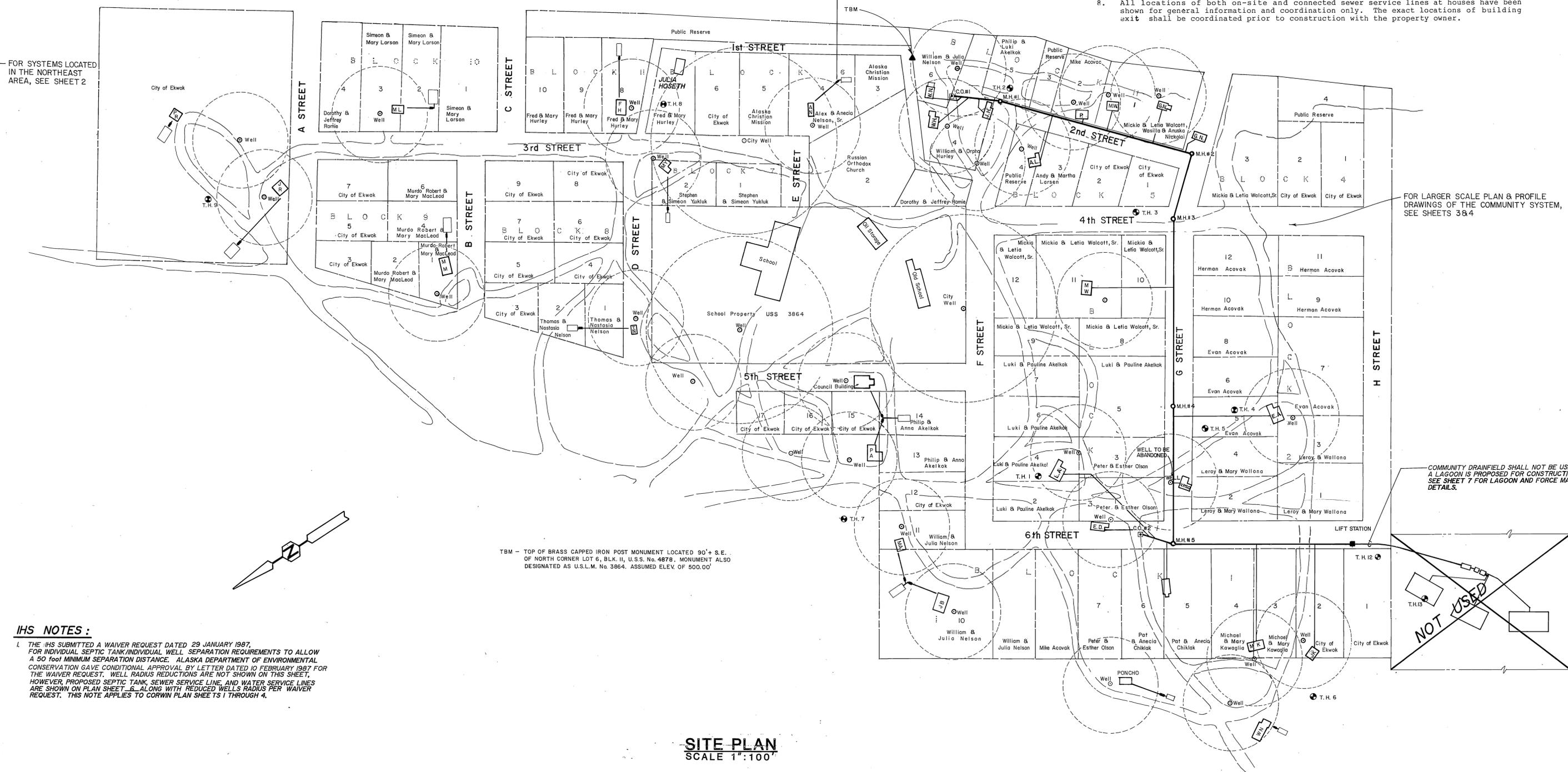


GENERAL NOTES:

1. Survey information for property lines indicated is from original BLM survey. Location of houses and wells was generally performed from references to this survey.
2. Roads indicated have been sketched from information accumulated during the survey. Accuracy cannot be totally guaranteed.
3. Existing telephone and electrical utilities are not shown. Locations shall be verified prior to construction.
4. Site plans for individual on-site systems are contained in the bound documents. Details for these systems appear on Sheet 6.
5. Houses to be connected to the community sewer system have been shaded for ready identification. Plan and profile information is indicated on Sheets 3 and 4. Details are shown on Sheets 5 and 6.
6. Test hole logs appear on Sheet 2. Bed design data has been based on these logs and appears on the back side of each site plan. During installation, these soil conditions shall be verified and if found substantially different, referred to the Engineer for further guidance during actual bed construction.
7. All installation shall be in accordance with standards and procedures established by the Alaska Department of Environmental Conservation.
8. All locations of both on-site and connected sewer service lines at houses have been shown for general information and coordination only. The exact locations of building exit shall be coordinated prior to construction with the property owner.



N U S H A G A K R I V E R

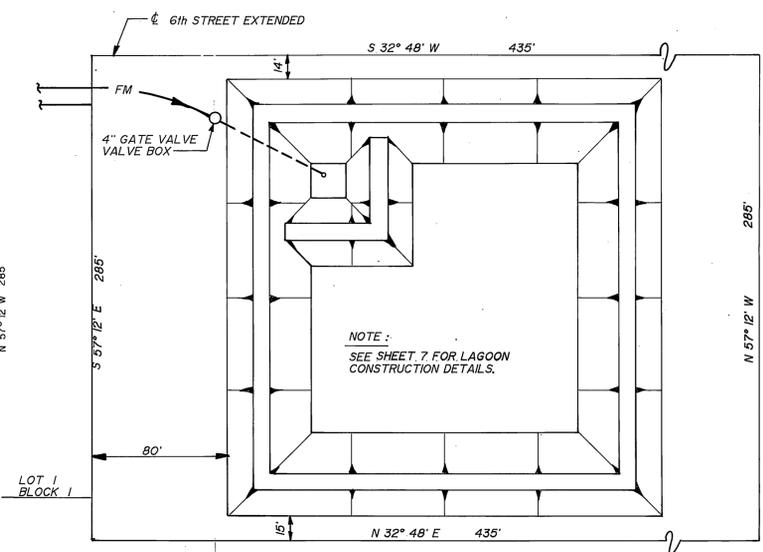
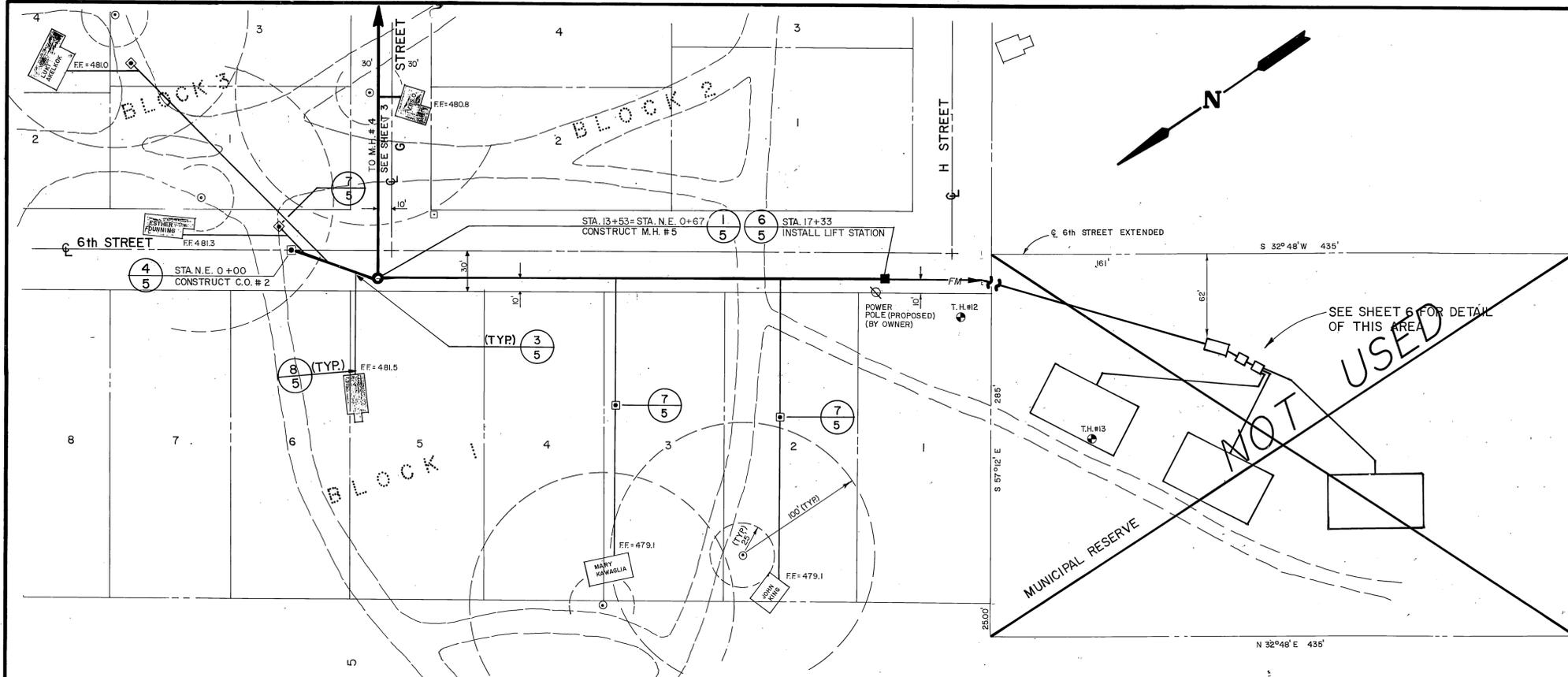


SITE PLAN SCALE 1"=100'

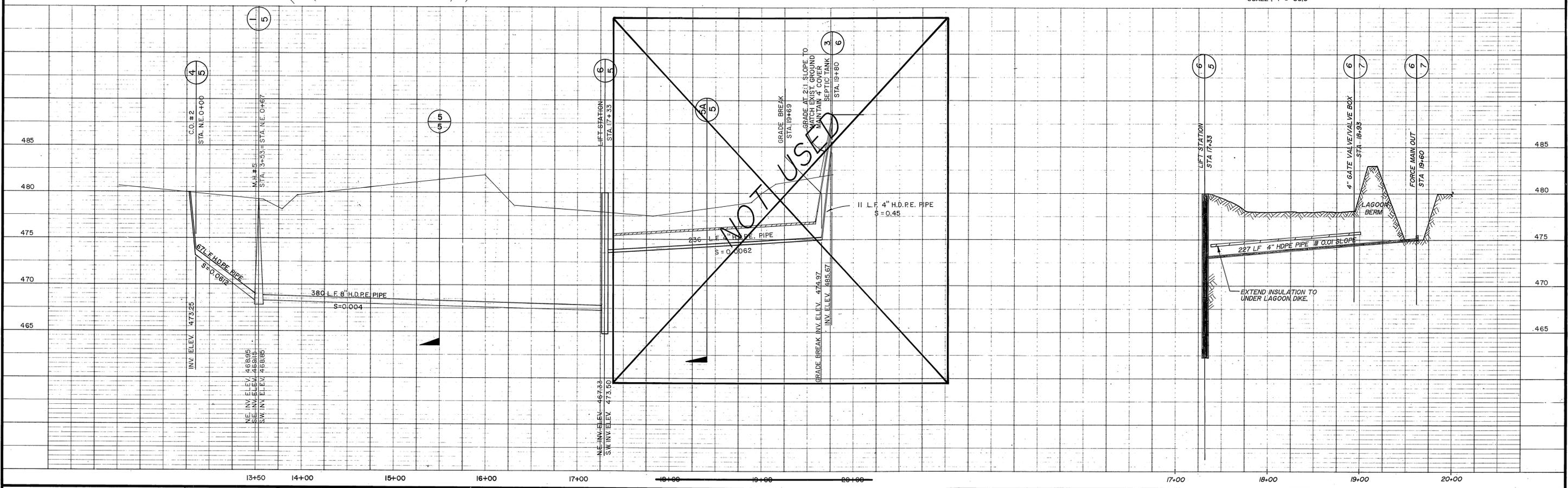
IHS NOTES:

1. THE IHS SUBMITTED A WAIVER REQUEST DATED 29 JANUARY 1987 FOR INDIVIDUAL SEPTIC TANK/INDIVIDUAL WELL SEPARATION REQUIREMENTS TO ALLOW A 50 FOOT MINIMUM SEPARATION DISTANCE. ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION GAVE CONDITIONAL APPROVAL BY LETTER DATED 10 FEBRUARY 1987 FOR THE WAIVER REQUEST. WELL RADIUS REDUCTIONS ARE NOT SHOWN ON THIS SHEET, HOWEVER, PROPOSED SEPTIC TANK, SEWER SERVICE LINE, AND WATER SERVICE LINES ARE SHOWN ON PLAN SHEET 6 ALONG WITH REDUCED WELLS RADIUS PER WAIVER REQUEST. THIS NOTE APPLIES TO CORWIN PLAN SHEETS 1 THROUGH 6.

PROJECT STATUS:		SHEET STATUS:		VILLAGE OF EKWOK, ALASKA		CORWIN & ASSOCIATES INC.		STATE OF ALASKA 49th		SHEET NUMBER	
1	JUNE 87	IHS NOTES, COMMUNITY NOTE & DELETION, HOME SHOWN ON LOT 7, BK. 6, ADDED TOTAL "SHEET No." CHANGE		SEWAGE IMPROVEMENT		Consulting Engineering		Professional Engineer		R-1	
NO. DATE		REVISION		DESIGNED: M.O., T.S.		- ANCHORAGE, ALASKA -		DATE: 1-18-85		SHEET NUMBER	
				DETAILED: B.S.				JOB NO. 8440		R-1	
				CHECKED: B.J.C.				APPROVED: B.J.C.		OF 4	
								SCALE: 1"=100'			



**LAGOON SITE PLAN**  
SCALE: 1" = 50.0'



PROJECT STATUS:		SHEET STATUS:	
1	JUNE 87	NORTH ARROW MOVED, COMMUNITY DRAINFIELD DELETED, RD/pml	
		PROPOSED LAGOON SHOWN, FORCE MAIN PROFILE REDRAWN, SHEET No. CHANGED.	
NO.	DATE	REVISION	BY CHK

**VILLAGE OF EKWOK, ALASKA**

**SEWAGE IMPROVEMENT**

DESIGNED: T.S.      DETAILED: B.S.      CHECKED: B.J.C.

**CORWIN & ASSOCIATES INC.**

Consulting Engineering

- ANCHORAGE, ALASKA -

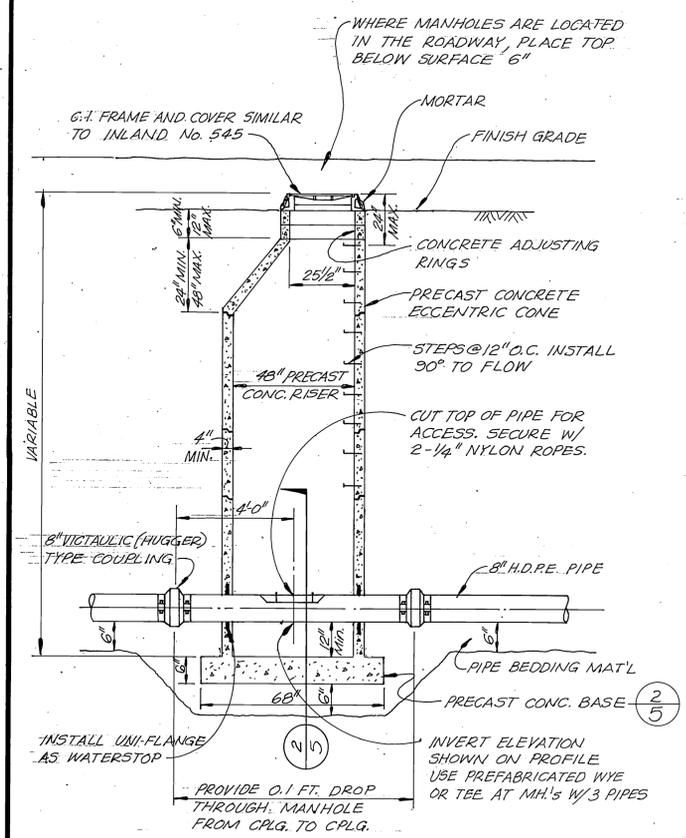


**PLAN AND PROFILE COMMUNITY SEWER**

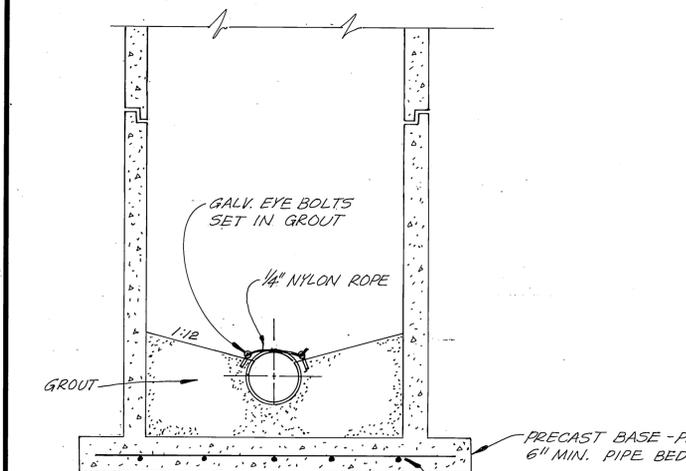
STA. 0 + 00 TO STA. 0 + 67  
STA. 13 + 53 TO STA. 17 + 33  
**FORCE MAIN TO BEDS**

DATE: 1-18-85      JOB NO. 8440      APPROVED: B.J.C.

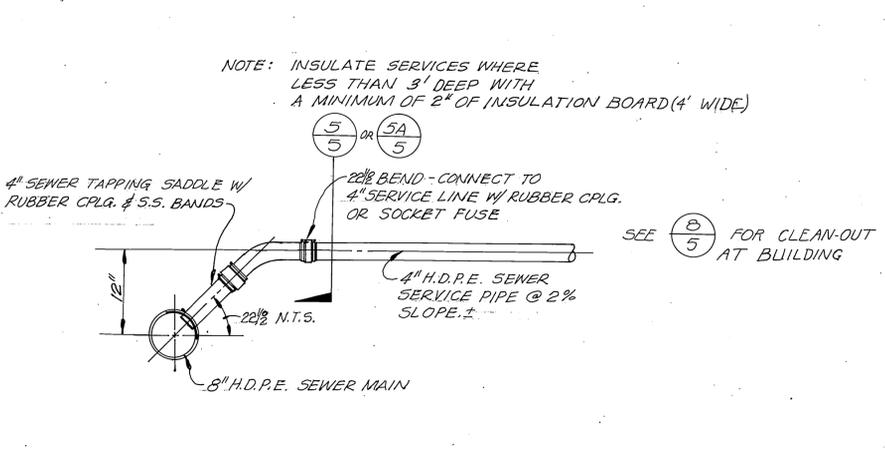
SHEET NUMBER	R-2
OF	4
SCALE:	As Noted



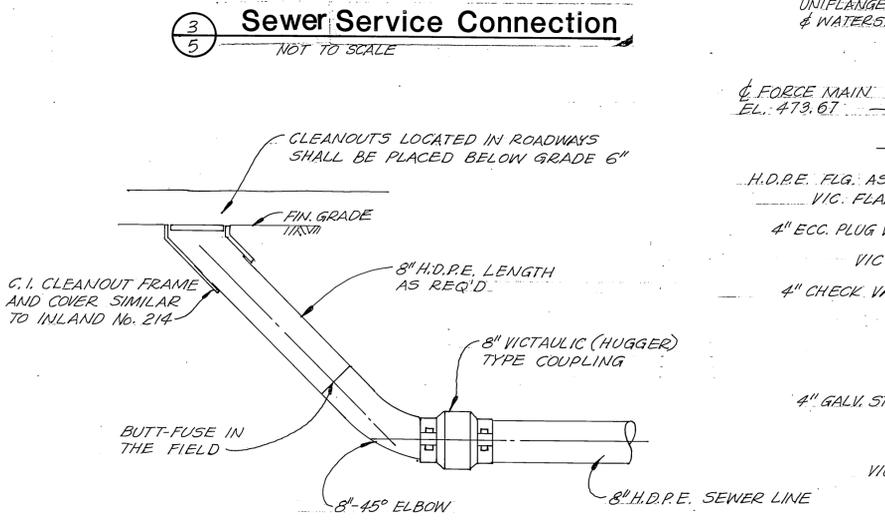
**1 Precast Concrete Manhole**  
NOT TO SCALE



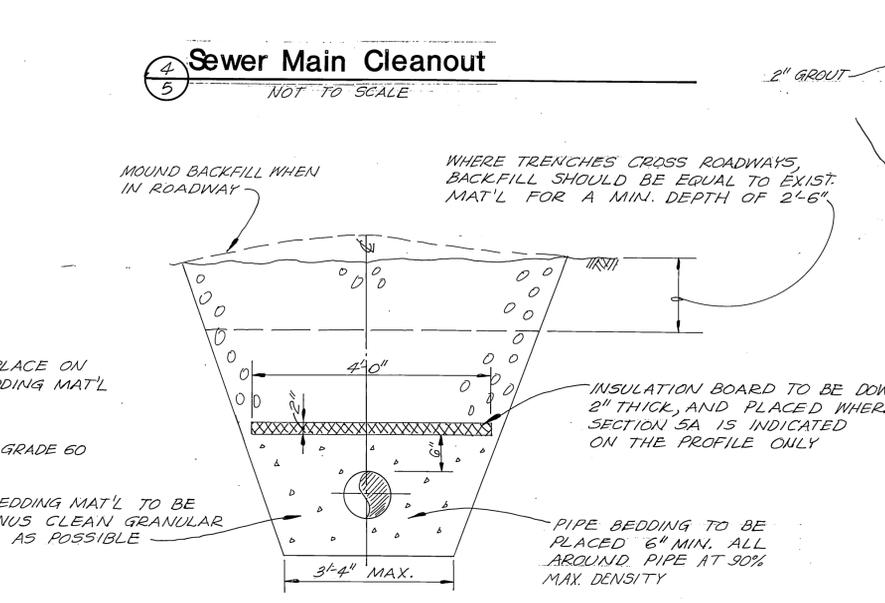
**2 Manhole Base Section**  
NOT TO SCALE



**3 Sewer Service Connection**  
NOT TO SCALE

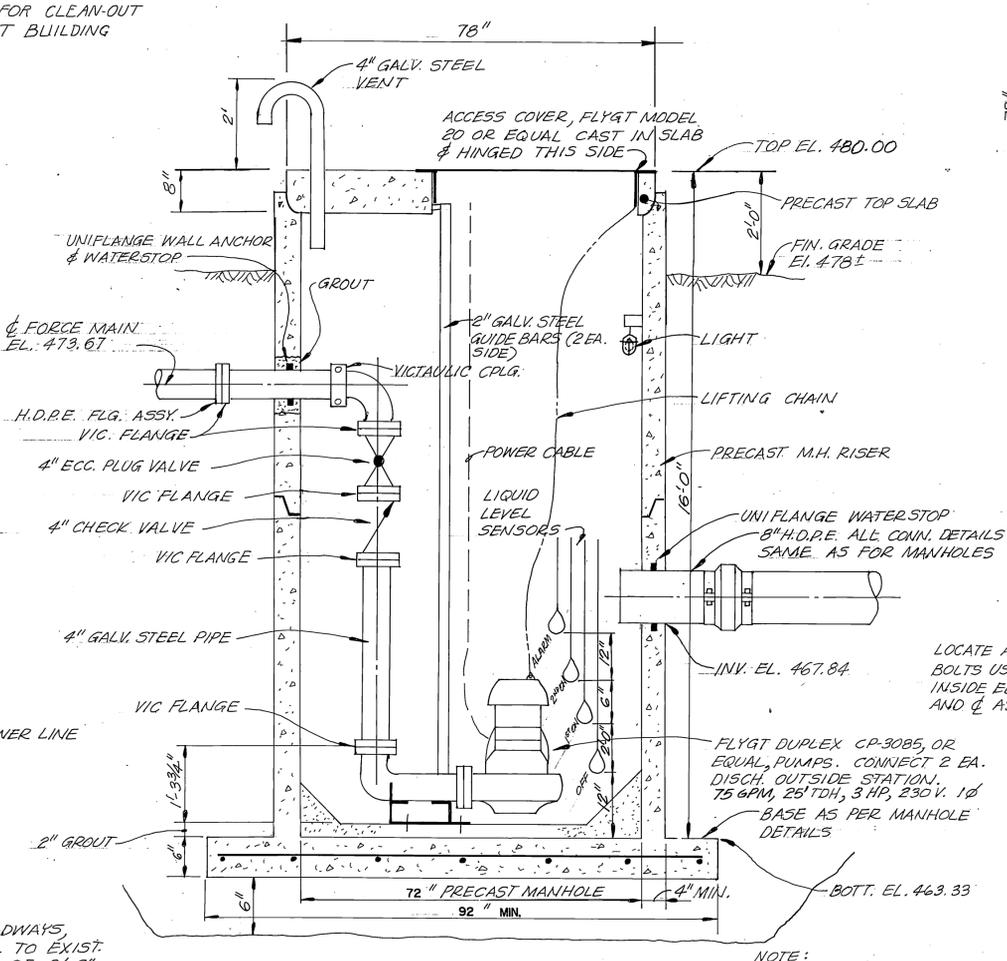


**4 Sewer Main Cleanout**  
NOT TO SCALE



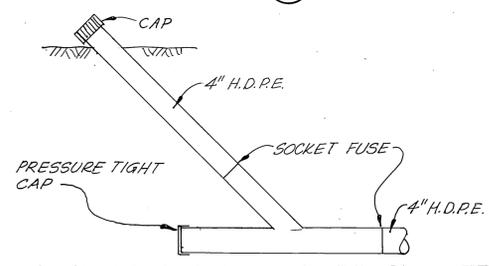
**5 Typical Pipeline Trench**  
NOT TO SCALE

**IHS NOTES:**  
INSTALL LIFT STATION CONTROL PANEL IN PAD-MOUNTED POWER GLASS ENCLOSED ENCLOSURE MODEL 54-2 AS MANUFACTURED BY WESTERN POWER PRODUCTS, INC. (OR APPROVED EQUAL). CONCRETE FOUNDATION PAD SHALL BE CONSTRUCTED PER MANUFACTURER'S RECOMMENDATIONS. SEE SHEET 6 FOR LOCATION.

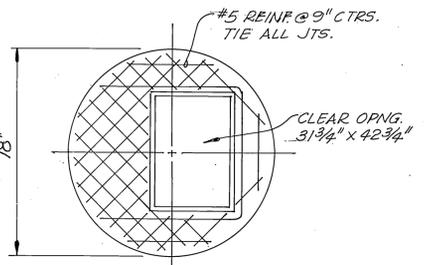


**6 Lift Station Section**

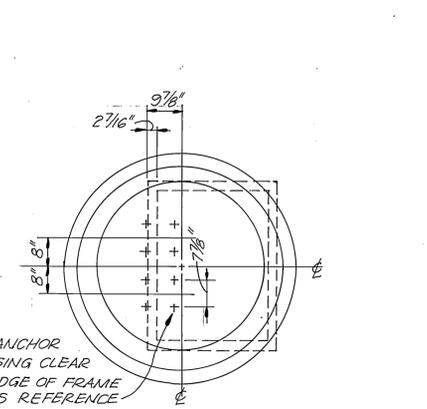
**6 Sewage Lift Station Details**  
NOT TO SCALE



**7 Typical Service Cleanout Detail**



**Top Slab Detail**



**Base Slab Detail**

**NOTE:**  
PUMP STATION COMPONENTS INCLUDING COMPLETE WEATHERPROOF POLE MOUNTED CONTROL PANEL ARE TO BE SUPPLIED BY CONTRACTOR. COMPLETE ELECTRIC SERVICE WILL BE SUPPLIED BY THE OWNER AS REQUIRED. COMPONENTS SHALL BE STD. PRODUCTS SUPPLIED BY PUMP MANUFACTURER AS PACKAGE UNIT. LEVEL CONTROLS SHALL BE 1<sup>ST</sup> PUMP ON, 2<sup>ND</sup> PUMP ON, PUMP OFF, AND ALARM. (FURNISH AND INSTALL AUDIBLE ALARM ON POWER POLE).

**8 Building Cleanout Detail**  
TYPICAL AT ALL BUILDINGS

PROJECT STATUS:		SHEET STATUS:	
1	JUNE 87	LIFT STATION WET WELL, DIAMETER CHANGE, PRECAST TOP CHANGES, "SHEET No." CHANGES, IHS NOTE ADDED.	RD/jpm
NO.	DATE	REVISION	BY

**VILLAGE OF EKWOK, ALASKA**

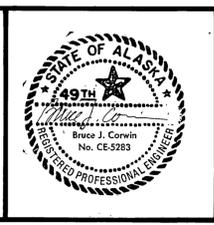
**SEWAGE IMPROVEMENT**

DESIGNED: T.S./B.J.C.    DETAILED: B.    CHECKED: B.J.C.

**CORWIN & ASSOCIATES INC.**

Consulting Engineering

— ANCHORAGE, ALASKA —



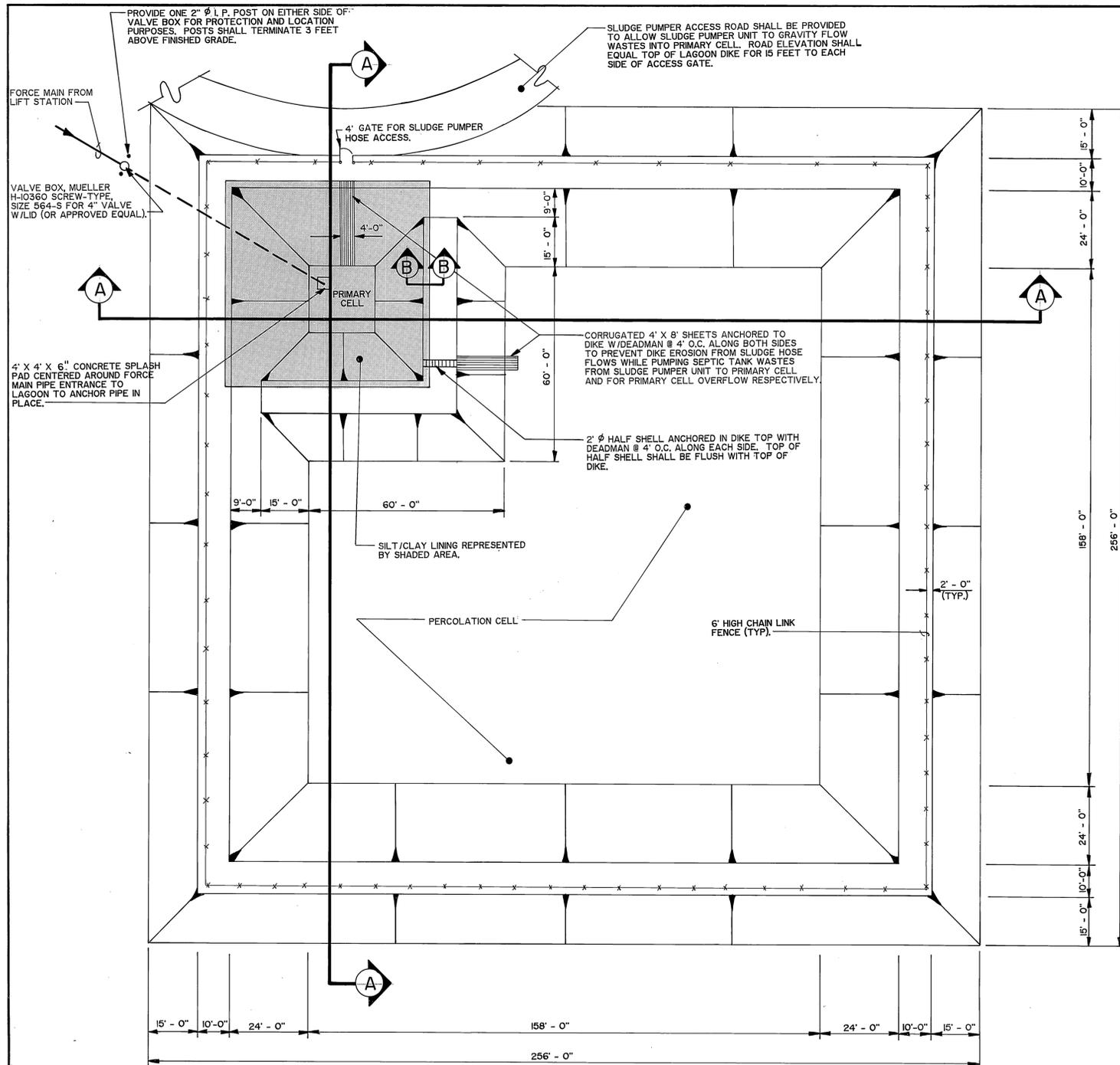
**PROJECT DETAILS**

DATE: 1-18-85    JOB NO. 8440    APPROVED: B.J.C.

SHEET NUMBER: R-3

OF 4

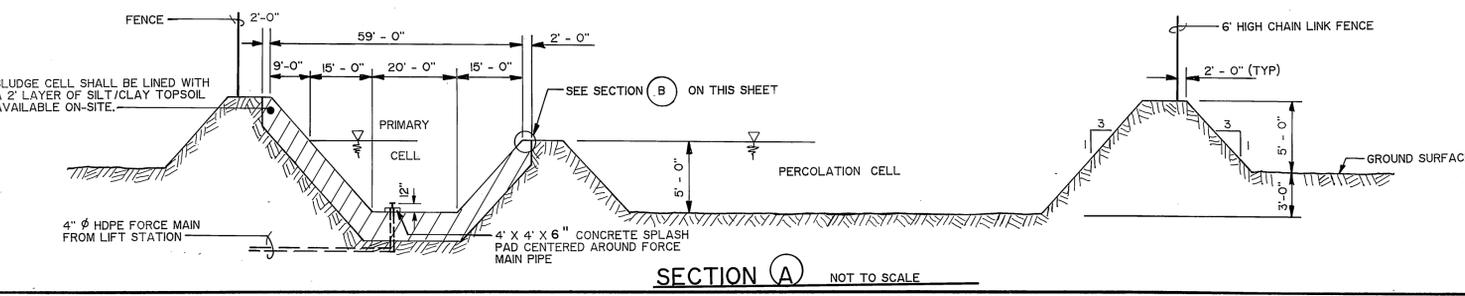
SCALE: As Noted



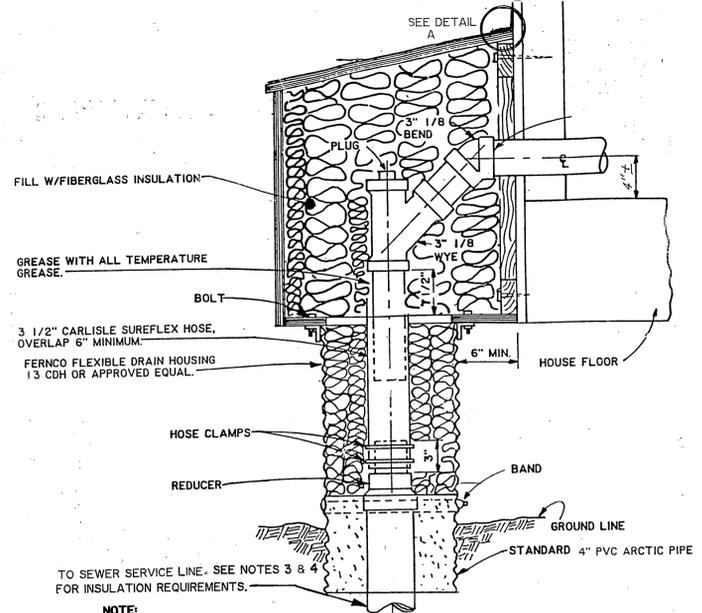
**LAGOON PLAN**  
SCALE: 1" = 20'-0"

**LAGOON DESIGN CRITERIA:**

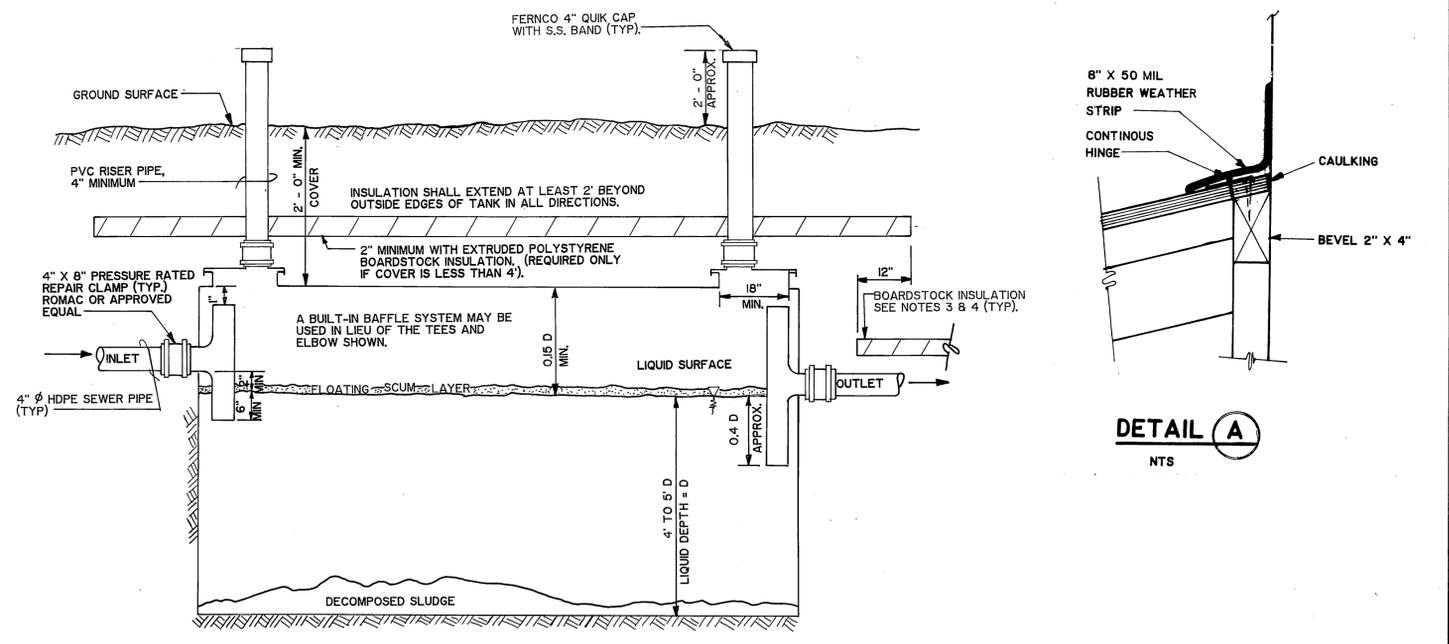
- DESIGN HOME W/INDIVIDUAL SEPTIC SYSTEM = 44 HOMES
- DESIGN HOME CONNECTIONS, COMMUNITY SYSTEM = 30 HOMES (ASSUMED 4 PEOPLE/HOME)
- BODs AERIAL LOADING = 15 lb. / ACRE / DAY
- PRIMARY CELL : 20 YEAR SLUDGE STORAGE
- PERCOLATION CELL : 5 MONTH LIQUID STORAGE



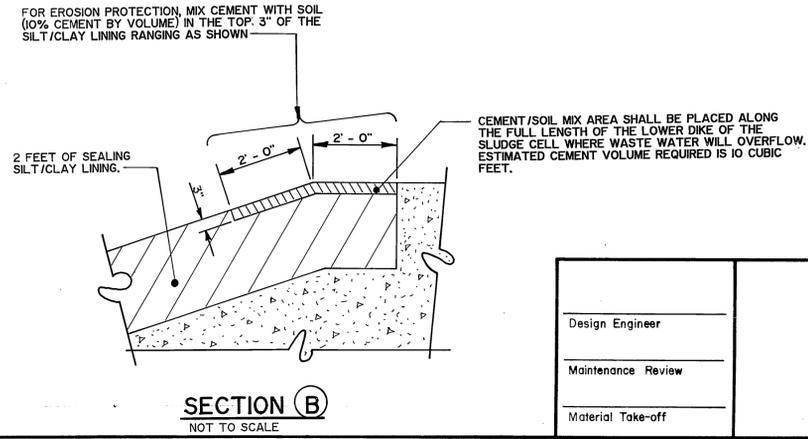
**SECTION (A)**  
NOT TO SCALE



**ARCTIC HOUSE SEWER WALL CONNECTION, (TYPICAL)**  
NOT TO SCALE

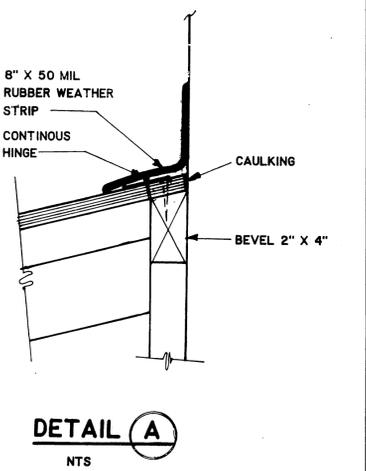


**TYPICAL SEPTIC TANK INSTALLATION DETAIL**  
NOT TO SCALE



**SECTION (B)**  
NOT TO SCALE

- NOTES:**
- SEPTIC TANK SHALL BE STABILIZED LEVEL. PLUMB PRIOR TO BACKFILLING.
  - SEPTIC TANK SHALL BE FILLED W/WATER WITH MANHOLE COVER IN PLACE WHILE BACKFILLING. SEPTIC TANK ASSEMBLY AND INSTALLATION SHALL BE ACCORDING TO THE MANUFACTURER'S SPECS.
  - 2" OF FOAMULAR 250" EXTRUDED BOARDSTOCK INSULATION (OR APPROVED EQUAL) SHALL BE PLACED OVER THE SEPTIC TANK, AND SEWER SERVICE PIPE FOR FROST PROTECTION WHERE EARTH COVER IS LESS THAN 4" MIN. EARTH COVER SHALL BE 2".
  - IF BOARDSTOCK INSULATION IS USED OVER NON-PERFORATED SEWER PIPE, THE BOARDSTOCK INSULATION SHALL BE CENTERED OVER THE PIPE WITH A 2" MIN. WIDTH AND PLACED ON TOP OF GRAVEL BED PRIOR TO BACKFILLING.



**DETAIL (A)**  
NTS

DATE	REVISIONS	INITIALS
<b>U. S. Department of Health &amp; Human Services</b> <b>Public Health Service</b> <b>Indian Health Service</b>		
<b>EKWOK, ALASKA</b>		SHEET NO. R-4
LAGOON DETAILS, SEPTIC TANK INSTALLATION & ARCTIC HOUSE SEWER WALL CONNECTION PUBLIC LAW 86-121 PROJECT PROJECT NO. AN-87 368		
DRAWN BY: LOWDERMILK DATE: 7-87		CHECKED BY: _____ DATE: _____
<b>SANITATION FACILITIES CONSTRUCTION BRANCH</b> <b>ENVIRONMENTAL HEALTH BRANCH</b> ALASKA AREA NATIVE HEALTH SERVICE ANCHORAGE, ALASKA		
TOTAL SHEETS 4		