N61165.AR.003305
CNC CHARLESTON
5090.3a

DRAFT ZONE L RESOURCE CONSERVATION AND RECOVERY FACILITY INVESTIGATION REPORT VOLUME 11 OF 12 APPENDIX F PART 1 CNC CHARLESTON SC
12/18/1998
ENSAFE

DRAFT ZONE L
RCRA FACILITY INVESTIGATION REPORT
CHARLESTON NAVAL COMPLEX

VOLUME 11 OF 12
APPENDIX F (Part 1)

CTO-029
CONTRACT NO: N62467-89-D-0318

Prepared for:

Department of the Navy
Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina

Prepared by:

EnSafe Inc.
5724 Summer Trees Drive
Memphis, Tennessee 38134
(901) 372-7962

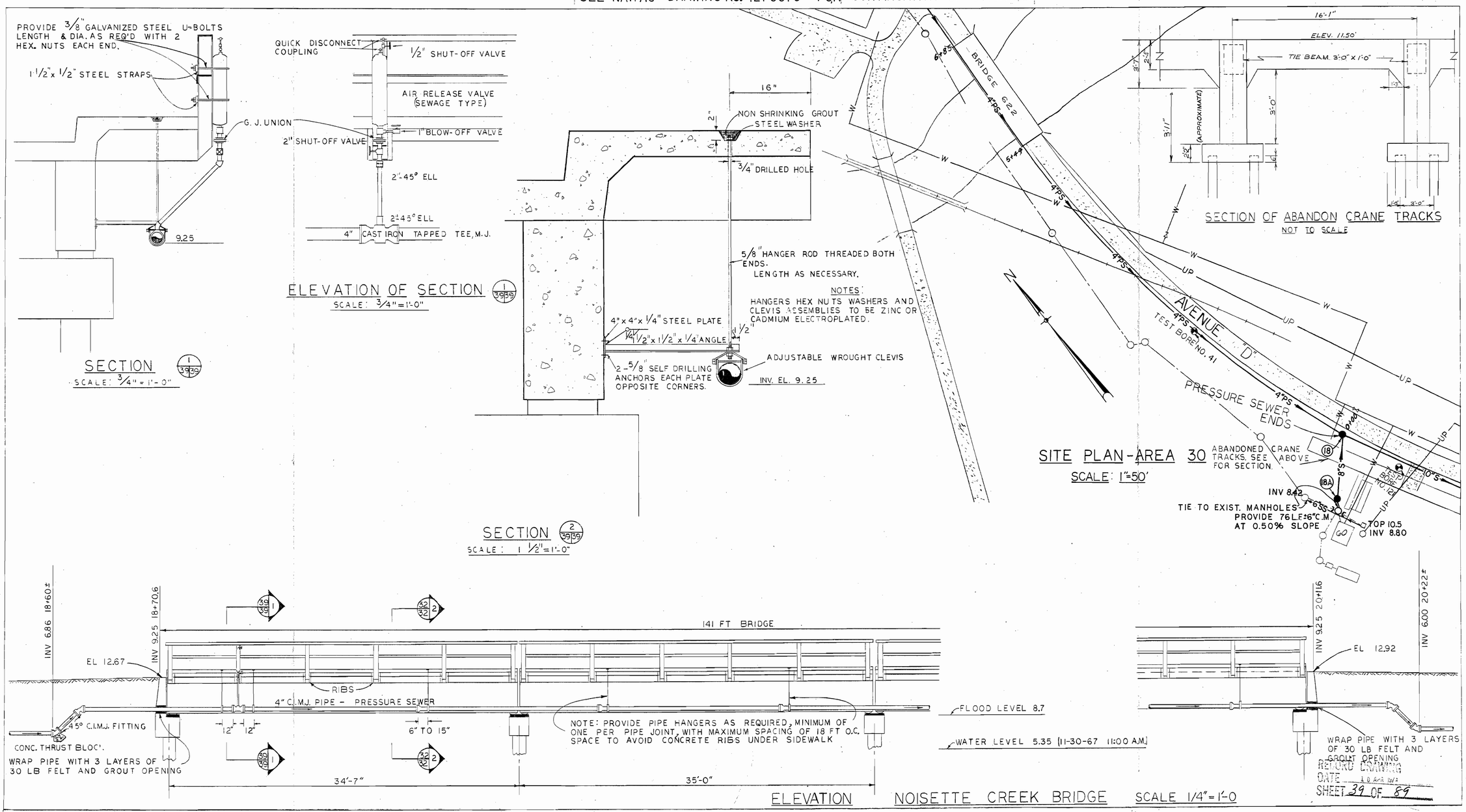
December 18, 1998

Appendix F

Maps of Storm and Sewer Lines

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/7/72	GETTER

SEE NAVFAC DRAWING NO. 1276679 FOR CONTINUATION OF UTILITIES.



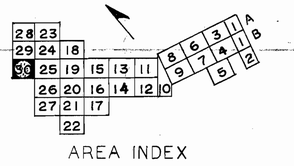
ELEVATION NOISETTE CREEK BRIDGE SCALE 1/4" = 1'-0

SEE NAVFAC DRAWING NO. 1276671 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW
PRESSURE SEWER		—4"PS—
BITUMINOUS PAVING		
CONCRETE PAVING		
BUILDING		
UNDERGROUND POWER	—UP—	
GUY AND ANCHOR		
POLE, HEIGHT & CLASS		
STORM SEWER	— — —	—12"SS—

	EXISTING	NEW
COMBINED SEWERS	— — —	
SANITARY SEWERS	— — —	—10"S—
SEWER MANHOLE		(18)
DROP INLET		
VALVE		
WATER LINE	—W—	
FENCE	X	
ELECTRIC MANHOLE		



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES

SCALE IN FEET

1/4" = 1' 0 1 2 3
3/4" = 1' 0 1 2
1 1/2" = 1' 0 1
1" = 50' 50 0 50 100

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4" UNLESS OTHERWISE NOTED.

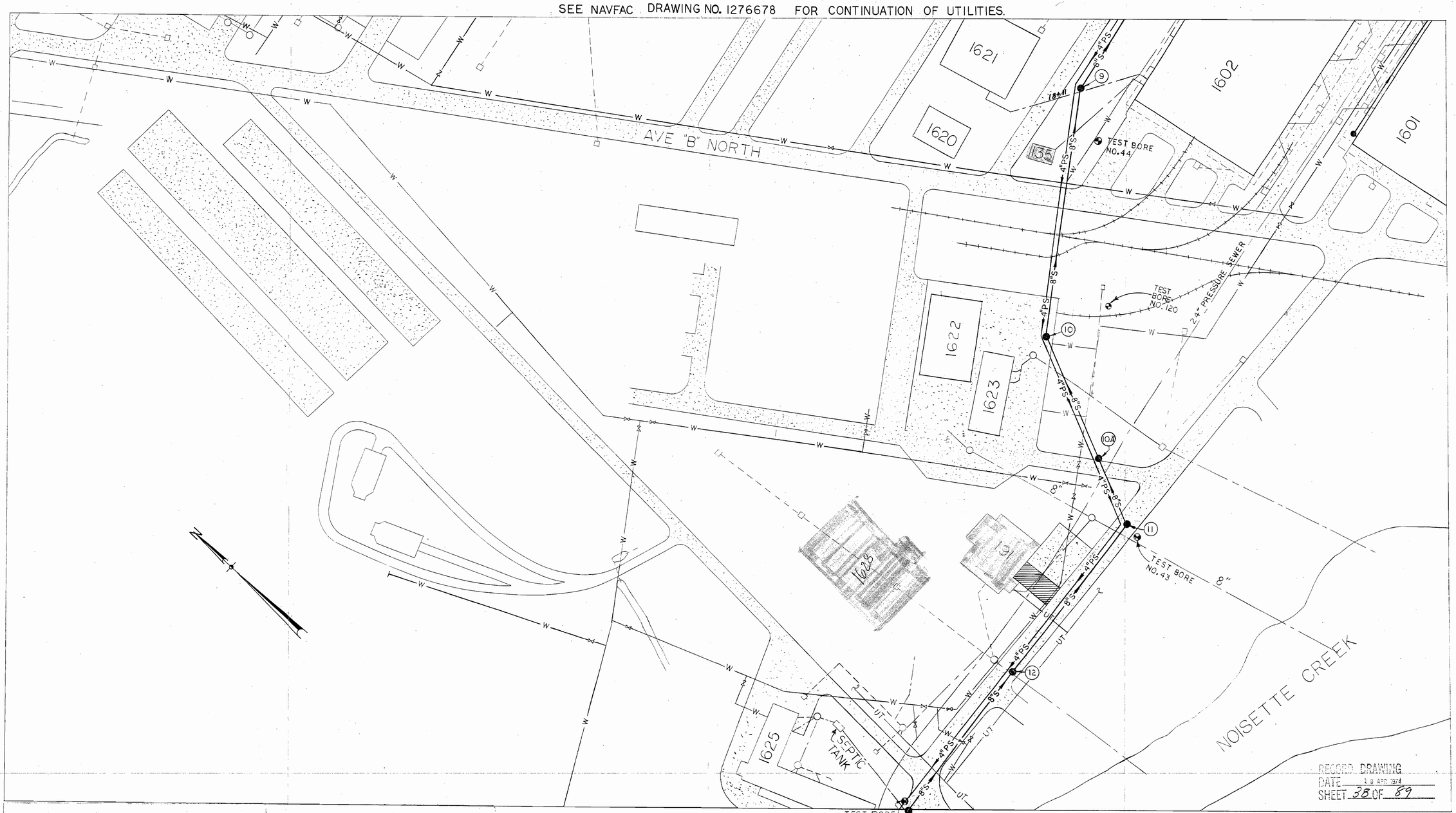
H 410 — 40

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. Brewer DR. Brewer CHK. Brewer	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrean	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY Harold L. Wrean, Jr. 4-12-68 DATE	SITE PLAN - AREA 30 & BRIDGE DETAILS
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION P.O.E. BRADLEY DIR.	
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276680
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
FOR COMMANDER, NAVFAC	SCALE AS SHOWN · SPEC. 8411/46/68U-24 · SHEET 39 OF 89

STANFAST PRODUCES INC. FORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276678 FOR CONTINUATION OF UTILITIES.



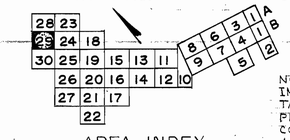
SEE NAVFAC DRAWING NO. 1276670 FOR CONTINUATION OF UTILITIES.

RECORD DRAWING
DATE 10 APR 1974
SHEET 38 OF 89

LEGEND

	EXISTING	NEW		EXISTING	NEW
PRESSURE SEWER		—4"PS→	COMBINED SEWERS	—·—·—	
BITUMINOUS PAVING			SANITARY SEWERS	—·—·—	←10"S—
CONCRETE PAVING			SEWER MANHOLE	○	●(12)
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE	—⋈—	
GUY AND ANCHOR	——┤		WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	X	
STORM SEWER	— — —	←10"SS—	ELECTRIC MANHOLE	○	
UNDERGROUND TELEPHONE	—UT—				

SEE NAVFAC DRAWING NO. 1276680 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

DATUM IS MEAN LOW WATER

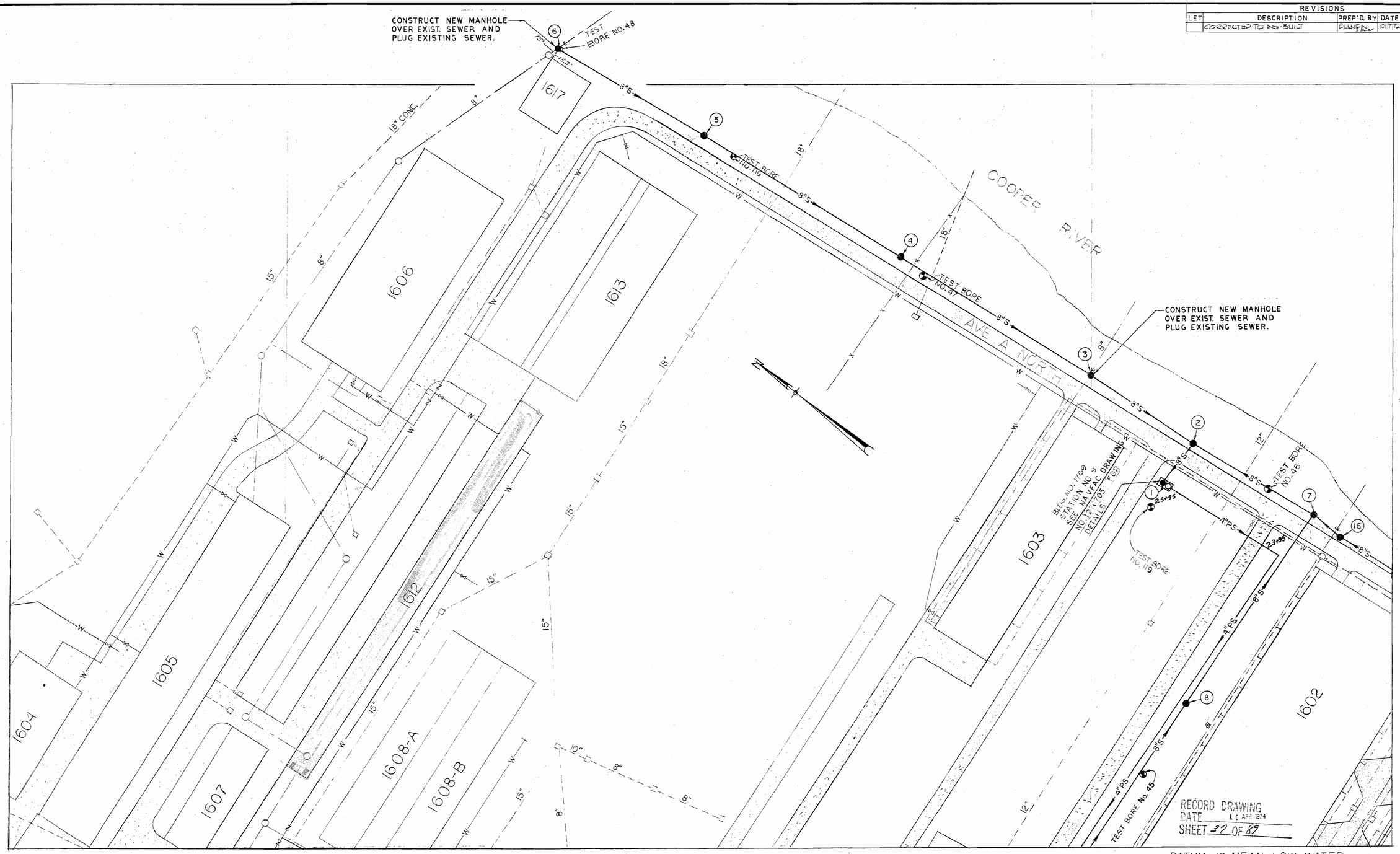
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED

H410——39

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND — SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. M.F. Clellan CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrenn	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE Harold B. Wrenn, pres. FIRM MEMBER (TITLE)	SITE PLAN AREA 29
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR. C.D. Black	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276679
APPROVED DATE	CONSTR. CONTR. NO. N62467 67 C-0344
OFFICER IN CHARGE	SCALE 1" = 50' · SPEC. 84119/67 Rev. 2 · SHEET 38 OF 89
APPROVED FOR COMMAND DATE	
EFD FOR COMMANDER, NAVFAC	

STAPHY PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/74	GETTER



DRAWING NO. 1276669 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276678

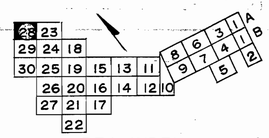
DATUM IS MEAN LOW WATER

LEGEND

	EXISTING	NEW
PRESSURE SEWER		—4"PS→
BITUMINOUS PAVING		
CONCRETE PAVING		
BUILDING		
UNDERGROUND POWER	—UP—	
GUY AND ANCHOR		
POLE, HEIGHT & CLASS		
STORM SEWER		—10"SS—

	EXISTING	NEW
COMBINED SEWERS		
SANITARY SEWERS		—10"S
SEWER MANHOLE	○	●(20)
DROP INLET	□	■
VALVE		
WATER LINE	—W—	
FENCE	X	
ELECTRIC MANHOLE	○	

SEE NAVFAC DRAWING NO. 1276679 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES

SCALE IN FEET

50 0 50 100

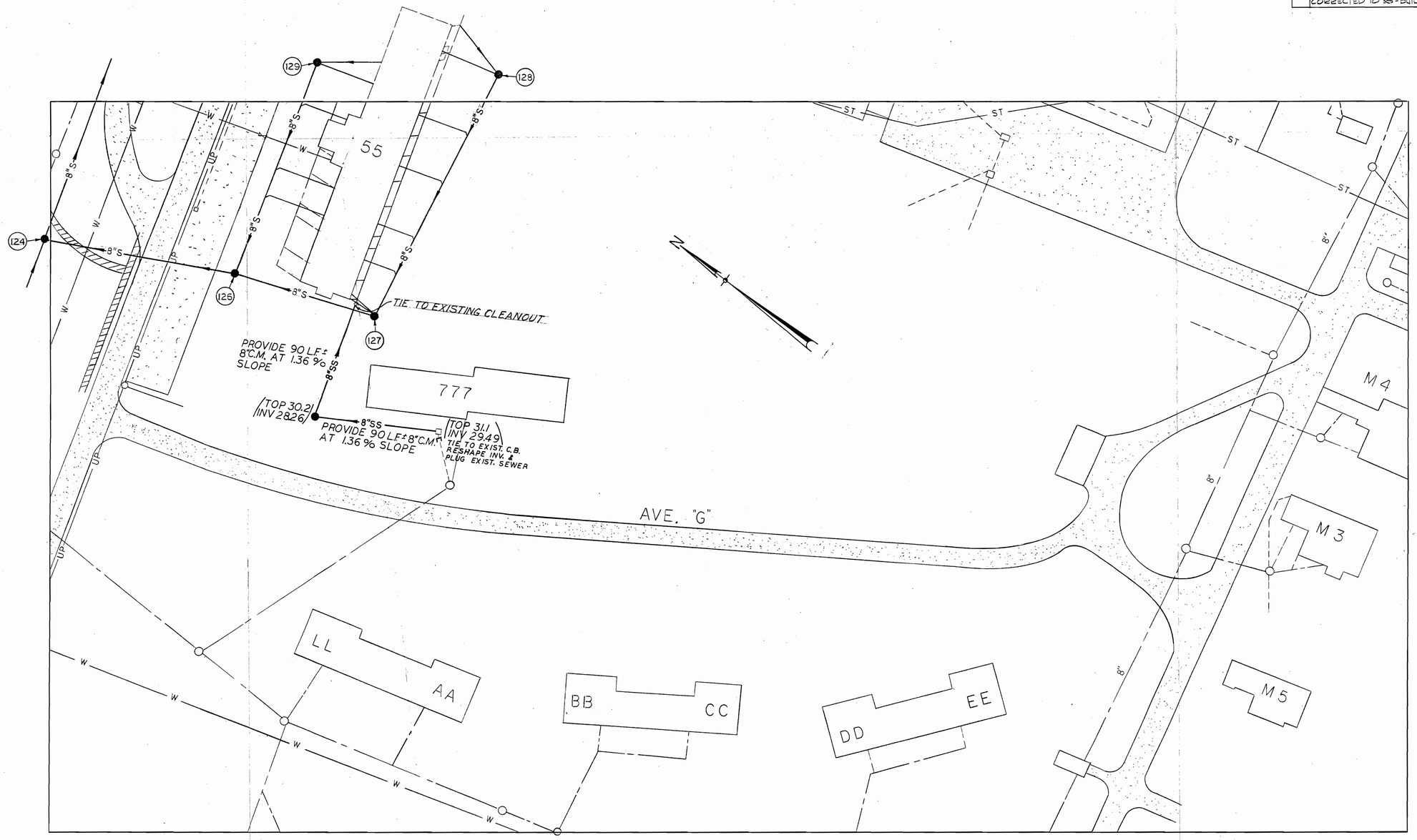
NOTE: ALL SERVICES TO BE 4" UNLESS OTHERWISE NOTED.

H410—38

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Brown DR. McClellan CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Vrzon	
SUBMITTED BY Harold D. Wilson, Jr. 4-12-68 DATE FIRM MEMBER (TITLE)	SANITARY & INDUSTRIAL SEWER SYSTEM
SOEAST DIV. NFEC—DESIGN DIVISION P.D.E. B.P. BADLEY DIR. C.A. Vrzon	SITE PLAN AREA 28
APPROVED DATE	SIZE F / CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276678
OFFICER IN CHARGE	CONSTR. CONTR. NO. N62467-67 C 0344
APPROVED FOR COMMAND DATE FOR COMMANDER, NAVFAC	SCALE 1"=50' / SPEC. 54146/Item-E / SHEET 37 OF 89

© STANPAT PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT		10-17-72	GETTER

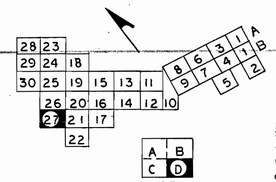


DATUM IS MEAN LOW WATER

RECORD DRAWING
DATE 10 APR 1974
SHEET 36 OF 89

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		(129)
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		12"SS	ELECTRIC MANHOLE		
STEAM	ST				



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
30 0 30 60

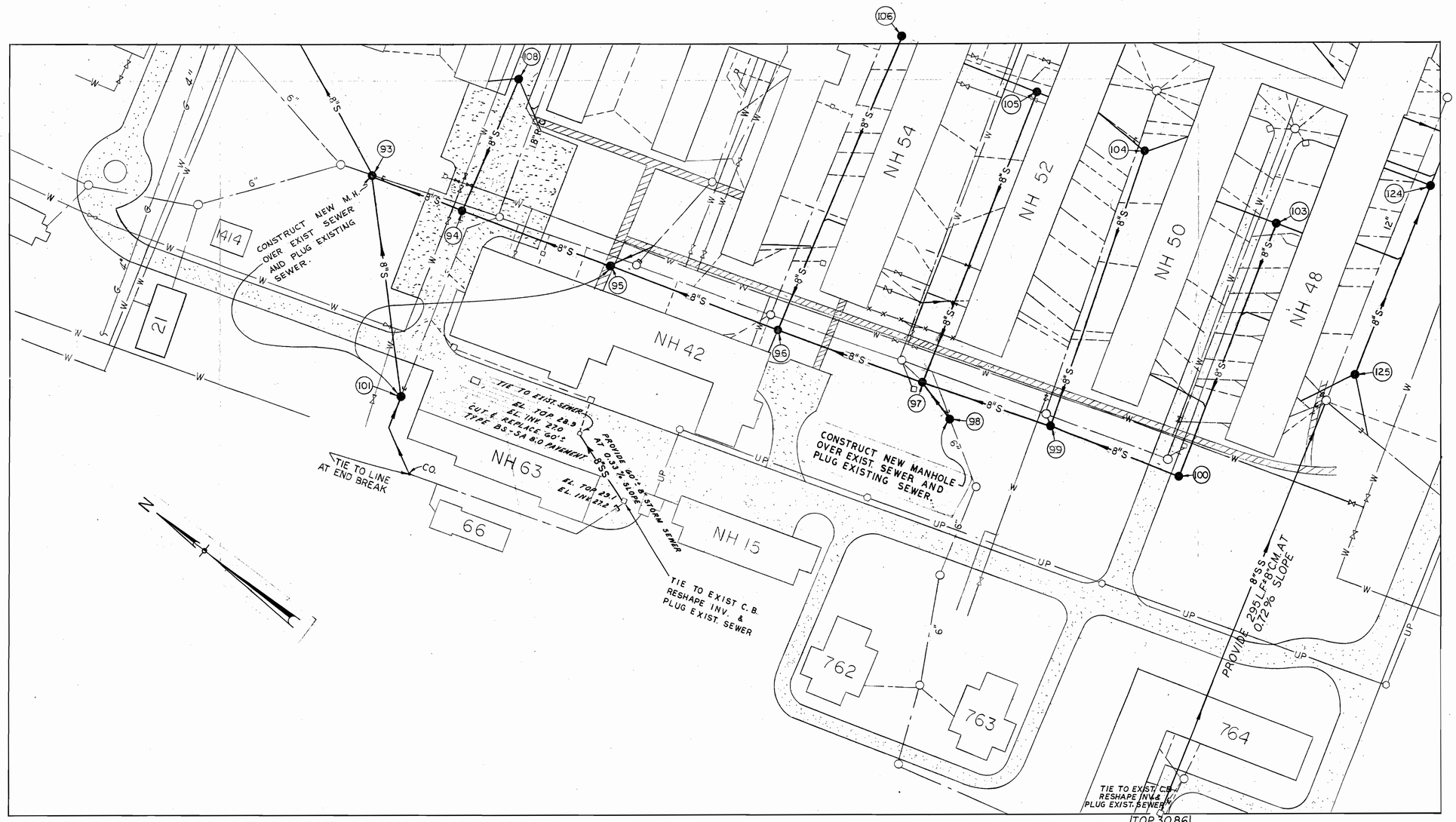
NOTE: ALL SERVICES TO BE 4" UNLESS OTHERWISE NOTED

H410—37

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. DR. CHK. SUPV. CH. ENGR. SUBMITTED BY DATE 4-12-68 FIRM MEMBER (TITLE) SOEAST DIV. NFEC-DESIGN DIVISION P.O.E. BRADLEY DIR.	NAVAL BASE CHARLESTON, S.C. SANITARY & INDUSTRIAL SEWER SYSTEM SITE PLAN AREA 27 D
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276677
OFFICER IN CHARGE	CONSTR. CONTR. NO. N62467 67 C 0344
APPROVED FOR COMMAND DATE FOR COMMANDER, NAVFAC	SCALE 1" = 30' · SPEC. B-8141/42/43-2 · SHEET 36 OF 89

STRAFRY PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

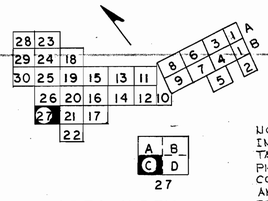


DATUM IS MEAN LOW WATER

RECORD DRAWING
DATE 10 APR 1974
SHEET 35 OF 89

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		99
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		10"SS	ELECTRIC MANHOLE		



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES

SCALE IN FEET

30 0 30 90

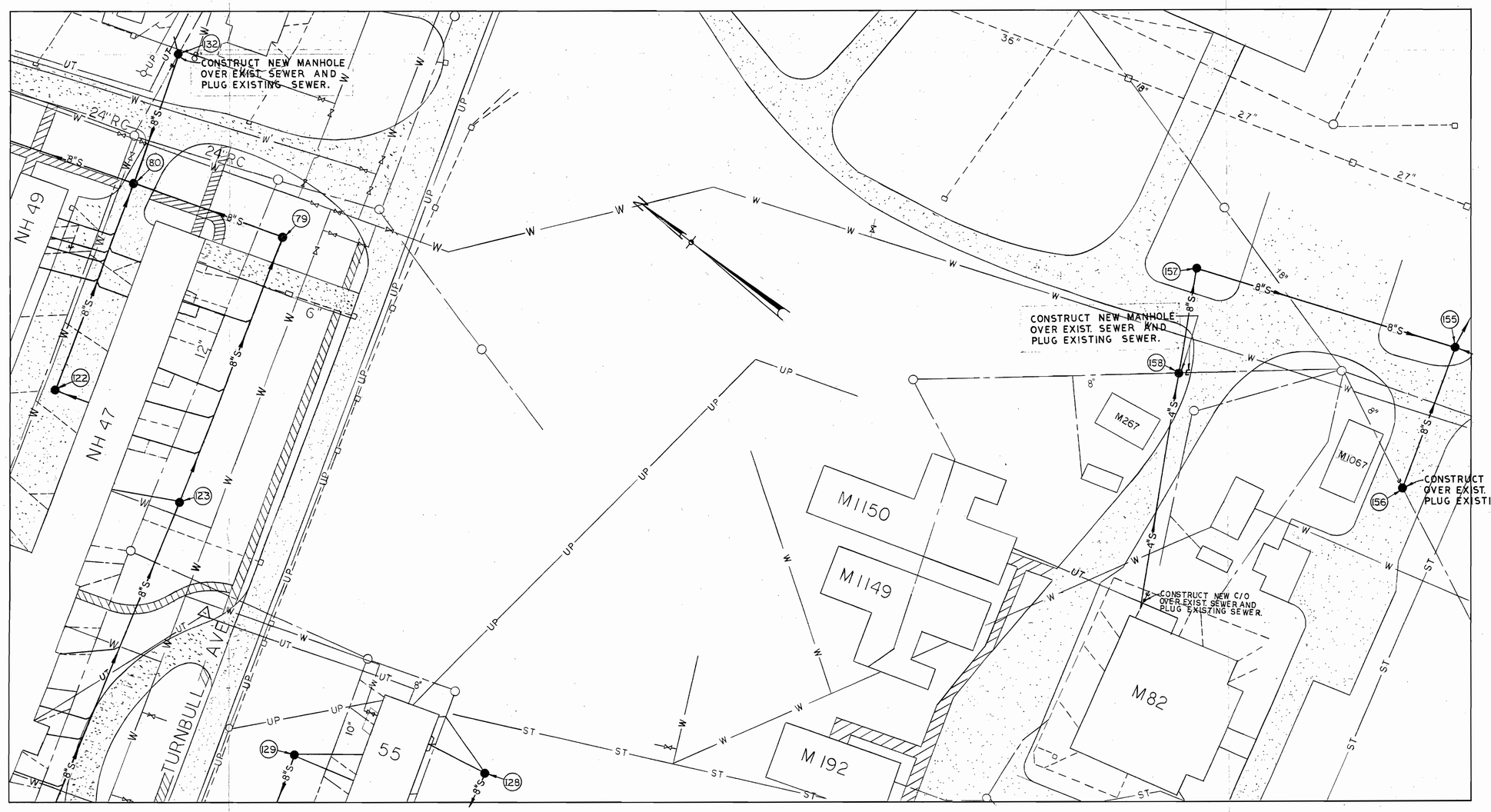
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED

H410—36

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. Berrio CHK. Browne	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrenn	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 27C
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION	
P.D.E. BRADLEY DIR. C.D. Black	
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276676
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD FOR COMMANDER, NAVFAC	SCALE 1"=30' SPEC 84112/67/PCL-2 SHEET 35 OF 89

STANPAT PRODUCTS INC. PORT WASHINGTON, N.Y.

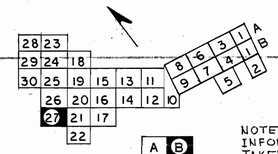
REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDON	10/17/72	GETTER



DATUM IS MEAN LOW WATER

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S→
CONCRETE PAVING			SEWER MANHOLE	○	●—(79)
BUILDING			DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE	—⋈—	
GUY AND ANCHOR			WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	—X—	
STORM SEWER		—10"SS→	ELECTRIC MANHOLE	○	
STEAM	—ST—				
UNDERGROUND TELEPHONE	—UT—				



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
0 0 30 60

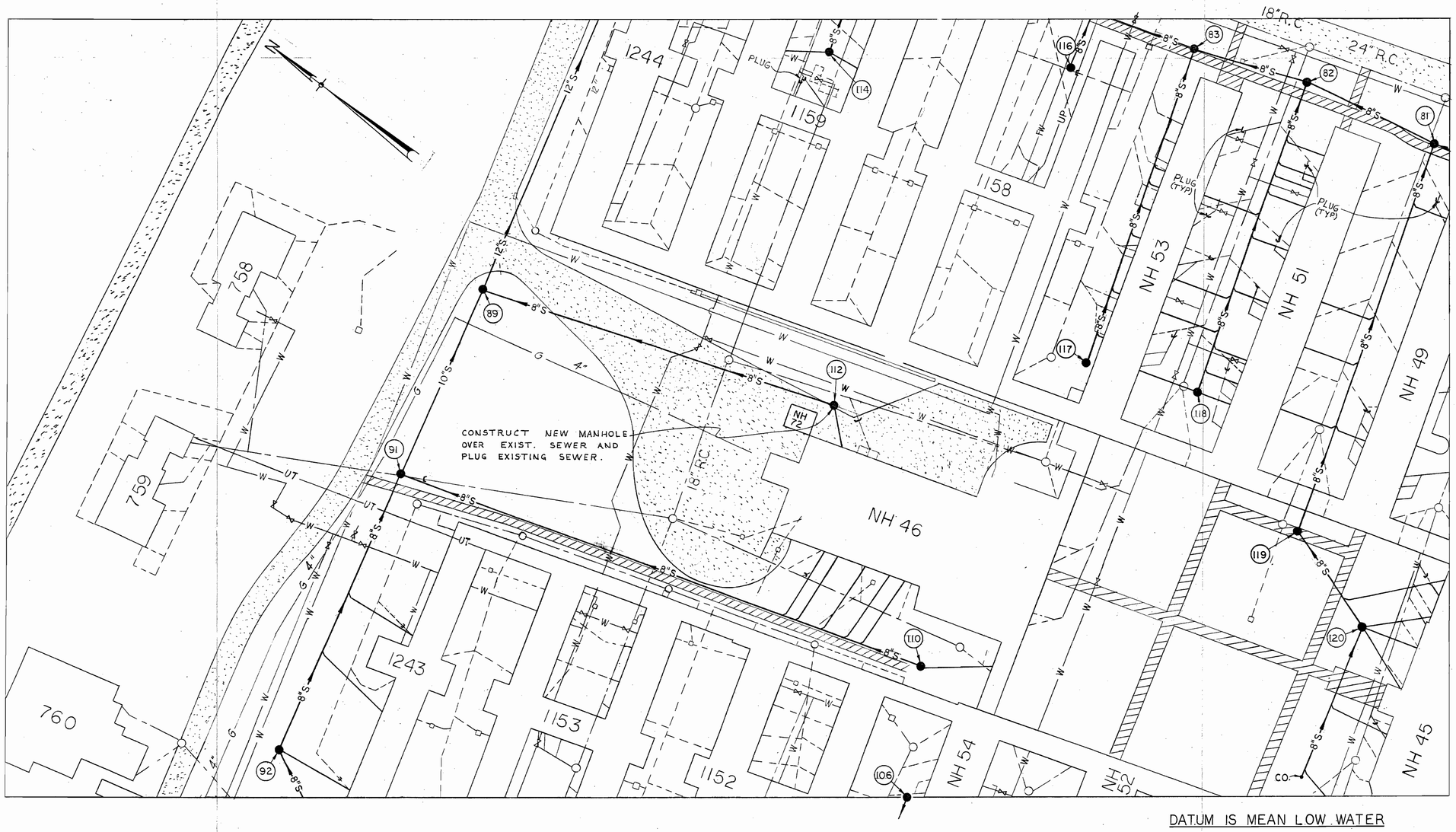
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

RECORD DRAWING
DATE 10 APR 1974
SHEET 34 OF 89

H410—35

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.	
DES. Browne DR. Perrin CHK. Browne	NAVAL BASE	CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrenn		
SUBMITTED BY 4-12-68 DATE	SANITARY AND INDUSTRIAL SEWER SYSTEM	
FIRM MEMBER (TITLE)	SITE PLAN	AREA 27 B
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR.		
APPROVED DATE	SIZE F	CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276675
OFFICER IN CHARGE		
APPROVED FOR COMMAND DATE		CONSTR. CONTR. NO. N62467 67 C 0344
FOR COMMANDER, NAVFAC	SCALE 1"=30'	SPEC 84114-Sewer-1 SHEET 34 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	[illegible]	10/17/72	GETTER



DATUM IS MEAN LOW WATER

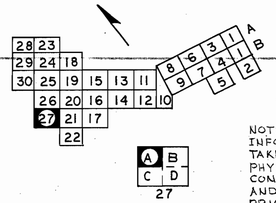
RECORD DRAWING
DATE 10 APR 1974
SHEET 33 OF 89

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED

H410—34

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		100
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		10"SS	ELECTRIC MANHOLE		
UNDERGROUND TELEPHONE	UT				



AREA INDEX

GRAPHIC SCALES

SCALE IN FEET

30 0 30 60

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. BROWNE DR. BROWNE CHK. WILLIAMSON	NAVAL BASE CHARLESTON, S.C.
SUPV. WILLIAMSON CH. ENGR. WRENN	SANITARY AND INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 27 A
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION	
P.D.E. BRADLEY DIR. [illegible]	
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276674
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD FOR COMMANDER, NAVFAC	SCALE 1"=30' · SPEC B-4119/67/REV-2 · SHEET 33 OF 89

ERASAPAT PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREPD.BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLLNDIV &	2-17-72	GEITTER

SEE NAVFAC DRAWING NO. 1276672 FOR CONTINUATION OF UTILITIES

ENLARGED DETAILS OF THE WORK REQUIRED IN THIS AREA ARE SHOWN ON NAVFAC DWG. NOS. 1276674, 1276675, 1276676, 1276677

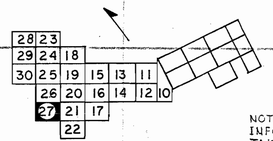
DATUM IS MEAN LOW WATER

RECORD DRAWING
DATE 10 APR 1974
SHEET 32 OF 89 H410—33

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		83
BUILDING			DROP INLET		
UNDERGROUND POWER	UP	NUP	VALVE		
GUY AND ANCHOR			WATER LINE	W	NW
POLE, HEIGHT & CLASS		35-5	FENCE	X	XX
STORM SEWER		8"SS	ELECTRIC MANHOLE		
			UNDERGROUND TELEPHONE	UT	



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

1"=50'

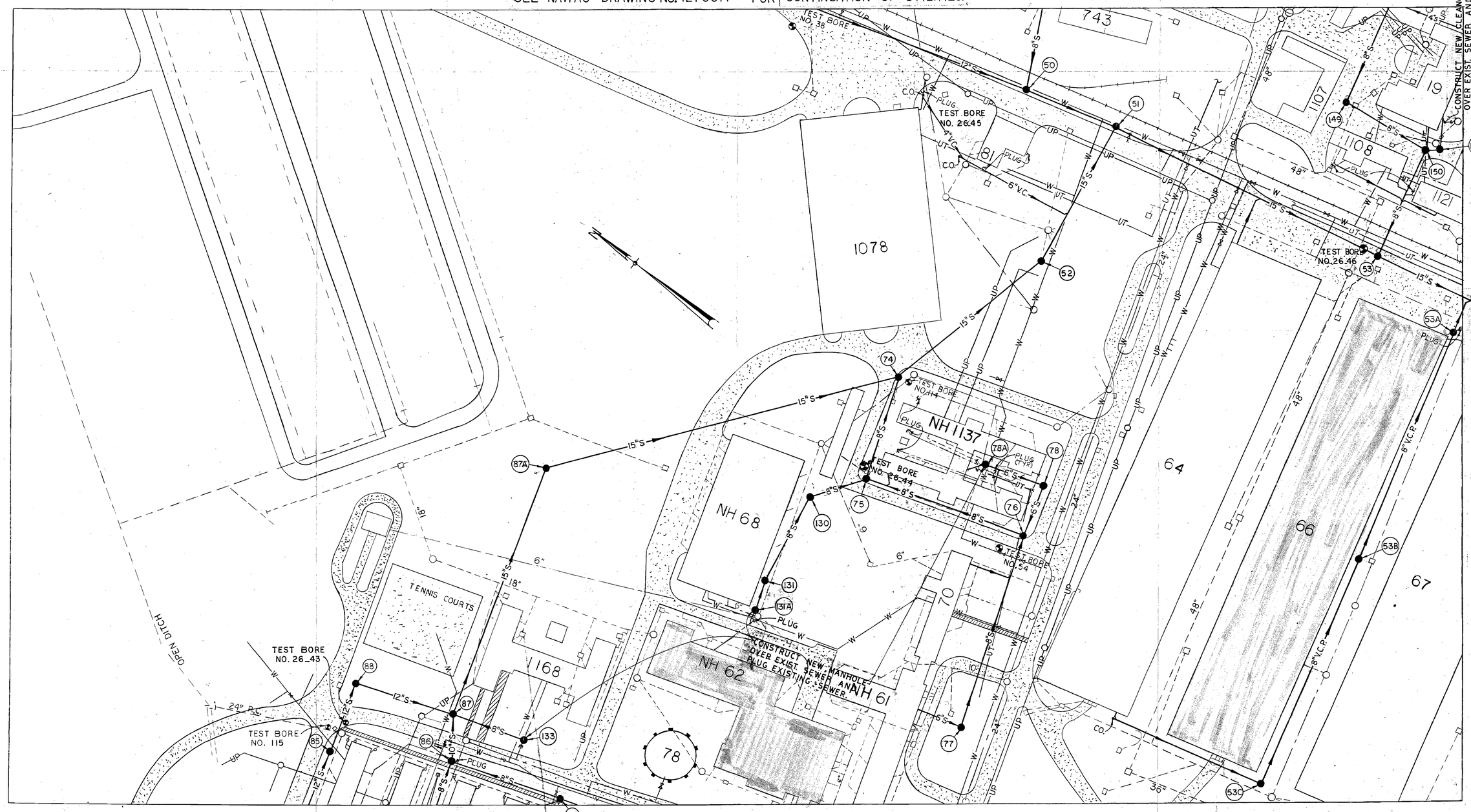
GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. [illegible] DR. [illegible] CHK. [illegible]	NAVAL BASE CHARLESTON, S.C.
SUPV. Wilkinson CH.ENGR. Wilson	
SUBMITTED BY Harold D. Williams, Jr. 4-12-68 DATE	SANITARY & INDUSTRIAL SEWER SYSTEM
FIRM MEMBER (TITLE) SOUTHEAST DIV. NFEC—DESIGN DIVISION	SITE PLAN AREA 27
PDE BRADLEY DIR. [illegible]	
APPROVED DATE	SIZE F / CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276673
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
FOR COMMANDER, NAVFAC	SCALE 1"=50' / SPEC NO. 4119/67/Rev-3 / SHEET 32 OF 89

BLUEPRINT PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276671 FOR CONTINUATION OF UTILITIES.



SEE NAVFAC DRAWING NO. 1276666 FOR CONTINUATION OF UTILITIES.

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

RECORD DRAWING
DATE 10 APR 1974
SHEET 31 OF 89

H410—32

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S→
CONCRETE PAVING			SEWER MANHOLE	○	● 75
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE		
GUY AND ANCHOR			WATER LINE	—W—	
POLE, HEIGHT & CLASS			FENCE	—X—	
STORM SEWER		—10"SS→	ELECTRIC MANHOLE	○	
			UNDERGROUND TELEPHONE	—UT—	

SEE NAVFAC DRAWING NO. 1276673 FOR CONTINUATION OF UTILITIES.

AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

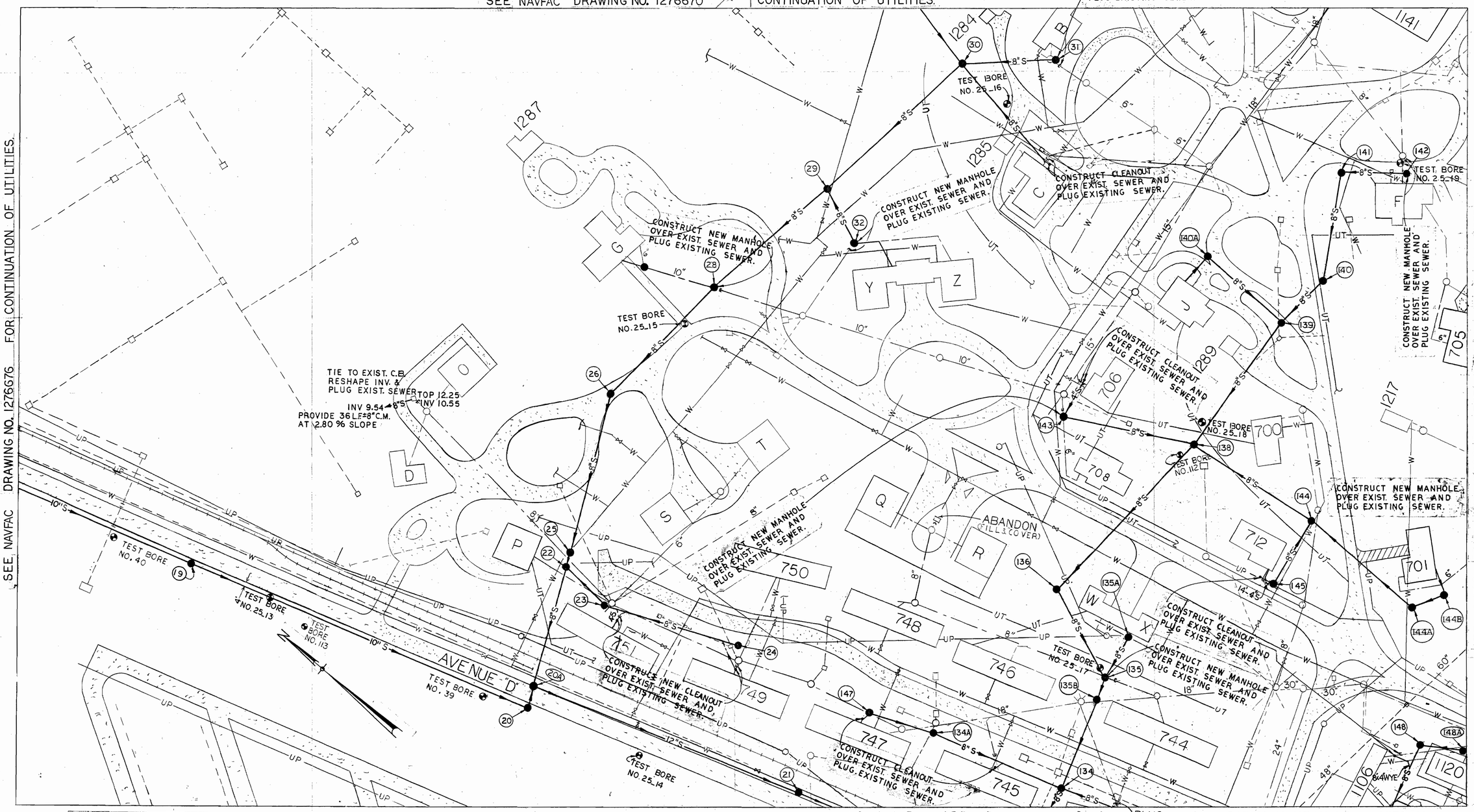
B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS
DES. BROWNE DR. EDWARDS CHK. WILLIAMSON
SUPV. WILLIAMSON CH. ENGR. KRENN
SUBMITTED BY 4-12-68 DATE
FIRM MEMBER (TITLE)
SOEAST DIV. NFEC—DESIGN DIVISION
P.O.E. BRADLEY DIR. C.D. Black
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
F.P.A. FOR COMMANDER NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S. C.
NAVAL BASE CHARLESTON, S.C.
SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA 26

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276672
		CONSTR. CONTR. NO. N62467 67 C 0344
SCALE 1" = 50'		SPEC. 84119/67/REV-2 SHEET 31 OF 89

REVISIONS				
LET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	DILLINGHAM	01/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276670 FOR CONTINUATION OF UTILITIES.



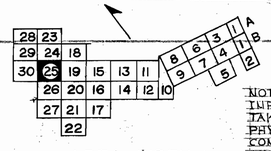
SEE NAVFAC DRAWING NO. 1276676 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276665 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		12"S
CONCRETE PAVING			SEWER MANHOLE		(24)
BUILDING			DROP INLET		
UNDERGROUND POWER	—UP—		VALVE		
GUY AND ANCHOR			WATER LINE	—W—	
POLE, HEIGHT & CLASS			PRESSURE SEWER		4"PS
STORM SEWER		10"S	ELECTRIC MANHOLE		
UNDERGROUND TELEPHONE	—UT—				

SEE NAVFAC DRAWING NO. 1276672 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

DATUM IS MEAN LOW WATER

RECORD DRAWING
DATE 10 APR 1974
SHEET 30 OF 89

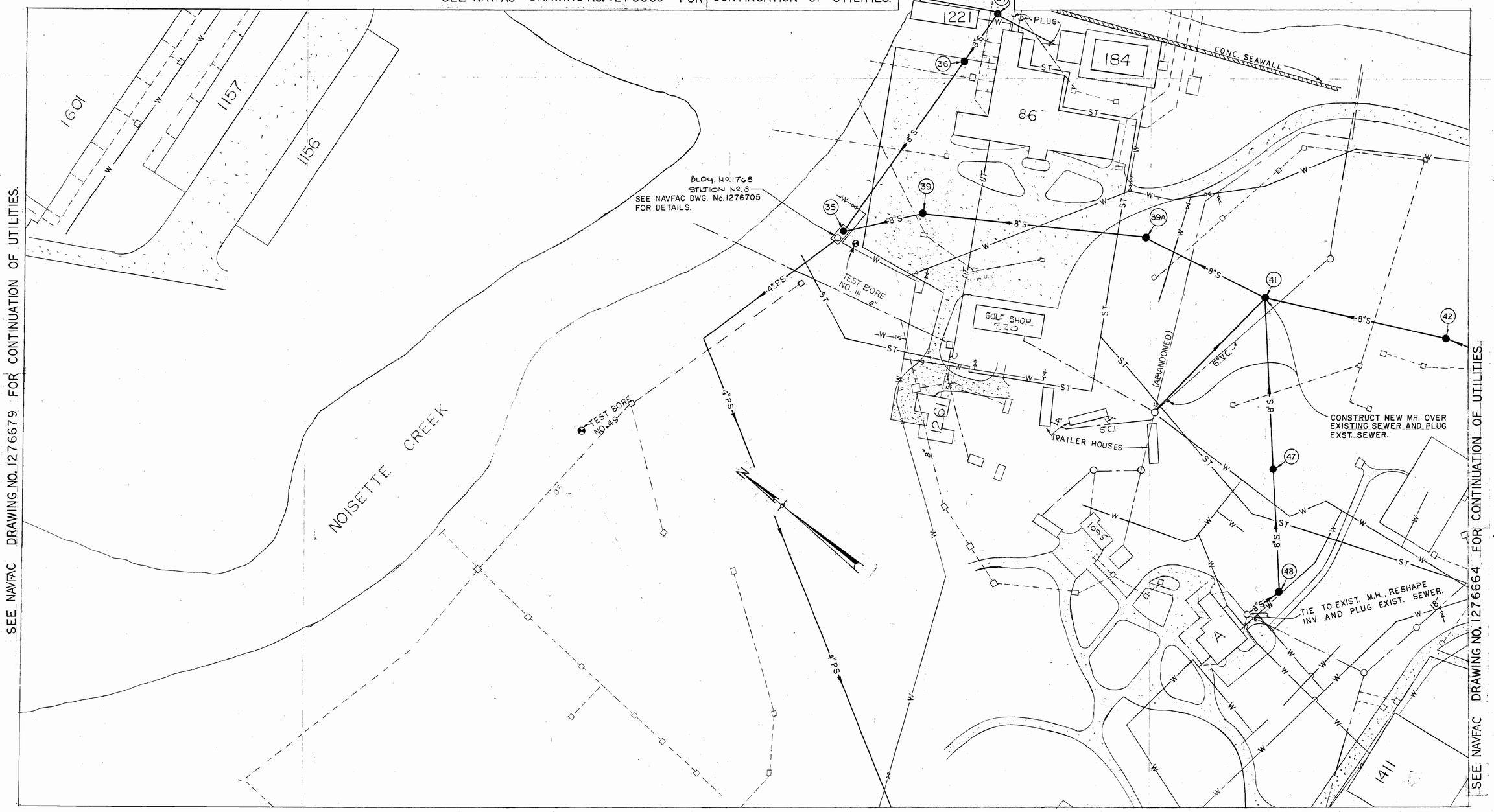
NOTE: ALL SERVICES TO BE AT 90° UNLESS OTHERWISE NOTED.

H410—31

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. BROWNE DR. PERRIN CHK. WILLIAMSON	NAVAL BASE CHARLESTON, S.C.
SUPV. WILLIAMSON CH. ENGR. VIRGIN	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 25
SOUTHEAST DIV. NFEC-DESIGN DIVISION FIRM MEMBER (TITLE)	
FOR BRADLEY DIR.	
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276671
OFFICER IN CHARGE	CONSTR. CONTR. NO. N62467 67 C 0344
APPROVED FOR COMMAND DATE	SCALE 1"=50' · SPEC. 2-11/14/17/20-X-1 · SHEET 30 OF 89
CHIEF FOR COMMANDER, NAVFAC	

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10 17 72	GETTER

SEE NAVFAC DRAWING NO. 1276669 FOR CONTINUATION OF UTILITIES.



SEE NAVFAC DRAWING NO. 1276679 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276664 FOR CONTINUATION OF UTILITIES.

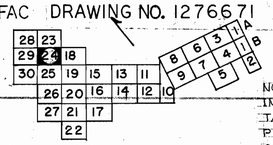
DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			UNDERGROUND TELEPHONE	—UT—	
BITUMINOUS PAVING			COMBINED SEWERS		
CONCRETE PAVING			SANITARY SEWERS		—8"S→
BUILDING			SEWER MANHOLE	○	●34
UNDERGROUND POWER	—UP—		DROP INLET	□	■
PRESSURE SEWER		—4"PS→	VALVE		
POLE, HEIGHT & CLASS	ϕ		WATER LINE	—W—	
STORM SEWER		—10"SS→	STEAM	—ST—	
			ELECTRIC MANHOLE	○	

SEE NAVFAC DRAWING NO. 1276671 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIAR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 29 OF 89

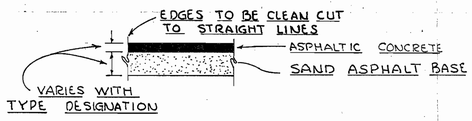
GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

H 410—30

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. M.T.Collins CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Vrooe	
SUBMITTED BY Richard L. Williamson, Jr. 4-12-68 DATE FIRM MEMBER (TITLE)	SANITARY & INDUSTRIAL SEWER SYSTEM
SOEAST DIV. NFEC—DESIGN DIVISION P.O.E. BRADLEY DIR. L.A. Black	SITE PLAN AREA 24
APPROVED DATE	SIZE F / CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276670
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. W 62467-67C-0344
FOR COMMANDER, NAVFAC	SCALE 1" = 50' / SPEC. C-411-61 Rev 2 / SHEET 29 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN, Jr.	10/17/72	GETTER

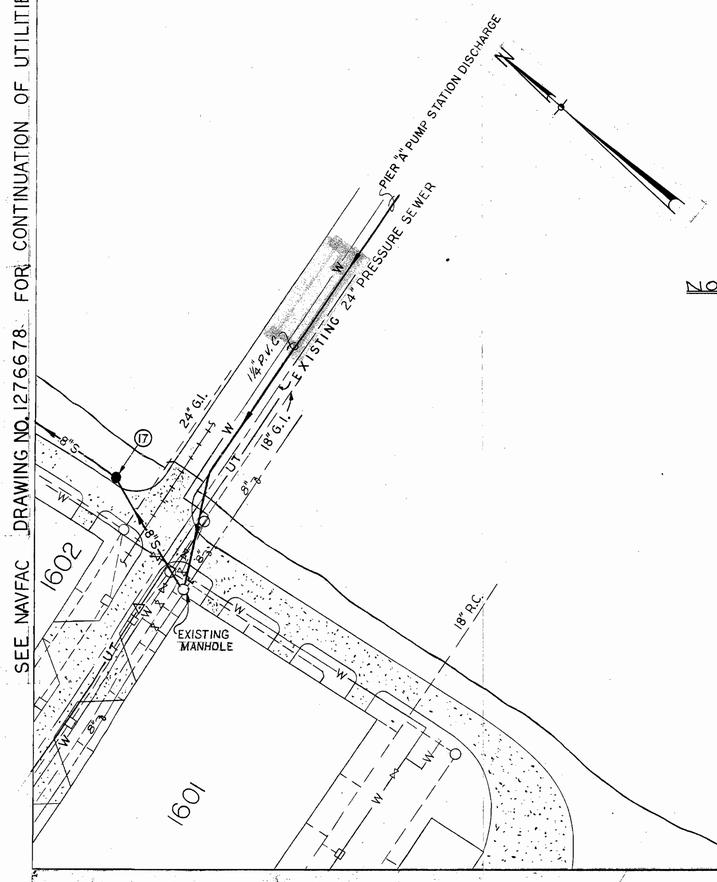
EXISTING SECTION



METHOD OF REPLACEMENT

REPLACE AS SHOWN FOR TYPE BS-SA

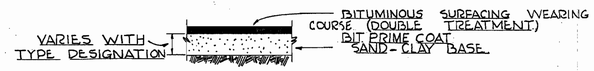
TYPE AC-SAS

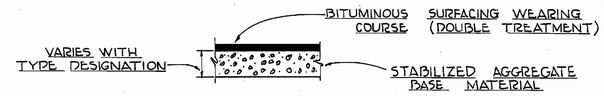


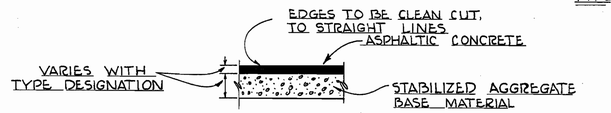
NOTE:

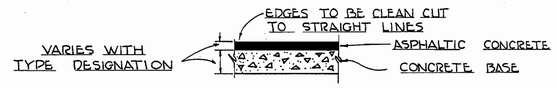
1. TYPE PAVEMENT TO BE CUT IS INDICATED ON THE PROFILE SHEETS NAVFAC DWGS 1276681 THROUGH 1276700 .
2. TYPE DESCRIPTION IS BASED ON THE FOLLOWING SYSTEM. FIRST TWO LETTERS DESIGNATE TYPE WEARING COURSE, FOLLOWED BY TWO NUMBERS WHICH INDICATE THICKNESS OF WEARING COURSE IN INCHES, SECOND TWO LETTERS DESIGNATE TYPE BASE MATERIAL, FOLLOWED BY TWO NUMBERS WHICH INDICATE THICKNESS OF BASE MATERIAL IN INCHES.
3. FOR EXAMPLE.. TYPE AC1.5-SAB.0 IS ASPHALTIC CONCRETE WEARING COURSE 1½" THICK ON STABILIZED AGGREGATE BASE 8" THICK.

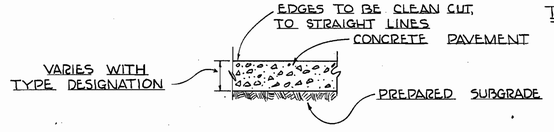
EXISTING SECTIONS







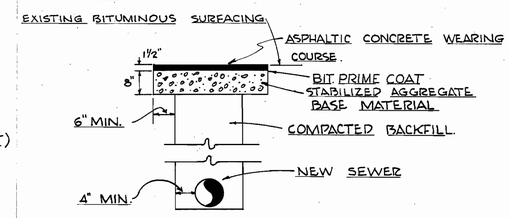




METHOD OF REPLACEMENT

REPLACE AS SHOWN FOR TYPE BS-SA

TYPE BS-SC



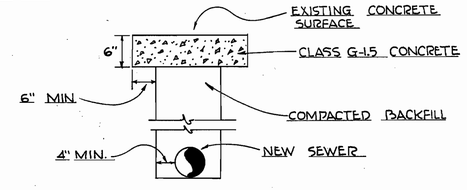
TYPE BS-SA

REPLACE AS SHOWN FOR TYPE BS-SA

TYPE AC-SA

REPLACE AS SHOWN FOR TYPE BS-SA

TYPE AC-CP



TYPE CP-PS

TYPICAL PAVEMENT SECTIONS TO BE REMOVED AND DETAILS FOR REPLACEMENT

N.T.S.

DATUM IS MEAN LOW WATER

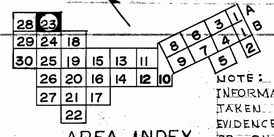
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		17
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE		W
POLE, HEIGHT & CLASS			FENCE		X
STORM SEWER		10"SS	ELECTRIC MANHOLE		
UNDERGROUND TELEPHONE	UT				

SEE NAVFAC DRAWING NO. 1276670 FOR CONTINUATION OF UTILITIES.

RECORD DRAWING
DATE 10 APR 1974
SHEET 28 OF 89



AREA INDEX

NOTE: INFORMATION ON BUILDING CONNECTIONS TAKEN FROM MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES

SCALE IN FEET

60 0 60 120

H410—29

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

DES. Browne DR. WC Killian CHK Williamson
SUPV. Williamson CH. ENGR. Wren
SUBMITTED BY 4-12-68 DATE
FIRM MEMBER (TITLE)
SOEAST DIV. NFEC-DESIGN DIVISION
P.O.E. BRADLEY DIR.
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
EFD FOR COMMANDER, NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S. C.

NAVAL BASE CHARLESTON, S.C.

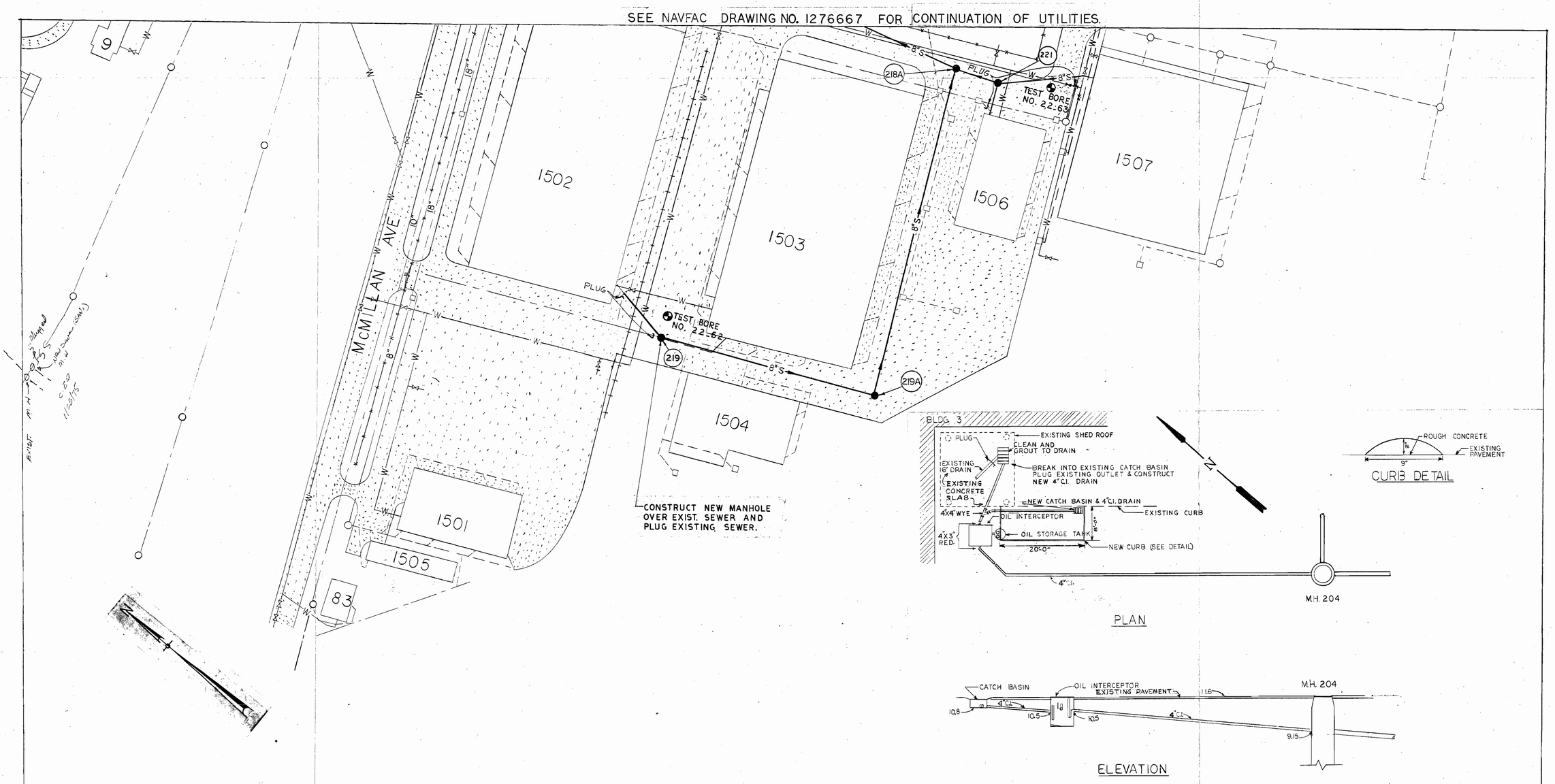
SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN-AREA 23 & PAVEMENT DETAILS

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276669

CONSTR. CONTR. NO. N62467-67-C-0344
SCALE AS SHOWN SPEC. B-41-9/67 Rev.-2 SHEET 28 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276667 FOR CONTINUATION OF UTILITIES.



OIL INTERCEPTOR DETAILS
NTS

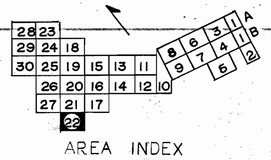
RECORD DRAWING
DATE 10 APR 1974
SHEET 22 OF 89

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		220
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		12"SS	ELECTRIC MANHOLE		



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50

H410—28

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Brown DR. McCellan CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Kerr	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 22
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION P.O.E. BRADLEY DIR.	
APPROVED DATE	SIZE F / CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276668
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
CEC FOR COMMANDER, NAVFAC	SCALE 1" = 50' / SPEC. 24NA-Letter-L-1 / SHEET 27 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN & Assoc	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276666 FOR CONTINUATION OF UTILITIES.

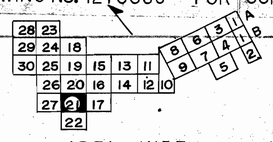
SEE NAVFAC DRAWING NO. 1276673 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276663 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		SAN.
CONCRETE PAVING			SEWER MANHOLE		161
BUILDING			DROP INLET		
UNDERGROUND POWER	—UP—		VALVE		
GUY AND ANCHOR			WATER LINE	—W—	
POLE, HEIGHT & CLASS			FENCE	—X—	
STORM SEWER		—12"SS—	ELECTRIC MANHOLE		
STEAM	—ST—				
UNDERGROUND TELEPHONE	—UT—				

SEE NAVFAC DRAWING NO. 1276668 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE: INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 26 OF 89

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

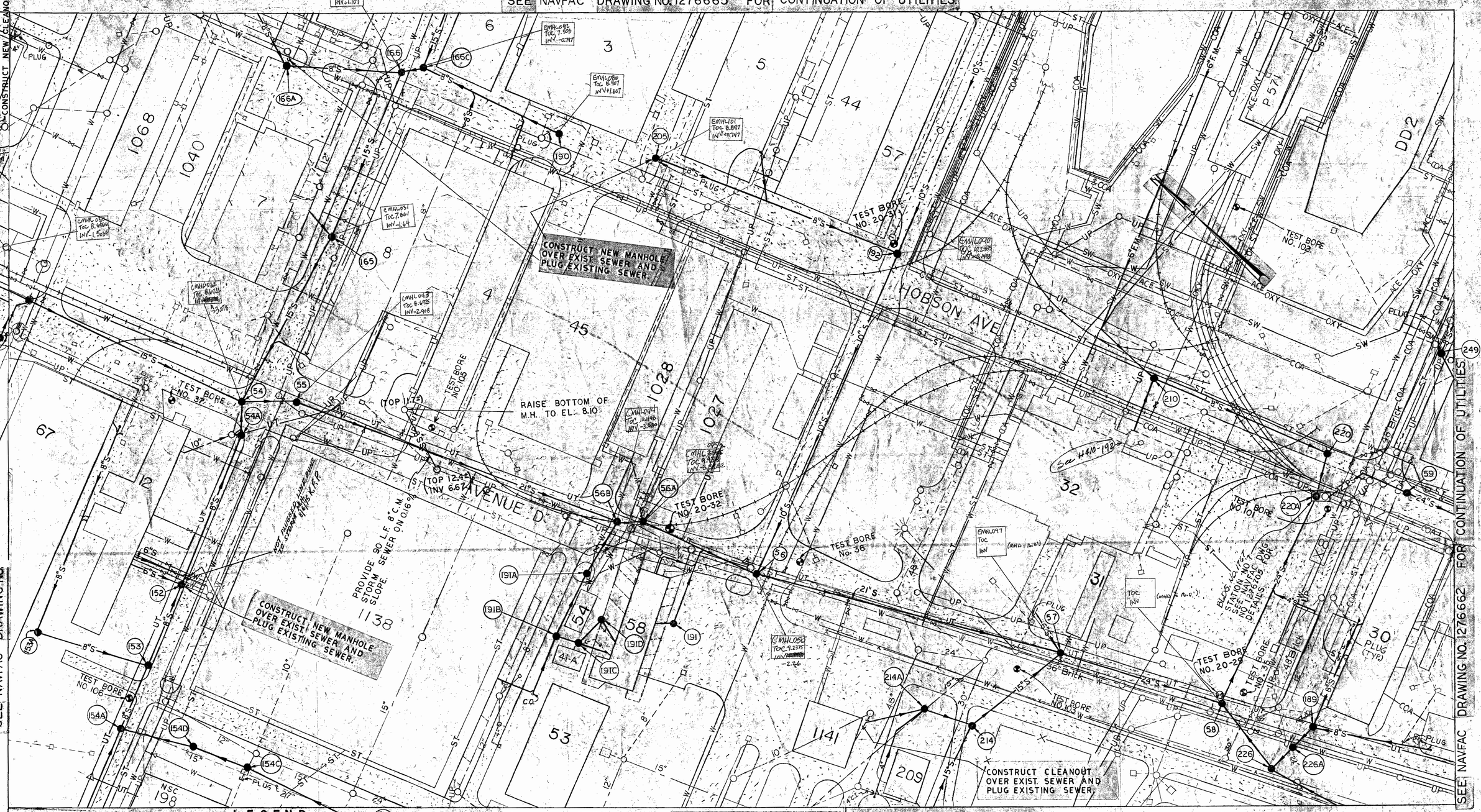
GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

H410—27

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. Browne DR. Porrio CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wagner	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 21
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION	
P.D.E. BRADLEY DIR. C.A. Black	
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276667
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD FOR COMMANDER, NAVFAC	SCALE 1" = 50' SPEC. B4149/67 SHEET 26 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
1	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

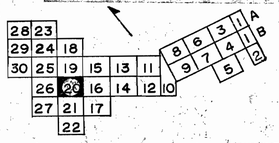
SEE NAVFAC DRAWING NO. 1276665 FOR CONTINUATION OF UTILITIES.



SEE NAVFAC DRAWING NO. 1276667 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
UNDERGROUND TELEPHONE	—UT—		COMBINED SEWERS		
CONTOURS			SANITARY SEWERS		—8"S→
BITUMINOUS PAVING			SEWER MANHOLE	○	●—(55)
CONCRETE PAVING			DROP INLET	□	■
BUILDING	□		VALVE		
UNDERGROUND POWER	—UP—		WATER LINE	—W—	
PRESSURE SEWER		—12" PS—	STEAM	—ST—	
POLE, HEIGHT & CLASS	⌀		ELECTRIC MANHOLE	○	
STORM SEWER		—12"SS→	COMPRESSED AIR	—COA—	
OXYGEN	—OXY—		SALT WATER	—SW—	
ACETYLENE	—ACE—				



AREA INDEX

NOTE: INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 25 OF 89

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

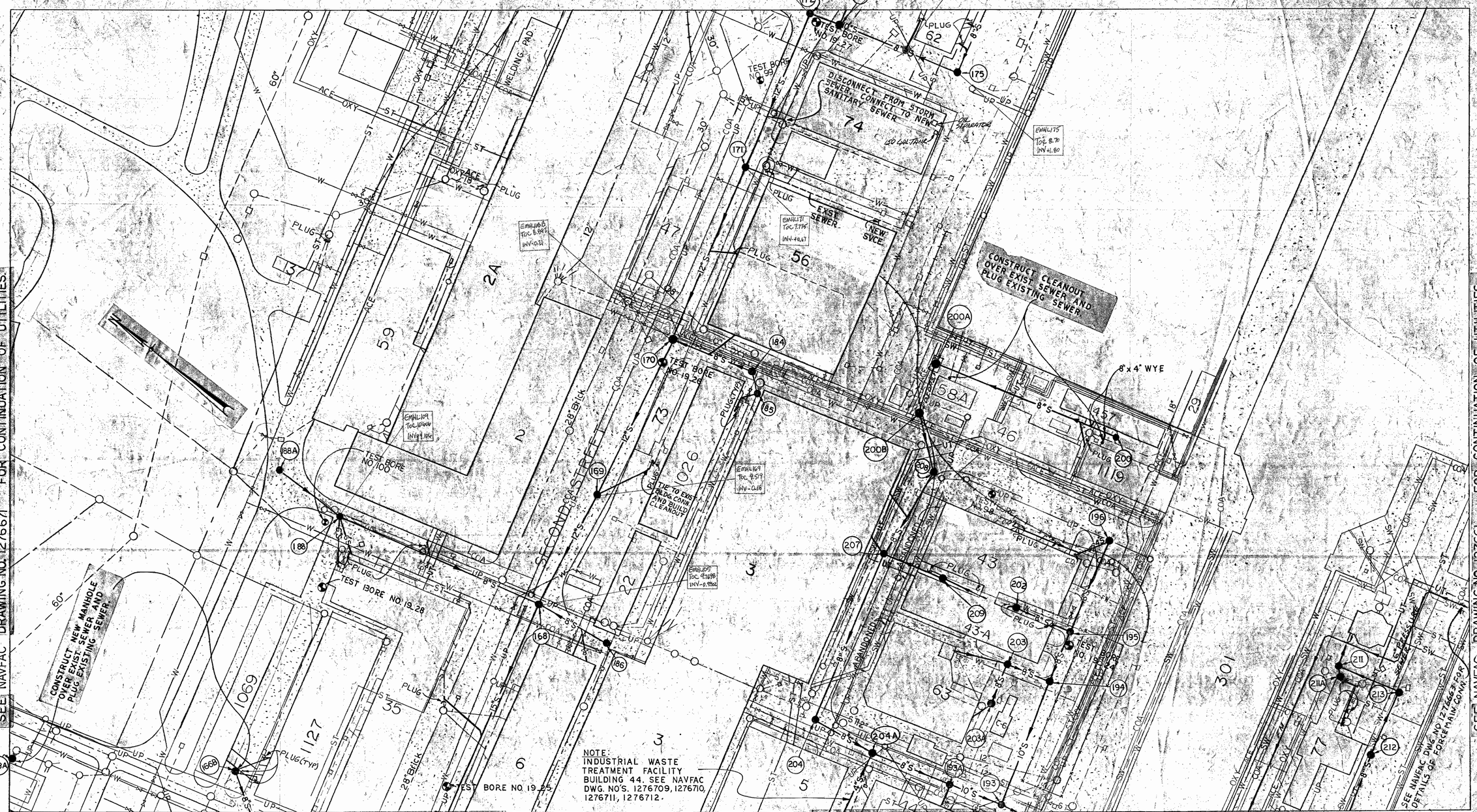
H410—26

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY, NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. Browne DR. McClellan CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrenn	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE Harold S. Wrenn, pres. FIRM MEMBER (TITLE)	SITE PLAN AREA 20
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR. CA Block	
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276666
OFFICER IN CHARGE	CONSTR. CONTR. NO. N62467 67 C 0344
APPROVED FOR COMMAND DATE	SCALE 1" = 50' SPEC. 84/19/68/7361-a SHEET 25 OF 89
EFD FOR COMMANDER, NAVFAC	

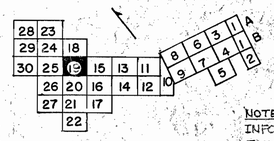
REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276664 FOR CONTINUATION OF UTILITIES.



LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			UNDERGROUND TELEPHONE	—UT—	
BITUMINOUS PAVING			COMBINED SEWERS		
CONCRETE PAVING			SANITARY SEWERS		—12"S—
BUILDING			SEWER MANHOLE		(172)
UNDERGROUND POWER	—UP—		DROP INLET		
GUY AND ANCHOR			VALVE		
POLE, HEIGHT & CLASS			WATER LINE	—W—	
STORM SEWER		—12"SS—	COMPRESSED AIR	—COA—	
			ELECTRIC MANHOLE		
OXYGEN	—OXY—		SALT WATER	—SW—	
STEAM	—ST—		ACETYLENE	—ACE—	



AREA INDEX

NOTE
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 24 OF 89

DATUM IS MEAN LOW WATER

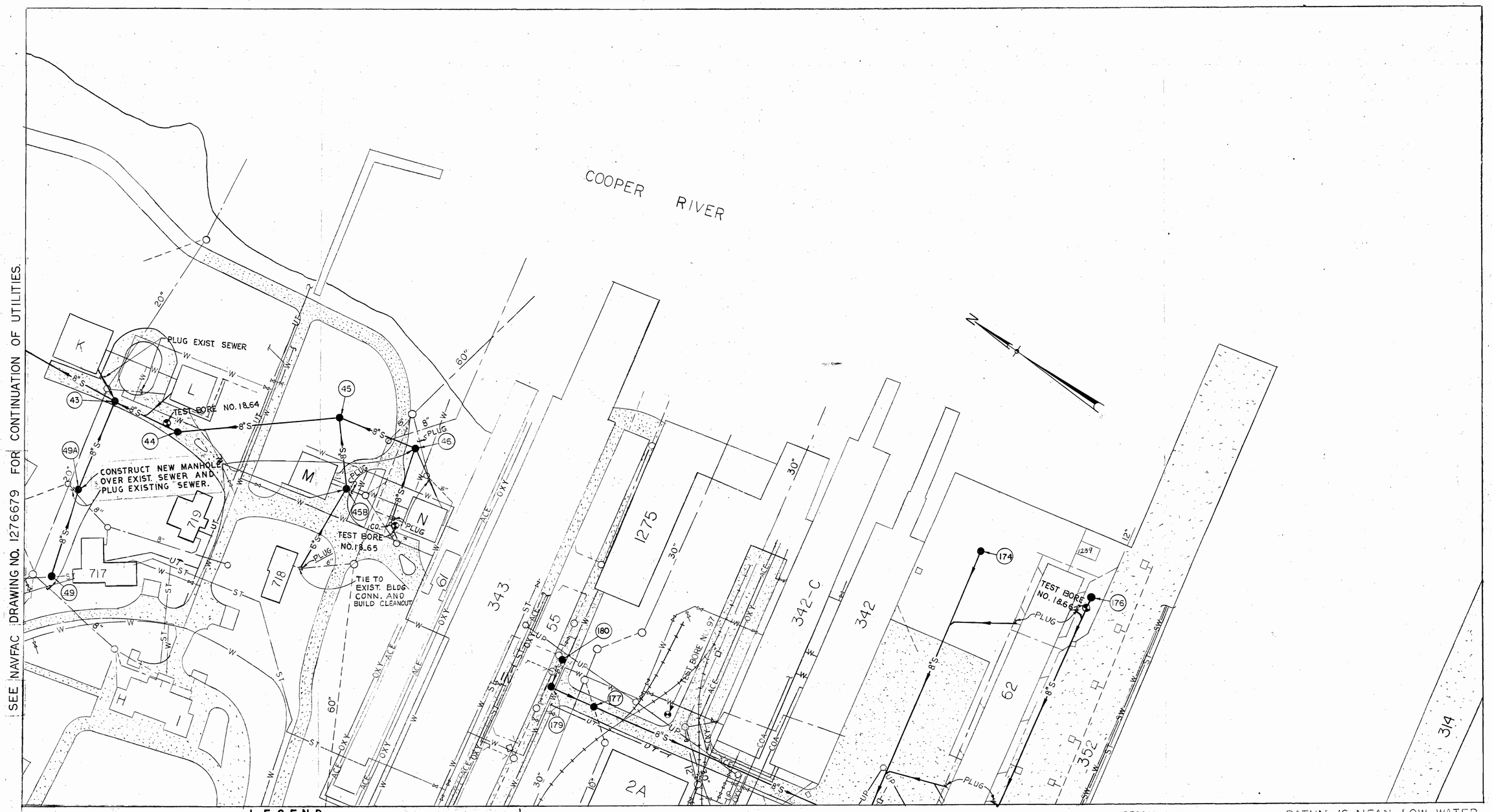
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

GRAPHIC SCALE
SCALE IN FEET
50 0 50 100

H410—25

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. BROWNE DR. BERRIO CHK. WILLIAMSON	NAVAL BASE CHARLESTON, S.C.
SUPV. WILLIAMSON CH. ENGR. WRENN	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE	SITE PLAN AREA 19
FIRM MEMBER (TITLE)	
SOEAST DIV. NFEC-DESIGN DIVISION	
P.O.E. BRADLEY DIR.	
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276665
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD FOR COMMANDER, NAVFAC	SCALE 1" = 50' SPEC. 84/1946 Rev-2 SHEET 24 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BUNDING	10/17/72	GETTER

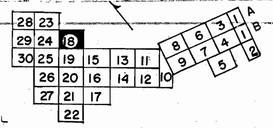


LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			UNDERGROUND TELEPHONE	—UT—	
BITUMINOUS PAVING			COMBINED SEWERS		
CONCRETE PAVING			SANITARY SEWERS		—12"S—
BUILDING			SEWER MANHOLE		(180)
UNDERGROUND POWER	—UP—		DROP INLET		
GUY AND ANCHOR			VALVE		
POLE, HEIGHT & CLASS			WATER LINE	—W—	
STORM SEWER		—12"SS—	FENCE	—X—	
ACETYLENE	—ACE—		ELECTRIC MANHOLE		
OXYGEN	—OXY—		STEAM	—ST—	
			SALT WATER	—SW—	

SEE NAVFAC DRAWING NO. 1276665 FOR CONTINUATION OF UTILITIES.

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.



AREA INDEX

RECORD DRAWING
DATE 10 APR 1974
SHEET 23 OF 89

DATUM IS MEAN LOW WATER

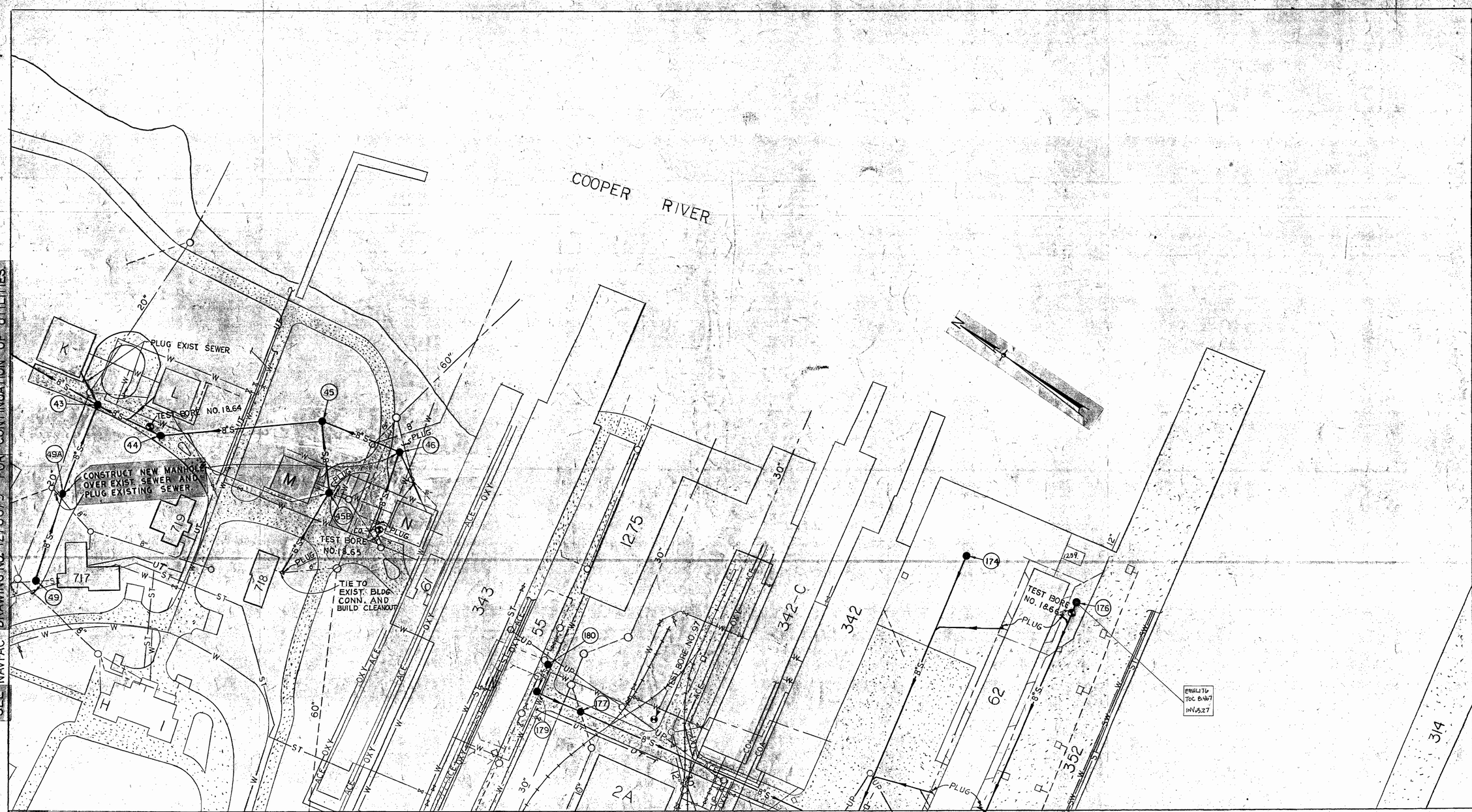
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

H410—24

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. Berrio CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Krewm	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE Harold D. Wilson, Pres. FIRM MEMBER (TITLE)	SITE PLAN AREA 18
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR.	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276664
APPROVED DATE	CONSTR. CONTR. NO. N62467 67 C 0344
OFFICER IN CHARGE	SCALE 1"=50' SPEC 84119/67 Revised SHEET 23 OF 89
APPROVED FOR COMMAND DATE	
EFD FOR COMMANDER, NAVFAC	

REVISIONS				
ET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLUNDIN	10/12	GETTER

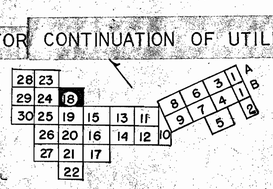


LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			UNDERGROUND TELEPHONE	—UT—	
BITUMINOUS PAVING			COMBINED SEWERS		
CONCRETE PAVING			SANITARY SEWERS		—12"S—
BUILDING			SEWER MANHOLE	○	●—(180)
UNDERGROUND POWER	—UP—		DROP INLET	□	■
GUY AND ANCHOR		—⊣	VALVE		
POLE, HEIGHT & CLASS	ϕ		WATER LINE	—W—	
STORM SEWER		—12"SS—	FENCE	—X—	
ACETYLENE	—ACE—		ELECTRIC MANHOLE	○	
OXYGEN	—OXY—		STEAM	—ST—	
			SALT WATER	—SW—	

SEE NAVFAC DRAWING NO. 1276665 FOR CONTINUATION OF UTILITIES.

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.



AREA INDEX

RECORD DRAWING
DATE 10 APR 1974
SHEET 23 OF 89

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

DATUM IS MEAN LOW WATER

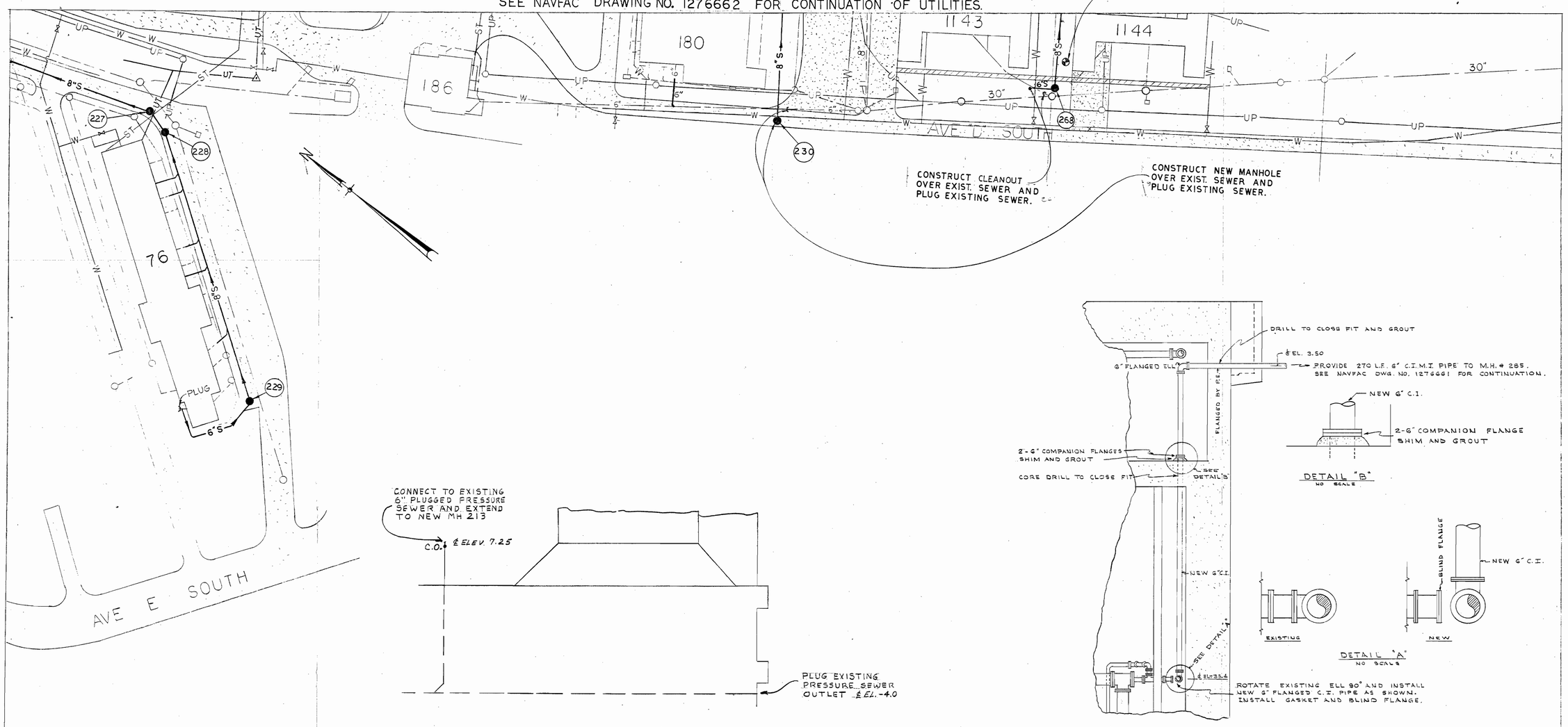
H410—24

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. Brown DR. Berry CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Brown	
SUBMITTED BY Richard L. Wilson 4-12-68 DATE	SANITARY & INDUSTRIAL SEWER SYSTEM
FIRM MEMBER (TITLE)	SITE PLAN AREA 18
SOEAST DIV. NFEC-DESIGN DIVISION	
POIC Bragdey DIR. Cooper	
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276664
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD FOR COMMANDER, NAVFAC	SCALE 1"=50' · SPEC. 8311/62 Rev-72 · SHEET 23 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO LS-BUILT	BLANDIN	10/17/62	GETTER

SEE NAVFAC DRAWING NO. 1276662 FOR CONTINUATION OF UTILITIES.



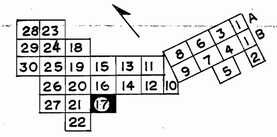
DRY DOCK NO. 2
NEW 6" C.I. SEWAGE DISCHARGE
NO SCALE

DRY DOCK NO. 5
NEW 6" C.I. SEWAGE DISCHARGE
NO SCALE

SEE NAVFAC DRAWING NO. 1276667 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		231
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		10"S	ELECTRIC MANHOLE		
STEAM	ST		UNDERGROUND TELEPHONE	UT	



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

RECORD DRAWING
DATE 20 APR 1964
SHEET 22 OF 89

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4" UNLESS OTHERWISE NOTE.

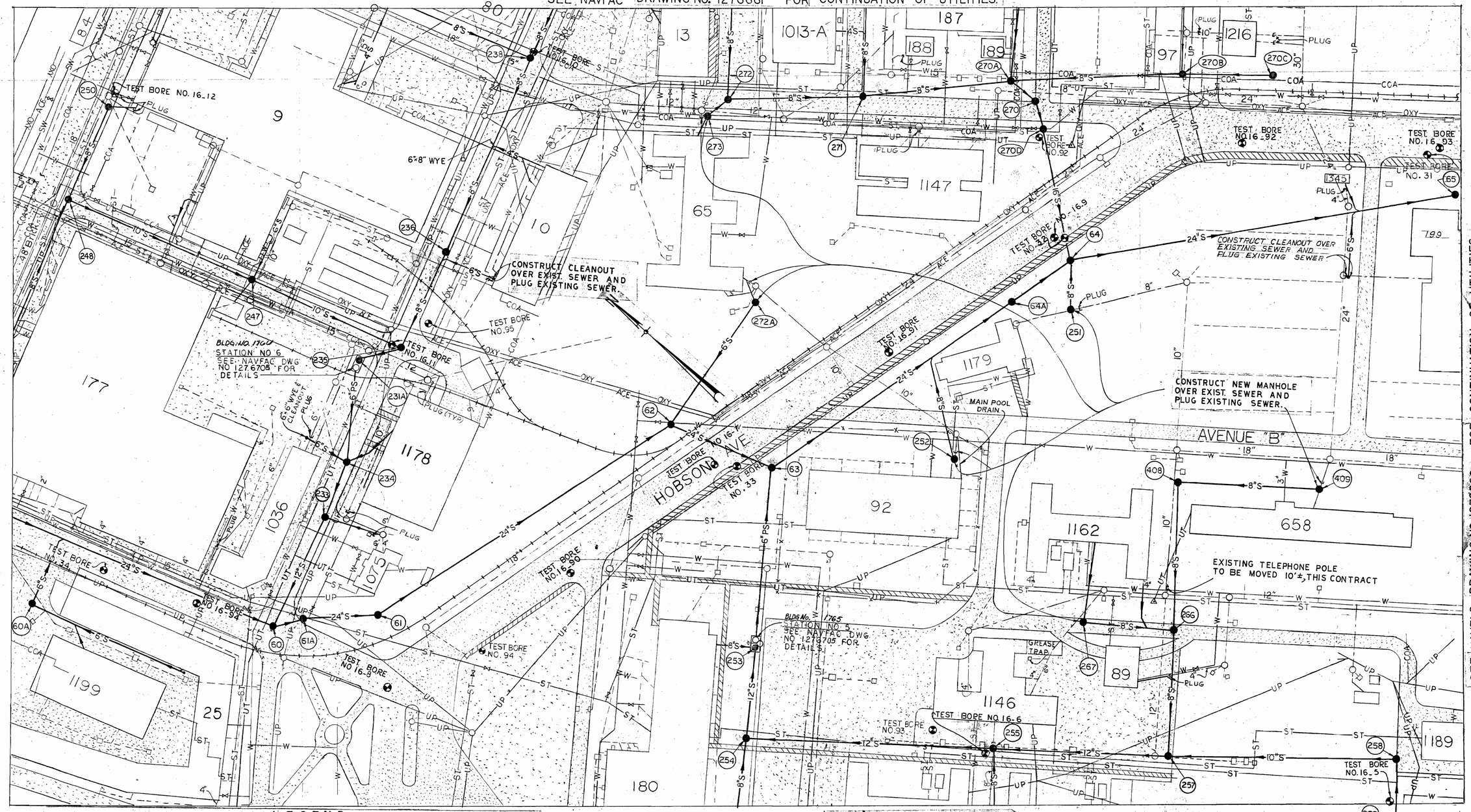
H410—23

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. Berrio CHK. Williamson SUPV. Williamson CH. ENGR. Wrenn	NAVAL BASE CHARLESTON, S.C. SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE Gerald L. Warner, pres. FIRM MEMBER (TITLE)	SITE PLAN AREA 17
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR. [signature]	DRY DOCK 2 & 5 — 6" CI. FORCE MAINS
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276663
OFFICER IN CHARGE	CONSTR. CONTR. NO. N62467-67-C-0344
APPROVED FOR COMMAND DATE [signature] EFD FOR COMMANDER, NAVFAC	SCALE 1" = 50' SPEC 89119/67/R61-21 SHEET 22 OF 89

STARPAT PRODUCTS INC. PORT WASHINGTON, N.Y.

REVISIONS				
LET.	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLUNDINE	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276661 FOR CONTINUATION OF UTILITIES.



SEE NAVFAC DRAWING NO. 1276666 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276660 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276663 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
UNDERGROUND TELEPHONE	—UT—		COMBINED SEWERS		
CONTOURS			SANITARY SEWERS		—8"S→
BITUMINOUS PAVING			SEWER MANHOLE	○	●—(62)
CONCRETE PAVING			DROP INLET	□	■
BUILDING	□		VALVE		
UNDERGROUND POWER	—UP—		WATER LINE	—W—	
PRESSURE SEWER		—6"PS→	SALT WATER	—SW—	
POLE, HEIGHT & CLASS	ϕ		ELECTRIC MANHOLE	○	
STORM SEWER		—8"SS→	ACETYLENE	—ACE—	
STEAM	—ST—		OXYGEN	—OXY—	
COMPRESSED AIR	—COA—				

AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 20 APR 1974
SHEET 21 OF 89

DATUM IS MEAN LOW WATER

NOTED: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

H410—22

GRAPHIC SCALES
SCALE IN FEET
60 0 50 100

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S. C.

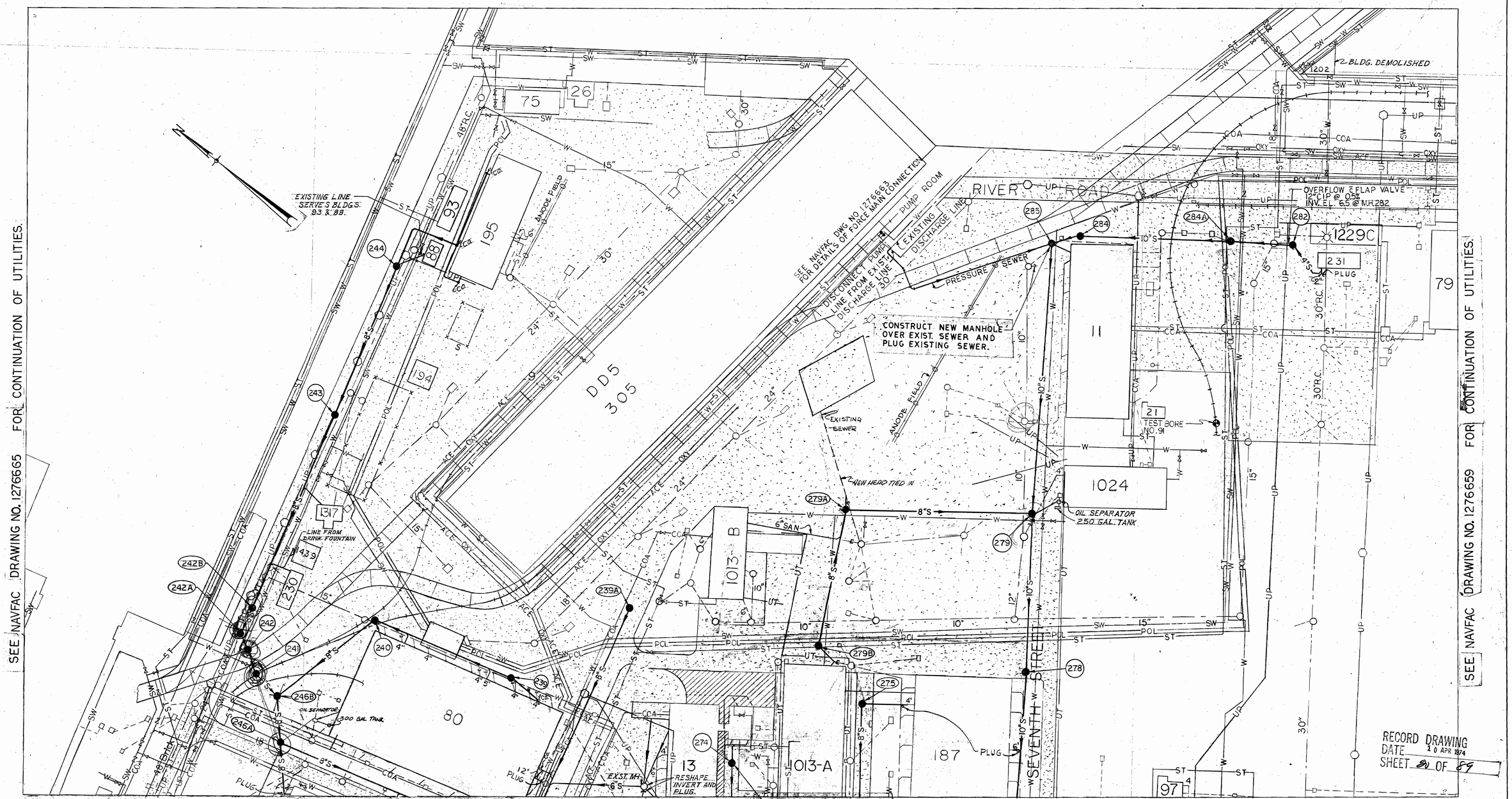
DES. Grover DR. Berrio CHK. Williamson
SUPV. Williamson CH. ENGR. Wrenn
SUBMITTED BY 4-12-68 DATE
FIRM MEMBER (TITLE)
SOEAST DIV. NFEC-DESIGN DIVISION
POE BRADLEY DIR.
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
FOR COMMANDER, NAVFAC

NAVAL BASE CHARLESTON, S.C.

SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA 16

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276662
SCALE 1"=50'		CONSTR. CONTR. NO. N62467 67 C 0344
		SPEC BA/N/G/T/O/K/A SHEET 21 OF 89

REVISIONS			
LET	DESCRIPTION	PREP'D. BY	APPROVED
	CORRECTED TO AS-BUILT	BLUNDIN	10/17/72 GETTER



DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

SEE NAVFAC DRAWING NO. 1276662 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			UNDERGROUND TELEPHONE	—UT—	
BITUMINOUS PAVING			COMBINED SEWERS		
CONCRETE PAVING			SANITARY SEWERS		—8"S→
BUILDING			SEWER MANHOLE		—(241)
UNDERGROUND POWER	—UP—		DROP INLET		
ACETYLENE	—ACE—		VALVE		
POLE, HEIGHT & CLASS			WATER LINE	—W—	
STORM SEWER		—10"SS→	STEAM	—ST—	
OXYGEN	—OXY—		ELECTRIC MANHOLE		
FUEL & OIL	—POL—		SALT WATER	—SW—	
			COMPRESSED AIR	—COA—	

AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

H410—21

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S.C.

NAVAL BASE — CHARLESTON, S.C.

SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN — AREA 15

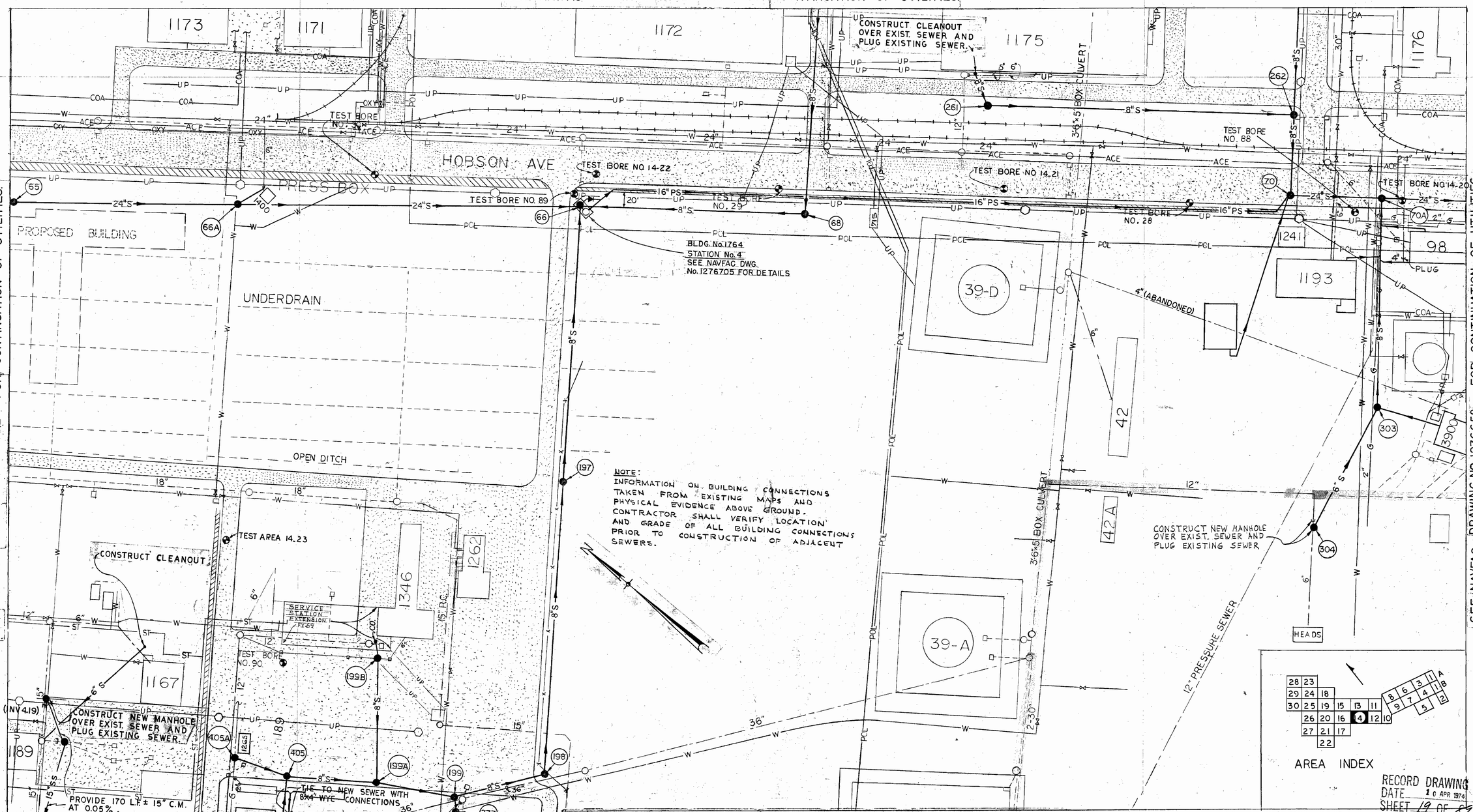
SIZE	F
CODE IDENT. NO.	80091
NAVFAC DRAWING NO.	1276661
CONSTR. CONTR. NO.	N62467 67C0344
SCALE	1" = 50'
SHEET	20 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO RE-BUILT	BUNDY	10/17/72	GETTER

SEE NAVFAC DRAWING NO. 1276659 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276662 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276658 FOR CONTINUATION OF UTILITIES.



NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

LEGEND

	EXISTING	NEW
CONTOURS		
BITUMINOUS PAVING		
CONCRETE PAVING		
BUILDING		
UNDERGROUND POWER	—UP—	
PRESSURE SEWER		—16"PS—
POLE, HEIGHT & CLASS		
STORM SEWER		—12"SS—
STEAM	—ST—	
COMPRESSED AIR	—COA—	

	EXISTING	NEW
COMBINED SEWERS		
SANITARY SEWERS		—8"S—
SEWER-MANHOLE		(67)
DROP INLET		
VALVE		
WATER LINE	—W—	
FENCE	—X—	
ELECTRIC MANHOLE		
ACETYLENE	—ACE—	
OXYGEN	—OXY—	
GAS	—G—	

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED

H410—20

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

DES. Brown DR. Perrin CHK. Williamson
SUPV. Williamson CH. ENGR. Williamson
SUBMITTED BY 14-12-68 DATE
FIRM MEMBER (TITLE) Bruce A. Williamson, Pres.
SOEAST DIV. NFEC-DESIGN DIVISION
POE BRADLEY DIR. Crosick
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
FOR COMMANDER, NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S. C.

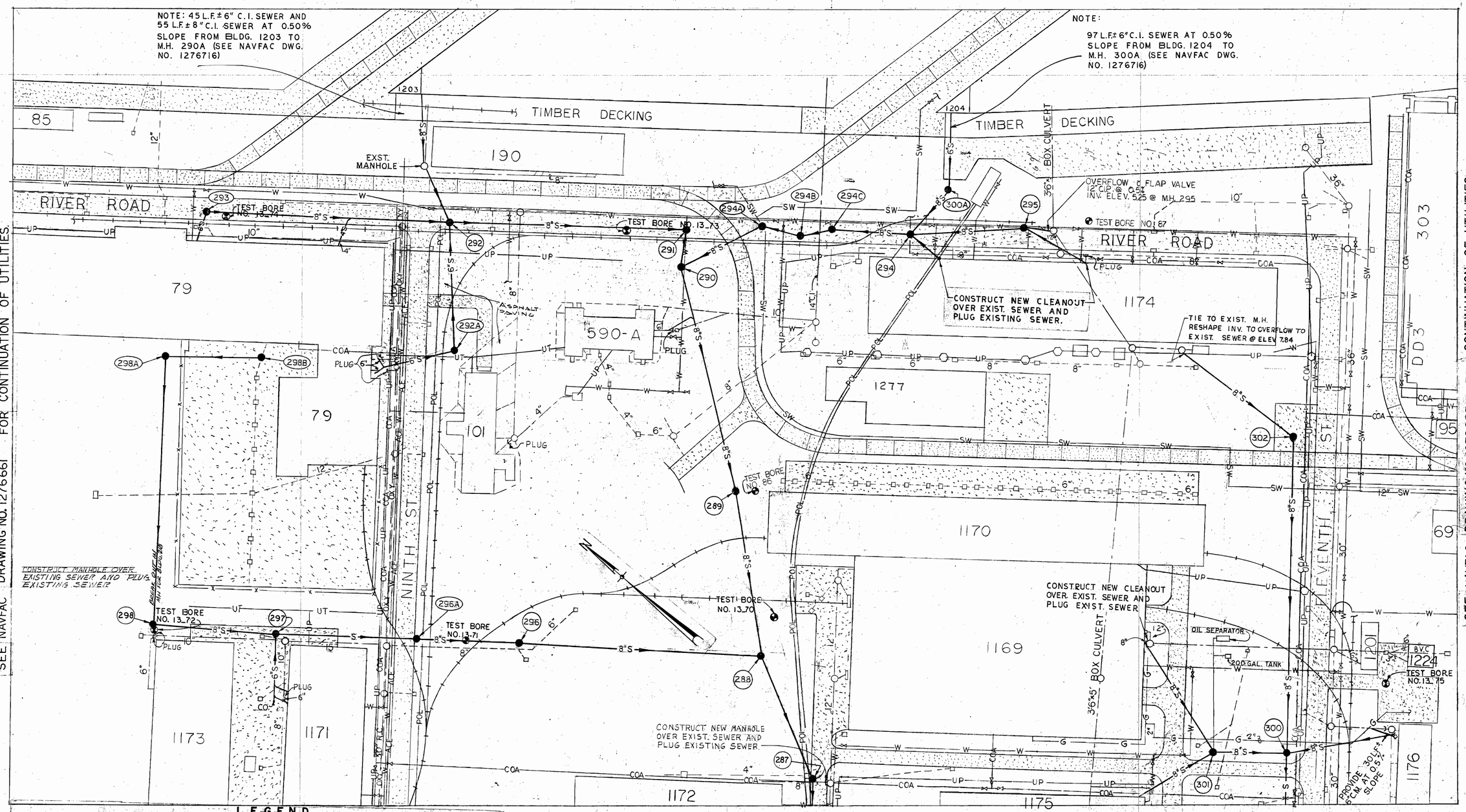
NAVAL BASE CHARLESTON, S.C.

SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA 14

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276660

CONSTR. CONTR. NO. N62467 67 C 0344
SCALE 1" = 50 SPEC. 68-1/67/Rev. SHEET 19 OF 89

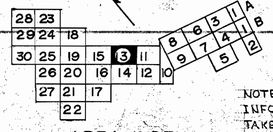
REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDING	10/17/72	GETTER



LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S←
CONCRETE PAVING			SEWER MANHOLE	○	●—291
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE	—⋈—	
FUEL & OIL	—POL—		WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	—X—	
STORM SEWER		—10"SS←	ELECTRIC MANHOLE	○	
COMPRESSED AIR	—COA—		ACETYLENE	—ACE—	
OXYGEN	—OXY—		SALT WATER	—SW—	
GAS	—G—		UNDERGROUND TELEPHONE	—UT—	

SEE NAVFAC DRAWING NO. 1276660 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE: INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 18 OF 89

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED.

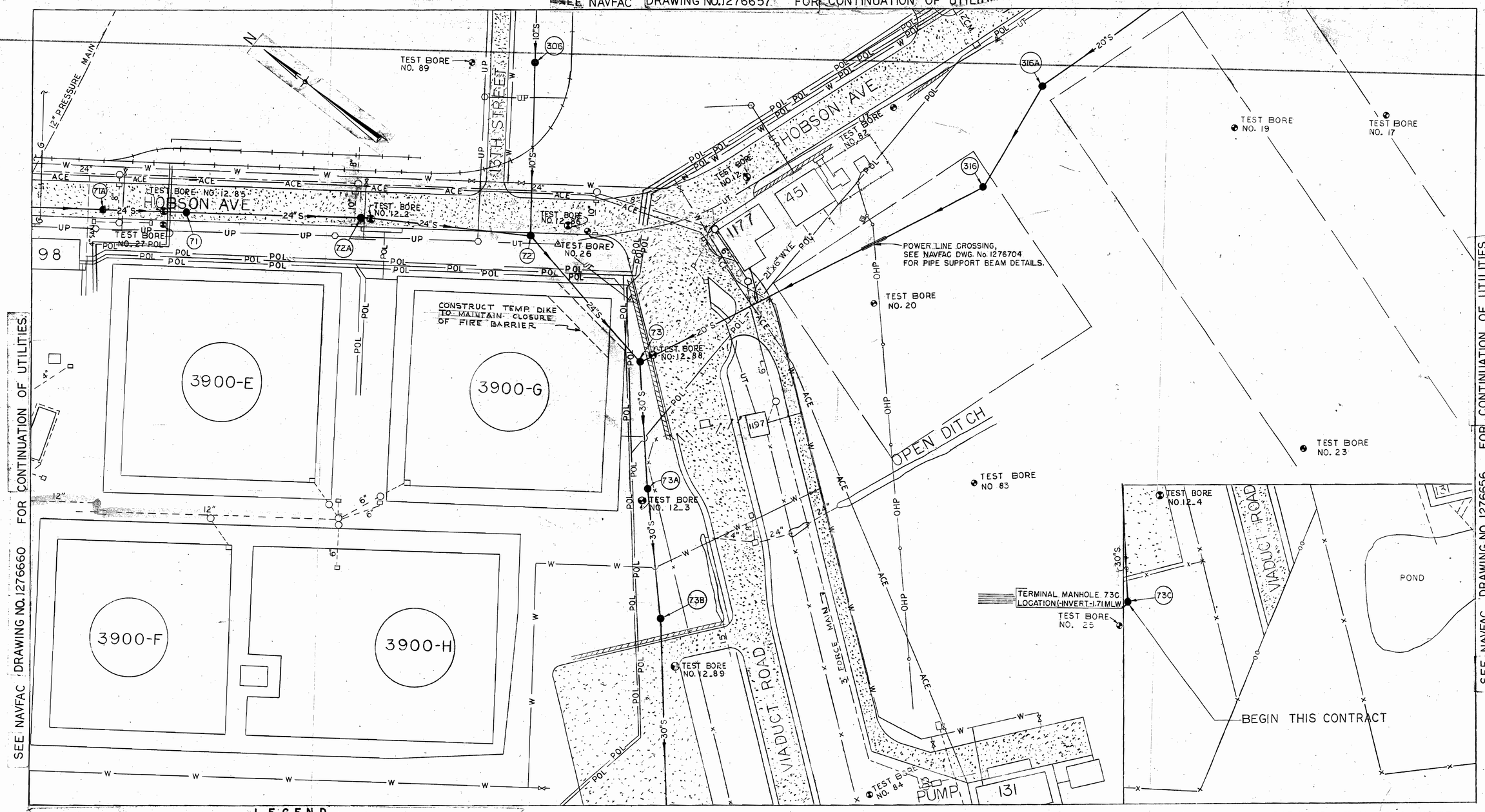
H410—19

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S.C.
DES. Browne DR. McClellan CHK. Williamson	NAVAL BASE CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Wrenn	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-68 DATE FIRM MEMBER (TITLE)	SITE PLAN AREA 13
SOEAST DIV. NFEC-DESIGN DIVISION P.O.E. BRADLEY DIR.	
APPROVED DATE	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 1276659
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467-67 C-0344
EPD FOR COMMANDER, NAVFAC	SCALE 1" = 50' SPEC. BAD 9/67 SHEET 18 OF 89

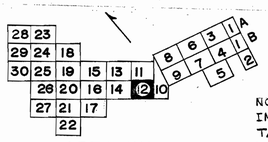
REVISIONS				
LET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLENDING	10/17/72	GETTER

SEE NAVFAC DRAWING NO.1276657 FOR CONTINUATION OF UTILITIES



LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S—
CONCRETE PAVING			SEWER MANHOLE	○	●(73)
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE		
PROPERTY LINES	—O O—		WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	—X—	
STORM SEWER		—10"SS—	ELECTRIC MANHOLE	○	
ACETYLENE	—ACE—		FUEL & OIL	—POL—	
UNDERGROUND TELEPHONE	—UT—		TELEPHONE MANHOLE	△	
GAS	—G—				



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

RECORD DRAWING
DATE 21 APR 1974
SHEET 12 OF 89

DATUM IS MEAN LOW WATER

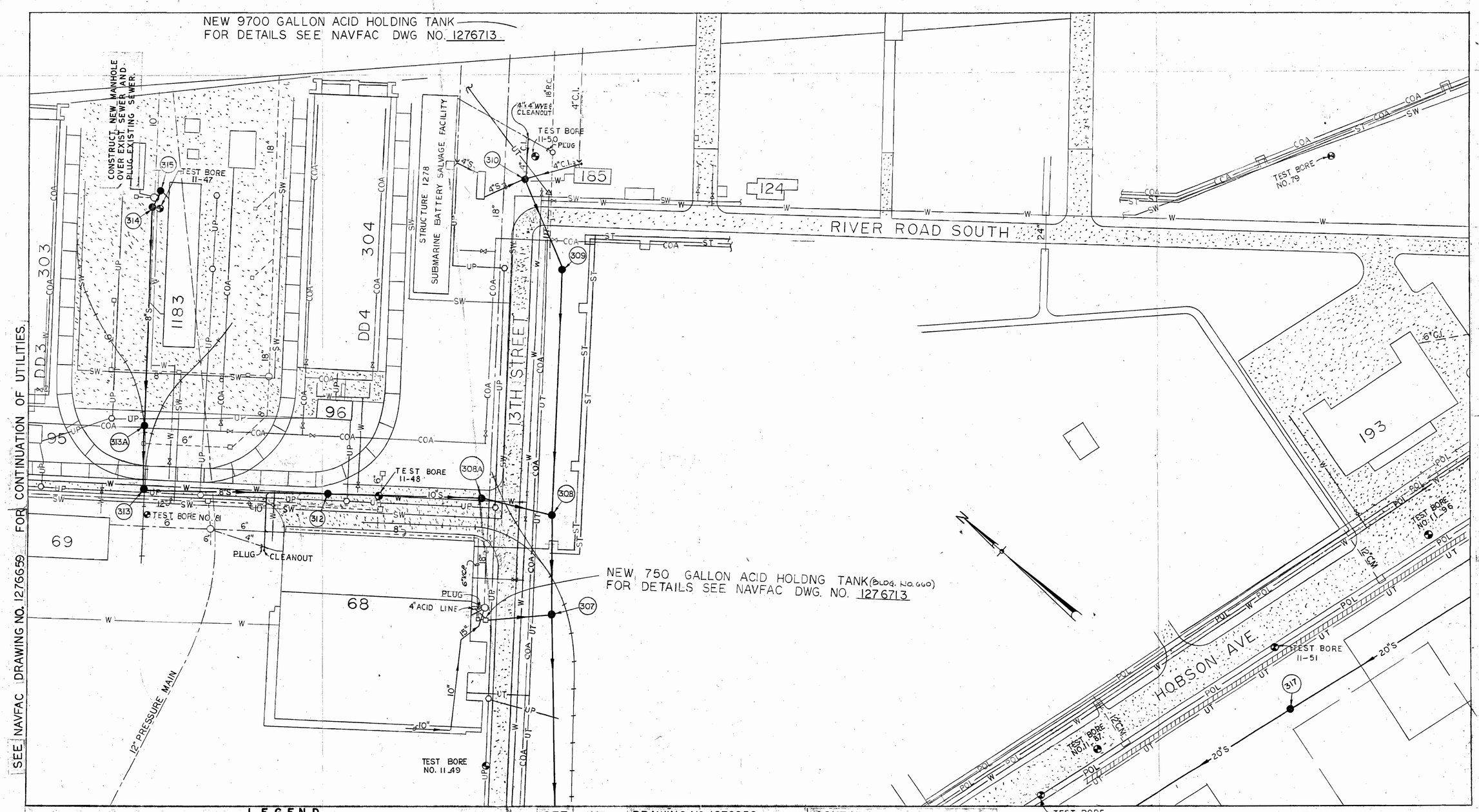
NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING.

H410—18

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Browne DR. Revity CHK. Williamson	NAVAL BASE	CHARLESTON, S.C.
SUPV. Williamson CH. ENGR. Williamson	SANITARY & INDUSTRIAL SEWER SYSTEM SITE PLAN AREA 12	
SUBMITTED BY Harold A. Williamson 4-12-68 DATE		
FIRM MEMBER (TITLE)		
SOEAST DIV. NFEC-DESIGN DIVISION		
PDE. BRADLEY DIR.		
APPROVED DATE	SIZE F	CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276658
OFFICER IN CHARGE		
APPROVED FOR COMMAND DATE		CONSTR. CONTR. NO. N62467-67 C-0344
EPD-FOR COMMANDER, NAVFAC	SCALE 1"=50'	SPEC 8419/1/2 REV 2 SHEET 17 OF 89

STANFAST PRODUCTS INC. FORT WASHINGTON, N.Y.

REVISIONS				
LET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDINO	1/72	GETTER



LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S—
CONCRETE PAVING			SEWER MANHOLE		(312)
BUILDING			DROP INLET		
UNDERGROUND POWER	—UP—		VALVE		
GUY AND ANCHOR			WATER LINE	—W—	
UNDERGROUND TELEPHONE	—UT—		TELEPHONE MANHOLE		
STORM SEWER		—10"SS—	ELECTRIC MANHOLE		
STEAM	—ST—		COMPRESSED AIR	—COA—	
FUEL & OIL	—POL—		SALT WATER	—SW—	

AREA INDEX

NOTE
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

RECORD DRAWING
DATE 10 APR 1974
SHEET 16 OF 89
H410—17

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S.C.

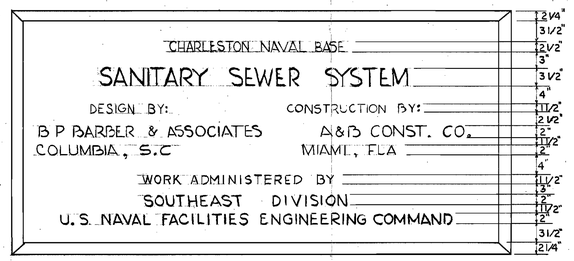
DES. Brouster DR. Bevins CHK. Williams
SUPV. Williamson CH. ENGR. Wesson
SUBMITTED BY Ronald L. Wesson, Pres. DATE 4-12-68
FIRM MEMBER (TITLE)
SOEAST DIV. NFEC-DESIGN DIVISION
PDE BRADLEY DIR. Ashack
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
EFD FOR COMMANDER, NAVFAC

NAVAL BASE CHARLESTON, S.C.

SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA II

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276657
SCALE 1"=50'		CONSTR. CONTR. NO. N62467-67-C-0344
		SPEC 8-11/4/67 Ser-2 SHEET 16 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D. BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLLNG	10/17/74	GETTER

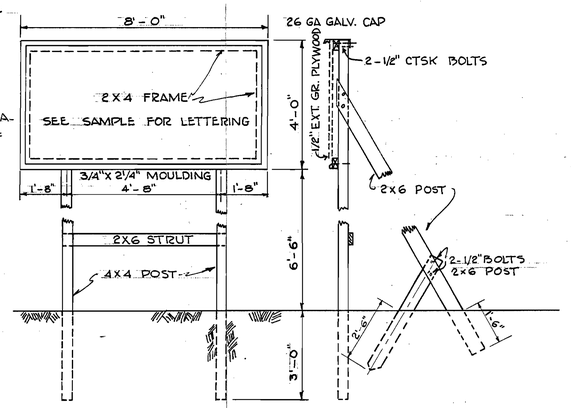


NOTE: ① IN SPACE HEADED CONSTRUCTION BY: SHOW NAME OF PRIME CONTRACTOR

SAMPLE LETTERING FOR CONSTRUCTION SIGN

NOTES:

POST AND BRACES SHALL BE PRESSURE TREATED. ALL FASTENINGS SHALL BE ZINC-COATED. PAINTS SHALL BE FIRST QUALITY, EXTERIOR TYPE. LETTERING AND FINISH COAT OF SIGN FACE SHALL BE "TRIM" TYPE PAINT. LETTER, MOLDING AND METAL CAP SHALL BE DARK BLUE. OTHER SURFACES SHALL BE WHITE. APPLY PRIME, BODY AND FINISH COATS TO SIGN FACE, AND PRIME AND FINISH COATS ELSEWHERE. BACK PRIME CONTACT SURFACES

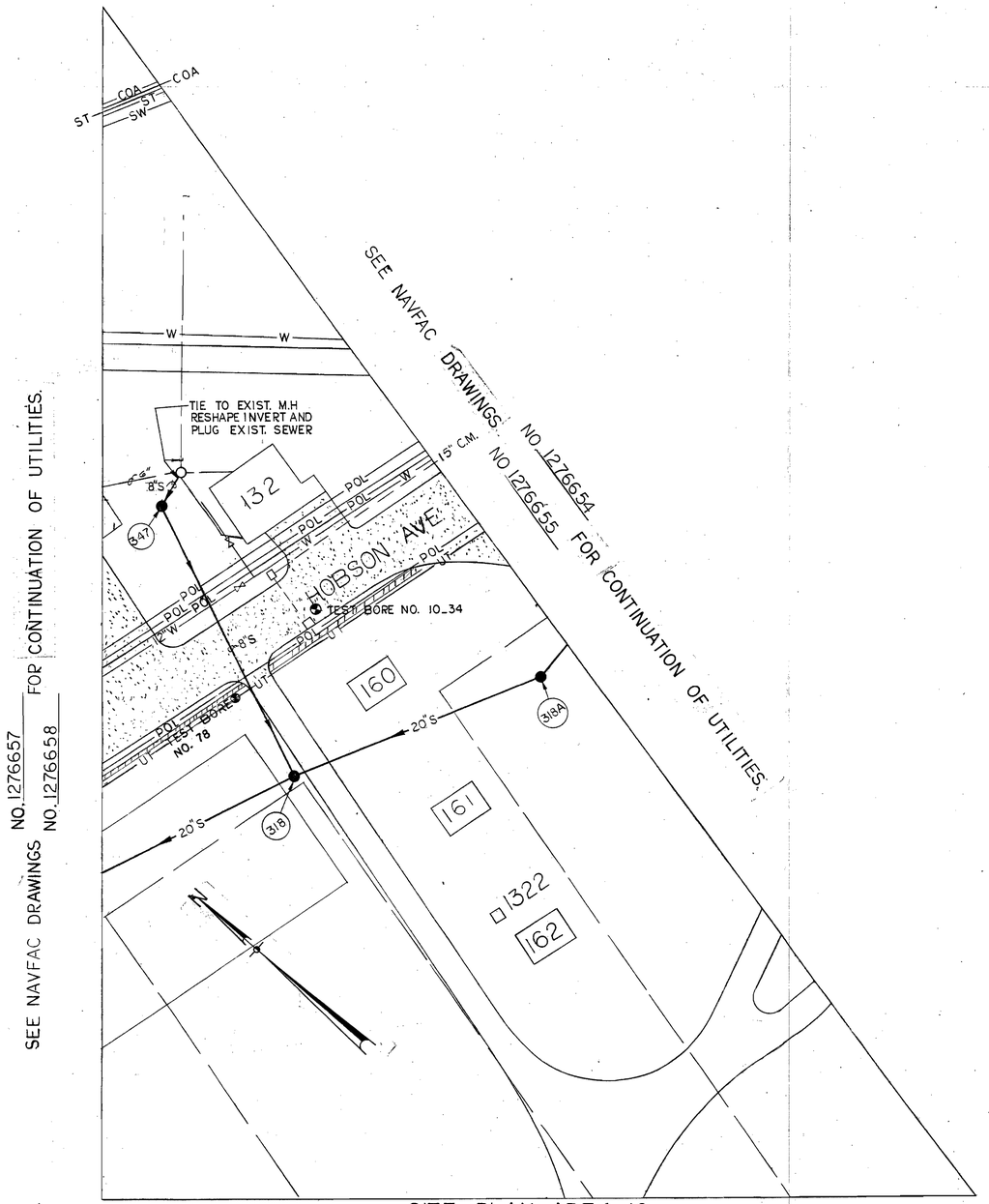


TYPICAL CONSTRUCTION SIGN

NOT TO SCALE

LEGEND

	EXISTING	NEW		EXISTING	NEW
UNDERGROUND TELEPHONE	—UT—		COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE	○	●318
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE		
GUY AND ANCHOR			WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	—X—	
STORM SEWER		10"SS	ELECTRIC MANHOLE	○	
TELEPHONE MANHOLE	△		FUEL & OIL	—POL—	



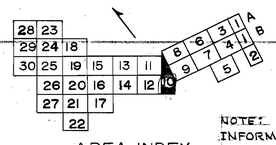
SITE PLAN-AREA 10

SCALE: 1"=50'

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED CLASS I BEDDING.

RECORD DRAWING
DATE 10 APR 1974
SHEET 15 OF 89

DATUM IS MEAN LOW WATER



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALES

SCALE IN FEET

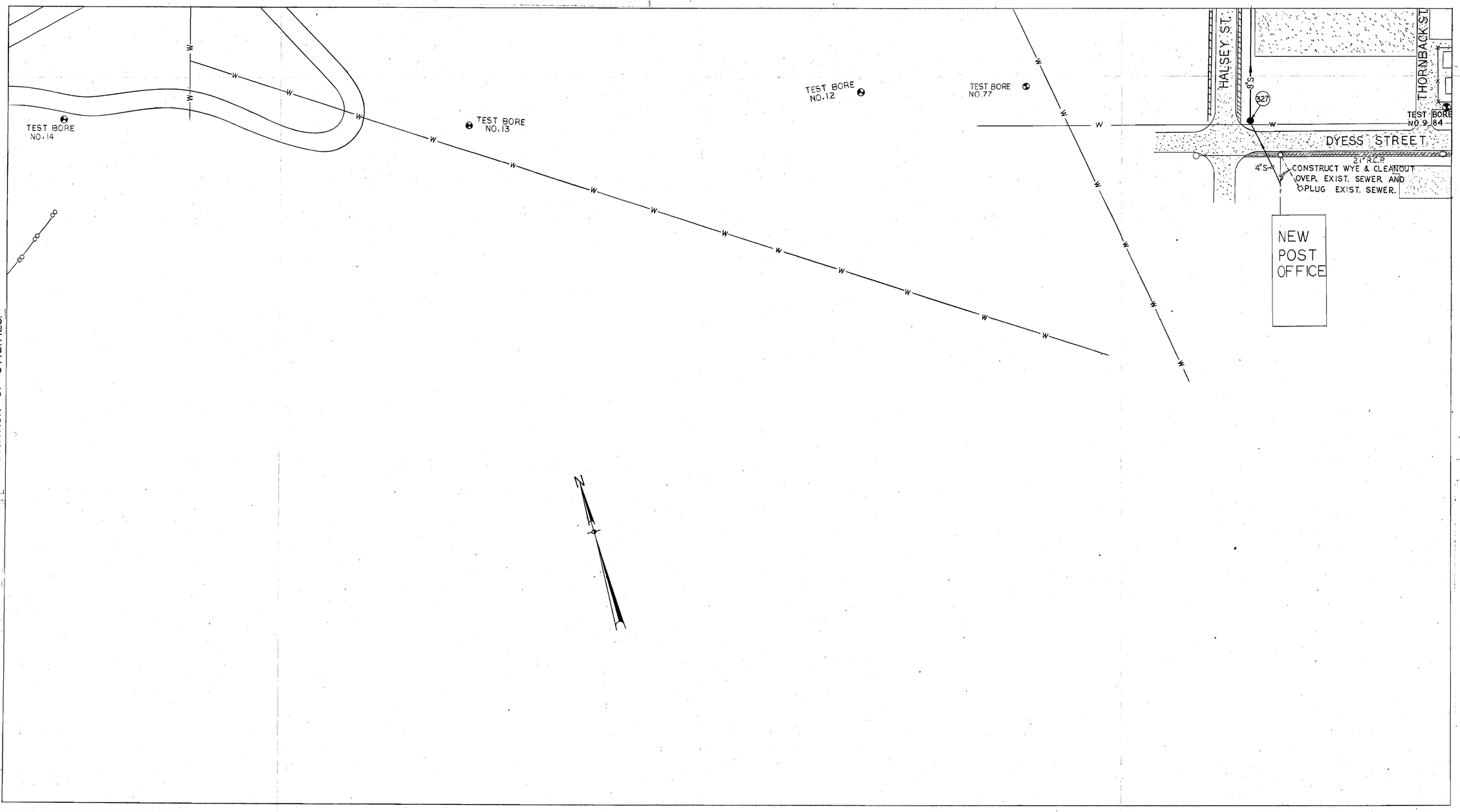
50 0 50 100

H410—16

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Brown DR. McClellan CHK. Williams	NAVAL BASE CHARLESTON, S.C
SUPV. Williams CH. ENGR. Brown	
SUBMITTED BY Bennett L. Williams, Jr. DATE 4-12-73 FIRM MEMBER (TITLE)	SANITARY & INDUSTRIAL SEWER SYSTEM
SOEAST DIV. NFEC-DESIGN DIVISION RDE BRADLEY DIR.	SITE PLAN - AREA 10 & CONSTRUCTION SIGN
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276656
OFFICER IN CHARGE APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467-67 C-0244
FOR COMMANDER, NAVFAC	SCALE AS SHOWN · SPEC. Contract-8 · SHEET 15 OF 89

REVISIONS				
LET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	5 OCT 74	GETTER

SEE NAVFAC DRAWING NO. 1276654 FOR CONTINUATION OF UTILITIES.

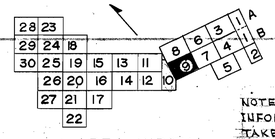


SEE NAVFAC DRAWING NO. 1276656 FOR CONTINUATION OF UTILITIES.

SEE NAVFAC DRAWING NO. 1276653 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
CONTOURS			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		8"S
CONCRETE PAVING			SEWER MANHOLE		326
BUILDING			DROP INLET		
UNDERGROUND POWER	UP		VALVE		
GUY AND ANCHOR			WATER LINE	W	
POLE, HEIGHT & CLASS			FENCE	X	
STORM SEWER		10"SS	ELECTRIC MANHOLE		
PROPERTY LINES	OO				



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 14 OF 89
H410—15

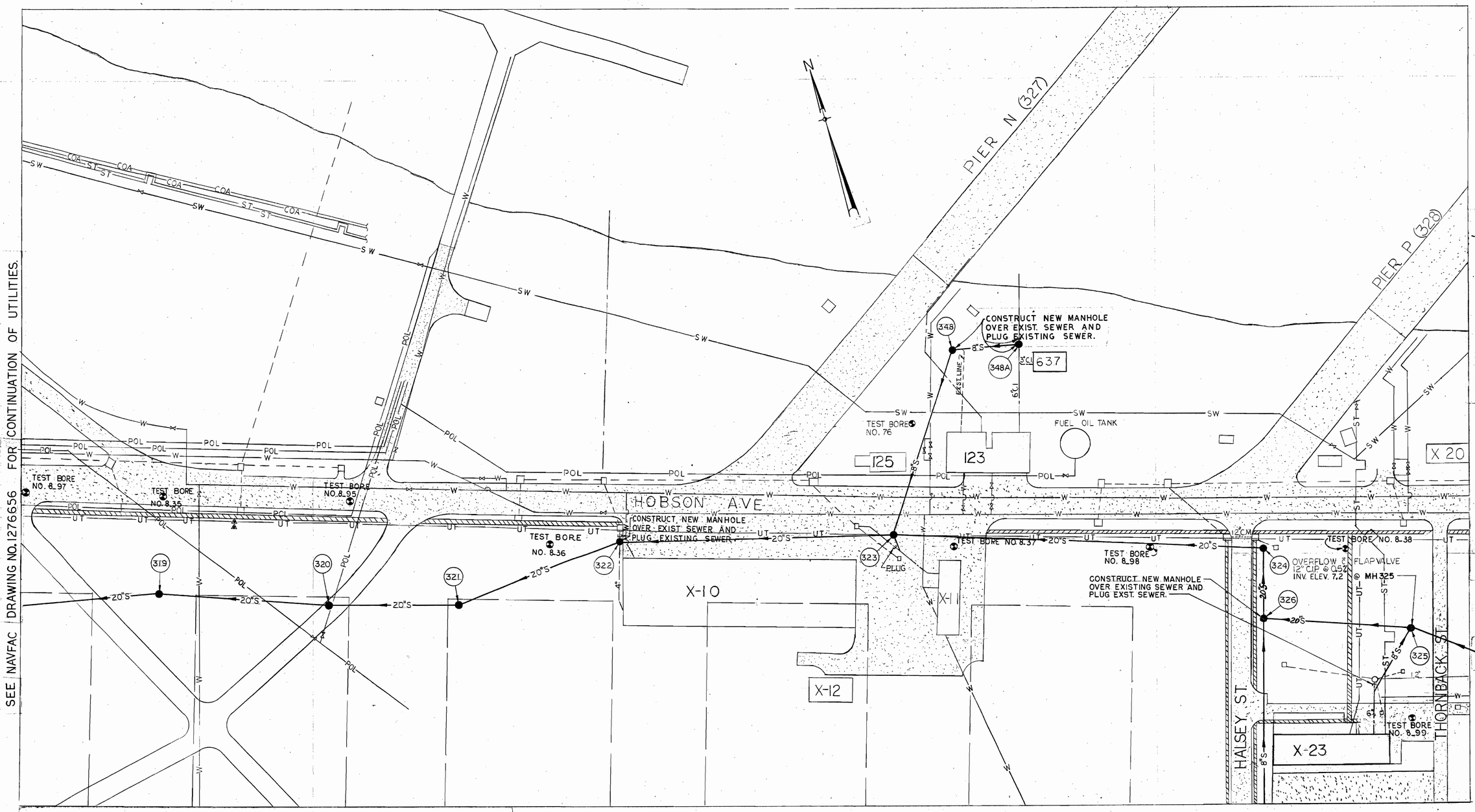
GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING.

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. / DR. / CHK.	NAVAL BASE CHARLESTON, S.C
SUPV. / CH. ENGR.	
SUBMITTED BY / DATE	SANITARY & INDUSTRIAL SEWER SYSTEM
FIRM MEMBER (TITLE)	SITE PLAN AREA 9
SOEAST DIV. NFEC-DESIGN DIVISION P.D.E. BRADLEY DIR.	
APPROVED / DATE	SIZE F / CODE IDENT. NO. 80091 / NAVFAC DRAWING NO. 1276655
OFFICER IN CHARGE	
APPROVED FOR COMMAND / DATE	CONSTR. CONTR. NO. N62467 67 C 0344
CEO FOR COMMANDER, NAVFAC	SCALE 1"=50 / SPEC. 84/125/00-21 / SHEET 14 OF 89

REVISIONS				
LET	DESCRIPTION	PREPD BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	[illegible]	[illegible]	GETTER

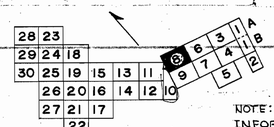


LEGEND

	EXISTING	NEW
CONTOURS		
BITUMINOUS PAVING		
CONCRETE PAVING		
BUILDING		
UNDERGROUND POWER	—UP—	
SALT WATER	—SW—	
POLE, HEIGHT & CLASS		
STORM SEWER		—10"SS→
COMPRESSED AIR	—COA—	
UNDERGROUND TELEPHONE	—UT—	

	EXISTING	NEW
COMBINED SEWERS		
SANITARY SEWERS		—8"S→
SEWER MANHOLE		321
DROP INLET		
VALVE		
WATER LINE	—W—	
FUEL & OIL	—POL—	
ELECTRIC MANHOLE		
STEAM	—ST—	
TELEPHONE MANHOLE		

SEE NAVFAC DRAWING NO. 1276655 FOR CONTINUATION OF UTILITIES.



AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 13 OF 89
H410—14

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING.

GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC.
COLUMBIA, S.C.
ENGINEERS

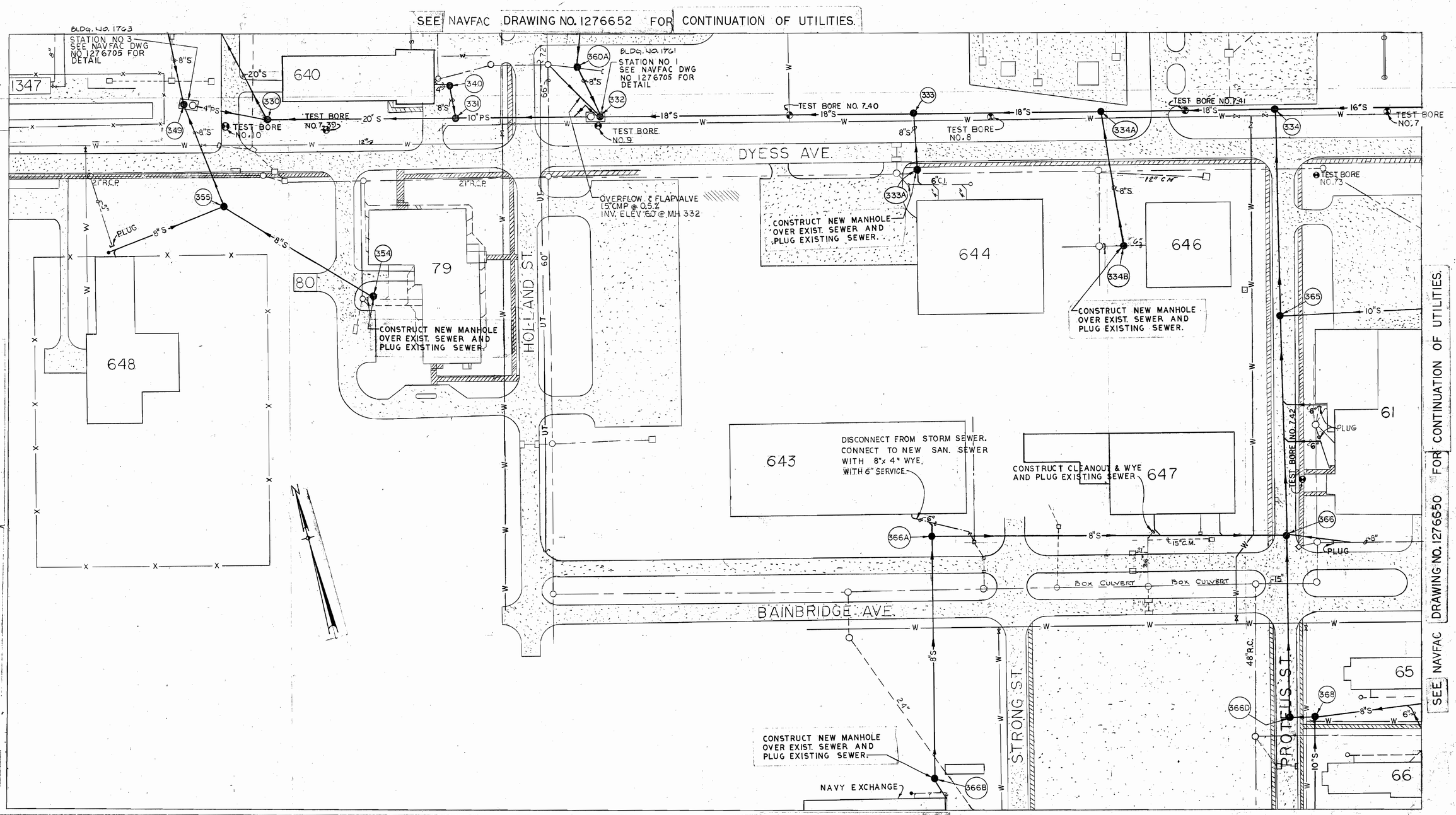
DES. [illegible] DR. [illegible] CHK. [illegible]
SUPV. [illegible] CH. ENGR. [illegible]
SUBMITTED BY [illegible] DATE 4-12-[illegible]
FIRM MEMBER (TITLE) [illegible]
SOEAST DIV. NFEC-DESIGN DIVISION
P.D.E. BRADLEY DIR. [illegible]
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
FOR COMMANDER, NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S. C.
NAVAL BASE CHARLESTON, S.C.
SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA 8

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276654

CONSTR. CONTR. NO. N62467-67-C-0344
SCALE 1"=50
SPEC. [illegible] SHEET 13 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLANDIN	10/72	GETTER



SEE NAVFAC DRAWING NO. 1276651 FOR CONTINUATION OF UTILITIES.

LEGEND

	EXISTING	NEW		EXISTING	NEW
ANODE FIELD			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S—
CONCRETE PAVING			SEWER MANHOLE	○	●—327
BUILDING	□		DROP INLET	□	■
UNDERGROUND POWER	—UP—		VALVE	—⋈—	
PRESSURE SEWER		—4"PS—	WATER LINE	—W—	
POLE, HEIGHT & CLASS	ϕ		FENCE	—X—	
STORM SEWER		—10"SS—	ELECTRIC MANHOLE	○	
UNDERGROUND TELEPHONE	—UT—				

AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

RECORD DRAWING
DATE 10 APR 1974
SHEET 12 OF 89
H410—13

DATUM IS MEAN LOW WATER

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING.

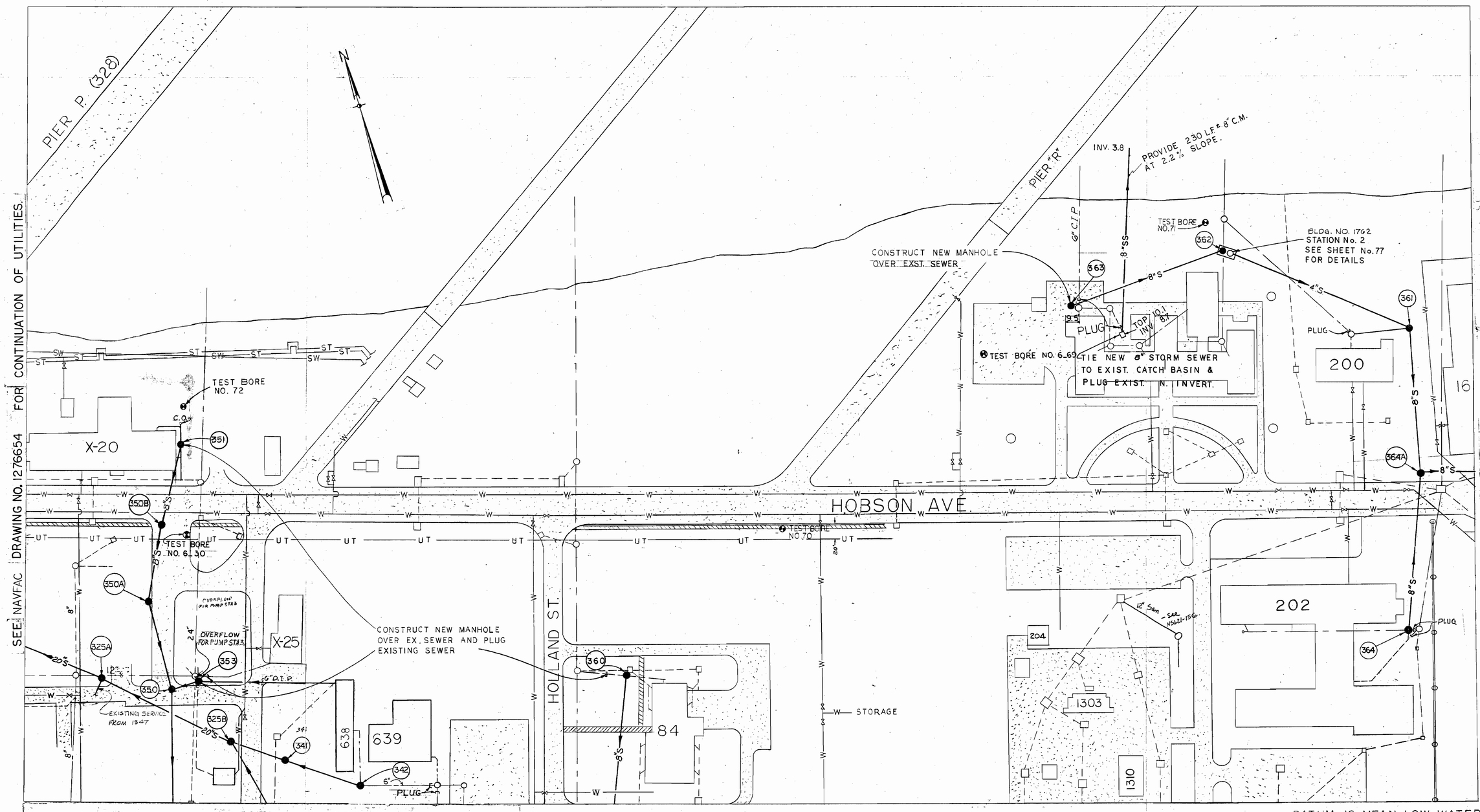
GRAPHIC SCALES
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS
DES. Browne DR. McClellan CHK. Williamson
SUPV. Williamson CH. ENGR. Arden
SUBMITTED BY: Donald A. Wesson P.E.S.E. 4-12-68 DATE
FIRM MEMBER (TITLE)
SOEAST DIV. NFEC-DESIGN DIVISION
P.O.E. BRADLEY DIR. C.A. Black
APPROVED DATE
OFFICER IN CHARGE
APPROVED FOR COMMAND DATE
ETS FOR COMMANDER, NAVFAC

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S.C.
NAVAL BASE CHARLESTON, S.C.
SANITARY & INDUSTRIAL SEWER SYSTEM
SITE PLAN AREA 7

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	1276653
SCALE 1" = 50'		CONSTR. CONTR. NO. N62467-67 C-0344
		SPEC. 64/72/72 SHEET 12 OF 89

REVISIONS				
LET	DESCRIPTION	PREP'D BY	DATE	APPROVED
	CORRECTED TO AS-BUILT	BLUNDIN	7/72	GETTER



DATUM IS MEAN LOW WATER

LEGEND

	EXISTING	NEW		EXISTING	NEW
ANODE FIELD			COMBINED SEWERS		
BITUMINOUS PAVING			SANITARY SEWERS		—8"S—
CONCRETE PAVING			SEWER MANHOLE		(361)
BUILDING			DROP INLET		
UNDERGROUND TELEPHONE	—UT—		VALVE		
TELEPHONE MANHOLE	△		WATER LINE	—W—	
POLE, HEIGHT & CLASS			PRESSURE SEWER		—4" PS—
STORM SEWER		—10"SS—	ELECTRIC MANHOLE	○	
STEAM	—ST—		SALT WATER	—SW—	

SEE NAVFAC DRAWING NO. 1276653 FOR CONTINUATION OF UTILITIES.

RECORD DRAWING
DATE 10 APR 1974
SHEET 11 OF 89

NOTE: ALL SERVICES TO BE 4", UNLESS OTHERWISE NOTED. CLASS I BEDDING.
H410—12

AREA INDEX

NOTE:
INFORMATION ON BUILDING CONNECTIONS TAKEN FROM EXISTING MAPS AND PHYSICAL EVIDENCE ABOVE GROUND. CONTRACTOR SHALL VERIFY LOCATION AND GRADE OF ALL BUILDING CONNECTIONS, PRIOR TO CONSTRUCTION OF ADJACENT SEWERS.

GRAPHIC SCALE
SCALE IN FEET
50 0 50 100

B.P. BARBER & ASSOC., INC. COLUMBIA, S.C. ENGINEERS	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND SOUTHEAST DIVISION CHARLESTON, S. C.
DES. Williamson DR. Davis CHK. Evans	NAVAL BASE CHARLESTON, S.C
SUPV. Williamson CH. ENGR. Lawson	SANITARY & INDUSTRIAL SEWER SYSTEM
SUBMITTED BY 4-12-69 DATE	SITE PLAN AREA 6F
FIRM MEMBER (TITLE)	
SOE ASST DIV. NFEC-DESIGN DIVISION P.O.E. Bentley DIR. Bunch	
APPROVED DATE	SIZE F · CODE IDENT. NO. 80091 · NAVFAC DRAWING NO. 1276652
OFFICER IN CHARGE	
APPROVED FOR COMMAND DATE	CONSTR. CONTR. NO. N62467 67 C 0344
EFD-FOR COMMANDER, NAVFAC	SCALE 1"=50' · SPEC. 84/9/2/2/2/-2-1 · SHEET 11 OF 89