

4/37 6/30/83
1 of 4
J. Kane

Conference Call - Thursday 6/30/83 @ 11:00 a.m.

<u>CPC</u>	<u>Bechtel</u>	<u>NRC</u>	<u>GEI</u>
R. Wieland	V. Verma	R. Landsman	S. Poulos
K. Razdan		J. Kane	
P. Berry (S&W)			

Topics Discussed

Possible to drill or cast hole in top of pier ^{below jacks} then tie back in turbine bldg slab
 Diagonal truss - tie back to piers & eliminate water
 Razdan - Problem w/ clearance & Jacks.

Construction status

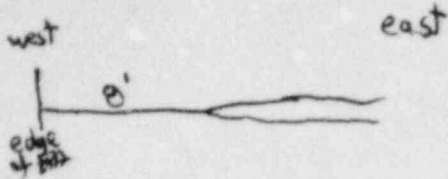
Now excavating ^{drift} from W8 to containment bldg. ^{end of Aug '83} Grillage to be completed by ~~early~~ Aug '83 (4 set on west, 3 set on East)
 Piers 12, 11, 10, 9 (both sides) have been jacked
 KC 11 to be jacked today
 KC 2 in two days to be jacked
 W8 is jacked (except for hammer head) now.
 Will support EPA on grillage

Now in Alert limit for Phase 3 (increased 50 mils recently)
 Could reach by Sept. 7, 1983 an alert limit of 150 mils (now @ 60 mils)

Affected (May 5, 1983) EPA w/ drift for W8 & E8
 More movement

1/4" thick ^{west} below mudmat of EPA

Dimensions of discovered voids
 @ least 12' long, 1/4" wide, 1/4" to 1/2" thick
 towards containment (N-S)
~~no voids~~
~~no voids~~



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Copy to
CPC
2/2/83

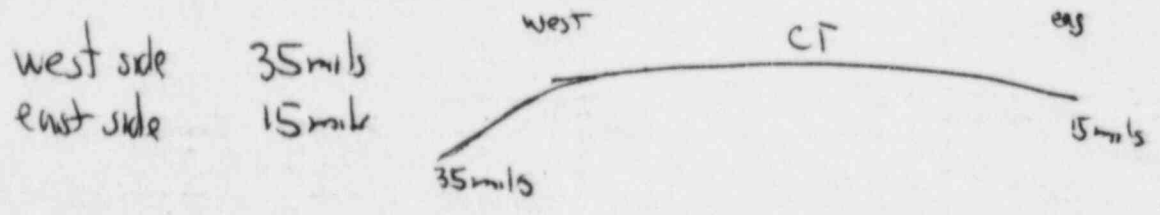
Did not find void on east EPA

- * Ask for ^{IGE} written report that ^{w/ sketches} ^{summarizes} extent of void including ^{cement grout} ^{.8c.y} ^{grout} ^{.2c.y} ^{in void} take (West EPA)
- * Ask for ^① updated settlements ^② & strain plots ^③ in form agreed upon previously. ^{with help} Provide discussion on what CPC estimates is occurring with respect to settlement & strain movements
- * - separate plot of construction events

Auxil. Bldg. crack mapping when W@ bulkhead is completed will be made
* GEI suggest selecting two cracks & measuring with gage (washer & calipers)

Actually measured values
 ZE 90 mils
 AS2 75
 Δ_i = 10 mils
 Believe void on west side is reason for greatest movement on west side

Measurements in E-W direction (Δ₂)
 south face of CT EPA



* NRC wants load test report - CPC to submit according to Tech Spec

SWPS - Pier load test

Have problem w/ isolating friction on pier - Concern for lateral stability during application of load
 Considering alternatives (plate load test)
 - Region III suggestion - Submit alternatives to pier load test
 NRC will review

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* Need to set up another conf. call on CPC Jun 9, 1983 submittal
C may want

CPC is recalculating calibration of Carlson stress meters
Reason - Back-up of telltale if load shift is occurring -

Discussion on VAT Approach

Describe when CT-1 is to be completed what else is finished?
W8 grillage is jacked & EPA is therefore supported

CT-1 and W-8 support EPA
CT-1 has 60% addtl. capacity (pier & fdm)

* GEI - Has CPC ~~to~~ addressed creation of hard spot @ CT-1 when
pier W5 & drift to containment is being made (EPA
supported @ CT-1 & W8 grillage)

Put back jacking gages in reacting to settlement movements
beyond the three day period

CPC is allowing settlement to take place rather than jacking
(by not maintaining jacking)

* NRC wishes to consider the present jacking sequence
(active maintenance)

* (proposed) Change up jacking procedure - when wedges are loose, JACK
to required pressure. Now required to notify RGE if several
wedges become loose & active jacking may be required.

GEI

Backpacking behind soldier boards - Yes

* (Ross Landsman) Groot Lines from truck are long enough to reach VAT approach
in Turbine Bldg. or eqpt will be kept @ VAT in readiness

~~ERG provide calculations~~

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C-200 Spec - Unusual occurrences - certain contingencies
have mat'l, men & eqpt available
Will spell out contingencies when coming for approval

R. Landsman

- Before approving CT-1 - cover NRC comments on Jun 9, 1983
- Call to be held week of July 11, 1983
- Need to resolve issues before before Region approving VAT approach

* Discussed in 6/30/83 cont. call w/ CPC

Comments by GEI on VAT approach

* 1. If CT-1 is installed - Hard spot put in @ end of CT earlier than originally planned reduces stresses @ E.I. 659 stresses increase @ top of EPA & C.T

CPC should check (when going from KC-3 to KC-4) that stresses are OK because of hard spot @ CT-1

* 2. With large load on CT-1 should CT-2 Response (Rozdan) - Going to CT-3 because larger bearing area (CT-2 has room for only small footing)

3. Reason why change to VAT Economic or ~~early~~ to reach

* 4. Jacking Pressure maintenance { During underpinning
NRC has proposal Long term (today)

5. Why not do KC-5 from VAT & hold drift from KC-4 to KC-5

* 6. East Tie-back System (G-839) - CPC indicates present scheme is required - Diagonal truss design why not move diagonal piece & hold top of pier & get rid of water

7.

GEI comments on Mar. 18, 1983. submitted (Discussed)

1. Is friction angle

Natural sands are less pervious than fill sands
May be drained in natural sands, less drained in fill sands

2 Plot applies to granular materials - Dr is appropriate
(soils without plasticity)
Curve (2), Attach D - would not use relative

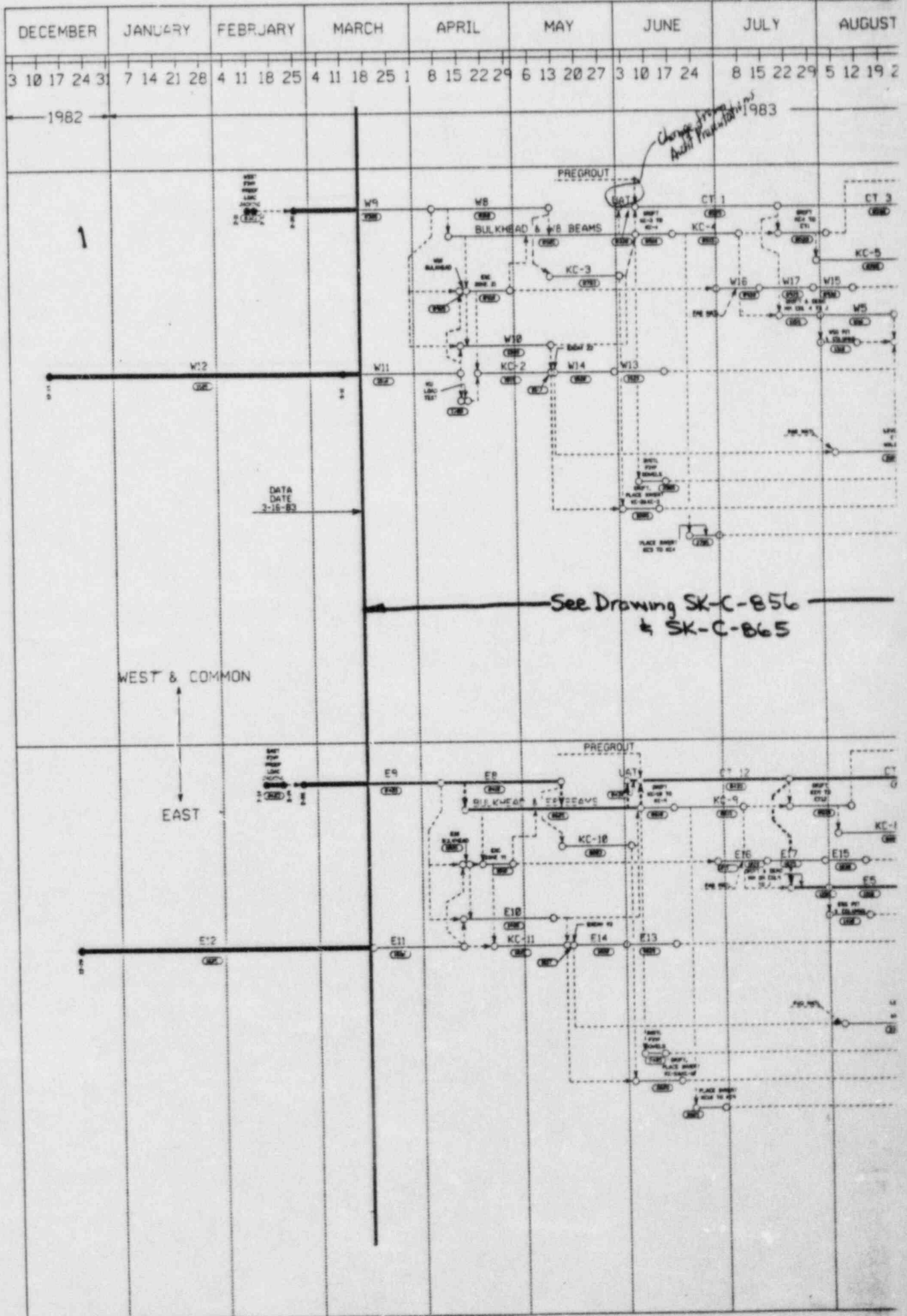
3 - Natural sands - strength imp't but compressibility
is more imp't (immediate & long term)
Cone penetrometer tells strength for

Would Consider
Comments by
Correlate dynamic cone penetrometers w/ degree of
compaction of natural sands. If $> 95\%$ then
can use ^{dynamic cone} penetrometer as index

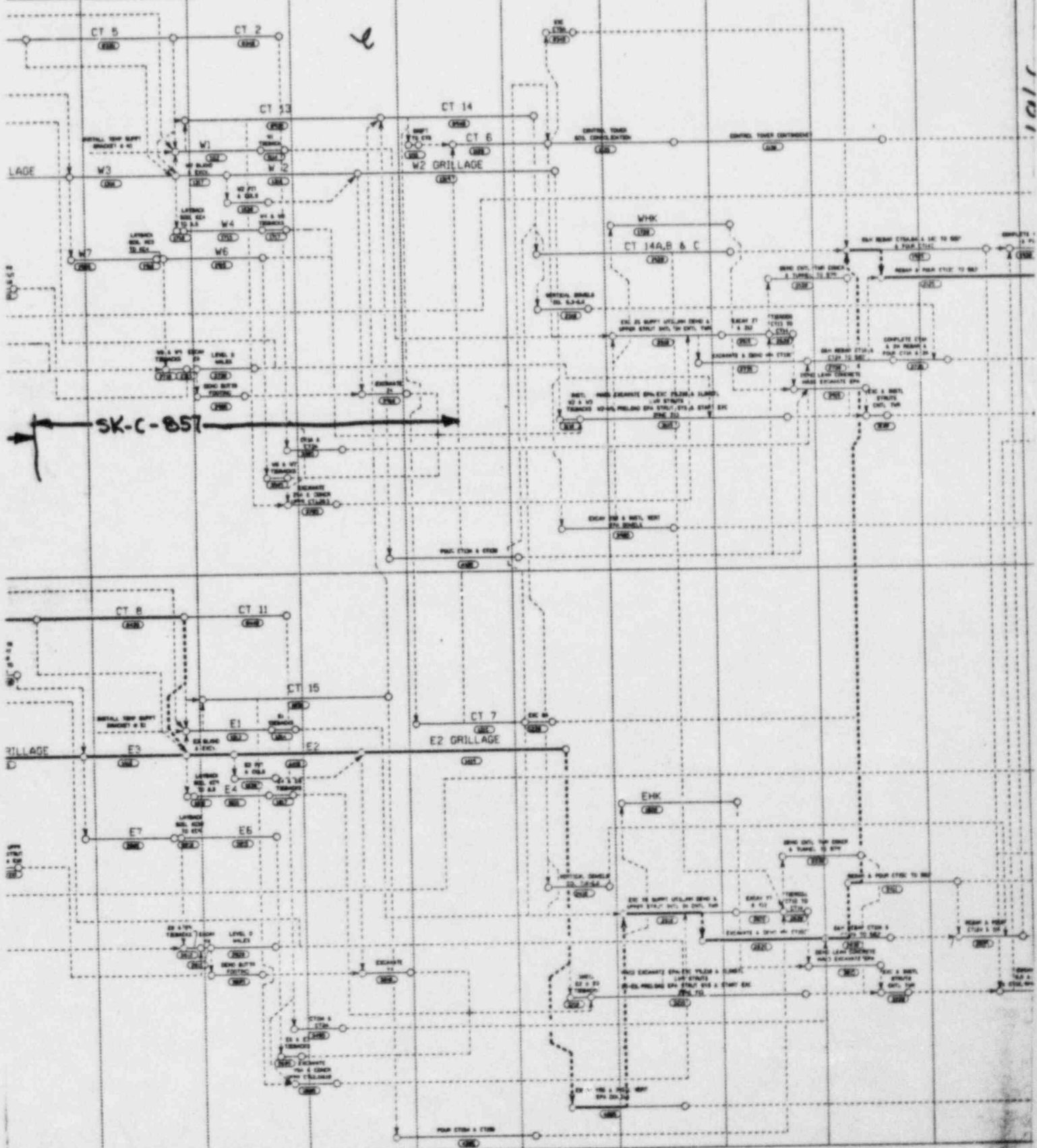
or
Undist samples - test for strength

or

or CBR (deformability) as index



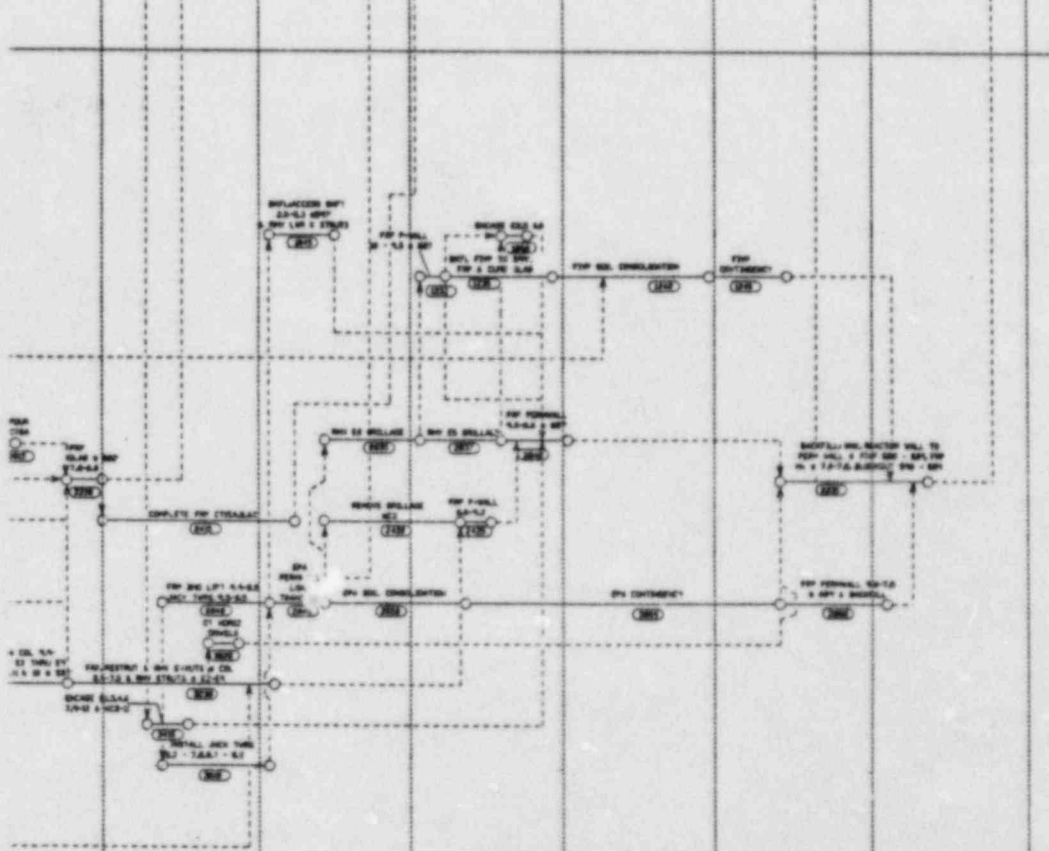
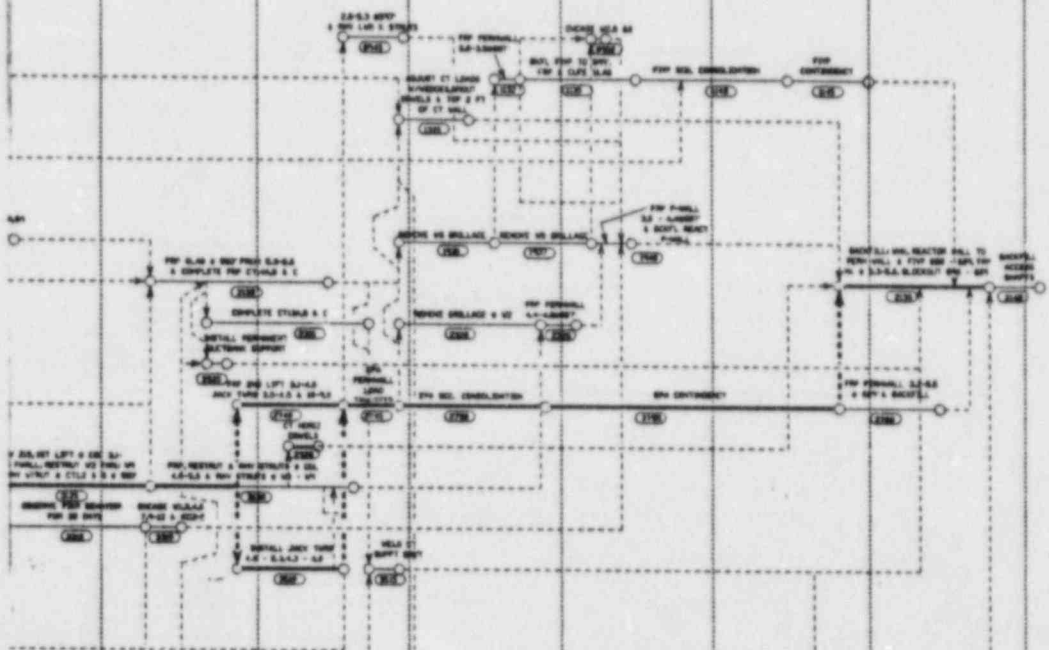
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16 23 30	7 14 21 28	4 11 18 25	2 9 16 23 30	6 13 20 27	3 10 17 24	2 9 16 23 30	6 13 20 27	4 11 18 25	1 8 15 22 29 6



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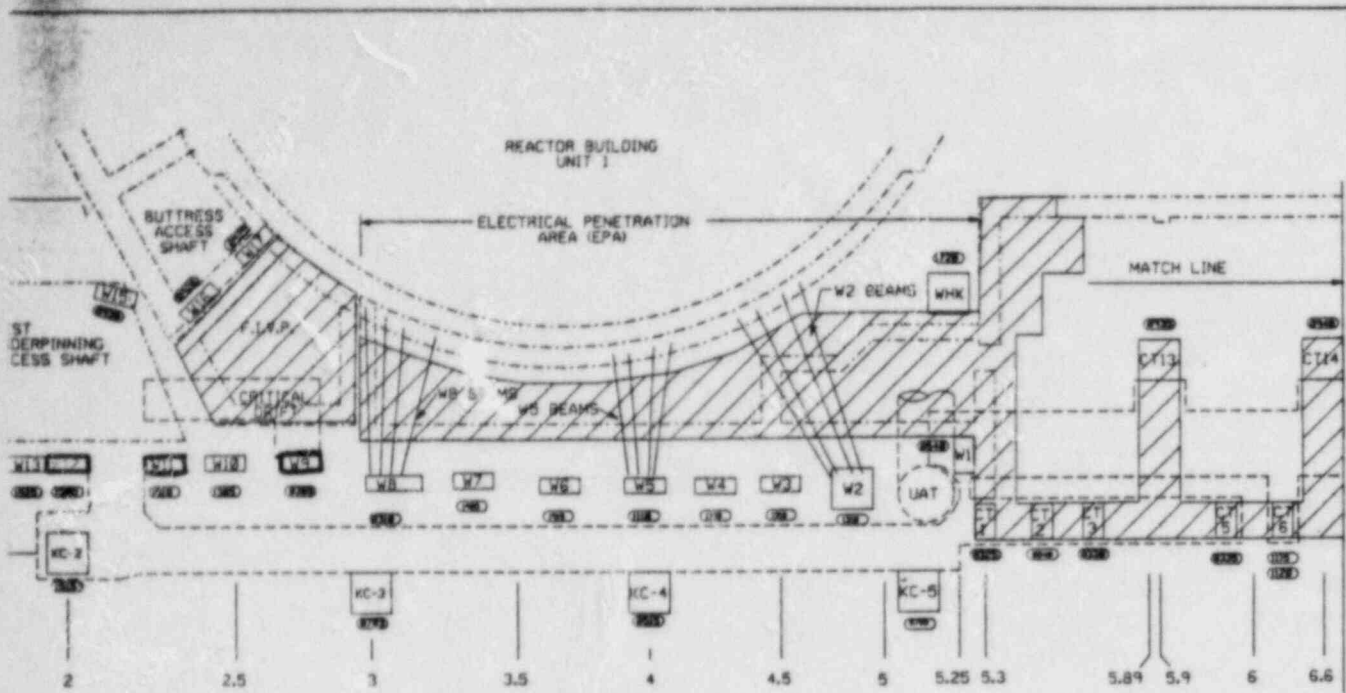


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 K —
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MILES
 AL

WEST &
 ↑
 EAST

J. Kona
5/16/83



CONSTRUCTION SCHEDULE

BUILDING UNDERPINNING

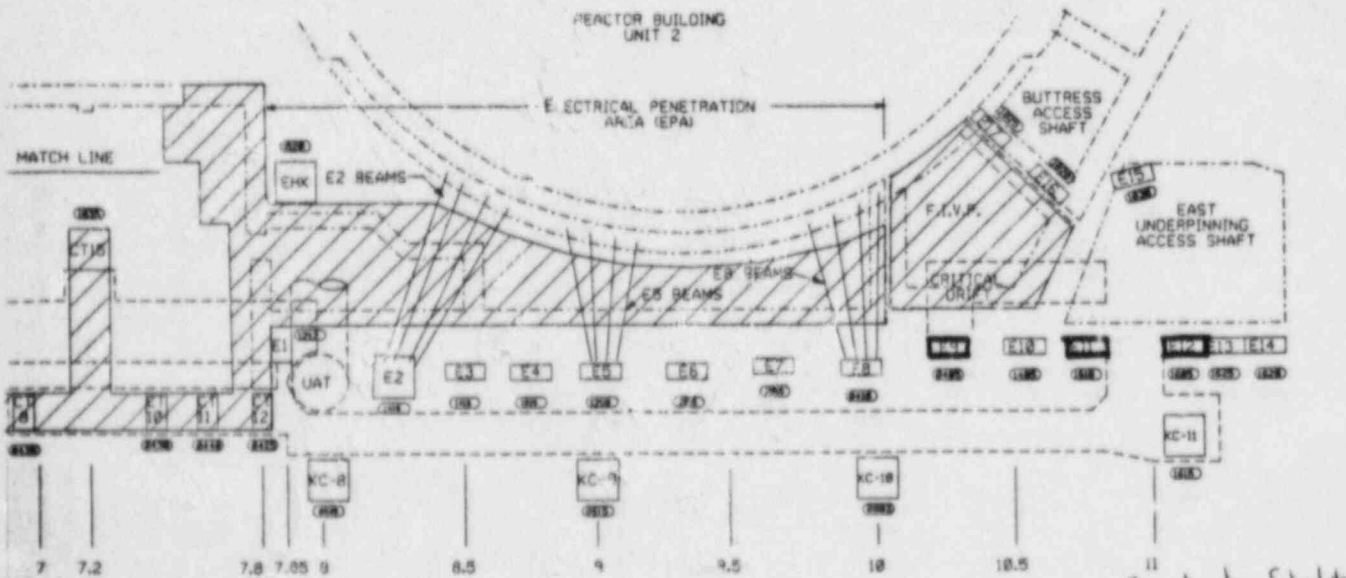
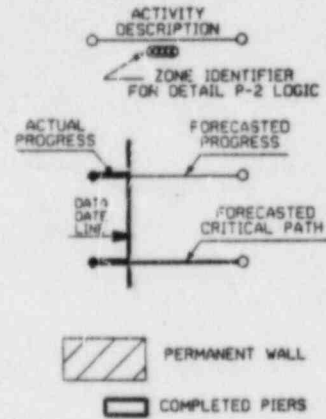
WEST SIDE SCHEDULE

4-14-83

2 REPORT WITH 03-16-83
DATE (MODIFIED MANUALLY)

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LEGEND



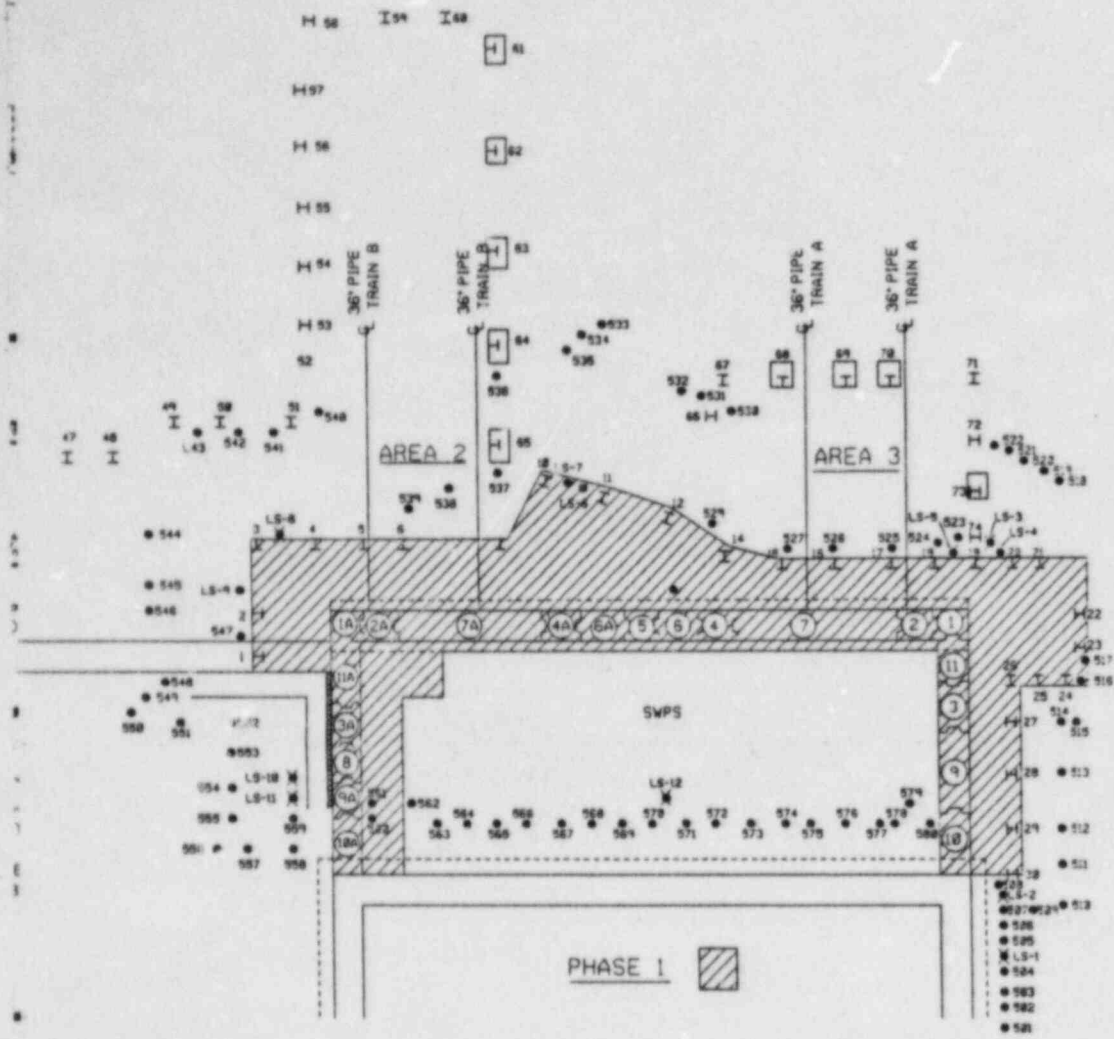
Construction Schedule for:
- AUXIL. BLDG. UNDERPINNING

(48.100)MO. ONSCH.001
DF18-1483

Rev'd 5/16/83 - Case Load Forecast

J. Kane
Rec'd 5/16/83

SCHEDULE



5/87

Construction Schedule for:
- SWPS Underpinning
- Underground Pipe Replacement
- BWS Ring Beam Repair

MILESTONE CONSTRUCTION SCHEDULE

SERVICE WATER PUMP STRUCTURE
UNDERGROUND PIPE REPLACEMENT

BWST RING BEAM REPAIR
& BALANCE OF REMEDIAL SOILS WORK

DATA DATE 3-22-83

ISSUE DATE 4-13-83

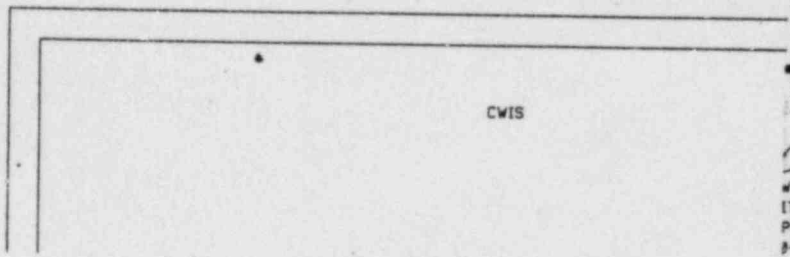
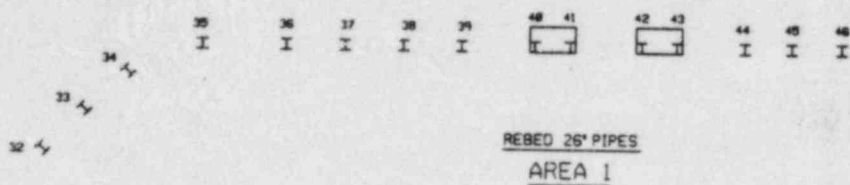
PRELIMINARY

SWPS
UNDERPINNING

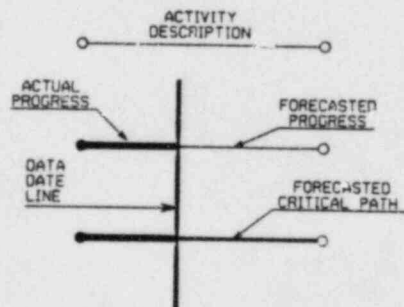
UNDERGROUND
PIPE
REPLACEMENT

BWST
RING BEAM
REPAIR

BALANCE OF
REMEDIAL SOILS WORK

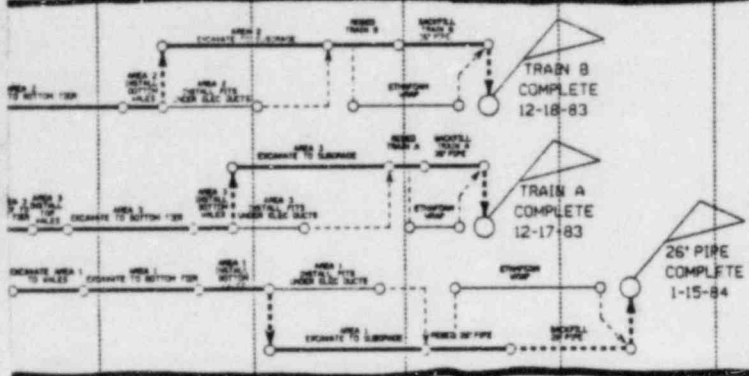
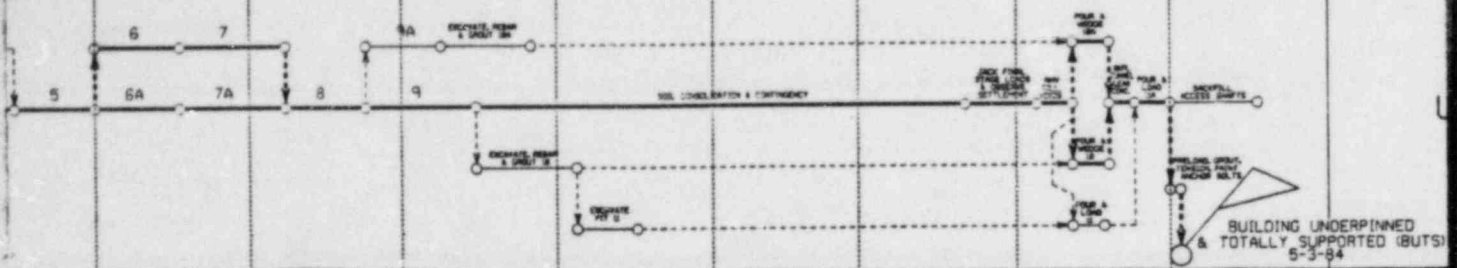


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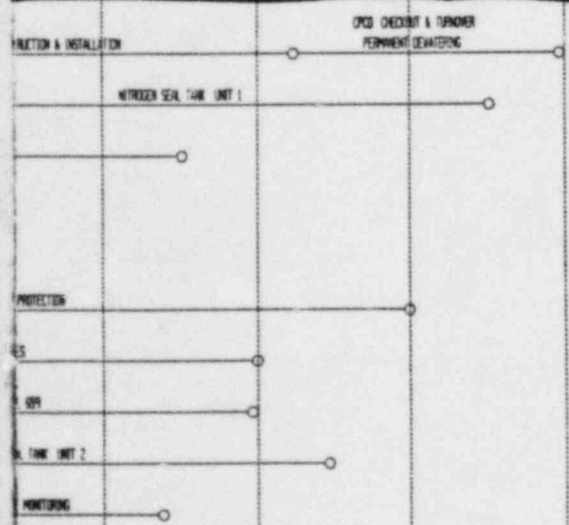


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SEPTEMBER			OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY					
6	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	2	9	16	23	30	8	15	22	29	6	13	20	27
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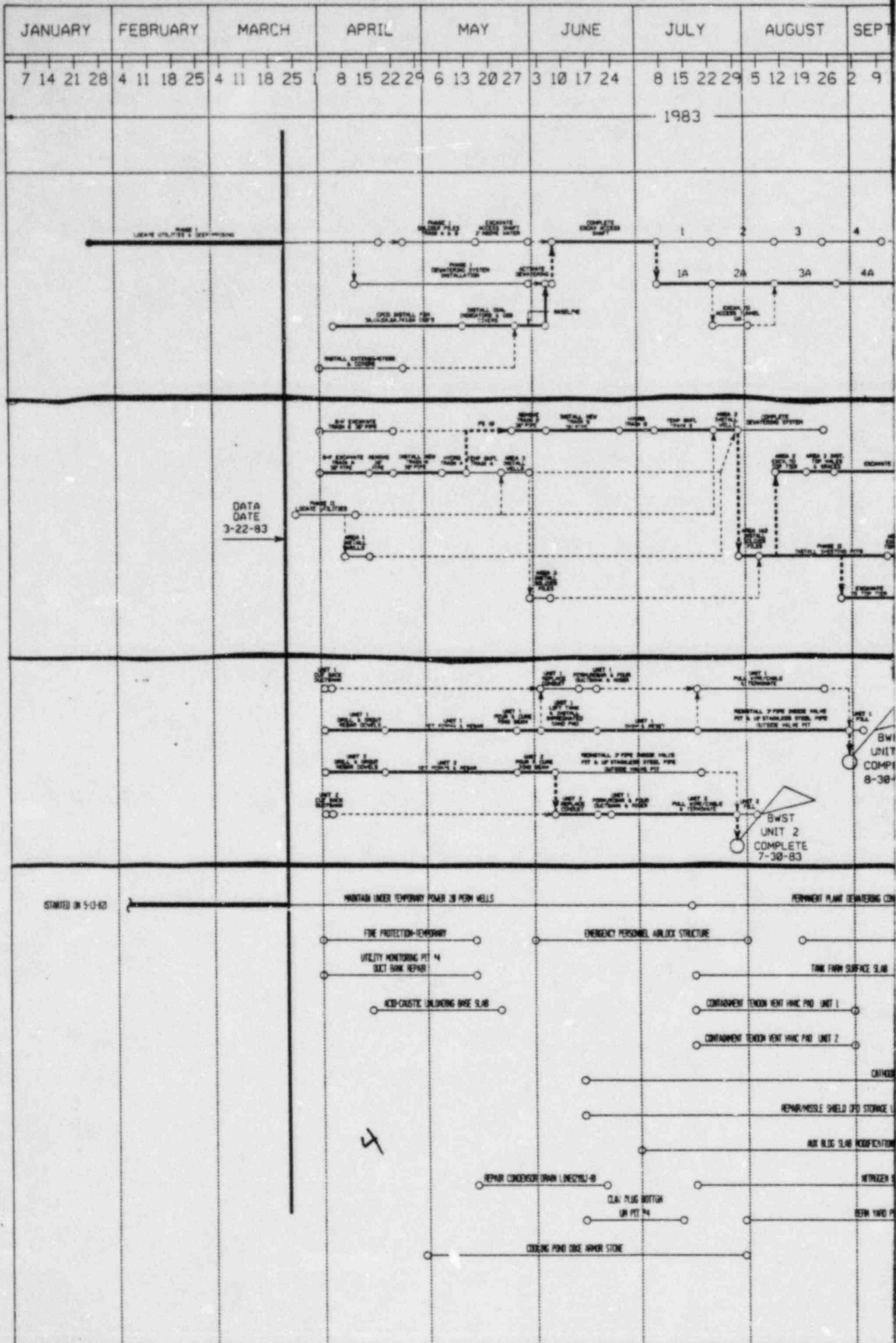


COMPLETE 83



M

REME



ROUTING AND TRANSMITTAL SLIP

Date: 9/1/83

TO: (Name, office symbol, room number, building, Agency/Post)

	Initials	Date
1. L. Heller Good Record	249	9/1
2. G. Lear		
3. J. Kane		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	<input checked="" type="checkbox"/> For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

A copy of the attached phone call record was provided to F. Rinaldi and D. Hood.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions.

FROM: (Name, org. symbol, Agency/Post)

J. Kane

Room No.—Bldg.

Phone No.

2-8153

5041-102

* GPO : 1981 O - 361-529 (148)

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

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8/30/83

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J. Kane

Discussions between J. Kane & R. Landsman in Phone Call of 8/30/83
(J. Kane returned R. Landsman's call of 8/29/83 which occurred while J. Kane was on vacation)

Region III (R. Landsman) requested that GES (J. Kane) provide assistance and comments on the following Midland related items:

1. (Refer to SSER No. 2, Fig. I-10). CPC is presently requesting authorization from Region III to proceed with drift excavation beneath Turbine Bldg. identified as (22) on Fig. I-1 and pg I-11 before jacking the loads into unfinished piers KC 3 and KC 10 ((16), Steps 27.3 & 27.4 on Pg. I-10). GES was asked if we had any problems with this request.

Background & Status of Underpinning Construction Information

- Piers completed to date where jacking has been completed include E/W 12; E/W 9; E/W 11; E/W 8, E/W 10, KC 2 and KC 11.
- The delay for jacking pier KC 3 is due to encountering massive concrete in drift excavation to pier KC 3 which has delayed completing pier KC 3. Date for jacking KC 3 and KC 10 is not presently known by R. Landsman.

GES Response To Region III (Given in phone call of 9/1/83. R. Landsman was on leave and unavailable on 8/31/83)

Recognizing that significant underpinning support has already been completed for the Turbine Bldg and that hourly monitoring of structural movement will be carried out while the requested drift (22) is undertaken, GES indicated to Region III that proceeding with the drift excavation before jacking loads into piers KC 3 and KC 10 was acceptable to GES. Unusual structural movement identified by in-place instruments would require stoppage of this proposed drift excavation, if the movements were to occur.

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J. Kane

2. R. Landsman recommended that NRC conduct design audit at Ann Arbor to verify the effects on Axil. Bldg. underpinning design due to adoption of lower soil modulus ($E_s = 1500$ ksf) rather than 3000 ksf) in order to expedite resolution of this issue. J. Kane agreed with recommendation and suggested audit be a minimum of two days to allow for the usual CPC presentation and then audit, ^{review} by NRC and consultant personnel. R. Landsman to contact D. Hood for his opinion and necessary arrangements.
3. CPC has provided a revised bracing system for Axil. Bldg underpinning work. This revision is in addition to the modified bracing which was addressed in R. Landsman's July 2, 1983 memo to RIII files on Revised Tiebacks. J. Kane has not received the revision identified by Region III personnel and indicated this item would need to be addressed by NRR Structural Engineering. R. Landsman to contact D. Hood / F. Rinaldi for resolution.
4. R. Landsman asked for NRR review comments on CPC June 9, 1983 submittal, ^(Load Test for Pier WII) to J. Harrison, Region III concerning the acceptability of proposed revisions to final lock-off procedures. GES Response Given On 7/1/83. GES would like to discuss this revision with our consultant, GEF, and get back to Region III sometime next week. Region III indicated that this item did not have immediate schedule requirements and could be postponed until the proposed design audit was held in Ann Arbor.



Docket Nos. 50-329/330

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 9 1983

1/37
Cep to: Heller
Kno

~~REDACTED~~
Revalde

MEMORANDUM FOR: G.E. Lear; Chief, Structural & Geotechnical Engineering Branch,
FROM: Elinor G. Adensam, Chief Licensing Branch No. 4 Division of Licensing
SUBJECT: CLARIFICATION OF NRR ASSISTANCE IN RESOLVING MIDLAND SOILS ISSUES

Recent discussions with Region III have occurred to clarify R. F. Warnick's memorandum of March 16, 1983 (Enclosure 1) addressing NRR assistance in resolving Midland soils issues. The clarification focused on the statement that "Region III has assumed all responsibility for reviewing the remedial soils work at the Midland site" Region III agrees that this statement does not apply to changes representing a significant departure from the Midland SER and its supplements or associated hearing testimony. Such changes are to be handled through the normal licensing process (i.e., by formal request from CPCo to NRR and SER supplements).

Accordingly, in the execution of the Task Interface Agreement 83-40 (TAC #51341; accomplishment No. 141433) included in Enclosure 1, NRR should be alert to recognize early where changes requested by CPCo represent a significant departure from our earlier evaluation, and to assure that such requests and reviews are accomplished in accordance with NRC regulations for licensing reviews and documentation requirements. Please assure that any such changes are identified promptly to the Licensing Project Manager, Darl Hood, in order that proper coordination and documentation be achieved.

Elinor G. Adensam
Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Enclosure:
As stated

8309300010

TASK INTERFACE AGREEMENT

PROBLEM: Midland 1/2 - Soils Issue

LEAD OFFICE: I&E NRR REGION III JOINT

NOTIFICATION:

REFERENCES: Memo to TNovak fm RWarnick dated 03/16/83, subject: NRR Assistance in Resolving Midland Soils Issue

ACTION PLAN:

- NRR: 1. Assist Region III in reviewing the remedial soils work at Midland. Assistance is expected to include evaluation of possible deviations from licensee commitments in the SER, advice to the Region III reviewer, and occasional site visits. (SGTEB)

The exact schedule cannot be defined but the PM forecasts that NRR assistance after ~~7/2/83~~ ^{6/84} is unlikely.

Region III will contact NRR (PM) on case basis.

NRR: Designate Lead Project Manager to assign TACS and coordinate correspondence, meetings, and reports (ORB# /LB#4 - D. Hood).

OFFICE COORDINATORS:

T.H. T. Ippolito (X27415)

R. Vollmer 5/31/83 (X27207)

APPROVED:

T. Novak 4/15 (X27425)

N.A. C. Norelius
 I&E
 Region - III

F. J. Miraglia 4/15 (X27492)

NRR

- | | | | |
|---------------------|-------------------|------------------|----------------------|
| cc: V. Stello, ROGR | J. Sniezek, I&E | T. Speis, NRR | G. Holahan, NRR |
| Regional Admin. | R. DeYoung, I&E | D. Eisenhut, NRR | Lead Project Manager |
| J. Taylor, I&E | J. Heltames, AEOD | R. Vollmer, NRR | R. Purple, NRR |
| | H. Denton, NRR | G. Laines, NRR | B. Madigan, NRR |
| B. Jordan, I&E | M. Cice, NRR | T. Novak, NRR | |
| B. Beer, I&E | R. Vetsch, NRR | F. Miraglia, NRR | |
| N. Mills, I&E | H. Thompson, NRR | F. ... | |

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

10/1/6

MEMORANDUM FOR: T. Novak, Assistant Director for Licensing, Division
of Licensing

FROM: R. F. Warnick, Director, Office of Special Cases

SUBJECT: NRR ASSISTANCE IN RESOLVING MIDLAND SOILS ISSUE

Region III has assumed all responsibility for reviewing the remedial soils work at the Midland site. However, we expect the licensee to periodically request relief from commitments made in the SSER. NRR's assistance will be requested when this occurs.

The expertise of NRR will also be required from time to time for consultation with Mr. Ross Landsman during his review of the remedial soils activities. A schedule cannot be defined at this time. NRR's assistance will be requested on a case by case basis as the need arises.

We also recommend that periodic site visits be made in order for your personnel to maintain their awareness of the underpinning effort. These visits could be limited to observations of critical work activities such as the pier 11 load tests and the drift work to the control tower. The schedule for these activities can be obtained from Ross Landsman.

Should you have any questions please contact Wayne Shafer (FTS 384-2656).

RF Warnick

R. F. Warnick, Director
Office of Special Cases

cc: A. B. Davis
J. H. Sniezek, IE
J. C. Stone, IE

✓ D. Hood, NRR M/S-116

~~831214004~~

7/87

Conf Call - Tuesday @ 1:15 p.m.

CPC
R. Wheeler
K. Razdan

NRC Beggs
R. Landsman

NRC-NRR
J. Kane

Call initiated by R. Wheeler at direction of K. Razdan.

Discussed:

Site visit timing in conjunction with pier load test

Crack originally 25 mils - News-Jenny doing baseline survey
is now 33 mils (roof) - another crack

~~XXXXXXXXXX~~ Better information on widening of crack will be provided
Friday 4/22/83

Jacking on Pier W11 - Start Friday or Saturday 4/22 & 4/23
Expect 30 hours

Site visit Tues - Wed & Thursday - 4/26, 27 & 28/83