CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	14	3-26-85

FROM CONTRACTOR: Harry Pepper + Associates, Inc.

TO: Henry von Oesen + Associates, Inc

PROJECT TITLE AND LOCATION: Holcomb Blvd WTP, MCB, Camp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	Cast-In-Place Concrete			
	1.2.1	Reinforcing Drawings	4	RA	4/3/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: One Copy to ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pepper

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractor's Approval Appears Appropriate

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	4/3/85	[signature]

2 VOC 1982 11 32

LOTT STEEL PRODUCTS CO., INC.

CONTRACT NO.

S. O. NUMBER 85132

REINFORCING SHOP ORDER

STRUCTURE EXP. - HOLCOMB BLVD. WATER TREAT. PLANT

SHEET ____ OF ____

SHIP TO HARRY PEPPER CONST

DATE

LOCATION CAMP LE JEUNE, N.C.

MADE BY LOTT CKD. BY

MATERIAL FOR FDNS. RAW WATER RESERVOIR

REFERENCE DWG. 5

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
* 1		6	34-2	B601	9		34-2						1-11		74-3	33-9	
* 2			33-10	B602	9		33-10						1-11		73-9	33-6	
* 3			33-8	B603	9		33-8						1-11		73-3	33-3	
* 4			33-4	B604	9		33-4						1-11		72-6	33-0	
* 5			33-2	B605	9		33-2						1-10		71-11	32-9	
* 6			32-10	B606	9		32-10						1-10		71-3	32-5	
* 7			32-8	B607	9		32-8						1-10		70-8	32-3	
* 8			32-4	B608	9		32-4						1-10		70-0	31-11	
* 9			32-2	B609	9		32-2						1-10		69-6	31-9	
* 10		6	31-9	B610	9		31-9						1-10		68-9	31-5	
11																	
12		5	4-8	B501	2	1-5	3-3										
13			8-2	B502	2	3-1	5-1										
14			10-8	B503	S4	10	2-9	3-6	2-9			10					
15			5-2	B504	2	10	3-6					10					
16			6-7	B505	17		10	2-9	3-0								
17			9-0	B506	17		3-0	3-0	3-0								
18			10-2	B507	3		2-0	1-5	3-4	1-5	2-0		1-0				
19			23-9	B508	3		2-0	1-5	20-4				1-0				
20		5	4-0	B509	2	2-0	2-0										
21																	
22		4	4-3	B401	16	8	1-1	2-6									
23			5-4	B402	20		8	4-0	8								
24			5-0	B403	20		8	3-8	8								
25			7-7	B404	2	1-6	4-7					1-6					
26			7-6	B405	T3		LAP = 2-0									1-9	
27		4	8-6	B406	T3		LAP = 2-0									2-1	
28																	
29																	
30																	
31																	

* SHIP AS STRAIGHT BAR

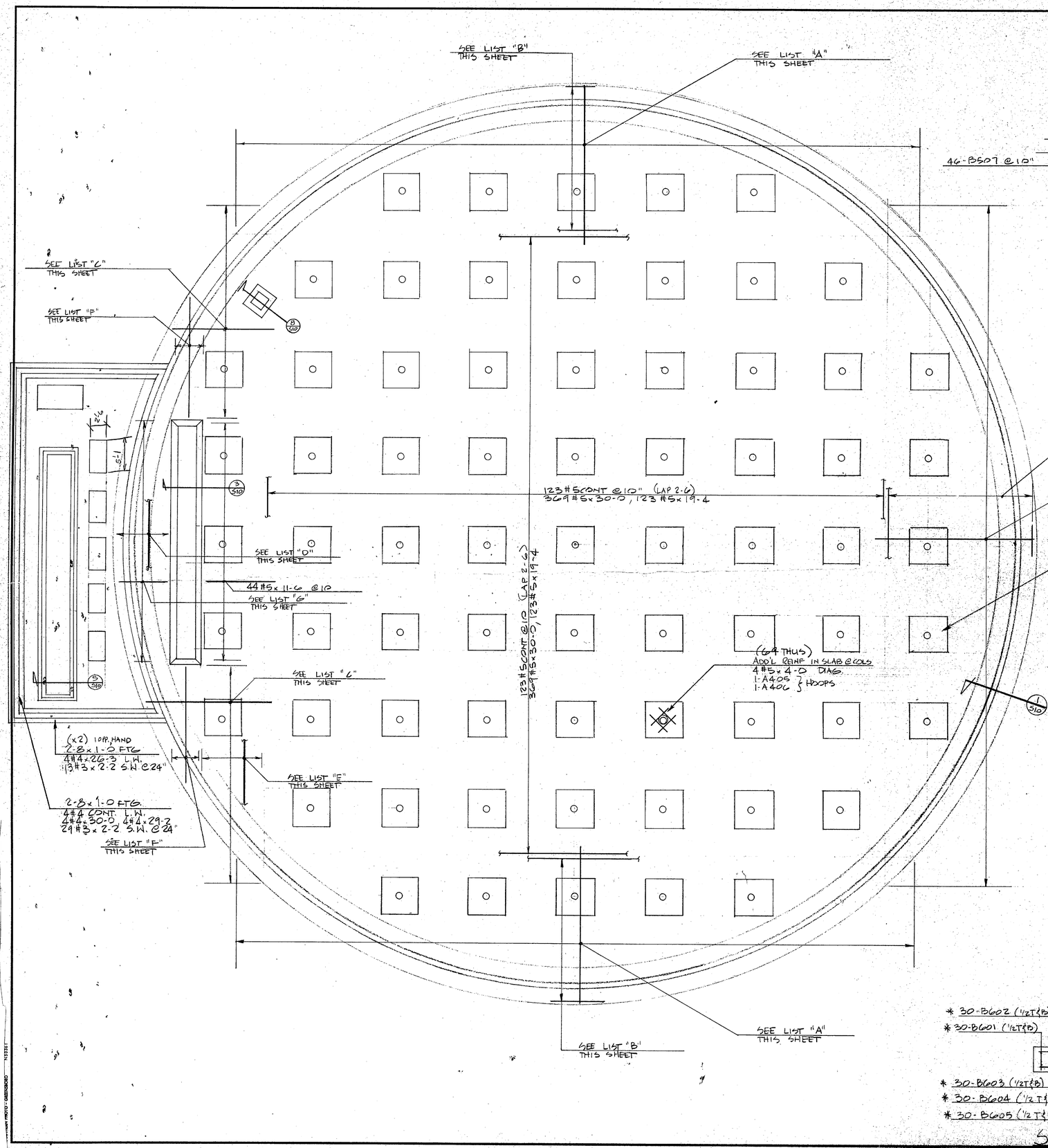
SHIP

CUST. ORDER NO.

GRADE 60

SHEET TOTAL

ORDER TOTAL



LIST "C" (2 THU'S)

#5 @10

2#5x3-3
3#5x4-3
3#5x5-3
2#5x6-3
3#5x7-3
3#5x8-3
2#5x9-3
3#5x10-3
3#5x11-3
2#5x12-3
3#5x13-3
3#5x14-3
2#5x15-3
3#5x16-3
2#5x17-3
2#5x18-3
1#5x19-3

LIST "D"

#5 @10 (FROM L TO R)

1#5x4-4
1#5x7-10
1#5x11-6
1#5x14-10
1#5x18-6
1#5x22-0
1#5x25-6
1#5x29-0
1#5x32-6
1#5x36-2
1#5x39-8

LIST "E"

#5 @10 (FROM L TO R)

2#5x33-5
2#5x36-2
2#5x30-0, 1#5x16-4
2#5x30-0, 1#5x19-10
2#5x30-0, 1#5x23-6
2#5x30-0, 1#5x27-0
2#5x30-0, 1#5x30-6
2#5x30-0, 1#5x34-0
3#5x30-0, 1#5x10-0
3#5x30-0, 1#5x13-8
3#5x30-0, 1#5x17-2
3#5x30-0, 1#5x20-8

CONT. REINF (LAP 2'-6")

LIST "A" (3 THU'S)

#5 @10" (FROM L TO R)

2#5x3-3
3#5x4-3
3#5x5-3
2#5x6-3
3#5x7-3
3#5x8-3
2#5x9-3
3#5x10-3
3#5x11-3
2#5x12-3
3#5x13-3
3#5x14-3
2#5x15-3
3#5x16-3
3#5x17-3
2#5x18-3
3#5x19-3
3#5x20-3
3#5x21-3
2#5x22-3
3#5x23-3
3#5x24-3
3#5x25-3
3#5x26-3
3#5x25-3
3#5x24-3
3#5x23-3
2#5x22-3
3#5x21-3
3#5x20-3
3#5x19-3
2#5x18-3
3#5x17-3
3#5x16-3
2#5x15-3
3#5x14-3
3#5x13-3
2#5x12-3
3#5x11-3
3#5x10-3
2#5x9-3
3#5x8-3
3#5x7-3
2#5x6-3
3#5x5-3
3#5x4-3
2#5x3-3

LIST "B" (3 THU'S)

#5 @10 (FROM TOP TO BOT.)

1#5x4-4
1#5x7-10
1#5x11-6
1#5x14-10
1#5x18-6
1#5x22-0
1#5x25-6
1#5x29-0
1#5x32-6
2#5x19-4
2#5x21-1
2#5x22-8
2#5x24-6
2#5x26-5
2#5x28-1
2#5x29-11
2#5x31-8
2#5x33-5
2#5x35-2
2#5x30-0, 1#5x16-4
2#5x30-0, 1#5x19-10
2#5x30-0, 1#5x23-6
2#5x30-0, 1#5x27-0
2#5x30-0, 1#5x30-6
2#5x30-0, 1#5x34-0
3#5x30-0, 1#5x10-0
3#5x30-0, 1#5x13-8
3#5x30-0, 1#5x17-2
3#5x30-0, 1#5x20-8

CONT. REINF. (LAP 2'-6")

LIST "F" (2 THU'S)

#5 @10 (FROM L TO R)

1#5x12-10
1#5x15-2
1#5x17-6
1#5x19-10
1#5x22-2
1#5x24-6
1#5x26-10

LIST "G"

#5 @10

2#5x4-3
3#5x5-3
2#5x6-3
2#5x7-3
3#5x8-3
3#5x9-3
3#5x10-3
3#5x11-3
3#5x10-3
3#5x9-3
3#5x8-3
3#5x7-3
3#5x6-3
3#5x5-3
2#5x4-3

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

Submitted for Government approval.

Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Perre DATE 3-26-85

Mschock 3-22-85

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

LSP LOTT STEEL PRODUCTS CO.

PROJECT EXP. HOLCOMB BLVD. WATER TREAT PLANT
LOCATION CAMP LE JEUNE N.C.
CONTRACTOR HARRY PEPPER & ASSOC
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 3-15-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 185132-S SERIES B

LSP LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

S. O. NUMBER 85132

REINFORCING SHOP ORDER

STRUCTURE HOLCOMB WWT PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER

DATE 9/21/85

LOCATION CAMP LEJUNE, N.C.

MADE BY JOHNSON CKD. BY _____

MATERIAL FOR ROOF SLAB

REFERENCE DWG. 21-"P"

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	R	O	WEIGHT
1		4	2-4	P400	2	8	1-8							4			
2			2-0	P401	1	4	1-8										
3			2-6	P402	20		1-8	0-8	2								
4			3-0	P403	2	1-6	1-6										
5			3-8	P410	2	8	3-0										
6		4	3-0	P411	2	8	2-4										
7																	
8		3	1-2	P300	2	6	8										
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	

930' - 1' SB (W/PT) (5-0)

250 pc-2" HC (W/PT)

SHIP _____

CUST. ORDER NO. _____

GRADE 60

SHEET TOTAL _____

ORDER TOTAL _____

REPLACEMT FOR SH 7 & 14

LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE HOLCOMB BLVD WWT PLANT

SHEET 1 OF 1

SHIP TO HARRY PEPPER

DATE 9/25/85

LOCATION CAMP LEJUNE, N.C.

MADE BY _____ CKD. BY JOHNSON

MATERIAL FOR ROOF SLAB, BEAMS & GIRDERS

REFERENCE DWG. 24"-P"

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	R	O	WEIGH
1		7	10-6	P701	1	4	10-2							4			
2		7	6-11	P702	1	4	6-7							4			
3																	
4																	
5		5	5-8	P505	1	4	5-4							4			
6			10-6	P506	1	4	10-2							4			
7		5	6-11	P507	1	4	6-7							4			
8																	
9																	
10		4	3-8	P406	2	8	3-0										
11			10-6	P407	1	4	10-2							4			
12			5-8	P408	1	4	5-4							4			
13		4	6-11	P409	1	4	6-7										
14																	
15																	
16		3	4-8	P308	S-4	1-0	1-0	8	1-0			1-8					
17		5	4-8	P309	T-6	1-8	1-0	8	1-0	4							
18		3	6-0	P310	S-4	1-0	1-8	8	1-8			1-0					
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	

748' - 1" SB W/PT (5'-0")
200pc - 2½" HC W/PT @ 48"

SHIP _____

CUST. ORDER NO. _____

GRADE 60

SHEET TOTAL _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

S. O. NUMBER 85132-23"P"

REINFORCING SHOP ORDER

STRUCTURE HOLCOMB BLVD WWT PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER

DATE 9/24/85

LOCATION CAMP LEJUNE, NC.

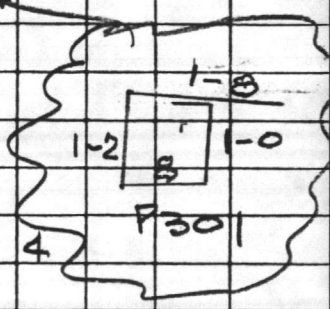
MADE BY JOHNSON CKD. BY _____

MATERIAL FOR SLAB, BEAMS & GIRDERS

REFERENCE DWG. 23"P"

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	R	O	WEIGHT
1		9	6-9	P900	1	9	6-0							4			
2																	
3																	
4		7	6-2	P700	1	8	5-8							4			
5																	
6																	
7		5	6-0	P500	1	4	5-8							4			
8			12-11	P501		4	12-7							4			
9			11-11	P502	1	4	11-7							4			
10		5	6-4	P503	1	4	6-0							4			
11																	
12																	
13																	
14		4	6-4	P404	1	4	6-0							4			
15		4	3-8	P410		8	3-0										
16																	
17		3	4-10	P-301	T-6	1-8	1-2	8	1-0	4							
18			5-0	P302	S-4	1-0	1-2	8	1-2			1-0					
19			6-0	P303	T-6	1-8	1-8	8	1-8	4							
20			6-0	P304	S-4	1-0	1-8	8	1-8			1-0					
21			5-10	P305	T-6	1-8	1-8	8	1-6	4							
22			2-4	P306	S-9	4	8	4	8			4		4			
23		3	1-6	P307	2	16	1-0										
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	



NOTE: P305 SIM

410' - 1" SB W/PT (5'-0")

105pc - 2" HC W/PT @ 48"

SHIP _____

CUST. ORDER NO. _____

GRADE 60

SHEET TOTAL _____

ORDER TOTAL _____

Item #1

I hereby certified that the materials indicated shown and marked in this submittal, shop drawings, catalog data, etc. are approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated spaces and is:

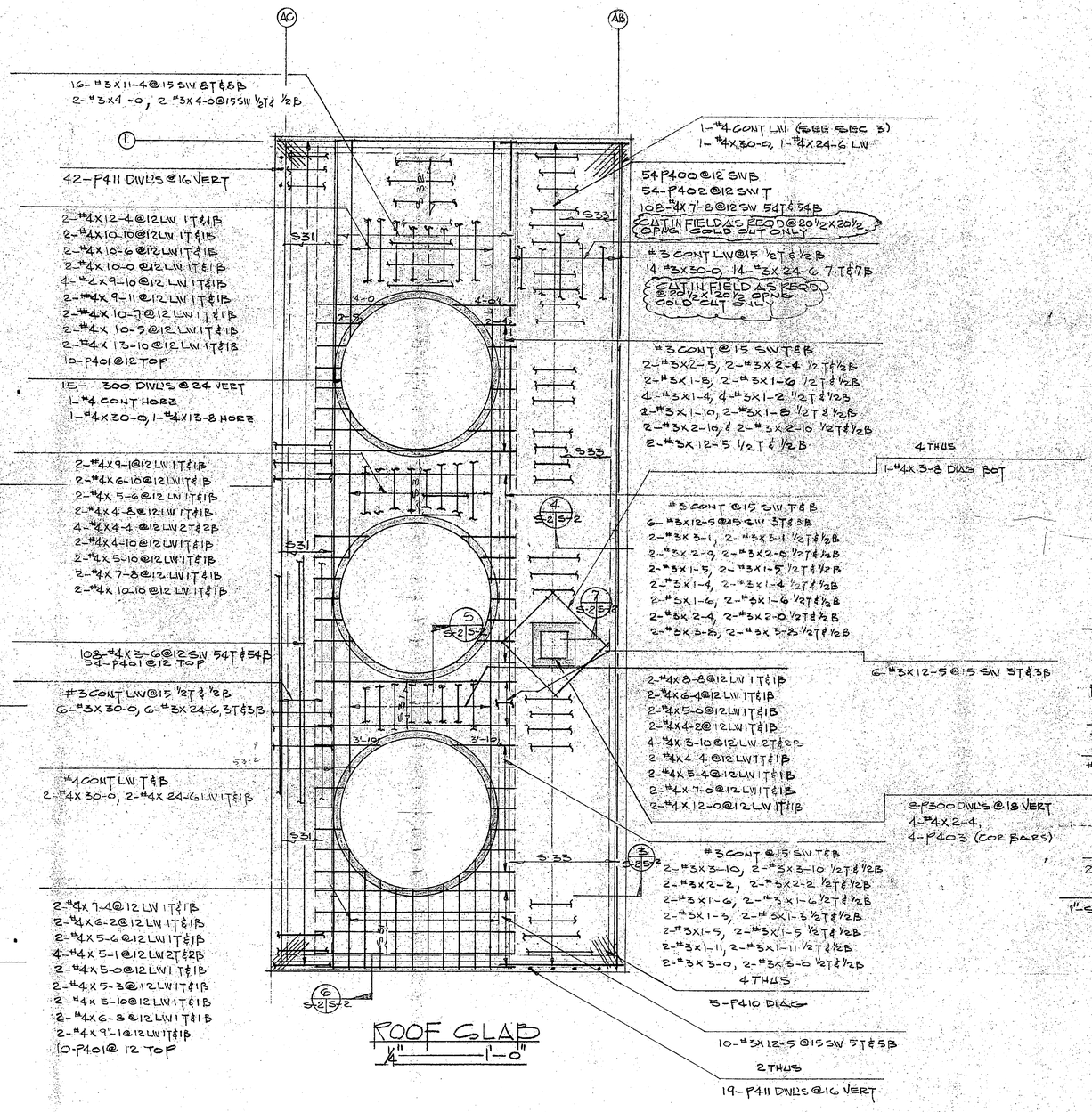
X Approved for use.

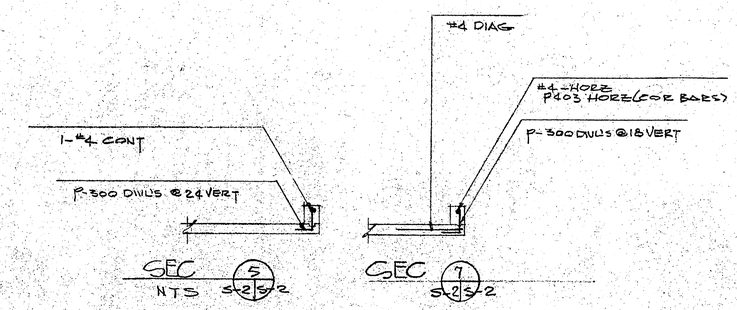
____ Submitted for Government approval.

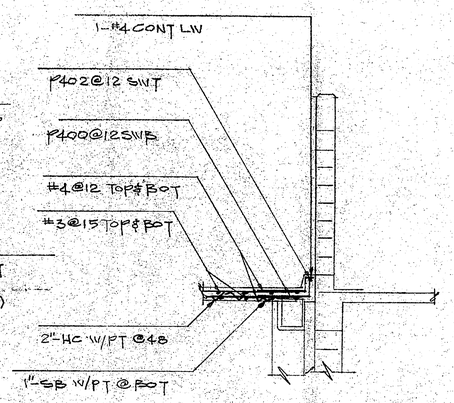
____ Approved for use subject to Government approval of specific deviation.

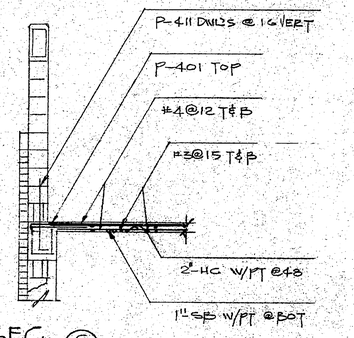
Authorized Reviewer _____ DATE ____

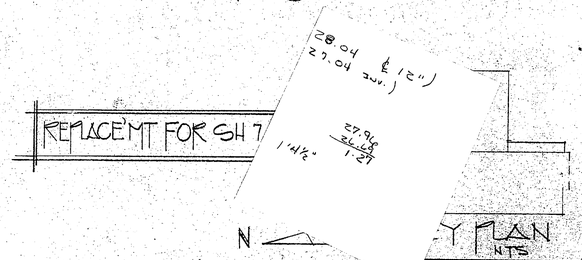
Signature CQC Rep. _____ DATE 10-8-87











FOR APPROVAL ONLY
Not For Construction

LOTT STEEL PRODUCTS CO.

PROJECT HOLCOMB BLVD WWT PLANT
LOCATION CAMP LEJUNE, N.C.
CONTRACTOR HARRY PEPER
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
AS INDC	NAME Johnson	NAME	NAME
	DATE 7/21/83	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 8532-21 SERIES P

(℄ 24" 29.00) 28.04 (℄ 12")
(28.00 INV.) 27.04 INV.)

28.00
27.69

27.96
26.69
1.27

27.04

1'4½"

28.04

Item #1

I hereby certified that the materials, equipment, shown and marked in this submittal, shop drawings, catalog data, etc., are approved/proposed to be incorporated into Contract No. N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated spaces and is:

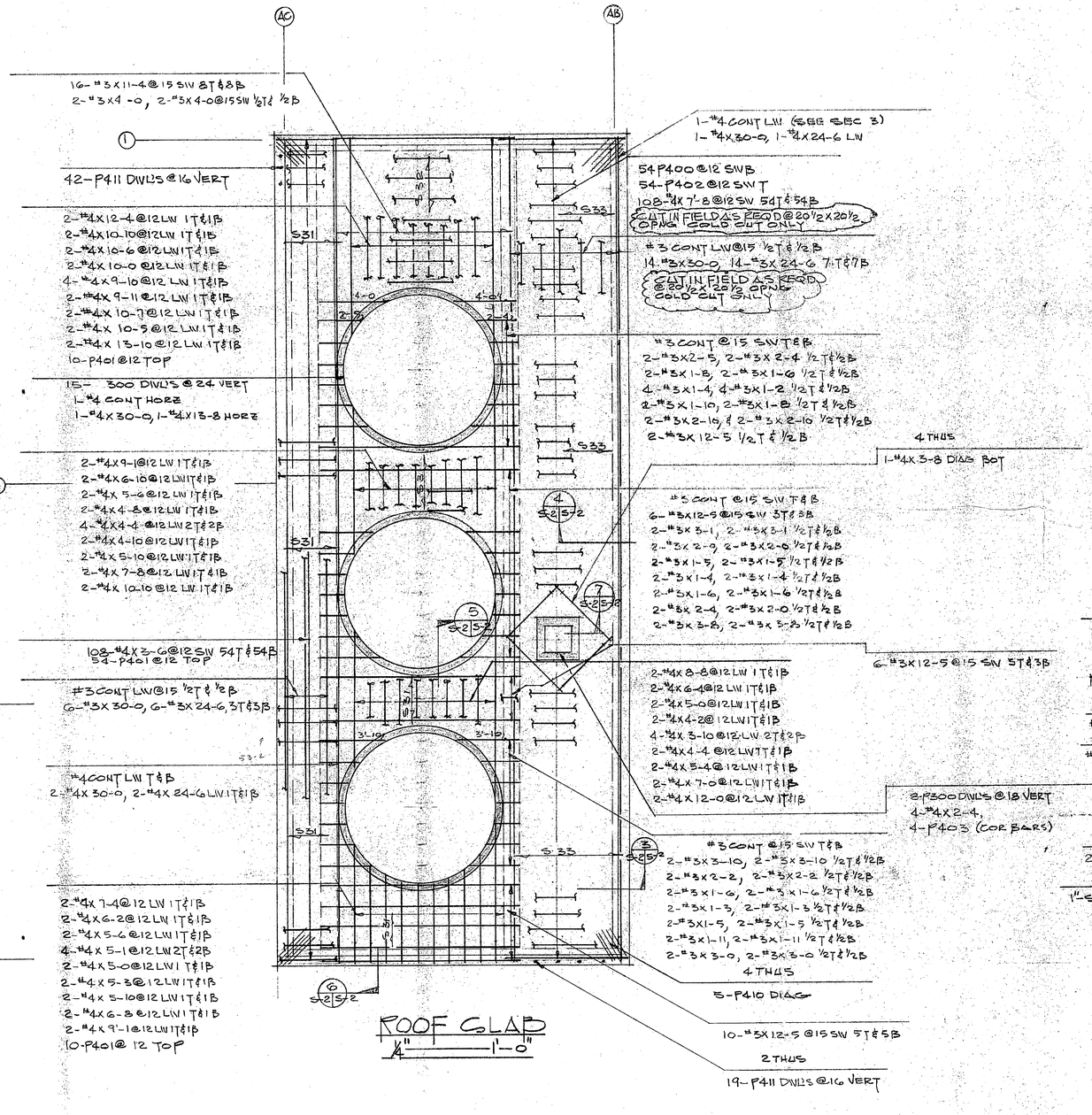
X Approved for use.

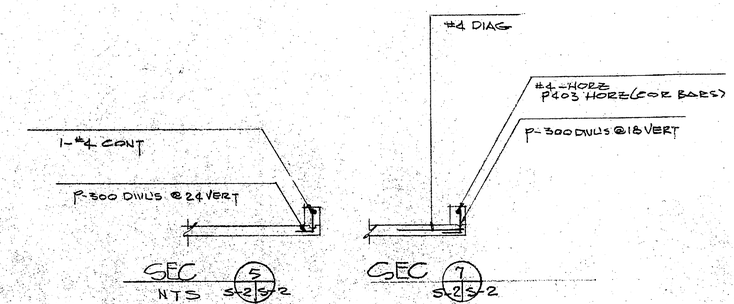
____ Submitted for Government approval.

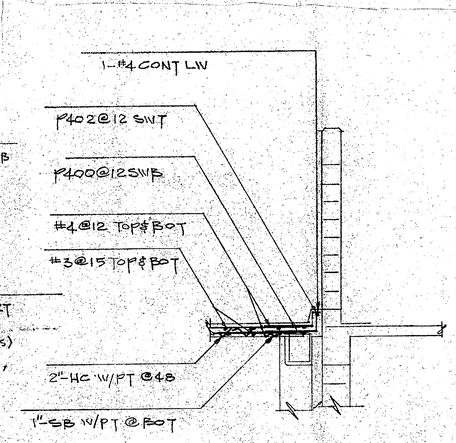
____ Approved for use subject to Government approval of specific deviation.

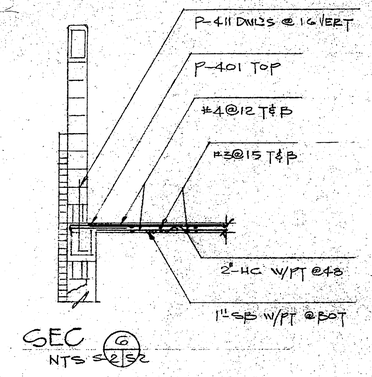
Authorized Reviewer _____ DATE ____

Signature CQC Rep. [signature] DATE 10-8-83

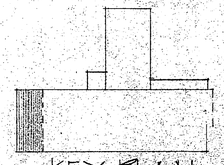








REPLACEMT FOR SH 7&14



N

KEY PLAN
NTS

FOR APPROVAL ONLY
Not For Construction

LSP LOTT STEEL PRODUCTS CO.

PROJECT HOLCOMB BLVD WWT PLANT
LOCATION CAMP LEJUNE, N.C.
CONTRACTOR HARRY PEPER
ARCHITECT

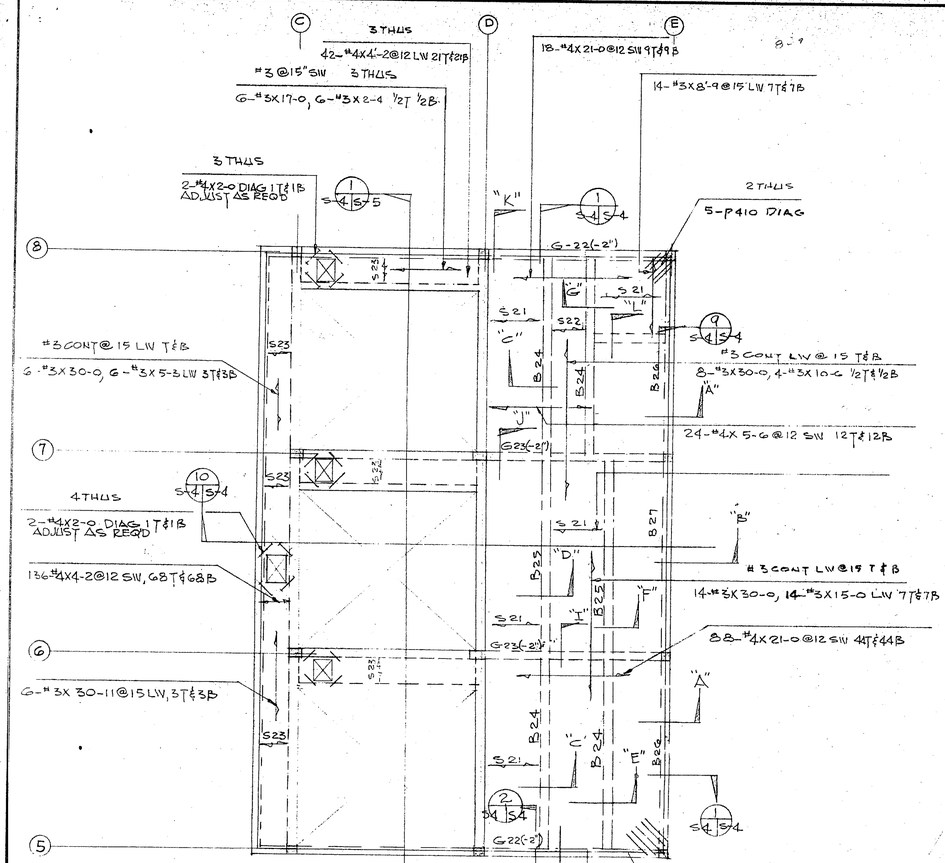
SCALE	DRAWN BY	CHECKED	APPROVED
AS INDIC	NAME JOHNSON	NAME	NAME
	DATE 9/21/83	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

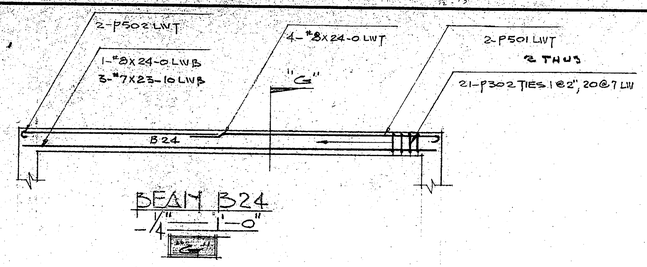
DRAWING NO. 85132-21 REVISION P

SOUTHERN PHOTO - GREENSBORO N1232-1

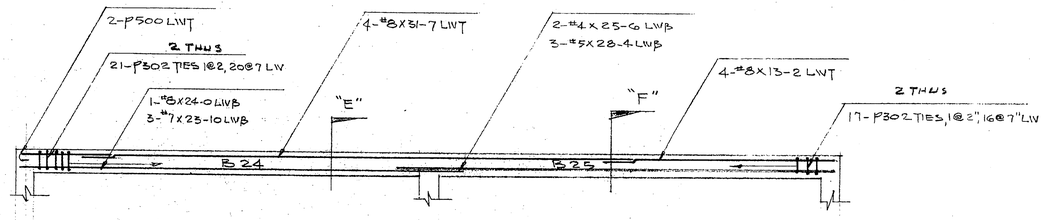
Item #2



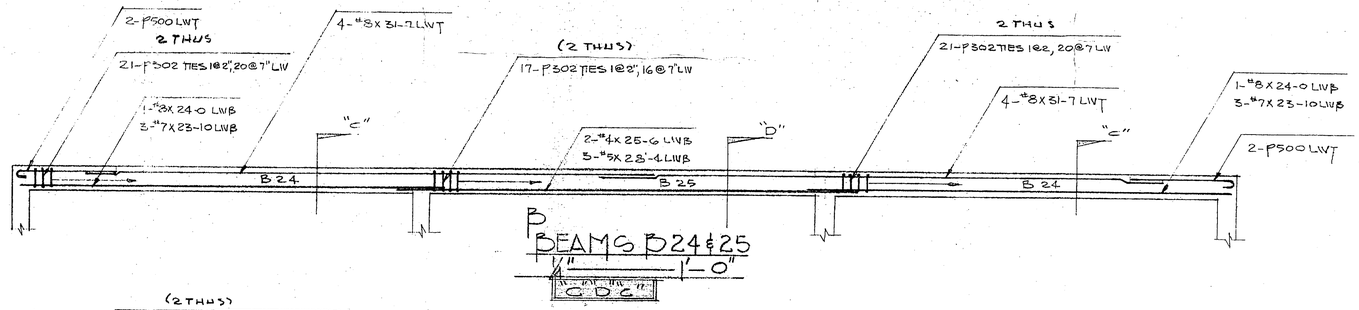
SECOND FL SLAB & BEAMS
1/8" = 1'-0"



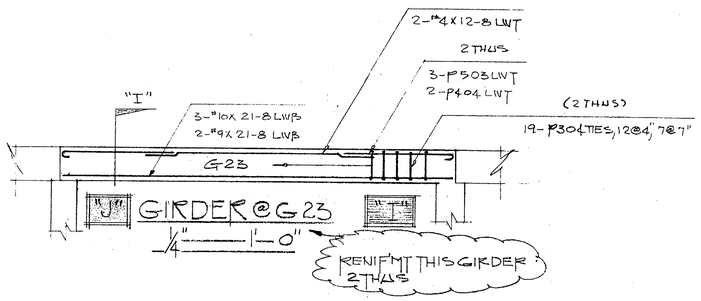
BEAM B24
1/4" = 1'-0"



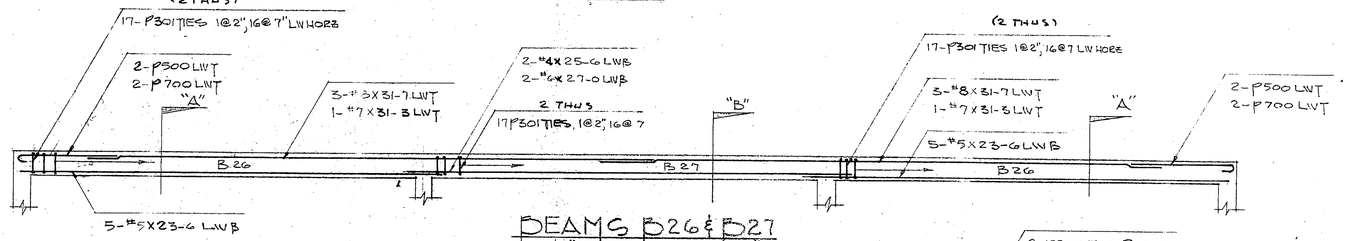
BEAMS B24 & B25
1/4" = 1'-0"



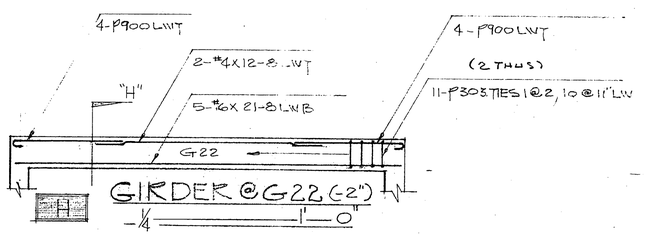
BEAMS B24 & B25
1/4" = 1'-0"



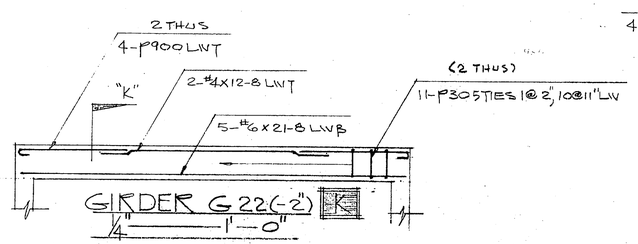
GIRDER @ G23
1/4" = 1'-0"



BEAMS B26 & B27
1/4" = 1'-0"



GIRDER @ G22(-2")
1/4" = 1'-0"



GIRDER G22(-2")
1/4" = 1'-0"

GIRDER @ "L"
1/2" = 1'-0"

LOTT STEEL PRODUCTS CO.

PROJECT	HOLCOMB BLVD WWT PLANT
LOCATION	CAMP LEJUNE N.C.
CONTRACTOR	HARRY PEPPER
ARCHITECT	

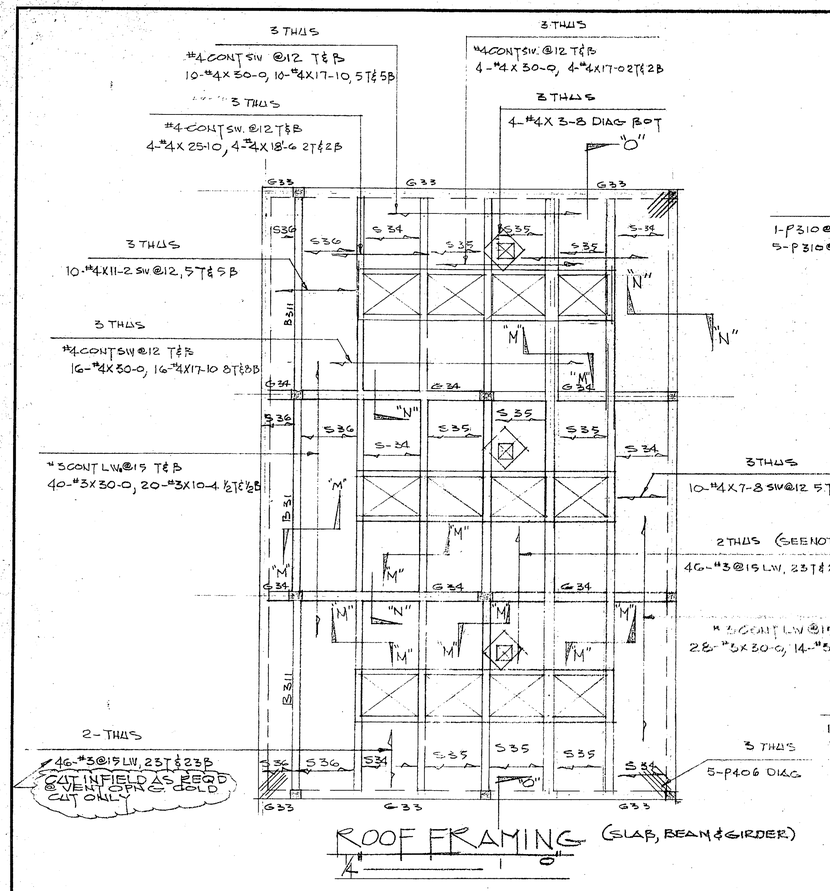
SCALE	DRAWN BY	CHECKED	APPROVED
AS INDIC	NAME Johnson	NAME	NAME
	DATE 9/24/85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

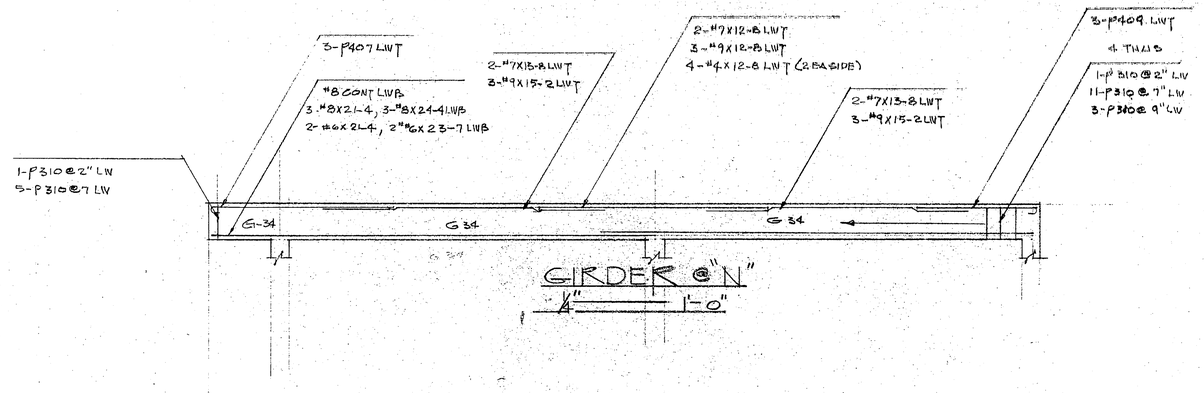
DRAWING NO 185132-25 SERIES P

SOUTHERN PHOTO - GREENSBORO M-6241

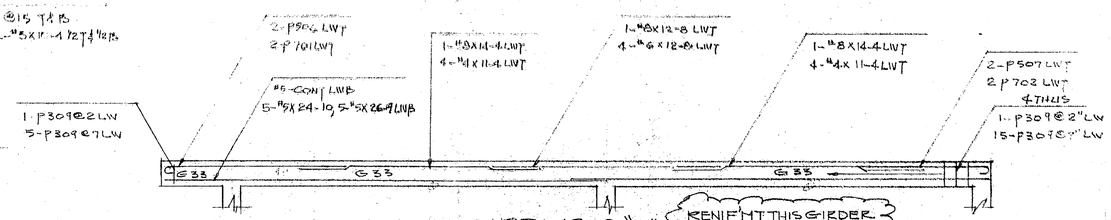
Item #3



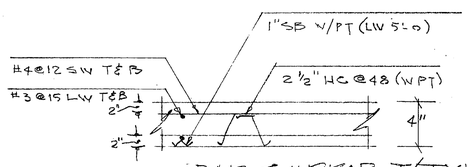
ROOF FRAMING (SLAB, BEAM & GIRDER)
1/4" = 1'-0"



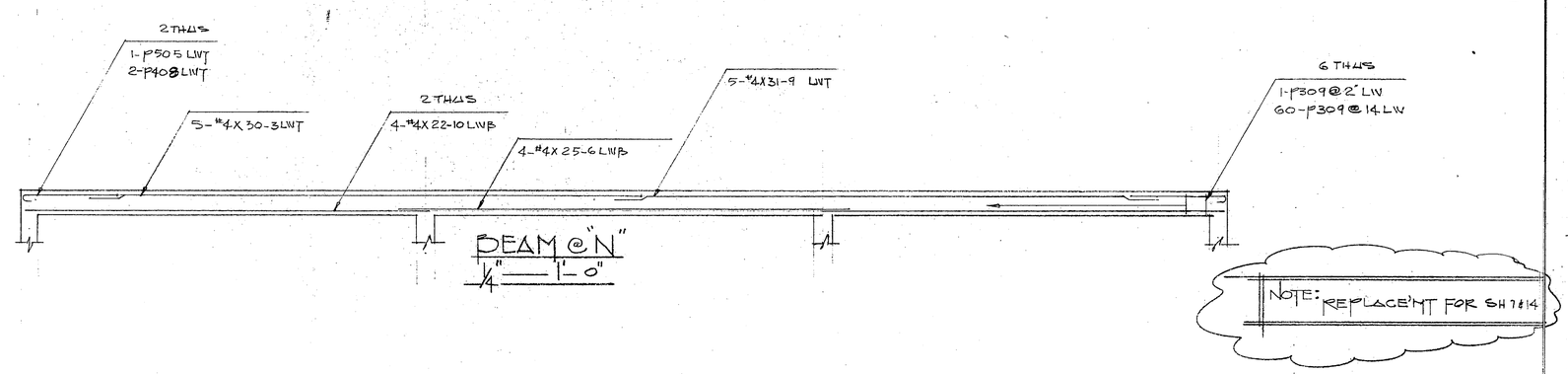
GIRDER @ "N"
1/4" = 1'-0"



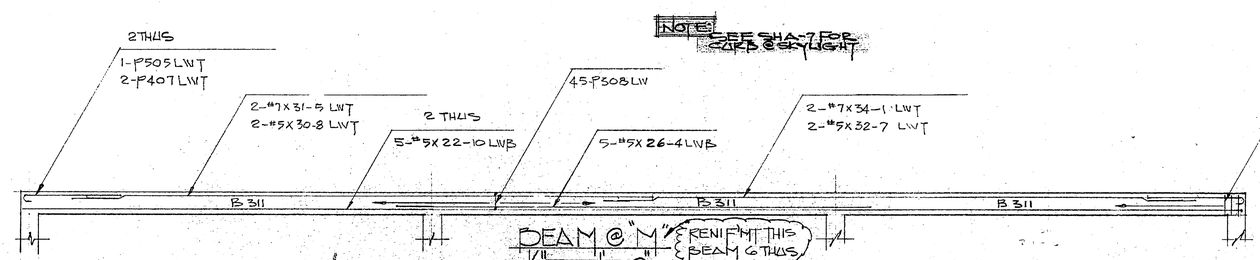
GIRDER @ "O"
1/4" = 1'-0"
REINFMT THIS GIRDER 2 THWS



BAR SUPPORT (TYP)
NTS



BEAM @ "N"
1/4" = 1'-0"



BEAM @ "M"
1/4" = 1'-0"
REINFMT THIS BEAM 6 THWS

LSP LOTT STEEL PRODUCTS CO.

PROJECT HOLCOMB BLVD WWT PLANT
LOCATION CAMP LEJUNE NC
CONTRACTOR HARRY PEPPER
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
AS INDIC	NAME JOHNSON	NAME	NAME
	DATE 9/25/85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-21 SERIES "P"

SOUTHERN PHOTO - GREENSBORO 1-12-2-1

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	102	10-8-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST IN PLACE CONCRETE			
1	1.2.1	Reinforcement Steel Drwg # 21 Roof Slab	4	RA	RoR 10/14/85
2	1.2.1	Reinforcement Steel Drwg # 23 Slab, Beams and Girders	4	RA	RoR 10/14/85
3	1.2.1	Reinforcement Steel Drwg # 24 Slab, Beams and Girders	4	RA	RoR 10/14/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): PHIL REESE Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
10/10/85	Henry von Oesen & Assoc., Inc.	

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

HENRY VON OESEN AND ASSOCIATES, INC.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	10 OCT 1985 11 AM 10/10/85	Robert A

☆ U.S. GPO:1984-537-003/11170 Region 3-11

CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	33	5-6-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☒ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged,
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
		Reinforcement Drawing	7	AN	5/14/85

CONTRACTOR'S COMMENTS

A/E Please Verifyas indicated on Drwg 185132-9.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER | FROM (Reviewer) | TO

☑ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: 5/14/85

SIGNATURE:

LOTT STEEL PRODUCTS CO., INC.

CONTRACT NO.

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE EXP. HOLCOMB BLVD. WATER TREATMENT PLANT

SHEET 1 OF

SHIP TO HARRY PEPPER CONSTR.

DATE

LOCATION CAMP LE JEUNE, N.C.

MADE BY SEL CKD. BY

MATERIAL FOR FDNS. FINISH WATER RESERVOIR

REFERENCE DWG. 6

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGH
1		6	31-5	B611	9		31-5						1-4		88-3	31-2	
2			31-3	B612	9		31-3						1-4		87-8	30-11	
3			31-1	B613	9		31-1						1-4		87-2	30-10	
4			30-10	B614	9		30-10						1-4		86-6	30-8	
5			30-8	B615	9		30-8						1-4		86-0	30-5	
6			30-5	B616	9		30-5						1-4		85-2	30-2	
7			30-2	B617	9		30-2						1-4		84-6	29-11	
8			30-0	B618	9		30-0						1-4		83-11	29-9	
9			29-10	B619	9		29-10						1-4		83-4	29-7	
10		6	29-8	B620	9		29-8						1-4		82-9	29-5	
11																	
12																	
13																	
14		5	5-2	B501	2	1-5	3-9										
15			8-2	B502	2	3-1	5-1										
16			10-8	B503	S4	10	2-9	3-6	2-9			10					
17			5-2	B504	2	10	3-6					10					
18			6-7	B505	17		10	2-9	3-0								
19		5	9-0	B506	17		3-0	3-0	3-0								
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	

SHIP AS STRAIGHT BAR

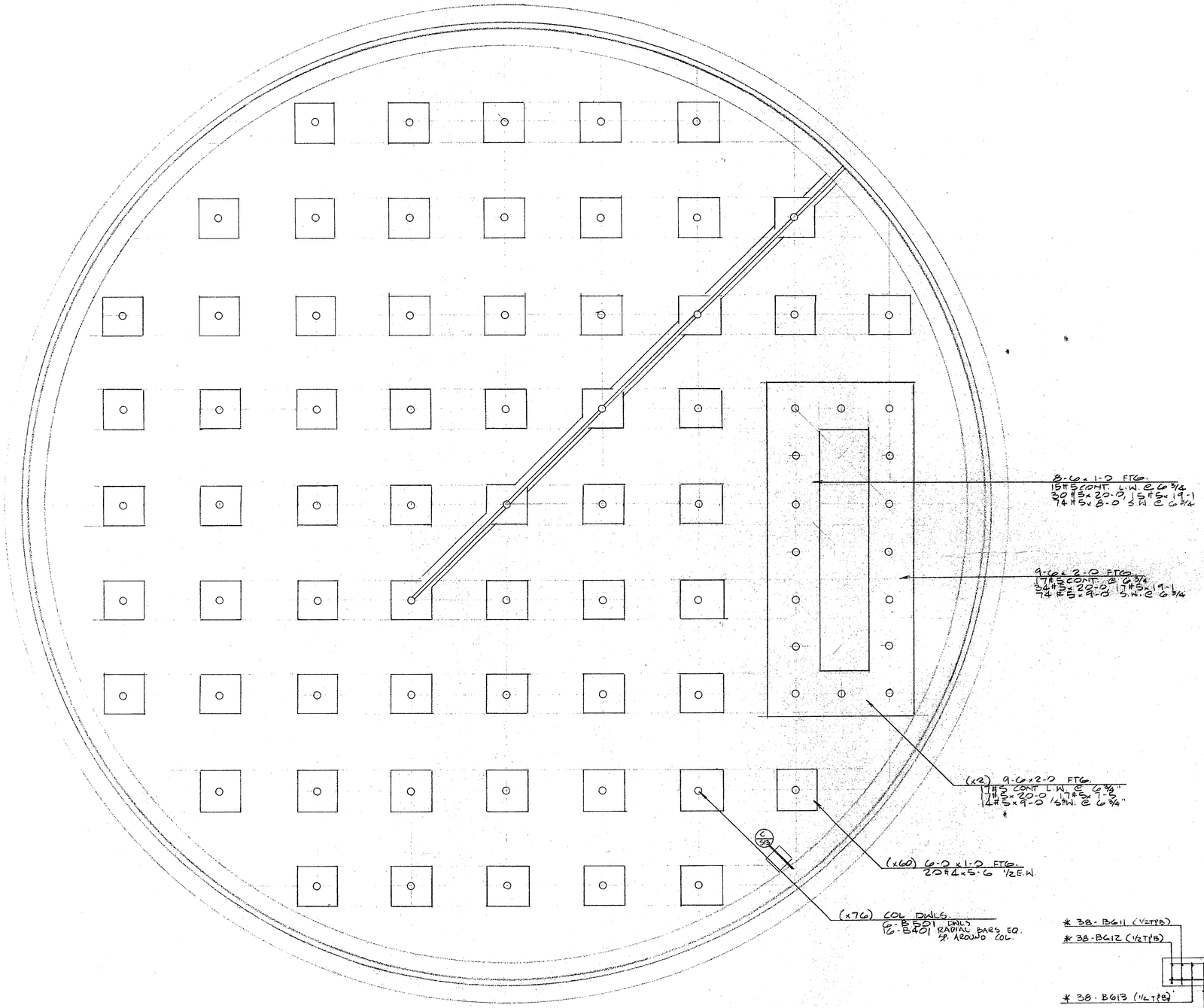
SHIP

CUST. ORDER NO.

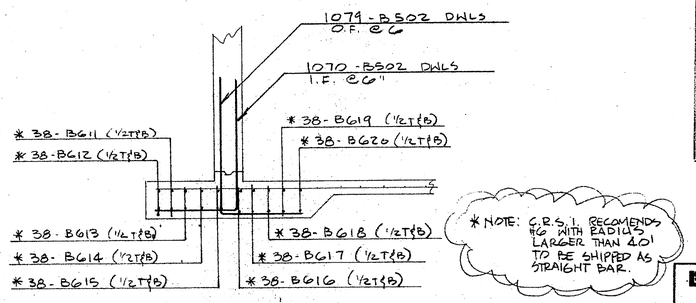
GRADE 60

SHEET TOTAL

ORDER TOTAL

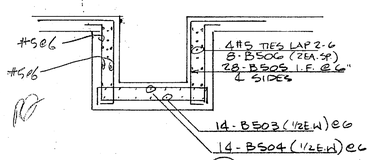


FOUNDATION PLAN



SECTION 1/513

* NOTE: C.R.S.I. RECOMENDS #6 WITH RADIUS LARGER THAN 4.0' TO BE SHIPPED AS STRAIGHT BAR.



SECTION C/513

AS NOTED
APPROVED FOR USE ON 81-C-1644
APPROVAL OF MATERIALS AND/OR EQUIPMENT INDICATES APPROVAL OF WHAT SPECIFICATION REQUIREMENTS ONLY. COMPLIANCE WITH SPECIFICATION REQUIREMENTS ONLY DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO FURNISH WORKS, CAPACITIES, AND CONSTRUCTION FEATURES OTHER THAN SPECIFIED, DIMENSIONS, COORDINATION WITH OTHER TRADES, OR OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS.
PERMANENT INSTALLATION IN PLACE AND READY FOR USE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
DEFRAY VON STEEN AND ASSOCIATES
811 PRINCESS STREET
WILMINGTON, NORTH CAROLINA
DATE MAY 14 1985
BY

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_____ Approved for use.
X Submitted for Government approval.
_____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____
Signature CQC Rep. Phil Pierce DATE 5-6-85

FOR APPROVAL ONLY
Not For Construction

LSP LOTT STEEL PRODUCTS CO.

PROJECT EAP. H/LCOMB. BND WATER TREAT. PLANT
LOCATION CAMP LE JEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME G.E.L.	NAME	NAME
	DATE 3-18-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO. 185132-6 SERIES B

SOUTHERN PHOTO - GREENSBORO 142351

LOTT STEEL PRODUCTS CO., INC.

REINFORCING SHOP ORDER

REL. NO. _____

S. O. NUMBER 85132

STRUCTURE EXP. HOLCOMB BLVD. WATER TREAT. PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LEJUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR BASE SLAB - FINISH WATER RESERVOIR

REFERENCE DWG. E

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		6	15-8	D601	3		2-6	3-2	4 4	3-2	2 6		1-0				
2		1	29-5	D602	3		2 6	3-2	23-9				1-0				
3		6	5-0	D603	2	2-6	2-6										
4																	
5																	
6		5	3-6	D501	2	10	2-8										
7																	
8																	
9																	
10		4	2-5	D401	2	8	1-4										
11			2-6	D402	2	8	1-10										
12			2-8	D403	2	8	2-0										
13			7-6	D404	T3			LAP =	2-0							1-4	
14			8-6	D405	T3			LAP =	2-0							2-1	
15		4	9-0	D406	2	1-6	6-0					1-6					
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	

SHIP _____

GRADE 60

SHEET TOTAL _____

LOTT STEEL PRODUCTS CO., INC.

REINFORCING SHOP ORDER

REL. NO. _____

S. O. NUMBER E5132

STRUCTURE EXP. HOLCOMB BLVD WATER TREAT PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LEJEUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR WALLS & COLS. - FINISH WATER RESERVOIR

REFERENCE DWG. _____

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		5	4-10	E501	2	10	4-0										
2																	
3																	
4		4	14-10	E401	2	1-6	13-4										
5																	
6																	
7																	
8		3	4-0	E301	T3		LAP =		1-4							10	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
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26																	
27																	
28																	
29																	
30																	
31																	

SHIP _____

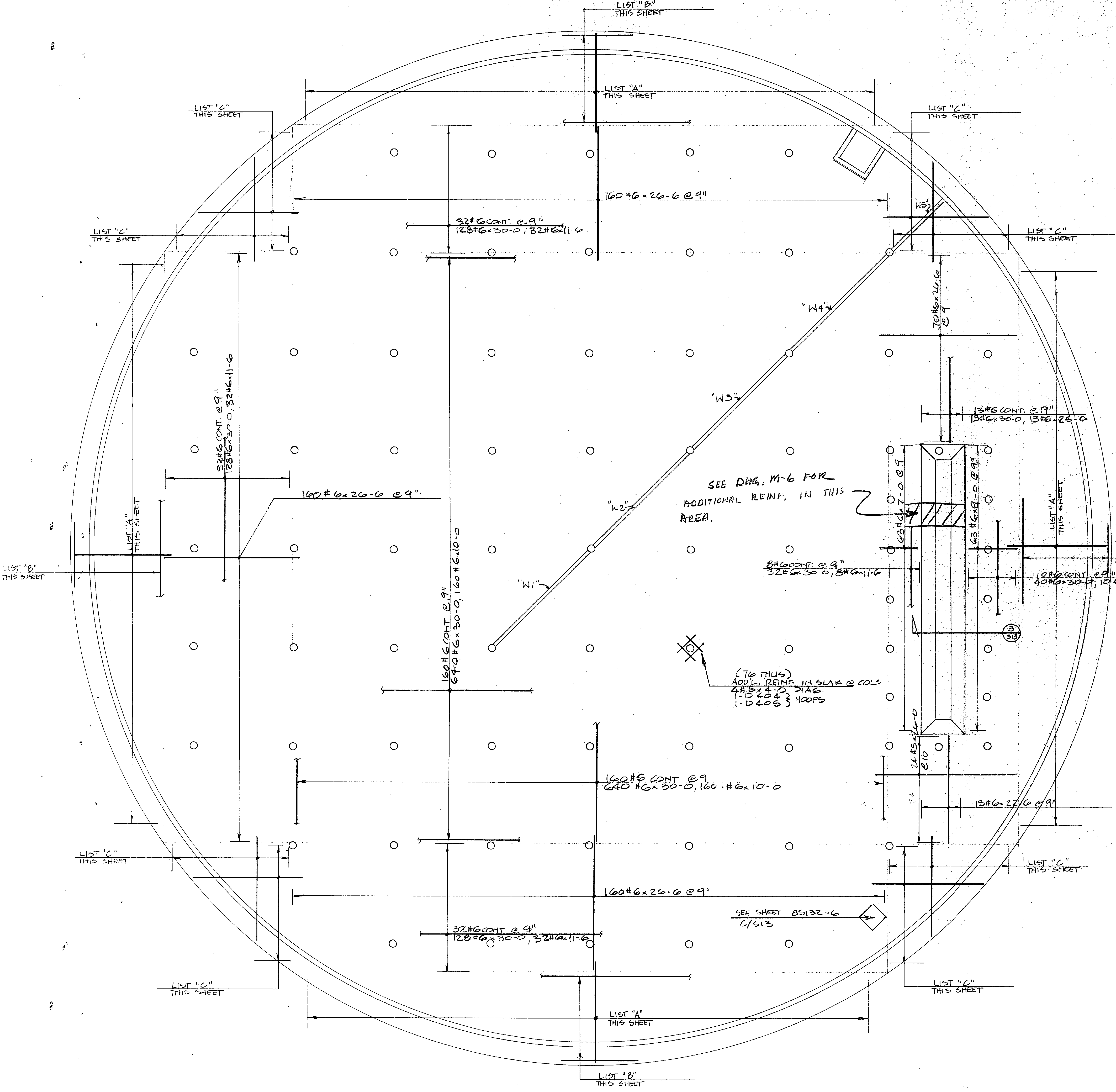
CUST. ORDER NO. _____

GRADE 60

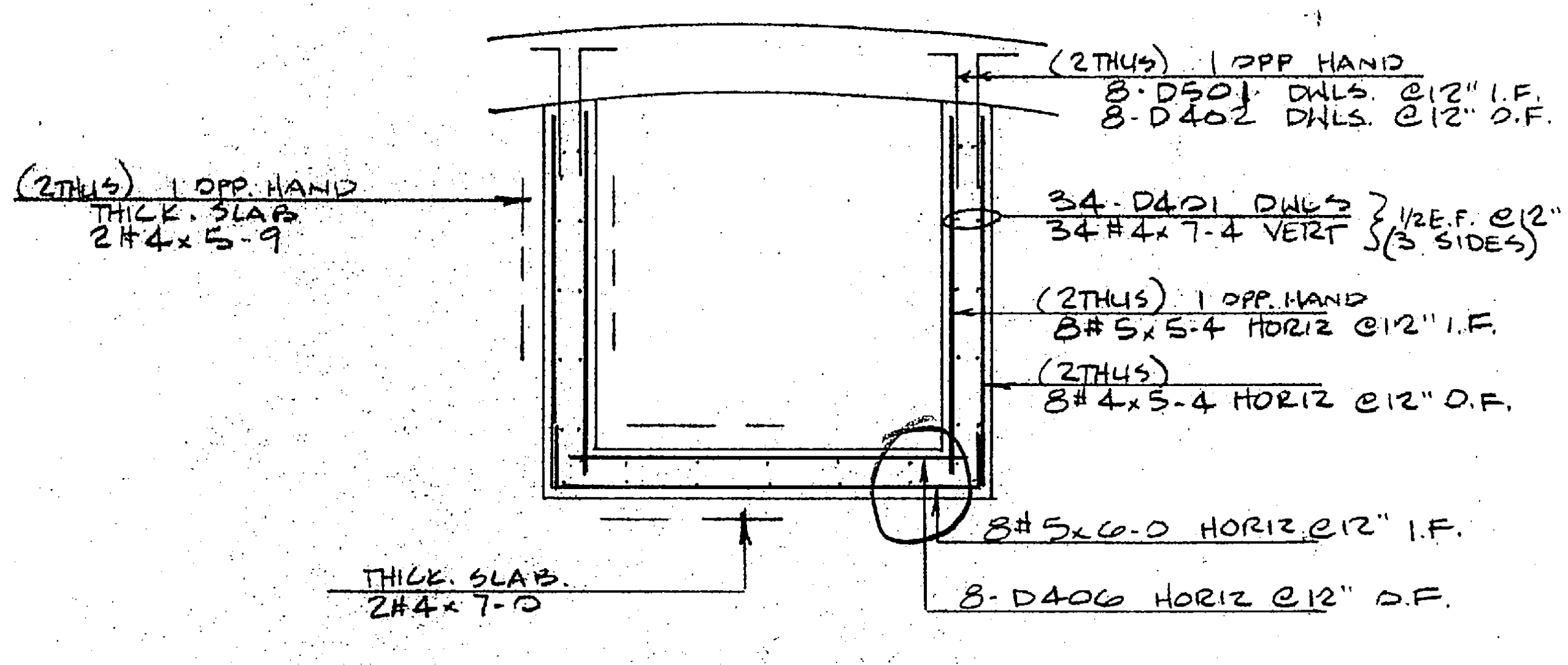
SHEET TOTAL _____

ORDER TOTAL _____

SLOPE 1-4¼ CTR TO OUTSIDE



SLAB PLAN



PLAN INLET BOX

LIST "C" (8 THUS)

#6 @ 9

1#6x2-10
1#6x3-10
1#6x4-9
1#6x5-8
1#6x6-8
1#6x7-7
1#6x8-6
1#6x9-5
1#6x10-4
1#6x11-3
1#6x12-3
1#6x13-2
1#6x14-1
1#6x15-0
1#6x15-11
1#6x16-10
1#6x17-9
1#6x18-8

LIST "A" (4 THUS)

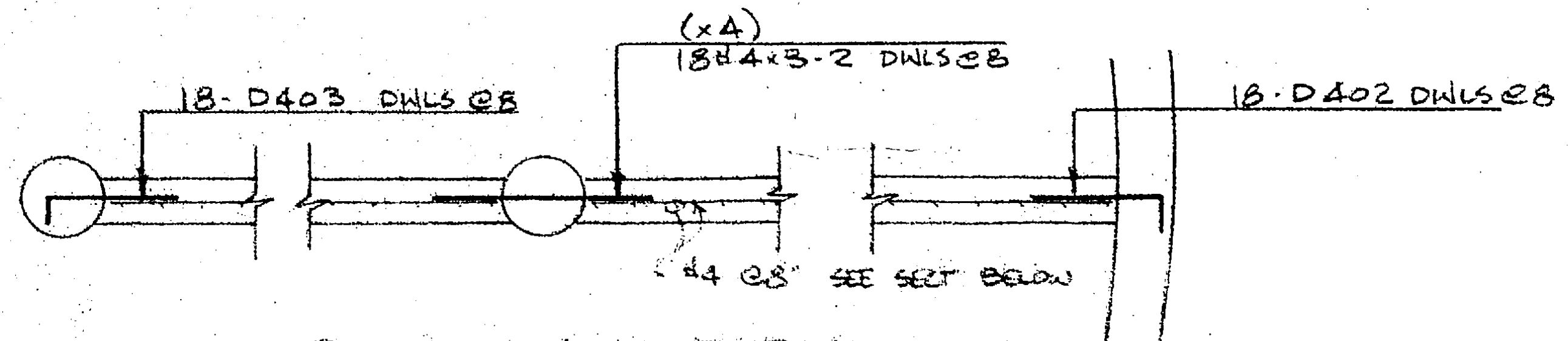
#6 @ 9" (FROM L TO R)

5#6x2-0
2#6x2-6
2#6x3-0
2#6x3-6
2#6x4-0
2#6x4-6
2#6x5-0
4#6x5-6
2#6x6-0
2#6x6-6
2#6x7-0
2#6x7-6
2#6x8-0
2#6x8-6
4#6x9-0
2#6x9-6
2#6x10-0
2#6x10-6
2#6x11-0
2#6x11-6
2#6x12-0
2#6x12-6
2#6x13-0
4#6x13-6
2#6x14-0
2#6x14-6
2#6x15-0
2#6x15-6
2#6x16-0
2#6x16-6
2#6x17-0
2#6x17-6
3#6x18-0
2#6x17-6
2#6x17-0
2#6x16-6
2#6x16-0
2#6x15-6
2#6x15-0
2#6x14-6
2#6x14-0
4#6x13-6
2#6x13-0
2#6x12-6
2#6x12-0
2#6x11-6
2#6x11-0
2#6x10-6
2#6x10-0
2#6x9-6
4#6x9-0
2#6x8-6
2#6x8-0
2#6x7-6
2#6x7-0
2#6x6-6
2#6x6-0
4#6x5-6
2#6x5-0
2#6x4-6
2#6x4-0
2#6x3-6
2#6x3-0
2#6x2-6
5#6x2-0

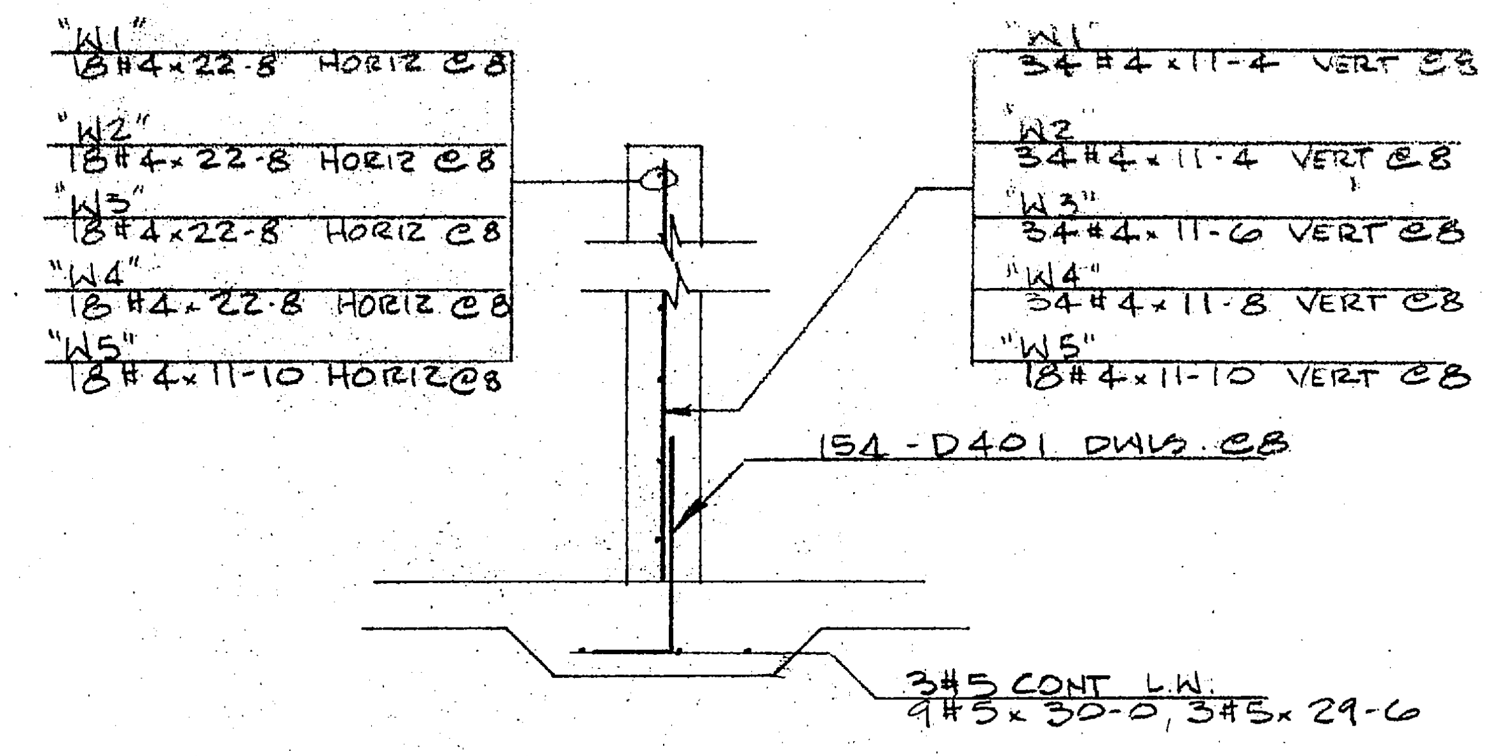
LIST "B" (4 THUS)

#6 @ 9"

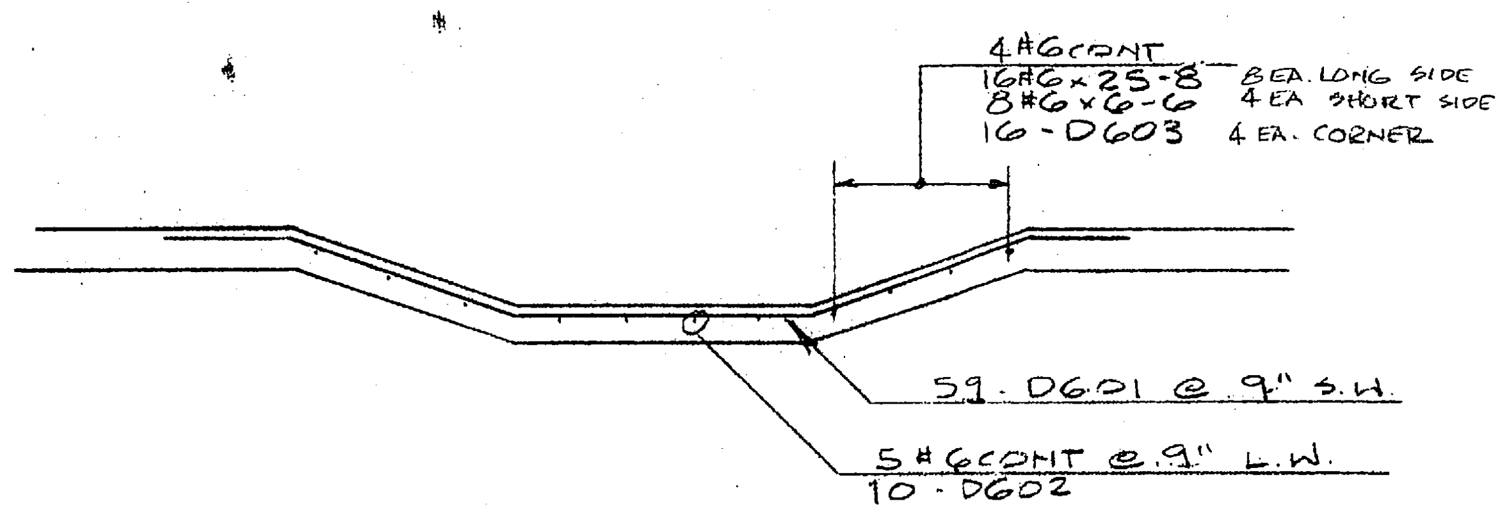
1#6x4-10
1#6x11-0
1#6x17-0
1#6x23-2
1#6x29-2
1#6 CONT
1#6x30-0, 1#6x7-1
1#6 CONT
1#6x30-0, 1#6x13-1
1#6 CONT
1#6x30-0, 1#6x19-3
1#6 CONT
1#6x30-0, 1#6x25-3
1#6 CONT
2#6x30-0, 1#6x3-2
1#6 CONT
2#6x30-0, 1#6x9-2
1#6 CONT
2#6x30-0, 1#6x15-2
1#6 CONT
2#6x30-0, 1#6x21-4
1#6 CONT
2#6x30-0, 1#6x27-4
1#6 CONT
3#6x30-0, 1#6x5-0
1#6 CONT
3#6x30-0, 1#6x11-3
1#6 CONT
3#6x30-0, 1#6x17-3
1#6 CONT
3#6x30-0, 1#6x23-3
1#6 CONT.
3#6x30-0, 1#6x29-5
1#6 CONT
4#6x30-0, 1#6x5-6
1#6 CONT
4#6x30-0, 1#6x11-6



BAFFLE WALL DETAILS



BAFFLE WALL SECTION



SECTION $\frac{3}{S13}$

☐ AS NOTED 4

APPROVED FOR USE ON 81-C-1644

APPROVAL OF MATERIALS AND/OR EQUIPMENT INDICATES COMPLIANCE WITH SPECIFICATION REQUIREMENTS ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROVIDE PROPER PHYSICAL DIMENSIONS, CLEARANCES, WEIGHTS, CAPACITIES, PERFORMANCE, COORDINATION WITH OTHER TRADES OR THE RESPONSIBILITY TO PROVIDE THE SYSTEM AND/OR EQUIPMENT COMPLETE IN PLACE AND READY FOR USE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

HENRY VON OESEN AND ASSOCIATES
611 PRINCESS STREET
WILMINGTON, NORTH CAROLINA

MAY 14 1985

FOR APPROVAL ONLY
Not For Construction

LSP LOTT STEEL PRODUCTS CO.

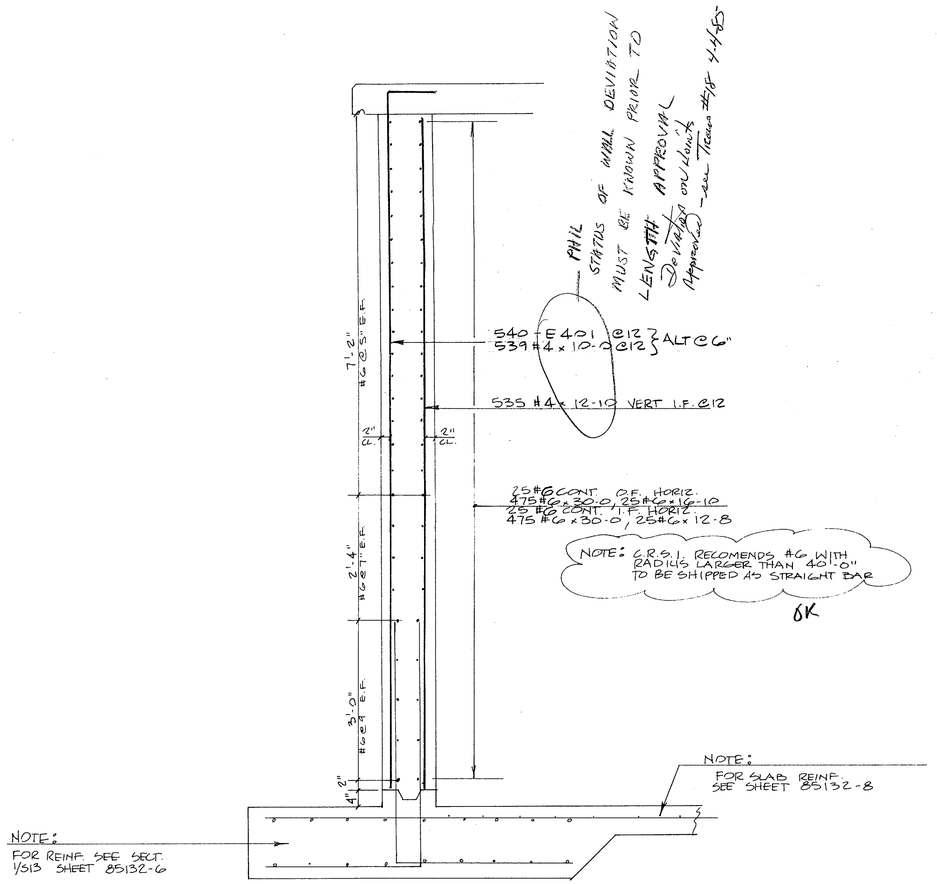
PROJECT EXP. HOLCOMB BLVD. WATER TREAT. PLANT
LOCATION CAMP LE JEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 4-26-85	DATE	DATE

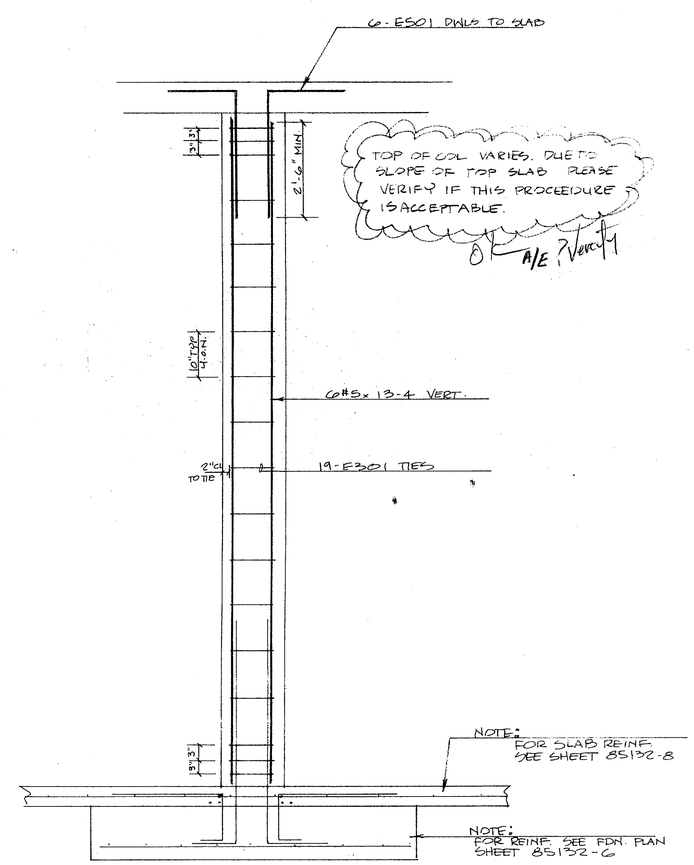
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 185132-8

SERIES D



EXTERIOR WALL SECT.



TYP COLUMN
(76 THUS)

AS NOTED

APPROVED FOR USE ON 81-C-1644

APPROVAL OF MATERIALS AND/OR EQUIPMENT INDICATES COMPLIANCE WITH SPECIFICATION REQUIREMENTS ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO PROVIDE PROPER PHYSICAL DIMENSIONS, CLEARANCES, WEIGHTS, CAPACITIES, ETC. AND FOR COORDINATION WITH OTHER TRADES. THE RESPONSIBILITY FOR PROVIDING THE SYSTEM AND/OR EQUIPMENT COMPLETE IN PLACE AND READY FOR USE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

CONSULTING ENGINEERS: OPPEEN AND ASSOCIATES
911 PRINCESS STREET
WILMINGTON, NORTH CAROLINA

DATE MAY 14 1985

BY

FOR APPROVAL ONLY
Not For Construction

FINISH WATER RESERVOIR

LOTT STEEL PRODUCTS CO.

PROJECT H2COMB BLVD WATER TREAT. PLANT
LOCATION CAMP LE JEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 4-26-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-9 SERIES E

SOUTHERN PHOTO - GREENSBORO N-5231

CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	41	5-13-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant
MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings	4	R/A	RD 5/14/85

CONTRACTOR'S COMMENTS

Please Advise if procedure is acceptable as indicated on drawing.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE *(Signature)*

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractors approval appears to be appropriate

Henry von Oesen and Associates, Inc.
Wilmington, N.C.

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	5/13/85	[illegible]

LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE HOLCOMB BLVD. WATER TREAT PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC

DATE _____

LOCATION CAMP LEJEUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR RAW WATER TANK WALLS

REFERENCE DWG. 10

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		5	17-6	F501	2	10	18-8										
2		5	4-10	F502	2	10	4-0										
3																	
4																	
5		3	4-0	F301	T3		LAP = 1-4									10	
6																	
7																	
8																	
9																	
10																	
11																	
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30																	
31																	

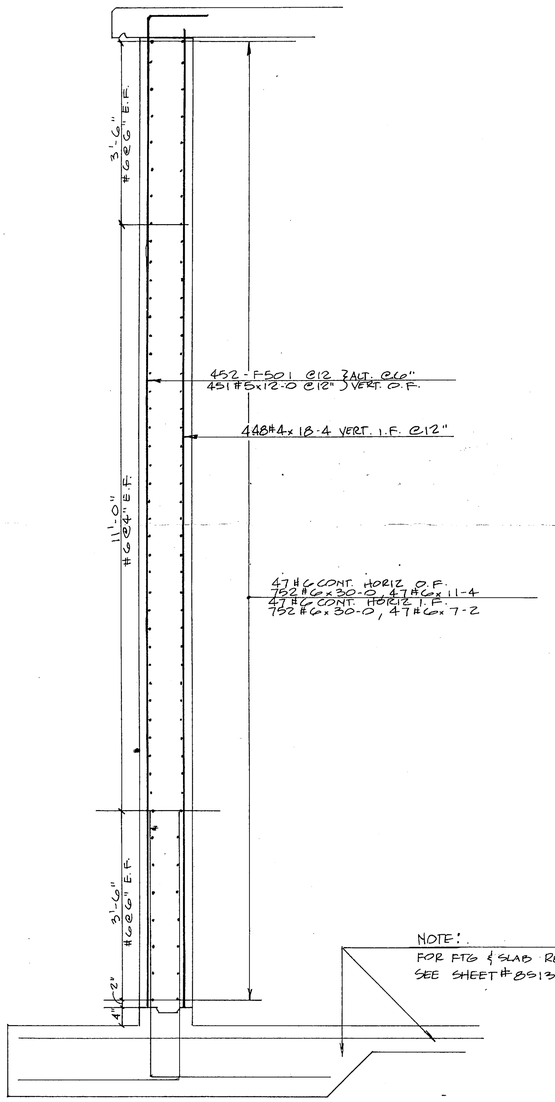
SHIP _____

CUST. ORDER NO. _____

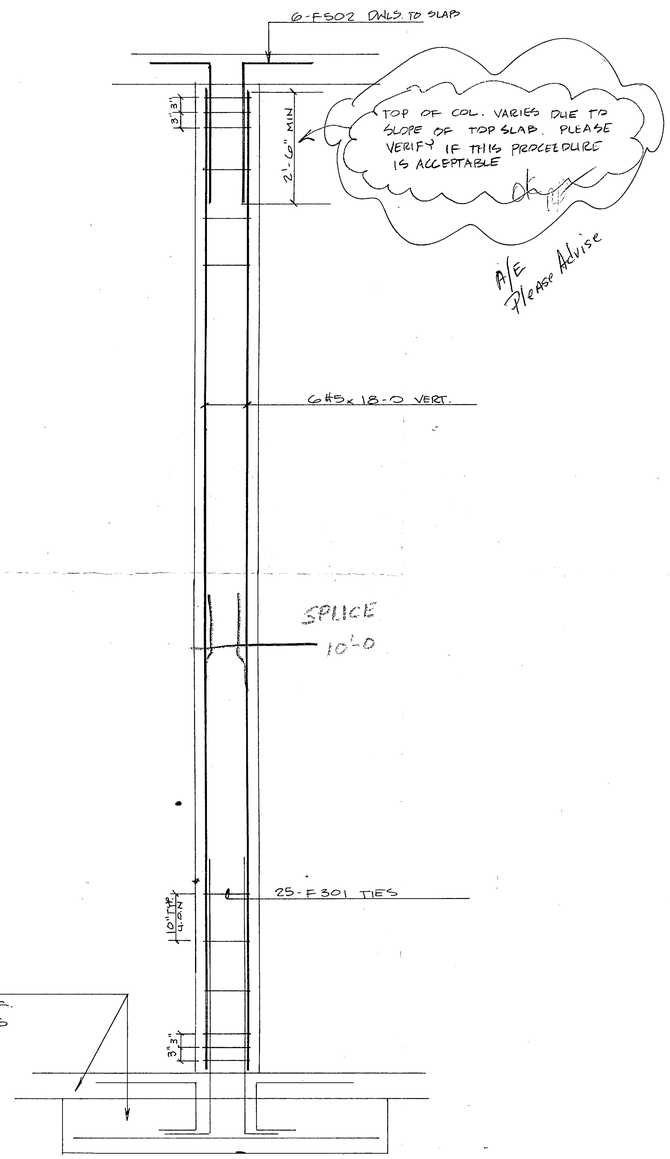
GRADE 60

SHEET TOTAL _____

ORDER TOTAL _____



EXTERIOR WALL



TYP. COL. SECT.

(69 THUS)

"It is hereby certified that the (materials) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer

Signature CQC Rep. _____ DATE _____

Signature _____ DATE 5-13-85

FOR APPROVAL ONLY
Not For Construction

RAW WATER RESERVOIR

LOTT STEEL PRODUCTS CO.

PROJECT HOLCOMB BLVD. WATER TREAT. PLANT
LOCATION CAMP LEJEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 5-1-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-10 REV-IX F

SOUTHERN PHOTO - GREENSBORO N93341

Hart

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	36	5-9-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings	7		
				AN	AD

CONTRACTOR'S COMMENTS

If this proposed deviation is approved there will be no addition cost to the Government and any changes caused by this deviation will be the responsibility of the Contractor at no expense to the Government.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pepper

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
5/20/85	LANTDIV	ROICC / HARRY PEPPER

☒ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

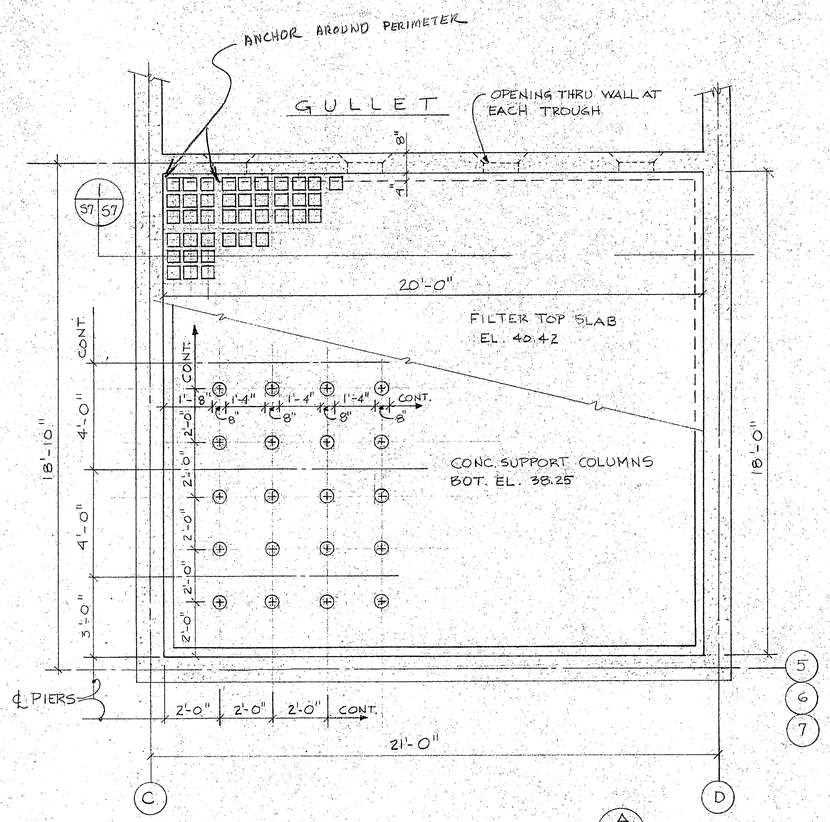
☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

1) PROVIDE DETAILS OF CONCRETE SUPPORT COLUMNS.
2) SUBMIT TYPE OF "REDHEAD" OR THUNDERSTUD" PROPOSED FOR USE.

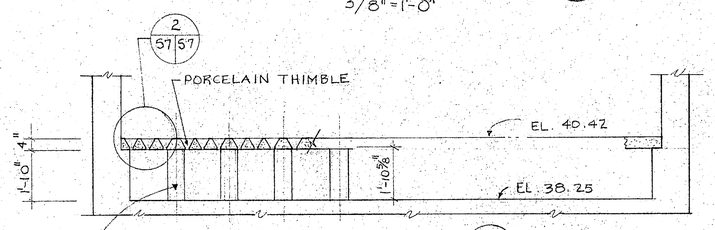
APPROVED AS NOTED - NO CHANGE IN COST/TIME

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	5/22/85	J. Hart



PLAN FILTER BOTTOM (A / 57|57)

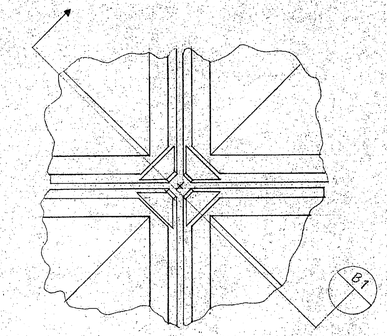
3/8" = 1'-0"



SECTION (1 / 57|57)

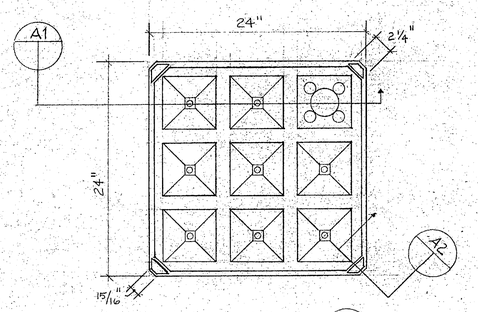
3/8" = 1'-0"

NOTE: ANCHOR BOLT TO BE "RED HEAD" OR THUNDERSTUD" TO FLOOR. ANCHOR TO PASS THROUGH CENTER OF 8"-Ø SUPPORT COLUMN AND BOLT FOUR CORNERS OF BLOCKS



TYPICAL CORNERS (B1 / BB)

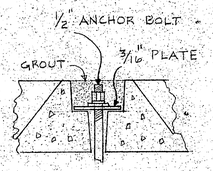
3" = 1'-0"



PLAN (A1 / AA)

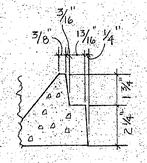
1½" = 1'-0"

TYPICAL HOLD DOWN



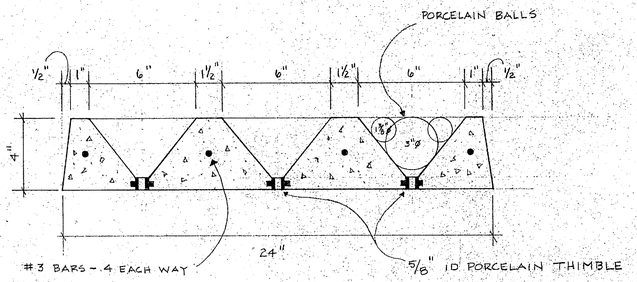
SECTION (B1)

3" = 1'-0"



SECTION (A2)

3" = 1'-0"



SECTION (A1)

3" = 1'-0"

DEVIATION: APPROVED ✓
~~DISAPPROVED~~

LANTDIV REVIEWER — Code 402 ACB
DATE — 21 MAY 1985

1. ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL
2. THIS IS A STANDARD WHEELER FILTER BOT.
3. ALL CONC. SHALL BE 4000 lbs @ 28 DAY
4. Provide deviation Detail of reinforcement in 8" Φ Support Columns

5/3/85

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

____ Approved for use.
X Submitted for Government approval.
____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____
Signature CQC Rep. [signature] DATE 5-9-85

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED _____
APPROVED AS NOTED ✓
DISAPPROVED _____
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-81-1644
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.
REVIEWER ACB DATE 21 MAY 1985
FOR OFFICER IN CHARGE OF CONSTRUCTION

EXPANSION OF HOLCOMB BOULEVARD WATER TREATMENT PLANT		
HARRY PEPPER & ASSOC JACKSONVILLE FLORIDA	SCALE AS SHOWN	DRAWN BY DAH / REVISED
FILTER PLAN & SECTION		
DATE 4-29-85	APPROVED BY	DRAWING NUMBER HB 101

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	46	5-16-85

FROM CONTRACTOR: Harry Pepper & Associates Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

[X] Contractor Approved [ ] OICC Approval [ ] Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcing Drawings	4	RA	RA 5/30/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

DATE RECEIVED BY REVIEWER | FROM (Reviewer) | TO

[ ] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

CONTRACTOR'S APPROVAL APPEARS TO BE APPROPRIATE

COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: 5/30/85

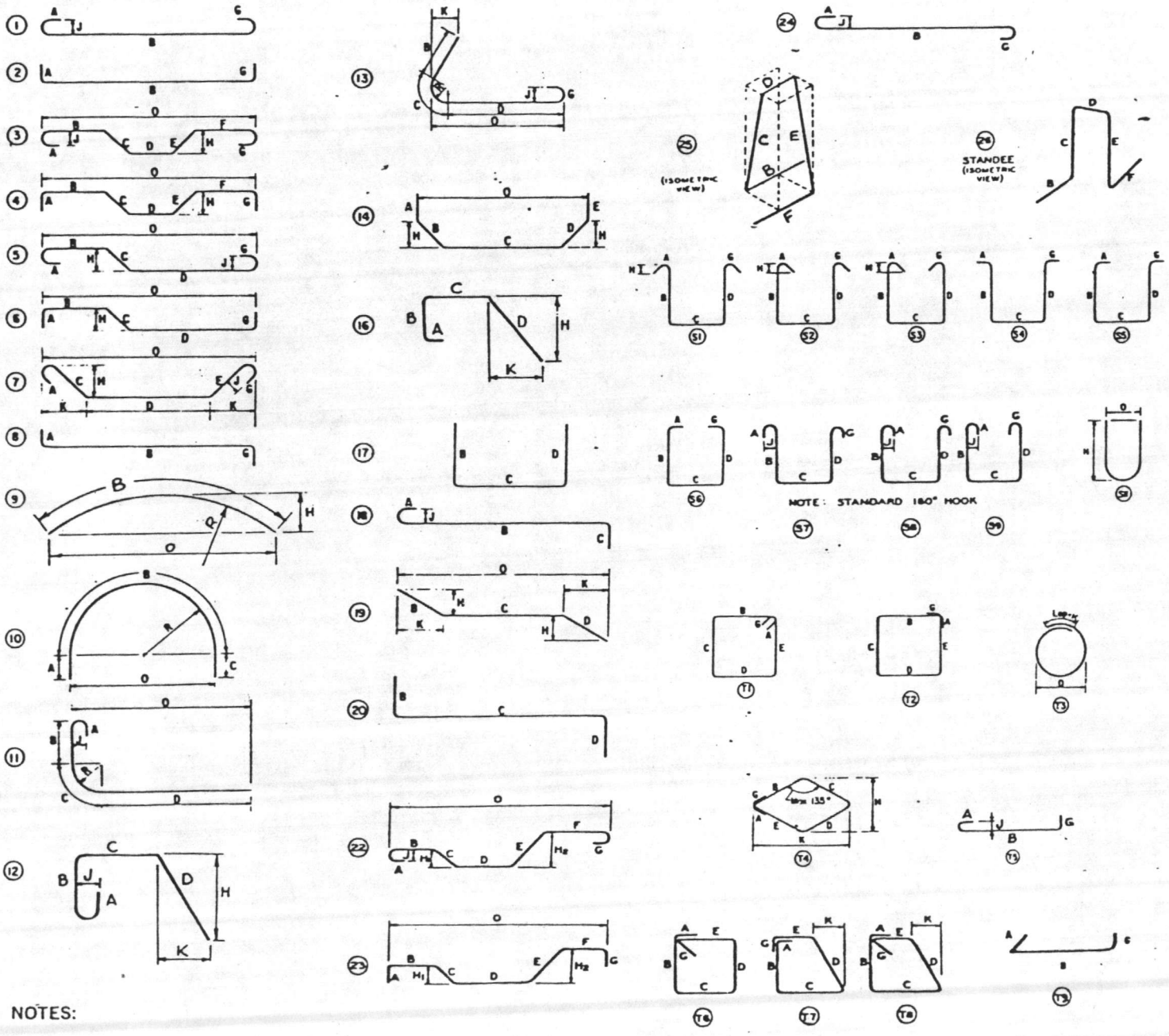
SIGNATURE: [signature]

31 MAY 1985 11 33

LSP LOTT STEEL PRODUCTS COMPANY

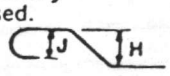
P. O. BOX 879 • WELCOME, NORTH CAROLINA 27374-0879
TELEPHONE (704) 731-6331

TYPICAL BAR BENDS



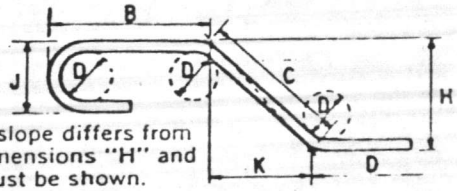
NOTES:

1. All dimensions are out-to-out of bar except "A" and "G" on standard 180° and 135° hooks.
2. "J" dimension on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where "J" is not shown, "J" will be kept equal to or less than "H" on truss bars. Where "J" can exceed "H", it should be shown.



4. "H" dimension stirrups to be shown where necessary to fit within concrete.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer fabrication should have limits indicated.
6. Figures in circles show types.
7. For recommended diameter "D", of bends, hooks, etc., see tables, page 6-4.
8. Type S1-S9, S11, T1-T9 apply to bar sizes #3 through #8.

Unless otherwise noted diameter D is the same for all bends and hooks on a bar.



Where slope differs from 45° dimensions "H" and "K" must be shown.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE EXP. HOLCOMB BLVD. WATER TREAT. PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LE JEUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR SLAB @ EL 38.25

REFERENCE DWG. 12

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		4	12-9	G401	1	6	12-3					–					
2		4	26-2	G402	1	6	25-2					6					
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10		3	2-6	G301	2	6	2-0										
11																	
12																	
13																	
14																	
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31																	

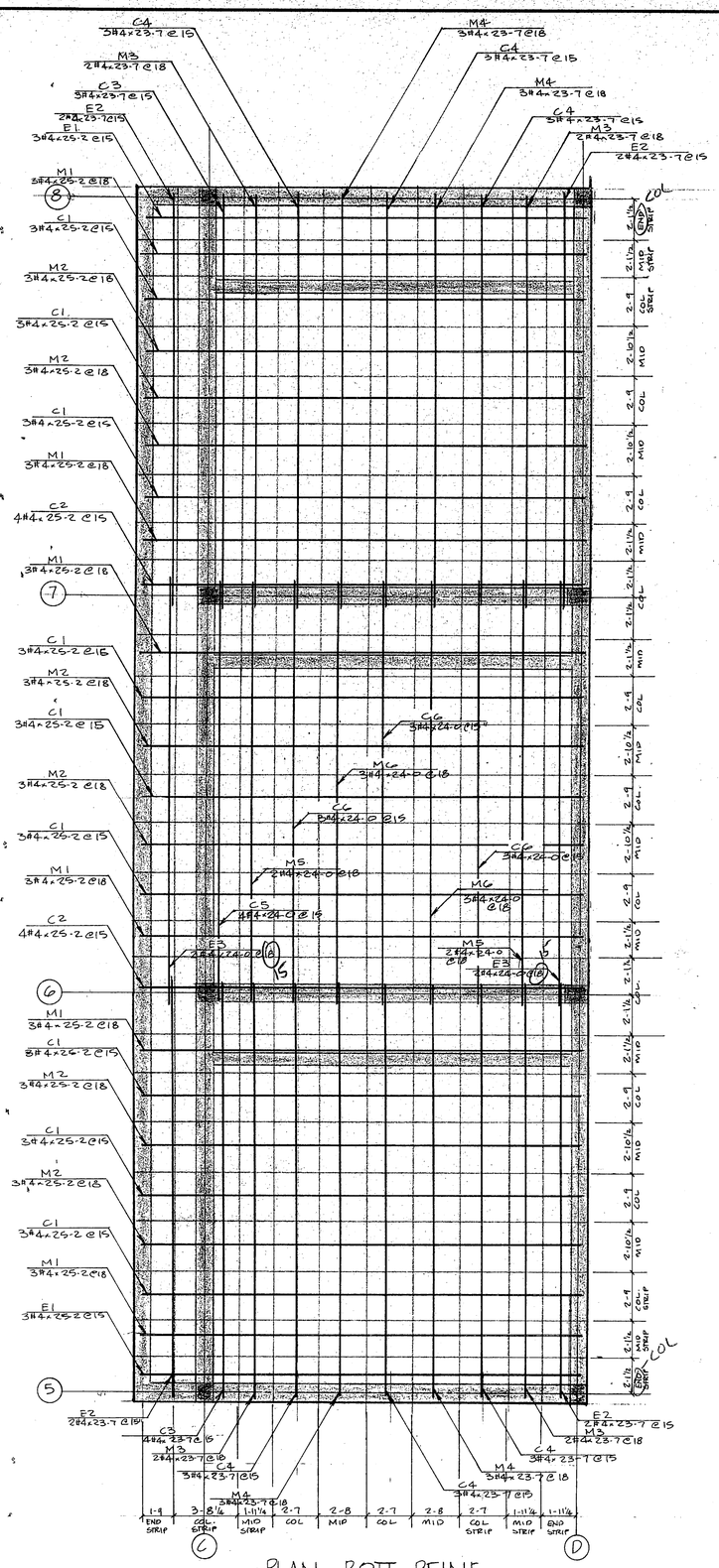
SHIP _____

CUST. ORDER NO. _____

GRADE 60

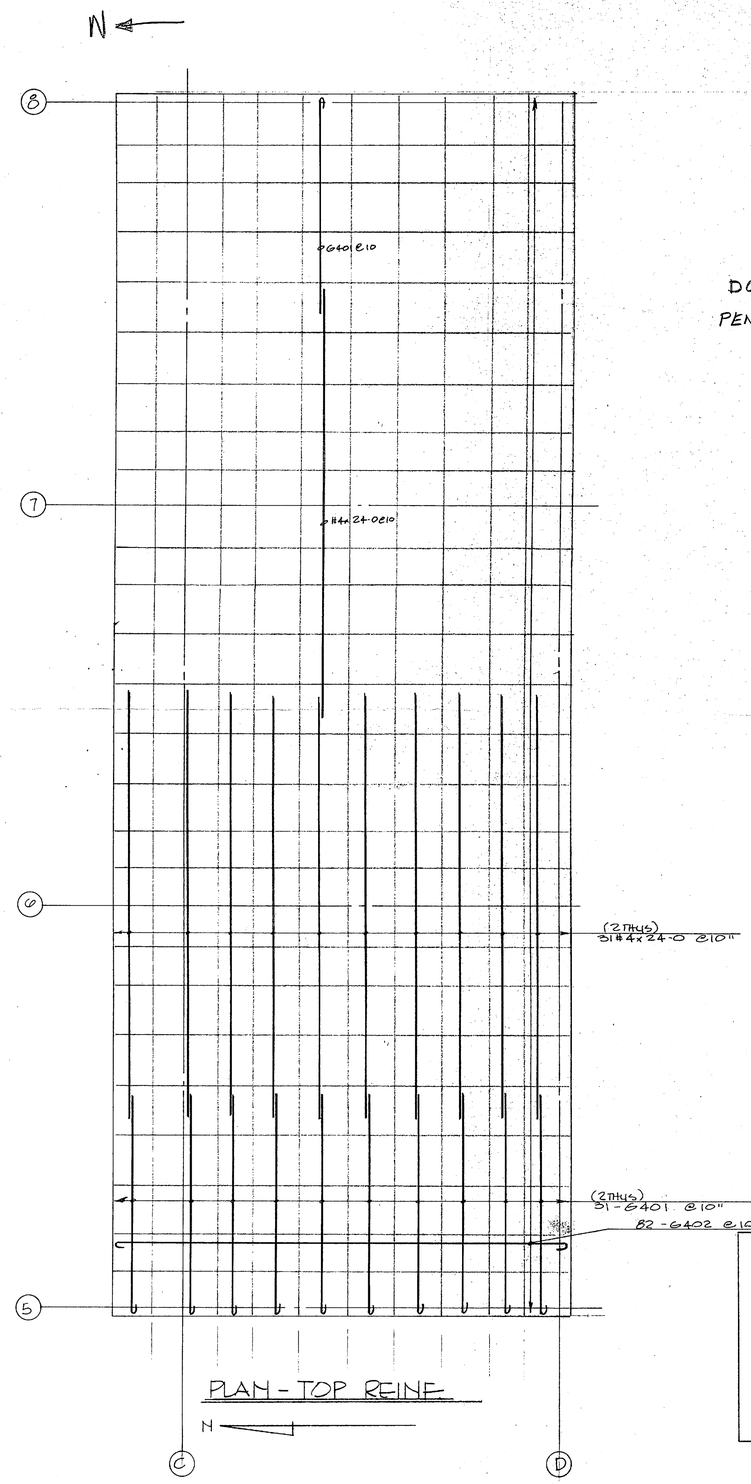
SHEET TOTAL _____

ORDER TOTAL _____



PLAN - BOTT. REINF.

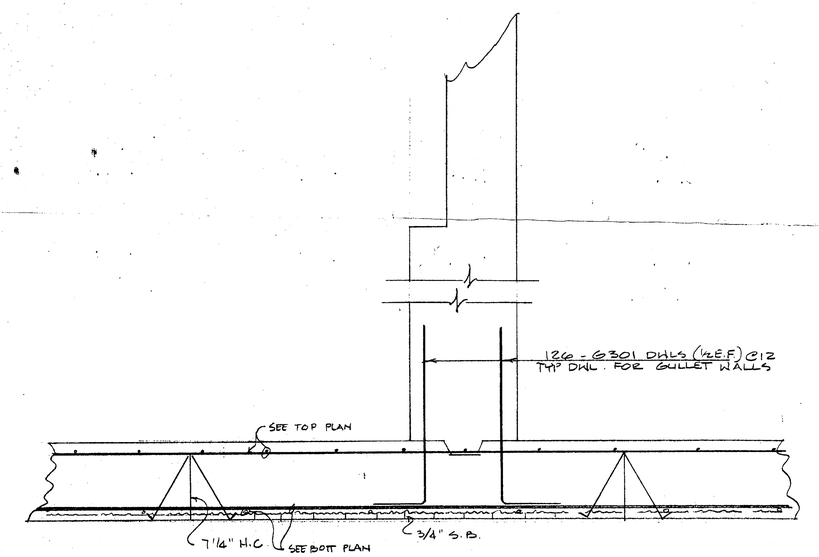
N



PLAN - TOP REINF.

N

DOWELS FOR FILTER BOTTOM ARE ON HOLD PENDING FILTER BOTTOM DEVIATION APPROVAL



TYP. SLAB SECTION

PLACING SEQUENCE

1. PLACE 3/4" S.B IN E-W DIR. @48" o/c
2. PLACE BOTT REINF. IN N-S DIRECTION (SEE PLAN FOR REINF)
3. PLACE BOTT REINF. IN E-W. DIRECTION (SEE PLAN FOR REINF)
4. PLACE 7 1/4" H.C. @48" o/c
5. PLACE TOP REINF. IN E-W DIRECTION (SEE PLAN FOR REINF) NOTE USE THESE BARS AS REQ'D. FOR SUPPORT BARS
6. PLACE TOP REINF. IN N-S DIRECTION (SEE PLAN FOR REINF)
7. PULL UP AND TIE TOP E-W BARS TO N-S BARS

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X Approved for use.

___ Submitted for Government approval.

___ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Paul Pierce DATE 5-16-85

BAR SUPPORTS
475 L.F. 3/4" S.B.
120 PCS. 7 1/4" H.C.
} PLASTIC TIPPED

SLAB @ EL. 38.25

5/14/85

LOTT STEEL PRODUCTS CO.

PROJECT Holcomb Blvd Water Treat. Plant
LOCATION Camp Lejeune, N.C.
CONTRACTOR Harry Pepper & Assoc.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 5-10-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-12 SERIES 6

X | PPK

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 1-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	98	9-23-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Steel Slab and Roof at Acid and Chlorine Storage	4	RA/C	ROR 10-3-85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL OF APPROVED SUBMITTALS TO ROICC: ONE COPY TO ROICC

RECEIVED SEP 26 1985 HENRY VON OESEN & ASSOC.

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER: SEP 26 1985

FROM (Reviewer): Henry von Oesen & Assoc., Inc.

TO:

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REVIEWER'S COMMENTS

Minor corrections were made by the reviewer. Tha contractor is requested to update his coies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC.

HENRY VON OESEN AND ASSOCIATES, INC.

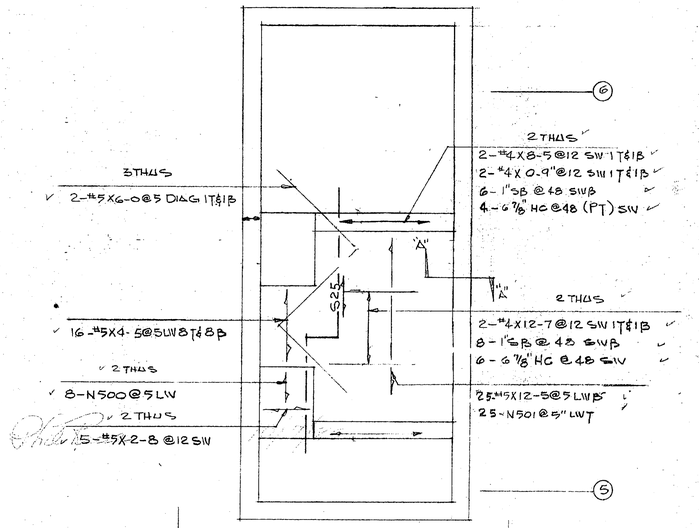
Phil Reese 10/7/85

COPIES TO: ROICC (2), LANTDIV (1), A-E (1)

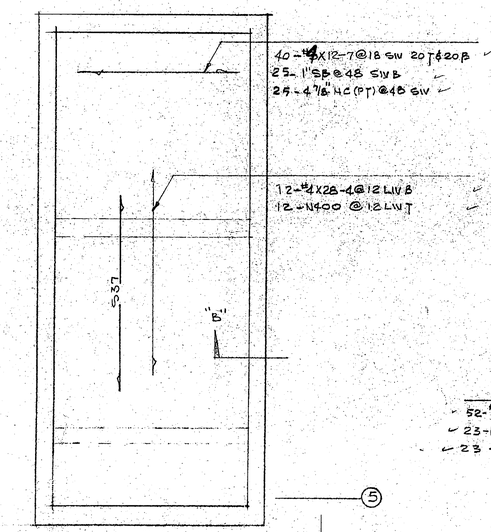
DATE: 10-3-85

SIGNATURE: [illegible]

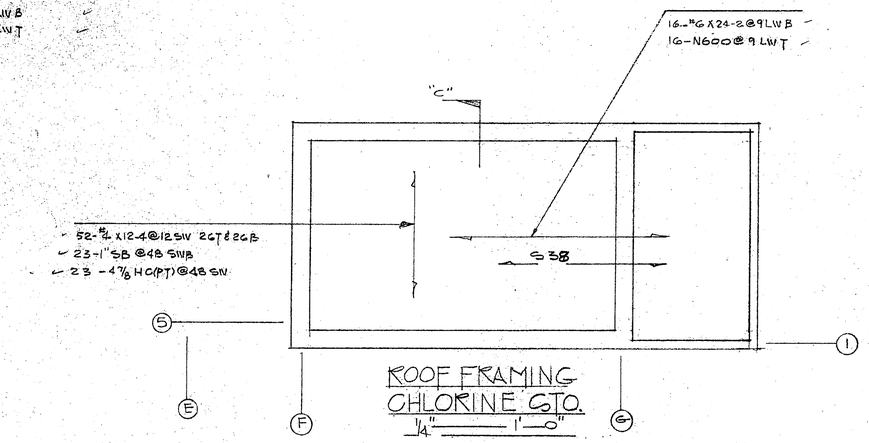
☆ U.S. GPO:1984-537-003/11170 Region 3-11



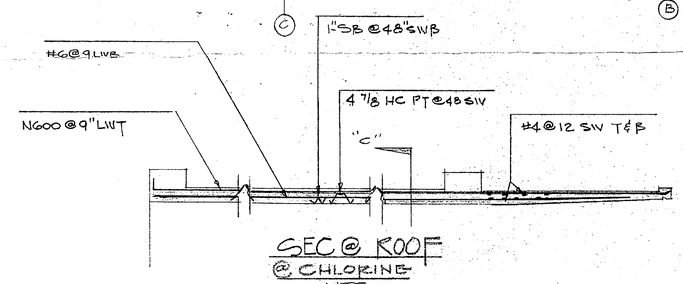
SLAB @ ACID STO.
1/4" = 1'-0"



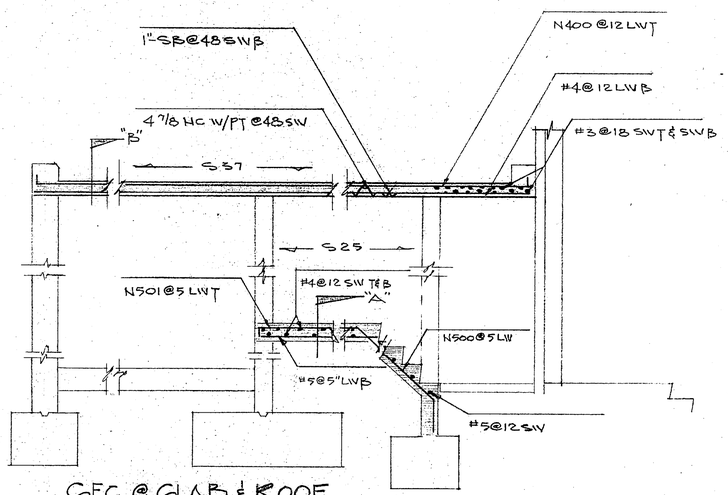
ROOF FRAMING
ACID STO.
1/4" = 1'-0"



ROOF FRAMING
CHLORINE STO.
1/4" = 1'-0"



SEC @ ROOF
@ CHLORINE
NTS



SEC @ SLAB & ROOF
@ ACID STO
NTS

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer

Signature CQC Rep. Pat Reese DATE 9-23-85 DATE

FOR APPROVAL ONLY
Not For Construction

SLAB & ROOF @ ACID & CHLORINE STO

LSP LOTT STEEL PRODUCTS CO.

PROJECT EXP. HOLCOMB BLVD WWTP
LOCATION CAMP LEJEUNE N.C.
CONTRACTOR HARRY PEPPER & ASSOC
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
AS INDIC.	NAME JOHNSON	NAME	NAME
	DATE 9-19-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO B5132-20 SERIES "N"

SOUTHERN PHOTO - GREENSBORO N15581

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	112	10-17-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST IN PLACE CONCRETE			
1	1.2.1	Reinforcement Steel--- Top Slab Plan	4	RA	RCB 10/21/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
10/21/85	Henry von Oesen & Assoc.	

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REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

HENRY VON OESEN AND ASSOCIATES, INC.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	10/21/85	[illegible]

☆ U.S. GPO:1984-537-003/11170 Region 3-11

LOTT STEEL PRODUCTS CO., INC.

REINFORCING SHOP ORDER

REL. NO. _____

S. O. NUMBER 85132

STRUCTURE EXP. HOLCOMB BLVD. W.W.T.P.

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LE JEUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR SLAB REINF. TOP STEEL (RAW WATER)

REFERENCE DWG. 24 "R"

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		5	4-0	R501	2	2-0	2-0										
2																	
3		4	4-9	R401	2	4	4-5										
4			3-8	R402	2	4	3-4										
5			20-4	R403	2	4	20-0										
6			21-10	R404	2	4	21-6										
7			11-10	R405	2	4	11-6										
8			20-8	R406	2	4	20-0					4					
9			10-8	R407	2	4	10-0					4					
10			5-9	R408	2	8	4-5					8					
11			15-2	R409	T3		LAP	= 1-	6							4-4	
12		4	1-5	R410	2	5	1-0										
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31																	

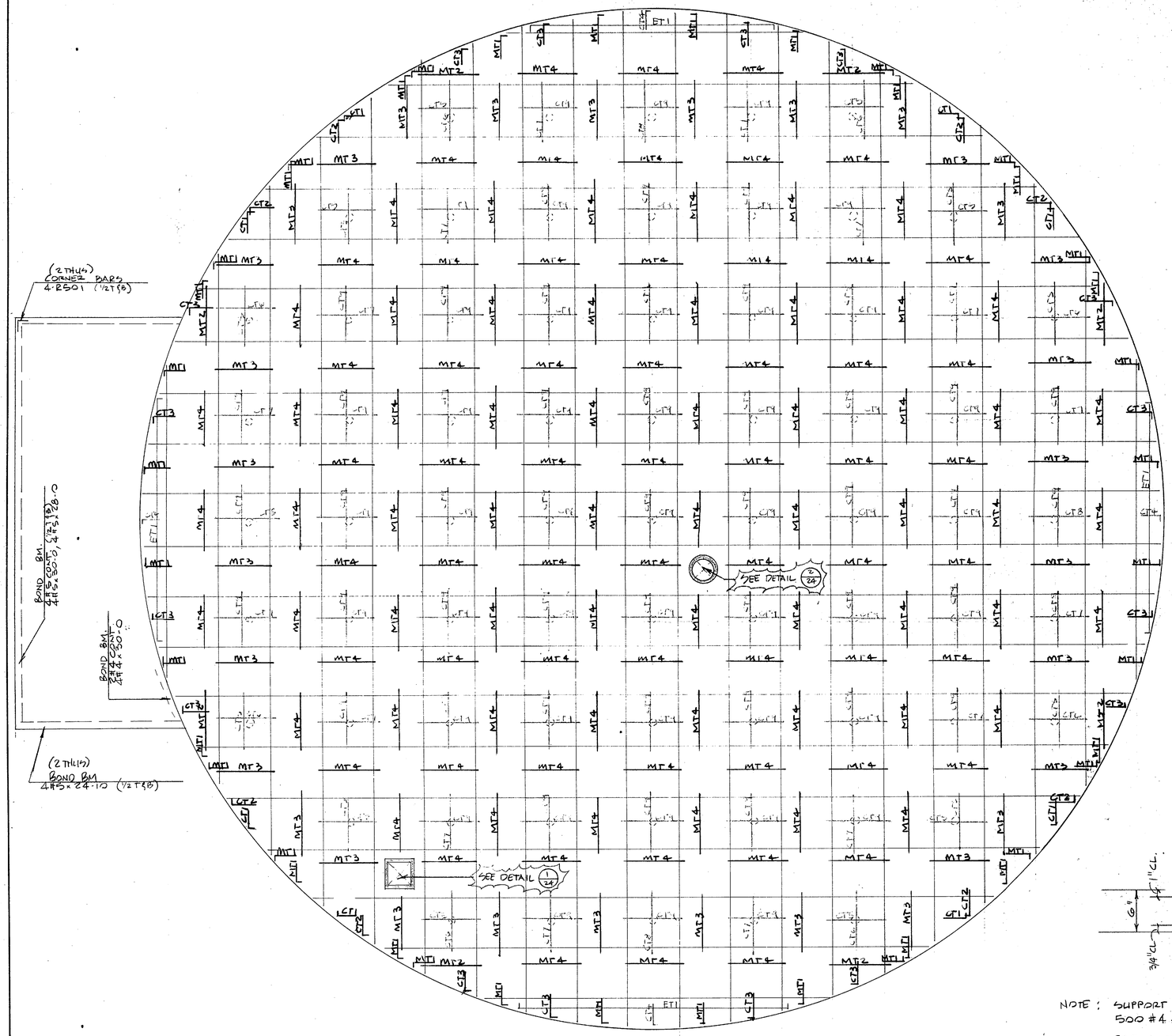
SHIP _____

CUST. ORDER NO. _____

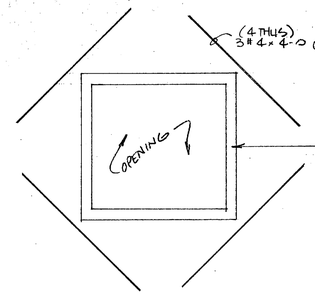
GRADE 60

SHEET TOTAL _____

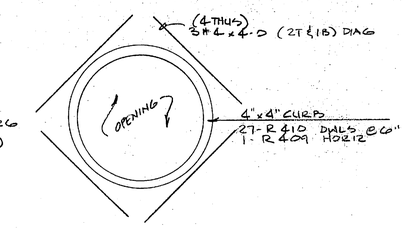
ORDER TOTAL _____



TOP SLAB PLAN - TOP REINF.

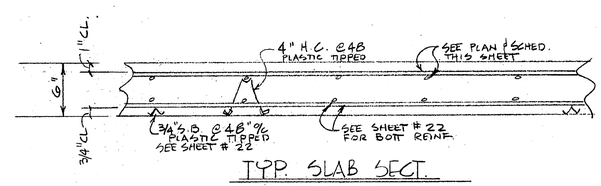


DETAIL 1/24



DETAIL 2/24

	MARK	QTY.	REINF.
COL.-STRIP TOP REINF.	CT1	8	11-R401
	CT2	8	10-R401
	CT3	16	7-R401
	CT4	4	6-R402 4-R401
	CT5	16	8#4 x 6-10 6#4 x 9-8
	CT6	8	6#4 x 6-8 4#4 x 9-8
	CT7	16	6#4 x 6-10 5#4 x 10-0
	CT8	4	6#4 x 6-10 6#4 x 10-0
	CT9	94	6#4 x 6-3 5#4 x 8-10
MID-STRIP TOP REINF.	MT1	40	7-R401
	MT2	8	7#4 x 8-5
	MT3	32	7#4 x 9-5
	MT4	116	7#4 x 8-3
END-STRIP TOP REINF.	ET1	4	ROW #1 - 1-R403, 1#4 x 13-0, 1-R403 ROW #2 - 1-R403, 1-R404 ROW #3 - 1-R403, 1-R405 ROW #4 - 1-R406 ROW #5 - 1-R407



TYP. SLAB SECT.

NOTE: SUPPORT BARS
500 #4 x 8-0 (@ 48 AS REQ'D)

BAR SUPPORTS
1100 pcs 4" H.C. @48
(PLASTIC TIPPED)

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X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. [signature] DATE 10-17-89

FOR APPROVAL ONLY
Not For Construction

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No.	
Structure	HOLCOMB BLVD. WATER TREAT. PLANT
Location	CAMP LE JEUNE, N.C.
Engineer	
Customer	HARRY PEPPER & ASSOC.

Made By LOTT Date 10-9-89 CONTRACT NO.

USE A615/GR 60 STEEL	REFERENCE DRAWING	DRAWING COVERS	DRAWING NO.
Q.A. CAT	511	SLAB REINF. RAW WATER	24 "R"

30 | PAK

File

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	2	3-8-85

FROM CONTRACTOR: Harry Roper + Associates, Inc.

TO: Henry Von Oesen + Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Co Lejeune, North Carolina

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	03302	Cast-In-Place Concrete		A	KAN/411 3/21/85
		Manufacturers Data on Melment -	7		
		Admixture			

CONTRACTOR'S COMMENTS: To provide better appearance, quality and increase strength, we wish to use Melment for wall placement, which will allow a highly workable flowing concrete without a loss of strength. If this proposal deviation is approved, there will be no additional cost to the Gov't and any changes caused will be the responsibility of the contractor at no additional cost to the Government

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: One Copy to ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Kerr

DATE RECEIVED BY REVIEWER: 3/11/85 | FROM (Reviewer): LANTDIV | TO: Harry Roper Inc

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REVIEWER'S COMMENTS: Approved No change in cost or time

COPY TO: FILE

DATE: 3-28-85

COPIES TO: ROICC (2), LANTDIV (1), A-E (1)

DATE: 3/25/85

SIGNATURE: [illegible]

HARRY PEPPER & ASSOCIATES, INC.

ENGINEERING CONTRACTORS

February 25, 1985

Resident Officer in Charge of Construction
Naval Facilities Engineering Command Contracts
Marine Corps Base
Camp LeJeune, North Carolina 28542

ATTN: Lieutenant P. E. Krug

RE: Contract N62470-81-C-1644
Expansion of Holcomb Boulevard
Water Treatment Plant
Camp LeJeune, North Carolina

Dear Sir:

With reference to Specification Section 03302 "Cast-in-Place Concrete" we wish to request the following no cost change.

In order to provide better appearance, better quality and increased strength, we wish to use an additional admixture called Melment, which is a concrete plasticizer. For wall placements it will allow a highly workable, flowing concrete without segregation or loss of strength.

We anticipate performing a trial mix to assure compatibility with the supplied concrete.

Enclosed is the manufacturer's literature for your evaluation. Please feel free to contact me if you require additional information. Advise me of your decision as soon as possible.

Very truly yours,
HARRY PEPPER & ASSOCIATES, Inc.

James Schock
Project Manager

enc

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_____ Approved for use subject to Government approval of specific deviation.

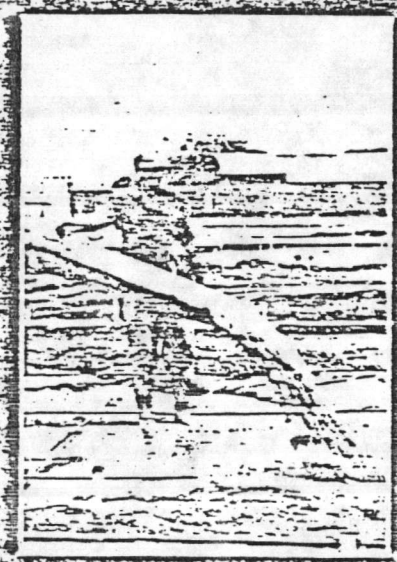
Authorized Reviewer _____ DATE _____

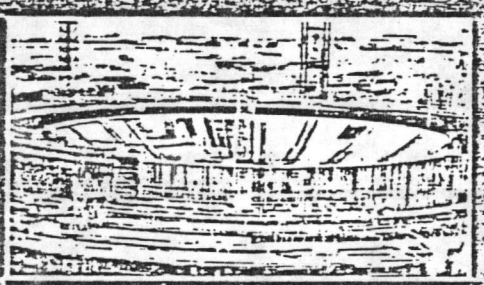
Signature CQC Rep. Phil Pierce DATE 3-8-85

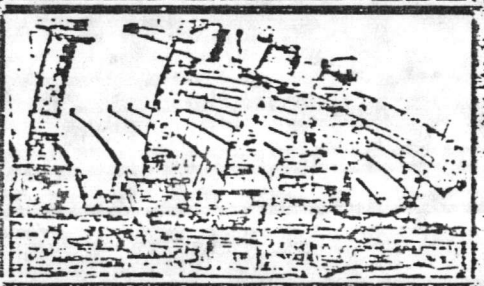
119 WEST EIGHTH STREET • P.O. BOX 3007 • JACKSONVILLE, FL 32206 904/356-3954

MELMENT®

This unique superplasticizing admixture brings improved performance and increased productivity to every concrete application.







American Admixtures and Chemicals Corporation

JOSEPH E. WOLFE

Atlanta GA 404 427 0263
Tampa FL 813 962 2632

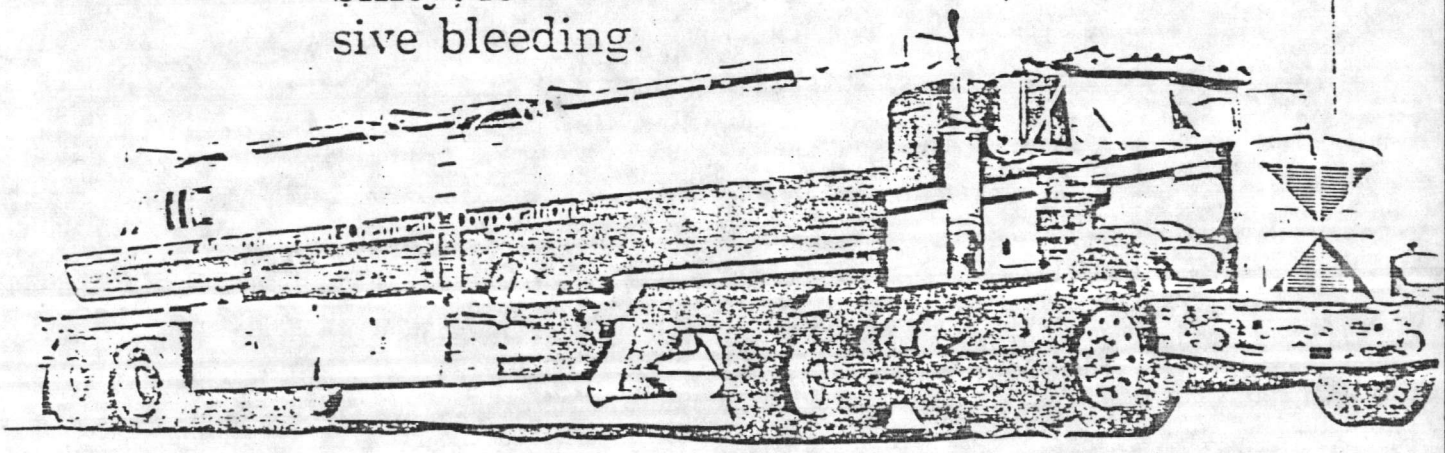
American Admixtures and Chemicals Corporation

5919 North Roger Avenue Chicago, Illinois 60646

MELMENT IS...

a sulfonated melamine condensate which has a powerful plasticizing effect on concrete without lowering the surface tension. It forms a lubricating film, enveloping both the cement and aggregate to reduce friction between the solids. Melment superplasticizer can be used to produce concrete at:

- Normal workability but at extremely low water-cement ratio.
- Extreme workability or "flowing" consistency at normal water-cement ratio. This concrete is essentially self-leveling, but without undesirable side effects, such as segregation, low durability, low abrasion resistance, and excessive bleeding.

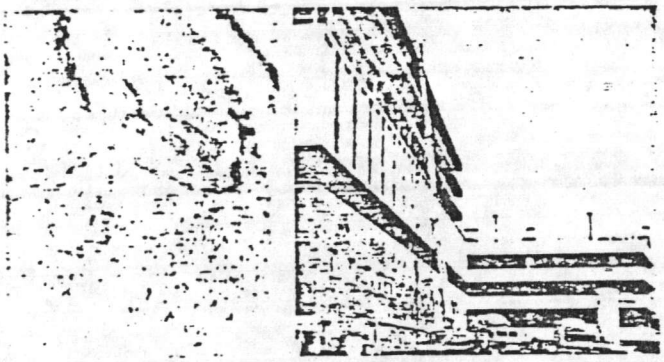


- A combination of better-than-normal workability but at a lower-than-normal water-cement ratio.

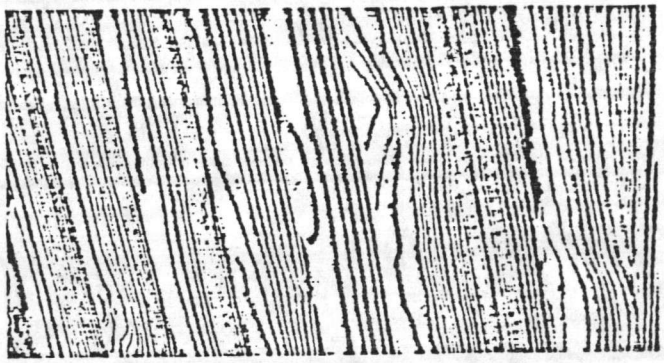
Because it is synthetically produced to exacting specifications, Melment assures consistent quality and dependable performance.

MELMENT FLOWING CONCRETE...

• Faster, easier placement • Slump tailored to your needs • Easier pumping • Better consolidation • Smoother finish, sharper textures. When Melment is added to increase the slump and workability of concrete without adding water, ordinary concrete becomes Flowing Concrete. In actual concreting comparisons, Melment Flowing Concrete has dramatically reduced time and labor costs.



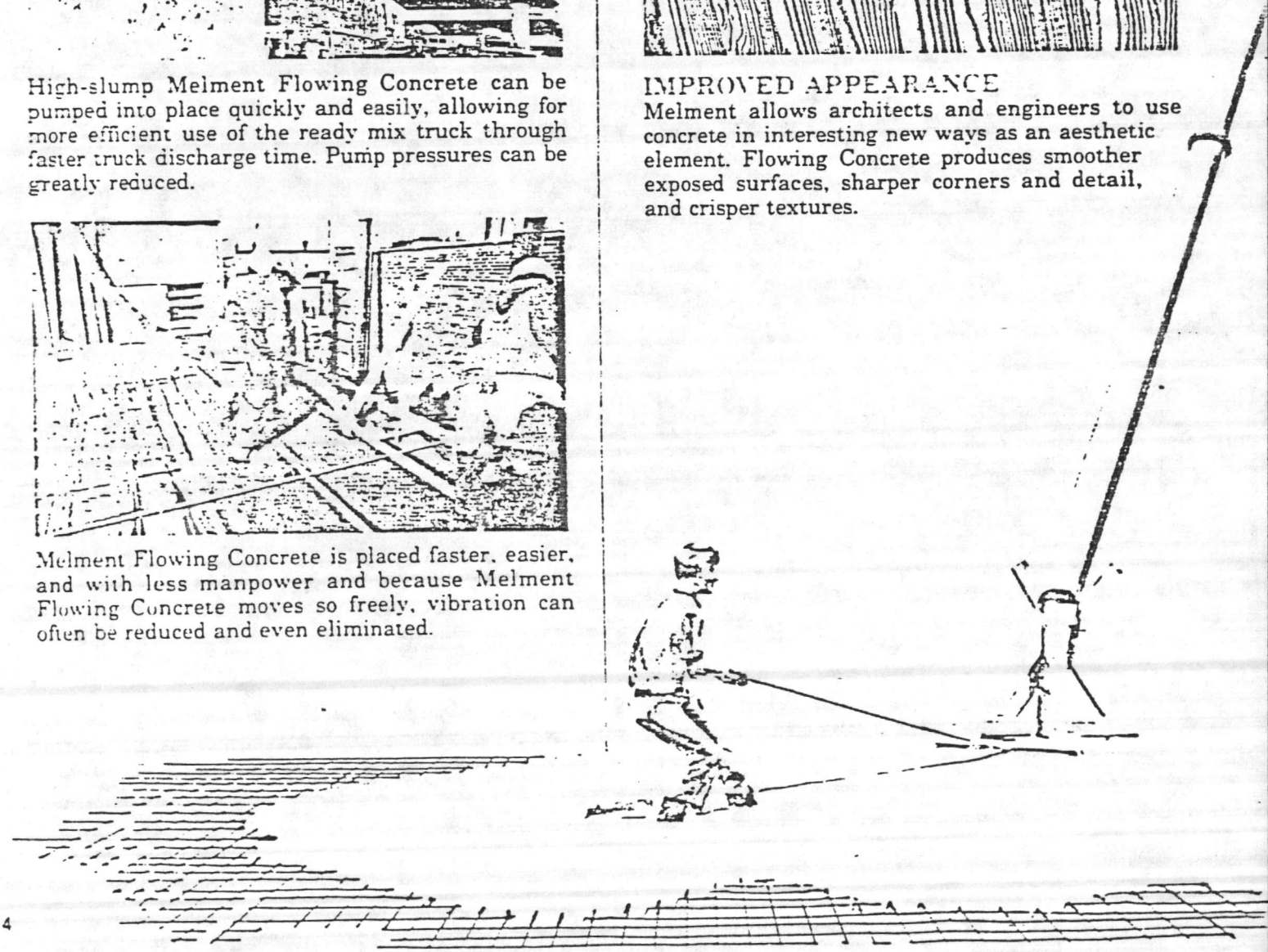
High-slump Melment Flowing Concrete can be pumped into place quickly and easily, allowing for more efficient use of the ready mix truck through faster truck discharge time. Pump pressures can be greatly reduced.

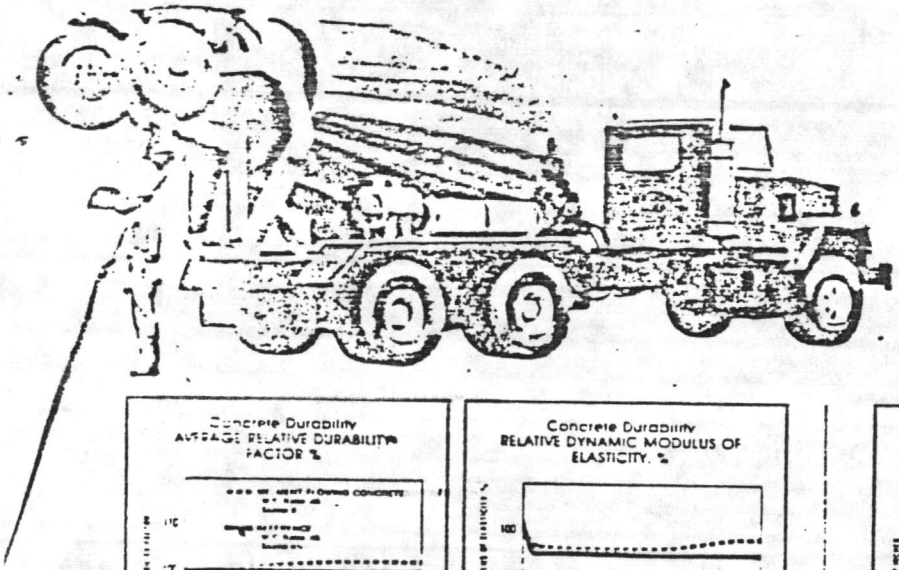


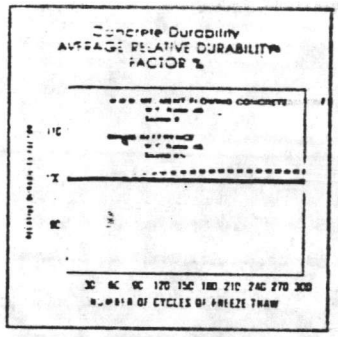
IMPROVED APPEARANCE

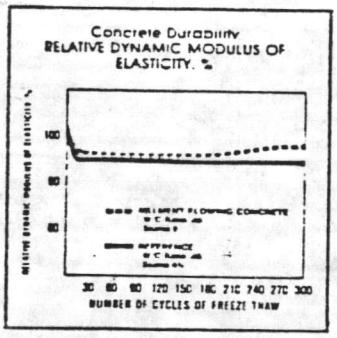
Melment allows architects and engineers to use concrete in interesting new ways as an aesthetic element. Flowing Concrete produces smoother exposed surfaces, sharper corners and detail, and crisper textures.

Melment Flowing Concrete is placed faster, easier, and with less manpower and because Melment Flowing Concrete moves so freely, vibration can often be reduced and even eliminated.





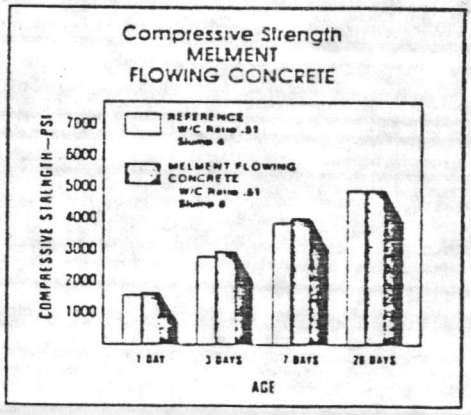




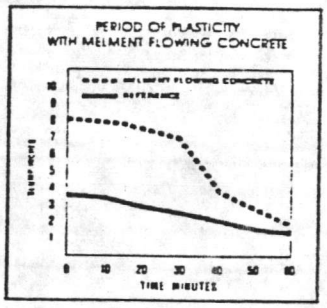
TESTS PROVE SUPERIOR PERFORMANCE

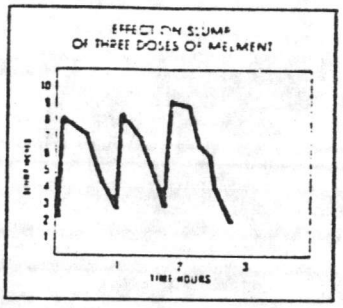
Durability is an important advantage of Melment Concrete. Melment L10A enhances air-void structures so they are not damaged even at high levels of flowability. Melment L10A has proved durable in tests by many independent laboratories and by state and Federal agencies even under the most severe exposure conditions. The graph above shows the average relative dynamic modulus of elasticity of Melment Flowing Concrete as a percentage of reference specimens for 300 cycles of freezing and thawing in water in laboratory tests.* Actual performance of Melment Flowing Concrete used in various applications in the field bears out these test results.

*ASTM C-666, Method A.



Compressive Strength obtained with Melment depends on its dosage and application. As the graph above shows, Melment Flowing Concrete produces slightly higher compressive strengths at all stages of testing.



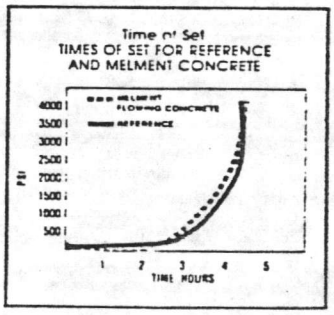


PLASTICITY OF MELMENT FLOWING CONCRETE

The plastic effect of Melment typically lasts from 30-60 minutes. Therefore, Melment is normally added at the point of placement. However, should flowability be lost before all concrete is placed, Melment may be added again to regain high slump without loss of strength.

TIME-OF-SET

Melment has no appreciable effect on the setting characteristics of concrete. The graph at right shows the time-of-set for two concrete mixtures with equal cement and water contents, the only difference is the addition of Melment.



SUGGESTED DIRECTIONS FOR USE

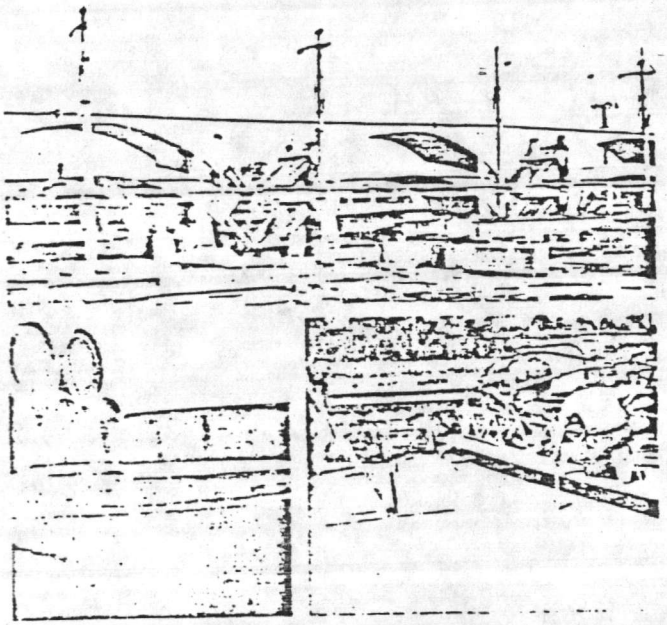
All concrete should arrive at the jobsite having a slump of 3" ± 1". Melment should be added after the concrete has been thoroughly mixed and the desired initial slump has been achieved. Additional mixing should be given after the addition of Melment to insure good distribution. Melment may be used with all types of cements and admixtures meeting appropriate ASTM specifications. Trial mixes should be produced to ensure compatibility.

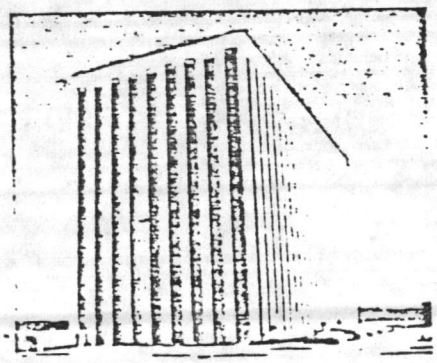
DOSAGE

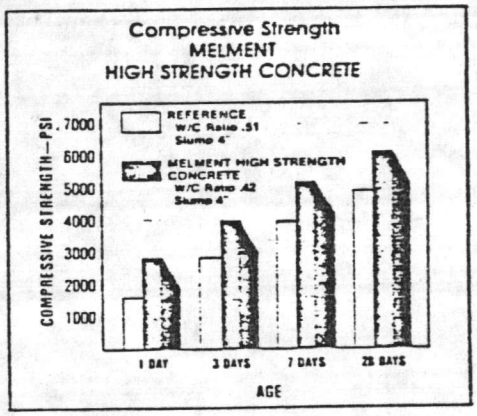
The dosage rate of Melment varies depending upon the amount of plasticity desired. Typically, Melment is batched at 12-30 fl. oz. per cwt of cementitious material (Portland cement + fly ash) for flowing concrete. The dosage rate of Melment, when used in conjunction with a Type A water-reducing admixture may be reduced 25% or more. Admixture compatibility should be ensured by trial batching prior to use.

MELMENT HIGH-STRENGTH CONCRETE...

• Far greater strengths at all ages • Better durability • Less shrinkage, less bleeding • Increased impermeability • Improved workability. Melment used as a high-range water reducer assures better concrete quality at normal levels of workability: Concrete may be placed at normal slumps, but with 20-30% less water content. Compare that to 5-15% water reduction of typical water-reducing admixtures. Melment facilitates accelerated curing to save time, energy and labor costs, as well as earlier turnover of forms. Melment often enables the producer to use Type I cement rather than Type III cement because of its beneficial effect on early strength.

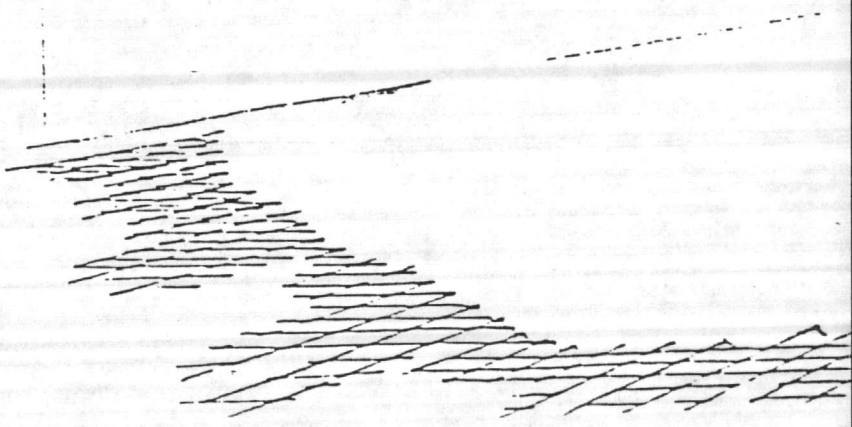






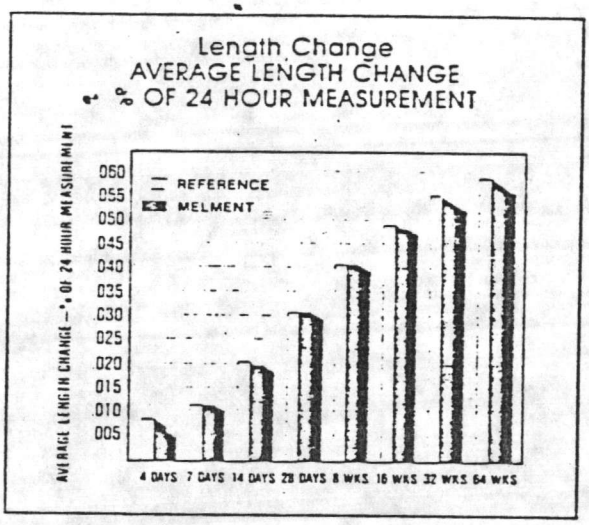
COMPRESSIVE STRENGTH

For those applications where higher strength is most important—precast structural elements, bridge supports, slip form concrete, prestressed or post-tensioned concrete, early removal of forms—Melment fills the bill as a high-range water reducer. The graph above illustrates the exceptional higher strength, at all ages, of Melment Concrete compared to a reference mixture.



SERVICEABILITY

Over the long term, strength levels in Melment concrete, with its reduced water content, remain as much as 15-20% greater than those of untreated concrete. Examinations under an electron-microscope and radiographic analysis show that hydration products of Melment High-Strength Concrete are identical to those of untreated concrete. Long-term test data confirms the benefit of Melment Concrete versus time.



Shrinkage can be reduced with the addition of Melment as a high-range water reducer. This reduces the danger of cracking and enhances the overall strength of the concrete product.

DIRECTIONS FOR USE:

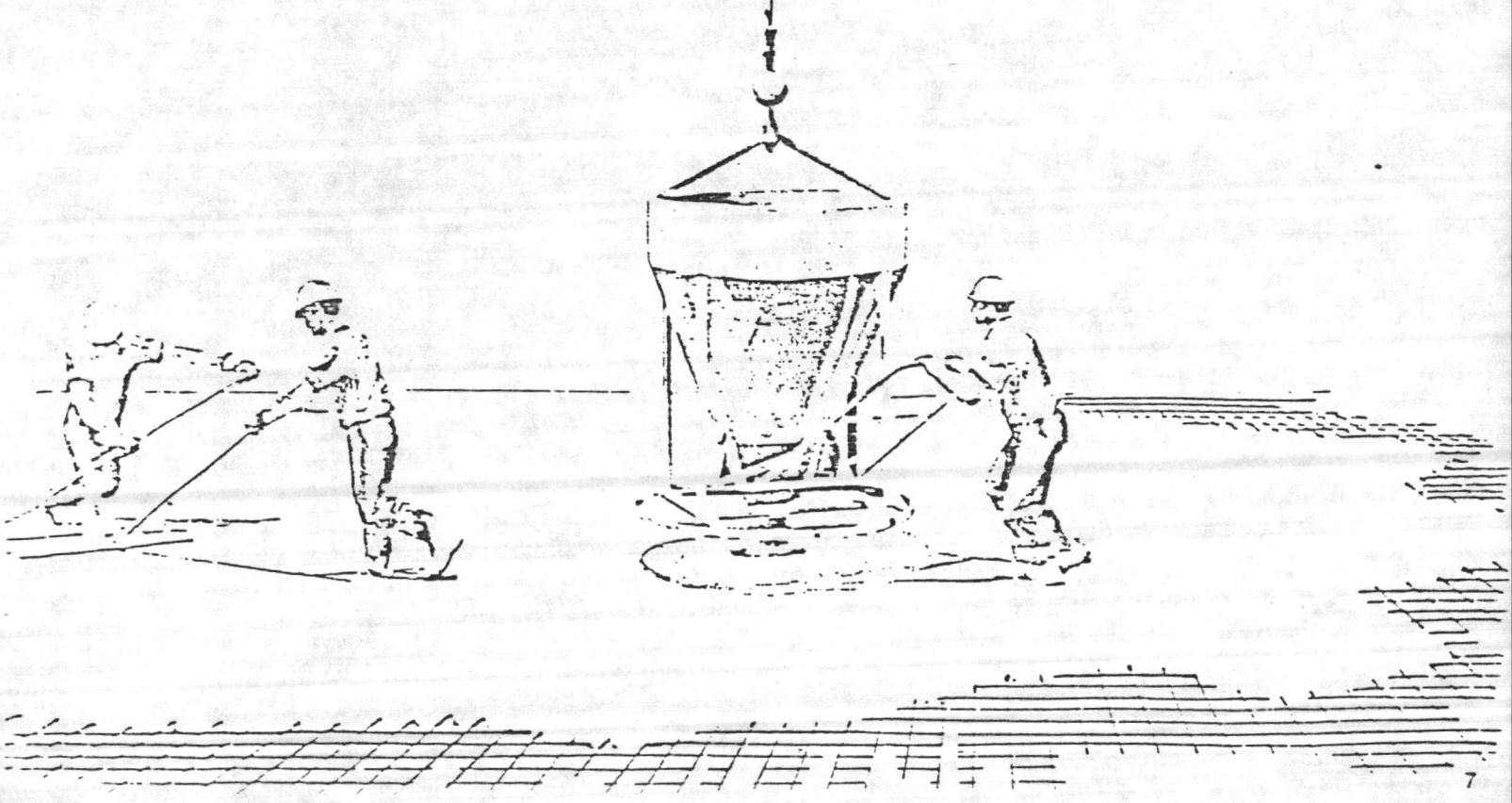
Concrete should be mixed at the water-cement ratio necessary to attain the specified strength. To achieve the desired level of workability, Melment should be added to the concrete as a final ingredient after it has been thoroughly mixed.

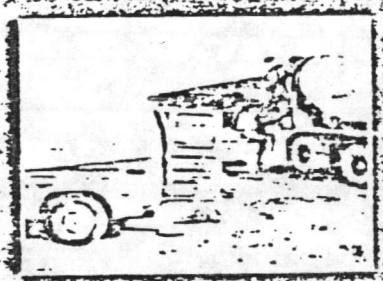
DOSAGE

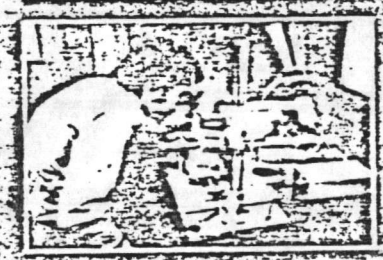
The dosage rate of Melment varies depending upon the amount of water reduction and workability desired. Typically, Melment is batched at 15-40 fl. oz./cwt of cementitious material (Portland cement + fly ash) for high-strength concrete.

COMBINATION

Melment lets you tailor concrete performance to meet your needs. Melment has a variable dosage rate so you can tailor the strength and workability of concrete to suit the circumstances of the job. Typically, concrete is brought to the jobsite at a 1-3" slump and Melment is added just prior to placement to achieve a 6-8" slump.







Expert technical assistance is provided with every ounce of Melment.

We have helped people place Melment concrete in every kind of construction from nuclear power plants to bank vaults, tilt-up panels to high-rise buildings. Our experience in quality control is a vital ingredient in high performance concrete work. That is why we urge customers to take advantage of our expertise from the beginning in any concrete project. Call your technical representative from American Admixtures and Chemicals Corporation during the planning stage. He will show you how Melment can affect production schedules, save on cement or solve unusual problems with a custom concrete mix design.

On-site quality control is another important service of American Admixtures. When needed, our technical representative is on the spot to assist you as you place Melment concrete.

Suggested Specifications for General Purposes

All concrete shall be delivered to the jobsite at a slump of 3" ± 1". No additional water shall be added to the concrete at the jobsite. If increased workability is desired, it shall be obtained through the use of Melment Superplasticizer conforming to ASTM C-494 Type A and F, as manufactured by American Admixtures and Chemicals Corporation.

(The above general purpose specifications can be applied to most jobsite situations. If a special situation should arise, your American Admixtures and Chemicals Corporation technical sales representative will aid in the tailoring of a specification for individual applications.)

Manufacturing Specifications: Melment is manufactured for conforming to the specifications of ASTM C-494 Type A and F, CRD C-97 Type A and AASHTO M-194 Type A.

Availability: Melment is available in powder form in bags weighing approximately 55 lbs. in any quantities. Melment is available in liquid form in 55 gallon drums or in bulk delivered by American Admixtures' own trucks or in small railroad tank cars.

Need Help? Call the American Admixtures Hotline 800/621-5506 (In Illinois 312/298-3700). Get immediate information on Melment or any of our other products from our technical department.

American Admixtures and Chemicals Corporation

Corporate Headquarters: 5905 Northwest A Avenue, Chicago, Illinois 60646 (312/775-7737)

Regional Offices:

St. Louis: 12210 Hanley Industrial Court, St. Louis, Missouri 63144 (314/962-0650)

Hagerstown: 185 Pennsylvania Avenue, Hagerstown, Maryland 21740 (301/790-3900)

Dallas-Fort Worth: 1808 Summit, Suite 3, Plano, Texas 75074 (214/422-7851)

Atlanta: 930 Mansell Industrial Drive, Marietta, Georgia 30062 (404/977-0259)

PRODUCT DATA

MELMENT
For Flowing Concrete

GENERAL:

MELMENT is a melamine formaldehyde, water soluble polymer based, normal-setting Superplasticizer which produces extremely workable "flowing concrete" that is essentially self-leveling without undesirable side effects.

ADVANTAGES:

- MELMENT flowing concrete enables easier and faster placement of concrete resulting in a significant savings in labor costs.
- Through its unique plasticizing effect, MELMENT can provide highly workable, flowing concrete without segregation at the same water-cement ratio as concrete of normal workability without a loss of strength.
- MELMENT improves pumpability. Pump pressures can be reduced up to 50%.
- The use of vibrators can be eliminated or reduced while giving greater assurance of good consolidation.
- MELMENT adds to reduced permeability to water as well as improved resistance to freezing and thawing and the action of deicing salts.
- MELMENT flowing concrete will produce better architectural concrete without honeycombing. Textured concrete surfaces are enhanced.
- MELMENT is chloride-free.
- MELMENT may be used with all types of ASTM approved cements and admixtures. Trial mixes should be conducted to ensure compatibility.
- The plastic effect of MELMENT typically lasts from 30 - 60 minutes. Therefore, MELMENT is normally added at the point of placement.

DIRECTIONS FOR USE:

All concrete should arrive at the jobsite having a slump of 3" ± 1".

MELMENT should be added after the concrete has been thoroughly mixed and the desired initial slump has been achieved. Additional mixing should be given after the addition of MELMENT to insure good distribution.

DOSAGE:

The dosage rate of MELMENT varies depending upon the amount of plasticity desired. Typically, MELMENT is batched at 12 - 30 fl. oz. per cwt of cementitious material (Portland cement – fly ash) in ready mix concrete.

SPECIFICATIONS:

MELMENT is manufactured to conform to the specifications of ASTM C-494, Type A, CRD C-87, Type A, and AASHTO M-194-70, Type A.

SUGGESTED SPECIFICATION FOR GENERAL PURPOSE USE:

All concrete shall be delivered to the jobsite at a slump of 3" ± 1". No additional water shall be added to the concrete at the jobsite. If increased workability is desired, it shall be obtained through use of MELMENT Superplasticizer conforming to ASTM C-494, Type A, as manufactured by American Admixtures and Chemicals Corporation, 5909 North Rogers Avenue, Chicago, Illinois 60646.

(The above general purpose specification can be applied to most jobsite situations. If a special situation should arise, your American Admixtures and Chemicals Corporation technical sales representative will aid in the tailoring of a specification for individual application.

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	82	7-18-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☒ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	2.2.4.2	Manufacturer's Data on Pozzolith 122-R	7	A	RO'B 7/22/85
2		Certification	7	A	RO'B 7/22/85

CONTRACTOR'S COMMENTS

Request is made by the Contractor to use Pozzolith 122-R for use in pouring concrete when needed for construction purposes, specifically during high temperature periods. This admixture will aide in placing and finishing. If approval for use is given, there will be no additional expense to the Government and any problems caused will be at the expense of the Contractor.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pease

DATE RECEIVED BY REVIEWER | FROM (Reviewer) | TO

☒ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	7/22/85	[illegible]

☆ U.S. GPO:1984-537-003/11170 Region 3-11

Item #1

MASTER BUILDERS
IMPROVING CONCRETE WORLDWIDE
MARTIN MARIETTA
CLEVELAND, OHIO 44122

POZZOLITH* 122-R

Admixture for Improving Concrete

POZZOLITH 122-R is a ready-to-use, liquid admixture for making more uniform and predictable quality concrete while retarding its setting time to facilitate placing and finishing operations. It meets ASTM C 494 requirements, specifically:

- INCREASED STRENGTH – compressive and flexural
- RELATIVE DURABILITY TO DAMAGE FROM FREEZING AND THAWING – well above industry standards
- REDUCED WATER CONTENT REQUIRED FOR A GIVEN WORKABILITY
- RETARDED SETTING CHARACTERISTICS

ADVANTAGES: The set retarding characteristics of POZZOLITH 122-R admixture aid in the production of concrete with the following special qualities:

- IMPROVED WORKABILITY
- REDUCED SEGREGATION
- SUPERIOR FINISHING CHARACTERISTICS for flatwork and cast surfaces
- MODERATE TO EXTENDED RETARDATION – depending on dosage used
- PROVIDES FLEXIBILITY IN THE SCHEDULING OF PLACING AND FINISHING OPERATIONS
- OFFSETS THE EFFECTS OF TOO-EARLY HARDENING DURING EXTENDED DELAYS BETWEEN MIXING AND PLACING
- HELPS ELIMINATE UNWANTED COLD JOINTS
- ALLOWS FOR DEAD LOAD DEFLECTION TO TAKE PLACE (BEFORE CONCRETE SETS) IN EXTENDED POURS for bridge decks, cantilevers, nonshored structural elements, etc.
- LOWERS PEAK TEMPERATURE AND/OR RATE OF TEMPERATURE RISE IN MASS CONCRETE – REDUCES THERMAL CRACKING
- EFFECTIVE AS A SINGULAR ADMIXTURE OR AS A COMPONENT IN A POZZOLITH ADMIXTURE SYSTEM

WHERE TO USE: POZZOLITH 122-R admixture is recommended for use in all types of concrete where moderate to extended retardation of set and improved performance are desired.

This admixture improves pumped concrete, shotcrete (wet mix), and conventionally placed concretes. It improves plain, reinforced, precast, prestressed, lightweight or standard-weight concrete.

POZZOLITH 122-R admixture can be used with air-entraining cements and with air-entraining admixtures approved under ASTM, AASHTO and CRD specifications. When air-entrained concrete is desired, Master Builders air-entraining admixtures are recommended for use with POZZOLITH 122-R admixture. By itself, POZZOLITH 122-R admixture does not entrain air.

When used in conjunction with another admixture, each admixture must be dispensed separately into the mix.

POZZOLITH 122-R admixture can be used in white or colored concrete and in architectural concrete.

QUANTITY TO USE: POZZOLITH 122-R admixture is recommended for use at the rate of 4 ± 1 fl oz per 100 lb (260 ± 65 ml per 100 kg) of cement for most concrete mixes using average concrete ingredients. However, it is appreciated that variations in the job conditions and concrete materials may make usage rates outside the recommended dosage range desirable. In such cases, contact your local Master Builders representative.

RATE OF HARDENING: The temperature of the concrete mix and the ambient temperature (forms, earth, reinforcement, air, etc.) affect the hardening rate of concrete. At higher temperatures, concrete hardens more rapidly which may cause problems with placing and finishing.

A function of POZZOLITH 122-R admixture is to retard the set of concrete. Within the normal dosage range, it will generally extend the vibration limit and delay the set of concrete containing normal portland cement approximately 1 hour to 5 hours over the setting time of a comparable, plain concrete mix, depending on job materials and temperatures. Trial mixes should be made with job materials approximating job conditions to determine the dosage required.

COMPRESSIVE STRENGTH: Concrete produced with POZZOLITH 122-R admixture will have rapid strength development after initial set occurs. Develops higher early (24 hour) and higher ultimate strengths than plain concrete when used within the recommended dosage range and under normal, comparable curing conditions.

When POZZOLITH 122-R admixture is used in heat-cured concrete, the length of the preheating period should be increased until initial set of the concrete is achieved. The actual heat curing period is then reduced accordingly to maintain existing production cycles without sacrificing early or ultimate strengths.

PACKAGING: POZZOLITH 122-R admixture is supplied in 55 U.S. gallon (208 litre) drums and bulk delivery.

CAUTION: If POZZOLITH 122-R admixture has frozen, thaw at 35°F (2°C) or above and completely reconstitute by mild mechanical agitation. ***Do not use pressurized air for agitation.***

For additional information on POZZOLITH 122-R admixture or on its use in developing a concrete mix with special performance characteristics, contact your local Master Builders representative.

*Reg. U.S. Pat. & Tm. Off.

Form P-139c
Printed in U.S.A. 784

APPROVED
FOR USE ON 81-C-1644

APPROVAL OF MATERIALS AND/OR EQUIPMENT INDICATES COMPLIANCE WITH SPECIFICATION REQUIREMENTS ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROVIDE PROPER PHYSICAL DIMENSIONS, CLEARANCES, WEIGHTS, CAPACITIES, PERFORMANCE, COORDINATION WITH OTHER TRADES OR THE RESPONSIBILITY TO PROVIDE THE SYSTEM AND/OR EQUIPMENT COMPLETE IN PLACE AND READY FOR USE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

HENRY VON OESEN AND ASSOCIATES
611 PRINCESS STREET
WILMINGTON, NORTH CAROLINA

DATE JUL 22 1985

BY RDB

It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_____ Approved for use.

X Submitted for Government approval.

_____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Reese DATE 2-18-85

Item #2

MASTER BUILDERS
IMPROVING CONCRETE WORLDWIDE
MARTIN MARIETTA

February 20, 1985

Certificate of Conformance
Pozzolith 122-R
Master Builders Admixture for Concrete

Re: Job: Expansion of Holcomb Blvd.
Water Treatment Plant
Marine Corps Base
Camp Le Jeune Marine Base, North Carolina
Job No. N62470-81-C-1644
General Contractor: Harry Pepper and Associates
Jacksonville, Florida

To Whom It May Concern:

State of Ohio)
County of Cuyahoga) ss

Before me, a Notary Public, in and for the aforesaid State and County, personally appeared Philip A. Rosskopf, who being duly sworn, deposes and says:

That he is Senior Research Advisor for Master Builders, Cleveland, Ohio; and

That Pozzolith 122-R meets the requirements for a Type B, Retarding, and Type D, Water-Reducing and Retarding Admixture specified in ASTM C 494-82, Corps of Engineers' CRD-C 87-83 and AASHTO M 194-82, Standard Specifications for Chemical Admixtures for Concrete.

Philip A. Rosskopf

Philip A. Rosskopf
Senior Research Advisor

Subscribed and sworn to before me
this 20th day of February, 1985

Barbara K. Leslie

Barbara K. Leslie, Notary Public
State of Ohio
My Commission Expires August 13, 1989
(Recorded in Cuyahoga County)

23700 CHAGRIN BOULEVARD
CLEVELAND, OHIO 44122
PHONE 216/831-5500
TELEX 980-305

X/RAK
OK

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	98	9-23-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

[X] Contractor Approved [ ] OICC Approval [ ] Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Steel Slab and Roof at Acid and Chlorine Storage	4	RAK	ROR 10-3-85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE Signature: Phil Reese

DATE RECEIVED BY REVIEWER

FROM (Reviewer): Henry von Oesen & Assoc., Inc.

TO

[ ] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

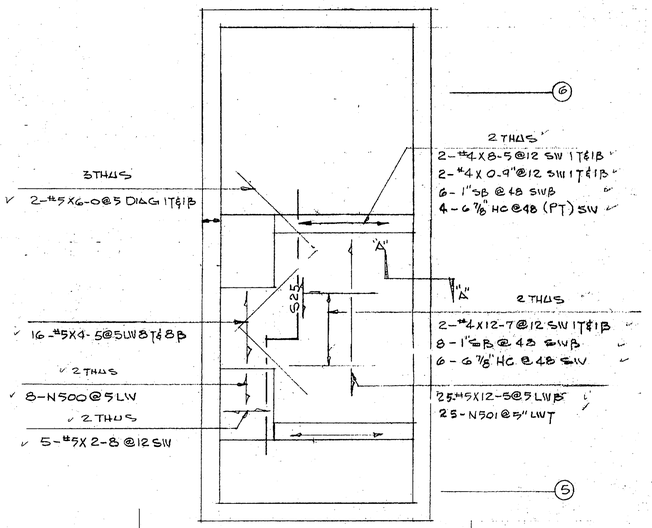
Minor corrections were made by the reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC.

HENRY VON OESEN AND ASSOCIATES, INC.

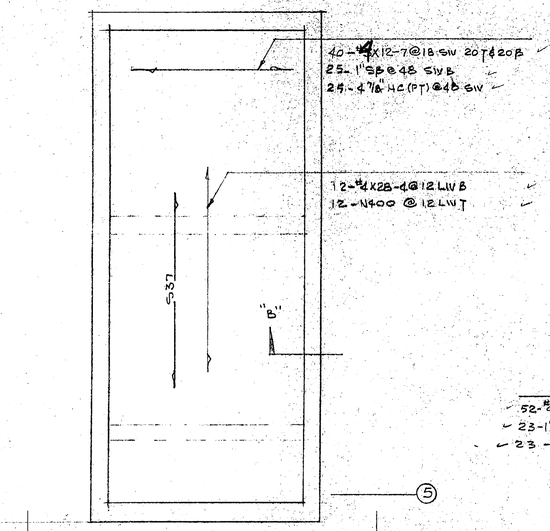
OCT 03 15 31

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	10-3-85	

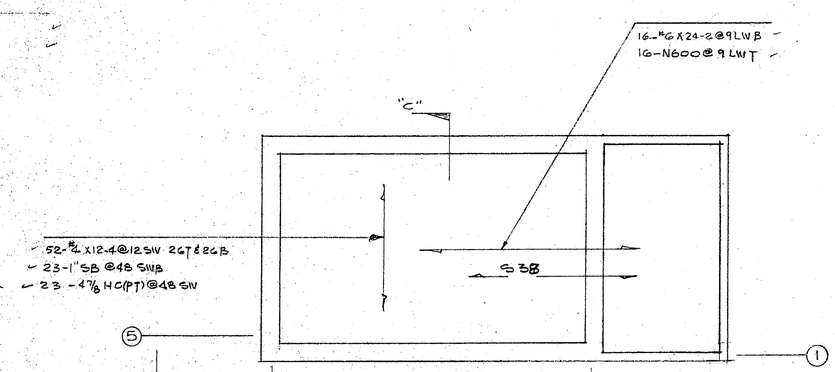
☆ U.S. GPO:1984-537-003/11170 Region 3-11



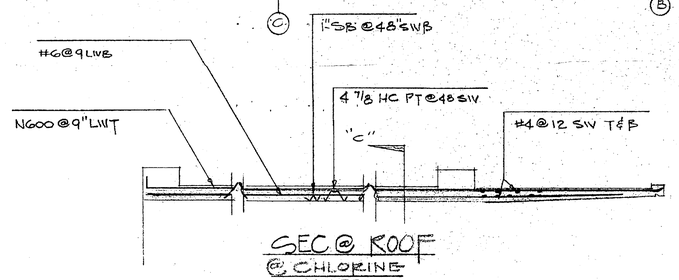
SLAB @ ACID STO.
1/4" = 1'-0"



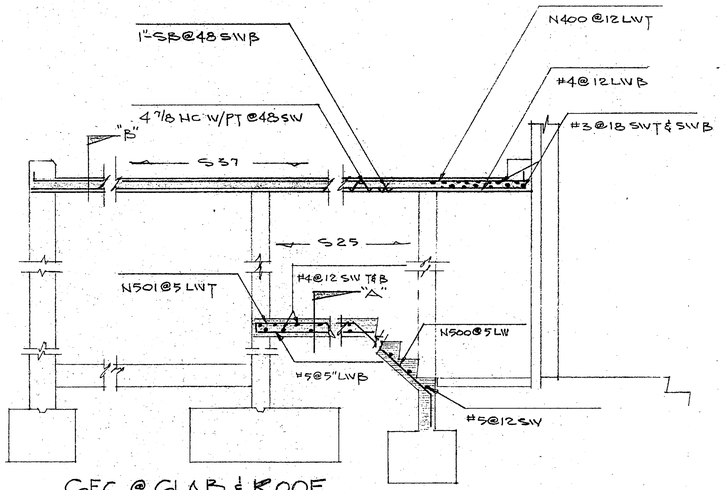
ROOF FRAMING
ACID STO.
1/4" = 1'-0"



ROOF FRAMING
CHLORINE STO.
1/4" = 1'-0"



SEC @ ROOF
@ CHLORINE
NTS



SEC @ SLAB & ROOF
@ ACID STO
NTS

It is hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut sheet, etc., and described/proposed to be incorporated into Contract Number N62467-81-C-1544 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space.

X Approved for use.

Submitted for Government approval.

Approved for use subject to Government approval of specific deviation.

Authorized Reviewer

Signature CQC Rep DATE

DATE 9-23-85

FOR APPROVAL ONLY
Not For Construction

SLAB & ROOF @ ACID & CHLORINE STO

LP LOTT STEEL PRODUCTS CO.

PROJECT EXP. HOLCOMB BLVD WWTP
LOCATION CAMP LEJEUNE N.C.
CONTRACTOR HARPY PEPPER & ASSOC
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
AS INDIC	NAME JOHNSON	NAME	NAME
	DATE 9/9/85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO B5132-20 SERIES "N"

SOUTHERN PHOTO - GREENSBORO N-5151

RK

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	101	10-7-85

FROM CONTRACTOR: Harry Pepper & Associates Inc

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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REVIEWER USE ONLY

**ACTION CODES
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AN-Approved as noted
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R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST IN PLACE CONCRETE			
1	1.2.1	Reinforcement Steel Top Slab Plan- Bottom Reinf -RAWWater	4	RA	RCB 10-11-85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): PHIL REESE Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
10/10/85	Henry von Oesen & Assoc., Inc.	

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

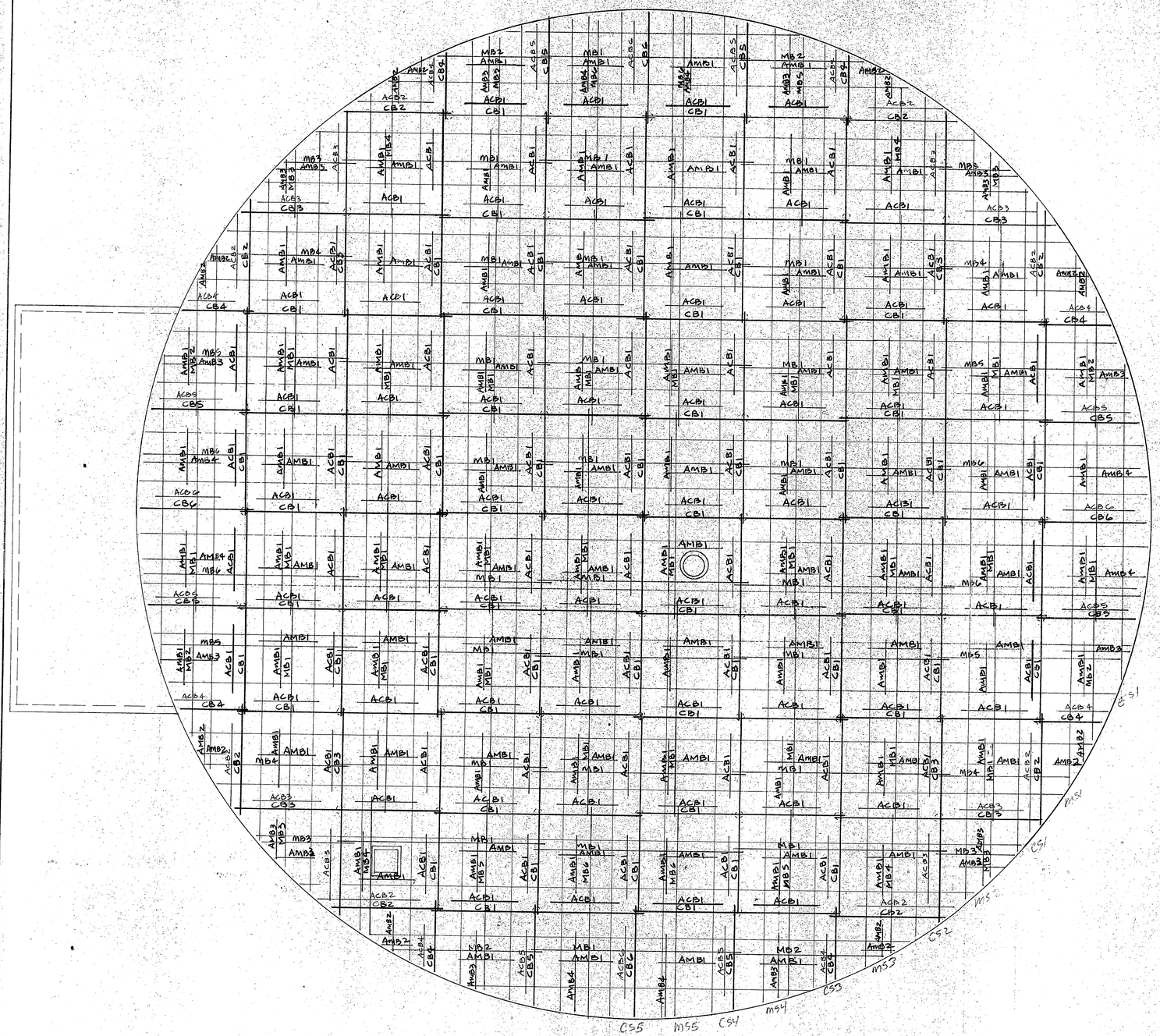
Contractor's approval appears to be appropriate.

HENRY VON OESEN AND ASSOCIATES, INC.

10-31-85

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	10/11/85	

☆ U.S. GPO:1984-537-003/11170 Region 3-11



TOP SLAB PLAN - BOTT. REINF.

SLAB REINF. SCHED.

COL.-STRIP BOTT. REINF.	CB1	56	5#3 x 29-5
	CB2	8	1#3 x 10-6 1#3 x 12-5 1#3 x 14-4 1#3 x 16-3 1#3 x 20-10
	CB3	8	1#3 x 27-0 1#3 x 28-5 1#3 x 31-10 1#3 x 31-3 1#3 x 32-8
	CB4	8	1#3 x 8-6 1#3 x 9-5 1#3 x 10-4 1#3 x 11-3 1#3 x 12-2
	CB5	8	1#3 x 13-6 1#3 x 13-9 1#3 x 14-3 1#3 x 14-6
	CB6	4	5#3 x 16-6
COL.-STRIP ALT. BOTT. REINF.	ACB1	120	5#3 x 10-8
	ACB2	8	1#3 x 8-6 1#3 x 10-5 1#3 x 12-3 1#3 x 14-2
	ACB3	8	6#3 x 14-6
	ACB4	8	5#3 x 10-6
	ACB5	8	5#3 x 12-6
	ACB6	4	6#3 x 13-2
MID-STRIP BOTT. REINF.	MB1	52	5#3 x 29-5
	MB2	8	1#3 x 25-6 1#3 x 22-5 1#3 x 19-5 1#3 x 16-5 1#3 x 12-6
	MB3	8	1#3 x 12-6 1#3 x 10-5 1#3 x 8-5 1#3 x 6-5
	MB4	8	1#3 x 32-6 1#3 x 32-6 1#3 x 32-6 1#3 x 32-6
	MB5	8	1#3 x 27-6 1#3 x 27-6 1#3 x 22-6 1#3 x 22-6 1#3 x 22-6
	MB6	8	3#3 x 20-0 2#3 x 29-5
MID-STRIP ALT. BOTT. REINF.	AMB1	136	6#3 x 10-0
	AMB2	16	5#3 x 9-9
	AMB3	16	5#3 x 11-9
	AMB4	8	5#3 x 12-9

I hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-D-1964 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific exceptions.

Authorized Reviewer _____ DATE _____

Contractor QCC Rep. Phil Reno DATE 10-7-85

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No.	
Structure	HOLCOMB BLVD. WATER TREAT. PLANT
Location	CAMP LE JEUNE, N.C.
Engineer	
Customer	HARRY PEPPER #A5500
Made By	LOTT Date 9-20-85
CONTRACT NO.	85132
DRAWING COVERS	SLAB REINF. RAW WATER
DRAWING NO.	22

USE A615/GR 60 STEEL

Q.A. CAT

REFERENCE DRAWING 511

X | PSK

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	80	7-15-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1.	1.2.1	Reinforcement Drawing, Chlorine Storage	4	RA/C	ROB 7/22/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER: 7/17/85

FROM (Reviewer): Henry von Oesen & Assoc., Inc.

TO:

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Minor Corrections were made by thr reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC.

CORRECTIONS ACKNOWLEDGE:

Signature _____ Date _____

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	7/22/85	Robert W. Brock

LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE Holcomb Blvd. Water Tri. Plt. Exp.

SHEET 1 OF _____

SHIP TO Harry Pepper & Assoc.

DATE _____

LOCATION Camp LeJune, Nor Car.

MADE BY RKB CKD. BY _____

MATERIAL FOR Flr Slab (Chlorine Storage)

REFERENCE DWG 185132-16 "K"

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		7	7-8	K701	2	0-5	7-3										
2																	
3		4	6-6	K401	2	0-3	5-10					0-5					
4																	
5																	
6																	
7																	
8																	
9																	
0																	
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6																	
7																	
8																	
9																	
0																	
1																	

SHIP _____

CUST. ORDER NO. _____

GRADE 60

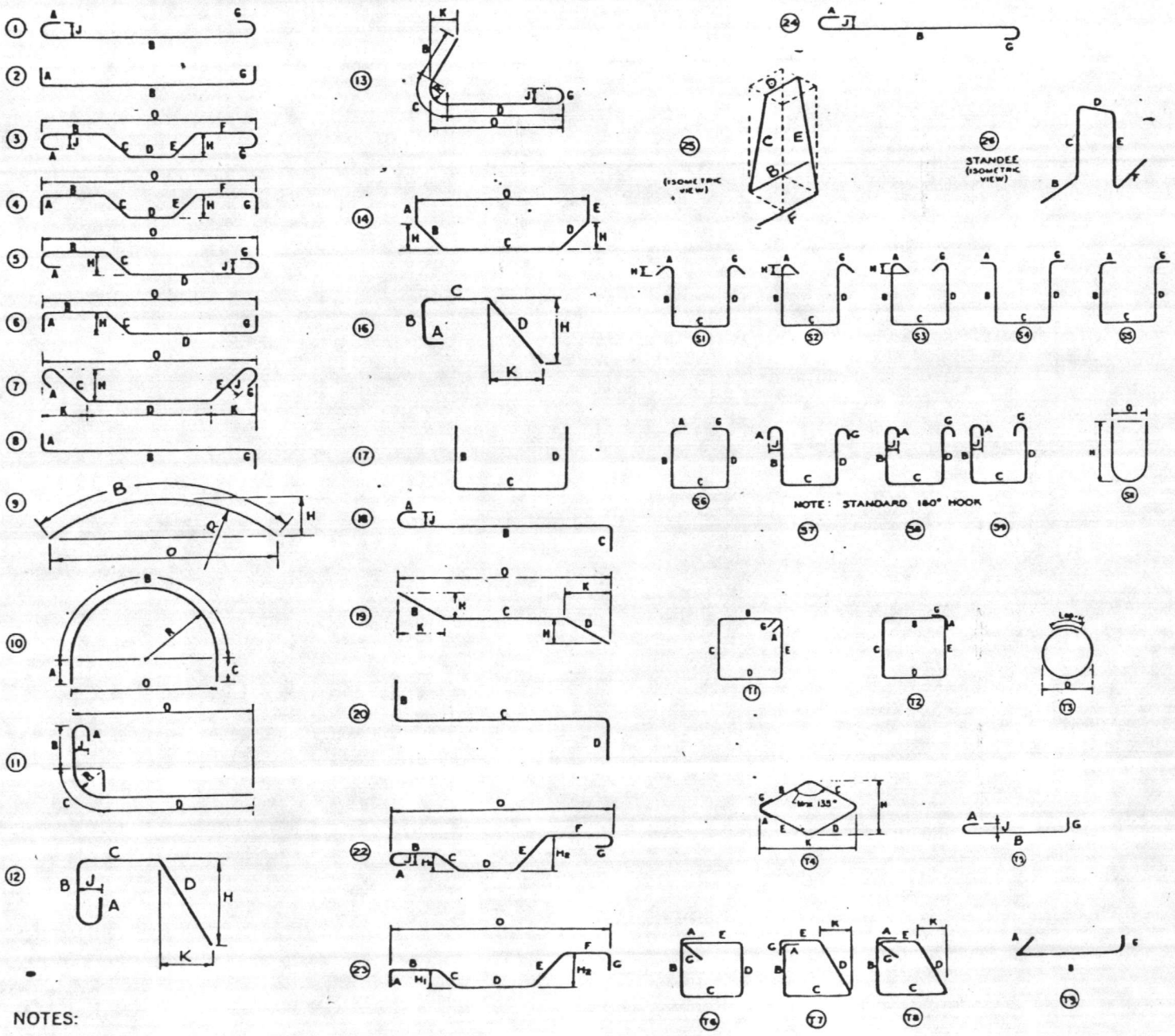
SHEET TOTAL _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS COMPANY

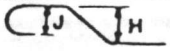
P. O. BOX 879 • WELCOME, NORTH CAROLINA 27374-0879
TELEPHONE (704) 731-6331

TYPICAL BAR BENDS



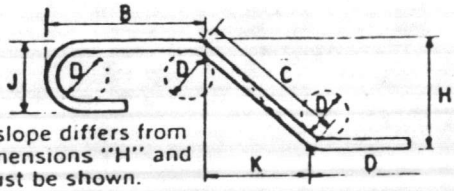
NOTES:

1. All dimensions are out-to-out of bar except "A" and "G" on standard 180° and 135° hooks.
2. "J" dimension on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where "J" is not shown, "J" will be kept equal to or less than "H" on truss bars. Where "J" can exceed "H", it should be shown.



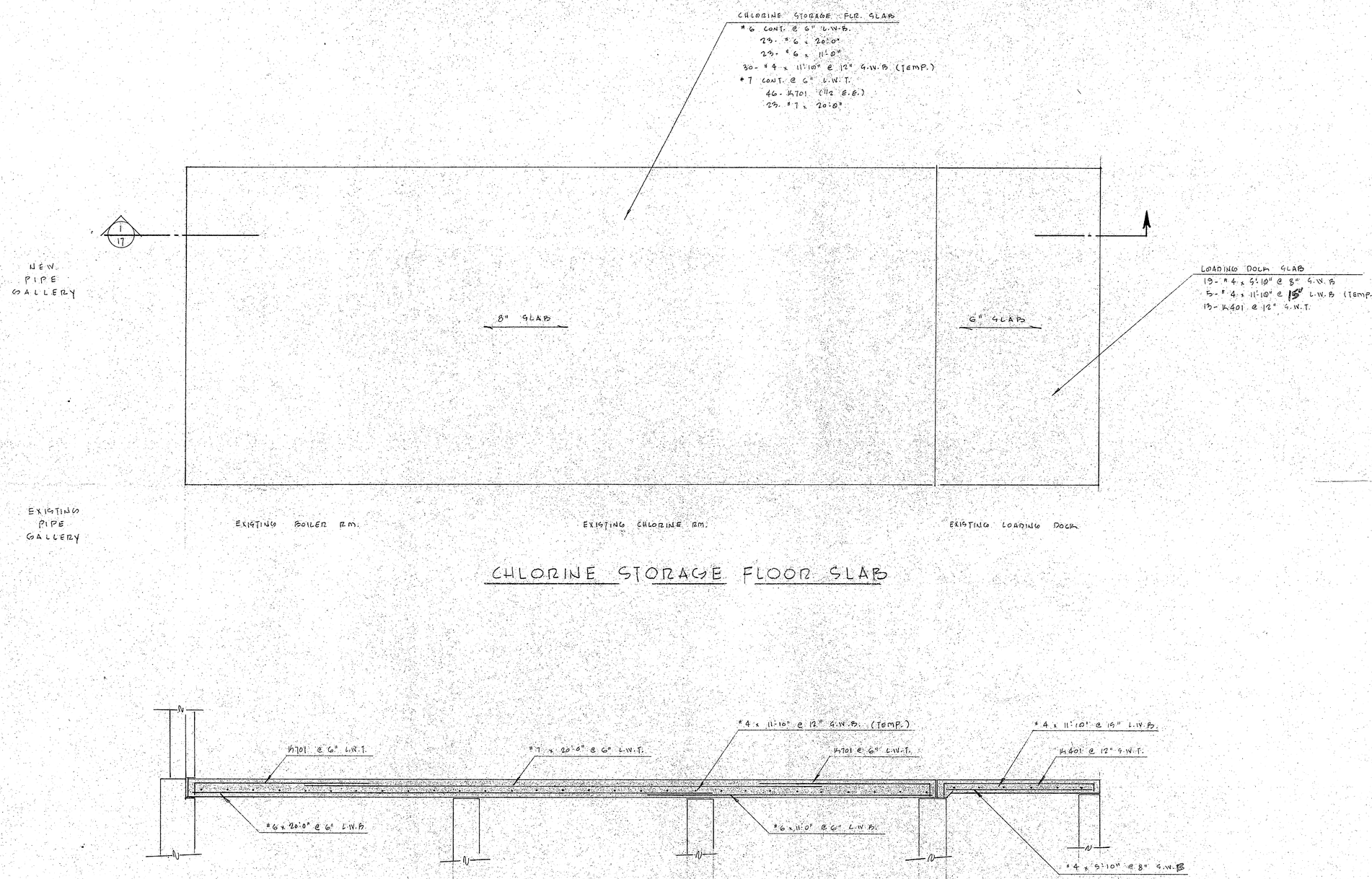
4. "H" dimension stirrups to be shown where necessary to fit within concrete.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer fabrication should have limits indicated.
6. Figures in circles show types.
7. For recommended diameter "D", of bends, hooks, etc., see tables, page 6-4.
8. Type S1-S9, S11, T1-T9 apply to bar sizes #3 through #8.

Unless otherwise noted diameter D is the same for all bends and hooks on a bar.



Where slope differs from 45° dimensions "H" and "K" must be shown.

ENLARGED VIEW SHOWING BAR BENDING DETAILS



CHLORINE STORAGE FLOOR SLAB

1/17 SECTION

is hereby certified that the (material) (equipment) shown on marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE ____

Signature CQC Rep. [signature] DATE 2-15-85

FOR APPROVAL ONLY
Not For Construction

CHLORINE STORAGE FLR. SLAB

LSP LOTT STEEL PRODUCTS CO.

PROJECT EXP. HOLCOMB BLVD. WATER TRT. PLT.
LOCATION CAMP LEJUNE, NOR. CAR.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
1/2" = 1'-0"	NAME R.K. PS	NAME	NAME
	DATE 6-17-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED. WITH TOLERANCES ±

DRAWING NO. 185132-16 SERIES 15

EASTMAN PHOTO - GREENSBORO N-2341

X | BK 02 | Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	83	7-22-85

FROM CONTRACTOR: Henry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings- Top Slab Plan Top Reinforcement	4	RAK	[illegible] 8/1/85
2	1.2.1	Reinforcement Drawings-Top Slab Plan Bottom Reinforcement	4	RAK	[illegible] 8/1/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): [signature]

DATE RECEIVED BY REVIEWER: 7/2

FROM (Reviewer): Henry von Oesen and Assoc., Inc.

TO: ROICC, LANTDIV 05, H. Pepper, A/E Firm

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☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

"Minor correction were made by the reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC."

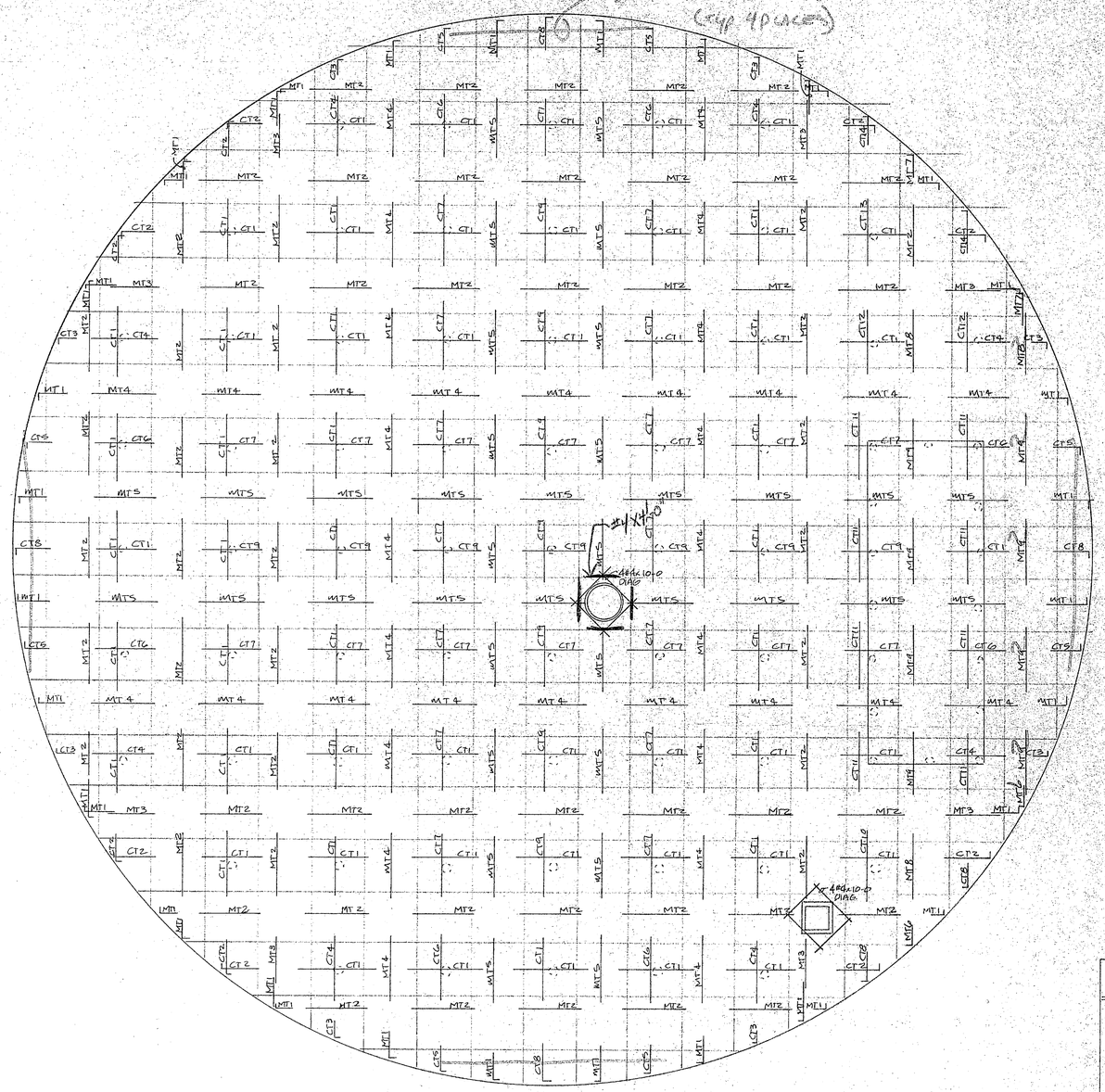
CORRECTIONS ACKNOWLEDGED:

COPY TO: FIELD
DATE: 8-7-85

Signature _____ Date _____

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1) AND CONTRACTOR	8/1/85	[signature]

☆ U.S. GPO:1984-537-003/11170 Region 3-11



TOP SLAB PLAN - TOP REINF.

TOP REINF. SCHED

	MARK	QTY.	REINF.
COLUMN STRIP TOP REINF.	CT1	68	10#4x6-10 9#4x10-2
	CT2	12	9-L401 8-L402
	CT3	8	5-L403 4-L404
	CT4	8	5#4x6-9 7#4x9-10
	CT5	8	6-L405 6-L406
	CT6	8	9#4x7-0 8#4x10-4
	CT7	28	9#4x7-0 9#4x10-4
	CT8	6	8-L407 8-L408
	CT9	14	9#4x6-10 9#4x10-2
	CT10	1	8#5x8-0 7#5x12-0
	CT11	8	5#4x6-0 4#4x7-0
	CT12	2	7#5x8-0 7#5x12-0
	CT13	1	10#4x6-10 9#4x10-3
	CT14	2	9-L401 8-L409
MID STRIP TOP REINF.	MT1	36	9-L410
	MT2	64	9#4x9-8
	MT3	8	9#4x9-2
	MT4	36	9#4x9-9
	MT5	36	9#4x9-7
	MT6	2	9-L411
	MT7	2	9-L410
	MT8	3	9#4x11-0
	MT9	8	9#4x6-0

Item #1

I hereby certified that the (material (equipment) shown and listed in this submittal, shop drawings, catalog cut (s), etc., and (approved/proposed to be incorporated into Contract Drawings (N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space; and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer [signature] DATE ____

Signature CQC Rep [signature] DATE 7-22-85

FOR APPROVAL ONLY
Not For Construction

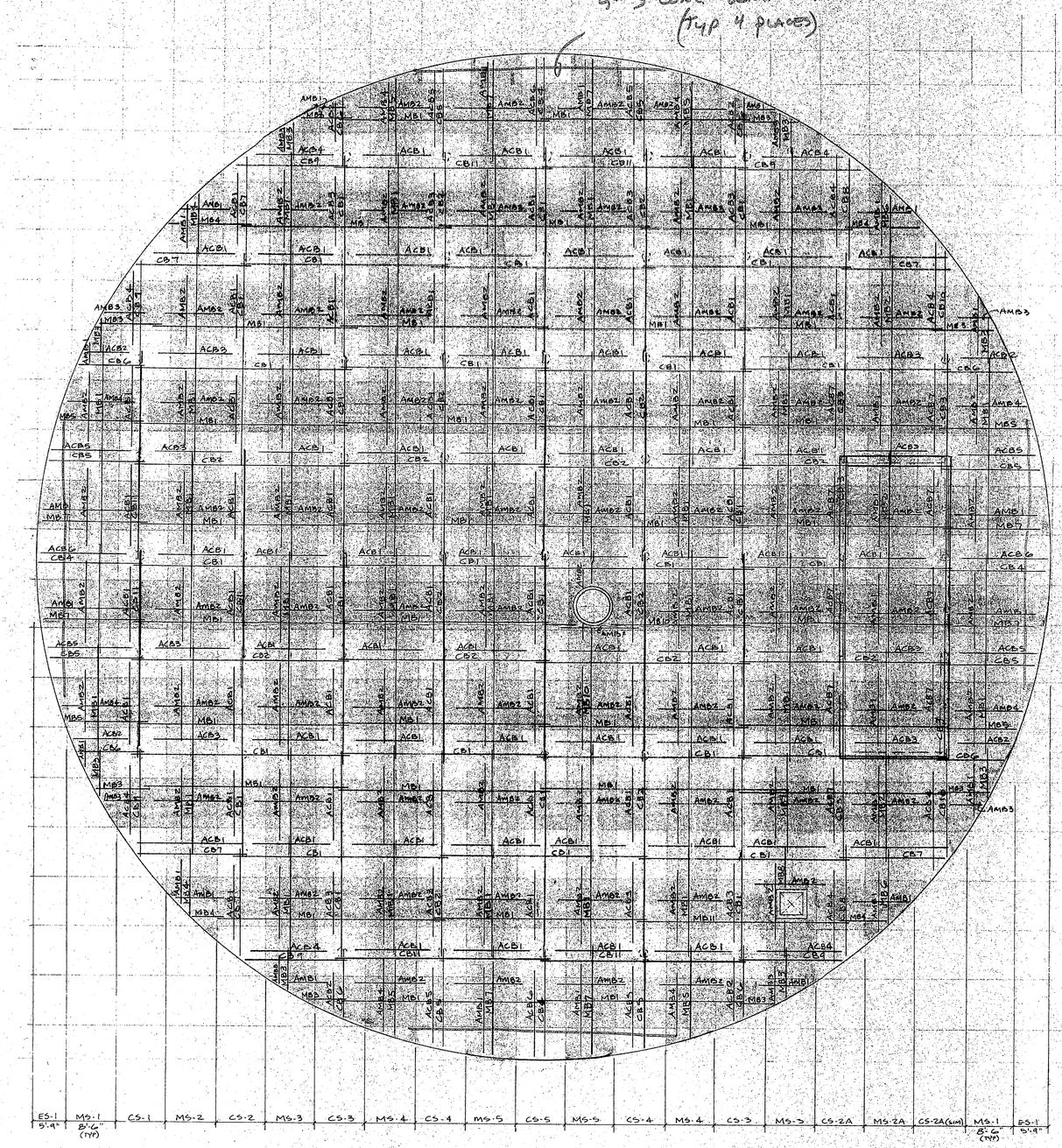
LSP LOTT STEEL PRODUCTS CO.

PROJECT EXP HOLCOMB BLVD WATER TREAT PLANT
LOCATION CAMP LEJEUNE, N.C.
CONTRACTOR HARRY PEPPER
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 6-24-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO. 85132-18 SHEET L



TOP SLAB PLAN – BOTTOM REINF.

SLAB REINF. SCHEDULE

	MARK	QTY	REINF.
COLUMN STRIP BOTTOM REINF.	CB1	35	8#3x35-0
	CB2	16	7#3x35-0
	CB3	8	10#3x35-0
	CB4	4	8#3x19-3
	CB5	8	7#3x18-3
	CB6	8	7#3x13-0
	CB7	6	1#3x15-0 1#3x16-0 1#3x17-0 1#3x18-0 1#3x19-0 1#3x20-0 1#3x21-0
	CB8	2	1#3x15-0 2#3x16-0 1#3x17-0 2#3x18-0 1#3x19-0 2#3x20-0 1#3x21-0
	CB9	6	1#3x12-0 1#3x14-0 1#3x16-0 2#3x18-0 1#3x20-0 1#3x22-0 1#3x24-0
	CB10	2	1#3x12-0 2#3x14-0 1#3x16-0 2#3x18-0 1#3x20-0 2#3x22-0 1#3x24-0
	CB11	6	8#3x35-0
COL. STRIP AT BOTT REINF.	ACB1	101	6#3x12-9
	ACB2	8	6#3x9-0
	ACB3	16	7#3x12-9
	ACB4	8	7#3x15-2
	ACB5	8	6#3x13-6
	ACB6	4	7#3x15-1
	ACB7	9	9#3x15-2
MID-STRIP BOTTOM REINF.	MB1	61	6#3x35-0
	MB2	3	7#3x35-0
	MB3	14	2#3x2-0 1#3x4-0 1#3x6-0 1#3x8-0 1#3x10-0 1#3x12-0
	MB4	6	1#3x6-0 1#3x8-0 1#3x10-0 1#3x12-0 1#3x14-0 1#3x16-0
	MB5	8	2#3x14-0 2#3x15-0 2#3x16-0
	MB6	2	1#3x6-0 1#3x8-0 1#3x10-0 2#3x12-0 1#3x14-0 1#3x16-0
	MB7	8	6#3x19-3
	MB8	1	2#3x18-0 4#3x7-0 4#3x7-0
	MB9	1	6#3x18-0
	MB10	2	2#3x35-0 4#3x6-0 4#3x23-0
	MB11	1	2#3x35-0 4#3x7-0 4#3x22-0
MID. STRIP AT BOTT REINF.	AMB1	30	6#3x14-9
	AMB2	133	6#3x12-0
	AMB3	8	6#3x8-9
	AMB4	10	6#3x13-0

Item #2

It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer: ____ DATE ____

Signature CQC Rep: ____ DATE 1/22-85

FOR APPROVAL ONLY
Not For Construction

LSP LOTT STEEL PRODUCTS CO.

PROJECT EXP HOLCOMB BLVD WATER TREAT. PLANT
LOCATION CAMP LEJEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 6-2085	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-17 SERIES

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	58	6-5-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

[X] Contractor Approved [ ] OICC Approval [ ] Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings for Wall in Filter Area	4	RA	6/17/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
6/7/85	Henry von Oesen & Assoc., Inc.	

[ ] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

Henry von Oesen and Associates, Inc.

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	6/17/85	[illegible]

LOTT STEEL PRODUCTS CO., INC.

REINFORCING SHOP ORDER

REL. NO. _____

S. O. NUMBER 85132

STRUCTURE EXPANSION - HOLCOMB BLVD. WATER TREAT. PLANT

SHEET 1 OF _____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LE JEUNE, N.C.

MADE BY LOTT CKD. BY _____

MATERIAL FOR WALLS - FILTER AREA

REFERENCE DWG. 13

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		5	3-10	H501	2	1-11	1-11										
2																	
3																	
4		4	11-9	H401	2	8	11-1										
5		5	3-0	H402	2	1-6	1-6										
6		4	3-2	H403	2	11	2-3										
7																	
8																	
9																	
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28																	
29																	
30																	
31																	

SHIP _____

CUST. ORDER NO. _____

GRADE 60

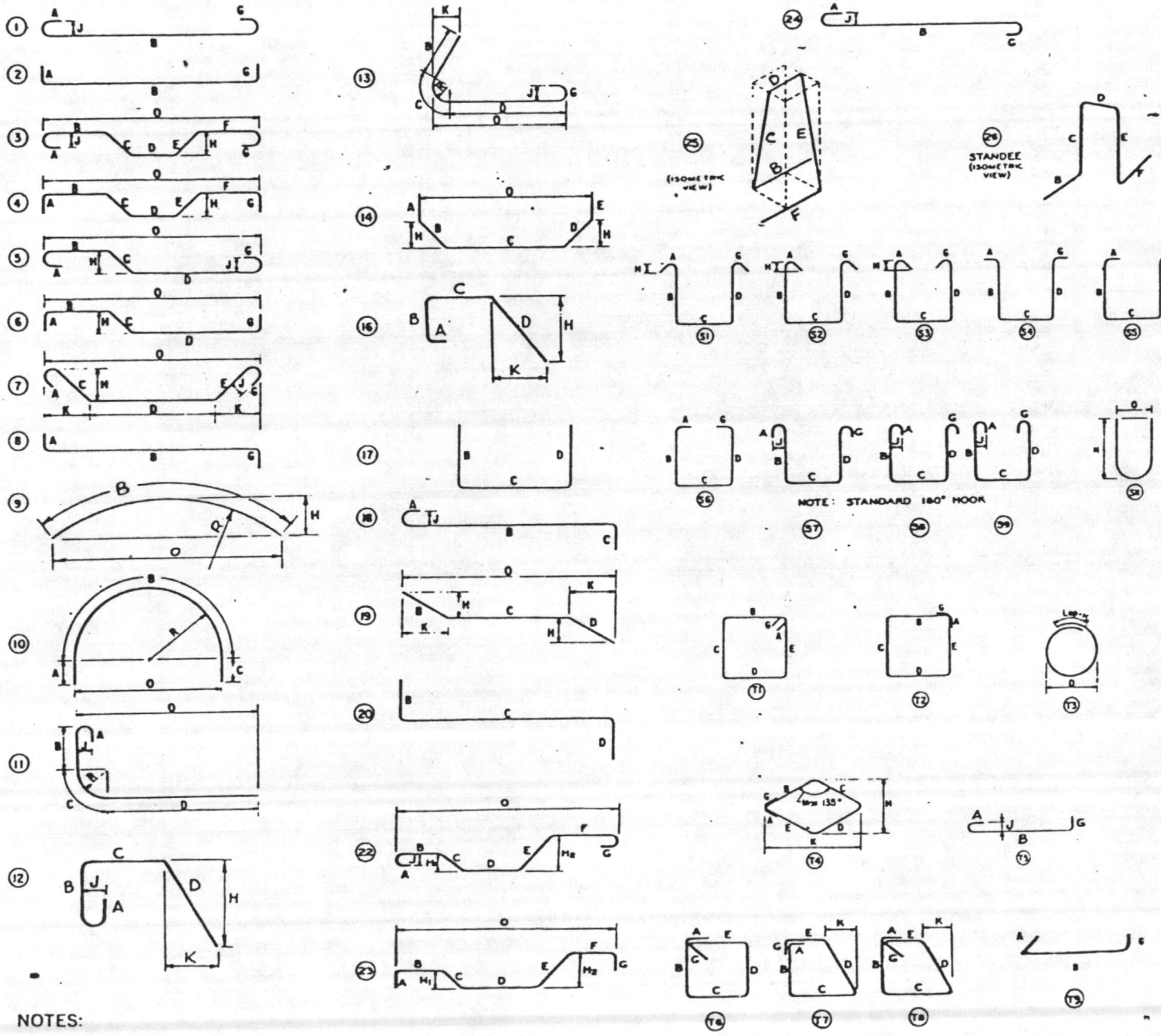
SHEET TOTAL _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS COMPANY

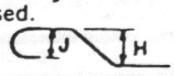
P. O. BOX 879 • WELCOME, NORTH CAROLINA 27374-0879
TELEPHONE (704) 731-6331

TYPICAL BAR BENDS



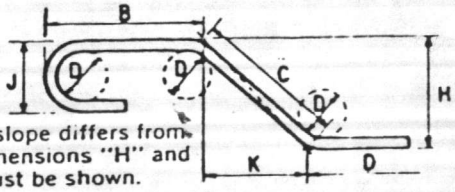
NOTES:

1. All dimensions are out-to-out of bar except "A" and "G" on standard 180° and 135° hooks.
2. "J" dimension on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where "J" is not shown, "J" will be kept equal to or less than "H" on truss bars. Where "J" can exceed "H", it should be shown.



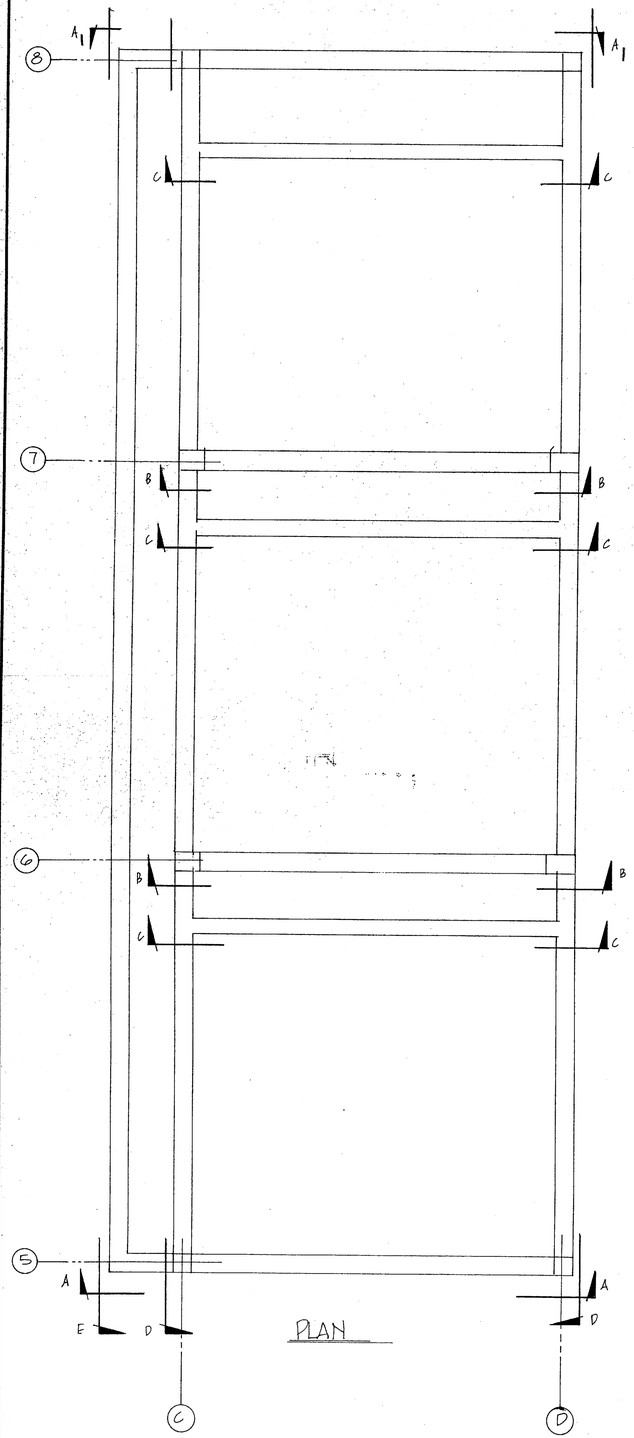
4. "H" dimension stirrups to be shown where necessary to fit within concrete.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer fabrication should have limits indicated.
6. Figures in circles show types.
7. For recommended diameter "D", of bends, hooks, etc., see tables, page 6-4.
8. Type S1-S9, S11, T1-T9 apply to bar sizes #3 through #8.

Unless otherwise noted diameter D is the same for all bends and hooks on a bar.

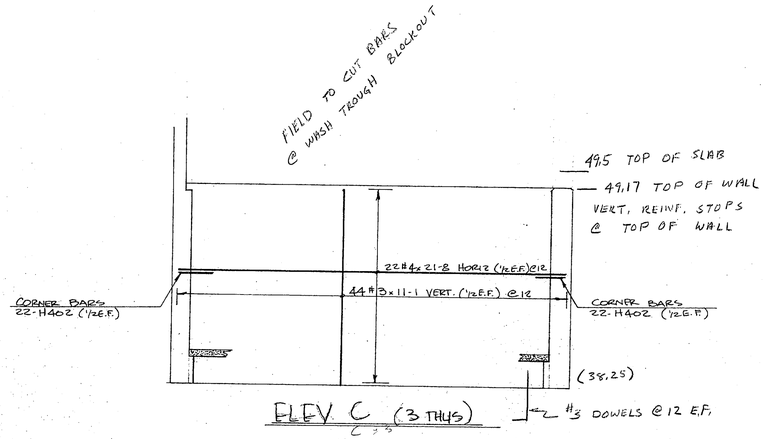


Where slope differs from 45° dimensions "H" and "K" must be shown.

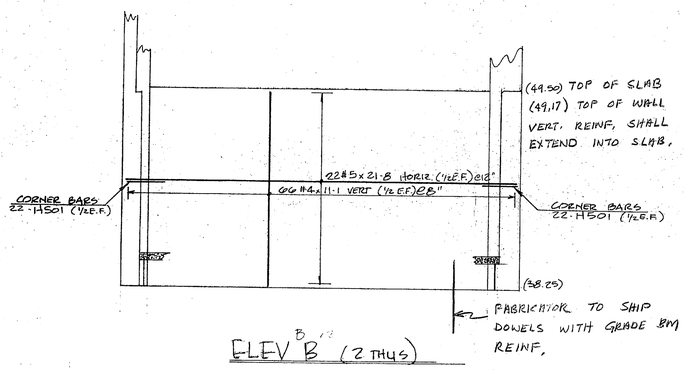
ENLARGED VIEW SHOWING BAR BENDING DETAILS



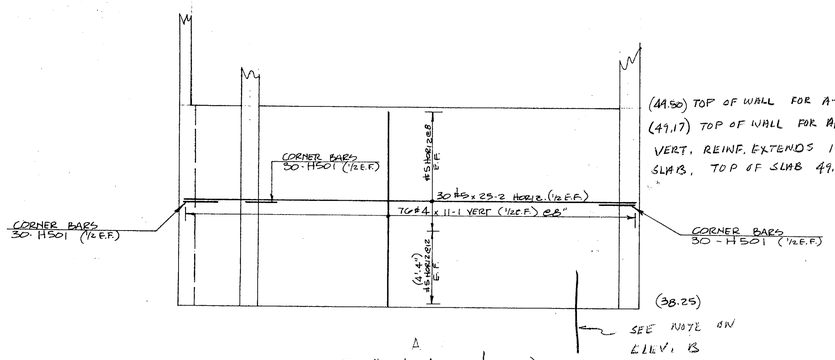
PLAN



ELEV C (3 THUS)

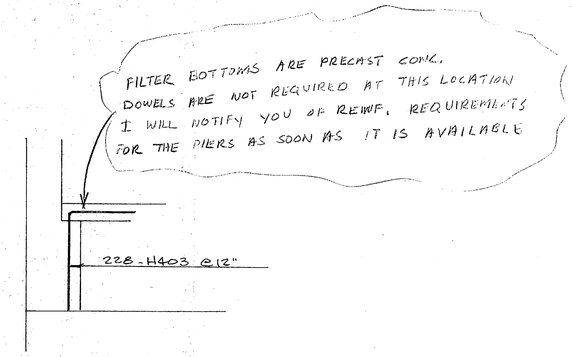


ELEV B (2 THUS)

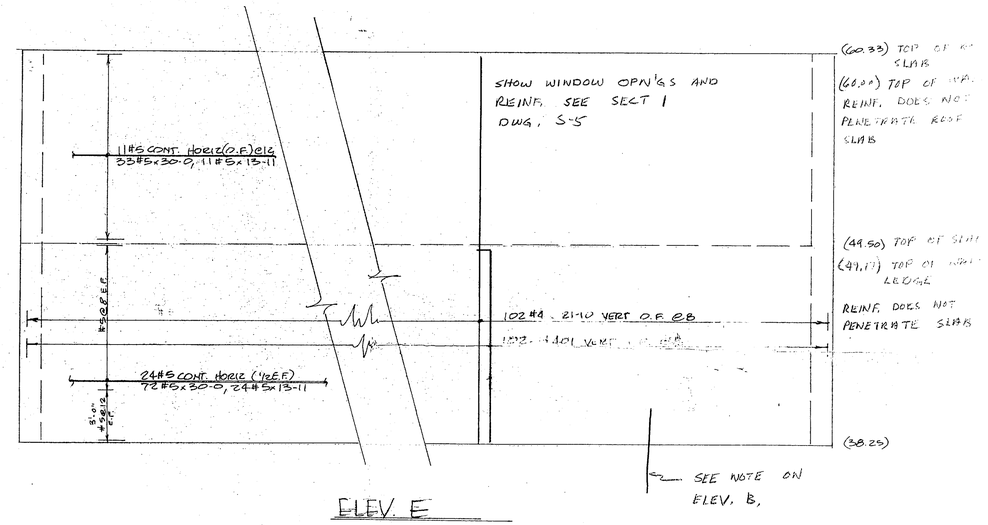


ELEV A (1/2 THUS)

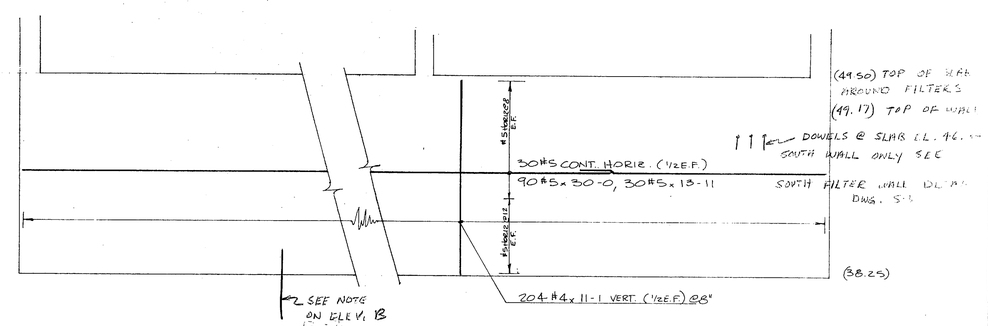
ELEV A1 (1 THUS)



TYP. DWL TO FILTER BOTT. SLAB



ELEV. E



ELEV. D (2 THUS)

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. [signature] DATE 6-5-85

PROVIDE BARS AS REQUIRED AROUND PIPE PENETRATIONS

FOR APPROVAL ONLY
Not For Construction

[signature] 5/31

WALLS - FILTER AREA

LSP LOTT STEEL PRODUCTS CO.

PROJECT Holcomb Blvd. Water Treat. Plant
LOCATION Camp Le Jeune, N.C.
CONTRACTOR Harry Pepper & Assoc.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 5-28-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-13 SERIES H

SOUTHERN PHOTO - GREENSBORO N2334-1

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO.	DATE
81-C-1644	69	6-20-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant

MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
		Vertical Construction Joints		AN	Code 402 ACB 8 JUL 85

CONTRACTOR'S COMMENTS

Request is made to use Vertical Construction Joints in lieu of Horizontal Construction Joints. See attached statement. If this proposed deviation is approved, there will be no cost to the Government and any changes caused by the proposed deviation will be the responsibility of the Contractor at no expense to the Government.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pease

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
24 JUNE 85	LANTDIV	ROICC / HARRY PEPPER & ASSOC

☒ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

The deviation is Approved. The vertical construction joints shall be in the locations noted on the enclosed sketches from Henry Von Oesen & Assoc. (Henry Von Oesen ltr dtd JUL 1, 85). SUBMIT COST AND CREDIT PROPOSAL FOR ADDITIONAL JOINTS TO ROICC CAMP LEJEUNE PRIOR TO START OF WORK.

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	8 JULY 85	J J Haste

Note: Request is made to use Vertical Construction Joints as indicated on the attached drawings. The Contractor requests that by useing Vertical Construction Joints, the walls can be placed in sections thereby reducing concrete shrinkage and giving better control over each pour. All Vertical joints will be complete with keyways, dowels and waterstop per detail on Contract Drawings.

If this proposed Deviation is approved, there will be no additional cost to the Government and any changes caused by this Deviation will be at the expense of the Contractor.

D 56/56

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED _____
APPROVED AS NOTED _____
DISAPPROVED _____
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-81-1644
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

8 JUL 1985

REVIEWER ACB 402 DATE _____

FOR OFFICER IN CHARGE OF CONSTRUCTION

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_____ Approved for use.

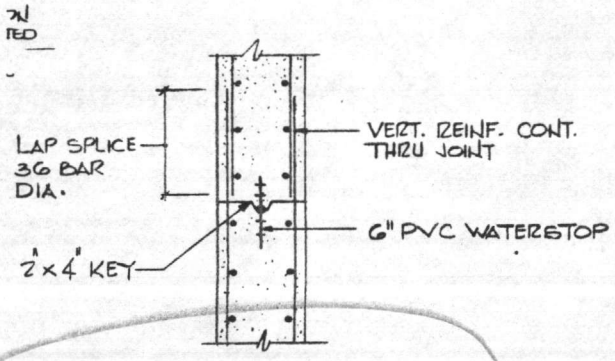
X Submitted for Government approval.

_____ Approved for use subject to Government approval of specific deviation.

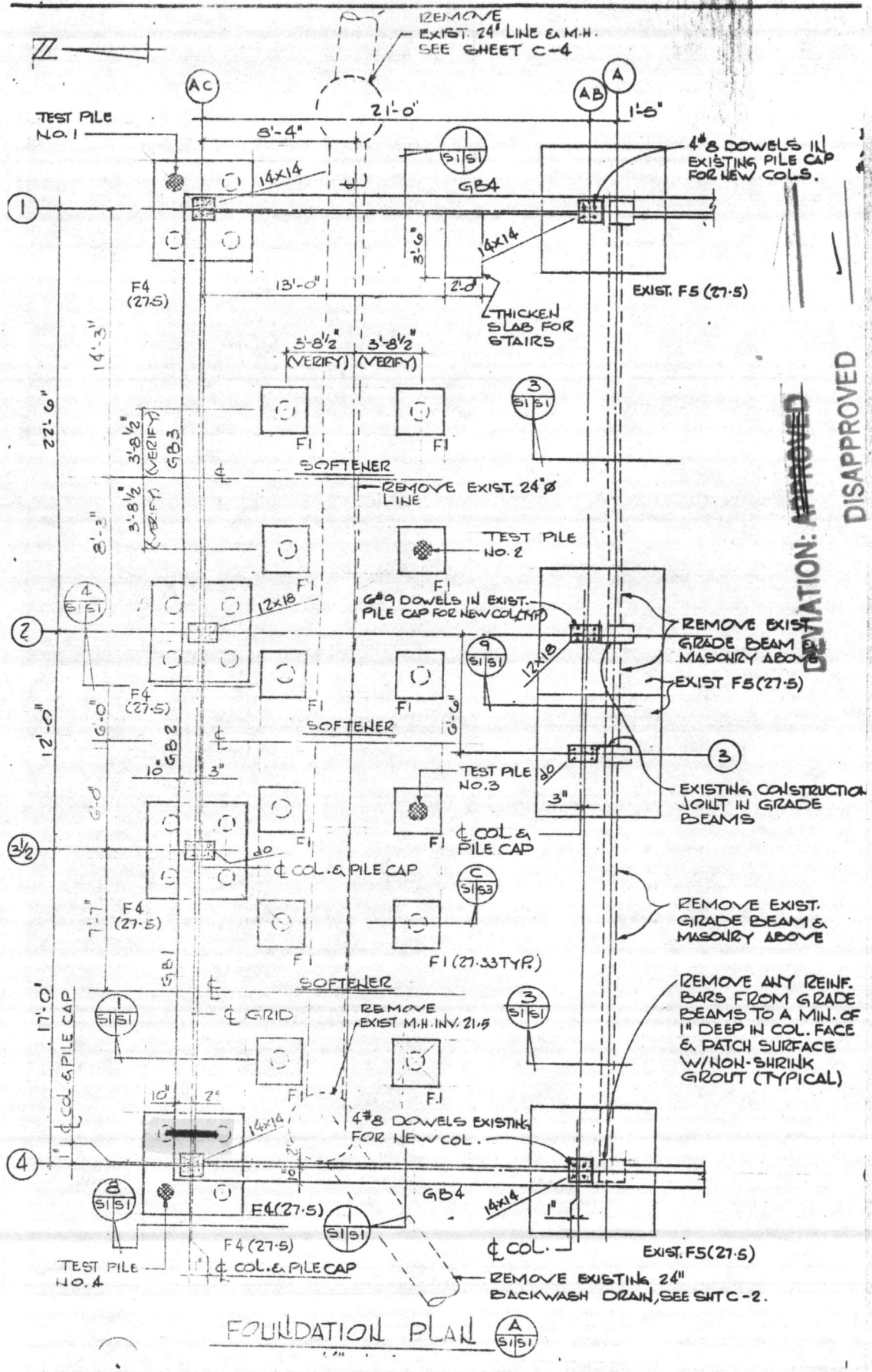
Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Pure DATE 6-20-85

Deviation Approved: Additional vertical joints are required. See sketches from Henry Von Oesen & Assoc. for exact locations of joints



ELEVATION TYPICAL
WALL CONSTRUCTION
JOINT D 56/56



FOUNDATION PLAN (A S1/S1)

DEVIATION: ~~APPROVED~~ DISAPPROVED

LANTDIV REVIEWER

DATE

ACB 402

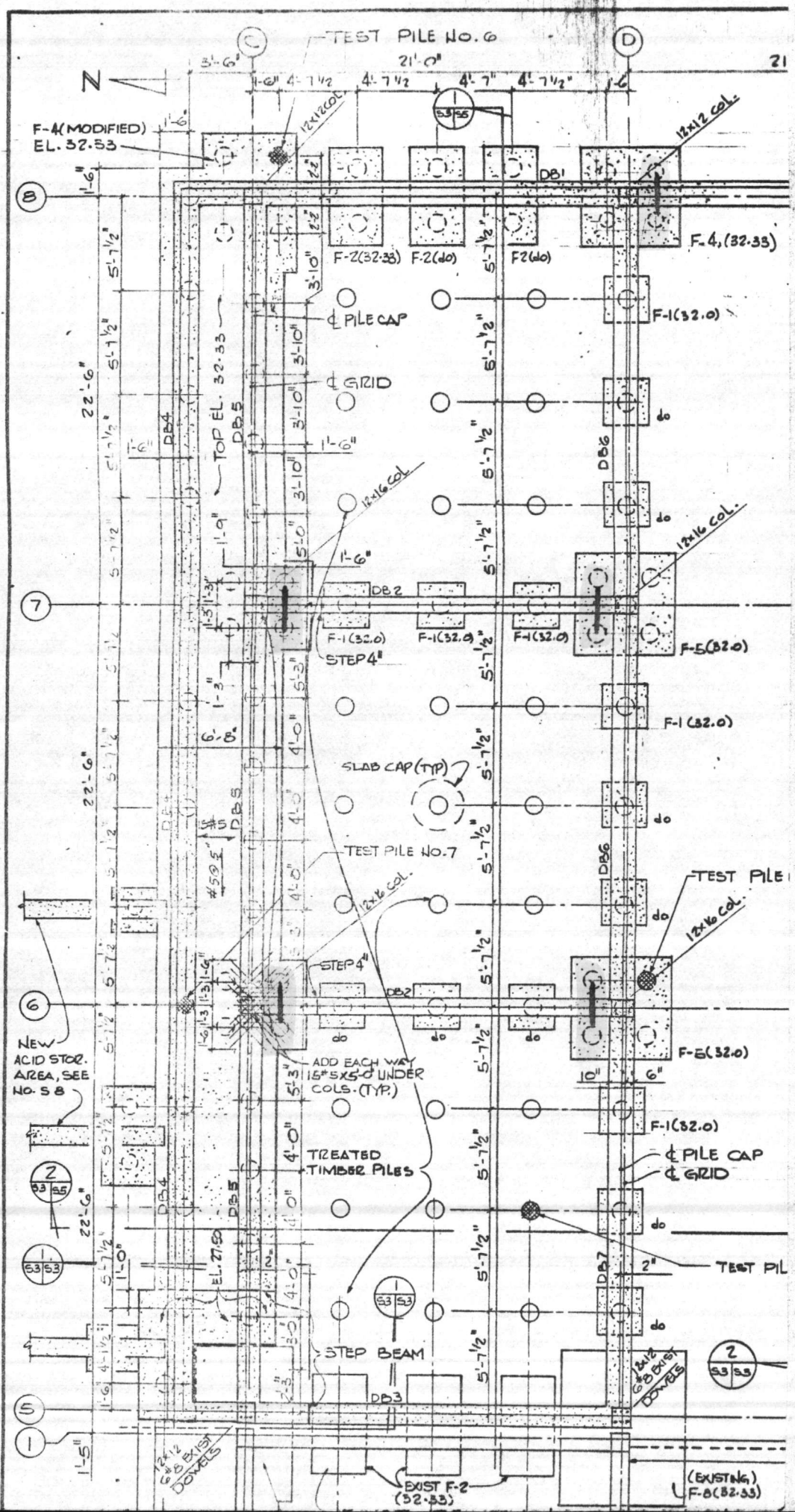
8 JUL 1985

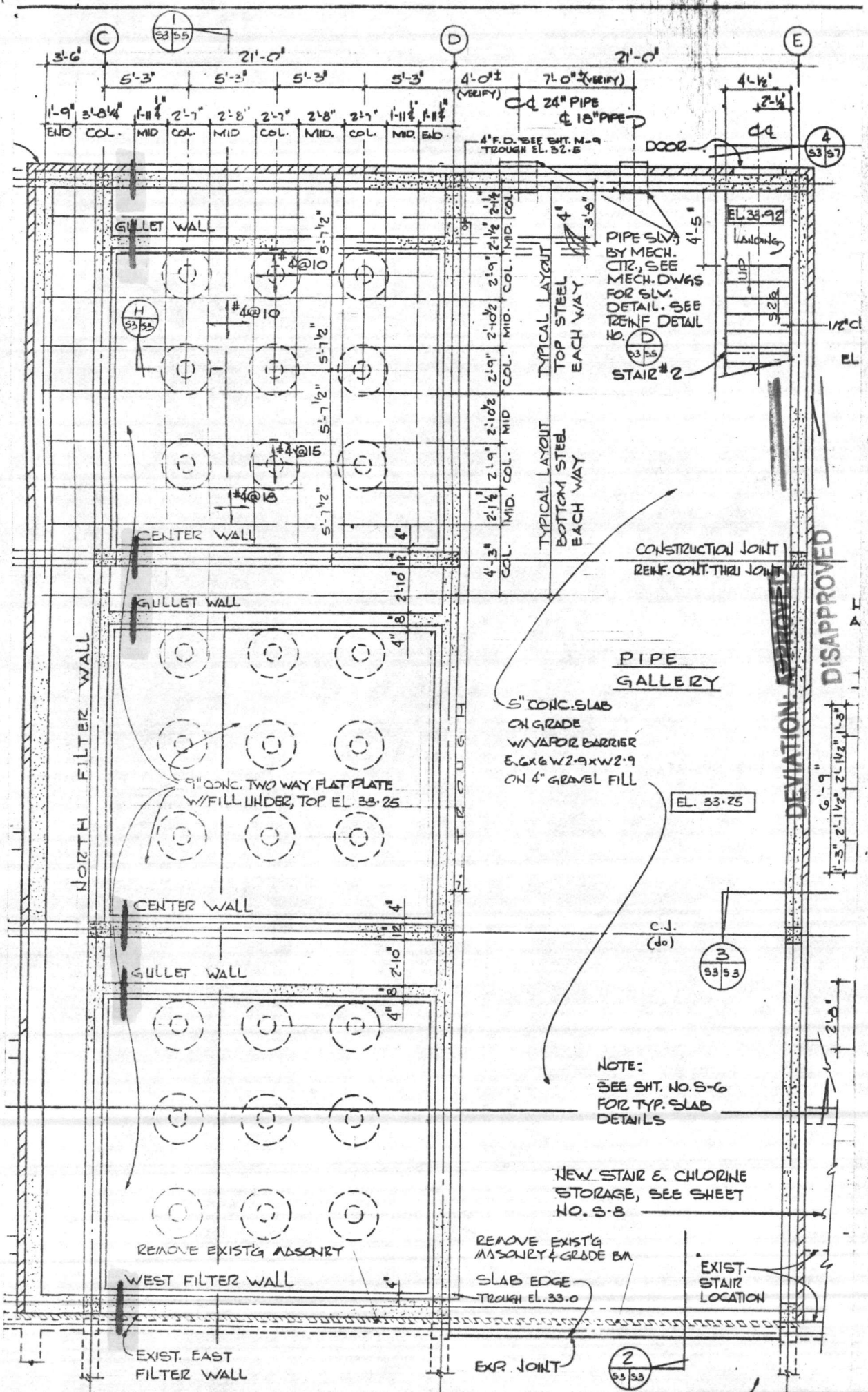
DEVIATION: ~~APPROVED~~ ✓

DISAPPROVED

LANTDIV REVIEWER ACB 402

DATE 8 JUL 1985




C
D
E
21'-0"
21'-0"
3'-6"
5'-3"
5'-3"
5'-3"
5'-3"
4'-0"± (VERIFY)
7'-0"± (VERIFY)
℄ 24" PIPE
℄ 18" PIPE
4'-½"
2'-½"
1'-9" END
3'-8¼" COL.
1'-11⅞" MID
2'-7" COL.
2'-8" MID.
2'-7" COL.
2'-8" MID.
2'-7" COL.
1'-11⅞" MID.
1'-11⅞" END
4" F.D. SEE SHT. M-9 TROUGH EL. 32.5
DOOR
GULLET WALL
#4@10
#4@10
#4@15
#4@18
CENTER WALL
GULLET WALL
CENTER WALL
GULLET WALL
WEST FILTER WALL
EXIST. EAST FILTER WALL
NORTH FILTER WALL
TRUCK
TYPICAL LAYOUT TOP STEEL EACH WAY
TYPICAL LAYOUT BOTTOM STEEL EACH WAY
PIPE SLV. BY MECH. CTR., SEE MECH. DWGS FOR SLV. DETAIL. SEE REINF DETAIL NO. D
STAIR #2
EL. 38.92
LANDING
UP
1/2" cl
EL
CONSTRUCTION JOINT
REINF. CONT. THRU JOINT
PIPE GALLERY
5" CONC. SLAB ON GRADE W/VAPOR BARRIER 6x6 W2.9xW2.9 ON 4" GRAVEL FILL
9" CONC. TWO WAY FLAT PLATE W/FILL UNDER, TOP EL. 33.25
EL. 33.25
C.J. (do)
NOTE: SEE SHT. NO. S-6 FOR TYP. SLAB DETAILS
NEW STAIR & CHLORINE STORAGE, SEE SHEET NO. S-8
REMOVE EXIST'G MASONRY
REMOVE EXIST'G MASONRY & GRADE BM
SLAB EDGE TROUGH EL. 33.0
EXP. JOINT
EXIST. STAIR LOCATION
DEVIATION APPROVED
DISAPPROVED
ACB 402
8 JUL 1985
LANTDIV REVIEWER
DATE

402 2476

HENRY VON OESEN AND ASSOCIATES
CONSULTING ENGINEERS
AND PLANNERS
Telephone (919) 763-0141

611 PRINCESS STREET P.O. DRAWER 2087 WILMINGTON, NORTH CAROLINA 28402

July 1, 1985

8 JUL 1985

Code ~~05~~ 04
Atlantic Division
Naval Facilities Eng. Command
Building N26
Norfolk, VA 23511

Attn: Mr. Warren Bixler
Structural Department

Re: Holcomb Blvd. Water Treatment Plant
MCB/Camp Lejeune, N. C.
Contract No. 81-C-1644

Dear Mr. Bixler:

In accordance with my telephone conversation with you on this date, I am sending herewith a revised set of prints showing construction joint location in grade beams and structural concrete walls. The following working drawing details are copied and marked herein: A/S1-S1, A/S3-S3, B/S3-S3.

In general, the following notes and sketches shall apply for vertical construction joints in concrete grade beams, concrete walls, and elevated concrete slabs.

1. Concrete grade beams (below lower floor): Detail A/S1-S1 for horizontal and vertical joints, use 2 x 4 T&G shear key.

2. Concrete walls: Detail A/S3-S3. Locate vertical construction joints at mid-point of horizontal span. For horizontal and vertical construction joints, use 2 x 4 or 2 x 6 shear key with continuous waterstop.

3. Elevated concrete slabs: Detail A/S4-S4. Locate joints in low shear area within mid-third of span, preferably at the centerline of span. Provide continuous T&G shear key with groove width approximately one-third of slab depth and groove depth 1½ inches.

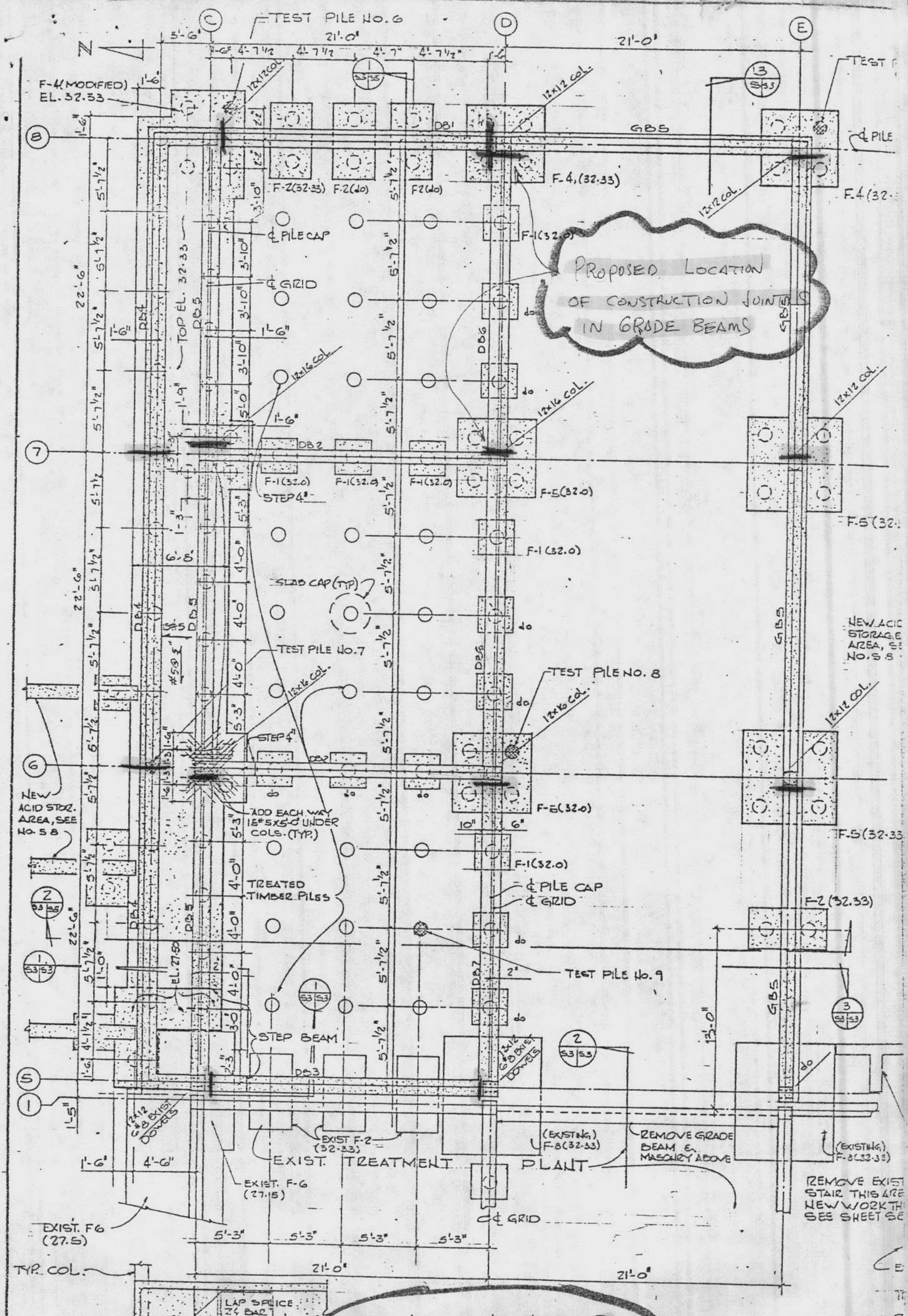
Please void or destroy the approval given by this office on Transmittal No. 69 dated 6-20-85.

Very truly yours,

HENRY VON OESEN AND ASSOCIATES, INC.

Charles E. Davis, P. E.

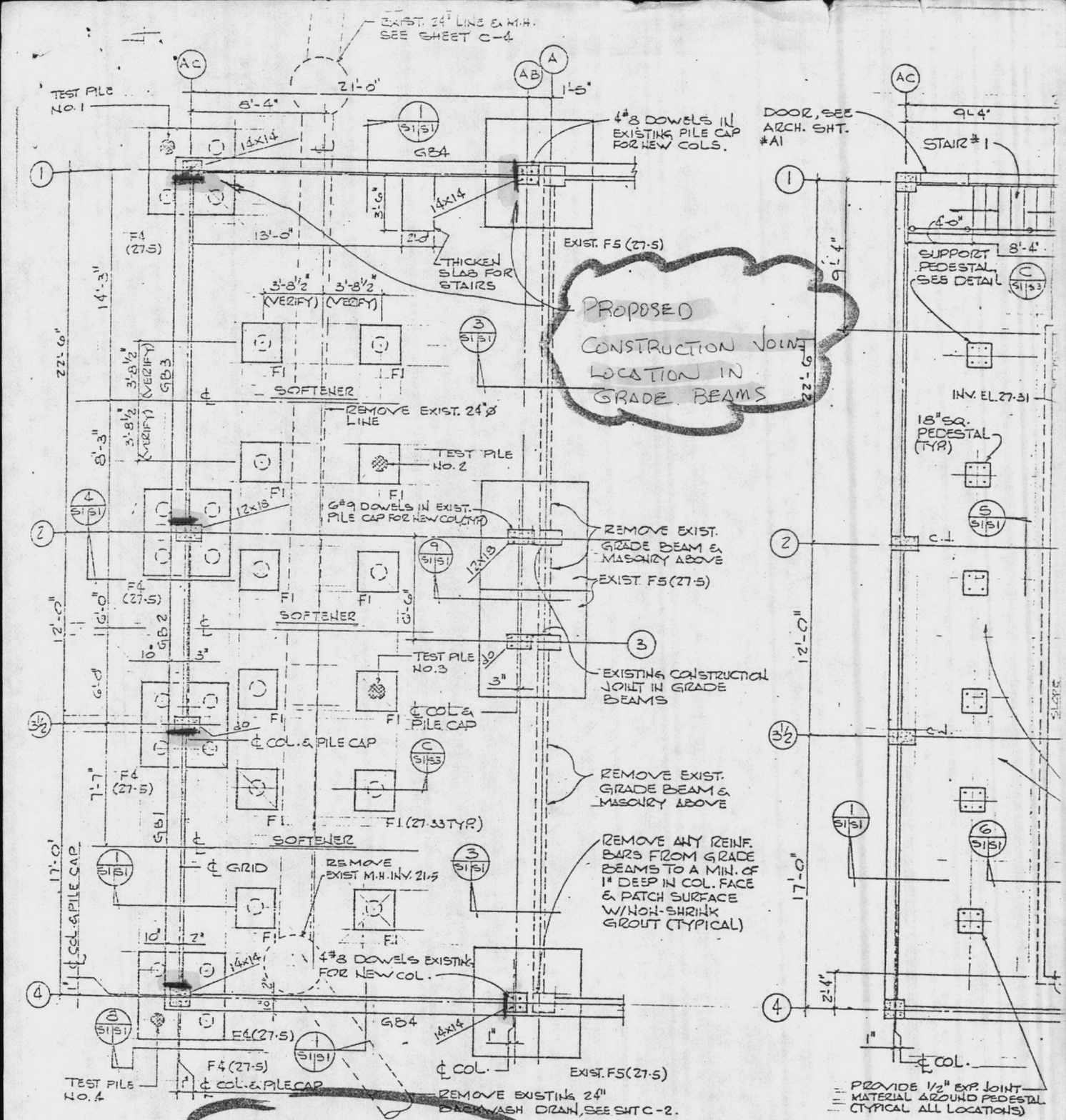
CED/GGB
Enc.



TIMBER PILE LENGTH SCHEDULE	
TOP EL. PILECAP*	BASE BID PILE LENGTH
27.5, 27.33	39 FEET
32.33, 32.0	44 FEET
38.26	49 FEET

PILE CAPACITY = 20 TONS

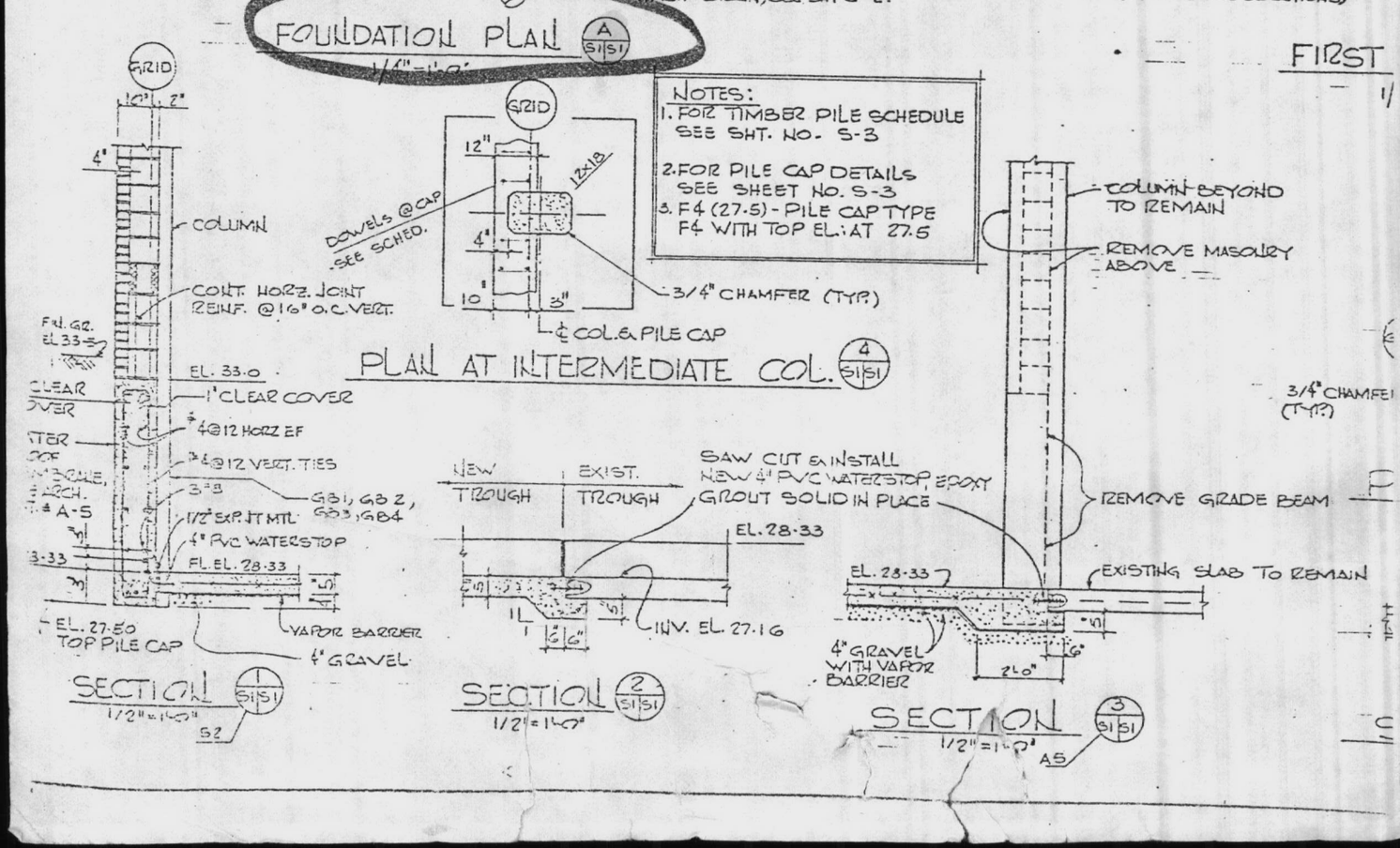
* OR FLOOR FOR SLAB ON GRADE



FOUNDATION PLAN (A S1/S1)
1/4" = 1'-0"

FIRST

NOTES:
1. FOR TIMBER PILE SCHEDULE SEE SHT. NO. S-3
2. FOR PILE CAP DETAILS SEE SHEET NO. S-3
3. F4 (27.5) - PILE CAP TYPE F4 WITH TOP EL. AT 27.5

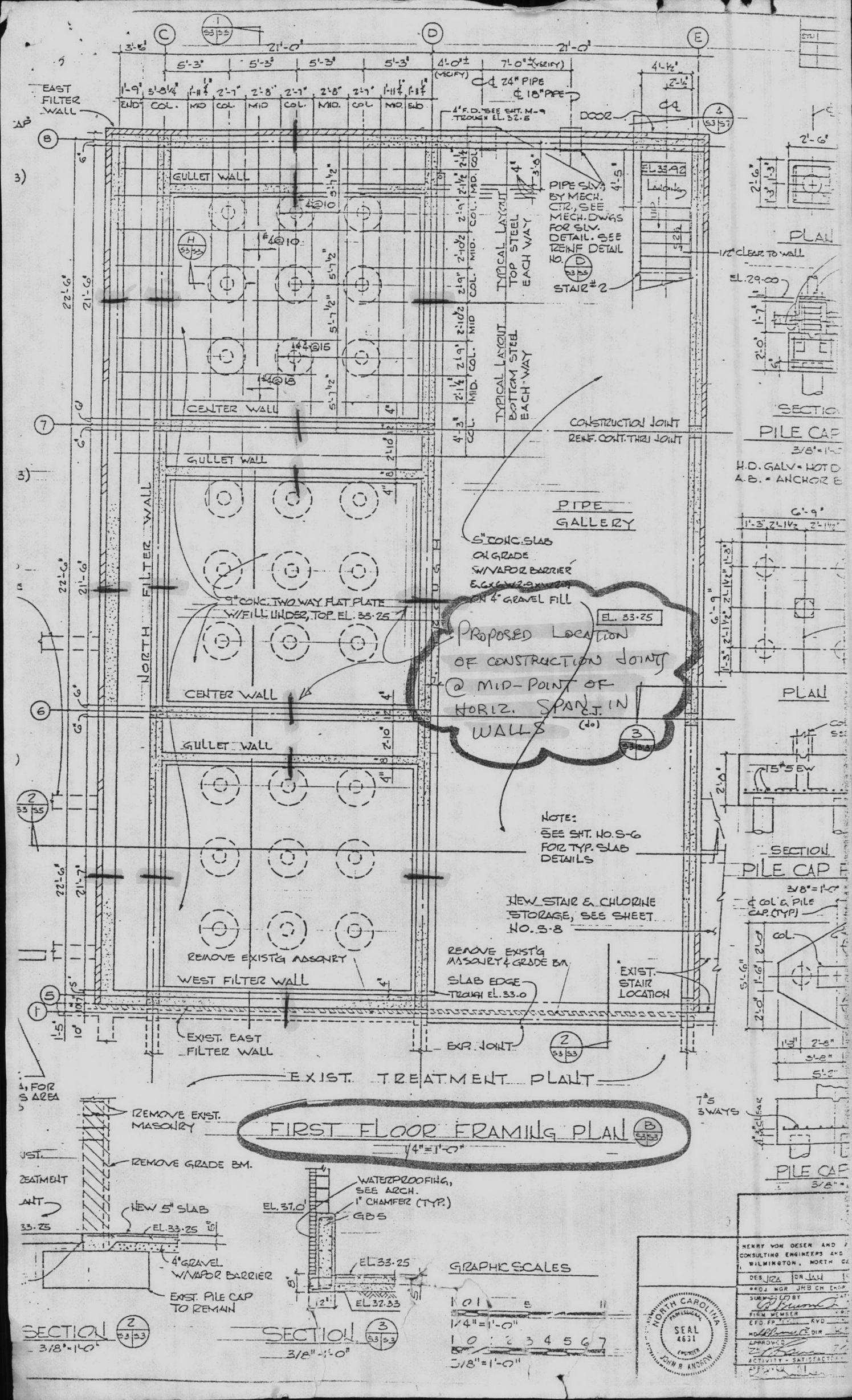


PLAN AT INTERMEDIATE COL. (4 S1/S1)

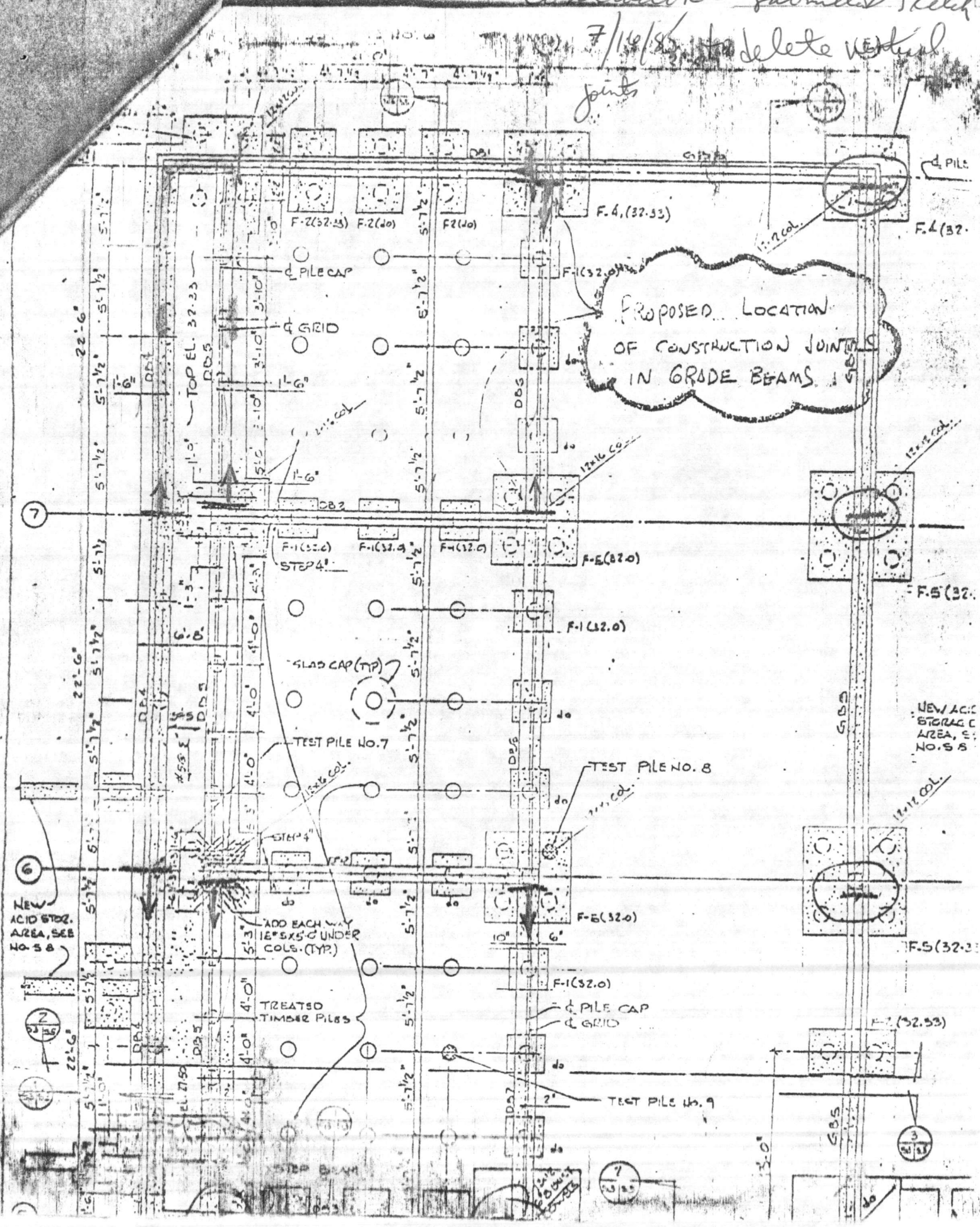
SECTION (1 S1/S1) 1/2" = 1'-0"

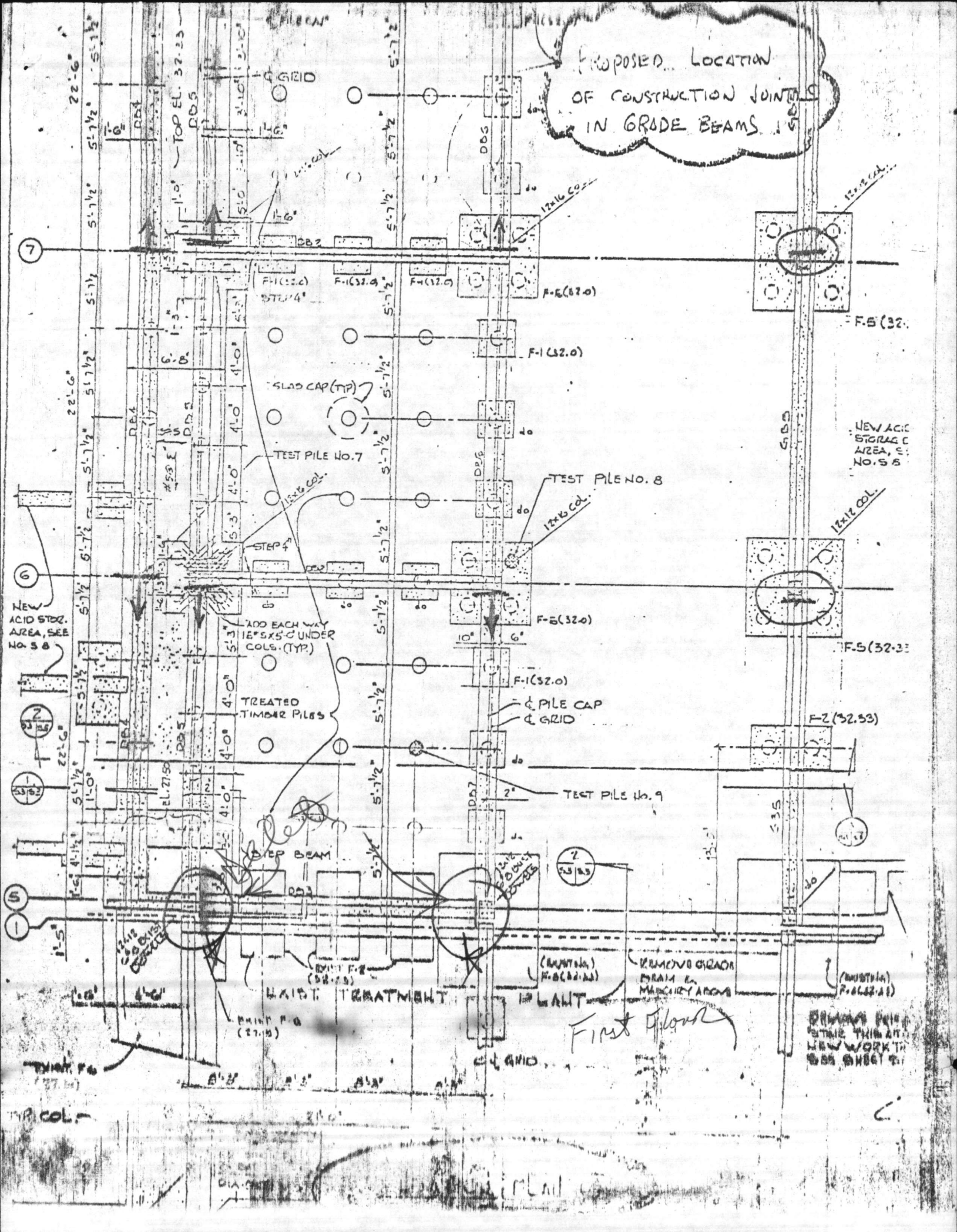
SECTION (2 S1/S1) 1/2" = 1'-0"

SECTION (3 S1/S1) 1/2" = 1'-0"


FIRST FLOOR FRAMING PLAN
1/4"=1'-0"
EXIST. TREATMENT PLANT
EAST FILTER WALL
WEST FILTER WALL
NORTH FILTER WALL
GULLET WALL
CENTER WALL
PIPE GALLERY
TYPICAL LAYOUT TOP STEEL EACH WAY
TYPICAL LAYOUT BOTTOM STEEL EACH WAY
CONSTRUCTION JOINT
REINF. CONT. THRU JOINT
5" CONC. SLAB ON GRADE W/VAPOR BARRIER ON 4" GRAVEL FILL
9" CONC. TWO WAY FLAT PLATE W/FILL UNDER, TOP EL. 33.25
PROPOSED LOCATION OF CONSTRUCTION JOINT @ MID-POINT OF HORIZ. SPAN IN WALLS
NOTE: SEE SHT. NO. S-6 FOR TYP. SLAB DETAILS
NEW STAIR & CHLORINE STORAGE, SEE SHEET NO. S-8
REMOVE EXIST'G MASONRY
REMOVE EXIST'G MASONRY & GRADE BM.
SLAB EDGE TROUGH EL. 33.0
EXIST. STAIR LOCATION
EXIST. EAST FILTER WALL
EXP. JOINT
PIPE SLV'S BY MECH. CTR., SEE MECH. DWGS FOR SLV. DETAIL. SEE REINF DETAIL NO. D
STAIR #2
DOOR
EL. 33.92
LANDING
1/2" CLEAR TO WALL
EL. 29.00
PLAN
SECTION
PILE CAP
3/8"=1'-0"
H.D. GALV = HOT D
A.B. = ANCHOR B
15#5 EW
SECTION
PILE CAP
3/8"=1'-0"
℄ COL & PILE CAP (TYP)
COL.
7#5 S WAYS
PILE CAP
3/8"=1'-0"
REMOVE EXIST. MASONRY
REMOVE GRADE BM.
NEW 5" SLAB
EL. 33.25
4" GRAVEL W/VAPOR BARRIER
EXIST. PILE CAP TO REMAIN
SECTION
3/8"=1'-0"
WATERPROOFING, SEE ARCH.
1" CHAMFER (TYP.)
GBS
EL. 37.0'
EL. 33.25
EL. 32.33
SECTION
3/8"=1'-0"
GRAPHIC SCALES
1/4"=1'-0"
3/8"=1'-0"
NORTH CAROLINA PROFESSIONAL SEAL 4631 ENGINEER JOHN R. ANDERSON
HENRY VON OESEN AND
CONSULTING ENGINEERS AND
WILMINGTON, NORTH CA
DES. JRA
DR. JAN
PROJ. MGR. JHB
CH. ENGR.
SUBMITTED BY
FIRM MEMBER
EFD FP
KYD
HD
DIR
APPROVED
ACTIVITY - SATISFACTO
APPROVED

Contractor's Submittal Sketch
7/16/85 to delete vertical joints




PROPOSED LOCATION OF CONSTRUCTION JOINTS IN GRADE BEAMS
℄ GRID
TOP EL. 32.33
12x16 COL.
F-1(32.0)
F-1(32.0)
F-1(32.0)
F-6(32.0)
F-5(32.
F-1 (32.0)
SLAB CAP (TYP)
TEST PILE NO.7
TEST PILE NO. 8
12x16 col.
12x12 col.
STEP 4"
NEW ACID STOR. AREA, SEE NO. S 8
ADD EACH WAY 16"x5'x5' UNDER COLS. (TYP.)
F-6(32.0)
F-5(32.33
F-1(32.0)
TREATED TIMBER PILES
℄ PILE CAP
℄ GRID
F-2(32.33)
TEST PILE No. 9
DEEP BEAM
EXIST. F-2 (32.33)
(EXISTING) F-6(32.0)
REMOVE GRADE BEAM IN MACHINERY AREA
(EXISTING) F-6(32.0)
WAST TREATMENT PLANT
First Floor
EXIST. F-6 (27.15)
EXIST. F-6 (27.15)
℄ GRID
COL.

GULLET WALL

PIPE SLV. BY MECH. CR. SEE MECH. DWGS FOR SLV. DETAIL. SEE REINF. DETAIL 16.

TYPICAL LAYOUT TOP STEEL EACH WAY

TYPICAL LAYOUT BOTTOM STEEL EACH WAY

STAIR #2

1½" CLEAR TO WALL

CENTER WALL

CONSTRUCTION JOINT

REINF. CONTINUOUS JOINT

OK to move + 5 feet

GULLET WALL

PIPE GALLERY

NORTH FILTER WALL

6" CONC. SLAB ON GRADE W/VAPOR BARRIER ON 4" GRAVEL FILL

9" CONC. TWO WAY FLAT PLATE W/FILL UNDER, TOP EL. 38.25

EL. 33.25

PROPOSED LOCATION OF CONSTRUCTION JOINTS @ MID-POINT OF HORIZ. SPAN IN WALLS

C.J. (do)

CENTER WALL

GULLET WALL

NOTE: SEE SHT. NO. S-6 FOR TYP. SLAB DETAILS

NEW STAIR & CHLORINE STORAGE, SEE SHEET NO. S-8

REMOVE EXIST'G MASONRY

WEST FILTER WALL

REMOVE EXIST'G MASONRY & GRADE BM.

SLAB EDGE THRU EL. 33.0

EXIST. STAIR LOCATION

EXIST. EAST FILTER WALL

CONST. JOINT

EXIST. TREATMENT PLANT

LOWER FRAMING PLAN

Second Floor

PLAN

EL. 29.00

SECTION

PILE CAP

H.D. GALV. - NOT C

A.B. - ANCHOR B

PLAN

15#5 EW

SECTION

PILE CAP

COL.

X | BK / 02

Hunt Pending

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	83	7-22-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

- [x] Contractor Approved
- [ ] OICC Approval
- [ ] Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
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AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings- Top Slab Plan Top Reinforcement	4	RA/C	RCB 8/1/85
2	1.2.1	Reinforcement Drawings-Top Slab Plan Bottom Reinforcement	4	RA/C	RCB 8/1/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pence

DATE RECEIVED BY REVIEWER: 7/23/85

FROM (Reviewer): Henry von Oesen and Assoc., Inc.

TO: ROICC, LANTDIV 05, H. Pepper, A/E Firm

- [ ] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- [ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

"Minor correction were made by the reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC."

CORRECTIONS ACKNOWLEDGE:

COPY TO: FIELD
DATE: 8-7-85
w/encls.

Signature

Date

signed copy filed 9-4-85

COPIES TO
ROICC (2)
LANTDIV (1)
A-E (1) AND CONTRACTOR

DATE: 8/1/85

SIGNATURE: [illegible]

☆ U.S. GPO:1984-537-003/11170 Region 3-11

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	89	8-12-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

[X] Contractor Approved [ ] OICC Approval [ ] Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	2.2.7.3	Liquid Chemical Compound	4	RA	RJB 8/27/85
2	2.2.8.1	Joint Sealant	4		

CONTRACTOR'S COMMENTS

Curing Compound will be used in all areas, with the exception of the interior of the Finish Water Reservoir.
UREXPAN NR-200 will be used in all joints, with the exception of the Finish Water Reservoir.

LANTDIV: Please advise Contractor as to who manufacturer's sealant as indicated in Para 2.2.8.2, as all avenues to secure this product have been exhausted.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): PHIL REESE Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
8/14/85	Henry von Oesen & Assoc., Inc.	

[X] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractors approval appears to be appropriate.

HENRY VON OESEN AND ASSOCIATES, INC.
CONSULTING ENGINEERS & PLANNERS

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	8/27/85	[signature]

PRODUCT BULLETIN

THE BURKE COMPANY
CONCRETE ACCESSORIES GROUP
2655 Campus Drive • P.O. Box 5818 • San Mateo, CA 94402 • TWX 910-374-2349 (BURKE SMT) • (415) 349-7600

RES-X^{NU} SODIUM SILICATE CURING COMPOUND

Item #1

1. PRODUCT NAME: **Res-X^{NU} Sodium Silicate Curing Compound**

2. MANUFACTURED BY: **The Burke Company**

3. PRODUCT DESCRIPTION

Basic Uses

Res-X^{NU} is an economical curing, hardening and dustproofing compound that can be used on fresh or aged interior or exterior concrete.

It chemically cures, hardens and dustproofs in one easy operation. Res-X^{NU} does not interfere with the bondability of most toppings, coatings or adhesives.

Safe to use, Res-X^{NU} is odorless, non-flammable, non-explosive and may be safely used in areas where petroleum-based materials might be hazardous.

Composition

Res-X^{NU} is a sodium silicate base compound which penetrates the surface chemically. It contains no wax, paraffin or oil. A red fugitive dye is added to provide a visual check of coverage during application. It is also available in white pigmented on request.

Packaging

55 Gallon (208 liter) drums, Order No. (302) 47-007
5 Gallon (19 liter) containers, Order No. (302) 47-008

4. APPLICATION INSTRUCTIONS

Burke Res-X^{NU} is designed for easy application with hand or power spray equipment. Brush roller or squeegee also may be used. Best results are obtained by using a spray application.

Res-X^{NU} is ready to use. Do not thin. Apply a continuous uniform film. If a second coat is applied, allow at least two hours drying time. Surface wear resistance increases with additional coats. Allow 24 hours drying time before permitting heavy traffic. Do not apply at temperatures below 40° F. (4°C).

Coverage Rates

Rough Finish — 200 to 300 sq. ft./gallon (5m^2 to 7m^2/liter).

Finely Textured — 300 to 400 sq. ft./gallon (5m^2 to 10m^2/liter).

Hard Troweled — 400 to 500 sq. ft./gallon (10m^2/liter).

Rates may vary according to specifications and application. Reduce coverage rate for each succeeding coat for best results.

APPROVED
FOR USE ON 81-C-1644

APPROVAL OF MATERIALS AND/OR EQUIPMENT INDICATES COMPLIANCE WITH SPECIFICATION REQUIREMENTS ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PROVIDE PROPER PHYSICAL DIMENSIONS, CLEARANCES, WEIGHTS, CAPACITIES, PERFORMANCE, COORDINATION WITH OTHER TRADES OR THE RESPONSIBILITY TO PROVIDE THE SYSTEM AND/OR EQUIPMENT COMPLETE IN PLACE AND READY FOR USE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

HENRY VON OESEN AND ASSOCIATES
611 PRINCESS STREET
WILMINGTON, NORTH CAROLINA

DATE AUG 27 1985

BY RDB

[illegible] hereby certified that the (material) (equipment) shown in [illegible] has submitted shop drawings, catalog cuts, or other [illegible] proposed to be incorporated into Contract [illegible] and is in compliance with the Contract [illegible] and Specifications and can be installed in the allotted [illegible] and is:

X Approved for use.

___ Submitted for Government approval.

___ Approved for use subject to Government approval specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. [illegible] DATE 8-12-85

5. CAUTION

Protect Res-X^{NU} from freezing. If subjected to freezing, thaw and stir or agitate before using. If Res-X^{NU} comes in contact with aluminum or glass, rinse thoroughly with water without delay but no later than one hour.

Direct contact of Res-X^{NU} to eyes or skin will cause irritation. Flush thoroughly with clean, cold water. After use, wash skin thoroughly with soap and water.

6. EQUIPMENT CLEAN UP

Clean brushes, tools and equipment with clean water immediately after use.

7. SUGGESTED SHORT FORM ARCHITECTURAL SPECIFICATION

All interior and exterior concrete surfaces, where so indicated, shall be cured with Burke Res-X^{NU} Sodium Silicate Curing Compound as manufactured by The Burke Company, San Mateo, California. Applicator should follow instructions and coverage rates as recommended by the manufacturer.

8. WARRANTY

Burke products will perform according to specifications only if directions are followed. Burke is not responsible for improper use, application, or storage of its products or for use of its products in unsafe weather or with unsafe engineering or working conditions. Burke products are supplied subject to Burke's standard terms and conditions of sale or rental, which limit Burke's responsibility for the product. Any warranty of the product is limited to Burke's or the manufacturer's standard warranty unless otherwise specifically provided by Burke in writing.

pecora CORPORATION

SPEC-DATA®

This Spec-Data Sheet conforms to editorial style prescribed by The Construction Specifications Institute. The manufacturer is responsible for technical accuracy.

Item #2

1. PRODUCT NAME

UREXPAN NR-200

Two-part, cold-applied, chemically-curing, self-leveling, horizontal grade, elastomeric polyurethane joint sealant.

2. MANUFACTURER

Pecora Corporation
165 Wambold Road
Harleysville, PA 19438
215-723-6051

3. PRODUCT DESCRIPTION

Basic Uses: Sealing horizontal joints in highways, bridge approaches, parking decks, plazas, terraces, sidewalks, driveways, swimming pool decks, reservoirs and sewage treatment plants.

Limitations: Not recommended for joints contaminated with oil, grease, wax, bitumens, curing compounds, concrete sealers, mold release agents, etc. Not for areas subjected to harsh chemicals such as acids, strong alkalis, ketones, etc. Not for use in joints less than ¼" (6.4mm) wide. Not intended for direct, continuous contact with food products.

Packaging: One and one-half gallon (346 in.^{3}) (5.7 litre) and four gallon (924 in.^{3}) (15 litre) units, when mixed with curing agent.

Colors: #12 Black, #39 Limestone, #403 Redwood Tan, #515 Aluminum Stone.

Applicable Standards: Meets the requirements of ASTMD1850 and Federal Specification TT-S-00227E(3), Class A Type I. ASTM C-920-79, Type S, Grade P, Class 25, Use T.

4. TECHNICAL DATA

TYPICAL PHYSICAL PROPERTIES

Polymeric Base	2-part Polyurethane
Max. Movement Capability	Expansion, 25% Compression, 25%
Practical Joint Design	Minimum of 3 times anticipated movement
Non-volatile Content	100%
Initial Cure Times:	
@120°F (49°C)	2 hours
@80°F (26.7°C)	5 hours
@40°F (4.4°C)	36 hours
Tack-free to touch	8 hours @80°F (26.7°C)
Traffic-bearing Cure	48 hours @80°F (26.7°C), 50% RH
Hardness, Shore A	
Initial	25-30
Ultimate	30-35
Adhesion in Peel (primed concrete)	Exceeds requirements of TT-S-00227E(3) for 7-day water immersion

5. INSTALLATION

Joint Design: The width or depth of the joint should not be less than ¼" (6.35mm). In joints up to ½" (12.7mm) wide, the depth of the sealant should be equal to the width. In joints wider than ½" (12.7mm), but not exceeding 1" (25.4mm), the depth may be maintained at ½" (12.7mm). For joints wider than 1" (25.4mm), please consult our Technical Service Department.

Surface Preparation: Surfaces must be clean and dry. The presence of moisture will cause gassing before the sealant achieves ultimate cure. Oil, grease, wax, form release agents, curing compounds, bitumens, laitance and old calking materials must be removed by sandblasting or sawing to sound, virgin concrete surface for optimum sealant performance.

Priming: All joints must be primed before applying NR-200. Pecora P-200 Two-Part Epoxy Primer is recommended.

Primer must be dry before application of the NR-200.

Dry Time: 75°F . . . . . 1 hour
40°F . . . . . 3 hours

P-200 Primer should not be allowed to dry over 8 hours before application of the NR-200.

Joint Backing: Backing rod should be used to control the depth of the sealant. Pecora #92 Green Rod Closed Cell Polyethylene is recommended. Use a size that will compress 25% when inserted into the joint. Do not overcompress or puncture backing rod during installation. Non-porous, semi-rigid backing materials may be used if a bondbreaker tape is applied to prevent adhesion to the joint filler. NR-200 should not be installed over impregnated fiberboard, sand or porous fillers capable of absorbing and retaining water.

Mixing: Activator and base components are packaged in the exact ratio for use. Mix all of the activator and base as furnished; do not attempt to mix partial units, as the exact ratio of A to B is essential for optimum performance.

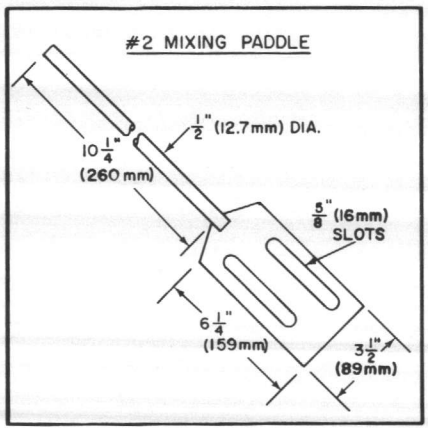
Thoroughly blend activator and base for a minimum of five minutes using a slow-speed, heavy-duty drill at 400 r.p.m. maximum speed. Use a Pecora #2 Mixing Paddle for proper blending. Avoid high-speed mixing that will entrain air bubbles. Scrape sides and bottom of container frequently during mixing.

Application: NR-200 flows easily into narrow joints from a calking gun; in wide joints, it can be poured from the container. Joints should be filled to within 1/16" (1.59mm) of the surface. Light tooling, if required, can be done immediately. Protect the sealant from water during the cure cycle. NR-200 is designed to self-level in horizontal joints. If the joint has a severe incline or if the

profile of the joint is misaligned, a non-sag grade of NR-200 should be used.

Application Life: (Approx.)
@120°F (49°C) ..... 1 hr.
@ 80°F (26.7°C) ..... 2-3 hrs.
@ 40°F (4.4°C) ..... 6-7 hrs.

A special accelerator can be supplied if a faster cure rate is desired, particularly in cold-weather applications.



Cleaning: Remove excess sealant promptly using toluene or xylene. These solvents are toxic and flammable; observe solvent manufacturer's precautions.

Storage Life: Approximately 6 months, when stored below 80°F (26.7°C) in original sealed containers.

Precautions: Despite its elasticity and abrasion resistance, NR-200 can be damaged by sharp objects such as women's spike heels, snow plow blades, studded tires, etc.

Contains diisocyanates; avoid prolonged breathing of vapors and contact with skin and eyes. Wash hands thoroughly after use and before eating or smoking. Upon accidental contact with eyes, flush thoroughly with water and seek medical attention immediately. KEEP OUT OF REACH OF CHILDREN.

6. AVAILABILITY AND COST

Pecora sealants are available from our plants in Harleysville, PA, Garland, TX, and Atlanta, GA, or from our stocking distributors in major cities. For the name and number of your nearest Pecora representative, call one of our three locations listed below, or call Sweet's "Buyline." Our representatives can give you prices or put you in touch with the nearest stocking distributor.

7. GUARANTEE

Pecora warrants its products to be manufactured free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable for this product. This warranty is in lieu of any and all other warranties, expressed or implied, and in no case will Pecora be liable for incidental or consequential damages.

8. MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and recalk. No primer is required. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the instructions under "Installation."

9. TECHNICAL SERVICES

Local Pecora representatives are available to assist in selecting an appropriate sealant and to provide on-site application instructions. For further technical assistance, please call our Technical Services Department at 215-723-6051.

10. FILING SYSTEMS

Sweet's General Building File.
Spec-Data® II.

165 Wambold Road, Harleysville, PA 19438 • 215-723-6051
2601 Oakland Avenue, Garland, TX 75041 • 214-278-8158
1741 Tully Circle N.E., Atlanta, GA 30329 • 404-636-1427

Pecora International Corporation:
165 Wambold Road, Harleysville, PA 19438 U.S.A.
215-723-6051 • Telex 846-377 • Cable EXPECORA

pecora CORPORATION

ADHESIVES AND SEALANTS FOR BUILDING SINCE 1862

NR-200-6/82-IVP-5M

X RAK 07 Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	23	4-9-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	05500	METAL FABRICATIONS			
3	1.2.2	Floor Gratings and Frames	4	RA/C	RD
4	1.2.2	Handrails	4		
5	1.2.2	Ladders	4	RA/C	RD
6	1.2.2	Trench Covers and Frames	4		
7	1.2.2	Expansion Joint Covers	4	RA/C	RD

CONTRACTOR'S COMMENTS

Note: Certification on Carbon steel, Steel Pipe and Tubing and on Steel Floor Grating is forthcoming.
Shop Drawings on Access Doors and Panels and on Cover Plates and Frames along with Samples as indicated in Para 1.2.3, is forthcoming.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pepper

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

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REVIEWER'S COMMENTS

"Minor corrections were made by the reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC".

CORRECTIONS ACKNOWLEDGE

Signature _____ Date _____

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	4/16/85	

HENRY von OESEN AND ASSOCIATES, INC.
611 Princess Street • Post Office Drawer 2087 • Wilmington, North Carolina 28401
Phone 919 / 763-0141

MEMO-LETTER

TO Harry Pepper & Assoc. Inc
Jacksonville N.C.
ATTN: Mr. Phil Reese

DATE 9/6/85

SUBJECT Holcomb Blvd Water Treatment Facility —

Since the decision has been made to allow the use of the Res-X Sodium Silicate Curing Compound by Burke on the water reservoirs, the attached deviation is no longer required. Therefore, we are returning all copies of the request for deviation.

If you have any questions please contact us.

Rob Ford

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	91	8-20-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
X	03302	CAST-IN-PLACE CONCRETE			
1	2.2.7	Materials for Curing Concrete	7		

CONTRACTOR'S COMMENTS

See attached letter

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese *Phil Reese*

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

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REVIEWER'S COMMENTS

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)		

☆ U.S. GPO:1984-537-003/11170 Region 3-11

HARRY PEPPER & ASSOCIATES, INC.

ENGINEERING CONTRACTORS

August 21, 1985

Henry Von Oesen & Associates, Inc.
P. O. Box 2087
Wilmington, NC 28402

RE: Contract N62470-81-C-1644
Expansion of Holcomb Boulevard
Water Treatment Plant
Camp Lejeune, North Carolina

Gentlemen:

In reference to a curing compound for cast-in-place concrete, Section 03302 paragraph 2.2.7.3, we would like to submitt the following deviation.

Our CQC, Mr. Phil Reese, has contacted several national suppliers of curing compounds regarding the purchase of an EPA approved curing compound. As of this date, Mr. Reese is unable to locate a company which could supply such a product.

As a result of Mr. Reese's findings we would like to submitt a deviation to leave our forms in place for three days. We feel this will provide adequate curing time and should cause no structural problems--Tom Carter and Lt. Krug are in agreement with this.

This deviation will cause no time delays and will be at no additional cost to the government. If you have any questions regarding this deviation please feel free to contact myself or Mr. Phil Reese.

Very truly yours,
HARRY PEPPER & ASSOCIATES, INC.

John Muter

John Muter
Field Engineer

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

____ Approved for use.

X Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Reese DATE 8-21-85

119 WEST EIGHTH STREET • P.O. BOX 3007 • JACKSONVILLE, FL. 32206 904/356-3954

Hurt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	138	12-31-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant

MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Re-inforcement drawings Pump Stations	4	RA	RÓB 1/9/86
		Raw Water Tank			

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese Phil Reese

DATE RECEIVED BY REVIEWER: 1/3/86

FROM (Reviewer): Henry Von Oesen & Assoc., Inc.

TO:

[ ] Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

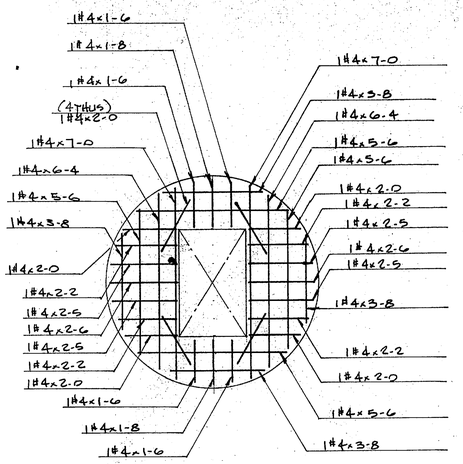
Contractor's approval appears to be appropriate.

COPIES TO
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: 10 JAN 1986 9-86 11 13

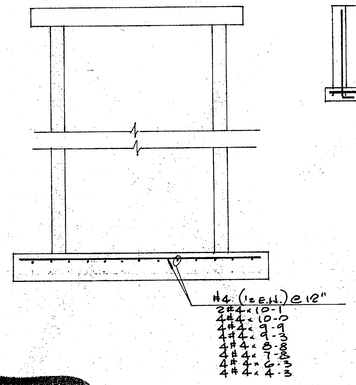
SIGNATURE: [signature]

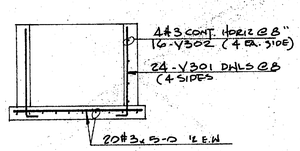
☆ U.S. GPO:1984-537-003/11170 Region 3-11



TOP SLAB PLAN

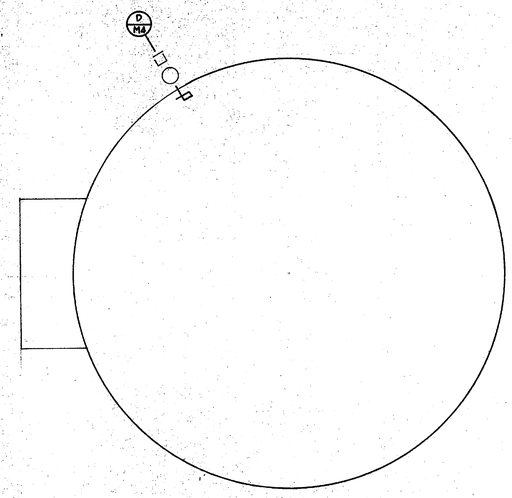
(2 THUS)



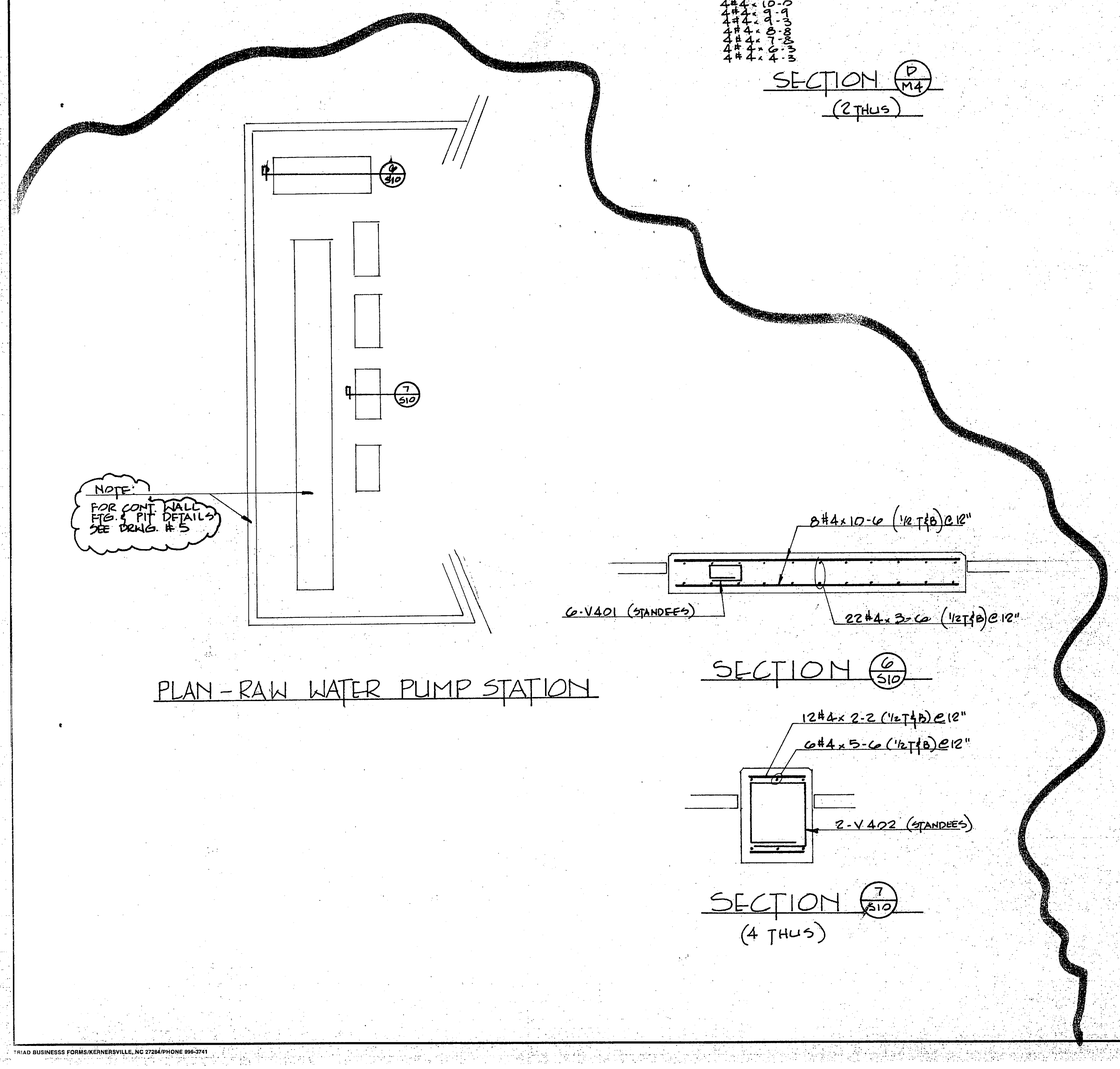


SECTION D/M4

(2 THUS)



RAW WATER RESERVOIR

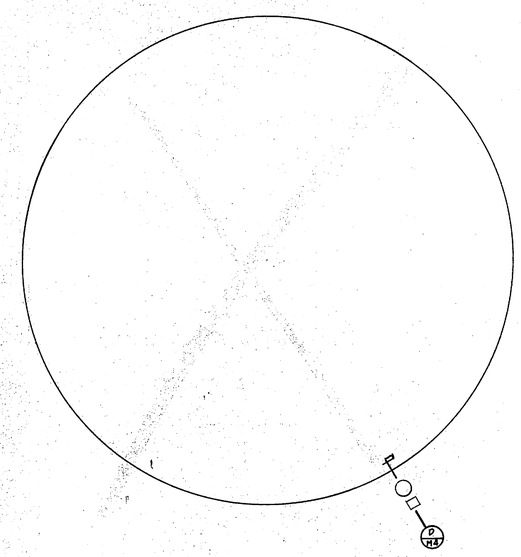


PLAN - RAW WATER PUMP STATION

SECTION 6/510

SECTION 7/510

(4 THUS)



FINISH WATER RESERVOIR

I hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

Submitted for Government approval.

Approved for use subject to Government approval of specific deviation.

Authorized Reviewer: DATE

Signature CQC Rep. DATE 12-31-85

For Approval only

Not for job use

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR
			12/4	APPROVAL (11)

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No.	
Structure	HOLCOMB BLVD. W.W.T.P.
Location	CAMP LEJEUNE, N.C.
Engineer	
Customer	HARRY PEPPER & ASSOC.

Made By LOTT Date 12/4/85 CONTRACT NO. 85132

~~FOR JOB USE~~

USE A615/GR 60 STEEL

Q. A. CAT

REFERENCE DRAWING

DRAWING COVERS: PUMP STATIONS

DRAWING NO. 26 ~~25~~ 'V'

Hunt

30/RAK

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	#2	3-8-85

FROM CONTRACTOR: Harry Pepper + Associates, Inc.

TO: Henry von Rosen + Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	Cast-In-Place Concrete Manufacturers Data on Melment-Admixture	7	A	KAN/411 3/21/85

CONTRACTOR'S COMMENTS: To provide better appearance, quality and increased strength, we wish to use melment for wall placement, which will allow a highly workable flowing concrete without a loss of strength. If this proposed deviation is approved, there will be no additional cost to the Gov't and any changes caused will be the responsibility of the contractor at no additional cost to the Government

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: One Copy to ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
3/11/85	LANTDIV	Harry Pepper / ROICC

☒ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Approved No change in cost or time

3-28-85

COPIES TO: ROICC (2), LANTDIV (1), A-E (1)

28 MAR 1985

DATE: 3/25/85

SIGNATURE: J J Hasta

HARRY PEPPER & ASSOCIATES, INC.

ENGINEERING CONTRACTORS

February 25, 1985

Resident Officer in Charge of Construction
Naval Facilities Engineering Command Contracts
Marine Corps Base
Camp LeJeune, North Carolina 28542

ATTN: Lieutenant P. E. Krug

RE: Contract N62470-81-C-1644
Expansion of Holcomb Boulevard
Water Treatment Plant
Camp LeJeune, North Carolina

Dear Sir:

With reference to Specification Section 03302 "Cast-in-Place Concrete" we wish to request the following no cost change.

In order to provide better appearance, better quality and increased strength, we wish to use an additional admixture called Melment, which is a concrete plasticizer. For wall placements it will allow a highly workable, flowing concrete without segregation or loss of strength.

We anticipate performing a trial mix to assure compatibility with the supplied concrete.

Enclosed is the manufacturer's literature for your evaluation. Please feel free to contact me if you require additional information. Advise me of your decision as soon as possible.

Very truly yours,
HARRY PEPPER & ASSOCIATES, Inc.

James Schock
Project Manager

enc

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

____ Approved for use.

X Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

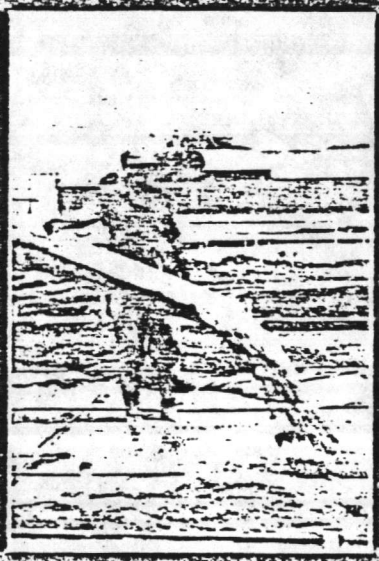
Authorized Reviewer _____ DATE _____

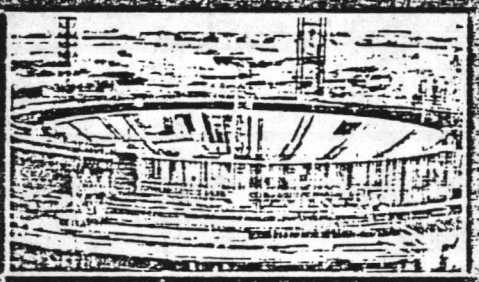
Signature CQC Rep. Phil Pence DATE 3-8-85

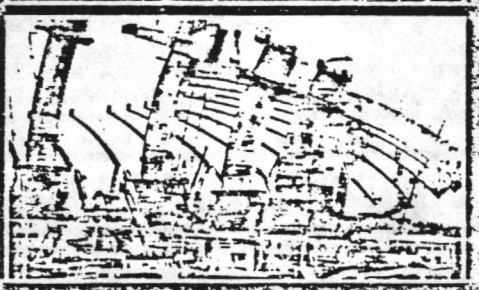
119 WEST EIGHTH STREET • P.O. BOX 3007 • JACKSONVILLE, FL 32206 904/356-3954

MELMENT®

This unique superplasticizing admixture brings improved performance and increased productivity to every concrete application.







American Admixtures and Chemicals Corporation

JOSEPH E. WOLFE

Atlanta, GA 404 427 0263
Tampa, FL 813 962 2632

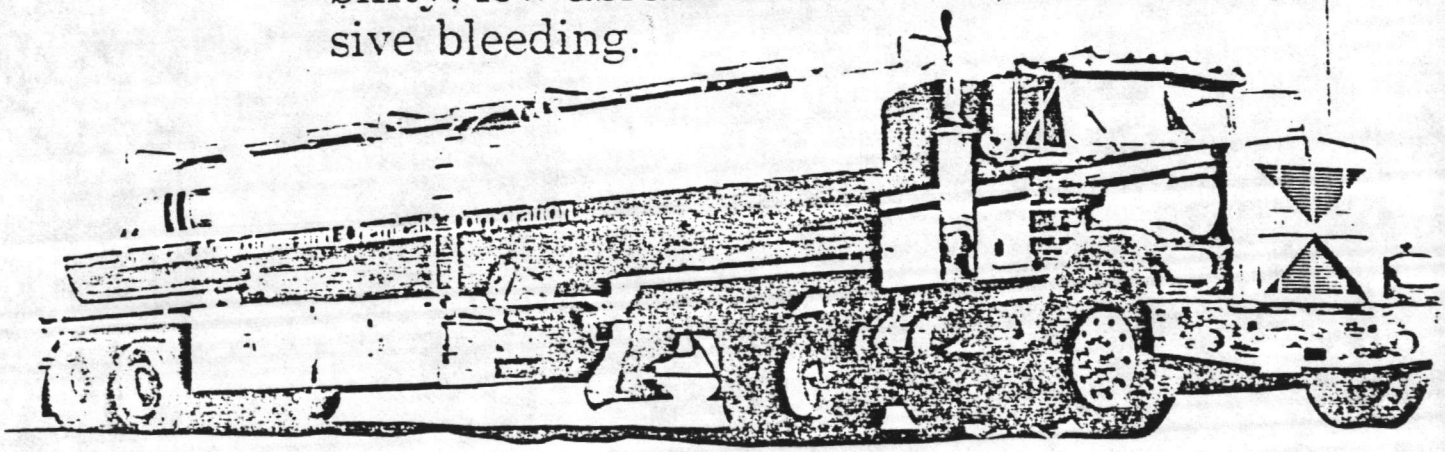
American Admixtures and Chemicals Corporation

5909 North Rogers Avenue, Chicago, Illinois 60646

MELMENT IS...

a sulfonated melamine condensate which has a powerful plasticizing effect on concrete without lowering the surface tension. It forms a lubricating film. enveloping both the cement and aggregate to reduce friction between the solids. Melment superplasticizer can be used to produce concrete at:

- Normal workability but at extremely low water-cement ratio.
- Extreme workability or "flowing" consistency at normal water-cement ratio. This concrete is essentially self-leveling, but without undesirable side effects, such as segregation, low durability, low abrasion resistance, and excessive bleeding.

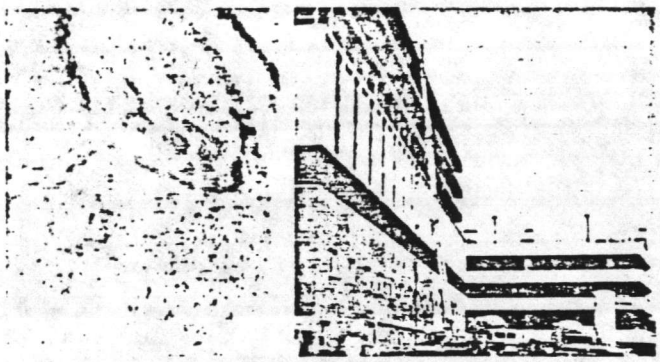


- A combination of better-than-normal workability but at a lower-than-normal water-cement ratio.

Because it is synthetically produced to exacting specifications. Melment assures consistent quality and dependable performance.

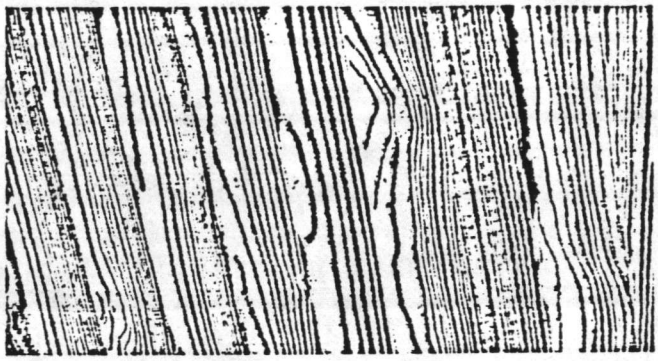
MELMENT FLOWING CONCRETE...

• Faster, easier placement • Slump tailored to your needs • Easier pumping • Better consolidation • Smoother finish, sharper textures. When Melment is added to increase the slump and workability of concrete without adding water, ordinary concrete becomes Flowing Concrete. In actual concreting comparisons, Melment Flowing Concrete has dramatically reduced time and labor costs.



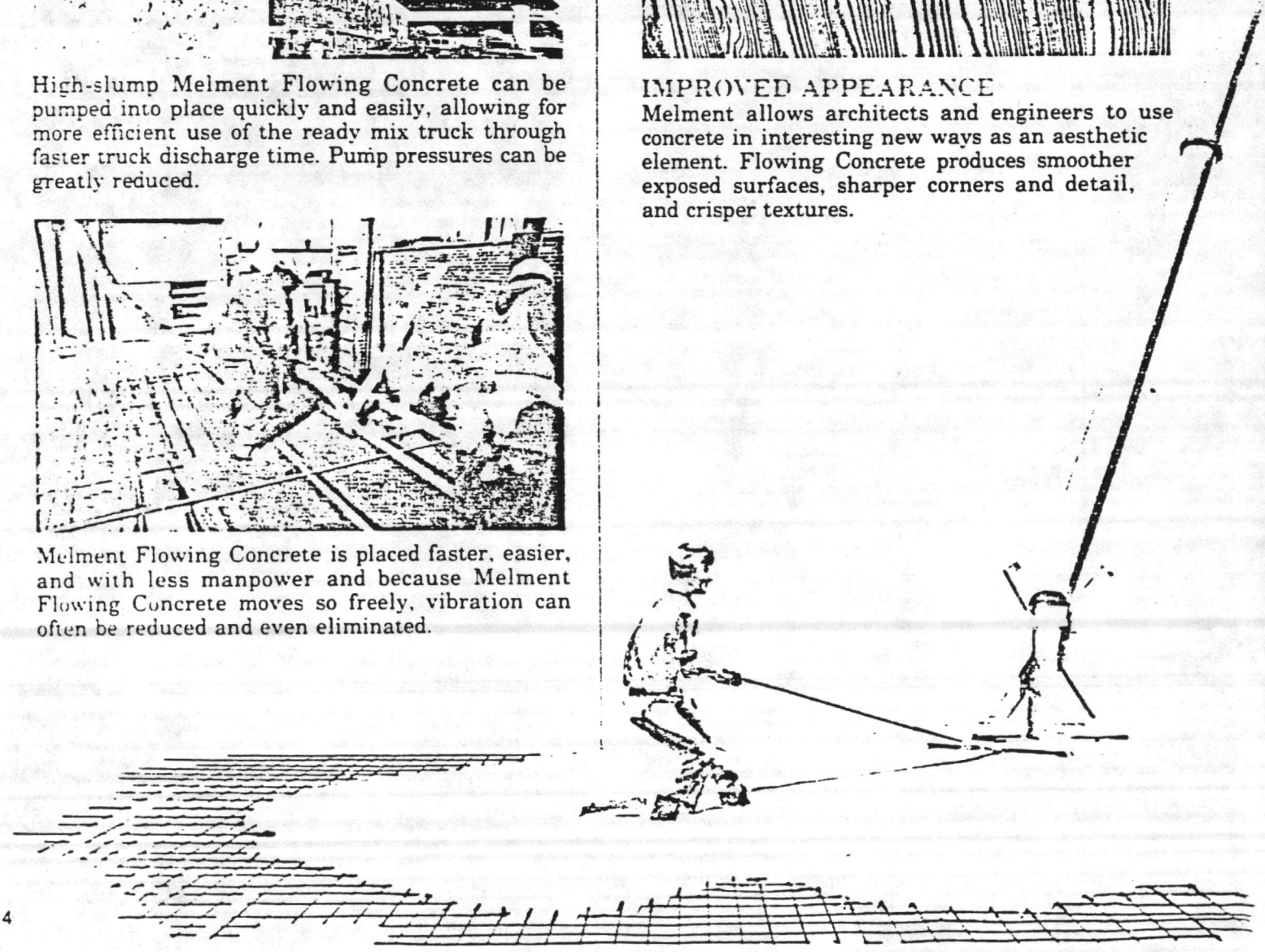
High-slump Melment Flowing Concrete can be pumped into place quickly and easily, allowing for more efficient use of the ready mix truck through faster truck discharge time. Pump pressures can be greatly reduced.

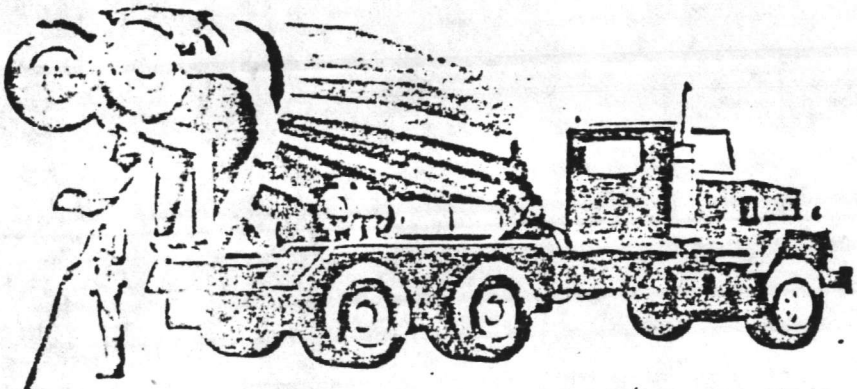
Melment Flowing Concrete is placed faster, easier, and with less manpower and because Melment Flowing Concrete moves so freely, vibration can often be reduced and even eliminated.

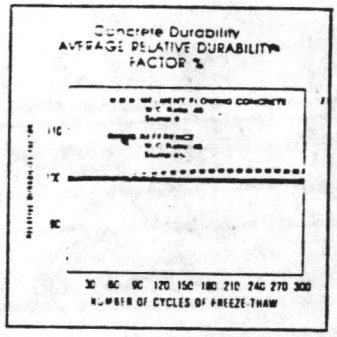


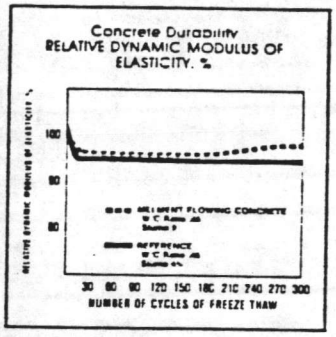
IMPROVED APPEARANCE

Melment allows architects and engineers to use concrete in interesting new ways as an aesthetic element. Flowing Concrete produces smoother exposed surfaces, sharper corners and detail, and crisper textures.





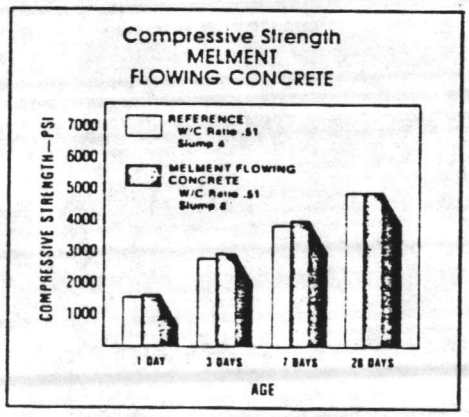




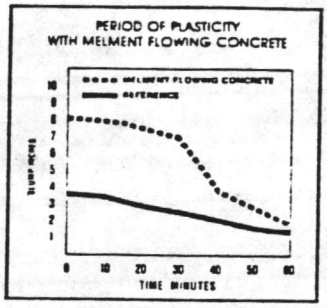
TESTS PROVE SUPERIOR PERFORMANCE

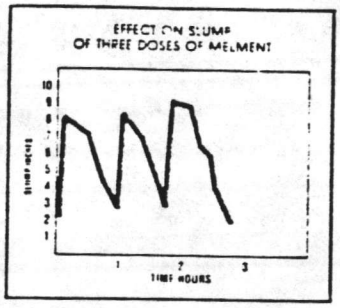
Durability is an important advantage of Melment Concrete. Melment L10A enhances air-void structures so they are not damaged even at high levels of flowability. Melment L10A has proved durable in tests by many independent laboratories and by state and Federal agencies even under the most severe exposure conditions. The graph above shows the average relative dynamic modulus of elasticity of Melment Flowing Concrete as a percentage of reference specimens for 300 cycles of freezing and thawing in water in laboratory tests.* Actual performance of Melment Flowing Concrete used in various applications in the field bears out these test results.

*ASTM C-666, Method A.



Compressive Strength obtained with Melment depends on its dosage and application. As the graph above shows, Melment Flowing Concrete produces slightly higher compressive strengths at all stages of testing.



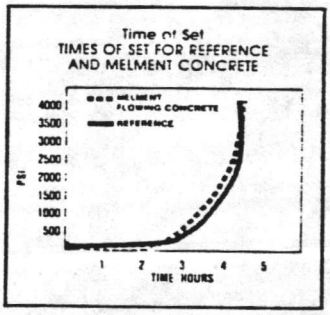


PLASTICITY OF MELMENT FLOWING CONCRETE

The plastic effect of Melment typically lasts from 30-60 minutes. Therefore, Melment is normally added at the point of placement. However, should flowability be lost before all concrete is placed, Melment may be added again to regain high slump without loss of strength.

TIME-OF-SET

Melment has no appreciable effect on the setting characteristics of concrete. The graph at right shows the time-of-set for two concrete mixtures with equal cement and water contents, the only difference is the addition of Melment.



SUGGESTED DIRECTIONS FOR USE

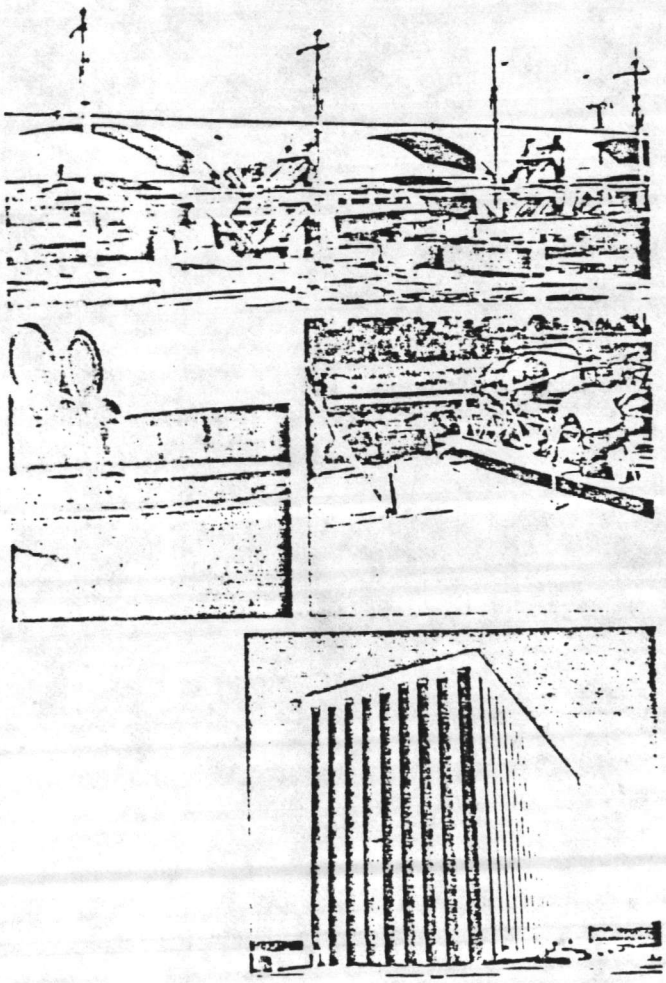
All concrete should arrive at the jobsite having a slump of 3" ± 1". Melment should be added after the concrete has been thoroughly mixed and the desired initial slump has been achieved. Additional mixing should be given after the addition of Melment to insure good distribution. Melment may be used with all types of cements and admixtures meeting appropriate ASTM specifications. Trial mixes should be produced to ensure compatibility.

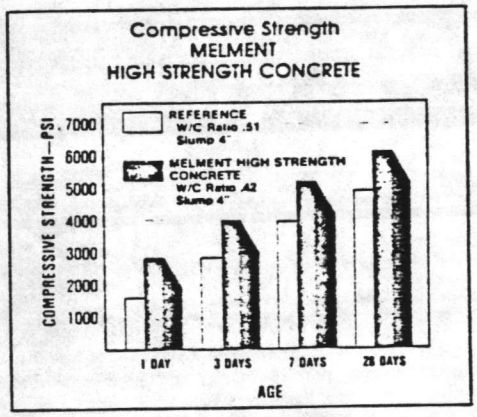
DOSAGE

The dosage rate of Melment varies depending upon the amount of plasticity desired. Typically, Melment is batched at 12-30 fl. oz. per cwt of cementitious material (Portland cement + fly ash) for flowing concrete. The dosage rate of Melment, when used in conjunction with a Type A water-reducing admixture may be reduced 25% or more. Admixture compatibility should be ensured by trial batching prior to use.

MELMENT HIGH-STRENGTH CONCRETE...

• Far greater strengths at all ages • Better durability • Less shrinkage, less bleeding • Increased impermeability • Improved workability. Melment used as a high-range water reducer assures better concrete quality at normal levels of workability: Concrete may be placed at normal slumps, but with 20-30% less water content. Compare that to 5-15% water reduction of typical water-reducing admixtures. Melment facilitates accelerated curing to save time, energy and labor costs, as well as earlier turnover of forms. Melment often enables the producer to use Type I cement rather than Type III cement because of its beneficial effect on early strength.



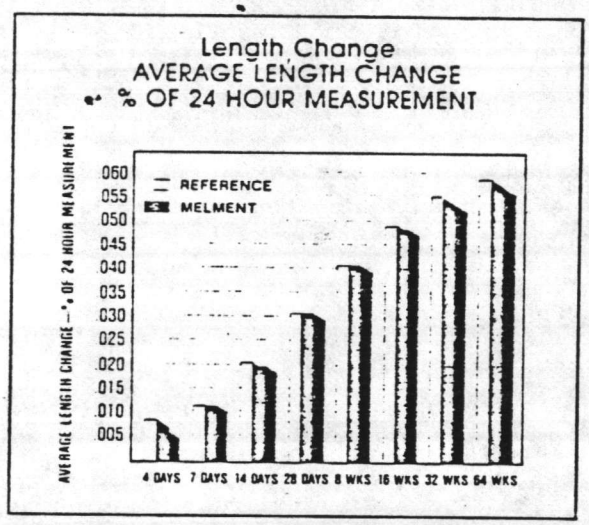


COMPRESSIVE STRENGTH

For those applications where higher strength is most important—precast structural elements, bridge supports, slip form concrete, prestressed or post-tensioned concrete, early removal of forms—Melment fills the bill as a high-range water reducer. The graph above illustrates the exceptional higher strength, at all ages, of Melment Concrete compared to a reference mixture.

SERVICEABILITY

Over the long term, strength levels in Melment concrete, with its reduced water content, remain as much as 15-20% greater than those of untreated concrete. Examinations under an electron-microscope and radiographic analysis show that hydration products of Melment High-Strength Concrete are identical to those of untreated concrete. Long-term test data confirms the benefit of Melment Concrete versus time.



Shrinkage can be reduced with the addition of Melment as a high-range water reducer. This reduces the danger of cracking and enhances the overall strength of the concrete product.

DIRECTIONS FOR USE:

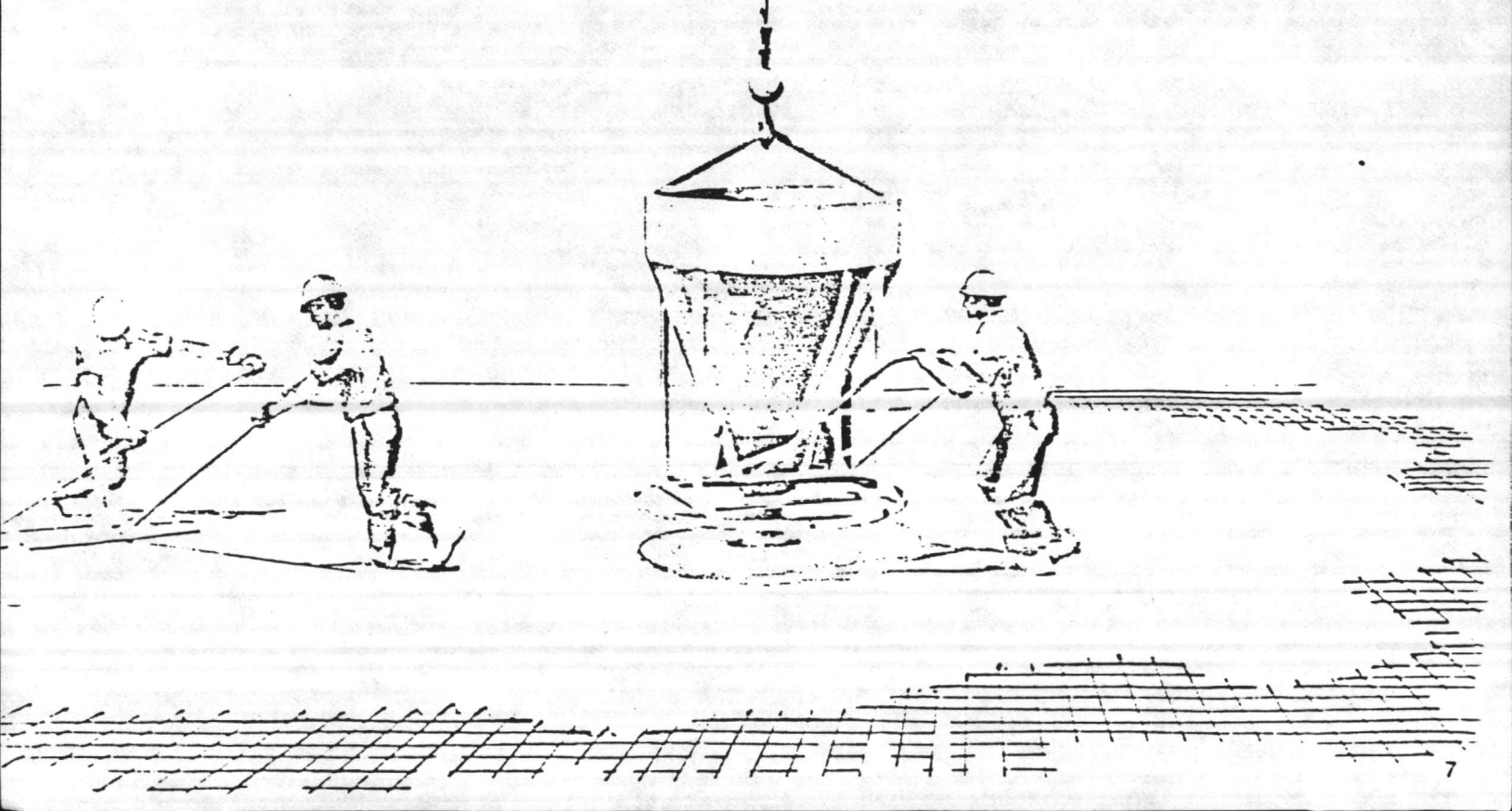
Concrete should be mixed at the water-cement ratio necessary to attain the specified strength. To achieve the desired level of workability, Melment should be added to the concrete as a final ingredient after it has been thoroughly mixed.

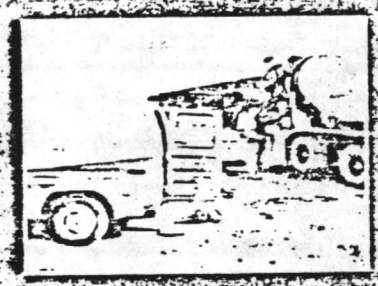
DOSAGE

The dosage rate of Melment varies depending upon the amount of water reduction and workability desired. Typically, Melment is batched at 15-40 fl. oz./cwt of cementitious material (Portland cement + fly ash) for high-strength concrete.

COMBINATION

Melment lets you tailor concrete performance to meet your needs. Melment has a variable dosage rate so you can tailor the strength and workability of concrete to suit the circumstances of the job. Typically, concrete is brought to the jobsite at a 1-3" slump and Melment is added just prior to placement to achieve a 6-8" slump.





Expert technical assistance is provided with every ounce of Melment.

We have helped people place Melment concrete in every kind of construction from nuclear power plants to bank vaults, tilt-up panels to high-rise buildings. Our experience in quality control is a vital ingredient in high performance concrete work. That is why we urge customers to take advantage of this experience from the beginning of any concrete project. Call your technical representative from American Admixtures and Chemicals Corporation during the planning stage. He will show you how Melment can affect production schedules, save on cement or solve unusual problems with a custom concrete mix design.

On-site quality control is another important service of American Admixtures. When needed, our technical representative is on-the-spot to assist you as you place Melment concrete.

Suggested Specification for General Purpose Use: All concrete shall be delivered to the jobsite at a slump of 3"-4½". No additional water shall be added to the concrete at the jobsite. If increased workability is desired, it shall be obtained through use of Melment Superplasticizer conforming to ASTM C-494, Type A and F, as manufactured by American Admixtures and Chemicals Corporation.

(The above general purpose specification can be applied to most jobsite situations. If a special situation should arise, your American Admixtures and Chemicals Corporation technical sales representative will aid in the tailoring of a specification for individual application.)

Manufacturing Specifications: Melment is manufactured to conform to the specifications of ASTM C-494, Type A and F; CRD C-37, Type A, and AASHTO M-194, Type A.

Availability: Melment is available in powder form in bags weighing approximately 55 lbs. in any quantities. Melment is available in liquid form in 55-gallon drums or in bulk delivered by American Admixtures' own trucks, or in full railroad tank cars.

NEED HELP? Call the American Admixtures Hotline: 800/621-5506 (In Illinois: 312/286-3737). Get immediate information about Melment or any of our other products from our concrete technicians.

American Admixtures and Chemicals Corporation

Corporate Headquarters: 5909 North Rogers Avenue, Chicago, Illinois 60646, 312/286-3737

Regional Offices:

St. Louis: 1200 Hanley Industrial Court, St. Louis, Missouri 63144, 314/962-0650

Hagerstown: 1835 Pennsylvania Avenue, Hagerstown, Maryland 21740, 301/790-3900

Dallas-Fort Worth: 9309 Summit, Suite 3, Plano, Texas 75075, 214/423-7855

Atlanta: 980 Mansfield Industrial Drive, Marietta, Georgia 30062, 404/427-0253

PRODUCT DATA

MELMENT
For Flowing Concrete

GENERAL:

MELMENT is a melamine formaldehyde, water soluble polymer based, normal-setting Superplasticizer which produces extremely workable "flowing concrete" that is essentially self-leveling without undesirable side effects

ADVANTAGES:

- MELMENT flowing concrete enables easier and faster placement of concrete resulting in a significant savings in labor costs.
- Through its unique plasticizing effect, MELMENT can provide highly workable, flowing concrete without segregation at the same water-cement ratio as concrete of normal workability without a loss of strength
- MELMENT improves pumpability. Pump pressures can be reduced up to 50%.
- The use of vibrators can be eliminated or reduced while giving greater assurance of good consolidation.
- MELMENT adds to reduced permeability to water as well as improved resistance to freezing and thawing and the action of deicing salts.
- MELMENT flowing concrete will produce better architectural concrete without honeycombing. Textured concrete surfaces are enhanced.
- MELMENT is chloride-free.
- MELMENT may be used with all types of ASTM approved cements and admixtures. Trial mixes should be conducted to ensure compatibility.
- The plastic effect of MELMENT typically lasts from 30 - 60 minutes. Therefore, MELMENT is normally added at the point of placement.

DIRECTIONS FOR USE:

All concrete should arrive at the jobsite having a slump of 3" ± 1".

MELMENT should be added after the concrete has been thoroughly mixed and the desired initial slump has been achieved. Additional mixing should be given after the addition of MELMENT to insure good distribution.

DOSAGE:

The dosage rate of MELMENT varies depending upon the amount of plasticity desired. Typically, MELMENT is batched at 12 - 30 fl. oz. per cwt of cementitious material (Portland cement + fly ash) in ready mix concrete

SPECIFICATIONS:

MELMENT is manufactured to conform to the specifications of ASTM C-494, Type A, CRD C-87, Type A, and AASHTO M-194-70, Type A.

SUGGESTED SPECIFICATION FOR GENERAL PURPOSE USE:

All concrete shall be delivered to the jobsite at a slump of 3" ± 1". No additional water shall be added to the concrete at the jobsite. If increased workability is desired, it shall be obtained through use of MELMENT Superplasticizer conforming to ASTM C-494, Type A, as manufactured by American Admixtures and Chemicals Corporation, 5909 North Rogers Avenue, Chicago, Illinois 60646

(The above general purpose specification can be applied to most jobsite situations. If a special situation should arise, your American Admixtures and Chemicals Corporation technical sales representative will aid in the tailoring of a specification for individual application.

American Admixtures and Chemicals Corporation
5909 NORTH ROGERS AVENUE • CHICAGO • ILLINOIS • 312/286-3737

DEVIATION: APPROVED

DISAPPROVED

LANTDIV REVIEWER

DATE 21 MAR 1985

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED

APPROVED AS NOTED

DISAPPROVED

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NO. 81-1644

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER _____ DATE 21 MAR 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_____ Approved for use.

X Submitted for Government approval.

_____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Reese DATE 3-8-85

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	6-A	4-4-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry von Oasen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

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*List only one specification division per form.

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R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03300	CAST-IN-PLACE CONCRETE		RA	

MAIL TO ROICC Camp Lejeune

CONTRACTOR'S COMMENTS

NOTE: Manufacturers data on 3000 PSI mix with # 8 Course AGG, was not intended to be a part of Transmittal # 6, dated 3-14-85. Submitted in error.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pepper

DATE RECEIVED BY REVIEWER: 4/11/85

FROM (Reviewer):

TO:

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: 4/11/85

SIGNATURE:

4-23-85

30 | PAR

RCB Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	7	3-14-85

FROM CONTRACTOR: Harry Pepper + Associates, Inc

TO: Henry von Oeser + Associates, Inc.

PROJECT TITLE AND LOCATION: Exp Holcomb Blvd Water Treat Plant MCB, Cp Lejeune North Carolina

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	03302	Cast In-Place Concrete			
	2.2.6	Reinforcement	4	RA/C	RO

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: One Copy to ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

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[ ] Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

"Minor corrections were made by the reviewer. The contractor is requested to update his copies of this submittal, acknowledge corrections below, and forward this submittal to the ROICC".

CORRECTIONS ACKNOWLEDGED

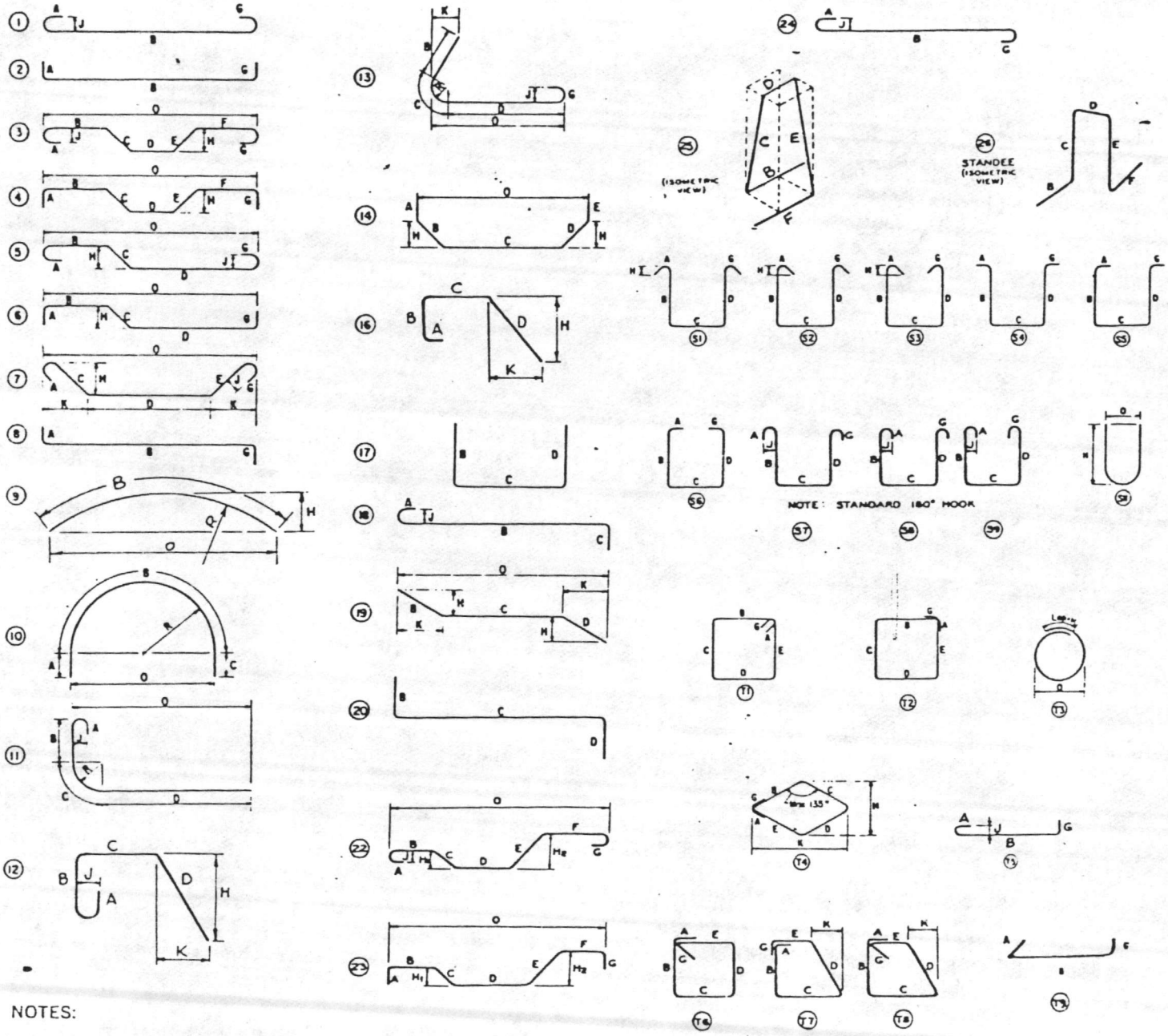
Signature Date

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	3/25/85	[illegible]

LOTT STEEL PRODUCTS COMPANY

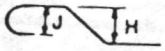
P. O. BOX 879 • WELCOME, NORTH CAROLINA 27374-0879
TELEPHONE (704) 731-6331

TYPICAL BAR BENDS



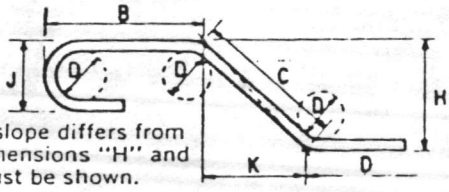
NOTES:

1. All dimensions are out-to-out of bar except "A" and "G" on standard 180° and 135° hooks.
2. "J" dimension on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where "J" is not shown, "J" will be kept equal to or less than "H" on truss bars. Where "J" can exceed "H", it should be shown.



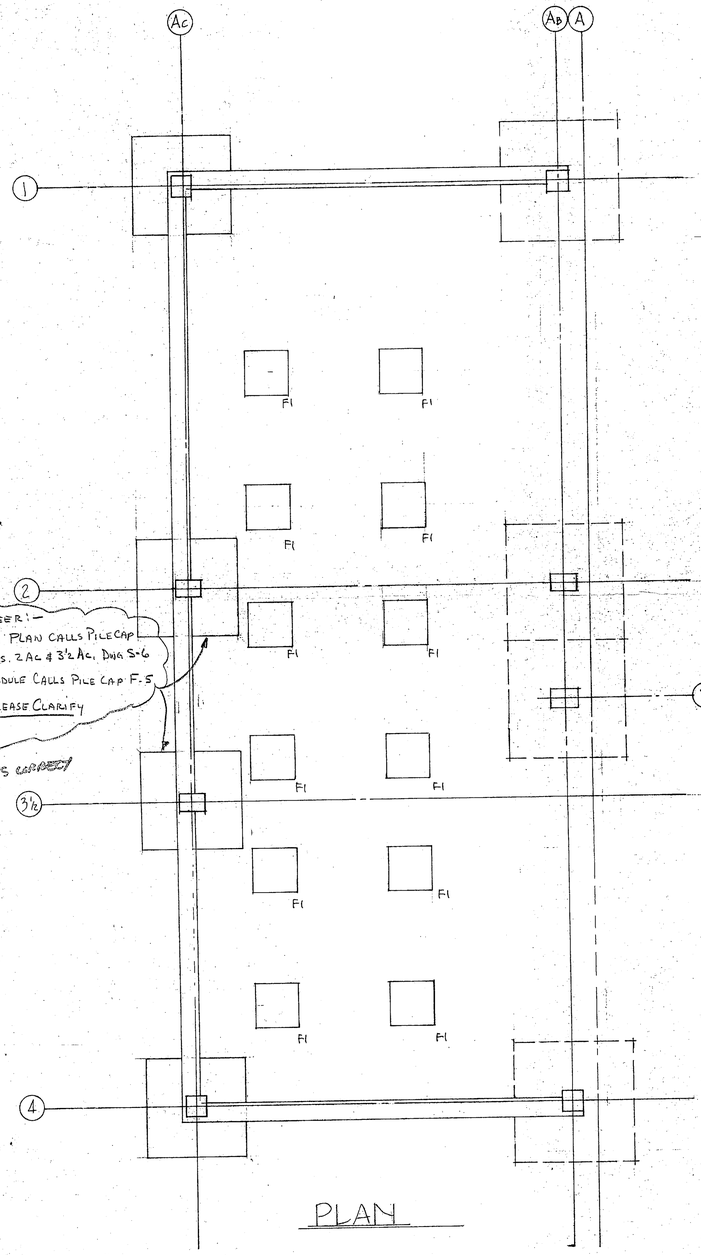
4. "H" dimension stirrups to be shown where necessary to fit within concrete.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer fabrication should have limits indicated.
6. Figures in circles show types.
7. For recommended diameter "D", of bends, hooks, etc., see tables, page 6-4.
8. Type S1-S9, S11, T1-T9 apply to bar sizes #3 through #8.

Unless otherwise noted diameter D is the same for all bends and hooks on a bar.



Where slope differs from 45° dimensions "H" and "K" must be shown.

ENLARGED VIEW SHOWING BAR BENDING DETAILS



ENGINEER:—
DWG S-1 PLAN CALLS PILE CAP F4 @ COLS. 2Ac & 3½Ac. DWG S-6 COL. SCHEDULE CALLS PILE CAP F.5
PLEASE CLARIFY

F4 is correct
RS

PLAN

COLUMN SCHEDULE

MARK (@ GRID LINE)	1·Ac & 4Ac	2·Ac & 3½ Ac	1·Ab & 4·Ab	2·Ab & 3·Ab
TOTAL NO. COLS.	2	2	2	2
PARAPET EL. 62.33				
ROOF EL. 60.33	SIZE: 8"×8" 3·A302 TIES @ 8	SIZE: 12"×8" 2·A304 TIES @ 12	SIZE: 8"×8" 3·A302 TIES @ 8	#7
2ND FL. EL. 47.00	SIZE: 14"×14" 2#8×19·2 VERT 4·A806 VERT 20·A301 TIES 9@3" BOTT 12@14" 3@3" TOP	SIZE: 12"×18" 6·A803 VERT 23·A303 TIES 11@3" BOTT 9@12" 3@3" TOP	SIZE: 14"×14" 2#8×19·2 VERT 4·A806 VERT 20·A301 TIES 9@3" BOTT 12@14" 3@3" TOP	SIZE 12"×18" 6#8×13·2 VERT 23·A303 TIES 11@3" BOTT 9@12" 3@3" TOP
BASEMENT EL. 28.33	SIZE 14"×14" 6·A805 VERT 24·A301 TIES 9@3" BOTT 12@14" 3@3" TOP	SIZE 12"×18" 6·A904 VERT 28·A303 TIES 11@3" BOTT 14@12" 3@3" TOP	SIZE 14"×14" 6·A805 VERT 24·A301 TIES 9@3" BOTT 12@14" 3@3" TOP	SIZE 12"×18" 6·A902 VERT 28·A303 TIES 6·#9×10'-0
	6·A804 DWLS.	6·A901 DWLS.	4#8 (EXIST.) DWLS	6#9 (EXIST.) DWLS

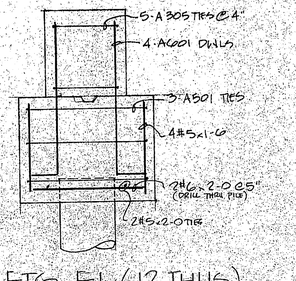
DIMENSIONS OMITTED ARE ZERO.					SEE TYPICAL BAR BEND SHEET FOR DETAILS.												
ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		9	6-8	A901	2	1-7	5-1					-					
2		1	~~21-10~~	A902	3	-	2-11	1-0½	17-6	2-0	-	-	3				
3		9	15-3	A903	3	-	2-0	1-1	12-2	-	-	-	6½				
4		9	21-5.2	A904	3	-	2-11	1-0½	17-6	-	-	-	3				
5		8	~~23-3~~	A801	2	1-4	21-0	2-8				1-4					
6			~~14-5~~	A802	2	1-4	12-0	13-2				-					
7			26-0	A803	2	1-4	24-8					-					
8			5-4	A804	2	1-4	4-0					-					
9			20-10½	A805	3	-	2-4	1-0½	17-6	-	-	-	3				
10		8	15-3	A806	3	-	2-0	1-1	12-2	-	-	-	4				
11																	
12		6	4-0	A601	2	1-0	3-0					-					
13		6	13-6	A602	H1	4	3-6	9-8					1-9				
14																	
15		5	8-10	A501	T2	5	2-0	2-0	2-0	2-0		5					
16		1	5-0	A502	3	-	2-6	2-6	-	-	-	-	1-3				
17		5	6-6	A503	3	-	4-0	2-6	-	-	-	-	1-3				
18																	
19		4	~~11-10~~	A401	T2	4	6	5-1	6	5-1		4					
20							5		8								
21		3	4-2	A301	T2	5	11	11	11	11		3					
22		1	2-2	A302	T2	3	5	5	5	5		3					
23			4-6	A303	T2	3	1-3	9	1-3	9		3					
24			2-10	A304	T2	3	5	9	5	9		3					
25		3	5-2	A305	T2	3	1-2	1-2	1-2	1-2		3					

TYPE H1

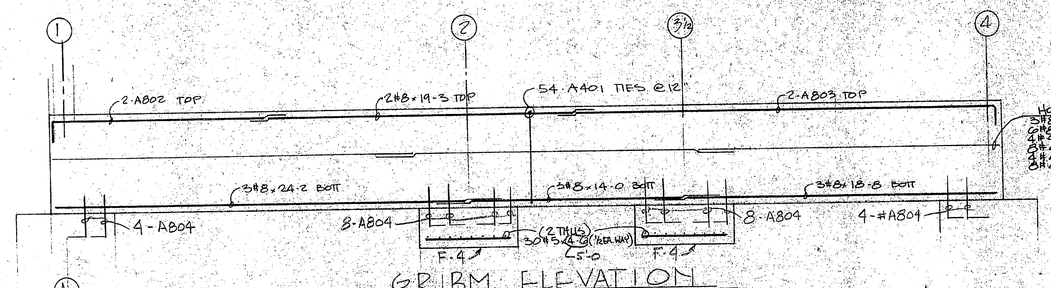
"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_X_ Approved for use.
___ Submitted for Government approval.
___ Approved for use subject to Government approval of specific deviation.

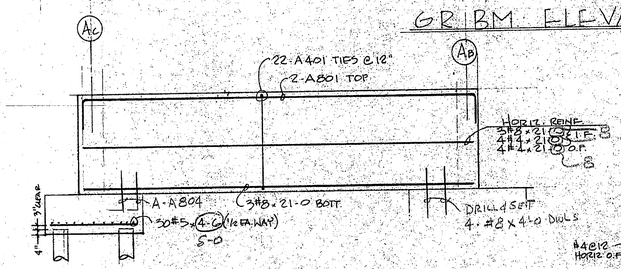
Authorized Reviewer: [signature] DATE 6-28
Signature CQC Rep: [signature] DATE 3-14-85



FTG. F1 (12 THUS)

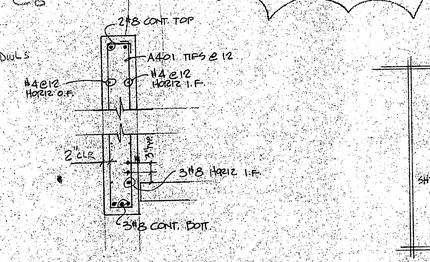


GR. BM. ELEVATION

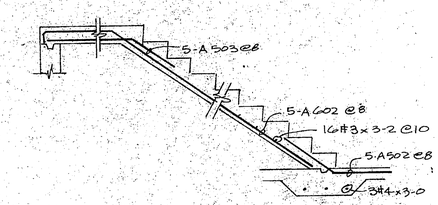


GR. BM. ELEVATION
(2 THUS) 1 OPP. HAND

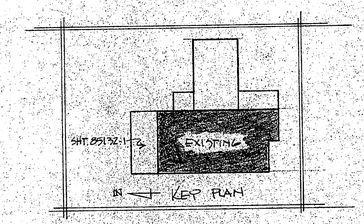
ENGINEER:
NOTE: 2#8 @ 1ST & 4TH TOP INDICATED ON GR. BM. SCHED. PLEASE INDICATE LOCATION IF REQ'D.



GR. BM. SECTION



STAIR No. 1



FOR APPROVAL ONLY
Not For Construction

LOTT STEEL PRODUCTS CO.

PROJECT: EXP. HOLCOMB BLVD WATER TREAT. PLANT
LOCATION: CAMP LEJEUNE, N.C.
CONTRACTOR: HARRY PEPPER & ASSOC. INC.
ARCHITECT:

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME LOTT	NAME	NAME
	DATE 2-7-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO. 185132-1 REV. NO. A

SOUTHERN PHOTO + GRAPHICS N4935-1

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	12-A	5-7-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcing Drwg	4	RA	5/14/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Pepper

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO:	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	5/14/85	Arthur [illegible]

LSP LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE HOLCOMB BLVD. WATERTREAT. PLANT

SHEET ____ OF ____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LEJEUNE, N.C.

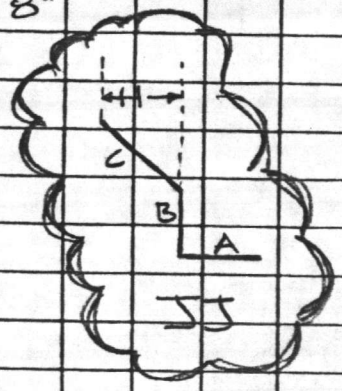
MADE BY DBR CKD. BY ____

MATERIAL FOR _____

REFERENCE DWG 85132-4

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		9	15-6	A906	2	1-6	12-6	-	-	-	-	1-6					
2		9	4-4	A907	2	1-6	2-10	-	-	-	-	-					
3		9	11-0	A908	2	1-6	9-6	-	-	-	-	-					
4		9	9-0	A909	20	-	2-6	4-0	2-6	-	-	-					
5		9	4-10	A910	2	1-6	3-4	-	-	-	-	-					
6		9	8-4	A911	20	-	2-6	3-4	2-6	-	-	-					
7		9	8-8	A912	3	-	2-0	1-2	2-0	-	-	-	10"				
8		9	17-6	A913	2	1-6	16-0	-	-	-	-	-					
9		9	11-6	A914	3	-	2-0	11"	5-8	11"	2-0	-	8"				
10																	
11																	
12																	
13																	
14		7	14-8	A703	2	1-2	12-4	-	-	-	-	1-2					
15																	
16																	
17																	
18																	
19		6	4-0	A603	2	1-0	3-0	-	-	-	-	-					
20		6	31-10	A604	2	1-0	29-10	-	-	-	-	1-0					
21		6	2-6	A605	2	1-0	1-6	-	-	-	-	-					
22		6	3-2	A606	JJ	8"	1-0	1-6	-	-	-	-	1-2				
23		6	9-1	A607	3	-	3-8	5-5	-	-	-	-	2-8				
24																	
25																	
26																	
27																	
28		5	2-6	A507	2	1-0	1-6	-	-	-	-	-					
29		5	3-10	A508	2	10"	3-0	-	-	-	-	-					
30		5	11-1	A509	2	8"	10-5	-	-	-	-	-					
31		5	5-7	A510	2	10"	3-11	-	-	-	-	10"					



SHIP _____

CUST. ORDER NO. _____

GRADE 60

SHEET TOTAL _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE HOLCOMB BLVD. WATERTREAT. PLANT

SHEET ____ OF ____

SHIP TO HARRY PEPPER & ASSOC.

DATE _____

LOCATION CAMP LEJEUNE, N.C.

MADE BY DBR CKD. BY ____

MATERIAL FOR _____

REFERENCE DWG. 85132-4

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		5	5-1	A511	2	10"	3-5	-	-	-	-	10"					
2		5	4-6	A512	2	10"	2-10	-	-	-	-	10"					
3		5	4-0	A513	2	10"	2-4	-	-	-	-	10"					
4		5	3-5	A514	2	10"	1-9	-	-	-	-	10"					
5		5	8-10	A501	T2	5"	2-0	2-0	2-0	2-0	-	5"					
6																	
7																	
8																	
9																	
10		4	9-11	A402	T2	3½"	4-4	4"	4-4	4"	-	3½"					
11		4	1-8	A403	17	-	8"	4"	8"	-	-	-					
12		4	8-11	A413	T2	3½"	4"	3-10	4"	3-10	-	3½"					
13		4	4-11	A414	T2	3½"	4"	1-10	4"	1-10	-	3½"					
14		4	10-7	A415	T2	3½"	4"	4-8	4"	4-8	-	3½"					
15		4	9-4	A416	T2	4"	8"	3-8	8"	3-8	-	4"					
16		4	8-7	A417	T2	3½"	4"	3-8	4"	3-8	-	3½"					
17		4	19-7	A418	T2	3½"	4"	9-2	4"	9-2	-	3½"					
18		4	11-7	A419	T2	3½"	4"	5-2	4"	5-2	-	3½"					
19		4	10-3	A420	T2	3½"	4"	4-6	4"	4-6	-	3½"					
20																	
21																	
22																	
23																	
24		3	3-6	A306	T2	3"	9"	9"	9"	9"	-	3"					
25																	
26																	
27																	
28																	
29																	
30																	
31																	

SHIP _____

CUST. ORDER NO. _____

GRADE 60

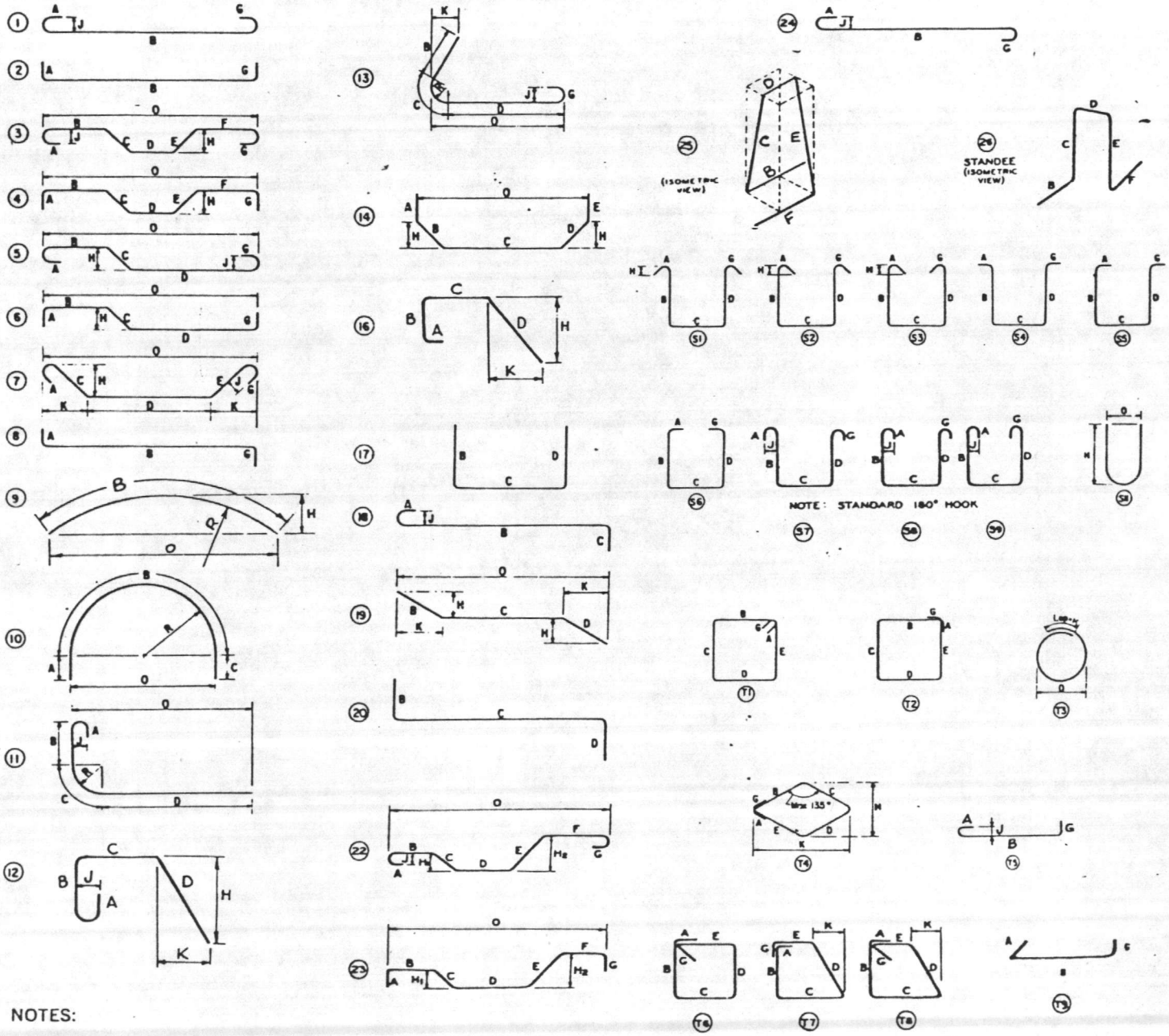
SHEET TOTAL _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS COMPANY

P. O. BOX 879 • WELCOME, NORTH CAROLINA 27374-0879
TELEPHONE (704) 731-6331

TYPICAL BAR BENDS



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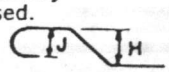

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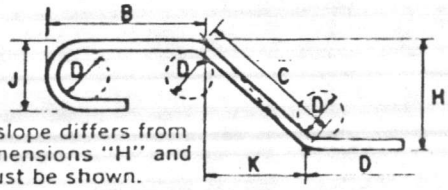

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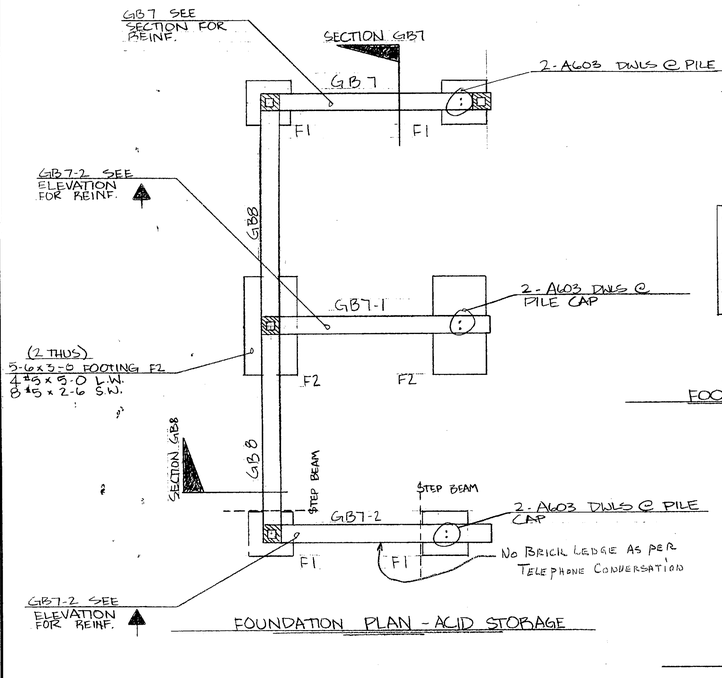
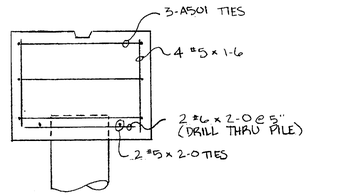
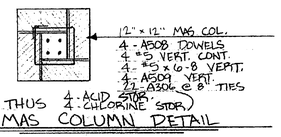
ENLARGED VIEW SHOWING BAR BENDING DETAILS



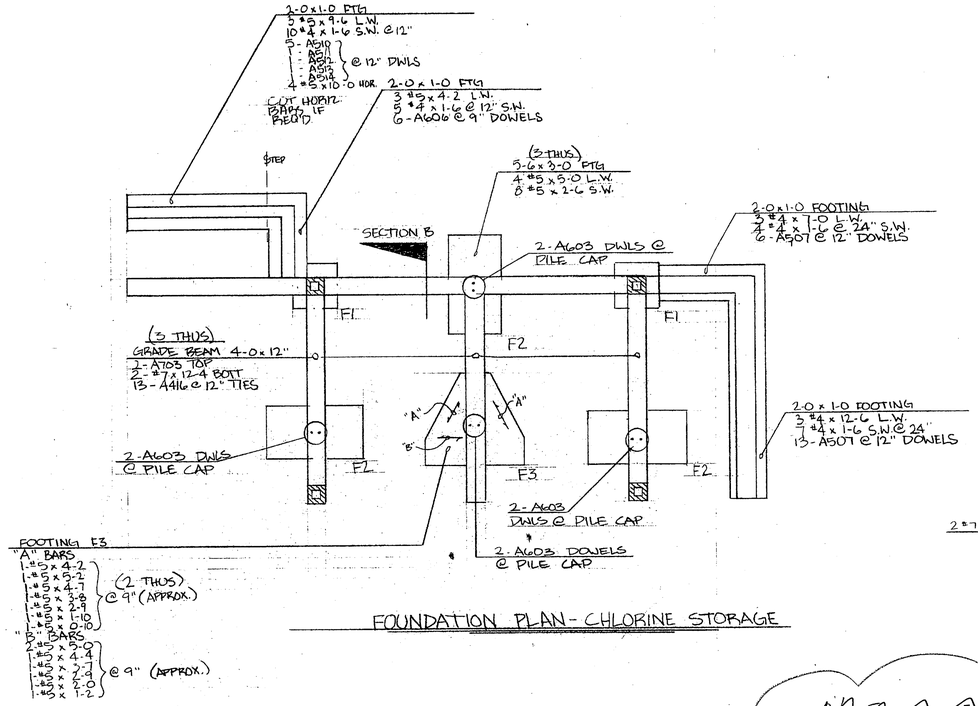
FOUNDATION PLAN - ACID STORAGE



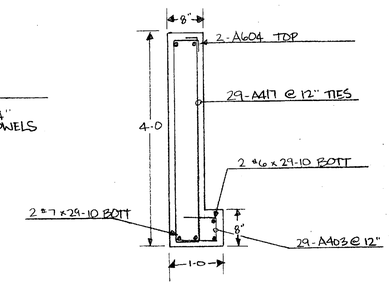
FOOTING F1 (6 THUS 4 ACID STORAGE 2 CHLORINE STOR.)



(8 THUS 4 ACID STOR. 4 CHLORINE STOR.)
TYP. MAS COLUMN DETAIL



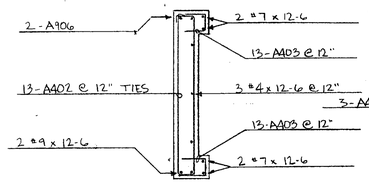
FOUNDATION PLAN - CHLORINE STORAGE



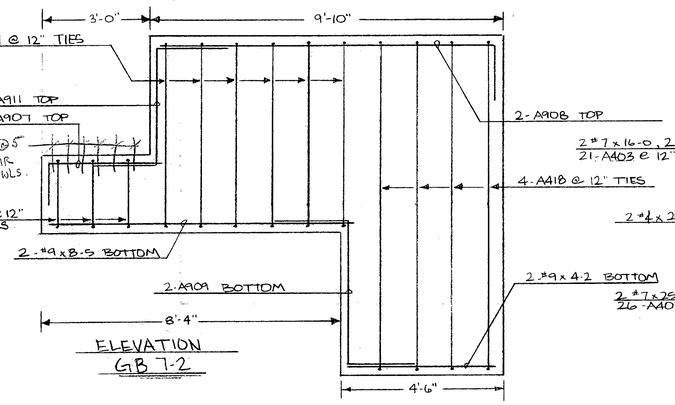
SECTION B

A/E SPECIAL IF CORNER BARS ARE REQUIRED

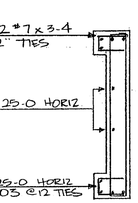
See Sheet S-5 of Drawings
Plan Wall Corner (A) 5/3/85



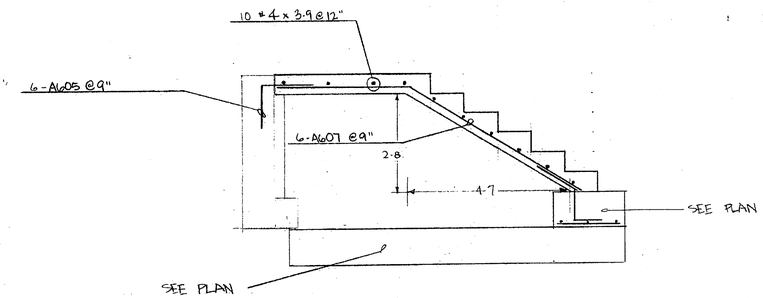
SECTION - GB7



ELEVATION GB 7-2



SECTION GB8



STAIR No 5

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

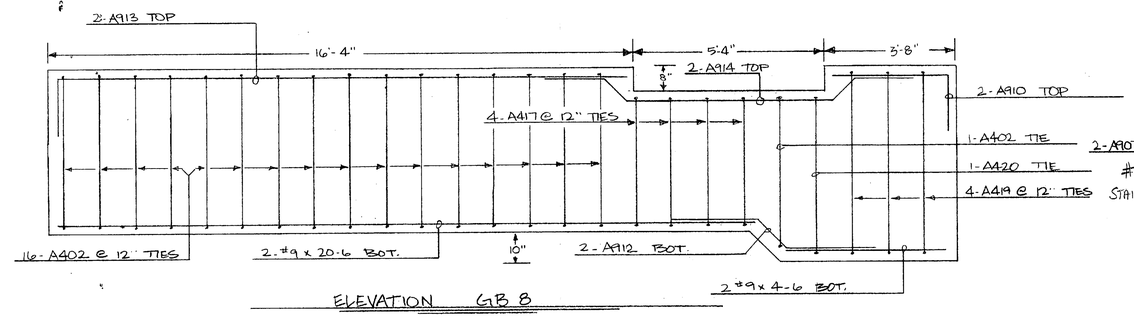
____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer ____ DATE ____

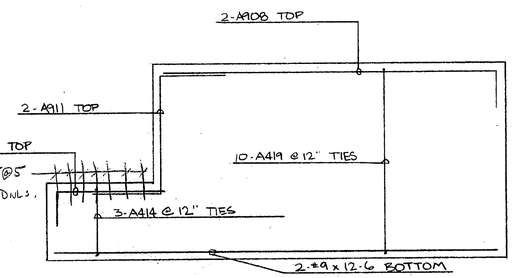
Signature CQC Rep. [signature] DATE 5-7-85

[signature] 5/3/85

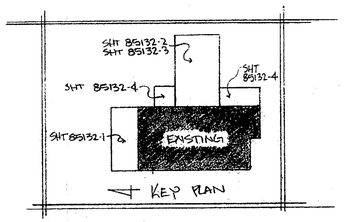
FOR APPROVAL ONLY
Not For Construction



ELEVATION GB 8



ELEVATION GB 7-1



ACID STORAGE FDTN. PLAN
CHLORINE STORAGE FDTN. PLAN

LOTT STEEL PRODUCTS CO.

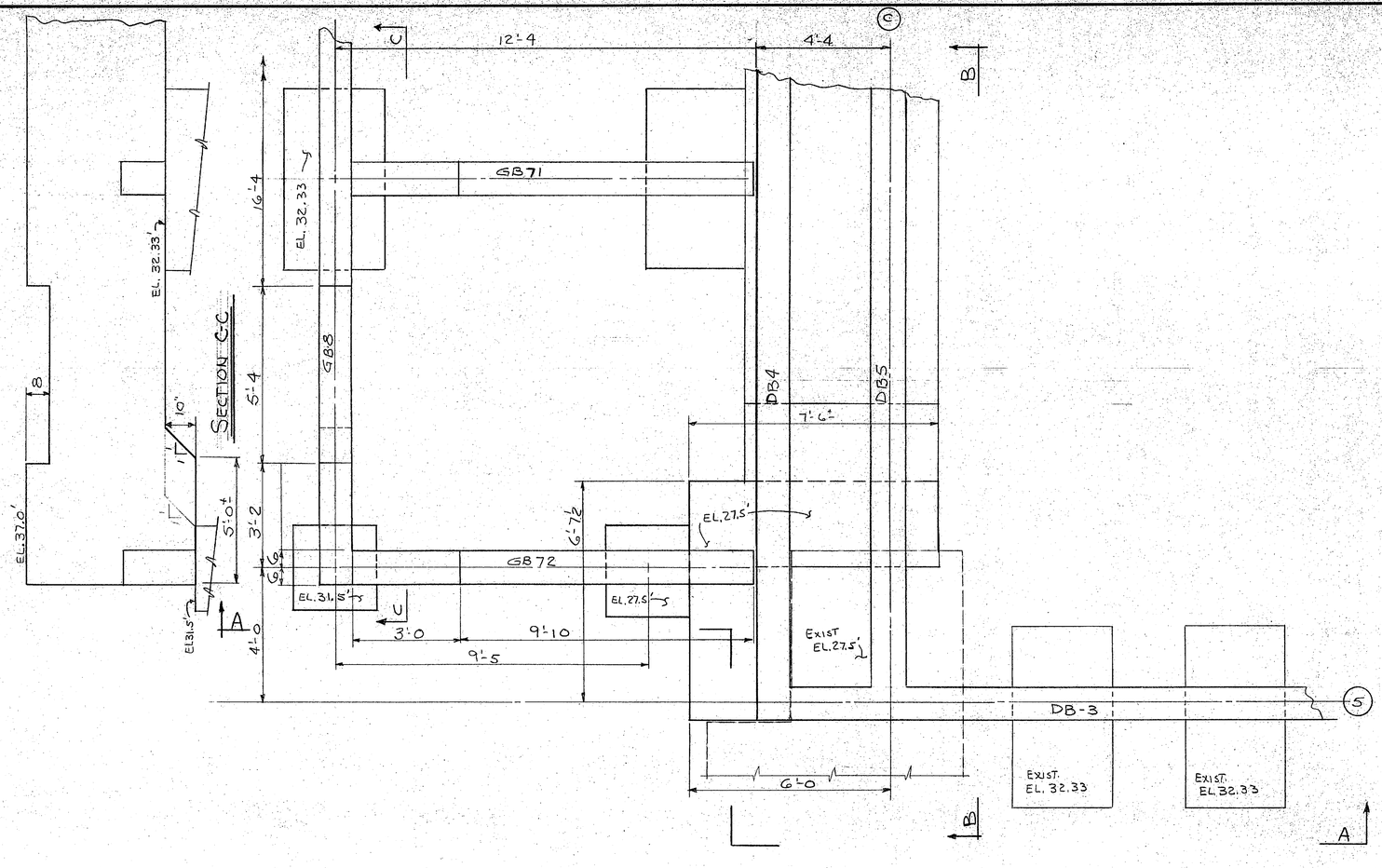
PROJECT EXP. HOLCOMB BLVD. WATER TREAT. PLANT
LOCATION CAMP LEJEUNE, NC
CONTRACTOR HARRY PEPPER & ASSOC. INC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME ROBERTSON	NAME	NAME
	DATE 3-14-85	DATE	DATE

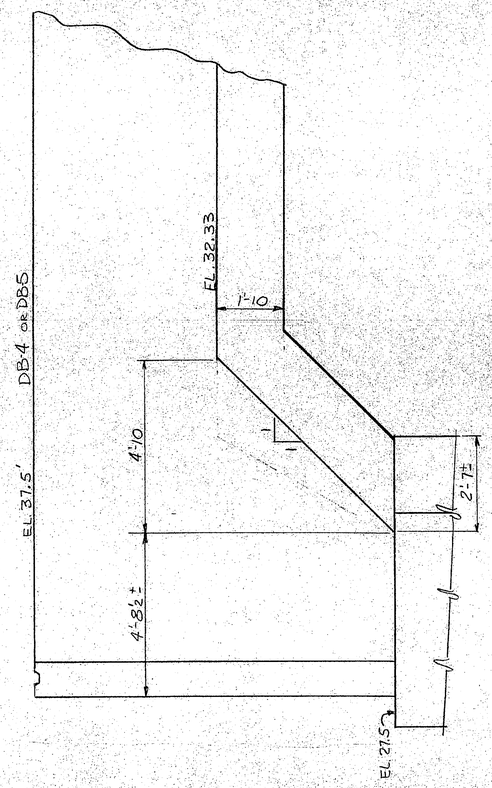
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-4 SERIES A

SOUTHERN PHOTO - GREENSBORO 1430561



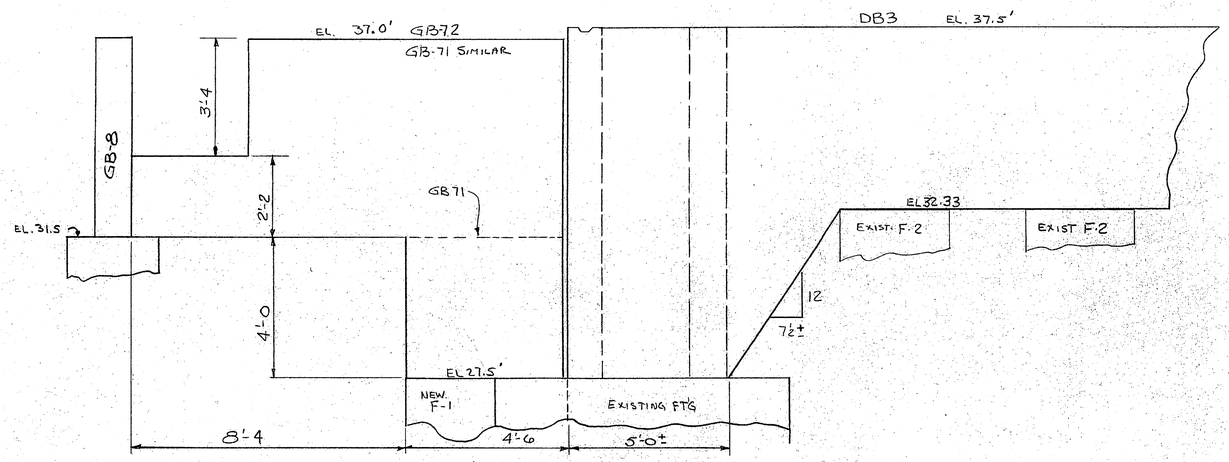
PLAN



SECTION B-B

NOTE: SEE DESIGN DWG'S FOR BRICK LEDGES.

A/E PLEASE SPECIFY IF CORNER BARS ARE REQUIRED.



SECTION A-A

Wshock 5/3/85

NO.	DATE	BY	REVISION

PROJECT
DESIGN
DRAWN JC
CHECKED

HARRY PEPPER AND ASSOCIATES INC.

ENGINEERING AND CONSTRUCTION JACKSONVILLE, FLORIDA

FOOTING & GRADE BEAM DETAIL @ COL. LINE 5C

EXPANSION OF HOLCOMB BLVD WASTE WATER TREATMENT PLANT

CAMP LEJEUNE NORTH CAROLINA

SCALE —
DATE 5-85

SHEET SK-1 OF 1

BRUNING 40-22 63175

LOTT STEEL PRODUCTS CO., INC.

REL. NO. _____

REINFORCING SHOP ORDER

S. O. NUMBER 85132

STRUCTURE EXP - HOLCOMB BLVD. WATERTREAT PLANT

SHEET ____ OF ____

SHIP TO HARRY PEPPER. CONSTR.

DATE _____

LOCATION CAMP LEJEUNE, N.C.

MADE BY DBR CKD. BY ____

MATERIAL FOR _____

REFERENCE DWG. 85132-3

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		8	14-5	A808	2	1-4	13-1	-	-	-	-	-					
2		8	24-4	A809	2	1-4	21-8	-	-	-	-	1-4					
3		8	7-4	A810	20	-	4-0	4"	3-0	-	-	-					
4		8	12-10	A811	3	-	3-0	6-10	3-0	-	-	-	4-10				
5		8	8-10	A812	2	1-4	7-6	-	-	-	-	-					
6		8	9-4	A813	2	1-4	8-0	-	-	-	-	-					
7		8	6-7	A814	20	-	3-3	4"	3-0	-	-	-					
8		8	25-4	A815	2	1-4	24-0	-	-	-	-	-					
9		8	27-10	A816	2	1-4	25-2	-	-	-	-	1-4					
10		8	7-8	A817	20	-	4-4	4"	3-0	-	-	-					
11																	
12																	
13																	
14		5	10-10	A506	3	-	2-0	6-10	2-0	-	-	-	4-10				
15																	
16																	
17																	
18		4	9-11	A402	T2	3½"	4-4	4"	4-4	4"	-	3½"					
19		4	1-8	A403	17	-	8"	4"	8"	-	-	-					
20		4	13-0	A404	T2	4"	5-2	1-0	5-2	1-0	-	4"					
21		4	11-8	A405	T2	4"	4-10	8"	4-10	8"	-	4"					
22		4	12-4	A406	T2	4"	4-10	1-0	4-10	1-0	-	4"					
23		4	14-2	A407	T2	4"	5-9	1-0	5-9	1-0	-	4"					
24		4	17-8	A408	T2	4"	7-6	1-0	7-6	1-0	-	4"					
25		4	11-8	A409	T2	4"	4-10	8"	4-10	8"	-	4"					
26		4	2-9	A410	17	-	1-0	9"	1-0	-	-	-					
27		4	13-6	A411	T2	4"	5-9	8"	5-9	8"	-	4"					
28		4	17-0	A412	T2	4"	7-6	8"	7-6	8"	-	4"					
29		4	11-0	A421	T2	4"	4-6	8"	4-6	8"	-	4"					
30		4	22-0	A422	T2	4"	9-8	1-0	9-8	1-0	-	4"					
31		4	21-4	A423	T2	4"	9-8	8"	9-8	8"	-	4"					

SHIP _____

GRADE 60

SHEET TOTAL _____

CUST. ORDER NO. _____

ORDER TOTAL _____

LSP LOTT STEEL PRODUCTS CO., INC.

REINFORCING SHOP ORDER

REL. NO. _____

S. O. NUMBER 85132

STRUCTURE EXP- HOLLOMB BLVD. TREATMENT PLANT

SHEET _____ OF _____

SHIP TO HARRY PEPPER CONSTR.

DATE _____

LOCATION CAMP LEJEUNE, NC

MADE BY DBR CKD. BY _____

MATERIAL FOR _____

REFERENCE DWG. 85132-2

DIMENSIONS OMITTED ARE ZERO. SEE TYPICAL BAR BEND SHEET FOR DETAILS

ITEM	NO. PCS.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H		R	O	WEIGHT
1		9	5-11	A904	2	1-7	4-4	-	-	-	-	-					
2		9	16-7½	A905	3	-	12-7	1-0½	3-0	-	-	-	3"				
3																	
4																	
5																	
6																	
7		8	16-3½	A807	3	-	12-7	1-0½	2-8	-	-	-	3"				
8																	
9																	
10																	
11																	
12		7	4-6	A701	2	1-2	3-4	-	-	-	-	-					
13		7	16-0½	A702	3	-	12-7	1-0½	2-5	-	-	-					
14																	
15																	
16																	
17																	
18		6	4-0	A603	2	1-0	3-0	-	-	-	-	-					
19																	
20																	
21																	
22																	
23		5	11-2	A504	3	-	2-2	6-10	2-2	-	-	-					
24		5	3-4	A505	2	10"	2-6	-	-	-	-	-					
25																	
26																	
27																	
28																	
29		3	3-6	A306	T2	3"	9"	9"	9"	9"	-	3"					
30																	
31																	

FOR APPROVAL ONLY
Not For Construction

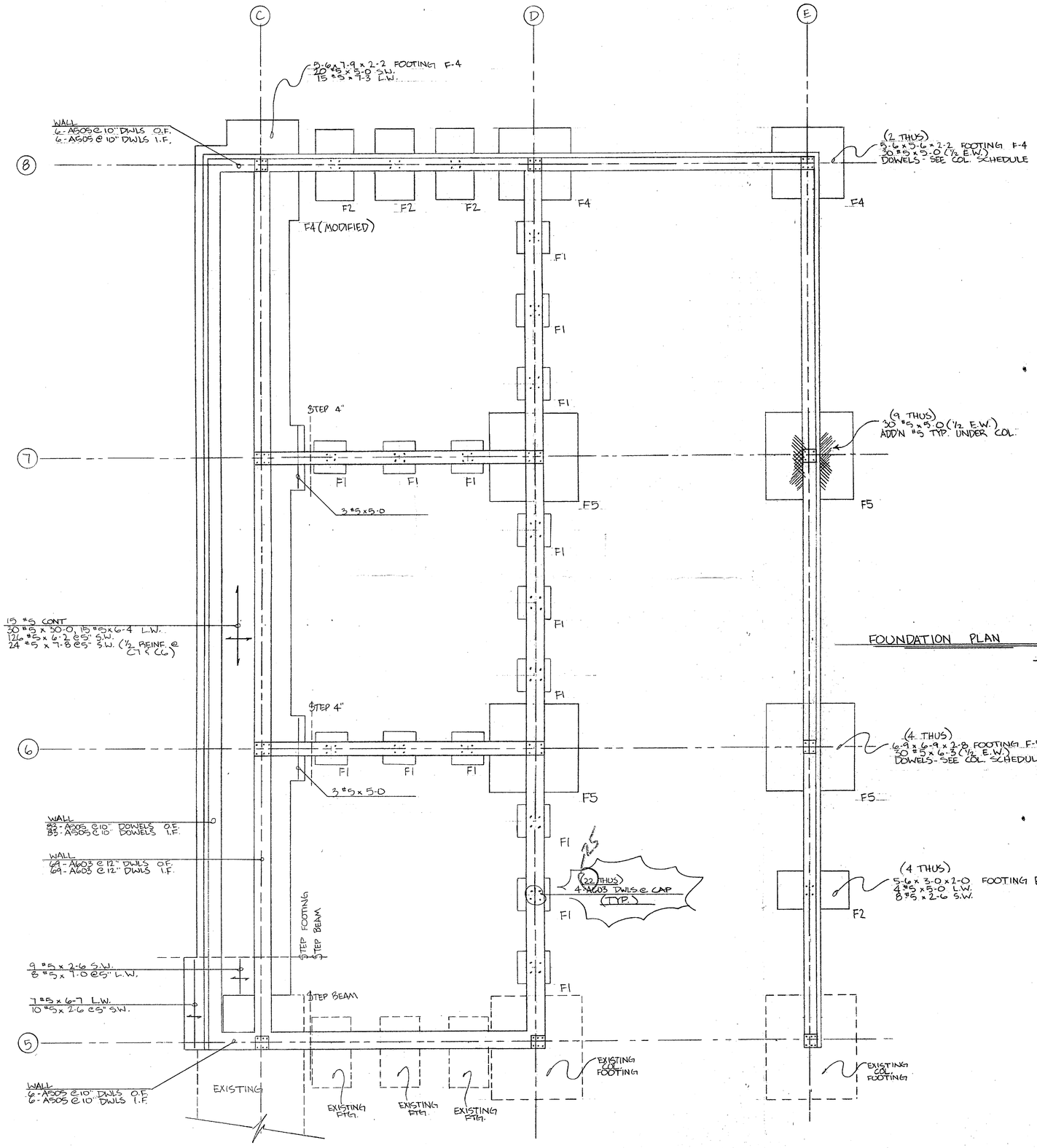
SHIP _____

CUST. ORDER NO. _____

GRADE 60

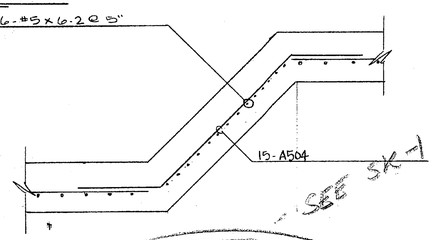
SHEET TOTAL _____

ORDER TOTAL _____

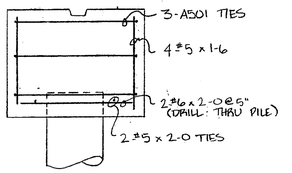


FOUNDATION PLAN

COLUMN SCHEDULE						
MARK (BY GRID LINE)	C5 & C8	C6 & C7	D5 & D8	D6 & D7	E5 & E8	E6 & E7
TOTAL NO. COL.	2	2	2	2	2	2
ROOF EL. 60.33						
SECOND FL. EL. 47.00	SIZE: 12"x12" VERT: 6 #8 x 13-2 21-A306 TIES 11@12" 10@3" BOTT.	SIZE: 12"x16" VERT: 6 #9 x 13-2 23-A303 TIES 11@12" 12@3" BOTT	SIZE: 12"x12" VERT: 6 #8 x 13-2 21-A306 TIES 11@12" 10@3" BOTT	SIZE: 12"x16" VERT: 4 #7 x 13-2 20-A303 TIES 11@12" 9@3" BOTT	SIZE: 12"x12" VERT: 6 #8 x 13-2 21-A306 TIES 11@12" 10@3" BOTT	SIZE: 12"x12" VERT: 4 #8 x 13-2 23-A306 TIES 11@12" 12@3" BOTT
GROUND FL. EL. 55.25 (VARIES)	SIZE: 12"x12" VERT: 6-A607 22-A306 TIES 3@3" TOP 10@12" 9@3" BOTT.	SIZE: 12"x16" VERT: 6-A905 24-A303 TIES 3@3" TOP 10@12" 11@3" BOTT.	SIZE: 12"x12" VERT: 6-A607 22-A306 TIES 3@3" TOP 10@12" 9@3" BOTT	SIZE: 12"x16" VERT: 4-A702 21-A303 TIES 5@3" TOP 11@12" 7@3" BOTT	SIZE: 12"x12" VERT: 6-A607 22-A306 TIES 3@3" TOP 10@12" 9@3" BOTT	SIZE: 12"x12" VERT: 4-A905 22-A306 TIES 3@3" TOP 10@12" 9@3" BOTT
	6-A904 DWLS 6-#8 (EXIST.)	6-A901 DOWELS	D8 6-A904 DWLS D5 6-#8 (EXIST.)	4-A701 DWLS	E8 6-A904 DWLS E5 6-#8 (EXIST.)	4-A904 DWLS



DETAIL OF STEPPED FTG



FOOTING F1 (15 THUS)

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

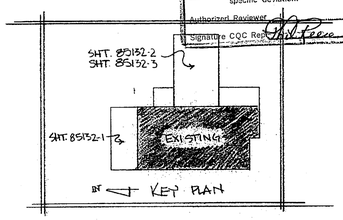
____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer ____ DATE ____

Signature CQC Rep. [signature] DATE 5-9-85

FOR APPROVAL ONLY
Not For Construction



EDTN. PLAN FOR FILTER ADD'N.

LOTT STEEL PRODUCTS CO.

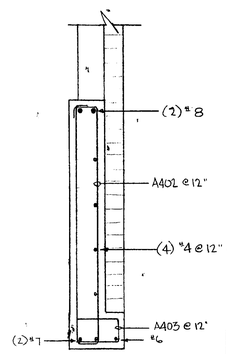
PROJECT EXP. HOLLOMB BLVD WATER TREAT PLANT
LOCATION CAMP LEJEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC., INC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME ROBERTSON	NAME	NAME
	DATE 2-28-85	DATE	DATE

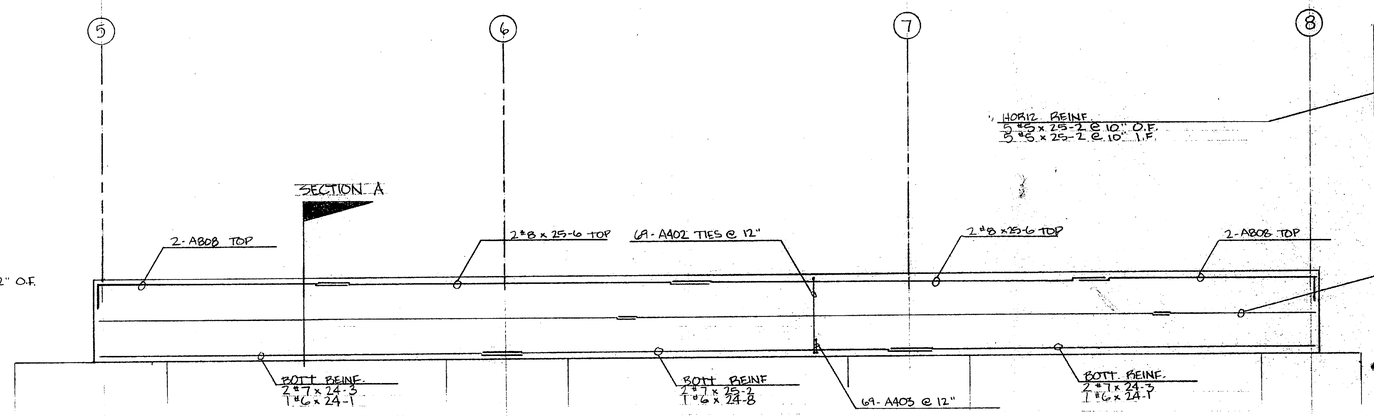
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO 85132-2 SERIES A

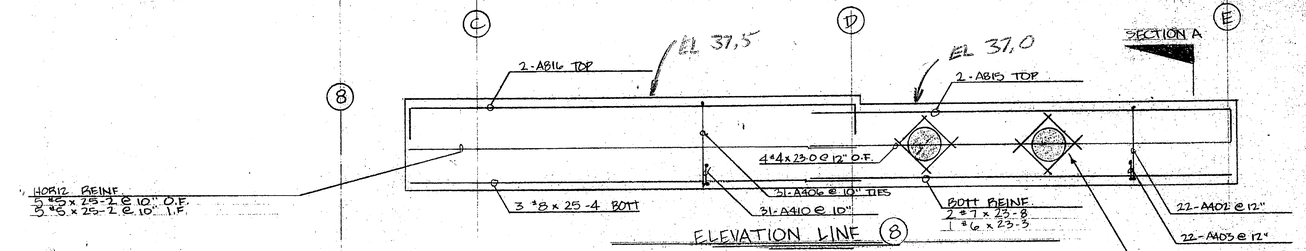
SOUTHERN PHOTO - GREENSBORO N10381



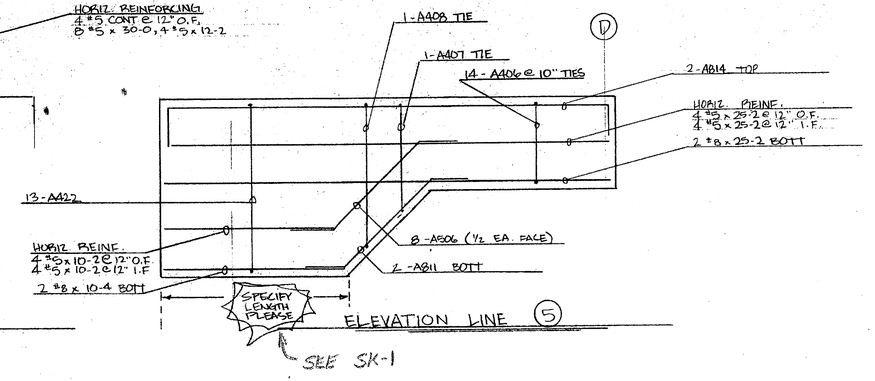
SECTION A



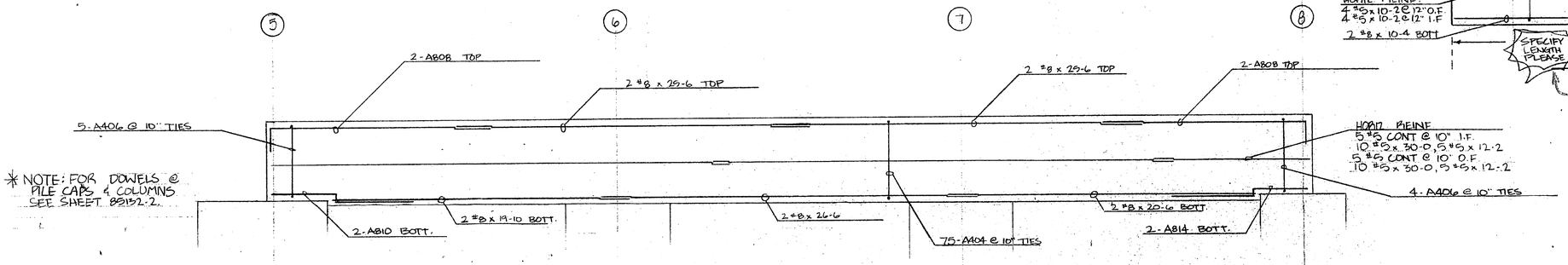
ELEVATION LINE (E)



ELEVATION LINE (8)

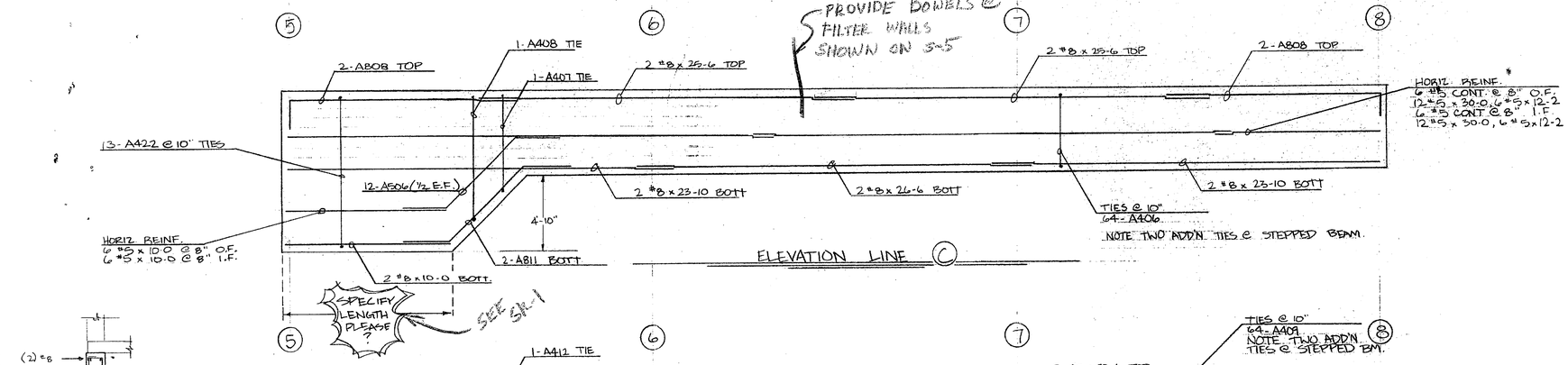


ELEVATION LINE (5)

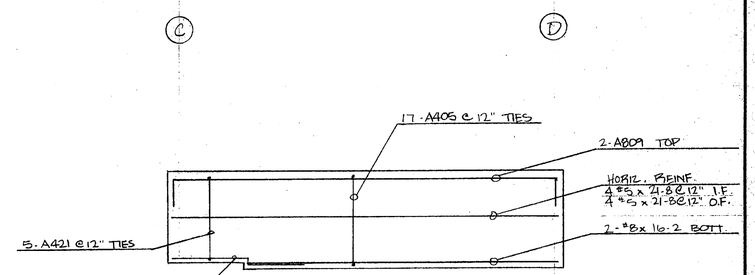


* NOTE: FOR DOWELS @ PILE CAPS & COLUMNS SEE SHEET 85152-2.

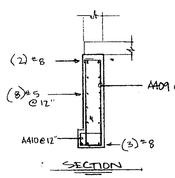
ELEVATION LINE (D)



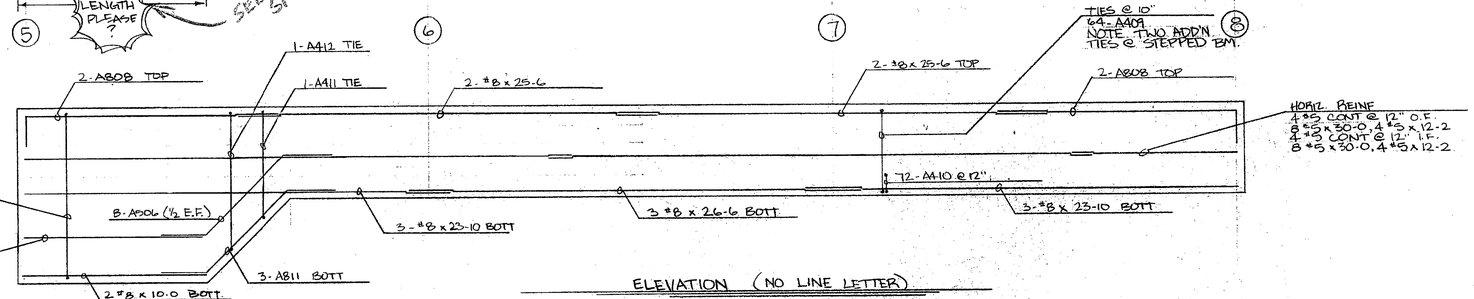
ELEVATION LINE (C)



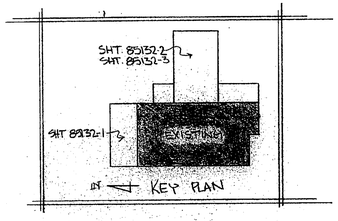
ELEVATION LINE (6) & (7)



SECTION



ELEVATION (NO LINE LETTER)



FOR APPROVAL ONLY
Not For Construction

GRADE BEAMS FOR FILTER ADD'N

LOTT STEEL PRODUCTS CO.

PROJECT EXP. HOLCOMB BLVD. WATER TREAT PLANT
LOCATION CAMP LEJEUNE, N.C.
CONTRACTOR HARRY PEPPER & ASSOC. INC.
ARCHITECT

SCALE	DRAWN BY	CHECKED	APPROVED
	NAME ADDERTSON	NAME	NAME
	DATE 3-6-85	DATE	DATE

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED WITH TOLERANCES ±

DRAWING NO. 85152-3 SERIES A

SOUTHERN PHOTO - GREENSBORO N52561

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
DF-C-1644	13	4-4-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST IN PLACE CONCRETE			
	Dwg S-T6	Vertical Construction Joint	7	AN	BRJ 4-23-85

CONTRACTOR'S COMMENTS

Request is made to use Vertical Construction Joints in both tanks in lieu of Horizontal Construction Joints. See attached statement. If this proposed deviation is approved there will be no cost to the Government and any changes caused by the proposed deviation will be the responsibility of the Contractor at no expense to the Government.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: SEE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): [signature]

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
18 APR 85	LANTDIV	HARRY PEPPER/ROICC

☒ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

APPROVED AS NOTED.

COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: 4/29/85

SIGNATURE: [signature]

Note # I just below Detail E on Drawing S-I6, states that no vertical construction joints are permitted in the Raw Water or Fresh Water tanks. The Contractor requests that be useing vertical construction joints in lieu of horizontal joints, the walls can be placed in four section, thereby reducing concrete shrinkage and giving better control over each pour. The four vertical joints will be complete with keyways and water-stop. All reinforcement will be carried through the joints. This procedure is in accordance with ACI Committee Report 350 " Concrete Sanitary Engineering Structures.

If this proposed deviation is approved, there will be no addition cost to the Government and any changes caused by this deviation will be at the expense of the contractor.

PER DETAIL E/S16/S16 OF CONTRACT DWGS.

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

_____ Approved for use.

X Submitted for Government approval.

_____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Pace DATE 4-4-85

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED _____
APPROVED AS NOTED X
DISAPPROVED _____
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-81-1644

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER BRJ DATE 23 APR 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

DEVIATION: APPROVED AS NOTED X

DISAPPROVED _____

LANTDIV REVIEWER BRJ

DATE 23 APR 1985

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO.	TRANSMITTAL NO.	DATE
81-C-1644	13-A	5-9-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings	4	RA	RA 5/14/85
		ROICC			

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE *(Signature)*

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE 10 NOV 1982 5/14/85 11:00

SIGNATURE

16 MAY 1985 11 40

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	162	2-4-86

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatement Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
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R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03303	CAST IN PLACE CONCRETE			
1	1.2.1	Reinforcement Drawings Stairway	4	RA/C	RCB 2/18/86
2	1.2.1	Reinforcement Drawings Misc Pits	4	RA	RCB 2/18/86

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER: 2/10/86

FROM (Reviewer): Henry von Oesen & Assoc., Inc.

TO:

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

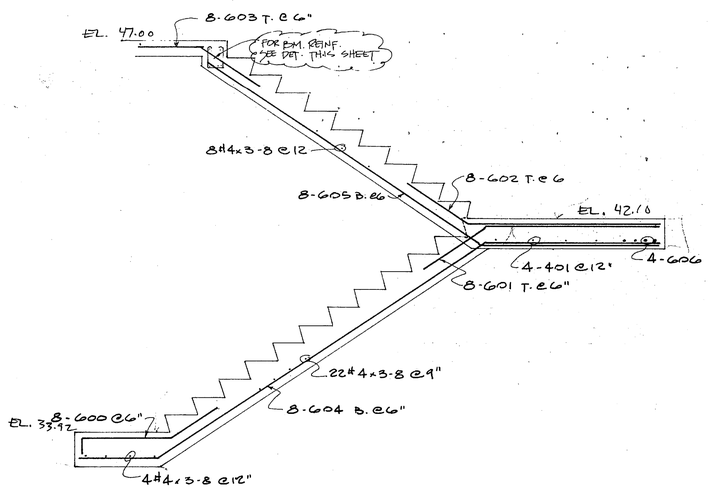
☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

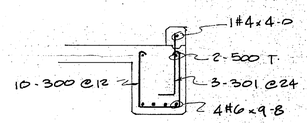
Contractor's approval appears to be appropriate.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	2/18/86	[signature]

☆ U.S. GPO:1984-537-003/11170 Region 3-11



SECTION - STAIR NO. 2



BM. DETAIL

Item #1

It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE ____

Signature CQC Rep. [signature] DATE 2-4-86

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No.	
Structure	HOLCOMB BLVD. W.W.T.P.
Location	CAMP LEJEUNE, N.C.
Engineer	
Customer	HARRY PEPPER & ASSOC.

Made By LOTT Date 1-21-86 CONTRACT NO. 85132

FOR APPROVAL ONLY
Not For Construction

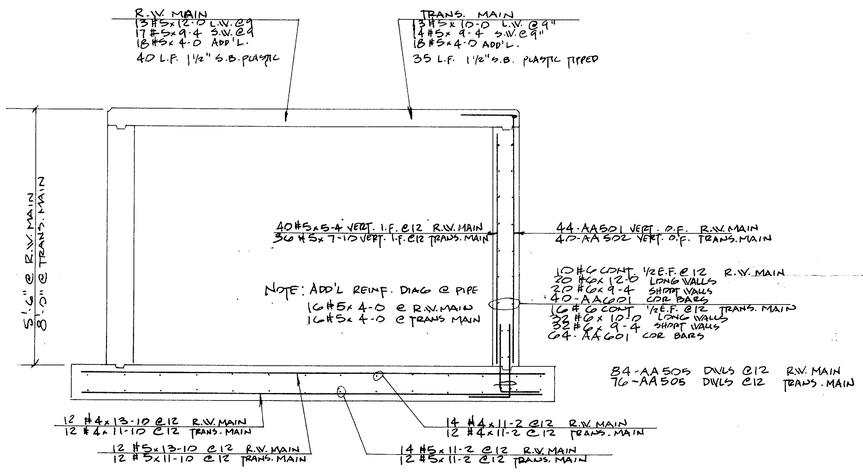
USE A615/GR 60 STEEL

Q. A. CAT

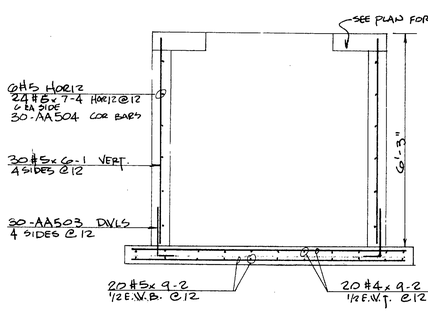
REFERENCE DRAWING: S7

DRAWING COVERS: STAIR NO. 2

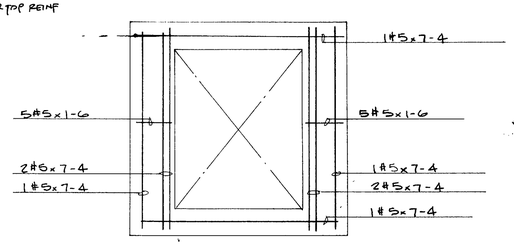
DRAWING NO. 28



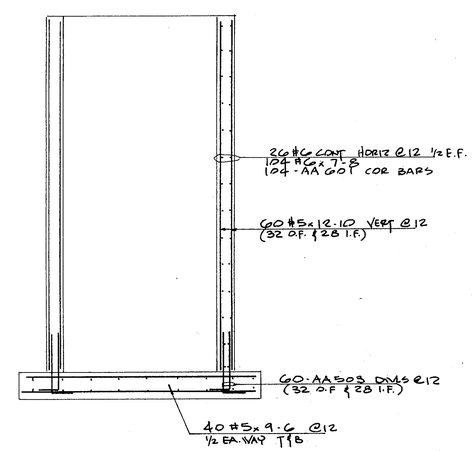
SECTION – METER PITS



SECT. (G/C2) ALT. VALVE PIT



TOP SLAB ALT. VALVE PIT



SECT. BACKWASH JUNCT. BOX

Item #2

I hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer: _____ DATE _____

Signature QC Rep. [signature] DATE 2-4-86

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No:	
Structure	HOLCOMB BLVD. W.W.T.P.
Location	CAMP LE JEUNE, N.C.
Engineer	
Customer	HARRY PEPPER & ASSOC

Made By LPT Date 1-23-86 CONTRACT NO. 85132

FOR APPROVAL ONLY
Not For Construction

USE A615/GR 60 STEEL	REFERENCE DRAWING	DRAWING COVERS	DRAWING NO.
Q.A. CAT	C2	MISC. PITS	29

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL*

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	159	1-28-86

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant, MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☐ Contractor Approved ☐ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	15271	PLANT PIPING		RH	
1		Manufacturer's Data on Uni-Flange	7	A	CCS 405 2/11/86
2		Shop Drawing for Locations	7	A	"

CONTRACTOR'S COMMENTS

Uni-Flange's will be used and placed as indicated on Item # 2. If this proposed Deviation is approved there will be no additional cost to the Government. Any changes caused by this Deviation will be at the expense of the Contractor.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
3 FEB 86	BM	DISTR

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☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

No change in cost or time.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	12 FEB 86	Bill Mauzey

☆ U.S. GPO:1984-537-003/11170 Region 3-11

Item #1

TECHNICAL DATA AND AVAILABILITY

Flange material

Manufactured from Ductile Iron ASTM A536 Grade 65 - 45 - 12 Drilling to ANSI B16.1 - 125 lb. & 250 lb.

Design

Uni-Flange has been designed to meet the test requirements of ANSI B16.1 - 125 lb. - 250 lb.

Set Screw Material

AISI 4140 Steel. Tensile 190,000 psi minimum. Heat treated and zinc plated.

Gasket Availability

Standard Gasket supplied with the Uni-flange is SBR (BUNA-S), suitable for water and wastewater, and most moderate chemicals. Temperature range -65°F to 212°F. The following alternative gaskets are also available, and color coded as indicated:

EPDM (Ethylene Propylene) - green suitable for -65°F to 350°F.

CR (Neoprene) - yellow suitable for -65°F to 212°F.

NBR (Buna-N, Nytril, Hycar) - orange suitable for -65°F to 300°F.

FPM (Viton) - red suitable for -50°F to 450°F.

Hydrostatic Test Pressure

Uni-flanges are capable of withstanding the following hydrostatic test without leakage:

SERIES 200 - 125 lb./150 lb.
2 in. - 8 in. 600 psi
10 in. - 12 in. 525 psi

SERIES 400 - 125 lb./150 lb.
2 in. - 12 in. 750 psi
14 in. - 24 in. 450 psi
30 in. - 48 in. 300 psi

SERIES 420 - 250 lb./300 lb.
2 in. - 12 in. 800 psi

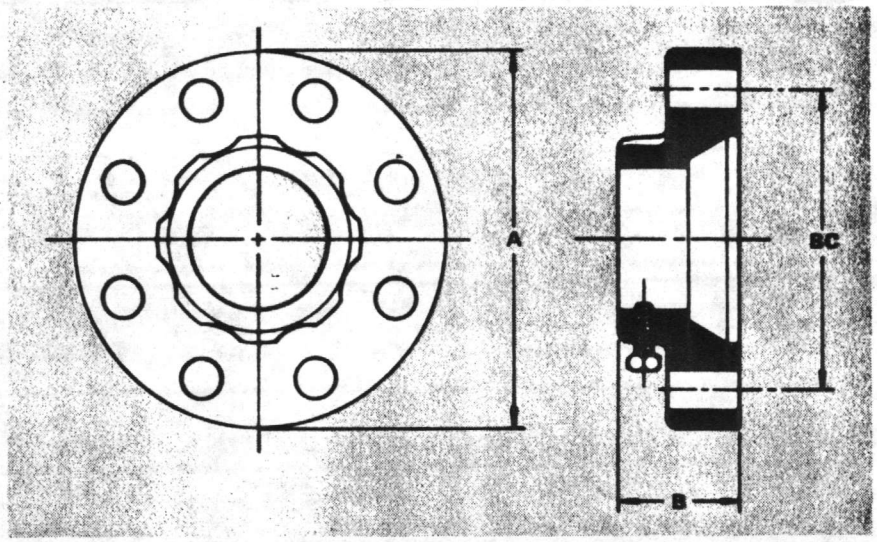
Applications

Uni-Flanges are designed to handle the following water working pressures at a temperature of -20 F to 150 F.

SERIES 200 - 125 lb./150 lb.
2 in. - 8 in. 200 psi
10 in. - 12 in. 175 psi

SERIES 400 - 125 lb./150 lb.
2 in. - 12 in. 250 psi
14 in. - 24 in. 150 psi
30 in. - 48 in. 100 psi

SERIES 420 - 250 lb./300 lb.
2 in. - 12 in. 400 psi



SERIES 200 - S /150 lb. SERIES 200 - C /125 lb.

NOM. PIPE SIZE	STEEL PIPE O.D. 200-S	CAST IRON PIPE O.D. 200-C	A	B	B.C.	BOLT HOLE DIA.	SET SCREWS NO.	SET SCREWS SIZE	WGT. APPROX. (LBS.)
2	2.375	2.50	6	1 13/16	4 3/4	3/4	2	1/2 x 1	3.5
2½	2.875	*N/A	7	1 13/16	5 1/2	3/4	4	1/2 x 1	4.0
3	3.500	3.96	7½	1 13/16	6	3/4	4	1/2 x 1	5.0
4	4.500	4.80	9	1 7/8	7 1/2	3/4	4	1/2 x 1	7.7
5	5.563	*N/A	10	1 7/8	8 1/2	7/8	8	1/2 x 1	8.7
6	6.625	6.90	11	1 7/8	9 1/2	7/8	8	1/2 x 1	10.0
8	8.625	9.05	13½	2 1/4	11 3/4	7/8	8	5/8 x 1 1/4	16.5
10	10.750	11.10	16	2 1/4	14 1/4	1	12	5/8 x 1 1/4	22.0
12	12.750	13.20	19	2 1/4	17	1	12	5/8 x 1 1/4	31.0

Dimensions in inches

SERIES 400 - S /150 lb. SERIES 400 - C /125lb.

NOM. PIPE SIZE	STEEL PIPE O.D. 400-S	CAST IRON PIPE O.D. 400-C	A	B	B.C.	BOLT HOLE DIA.	SET SCREWS NO.	SET SCREWS SIZE	WGT. APPROX. (LBS.)
2	2.375	2.50	6	2	4 3/4	3/4	4	1/2 x 1	5
2½	2.875	*N/A	7	2 1/16	5 1/2	3/4	4	1/2 x 1	7
3	3.500	3.96	7½	2 1/16	6	3/4	4	1/2 x 1	8
3½	4.000	*N/A	8½	2 1/16	7	3/4	8	1/2 x 1	9
4	4.500	4.80	9	2 1/16	7 1/2	3/4	8	1/2 x 1	11
5	5.563	*N/A	10	2 1/8	8 1/2	7/8	8	5/8 x 1 1/4	13
6	6.625	6.90	11	2 1/8	9 1/2	7/8	8	5/8 x 1 1/4	14
8	8.625	9.05	13½	2 1/8	11 3/4	7/8	8	5/8 x 1 1/4	21
10	10.750	11.10	16	2 3/16	14 1/4	1	12	5/8 x 1 1/4	38
12	12.750	13.20	19	2 1/4	17	1	12	5/8 x 1 1/4	56
14	14.000	15.30	21	2 5/8	18 3/4	1 1/8	12	5/8 x 1 1/4	70
16	16.000	17.40	23½	2 11/16	21 1/4	1 1/8	16	5/8 x 1 1/4	79
18	18.000	19.50	25	2 13/16	22 3/4	1 1/4	16	3/4 x 2	90
20	20.000	21.60	27½	2 15/16	25	1 1/4	20	3/4 x 2	145
24	24.000	25.80	32	3 1/8	29 1/2	1 3/8	20	3/4 x 2	175
30	30.000	32.00	38¾	4	36	1 3/8	28	1 x 2 1/4	270
36	36.000	38.30	46	4 1/2	42 3/4	1 5/8	32	1 x 2 1/4	400
42	42.000	44.50	53	4 3/4	49 1/2	1 5/8	36	1 x 2 1/4	495
48	48.000	50.80	59½	4 7/8	56	1 5/8	44	1 x 2 1/4	660

Dimensions in inches

SERIES 420 - S /300 lb. SERIES 420 - C /250 lb.

NOM. PIPE SIZE	STEEL PIPE O.D. 420-S	CAST IRON PIPE O.D. 420-C	A	B	B.C.	BOLT HOLE DIA.	SET SCREWS NO.	SET SCREWS SIZE	WGT. APPROX. (LBS.)
2	2.375	2.50	6½	2 1/4	5	3/4	8	1/2 x 1	7
2½	2.875	*N/A	7½	2 3/8	5 7/8	7/8	8	1/2 x 1	10
3	3.500	3.96	8¼	2 7/16	6 5/8	7/8	8	1/2 x 1	13
3½	4.000	*N/A	9	2 7/16	7 1/4	7/8	8	1/2 x 1	16
4	4.500	4.80	10	2 7/16	7 7/8	7/8	8	5/8 x 1 1/4	21
5	5.563	*N/A	11	2 9/16	9 1/4	7/8	8	5/8 x 1 1/4	27
6	6.625	6.90	12½	2 9/16	10 5/8	7/8	12	5/8 x 1 1/4	38
8	8.625	9.05	15	2 5/8	13	1	12	5/8 x 1 1/4	57
10	10.750	11.10	17½	2 7/8	15 1/4	1 1/8	16	5/8 x 1 1/4	74
12	12.750	13.20	20½	3	17 3/4	1 1/4	16	5/8 x 1 1/4	104

Dimensions in inches

It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

____ Approved for use.

____ Submitted for Government approval.

X Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Phil Peace DATE 1-28-86

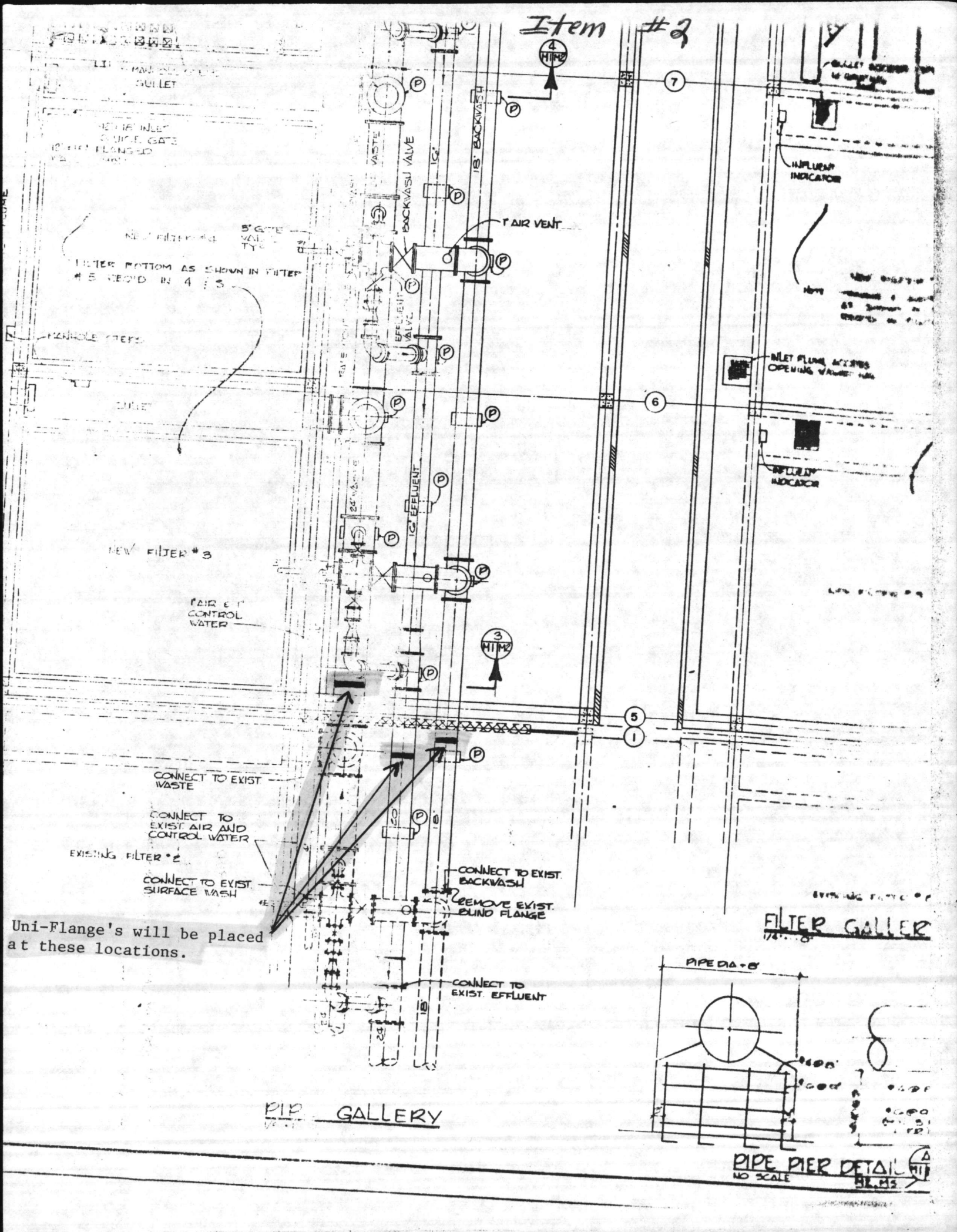
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED ✓
APPROVED AS NOTED _____
DISAPPROVED _____
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-81-1644
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SPECIFICALLY NOTES THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS COORDINATION OF TRADES, ETC., AS REQUIRED

REVIEWER CCS DATE 11 FEB 1986

FOR OFFICER IN CHARGE OF CONSTRUCTION

Item #2



Uni-Flange's will be placed at these locations.

N/22 PRK Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	157	1-27-86

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant

MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

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C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	04200	Unit Masonry			
1	2.3.5 a	Manufacturer's Data on Coated Copper Flashing	4	RA	ROB 2/18/86

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Reese Phil Reese

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
1/30/86	Henry von Oesen & Assoc., Inc.	

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

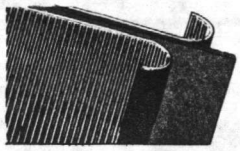
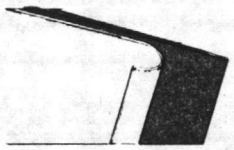
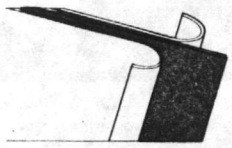
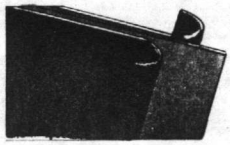
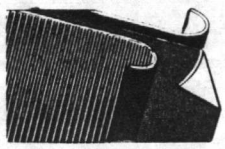
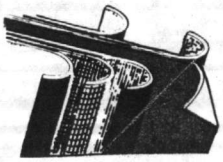
HENRY VON OESEN AND ASSOCIATES, INC.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	2/18/86	Robert W. [illegible]

☆ U.S. GPO:1984-537-003/11170 Region 3-11

AFCO Flashings • Concealed Thru-Wall

Item #1

 copper – fabric	**AFCO Copper Fabric:** A full sheet of copper between two layers of fiberglass or cotton fabric. The copper is bonded to both layers of fabric. **Size: up to 48" wide x 25-ft. long** **Copper weight: 2, 3, 5 or 7 ozs. per sq. ft.**	The flashing that combines the permanency of copper with the excellent mortar bonding qualities of fabric. It is flexible and tough. Drainage facilitated by crimped grooves. Acid and alkali resistant.
 copper – paper	**AFCO Cop-A-Bond:** Copper bonded on one side by asphalt to a waterproofed creped kraft paper. **Size: 60" wide x 120-ft long** **Copper weight: 1, 2 or 3 ozs. per sq. ft.**	Copper flashing in its most economical form.
 copper – paper	**AFCO Cop-A-Bond Duplex:** Copper bonded with asphalt to and between two layers of waterproofed creped kraft paper. **Size: 60" wide x 60-ft. long** **Copper weight: 2, 3 or 5 ozs. per sq. ft.**	A tough flexible economical copper flashing.
 copper – coated	**AFCO Cop-A-Cote:** A full sheet of copper coated on both sides with a flexible, rubbery bituminous compound. **Size: up to 60" wide x 25-ft. long** **Copper weight: 2, 3 ,5 or 7 ozs. per sq. ft.**	The permanence of copper plus protection against electrolysis by its rubbery bituminous coating Acid and alkali resistant. **AFCO's exclusive compound offers greater flexibility and firmness.**
 copper – lead fabric	**AFCO Cop-A-Lead® Fabric** A combination consisting of a sheet of electrolytically deposited copper bonded with asphalt to a sheet of lead and this assemblage is bonded between 2 layers of asphalt impregnated cotton or fiberglass fabric. **Sizes: 40" x 25' long** **Total metal weight: 2 oz., 3 oz., 5 oz., & 7 oz.**	Flexible, rugged, with the permanency of copper and lead. Maintains quality features of an all copper product at a lower cost. Fabric affords excellent mortar bonding qualities. Draining facilitated by crimped grooves.
 copper – lead	**AFCO Cop-A-Lead® Bond** A combination consisting of a sheet of electrolytically deposited copper bonded with asphalt to a sheet of lead and this assemblage bonded on one side to a fiberglass reinforced heavy creped kraft backing. **Size: 60" x 120' long** **Total metal Weight: 2 oz., 3 oz., per sq. ft.**	A copper-lead flashing in its most economical form, featuring a fiberglass reinforced lamination with asphalt of copper-lead and kraft paper.
 copper – lead	**AFCO Cop-A-Lead® Duplex** A combination consisting of a sheet of electrolytically deposited copper bonded with asphalt to a sheet of lead and this asssemblage bonded with asphalt between 2 layers of heavy creped kraft backing with a ply of fiberglass reinforcing. **Size: 2 and 3 oz.– 60" wide x 60'-ft. long** **5 oz.— 60" wide x 40'-ft. long**	The time proven features of copper and lead incorporating the permanence and alkali resistance of copper plus the acid resistance of lead.

Cop-A-Lead® is a registered trade mark of Afco Products Inc. Reg. No. 802076.

It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut (s), etc., and approved/proposed to be incorporated into Contract Number N62470-81-C-1644 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

_____ Submitted for Government approval.

_____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer _____ DATE _____

Signature CQC Rep. Thd Pace DATE 1-27-86

AFCO Specifications

Copper-Fabric
Copper Lead Fabric

1. MATERIAL shall be AFCO copper-fabric or AFCO Cop-A-Lead® Fabric* Flashing all as manufactured by AFCO Products Inc., Somerville, Mass. 02143. It shall consist of a sheet of copper or a lamination of copper and lead weighing (2, 3, 5 or 7 ozs. per sq. ft.) bonded to and between two layers of asphalt impregnated cotton fabric or fiberglass by means of an asphalt mastic and the combination shall be crimped with crosswise parallel grooves.

2. Installation: All surfaces to receive the flashing shall be reasonably smooth, free from irregularities. On all horizontal surfaces the flashing shall be laid either in a fresh bed of mortar above and below or a trowel coat of mastic. Vertical surfaces shall be spotted with asphalt mastic to hold flashing in place.

3. Over Concrete Foundations: The flashing shall be laid either in a fresh bed of mortar above and below or a trowel coat of mastic. At the intersection with column, the flashing should be brought a minimum of 10" up the column only and not on sides of column and secured with asphalt mastic.

4. SPANDRELS: Flashing shall start at the outside toe of the shelf angle, go up the face of the beam and then thru the wall turning up on the inside face of the wall not less than 2".

5. HEADS & SILLS: Flashing shall start ½" from outside face of wall, then thru the wall turning up at the inside not less than 2" and extend 6" on each side of the opening. It shall be turned at the ends forming a 2" deep pan running entirely thru the wall.

6. THRUWALL: Flashing shall start ½" from the outside face of wall, then go thru wall turning up at the inside not less than 2".

7. COPING: Flashing shall be laid in a fresh bed of mortar above and below and shall come within ½" of the faces of the wall.

8. JOINTS: shall be made by lapping which is accomplished by (1) rolling back the top layer of fabric 4" (2) interlocking the pieces, and (3) coating all contacting surfaces with plastic cement.

Copper-Coated

9. MATERIAL: shall be **AFCO Cop-A-Cote** as manufactured by AFCO Products Inc., Somerville, Mass. 02143 consisting of a sheet of copper weighing (2, 3, 5 or 7 oz. per sq. ft.) coated on both sides with a flexible rubbery bituminous compound weighing a minimum of 6 ozs. per sq. ft.

10. Joints: use paragraph 27.

Copper-Paper

11. Material: shall be **AFCO Cop-A-Bond** as manufactured by AFCO Products Inc., Somerville, Mass. 02143, consisting of a sheet of copper weighing (1, 2, 3 oz. per sq. ft.) bonded on one side by asphalt to a waterproofed creped kraft paper. (3 oz. wgt. is reinforced with fibers to meet Government Specifications).

12. Joints: use paragraph 27.

13. Material: shall be **AFCO Cop-A-Bond Duplex** as manufactured by AFCO Products Inc., Somerville, Mass. 02143 consisting of a sheet of copper weighing (2, 3, 5 oz. per sq. ft.) bonded with asphalt to and between two layers of waterproofed creped kraft paper.

14. Joints: use paragraph 27

Copper-Lead Paper

15. Material: shall be **AFCO Cop-A-Lead® Bond** as manufactured by AFCO Products Inc., Somerville, Mass. 02143 consisting of a sheet of electrolytically deposited copper bonded with asphalt to a sheet of lead totalling 2 or 3 ozs. per sq. ft. and this assemblage bonded on one side to a fiberglass reinforced creped kraft backing.

16. Joints: use paragraph 27

17. Material: shall be **AFCO Cop-A-Lead® Duplex** as manufactured by AFCO Products Inc., Somerville, Mass. 02143, consisting of a sheet of electrolytically deposited copper bonded with asphalt to a sheet of lead totalling 2, 3, 5 or 7 ozs. per sq. ft. and this assemblage bonded with asphalt between 2 layers of creped kraft backing with a ply of fiberglass reinforcing.

18. Joints: use paragraph 27

Fabric-Flashing

19. Material: shall be **AFCO Cloth-Cote** or **Glass CLoth-Cote** as manufactured by AFCO Products Inc., Somerville, Mass. 02143, consisting of a woven cotton fabric (or glass) impregnated and heavily coated with an elastic rubbery asphalt compound to 40 ozs. per sq. yd.

20. Joints: use paragraph 27

21. Material: shall be **AFCO Fabric Flashing** as manufactured by AFCO Products Inc., Somerville, Mass. 02143 consisting of 15# asphalt saturated felt bonded to and between two layers of asphalt impregnated cotton fabric by means of an asphalt mastic and the combination crimped with crosswise parallel grooves.

22. Joints: use paragraph 8

Aluminum-Flashing

23. Material: - Shall be **AFCO Aluminum Fabric Flashing** as manufactured by AFCO Products Inc., Somerville, Mass. 02143, consisting of .004" or .005" thick aluminum bonded to and between two layers of asphalt impregnated cotton fabric by means of an asphalt mastic and the combination crimped with cross-wise parallel grooves.

24. Joints: use paragraph 8

25. Material: - shall be **AFCO Aluminum Coated Flashing** as all manufactured by AFCO Products Inc. Somerville, Mass. 02143, consisting of a sheet of .004" or .005" thick aluminum coated on both sides with a flexible rubbery asphalt compound weighing a minimum of 6 ozs. per sq. ft.

26. Joints: use paragraph 27

27. Joints: — The material shall be **lapped** at least 4" and cemented with an asphalt mastic.

Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL

LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO	TRANSMITTAL NO	DATE
81-C-1644	131	12-10-85

FROM CONTRACTOR: Harry Pepper & Associates, Inc.

TO: Henry Von Oesen & Associates, Inc

PROJECT TITLE AND LOCATION: Holcomb Blvd Water Treatment Plant

MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

☒ Contractor Approved ☐ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged
C-Comments
R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	03302	CAST-IN-PLACE-CONCRETE			
1	1.2.1	Reinforcement Drawings, Well Houses 1 -14	4	RA	RO'B 12/11/85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature): Phil Fee

DATE RECEIVED BY REVIEWER: 12/11/85

FROM (Reviewer): Henry von Oesen & Assoc.

TO:

☐ Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

☐ Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

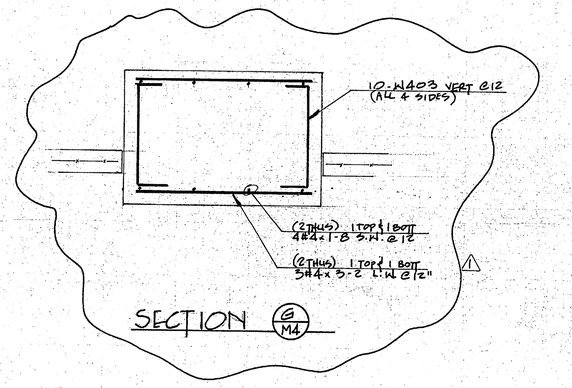
REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

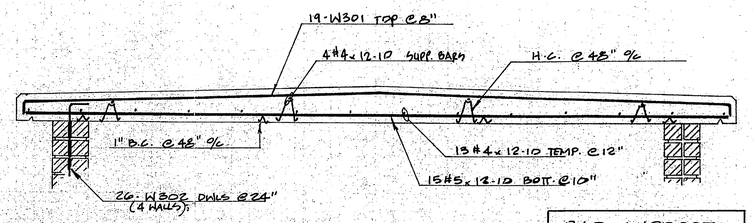
HENRY VON OESEN AND ASSOCIATES, INC.

COPIES TO	DATE	SIGNATURE
ROICC (2) LANTDIV (1) A-E (1)	12/11/85 13 DEC 1985	Robert A. [illegible]

☆ U.S. GPO:1984-537-003/11170 Region 3-11

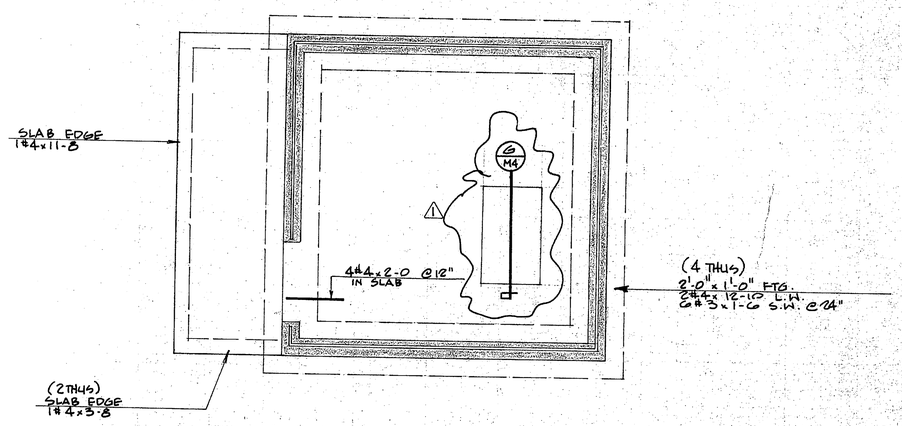


SECTION G M4

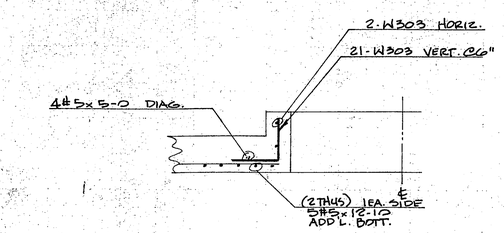


ROOF SECTION

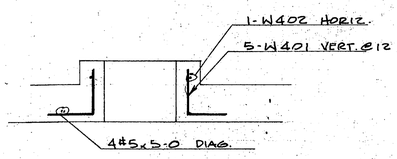
BAR SUPPORTS
HOT DIPPED GALV.
16 pcs. 1" B.C.
12 pcs. 3½" H.C.
4 pcs. 5" H.C.



FOUNDATION PLAN



SKYLIGHT DETAIL



ROOF VENT

I hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut(s), etc., and being proposed to be incorporated into Contract Number N62470-81-C-1844 is in compliance with the Contract Drawings and Specifications and can be installed in the allocated space, and is:

X Approved for use.

____ Submitted for Government approval.

____ Approved for use subject to Government approval of specific deviation.

Authorized Reviewer: _____ DATE _____

Signature CQC Rep. [signature] DATE 12-10-85

REV. NO.	DATE	DESCRIPTION	DATE	SENT FOR
			11/25	JOB USE
1	11/20	ADD ENG. BASE	11/11	APPROVAL

LOTT STEEL PRODUCTS CO., INC.
P.O. BOX 879, WELCOME, N.C. 27374

REINFORCING STEEL

File No.	
Structure	EXP. HOLCOMB BLVD. W.W.T.P.
Location	CAMP LEJEUNE, N.C.
Engineer	
Customer	HARRY PEPPER & ASSOC.
Made By	LOTT Date 11-9-85
Contract No.	85132
Drawing Covers	WELL HOUSE 1-20
Drawing No.	25 W

For Approval
~~FOR JOB USE~~
Not for Job Use

USE A615/GR 60 STEEL
Q.A. CAT
REFERENCE DRAWING: C3, C4, C5, C6, M4