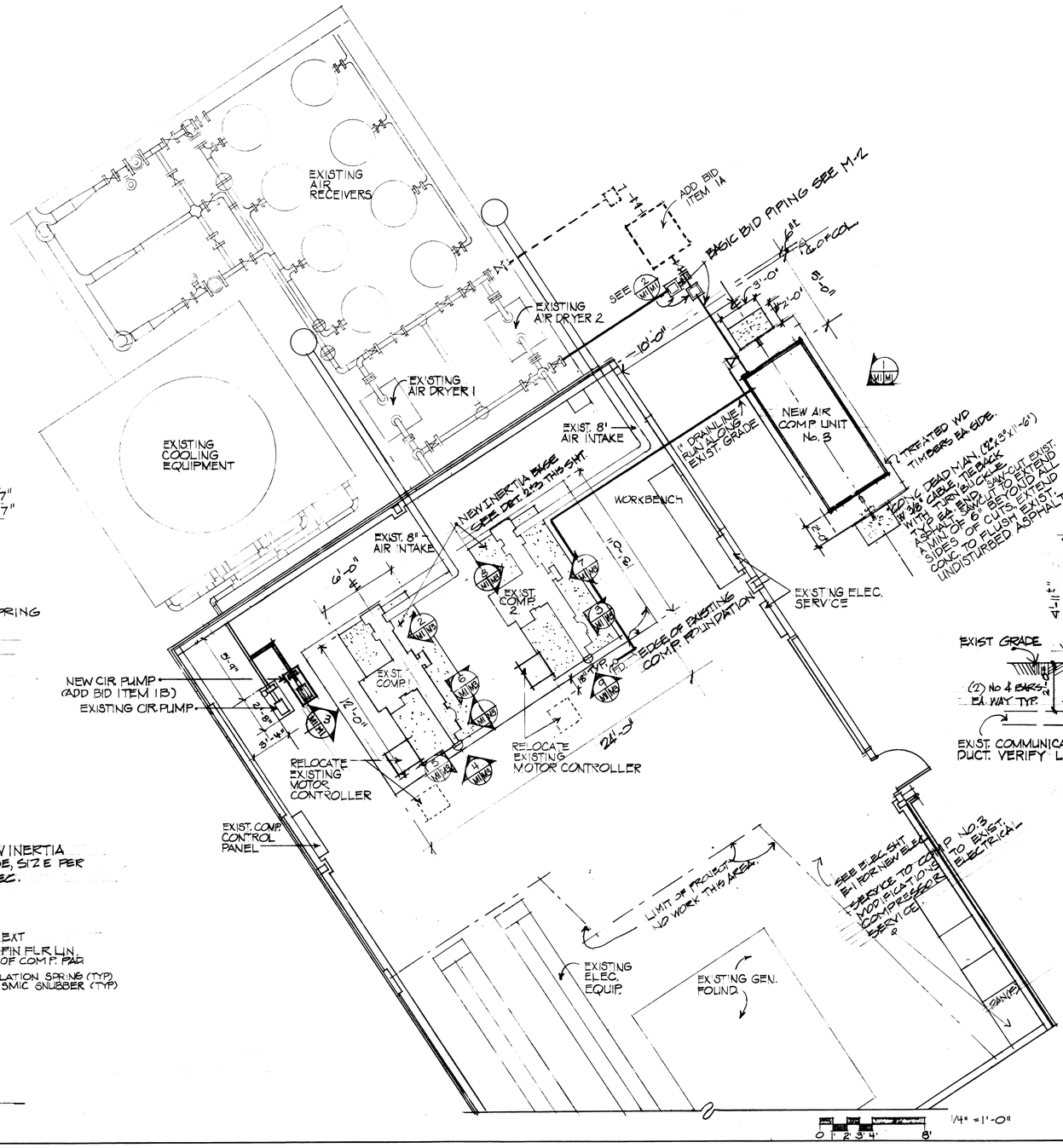
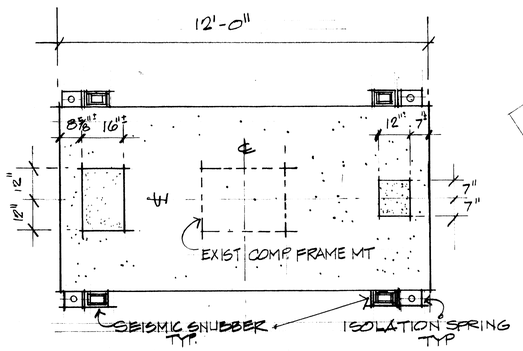
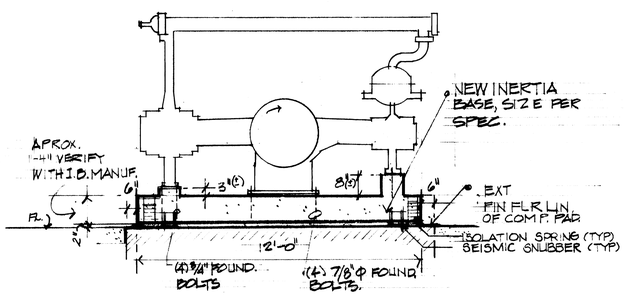
SYMBOL	DESCRIPTION OF REVISION	DATE	APPROVAL

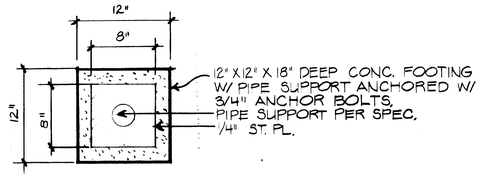




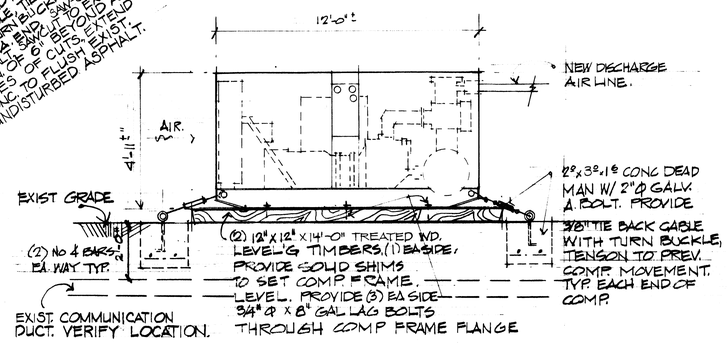
2/M1/M1 PLAN OF INERTIA BASE
N.T.S.



3/M1/M1 TYP. ELEVATION INERTIA BASE
N.T.S.



2/M1/M1 PIPE SUPPORT



ELEVATION, COMP. No. 3
N.T.S.

REGISTERED ARCHITECT 2331 STATE OF WASHINGTON

M-1

RASMUSSEN HOBBS ARCHITECTS/PLANNERS
NUMBER 9 SAINT HELENS
TACOMA, WASHINGTON 98402
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ARCH. RASMUSSEN HOBBS	MECH SEIFERT & FORBES		
CIVIL	ELEC. R.Y.		
EIC BOB PEDERSON	DIR. K.P. Rigsby	DATE	
SUBMITTED BY			
SATISFACTORY TO		DATE	
SIGNATURE-TITLE			
APPROVED BY SIGNATURE CONTRACTING OFFICER		DATE 7/20/82	

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION, WHIDBEY ISLAND
OAK HARBOR, WASHINGTON

MECH. PLAN - NEW COMPRESSOR
AIR COMPRESSOR ADDITION & REPAIR BLDG. 2528
N.A.S., WHIDBEY ISLAND, WA.

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
	80091	6, 159, 264
		CONSTR. CONTR. NO. N62474- 82-C-3783
SCALE AS SHOWN		SPEC. NO. 12- 82-3783 SHEET 2 OF 5

NASW 11100/1 (1-82)

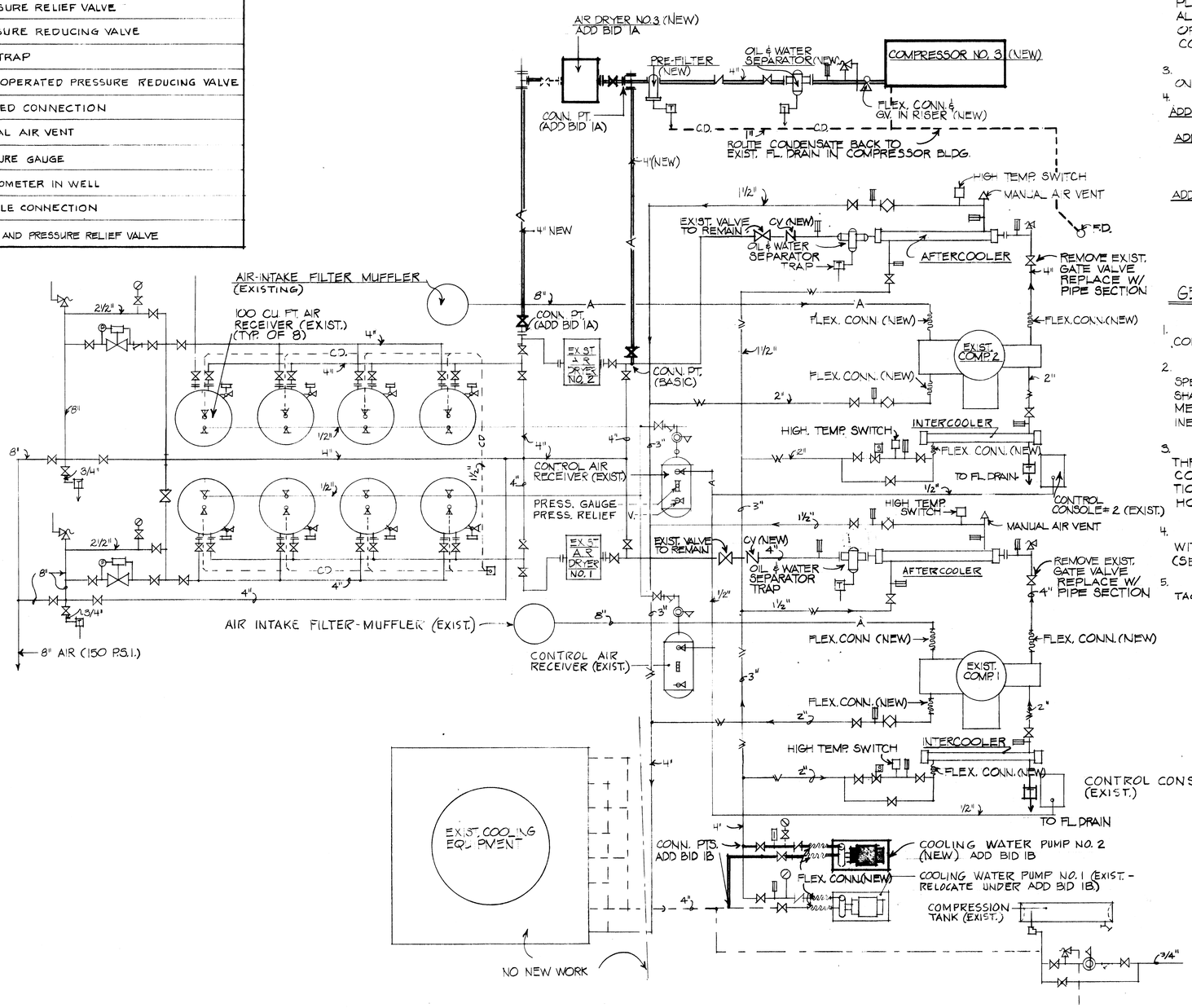
Air Compressor Addition & Repair
N62474-82-C-3783
2 of 5

82-3783

SYMBOL	DESCRIPTION
—W—	WATER
--CD--	CONDENSATE DRAIN
—A—	COMPRESSED AIR
	GATE VALVE
	GLOBE VALVE
S	SOLENOID VALVE
	CHECK VALVE
	BALANCING COCK
	STRAINER
	PRESSURE RELIEF VALVE
P	PRESSURE REDUCING VALVE
T	DRIP TRAP
	PILOT OPERATED PRESSURE REDUCING VALVE
	FLANGED CONNECTION
	MANUAL AIR VENT
	PRESSURE GAUGE
	THERMOMETER IN WELL
	FLEXIBLE CONNECTION
	GAUGE AND PRESSURE RELIEF VALVE

I. B. INERTIA BASE

SYMBOL	DESCRIPTION OF REVISION	DATE	APPROVAL



SCOPE OF WORK :

1. FURNISH & INSTALL COMPRESSOR NO. 3, COMPLETE WITH ALL PIPING, CONTROLS, WIRING & ACCESSORIES FROM UNIT TO EXISTING POINTS OF CONNECTION AS SHOWN ON THE PIPING DIAGRAM, TEST & OPERATE COMPLETED SYSTEM.

2. UPON COMPLETION OF WORK COVERED UNDER ITEM 1, DISCONNECT COMPRESSOR NO. 1 FOR REPAIR & OVERHAUL AS SPECIFIED. PROVIDE NEW INERTIA BASE PER PLANS & SPECS., RE-INSTALL OVER-HAULED COMPRESSOR, VODEY & RE-CONNECT ALL PIPING & WIRING AS SHOWN ON THE PLANS AND AS SPECIFIED. TEST & OPERATE COMPLETED SYSTEM, INCLUDING INTERCOOLER & AFTERCOOLER, & ALL CONTROLS & ACCESSORIES.

3. UPON COMPLETION OF WORK COVERED UNDER ITEM 2, PERFORM SAME WORK ON COMPRESSOR NO 2. AS DESCRIBED UNDER ITEM 2 FOR COMPRESSOR NO. 1.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAIL.

ADD BID ITEMS :

ADD BID 1A - UNDER THIS ALT., PROVIDE REFRIGERATED AIR DRYER NO. 3, COMPLETE WITH VALVES & PIPING FROM CONNECTIONS SHOWN ON THE PLANS. CAPACITY - 450 SCFM @ 250 P.S.I. WORKING PRESSURE (300 P.S.I. W.P. MAX.) -12°F ATMOSPHERIC DEW POINT, 480/3/60 MOTOR, 4 HP MAX.

ADD BID 1B - UNDER THIS ALT., PROVIDE A STANDBY COOLING WATER PUMP, SIM, & EQUAL TO THE EXIST. PUMP (100 G.P.M. @ 120 FT. T.D.H., 7½ H.P., 480/3/60, 1750 R.P.M.) RELOCATE EXIST. PUMP & PROVIDE NEW PIPING, CONTROLS, & ACCESSORIES, & WIRING FROM CONN. POINTS SHOWN ON THE PLANS. WORK SHALL BE PERFORMED & SCHEDULED TO PROVIDE CONT. FLOW OF COOLING WATER TO COMPRESSORS NO. 1 & 2.

GENERAL NOTES :

1. EQUIPMENT, ACCESSORIES, & PIPING SERVING COMPRESSOR NO. 3 IS NEW TO CONNECTION POINTS SHOWN ON PLANS. (BASIC)

2. EQUIPMENT, ACCESSORIES, & PIPING SERVING COMPRESSORS NO. 1 & 2, UNLESS SPECIFICALLY DESIGNATED 'NEW' IS EXISTING. EXISTING PIPING & EQUIPMENT SHALL BE REPAIRED AS SPECIFIED TO LIKE NEW CONDITION. PIPING ARRANGEMENT SHALL BE MODIFIED TO SUIT RELOCATION OF COMPRESSORS ON NEW INERTIA BASES.

3. FINAL CONN. OF ALL PIPING TO COMPRESSOR & PUMPS SHALL BE THROUGH FLEX. CONNECTIONS. TYPE, SIZE & ARRANGEMENT OF FLEX. CONNECTORS SHALL BE IN STRICT ACCORDANCE W/ THE MFRS. RECOMMENDATIONS & AS SPECIFIED. PROVIDE FLEX. CONNECTORS IN BOTH VERT. & HORIZ. LEGS OF ALL PIPING SERVING COMPRESSORS.

4. RELOCATE CONTROL CONSOLES AS SHOWN ON THE PLAN TO AVOID CONFLICT WITH NEW INERTIA BASES. RECONNECT CONTROL AIR PIPING AS REQ'D. (SEE ELEC. PLANS FOR WIRING MODIFICATIONS.)

5. ALL WIRING & PIPING SERVING COMPRESSORS NO. 1 & 2 SHALL BE IDENTIFIED & TAGGED PRIOR TO DISCONNECTION TO FACILITATE REASSEMBLY.

Air Compressor Addition & Repair
N62474-82-C-3783
3 of 5

6,159,265

REGISTERED ARCHITECT 2331 STATE OF WASHINGTON

LARRY N. STORSET REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON

M-2

RASMUSSEN HOBBS ARCHITECTS/PLANNERS
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CIVIL | ELEC. R.Y.
E/C BOB PEDERSON | DIR. R.P. Ripley
SUBMITTED BY | DATE
SATISFACTORY TO | DATE
SIGNATURE/TITLE
APPROVED BY | DATE 3/14/82
SIGNATURE CONTRACTING OFFICER

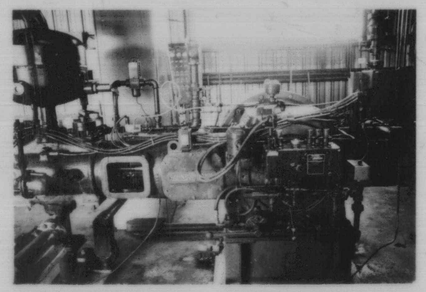
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION, WHIDBEY ISLAND
OAK HARBOR, WASHINGTON

MECH. DETAIL - PIPING DIAGRAM
AIR COMPRESSOR ADDITION & REPAIR BLDG. 2528
N.A.S., WHIDBEY ISLAND, WA.

SIZE | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 6,159,265
CONSTR. CONTR. NO. N62474- 82-C-3783
SCALE N.T.S. | SPEC. NO. 12-82-3783 | SHEET 3 OF 5

NASW 11100/1 (1-82)

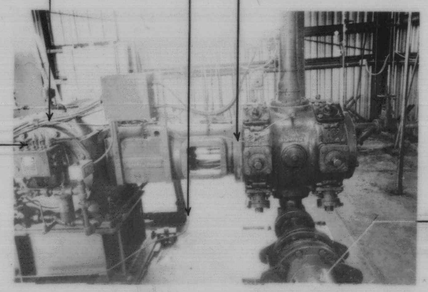
SYMBOL	DESCRIPTION OF REVISION	DATE	APPROVAL



(1 M1M5) SIDE ELEVATION COMP. NO.1
(HIGH PRESSURE STAGE)

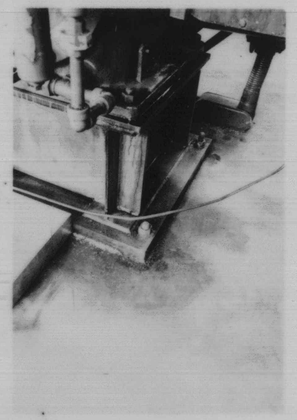
REPLACE ALL EXTERNAL EQUIP. MOUNTED PIPING.

REPLACE LUBE OIL PUMPS

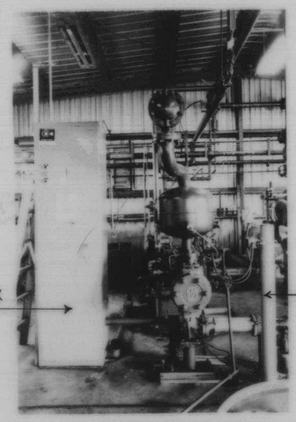


EXISTING AIR INTAKE NO.1. (MODIFY PIPING FOR NEW ELEVATION.)

(2 M1M5) SIDE ELEVATION COMP. NO.1
(LOW PRESSURE STAGE)



(3 M1M5) EXIST. ANCHOR BOLTS
COMP. NO. 2

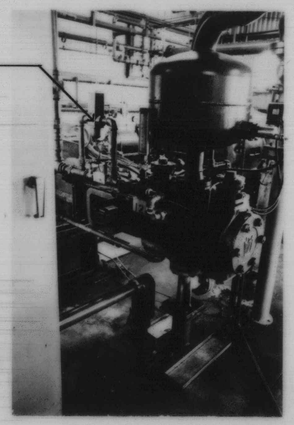


RELOCATE MOTOR CONTROLLER

RELOCATE ON NEW I.B.

(4 M1M5) FRONT ELEV. COMP. NO.1
(HIGH PRESSURE STAGE)

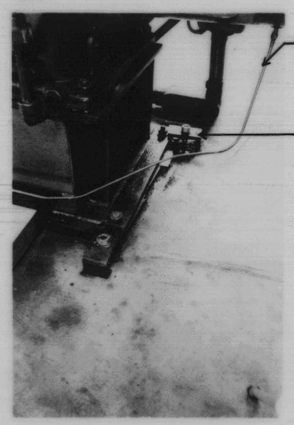
REMOVE IN SPECT AND REPAIR ALL SENSORS/CONTROLS. (TYP.)



REMOVE & VACATE UNDER FOUNDATION ELEC. SERVICE. TERMINATE EXIST'G 2" CONDUIT SLIGHTLY BELOW FIN. FL. ELEV. PACK GROUT FLUSH W/FIN. FL.

(5 M1M5) ELEV. COMP. NO.1
(HIGH PRESSURE STAGE)

EXIST'G MOUNT'G FRAME. REMOVE & RELOCATE ON NEW I.B.

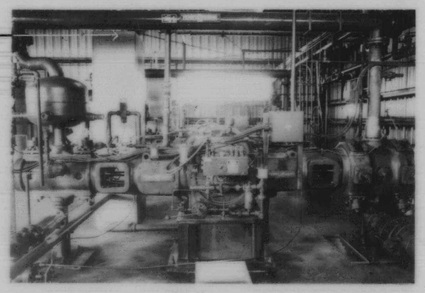


REPLACE ALL EXTERNAL COMPRESSOR PIPING.

REMOVE EXIST'G ANCHOR BOLTS FLUSH WITH FIN. FL. ELEV.

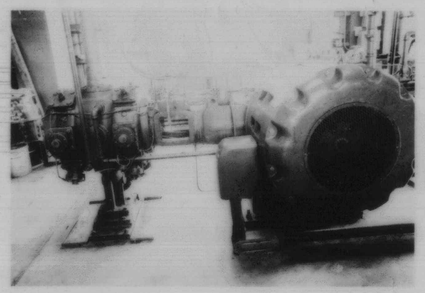
(6 M1M5) EXIST. ANCHOR BOLTS
COMP. NO.1 (LOW PRESS. SIDE)

RELOCATE MOTOR CONTROLLER & ELEC. SERVICE INFRONT OF EXISTING PILE SUPPORTED FOUND.



(7 M1M5) SIDE ELEVATION COMP. NO.2
(CHIGH & LOW PRESSURE STAGES)
(TYP. BOTH COMP.)

RELOCATE EXISTING SERVICE & RETURN AIR COOLENT PIPING TO MEET NEW ELEV. ESTAB. BY THE NEW INSTALLATION OF THE INERTIA BED.



(8 M1M5) OPP. SIDE ELEV. COMP. NO.2
(DRIVE MOTOR @ LOW PRESSURE STAGE)

RELOCATE EXISTING SUPPLY & RETURN COOLANT AIR LINES TO ACCOMODATE NEW INERTIA BED ELEV.

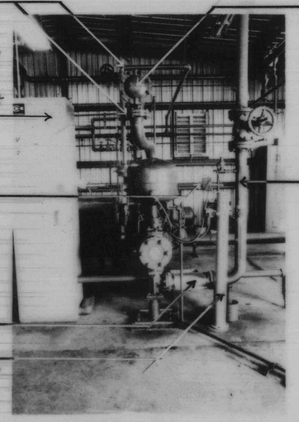
RELOCATE MOTOR CONTROLLER

INSPECT & REPAIR ALL EXIST'G SENSORS/CONTROL SWITCHING (TYP.)

PROVIDE NEW CONDUIT SERVICE CABLE & FLEX. CONNECTION TO ACCOMODATE NEW I.B.

REMOVE FLEX. CONNECTION

RELOCATE SUPPORT COLUMN TO ELEV. OF NEW I.B.



EXISTING INTERCOOLER. REMOVE, INSPECT, & PRESSURE TEST TO FACTORY SPEC.-TEST.

REMOVE, REPAIR & REINSTALL ISOLATION VALVE.

MODIFY AIRLINE TO ACCOMODATE NEW OUTLET ELEV.

VACATE EXISTING 2" CONDUIT & CONDUCTORS/INSTALL NEW SERVICE CONDUIT & CONDUCT FROM OVERHEAD. SEE ELEC. (TYP. EA. COMP.)

(9 M1M5) FRONT ELEV. COMP. NO.2
(HIGH PRESSURE STAGE)

3333 REGISTERED ARCHITECT R. R. Hobbs STATE OF WASHINGTON

M-3

RASMUSSEN HOBBS
ARCHITECTS/PLANNERS
9 SAINT HELENS
TACOMA, WASHINGTON 98402
(206) 572-5511

DSGN. M.K.	DRWN. M.A.W.H.	CHK. D.H.	
ARCH. RASMUSSEN HOBBS	MECH. SEIFERT & FORBES		
CIVIL	ELEC. FOR		
STR. BOB PEDERSON	DIR. K.F. Seifert		

SUBMITTED BY _____ DATE _____
SATISFACTORY TO _____ DATE _____
SIGNATURE-TITLE
APPROVED BY _____ DATE 7/30/82
SIGNATURE CONTRACTING OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION, WHIDBEY ISLAND
OAK HARBOR, WASHINGTON

MECH. DETAIL - EXIST. COMPRESSOR
AIR COMPRESSOR ADDITION & REPAIR, BLDG. 2528
N.A.S., WHIDBEY ISLAND, WA.

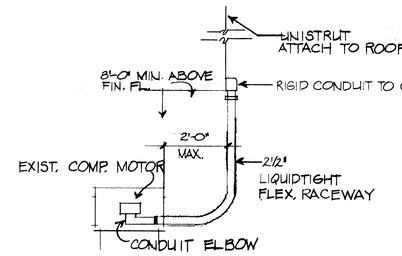
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
	80091	6,159,266
		CONSTR. CONTR. NO. N62474 82-C-3782
SCALE N.T.S.		SPEC. NO. 12 82-3783 SHEET 4 OF 5

NAVFAC 1100/1 (1-82)

Air Compressor Addition & Repair
N62474-82-C-3783
4 of 5

6,159,266

SYMBOL	DESCRIPTION OF REVISION	DATE	APPROVAL



E1/E1 TYP. COMP. MOTOR-ELEC. CONNECTION

ELECTRICAL NOTES

1.) ADD BID ITEM 1A
PROVIDE 480 V, 20 AMP, 3 Ø CIRCUIT BREAKER IN PANEL D. PROVIDE 480 V, 20 AMP, 3 Ø WEATHER TIGHT STARTER DISCONNECT MOUNTED ON DRYER UNIT PER MFRS' RECOMMENDATIONS. PROVIDE OVERHEAD 1/2" RACEWAY W/ THREE # 12 THW COPPER CONDUCTORS FROM STARTER DISCONNECT TO PANEL D. ALL EXTERIOR BLDG. CONN. SHALL BE WEATHER TIGHT. COORDINATE W/ DIV. 15 & PROVIDE ALL NECESSARY ELEC. CONN. PER MFRS RECOMMENDATIONS.

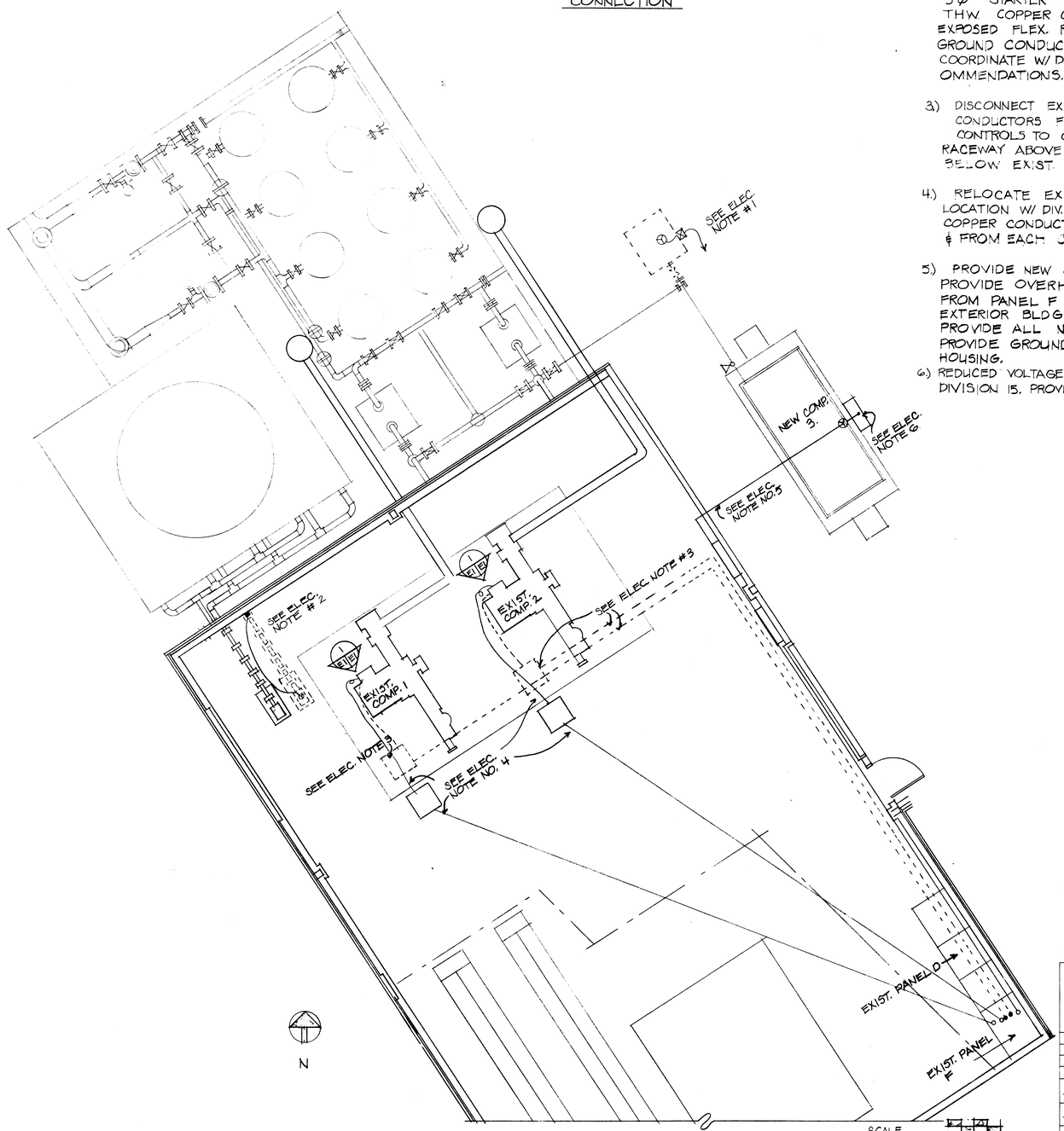
2.) ADD BID ITEM 1B
PROVIDE 480 V, 20 AMP, 3 Ø CIRCUIT BREAKER IN PANEL D. PROVIDE 480 V, 20 AMP, 3 Ø STARTER DISCONNECT MOUNTED ON WALL W/ OVERHEAD 1/2" RACEWAY & 3 # 12 THW COPPER CONDUCTORS FROM STARTER DISCONNECT TO PANEL D. PROVIDE EXPOSED FLEX. RACEWAY W/ 3 #12 THW COPPER CONDUCTORS & ONE GREEN GROUND CONDUCTOR FROM STARTER DISCONNECT TO NEW 7 1/2 HP MOTOR. COORDINATE W/ DIV. 15 & MAKE ALL NECESSARY ELEC. CONN. PER MFRS' RECOMMENDATIONS.

3.) DISCONNECT EXIST. COMPRESSOR #1 & #2 CONTROLLERS. REMOVE ALL ELEC. CONDUCTORS FROM PANEL F TO COMPRESSOR CONTROLS & FROM COMPRESSOR CONTROLS TO COMP. UNITS. CUT BELOW FL. LINE & REMOVE EXIST. RACEWAY ABOVE FIN. FL. PATCH FL. TO MATCH EXIST. ABANDON RACEWAY BELOW EXIST. FL

4.) RELOCATE EXIST. COMPRESSOR # 1 & # 2 CONTROLLERS. COORDINATE EXACT LOCATION W/ DIV. 15. PROVIDE OVERHEAD 2 1/2" RACEWAY & 3 # 250 MCM THW COPPER CONDUCTORS FROM EA. COMP. TO EACH CONTROL UNIT (SEE DETAIL E1/E1) & FROM EACH CONTROL UNIT TO EXIST. BREAKERS IN EXIST. PANEL F.

5.) PROVIDE NEW 380 V, 250 AMP, 3 Ø CIRCUIT BREAKER IN EXIST. PANEL F. PROVIDE OVERHEAD 2 1/2" RACEWAY W/ 3 # 350 MCM THW COPPER CONDUCTORS FROM PANEL F TO NEW COMP. #3. MAKE ALL BLDG. PENETRATIONS & EXTERIOR BLDG. CONNECTIONS WEATHERTIGHT. COORDINATE W/ DIV 15 & PROVIDE ALL NECESSARY ELEC. CONNECTIONS PER MFRS. RECOMMENDATIONS. PROVIDE GROUND ROD & BARE COPPER GROUND CONNECTION TO COMP. # 3 HOUSING.

6.) REDUCED VOLTAGE MOTOR STARTER/ DISCONNECT SWITCH & CONTROL WIRING UNDER DIVISION 15. PROVIDE ELEC. CONNECTION PER NOTE 5 ONLY.



SCALE 0' 1' 2' 3' 4' - 1/4" = 1'-0"

Air Compressor Addition & Repair
N62474-82-C-3783
5 of 5

6159267

REGISTERED ARCHITECT STATE OF WASHINGTON

ROGER C. YOUNG STATE OF WASHINGTON 15594 REGISTERED PROFESSIONAL ENGINEER

RASMUSSENHOBBS ARCHITECTS/PLANNERS NUMBER 9 SAINT HELENS TACOMA, WASHINGTON 98402 (206) 572-5511		DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
		NAVAL AIR STATION, WHIDBEY ISLAND OAK HARBOR, WASHINGTON	
DSGN. M.K. DRWN. M.A.W.H CHK. D.H.		AIR COMPRESSOR ADDITION & REPAIR, BLDG. 2528 NAS, , WHIDBEY ISLAND, WA.	
ARCH. RASMUSSENHOBBS MECH. SEIFERT & FORBES			
CIVIL ELEC. R.Y.			
E/C BOB PEDERSON DIR.			
SUBMITTED BY DATE		SIZE: D	CODE IDENT. NO.: 80091
SATISFACTORY TO DATE		NAVFAC DRAWING NO.: 6,159,267	
SIGNATURE-TITLE		CONSTR. CONTR. NO. N62474: 82-C-3783	
APPROVED BY DATE 7/30/82		SCALE: AS SHOWN	SPEC. NO. 12: 82-3783 SHEET 5 OF 5
SIGNATURE CONTRACTING OFFICER			

E-1

NASW 11100/1 (1-82)