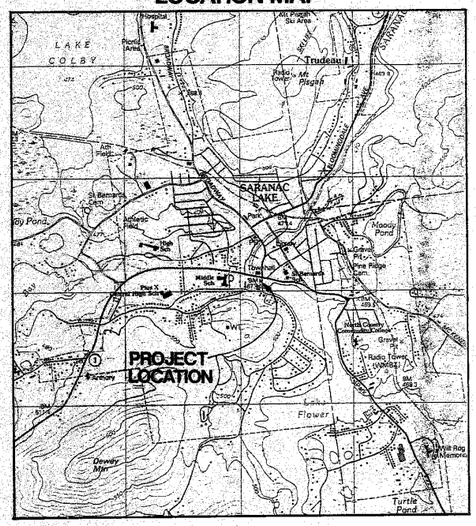
VILLAGE OF SARANAC LAKE

LAKE FLOWER HYDRO

JUNE, 1994

LOCATION MAP



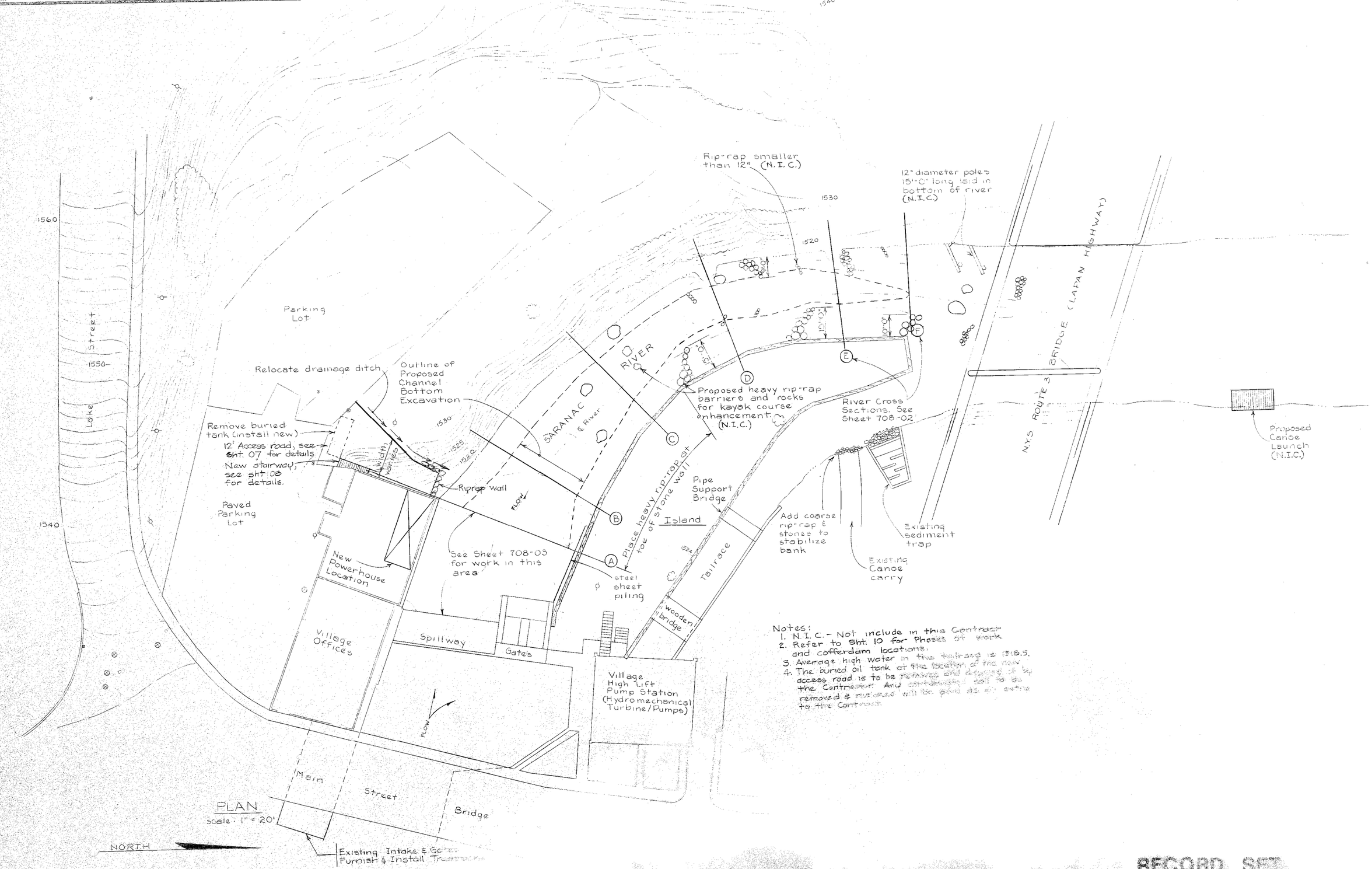
DRAWING INDEX

SHEET NO.	TITLE
708-01	SITE PLAN
708-02	TAILRACE EXCAVATION
708-03	RIVER WORK PLAN
708-04	SECTIONS
708-05	SECTIONS
708-06	EXISTING WATER CHAMBER AND UNDERPINNING
708-07	TRASHRACKS
708-08	POWERHOUSE MODIFICATIONS
708-09	HOIST RAIL DETAILS
708-10	SEDIMENT/EROSION CONTROL PLAN/COFFERDAMS

RECORD SET

Feb. 1, 1995

CHRISTIE ENGINEERING
MALONE, NEW YORK



Notes:
1. N.I.C. - Not include in this Contract
2. Refer to Sht. 10 for Phases of work and cofferdam locations.
3. Average high water in the tailrace is 1518.5.
4. The buried oil tank at the location of the new access road is to be removed and disposed of by the Contractor. Any contaminated soil to be removed & replaced will be paid as an extra to the Contract.

RECORD SET

Revisions
5-23-94
6-10-94
6-15-94
2-1-95
Record Set

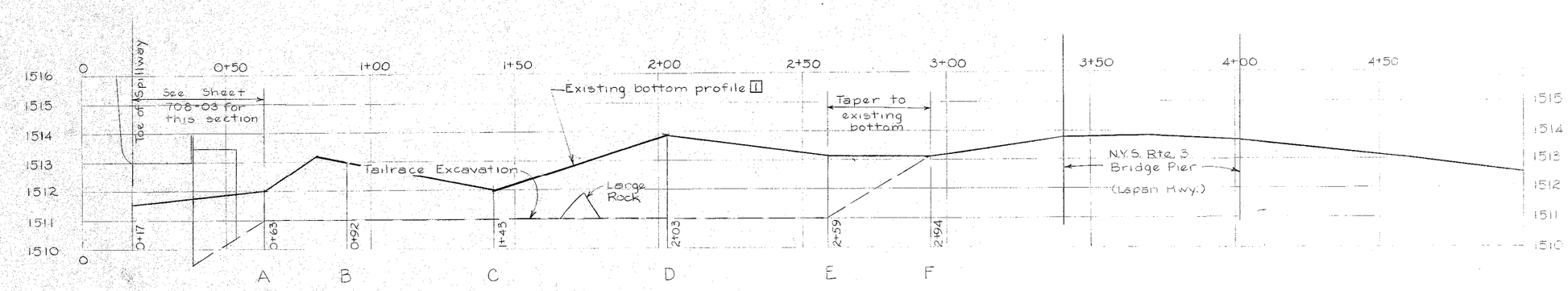
SCALE: as noted

DATE: 8-19-92

CHRISTIE ENGINEERING
Consulting Engineers
8 East Main · Malone · New York

VILLAGE OF SARANAC LAKE
LAKE FLOWER HYDRO
SITE PLAN

Drawing No. 708-01

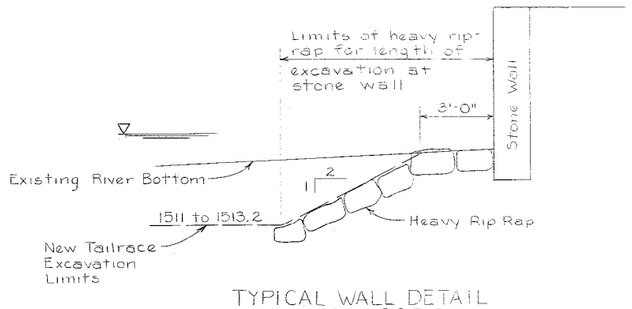


NOTE:
The bottom of the channel, after tailrace excavation, shall be left with coarse gravel and cobbles exposed. If this does not occur naturally with the excavation, course gravel and cobbles shall be spread over the exposed bottom. Material salvaged from the excavation may be used for this work.

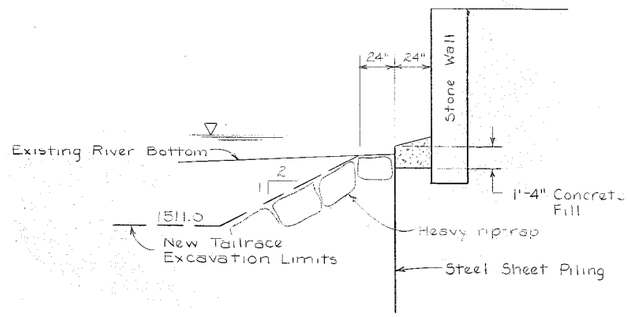
[1] Riprap stockpiled on site (existing) and riprap removed during this excavation may be used in this project where riprap is needed.

PROFILE OF RIVER BOTTOM AT CENTERLINE

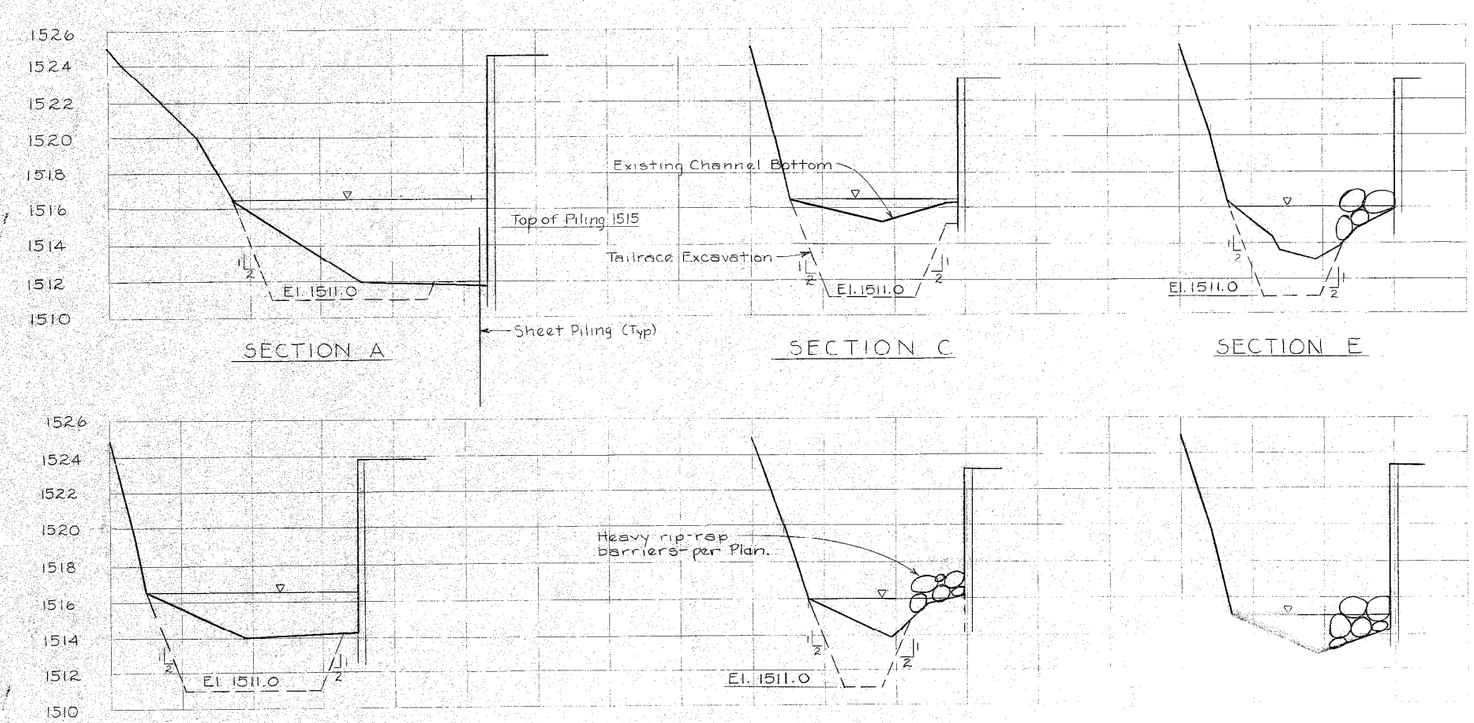
scale: horiz.: 1" = 20' vert: 1" = 2'



TYPICAL WALL DETAIL
AT HEAVY RIP-RAP



TYPICAL WALL DETAIL
AT SHEET PILING



SECTION A

SECTION C

SECTION E

SECTION B

SECTION D

SECTION F

CROSS SECTIONS

scale: horiz: 1" = 20'

Revisions
6-10-94
6-29-94 Addendum [1]
Record Set 2-1-95

SCALE
as noted

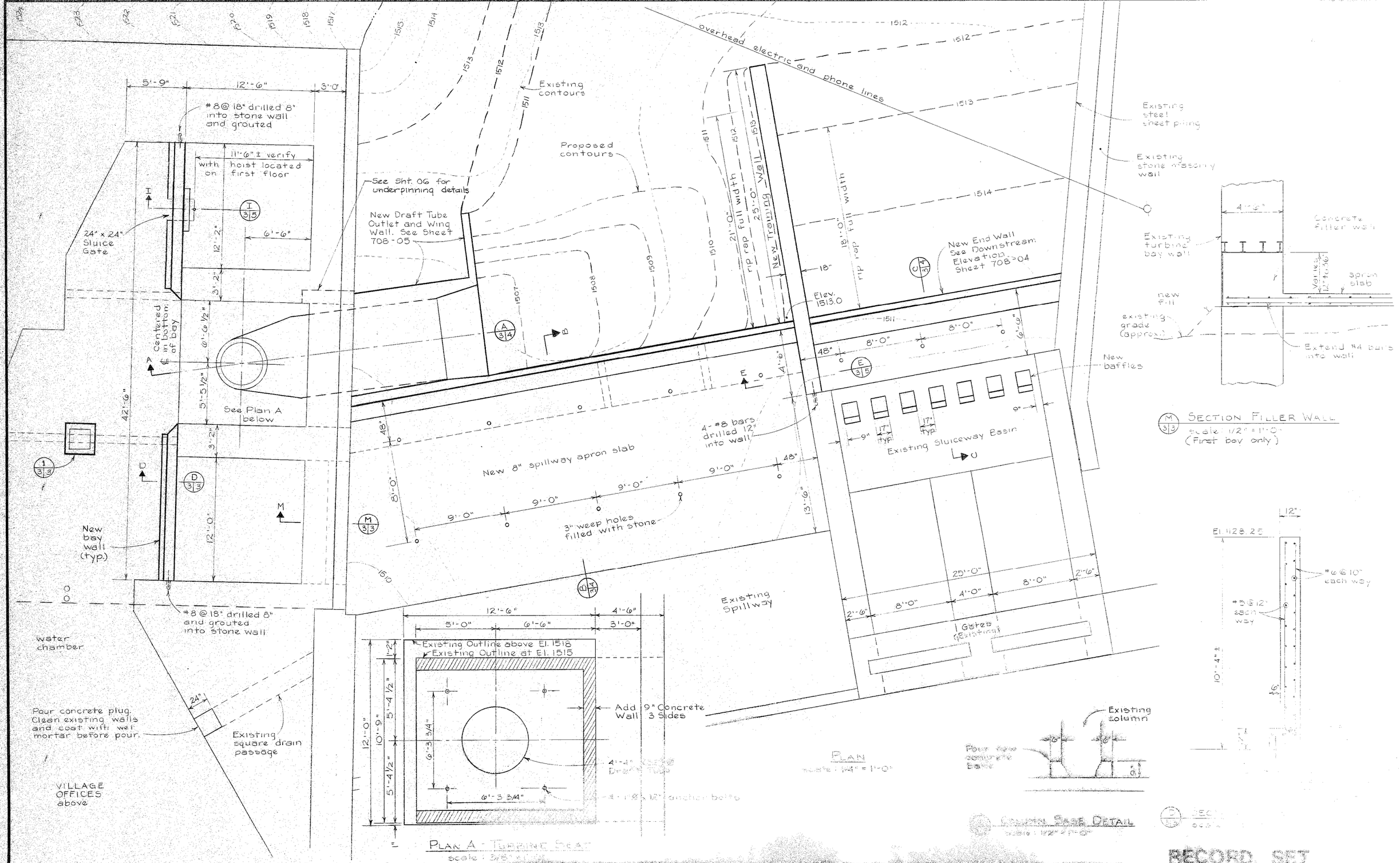
DATE
5-23-94

CHRISTIE ENGINEERING
Consulting Engineers
E. Syracuse · Malone · New York

RECORD SET

VILLAGE OF SARANAC LAKE
LAKE FLOWER HYDRO
TAILRACE GRADING
Profile & Cross Sections

Drawing No. 708-02



PLAN A - TURBINE SEAT
scale: 3/8" = 1'-0"

PLAN
scale: 1/4" = 1'-0"

SECTION FILLER WALL
scale: 1/2" = 1'-0"
(First bay only)

COLUMN BASE DETAIL
scale: 1/2" = 1'-0"

SECTION
scale: 1/2" = 1'-0"

RECORD SET

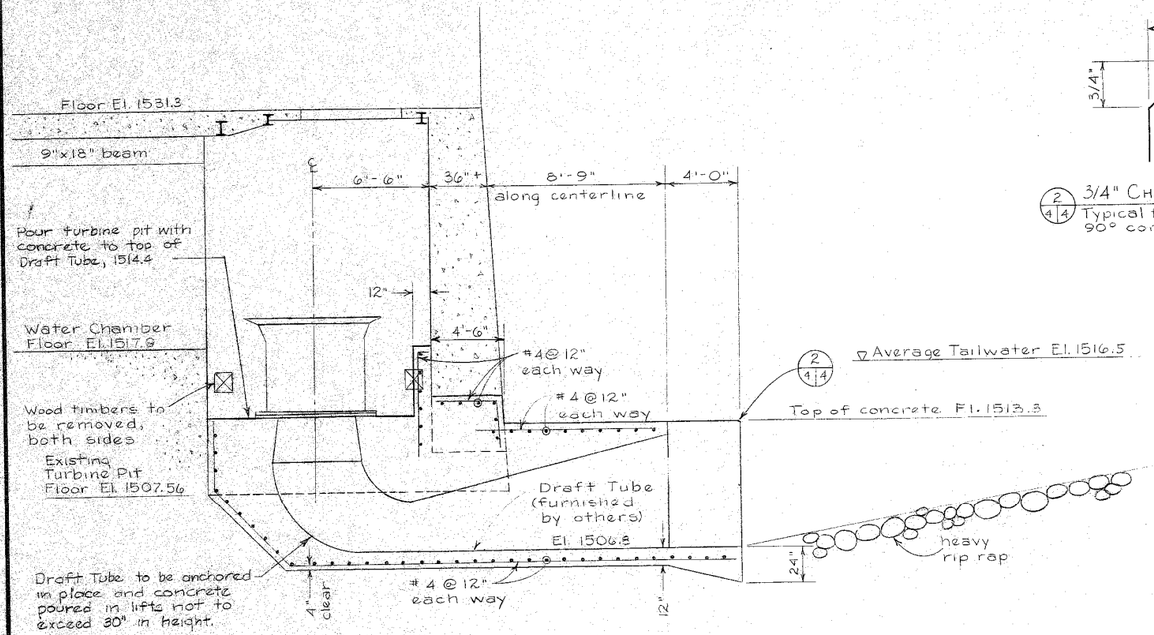
Revisions	SCALE	DATE
Record Set 2-1-95	as noted	6-10-94

CHRISTIE ENGINEERING
Consulting Engineers
8 Flint Rock · Malone · New York

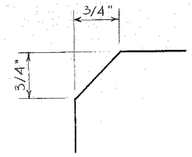
VILLAGE OF SARANAC LAKE
LAKE FLOWER HYDRO

RIVER WORK PLAN
Drawing No. 708-03

H.H. SULLIVAN, INC. 594306

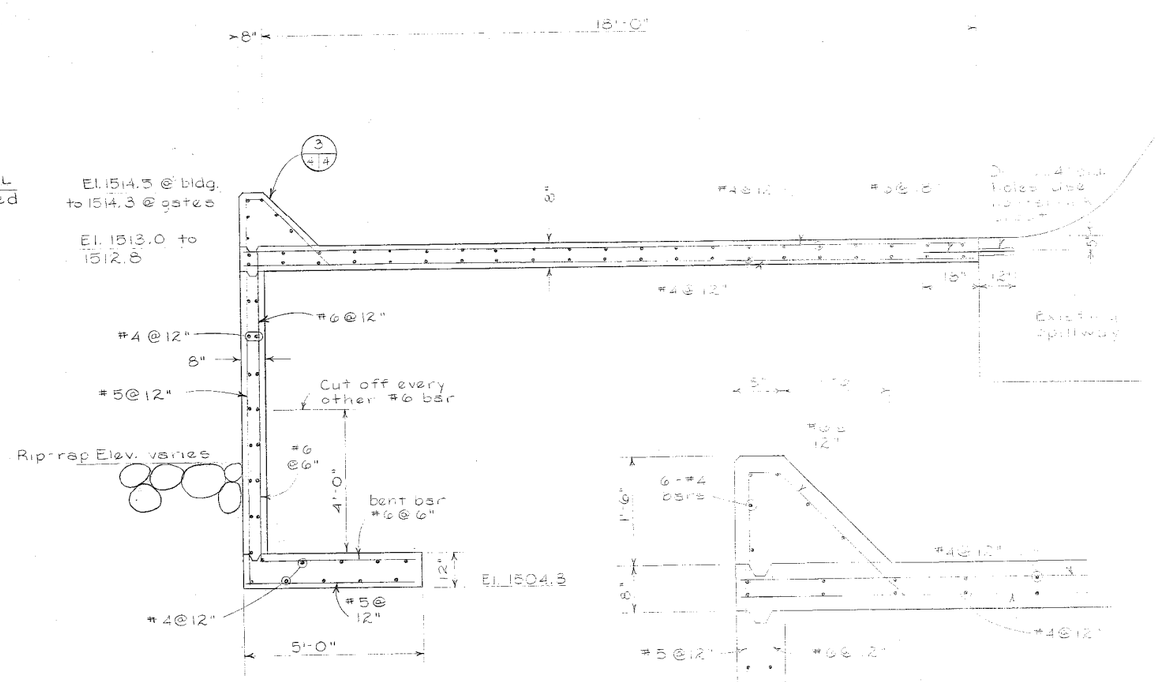


A 3/4 SECTION THRU DRAFT TUBE
scale: 1/4" = 1'-0"



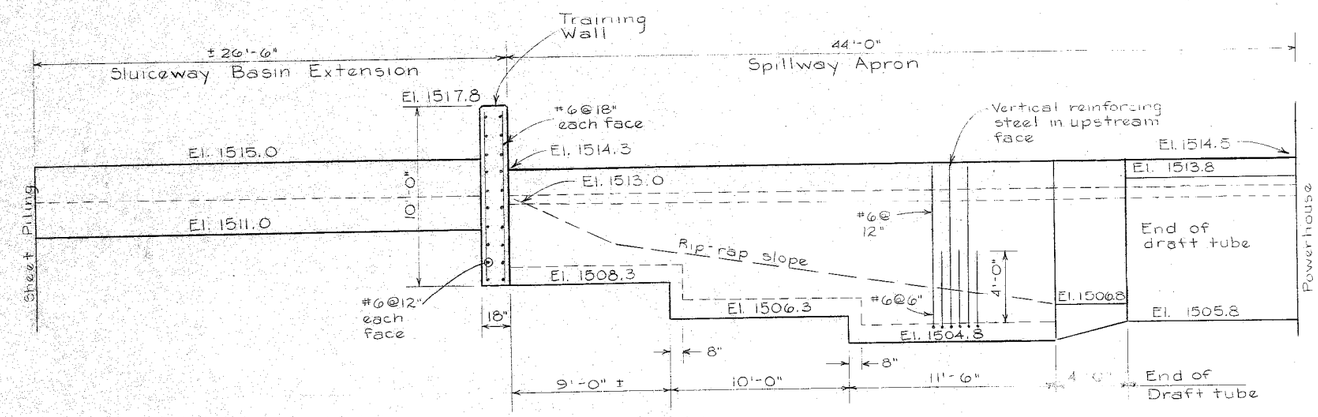
2 4/4 3/4" CHAMFER DETAIL
Typical for all exposed 90° corners

Note: Concrete pouring sequence to be as shown.

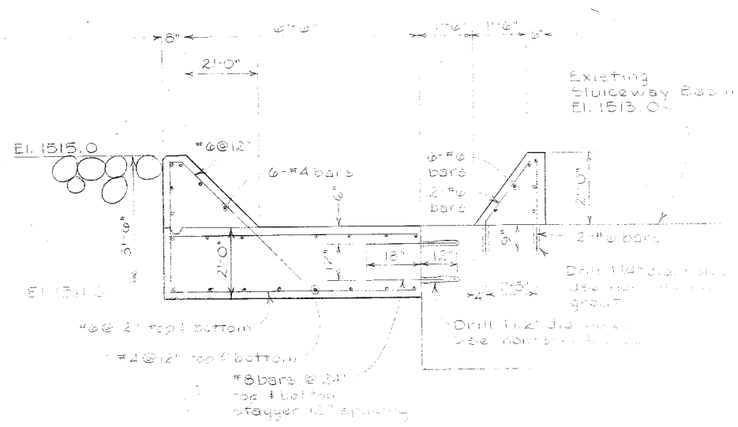


B 3/4 SECTION SPILLWAY APRON
scale: 1/2" = 1'-0"

SPILLWAY TOE DETAIL
scale: 1"=1'-0"



DOWNSTREAM END WALL ELEVATION
scale: 1/4" = 1'-0"



SECTION SPILLWAY TOE
scale: 1/2" = 1'-0"

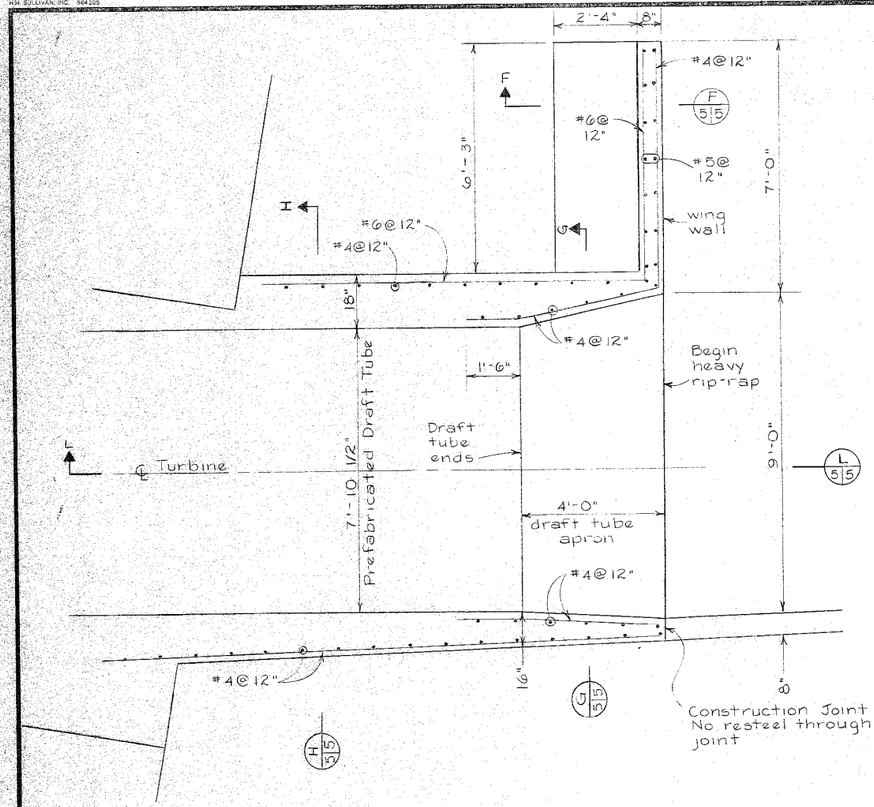
RECORD SET

REVISIONS	DATE
Record Set	2-1-95

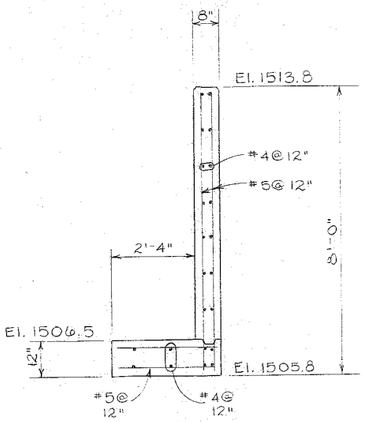
SCALE: as noted
DATE: 6-10-94

CHRISTIE ENGINEERING
Consulting Engineers
8 First Main · Malone · New York

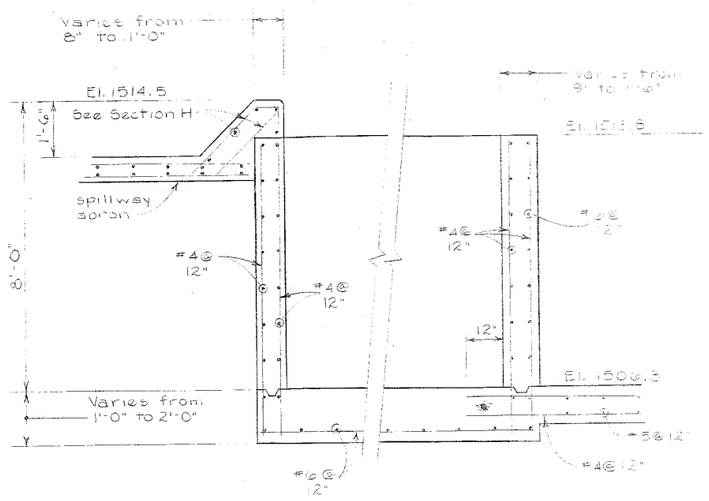
VILLAGE OF SARANAC LAKE
LAKE FLOWER HYDRO
SECTIONS
Drawing No. 204-04



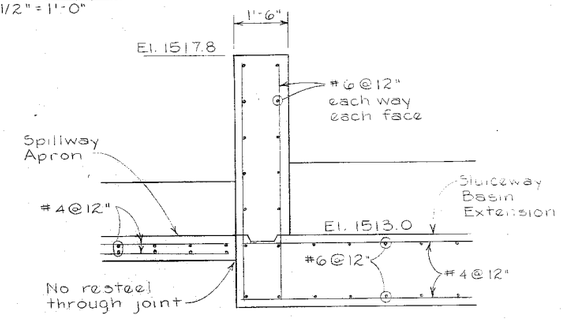
DRAFT TUBE OUTLET PLAN
scale : 1/2" = 1'-0"

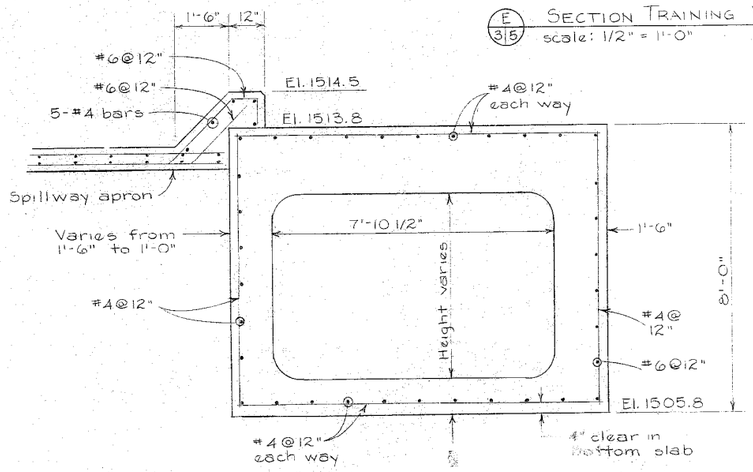


F 5|5 WING WALL SECTION
scale : 1/2" = 1'-0"



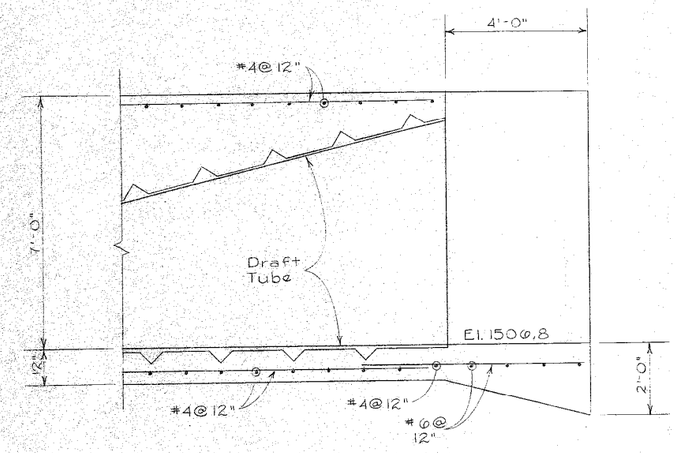
G 5|5 SECTION DRAFT TUBE APRON REINFORCEMENT
scale : 1/2" = 1'-0"



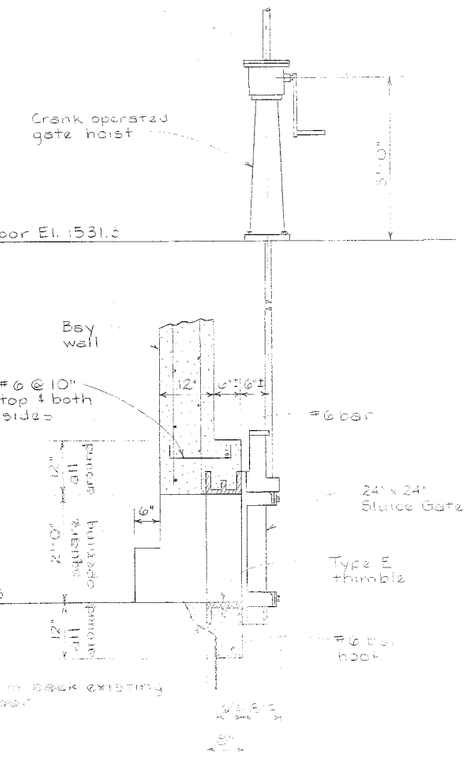


E 3|5 SECTION TRAINING WALL
scale: 1/2" = 1'-0"

H 5|5 DRAFT TUBE CONCRETE REINFORCEMENT
scale: 1/2" = 1'-0"



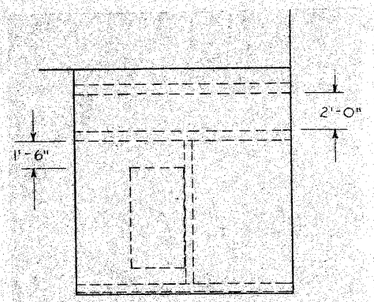
L 5|5 SECTION DRAFT TUBE
scale: 1/2" = 1'-0"



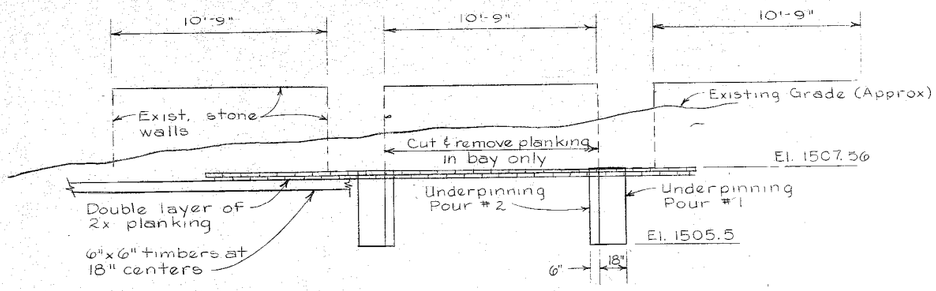
E SLUICE GATE
scale: 3/4" = 1'-0"

RECORD SET

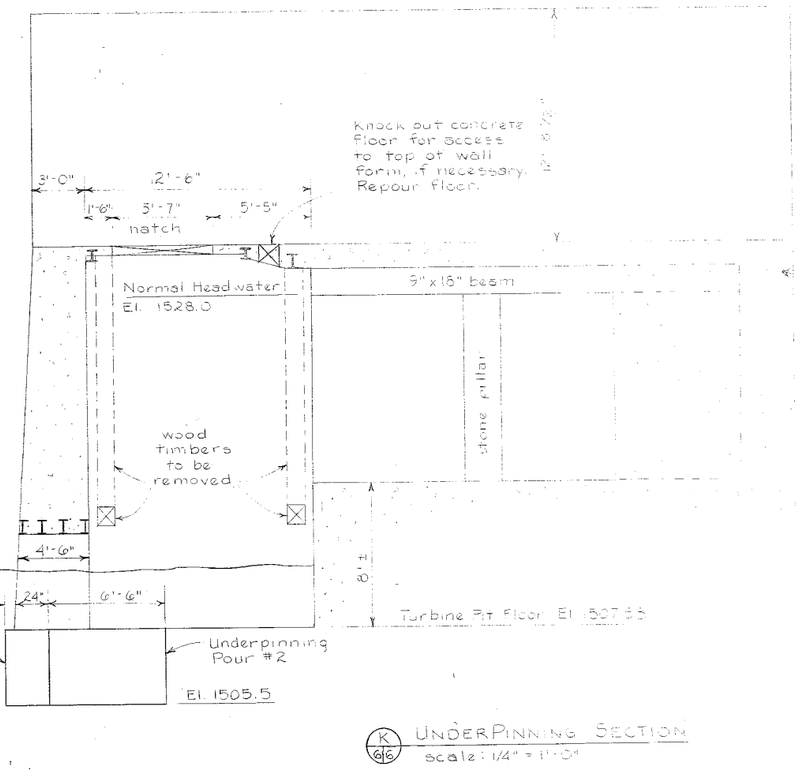
Revisions	SCALE	CHRISTIE ENGINEERING	VILLAGE OF SARANAC LAKE
Record Set 2-1-95	as noted	Consulting Engineers 6 Elm Row · Malone · New York	LAKE FLOWER HYDRO
	DATE		SECTIONS
	6-10-94		Drawing No. 108-0



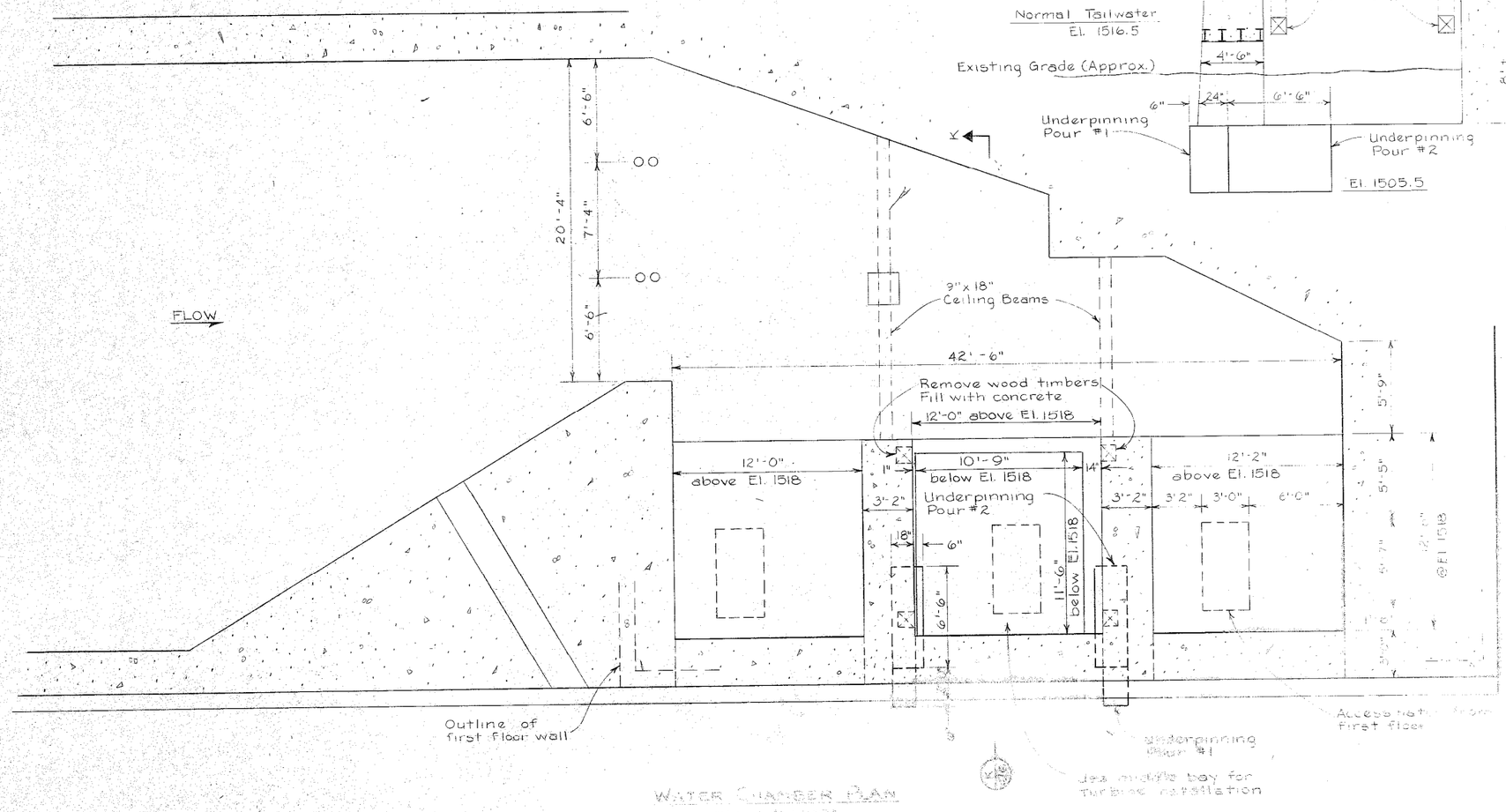
Overhead Beams in End Bay (Typ.)



BAY ELEVATION
scale: 1/4" = 1'-0"



(K 6/6) UNDERPINNING SECTION
scale: 1/4" = 1'-0"



WATER CHAMBER PLAN
scale: 1/4" = 1'-0"

UNDERPINNING PROCEDURE:

1. Remove existing soil material in middle bay to bottom of side stone walls.
2. Excavate area for underpinning Pour #1 at both walls and pour full of concrete.
3. After allowing Pour #1 to set for three full days, excavate area for underpinning Pour #2 at both walls and pour full of concrete. Allow Pour #2 to set for three full days before further excavation.
4. Do not excavate any other area below bottom of stone walls until Pour #2 under both walls has set for three full days.
5. Do not over-excavate holes for form work for underpinning Pour #1&2. Pour against undisturbed soil wherever possible. Plywood can be used to stabilize sides if necessary.

RECORD SET

Revisions
Record Set 2-1-95

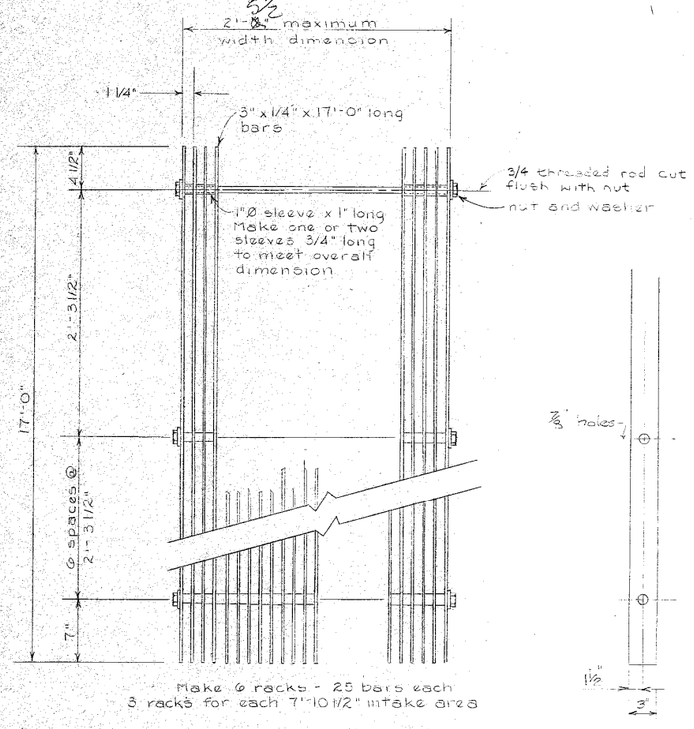
SCALE: as noted

DATE: 6-10-94

CHRISTIE ENGINEERING
Consulting Engineers
8 East Main · Medina · New York

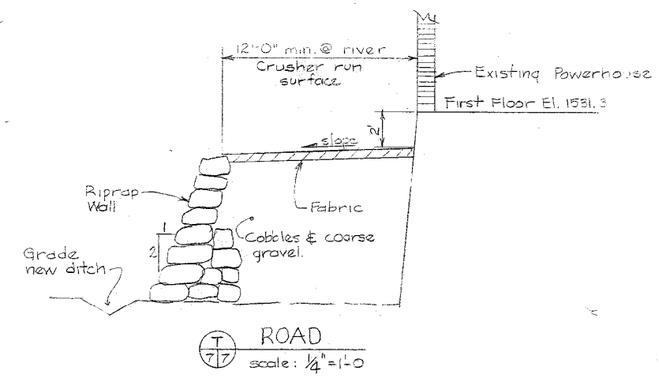
VILLAGE OF [illegible]
LAKE [illegible]
EXISTING WATER CHAMBER [illegible]

Drawing No. [illegible]

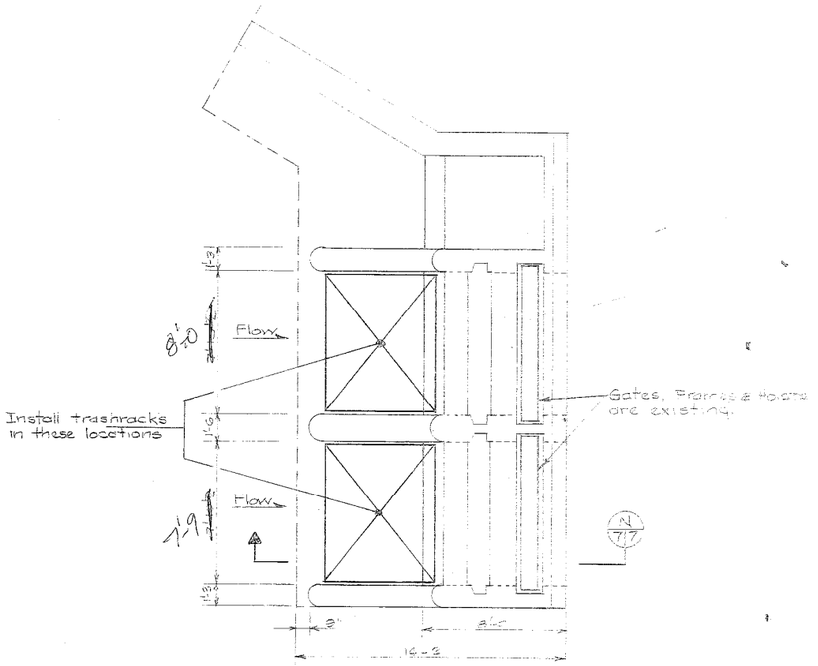


Make 6 racks - 25 bars each
3 racks for each 7'-10 1/2" intake area

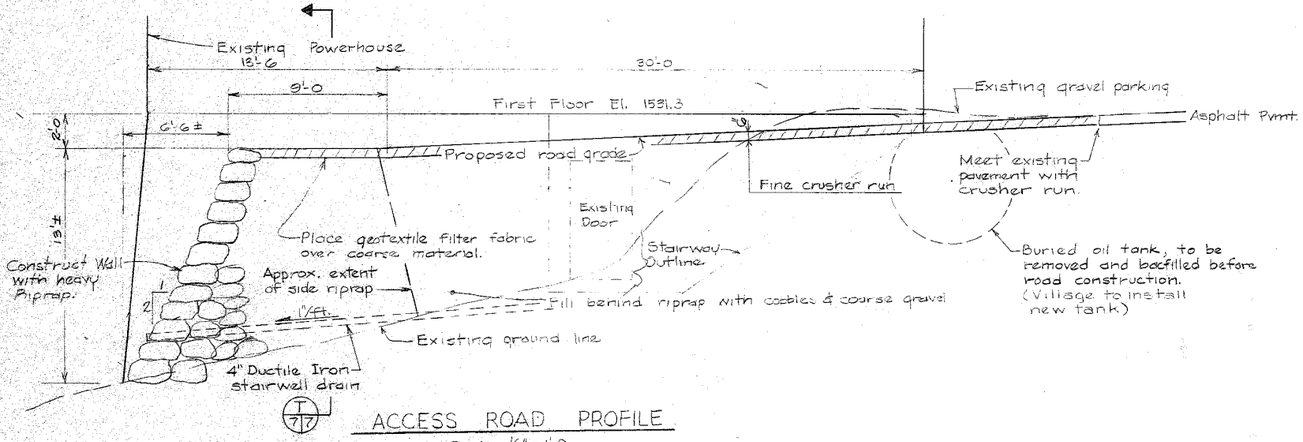
TRASH RACKS
scale: 1 1/2" = 1'-0"



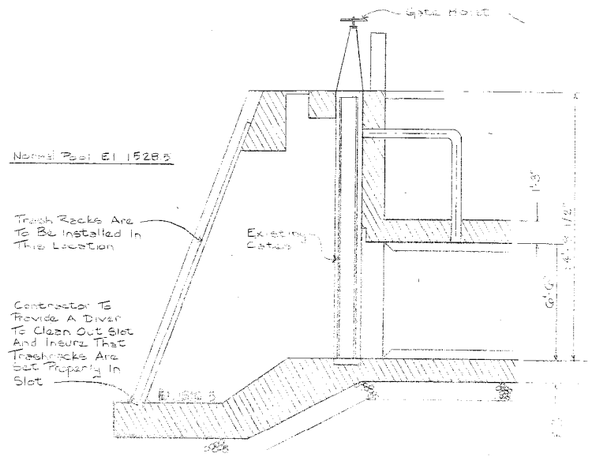
T 7/7 ROAD
scale: 1/4" = 1'-0



EXISTING INTAKE PLAN
scale: 1/8" = 1'-0



T 7/7 ACCESS ROAD PROFILE
Scale: 1/4" = 1'-0



N 7/7

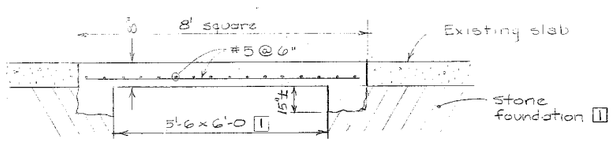
RECORD SET

VILLAGE OF [illegible]
LAKE [illegible]

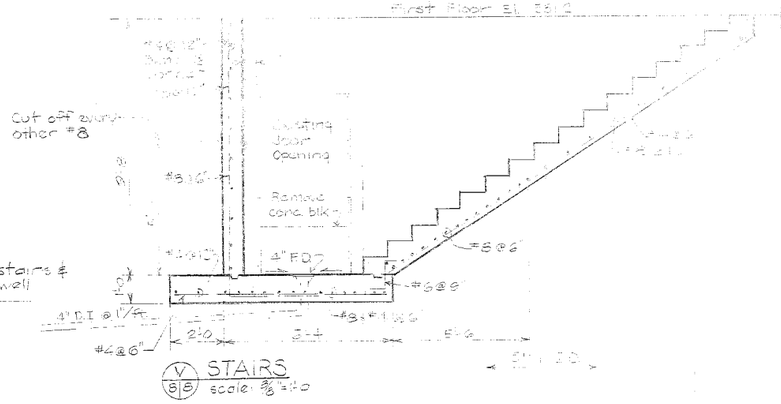
Revisions
6-15-94
Record Set 2-1-95

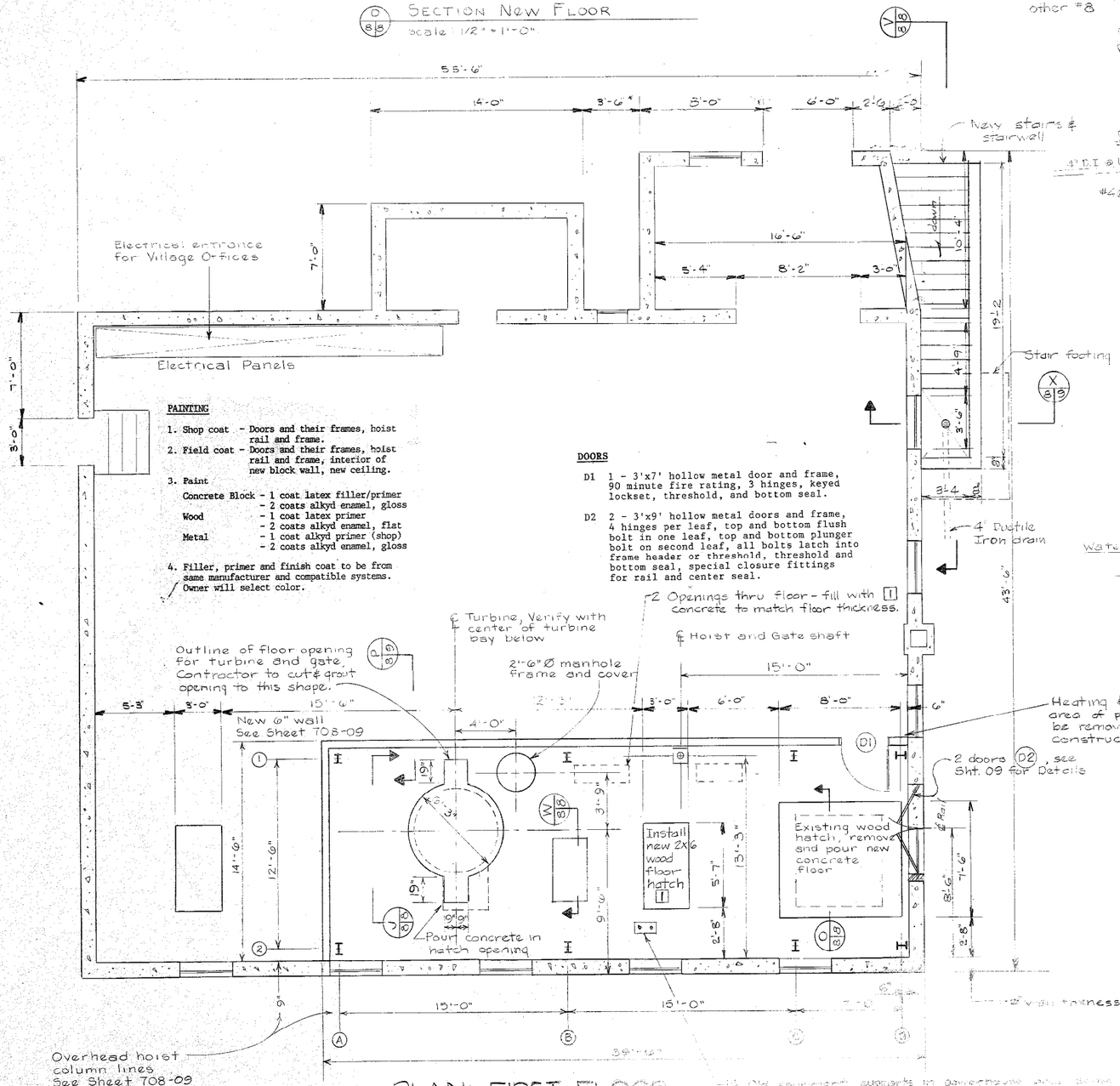
SCALE: As Shown
DATE: 6-10-94

CHRISTIE ENGINEERING
Consulting Engineers
9 Sand Park - Maine - New York



C/8/8 SECTION NEW FLOOR
scale 1/2"=1'-0"





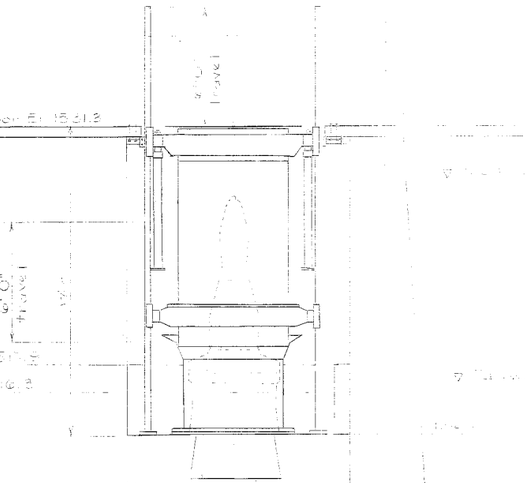
PAINTING

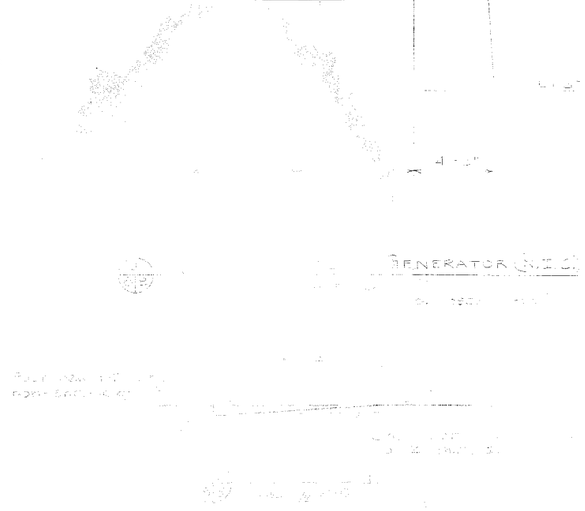
1. Shop coat - Doors and their frames, hoist rail and frame.
2. Field coat - Doors and their frames, hoist rail and frame, interior of new block wall, new ceiling.
3. Paint
   - Concrete Block - 1 coat latex filler/primer, 2 coats alkyd enamel, gloss
   - Wood - 1 coat latex primer, 2 coats alkyd enamel, flat
   - Metal - 1 coat alkyd primer (shop), 2 coats alkyd enamel, gloss
4. Filler, primer and finish coat to be from same manufacturer and compatible systems. Owner will select color.

DOORS

D1 1 - 3'x7' hollow metal door and frame, 90 minute fire rating, 3 hinges, keyed lockset, threshold, and bottom seal.

D2 2 - 3'x9' hollow metal doors and frame, 4 hinges per leaf, top and bottom flush bolt in one leaf, top and bottom plunger bolt on second leaf, all bolts latch into frame header or threshold, threshold and bottom seal, special closure fittings for rail and center seal.



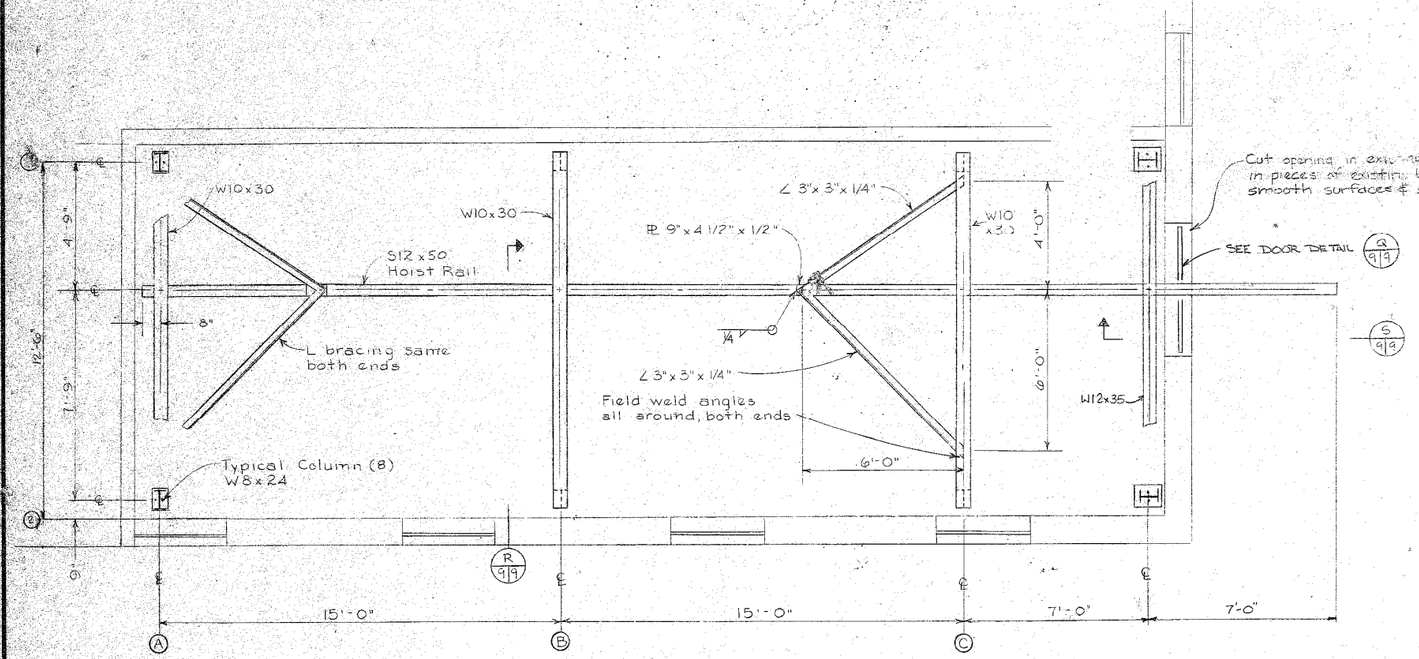


Revisions	SCALE	DATE
6-10-94	as noted	8-8-91
6-15-94		
6-29-94 Addendum 1		
10-25-94 Record Set		
2-1-95		

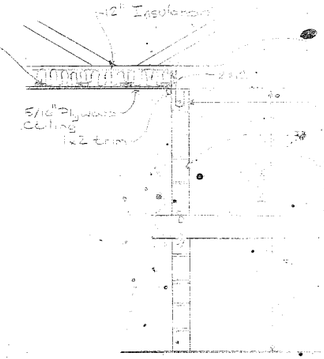
CHRISTIE ENGINEERING
Consulting Engineers
& East Aurora, New York

RECORD SET

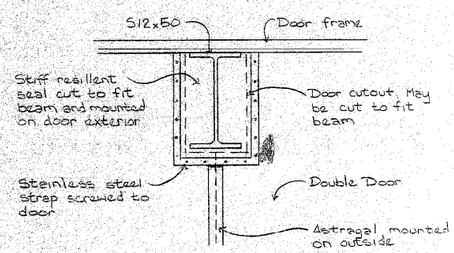
Village of [illegible]
Lake Flow [illegible]



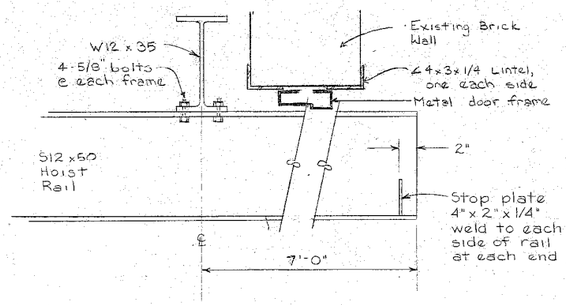
HOIST RAIL PLAN
scale: 3/8" = 1'-0"



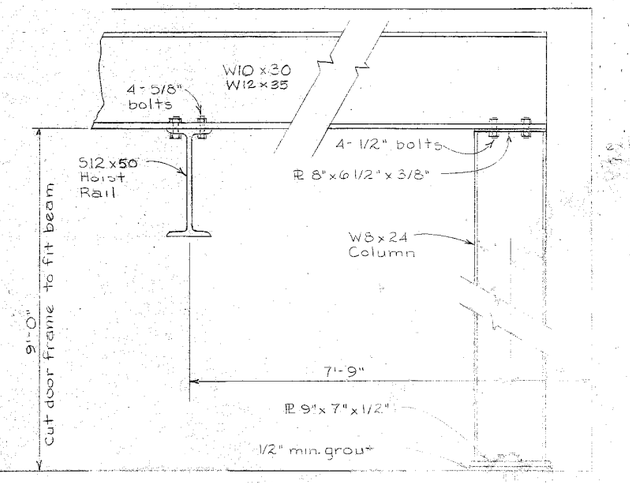
T 9/9 POWERHOUSE [illegible]
scale: 1/2" = 1'-0"



Q 9/9 DOOR DETAIL
scale: 1 1/2" = 1'-0"



S 9/9 END OF HOIST RAIL
scale: 1 1/2" = 1'-0"



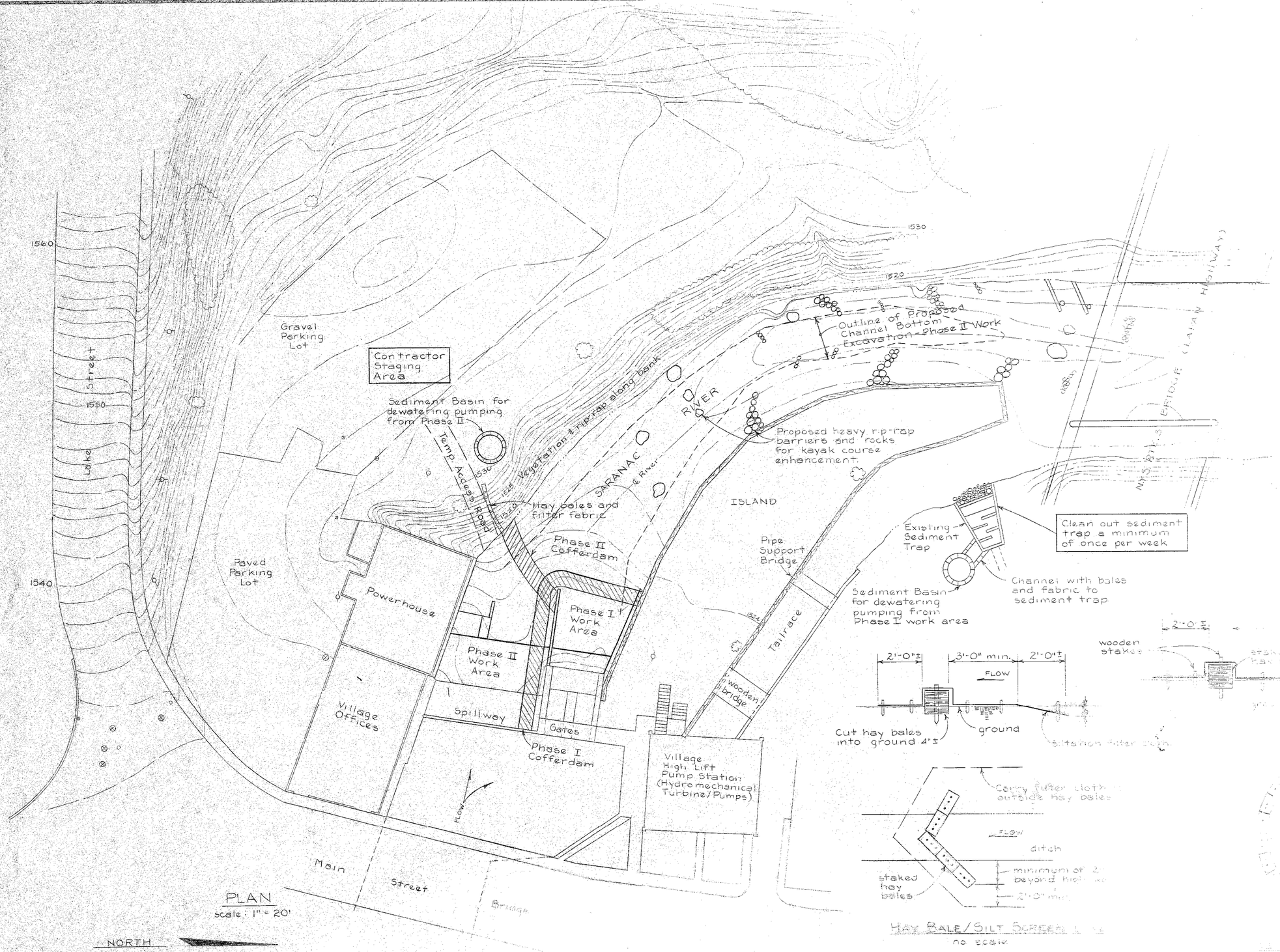
1/2 9/9 FRAME
scale: 1 1/2" = 1'-0"

Revisions
6-15-94
Record Set 2-1-95

SCALE: as noted

DATE: 6-10-94

CHRISTIE ENGINEERING
Consulting Engineers
[illegible] Bay Road, Milton, New York



PLAN
scale: 1" = 20'

HAY BALE/SILT SCREEN
no scale

Revisions
5-23-94
6-10-94
As Record Set 2-1-95

SCALE
as noted

DATE
3-25-94

CHRISTIE ENGINEERING
Consulting Engineers
6 West Main - Wilsons - New York

VILLAGE OF
SARA
SEDIME