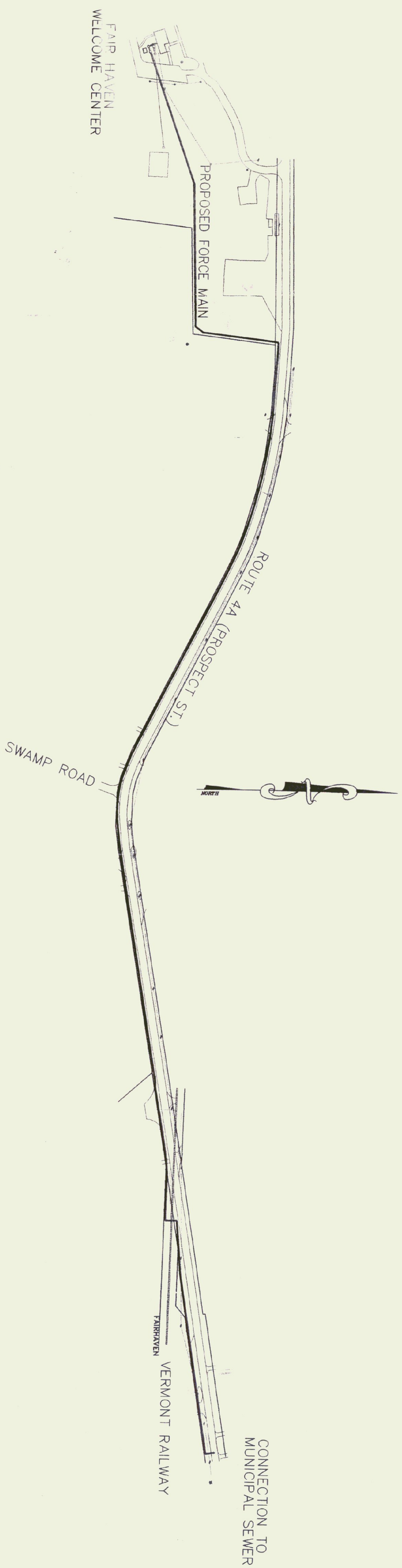


FAIR HAVEN WELCOME CENTER SEWER FORCE MAIN

RECORD DRAWINGS

FEDERAL PROJECT NO. NH-020-1(16)

APRIL 2000



OWNER

STATE OF VERMONT AGENCY OF ADMINISTRATION
DEPARTMENT OF BUILDINGS AND GENERAL SERVICE
2 GOVERNOR AIKEN AVENUE
MONTPELIER, VERMONT 05633-5801
THOMAS W. TORTI, COMMISSIONER

SHEET INDEX

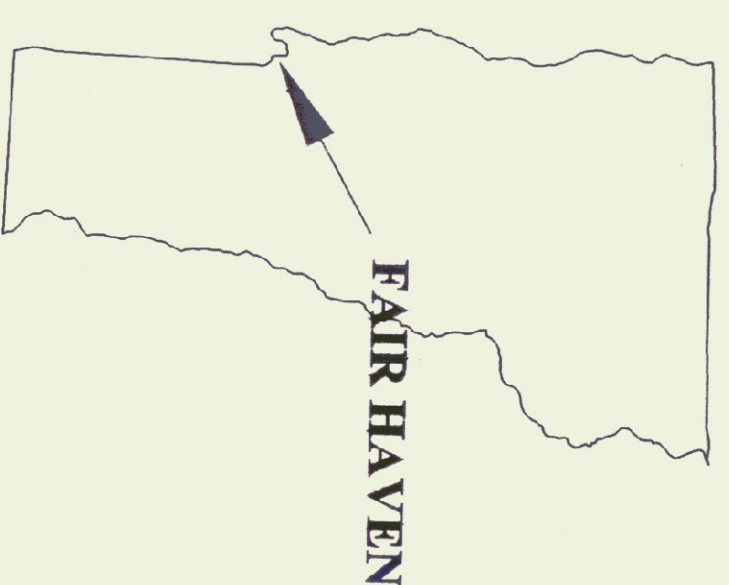
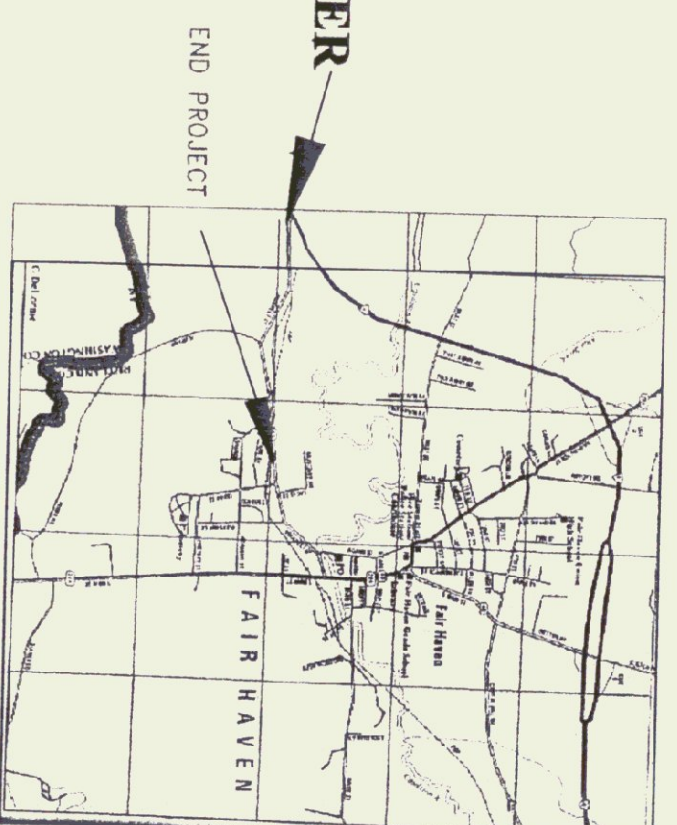
1. WELCOME CENTER SITE PLAN
2. SEWER PLAN 0+00 TO 15+50
3. SEWER PLAN 15+50 TO 29+50
4. SEWER PLAN 29+50 TO 49+30
5. SEWER PLAN 29+50 TO 49+30
6. SEWER PROFILES 0+00 TO 23+00
7. SEWER PROFILES 23+00 TO 49+30
8. MISC. SEWER DETAILS
9. MISC. SEWER DETAILS
9. A.O.T. TRAFFIC CONTROL DETAILS

OWNER

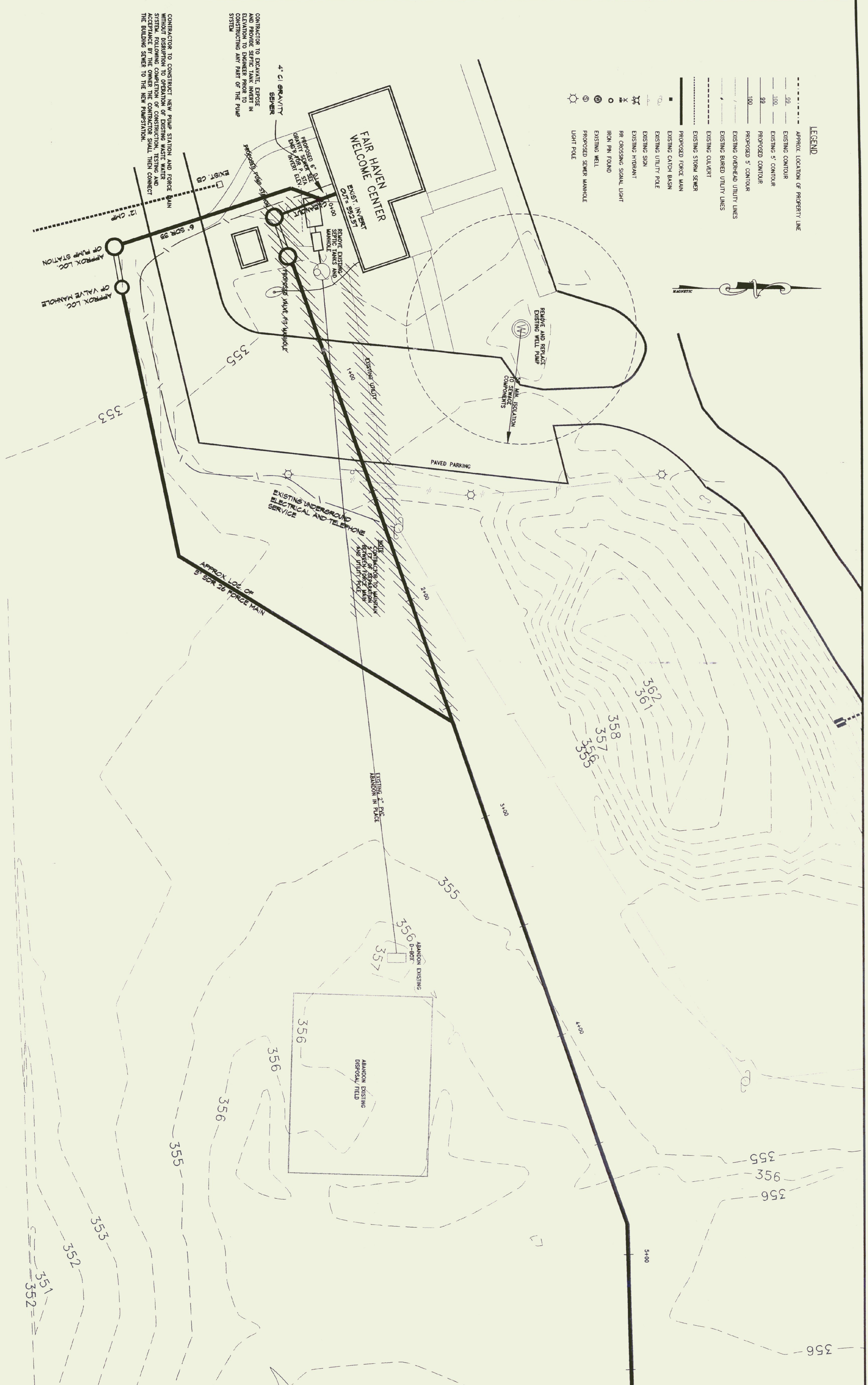
FEDERAL HIGHWAY ADMINISTRATION
87 STATE STREET
MONTPELIER, VERMONT 05602
ADMINISTRATOR _____ DATE _____

CIVIL ENGINEER
ENMAN ENGINEERING, P.C.
230 NORTH MAIN STREET
RUTLAND, VERMONT 05701
(802) 775-3437

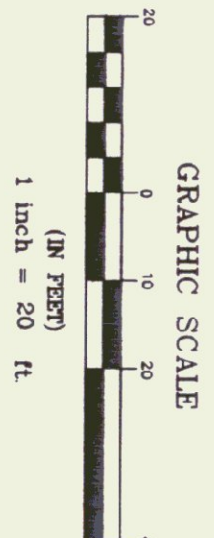
WELCOME CENTER



*Record
Drawings
Issued
2-2000*



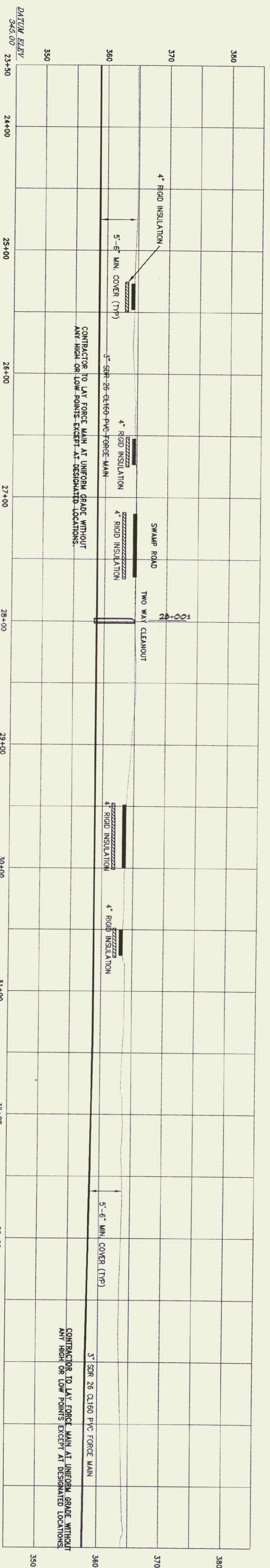
- LEGEND**
- APPROX. LOCATION OF PROPERTY LINE
 - - - - - EXISTING CONTOUR
 - EXISTING 5' CONTOUR
 - EXISTING 5' CONTOUR
 - PROPOSED 5' CONTOUR
 - EXISTING OVERHEAD UTILITY LINES
 - EXISTING BURIED UTILITY LINES
 - EXISTING CULVERT
 - EXISTING STORM SEWER
 - PROPOSED FORCE MAIN
 - EXISTING CATCH BASIN
 - EXISTING UTILITY POLE
 - EXISTING SIGN
 - EXISTING HYDRANT
 - RR CROSSING SIGNAL LIGHT
 - IRON PIN FOUND
 - EXISTING WELL
 - PROPOSED SEWER MANHOLE
 - LIGHT POLE



CONTRACTOR TO EXCAVATE EXPOSED EXISTING 4\"/>

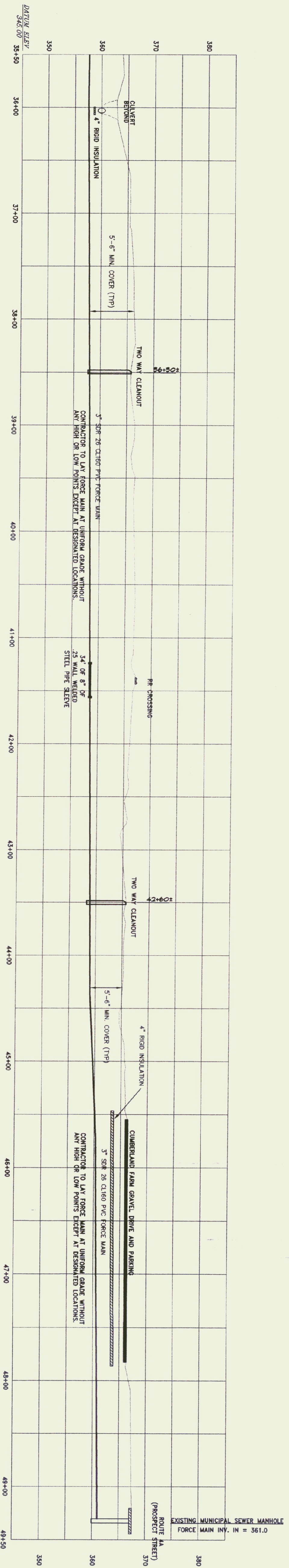
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<p>REVISIONS:</p> <p>3/11/99 RELEASED TO TOWN OF FAIR HAVEN FOR REVIEW</p> <p>6/15/99 REVISE FORCE MAIN MISC. NOTE</p> <p>7/02/99 ADD CLEANOUT LOCATIONS MISC. PLAN EDITS</p> <p>8/20/99 MISC. NOTE EDITS</p> <p>2/15/00 ADD RECORD INFORMATION</p>	<p>RELEASED:</p> <p>APRIL 2000</p>	<p>ISSUED FOR:</p> <p>RECORD DRAWINGS</p>	<p>FAIR HAVEN WELCOME CENTER</p>	<p>FAIRHAVEN, VERMONT</p> <p>THESE PLANS ARE FOR THIS PROJECT ONLY AND ARE NOT FOR REUSE ON THIS PROJECT OR ANY OTHER PROJECT WITHOUT WRITTEN CONSENT OF ENMAN ENGINEERING, P.C.</p>	<p>Enman Engineering Environmental & Civil & Sanitary 230 North Main Street Rutland, Vermont 05701 (802)775-3437 Copyright © 1998 All rights reserved.</p>	<p>THE CERTIFICATION ON THIS DRAWING ONLY INDICATES THE VT REGISTERED PROFESSIONAL ENGINEER RESPONSIBLE FOR PREPARATION AND IS NOT ISSUED FOR CONSTRUCTION UNLESS NOTED IN THE REVISION BOX.</p> <p>REGULATORY APPROVAL STAMP</p>	<p>WELCOME CENTER SITE PLAN</p>	<p>RECORD DRAWING</p> <p>SCALE: AS NOTED</p> <p>DATE: 02/24/99</p> <p>DESIGN BY: BJE/TNT</p> <p>DRAWN BY: JBT/JPL</p> <p>SHEET NO: 1 OF 9</p> <p>PROJECT NO: 9816</p>
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SEWER PROFILE

SCALE: VERTICAL 1"=10'
HORIZONTAL 1"=50'



NOTE:
CONTRACTOR TO INSTALL RAIL ROAD CROSSING WITHOUT
CREATING A HIGH POINT IN FORCE MAIN

SEWER PROFILE

SCALE: VERTICAL 1"=10'
HORIZONTAL 1"=50'

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TO VERIFY THE SAME. THE ENGINEER HAS REVIEWED
GRADE INSTALLATION IS PICTORIAL AND FIELD
MEASUREMENT IS RECOMMENDED

REVISIONS:

- 3/11/99 ADDED BRIDGE BLOCK PER AILEY
- RELEASED TO TOWN OF FAIR HAVEN
- FOR REVIEW
- 6/15/99
- ADJUSTED FORCE MAIN MISC. NOTE
- EDITS
- 7/02/99
- ADD CLEANOUT LOCATIONS
- MISC. PLAN EDITS
- 8/20/99
- MISC. NOTE EDITS
- 2/18/00
- ADD RECORD INFORMATION

RELEASED:
APRIL 2000
RELEASED FOR:
RECORD DRAWING

FAIR HAVEN
WELCOME CENTER

FAIRHAVEN, VERMONT

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REGULATORY APPROVAL STAMP

SEWER
PROFILES

RECORD DRAWING

SCALE: AS NOTED

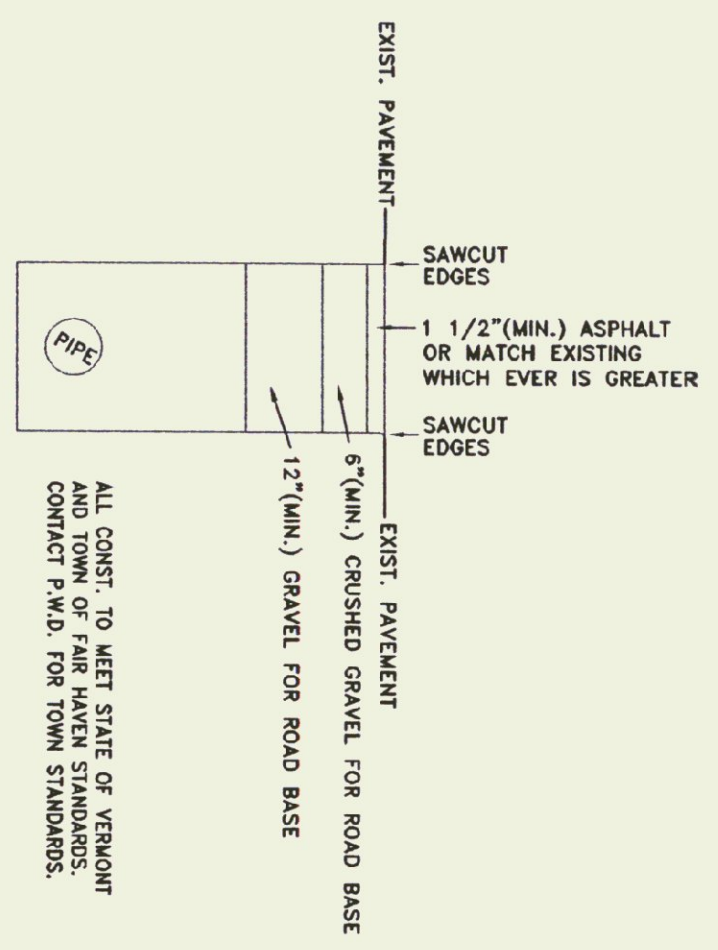
DATE: 02/24/99

DESIGN BY: BJE/TNT

DRAWN BY: JBT/JPL

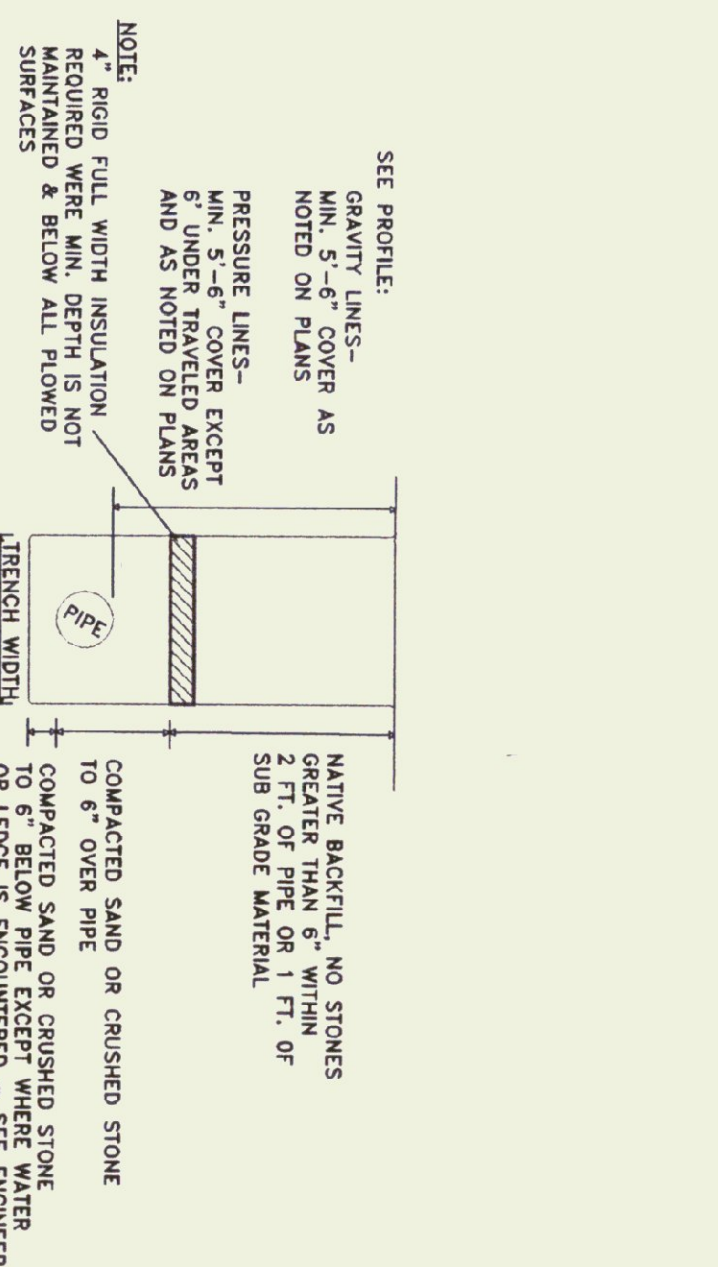
SHEET NO: 6 OF 9

PROJECT NO: 9816

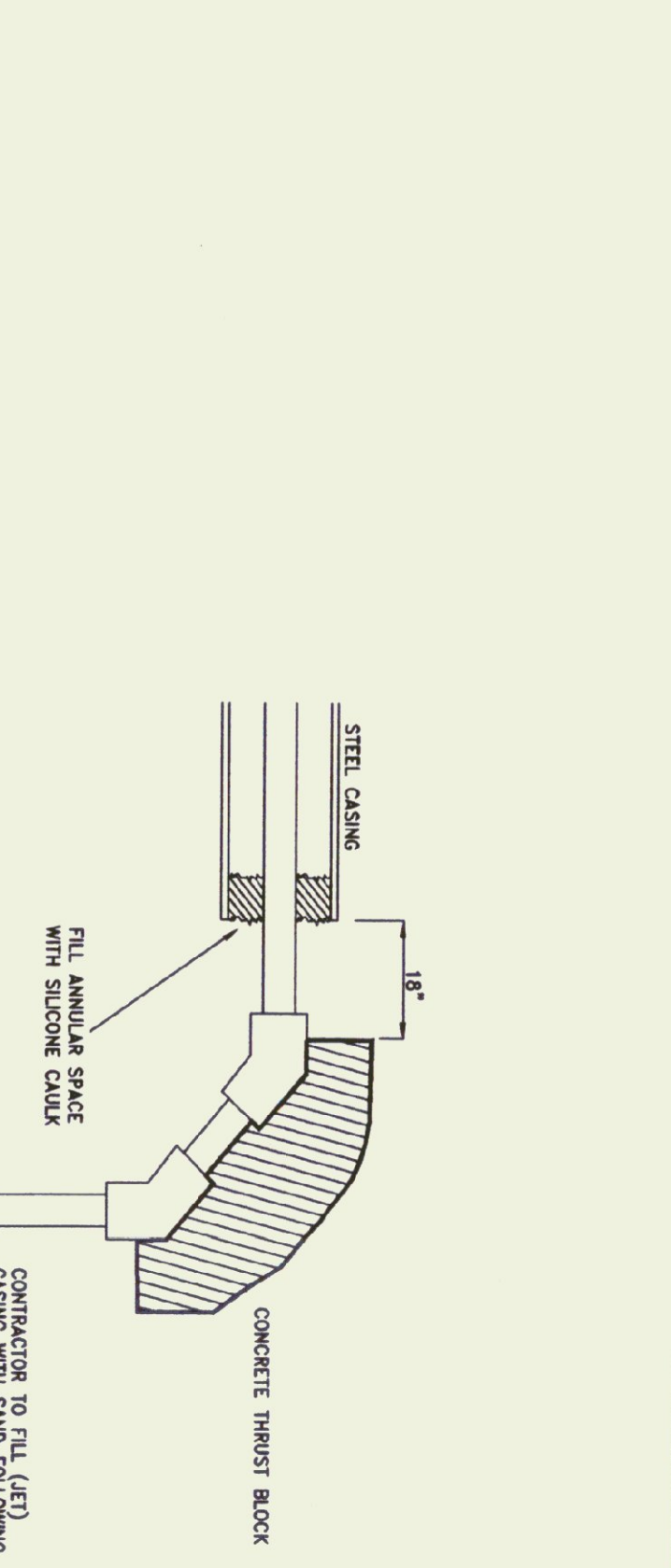


PAVEMENT REPAIR
NTS

ALL CONST. TO MEET STATE OF VERMONT CONTACT P.W.D. FOR TOWN STANDARDS.



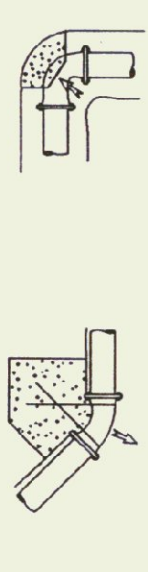
TYPICAL TRENCH DETAIL
NTS



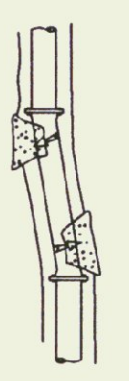
SLEEVE TERMINATION DETAIL
NTS

ESTIMATED BEARING LOADS

SOIL	lbs / sq ft
SILT	1500
SANDY SILT	3000
SAND	4000



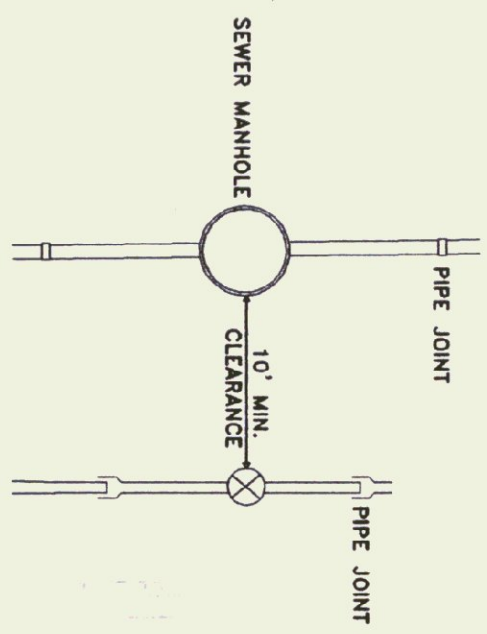
MAX. THRUST GENERATED (lbs.)
PIPE SIZE 3 IN
45° BEND 1940



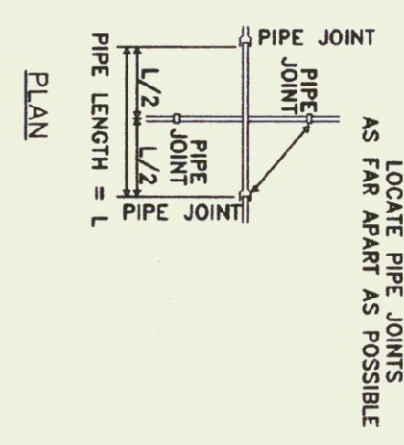
THRUST BLOCK BEARING AREAS (SQ. FT.)
PIPE SIZE 3 IN
45° BEND 1.3

1. CONCRETE SHALL BE PRODUCED IN A READY MIX PLANT FOR THIS PROJECT.
2. SLUMP SHALL BE BETWEEN 1.0 AND 4.5.
3. ALL JOINTS SHALL CONFORM TO ASTM C 943.
4. MINIMUM STRENGTH SHALL BE 2000 PSI AT 28 DAYS.
5. ALL JOINTS SHALL BE BROUGHT UP TO ENGINEER'S INSPECT.

THRUST BLOCK LOCATION
NTS



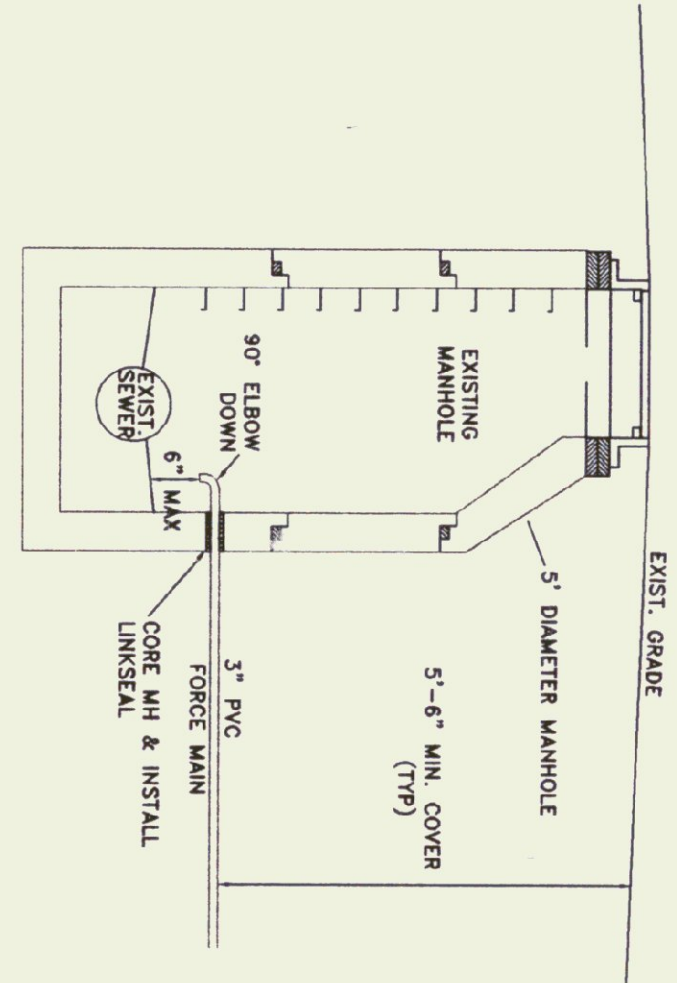
PARALLEL WATER AND SEWER MAIN INSTALLATION
NTS



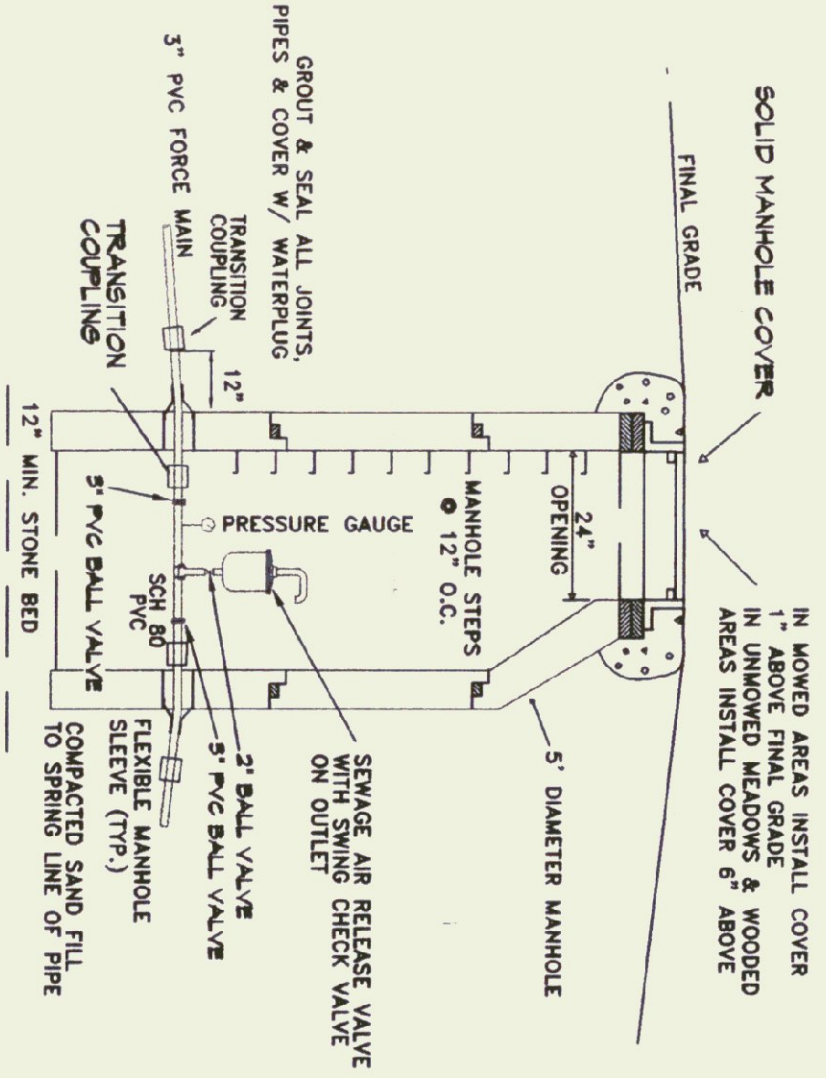
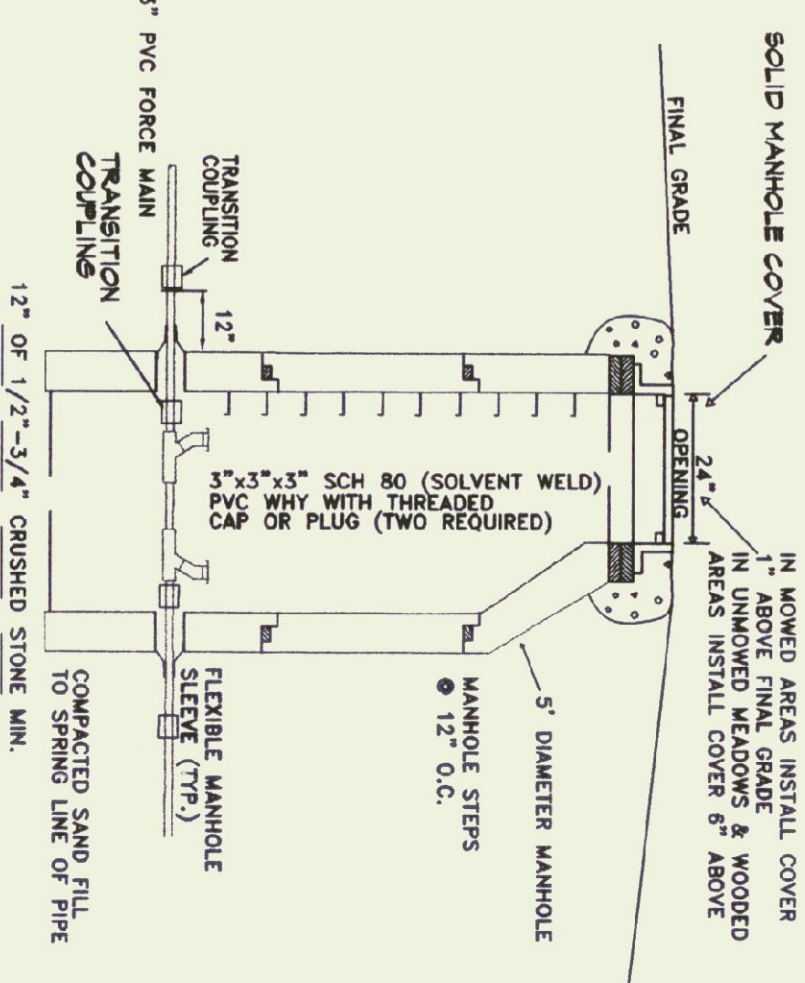
WATER AND SEWER MAIN CROSSINGS
NTS

NOTE: ALL GATE VALVES, WATER SHUT OFFS, ETC., TO BE A MINIMUM OF 10' FROM SEWERS.

FORCE MAIN TERMINATION MANHOLE
NTS



TWO WAY CLEANOUTS
NTS



AIR RELEASE VALVE IN 5\"/>

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REVISIONS:

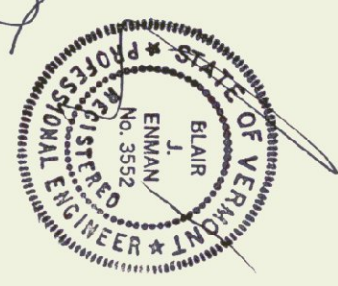
3/11/99	ADD THRUST BLOCK DETAIL
6/15/99	ADD TRENCH DETAIL FOR REVIEW
7/02/99	RESUBMIT FORCE MAIN MISC. NOTE
8/20/99	ADD CLEANOUT LOCATIONS
2/18/00	MISC. NOTE EDITS
	ADD RECORD INFORMATION

RELEASED: APRIL 2000
RELEASED FOR: RECORD DRAWING

FAIR HAVEN WELCOME CENTER

FAIRHAVEN, VERMONT
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REGULATORY APPROVAL STAMP

MISCELLANEOUS

SEWER DETAILS

RECORD DRAWING

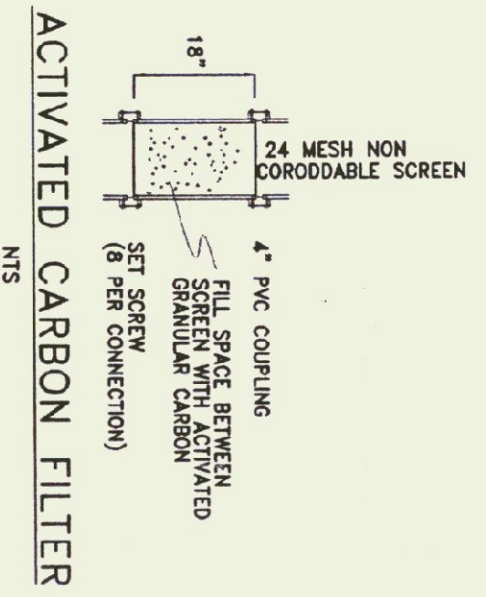
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DATE: 02/24/99

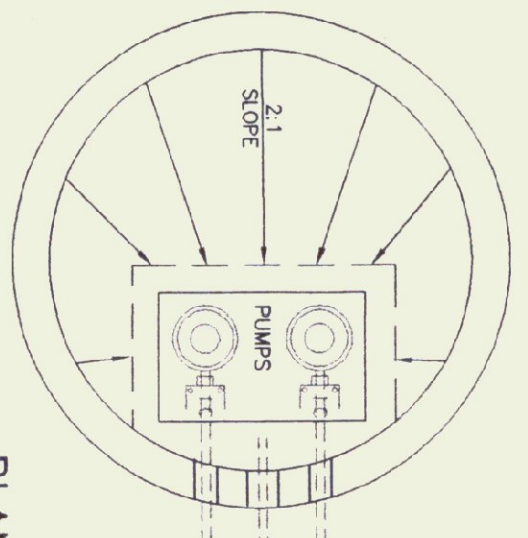
DESIGN BY: BJE/TNT

DRAWN BY: JBT/JPL

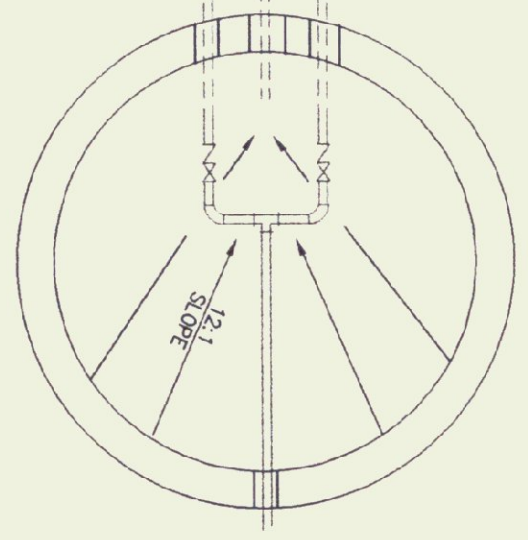
SHEET NO: 7 OF 9
PROJECT NO: 9816



ACTIVATED CARBON FILTER
NTS

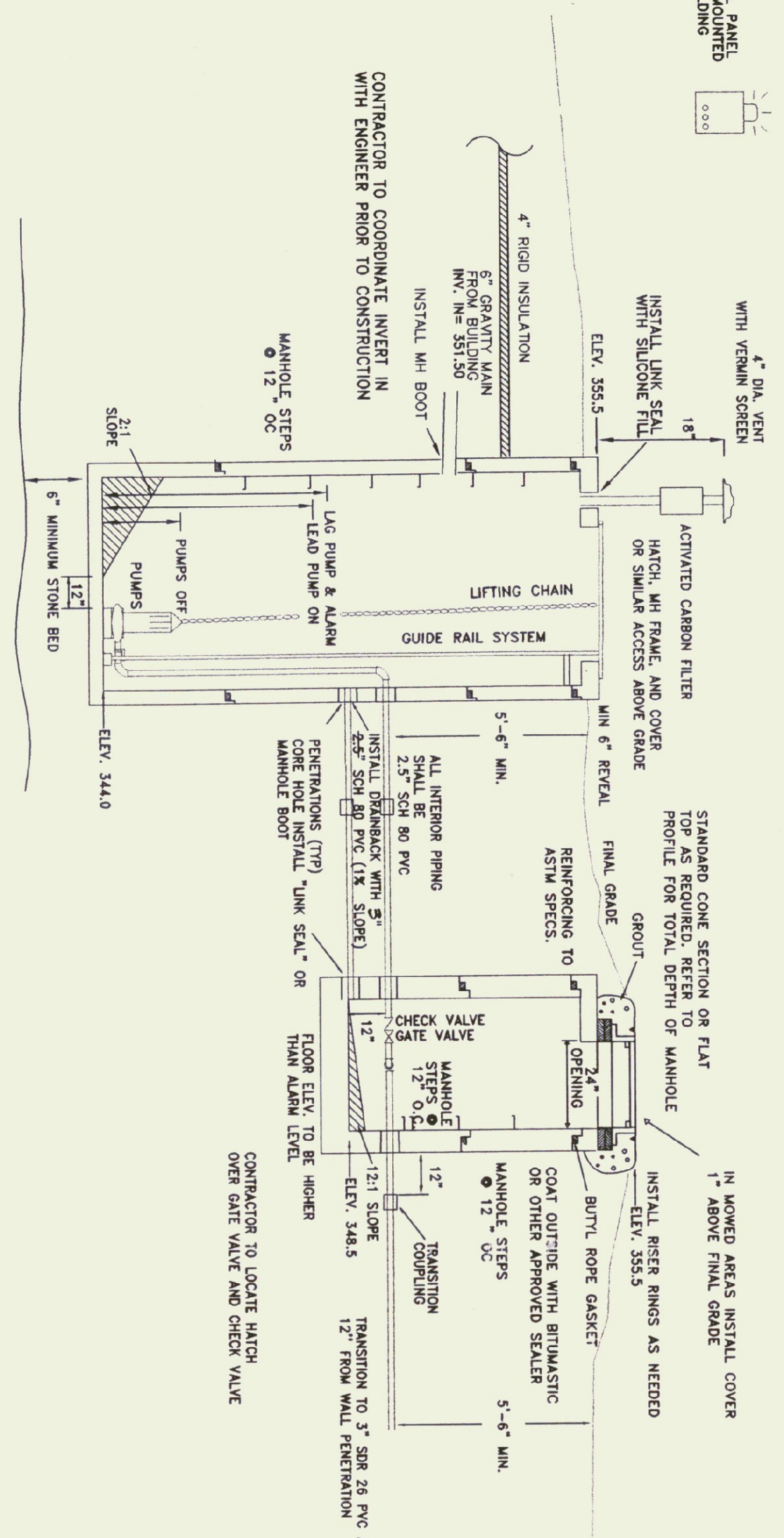


PLAN VIEW



STANDARD 5" ID PRECAST MANHOLE WITH INTEGRAL BASE

ELECTRICAL DESIGN TO BE PROVIDED BY A LICENSED PROFESSIONAL ENGINEER. WATERPROOF CONTROL PANEL WITH EXTERNAL ALUMINUM LIGHT AND BELL SHALL BE MOUNTED (HEATED) ADJACENT TO STATION ACCESS. A BELL SILENCER BUTTON SHALL BE PROVIDED ON THE EXTERIOR OF THE PANEL. LIGHT SHALL BE PROVIDED ON THE EXTERIOR OF THE PANEL. LIGHT SHALL BE HAND-OFF-AUTO SWITCH(ES) AND LARGED THE WATER(S) AND AN ALARM CIRCUIT TEST SWITCH SHALL BE PROVIDED. LEVEL CONTROLS SHALL BE ENCAPSULATED MERCURY FLOAT SWITCHES.



EFFLUENT PUMP STATION
X-SECTION
NTS

1. PUMPS OFF ON 18" 2. LAG PUMP & ALARM ON 3. LAG PUMP & ALARM ON 5-6" MINIMUM STONE BED

PUMP STATION SHALL BE WATER TIGHT AND LEAD LEVEL. USE BUTYL ROPE AT ALL PIPE PENETRATIONS. CONTRACTOR TO INSTALL CHARCOAL FILTER TO PUMP STATION VENT.

BASIS OF DESIGN

1. GPD	AVG 900
2. DOSE	400 GAL.
3. SIZE OF PUMPS	5 HP 77 GPM
4. RUN TIME	5 MIN. ±

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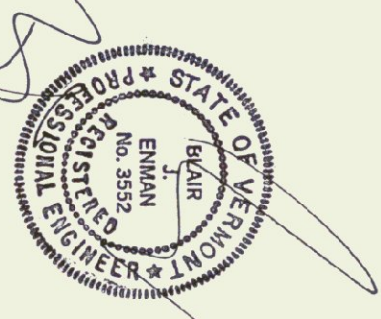
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6/15/99	REROUTE FORCE MAIN MISC. NOTE EDITS
7/02/99	ADD TIEAROUT LOCATIONS MISC. PLAN EDITS
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RELEASED: APRIL 2000
RECORD DRAWINGS

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REGULATOR APPROVAL STAMP

MISCELLANEOUS
SEWER
DETAILS

RECORD DRAWINGS
SCALE: AS NOTED

DATE: 02/24/99

DESIGN BY: BJE/TNT

DRAWN BY: JBT/JPL

SHEET NO: 8 OF 9

PROJECT NO: 9816