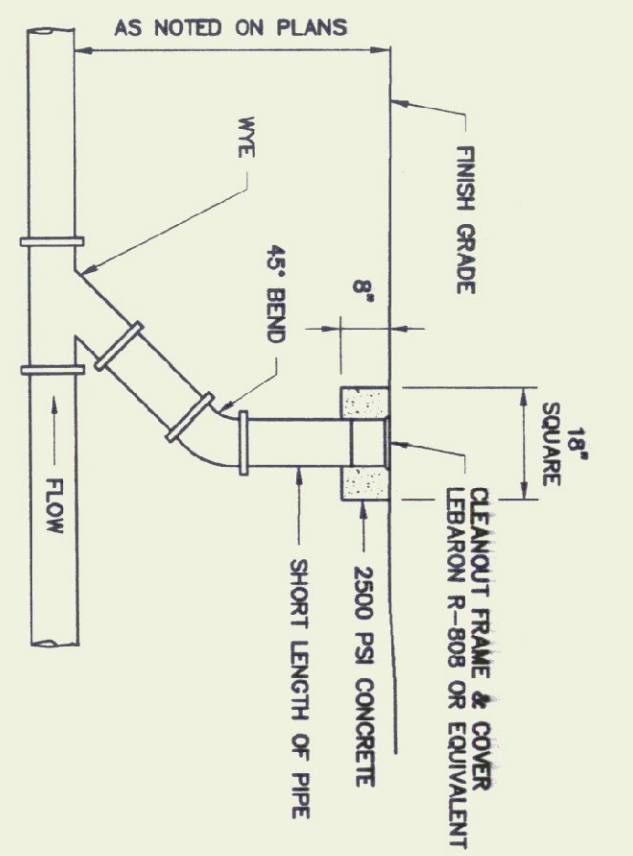
6 TYPICAL TAPERED CURB
N.T.S.



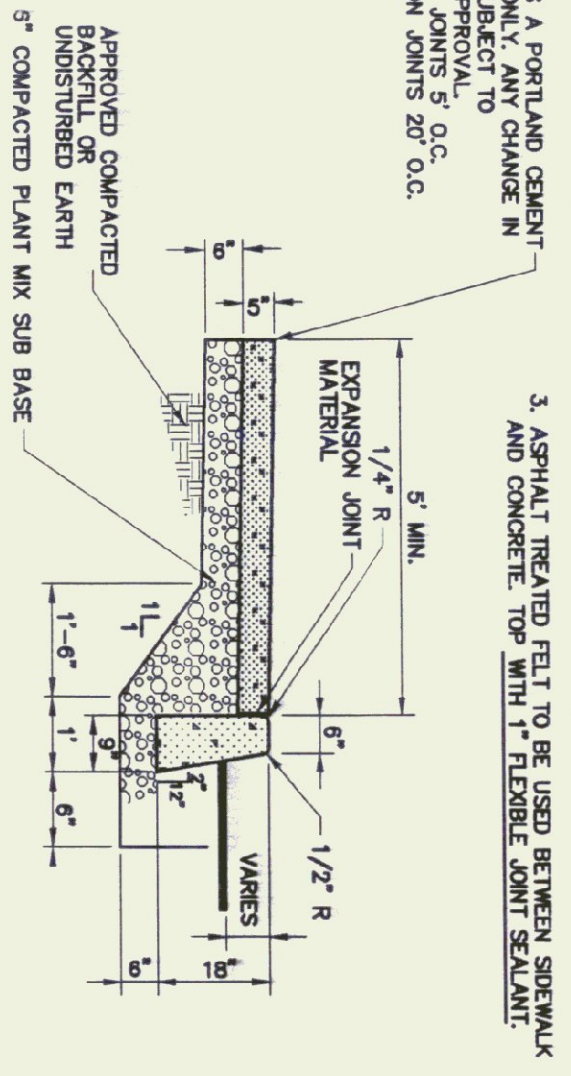
4 TYPICAL RURAL DRIVEWAY DETAIL
N.T.S.



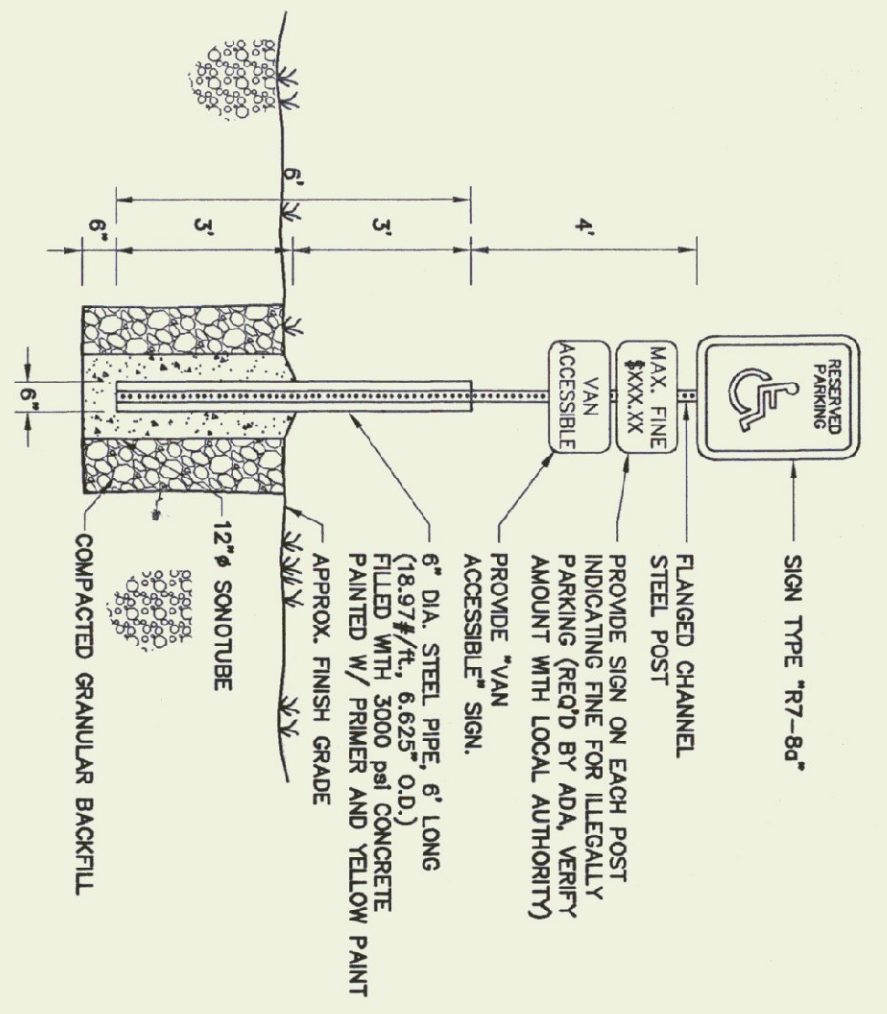
5 TYPICAL UNDERDRAIN DETAIL
N.T.S.



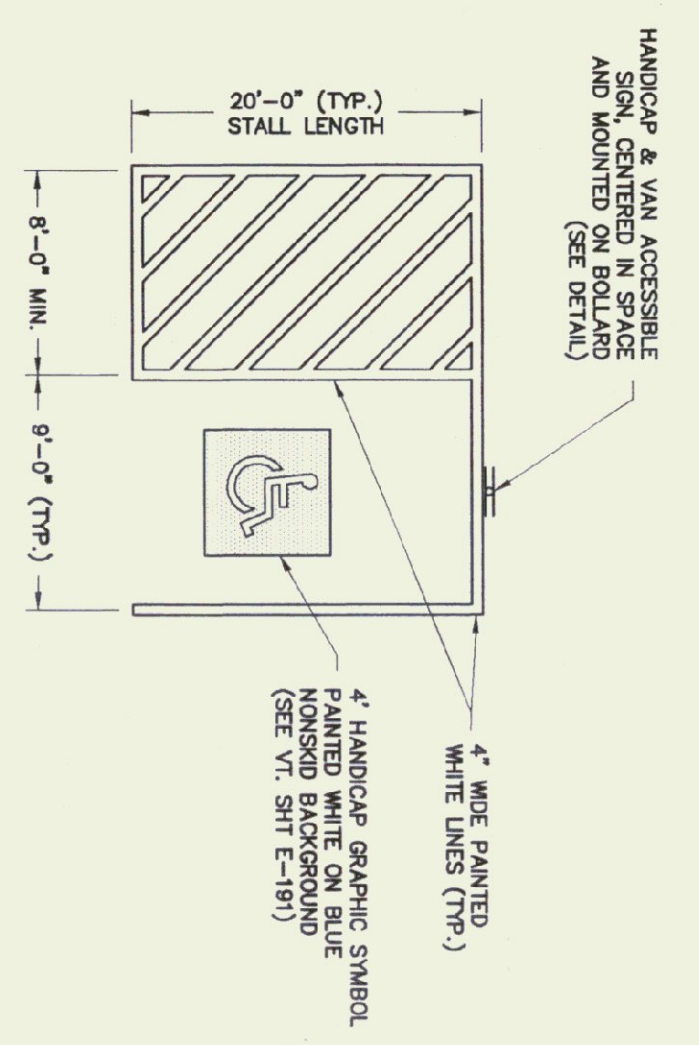
3 TYPICAL CLEANOUT DETAIL
N.T.S.



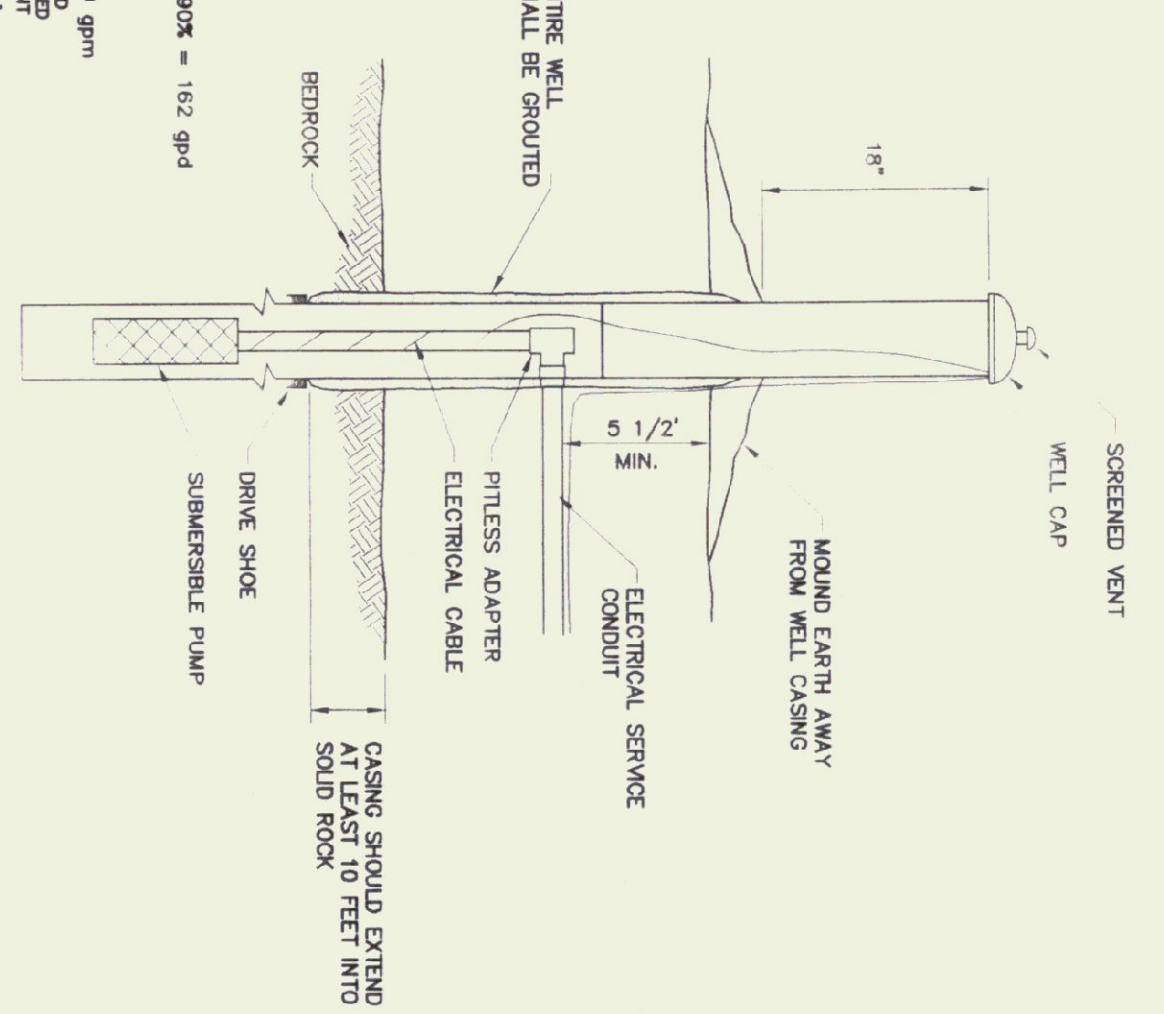
7 CONCRETE SIDEWALK & CURB DETAIL
N.T.S.



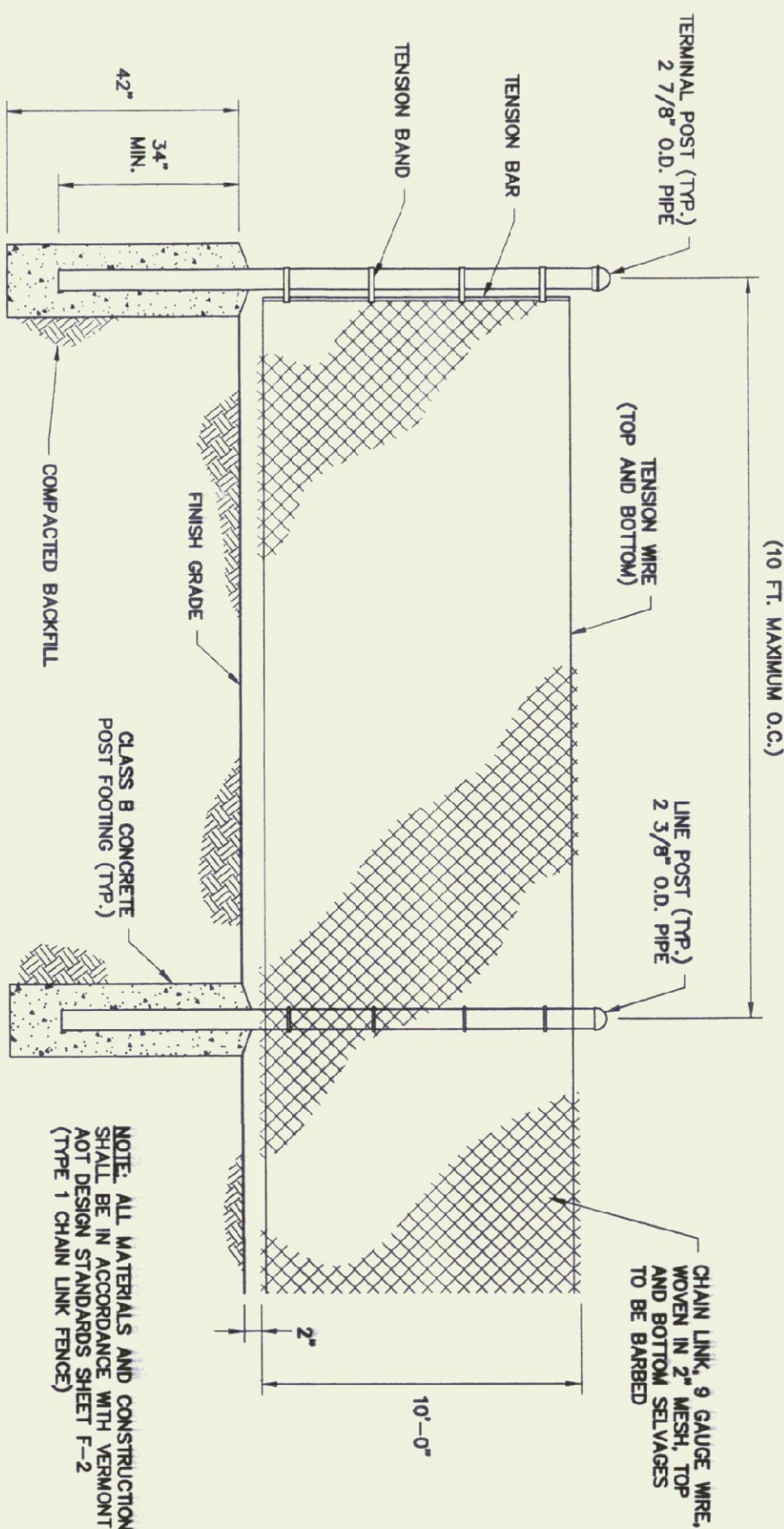
8 HANDICAP SIGN DETAIL
N.T.S.



9 ACCESSIBLE SPACE PAVEMENT MARKING
N.T.S.



10 TYPICAL DRILLED WELL
N.T.S.



11 CHAIN LINK FENCE DETAIL
N.T.S.

- DESIGN NOTES - WATER SUPPLY
- A) AVERAGE DAY DEMAND = 177 gpd
 - B) PEAK DAY DEMAND = 250 gpd
 - C) PEAK HOUR DEMAND = 177 gpd / 720 min. = 0.25 gpm
 - D) STORAGE CAPACITY AT TIME OF DRILL = 50 gal
 - E) STORAGE CAPACITY AT TIME OF DRILL = 50 gal
 - F) PUMP CAPACITY = 50 gpm
 - G) WELL INFLUENCE = 50 psi
 - H) FLOOD PLAN = N/A

AFTER WELL IS DRILLED AND BEFORE THE WATER SUPPLY SYSTEM IS INSTALLED, THE WELL MUST MEET THE REQUIREMENTS OF THE VERMONT WATER SUPPLY RULE.

Approved By: *[Signature]*
Permit #: 001-6-0534
DATE: 8/16/01



Champlain Consulting ENGINEERS
85 PRIM ROAD, P.O. BOX 463 COLCHESTER, VERMONT 05440
PHONE: (802) 893-8060 FAX: (802) 894-1878

D&W DORE AND WHITTIER, INC.
Architects • Project Managers
1795 WILLISTON RD, STE. 5 QUINCY, MA 02169
Phone: (603) 861-8282 Fax: (603) 861-9555
1400 HANCOCK STREET QUINCY, MA 02169
Phone: (617) 471-2897 Fax: (617) 471-2516

STATE OF VERMONT
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
AGENCY OF ADMINISTRATION
MONTPELIER, VERMONT

AGENCY OF TRANSPORTATION
HIGHGATE MAINTENANCE FACILITY
HIGHGATE VERMONT

SCALE: N.T.S.	REVISIONS
DATE: 08/03/01	
DRAWN BY: CCE	
APPR. BY: PD	
SITE DETAILS	
MAINTENANCE GARAGE	

