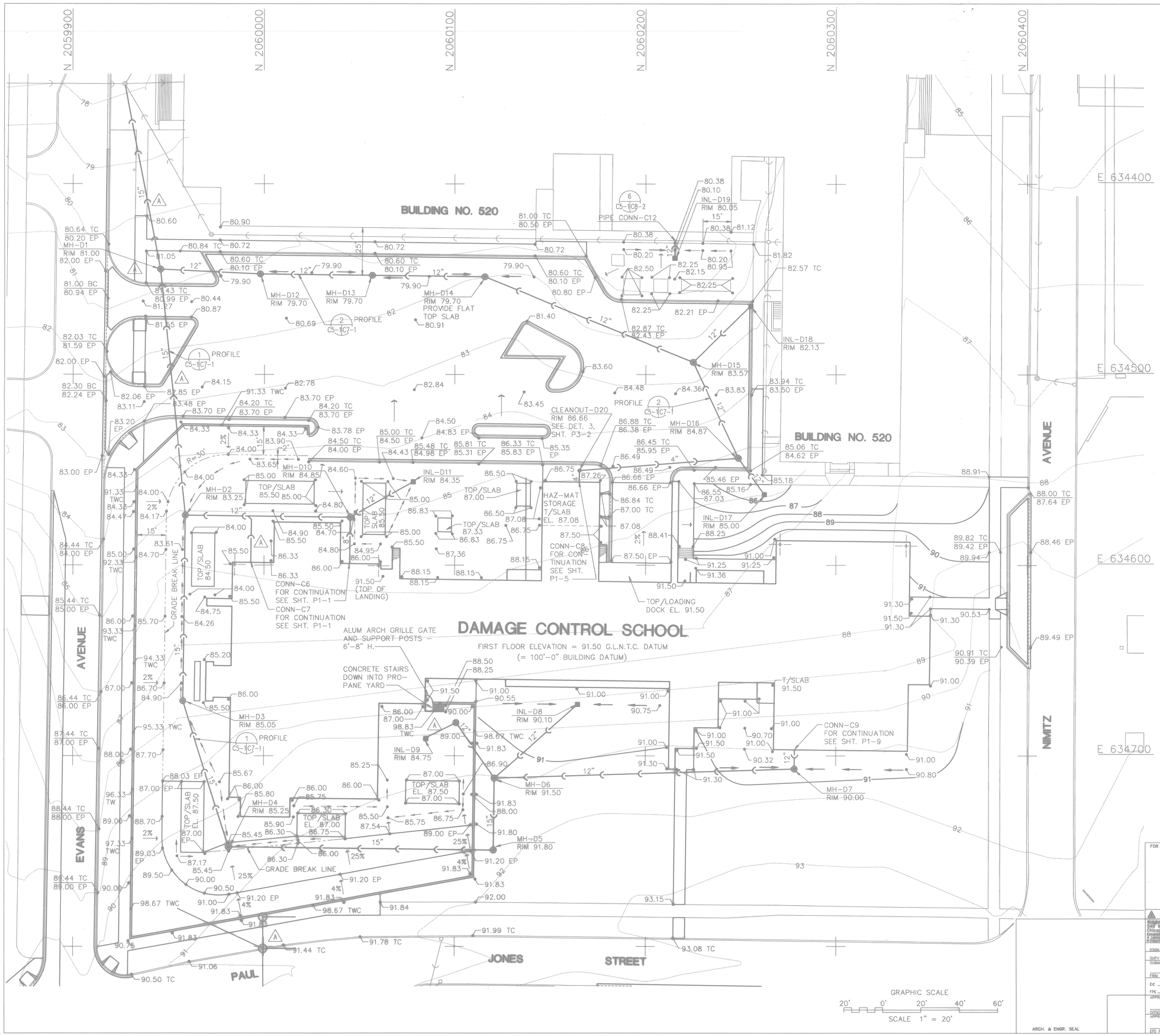

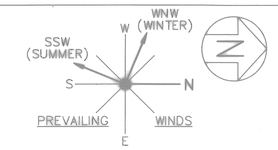

DRAINAGE STRUCTURE SCHEDULE

No.	TYPE	CASTING TYPE	RIM ELEV.	OUTLET INVERT	NORTH	EAST
D1	MH TY "A"	TY1,OL	81.00	72.26	2,059,934.76	634,440.80
D2	MH TY "A"	TY1,OL	83.25	77.27	2,059,958.79	634,573.80
D3	MH TY "A"	TY1,OL	85.05	78.73	2,059,957.60	634,671.12
D4	MH TY "A"	TY1,OL	85.25	79.91	2,059,981.66	634,747.76
D5	MH TY "A"	TY 1	91.80	81.30	2,060,120.54	634,749.47
D6	MH TY "A"	TY 1	91.50	81.69	2,060,121.01	634,711.68
D7	MH TY "A"	TY1,OL	90.00	85.26	2,060,278.04	634,706.82
D8	INL TY "A"	TY 8	90.10	84.27	2,060,164.43	634,673.02
D9	INL TY "A"	TY1,OL	84.75	82.14	2,060,085.01	634,691.02
D10	MH TY "A"	TY 1	84.85	80.27	2,060,045.13	634,574.85
D11	INL TY "A"	TY1,OL	84.35	80.65	2,060,078.37	634,556.28
D12	MH TY "A"	TY1,OL	79.70	73.52	2,059,997.87	634,447.25
D13	MH TY "A"	TY1,OL	79.70	74.70	2,060,056.87	634,447.96
D14	MH TY "A"	TY1,OL	79.70	75.29	2,060,115.86	634,448.68
D15	MH TY "A"	TY1,OL	83.57	76.47	2,060,224.75	634,493.50
D16	MH TY "A"	TY 1	84.87	78.74	2,060,248.77	634,543.80
D17	INL TY "A"	TY 8	85.00	80.97	2,060,262.33	634,562.79
D18	INL TY "A"	TY 11	77.66	78.60	2,060,255.09	634,463.93
D19	INL TY "A"	TY 8	80.10	73.14	2,060,215.14	634,438.92
D20	CLEANOUT	--	86.66	81.56	2,060,165.27	634,550.35

FOR STRUCTURE AND CASTING TYPES, SEE DETAILS 1-5 TYP. C5-1C8-2

STORM SEWER SCHEDULE

DOWNSTREAM STR.	DOWNSTREAM INVERT	UPSTREAM STR.	UPSTREAM INVERT	SIZE in.	L ft.	SLOPE %	TYPE
C11	71.37±	D1	72.26	15	24	3.68	RCP
D1	72.26	D2	77.25	15	135	3.70	RCP
D2	77.25	D3	78.70	15	97	1.5	RCP
D3	78.70	D4	79.90	15	80	1.5	RCP
D4	79.90	D5	81.29	15	139	1.0	RCP
D5	81.29	D6	81.69	15	40	1.0	RCP
D6	83.69	D7	85.26	12	157	1.0	RCP
D7	85.26	C9	85.36	12	10	1.0	RCP
D6	83.69	D8	84.27	12	58	1.0	RCP
D6	81.69	D9	82.14	12	45	1.0	RCP
D2	79.27	D10	80.13	12	86	1.0	RCP
D10	80.13	D11	80.51	12	38	1.0	RCP
D10	80.46	C6	80.70	8	24	1.0	CONC
TEE	79.86	C7	80.10	6	24	1.0	CONC
D1	72.26	D12	73.52	12	63	2.0	RCP
D12	73.52	D13	74.70	12	59	2.0	RCP
D13	74.70	D14	75.29	12	59	1.0	RCP
D14	75.29	D15	76.47	12	118	1.0	RCP
D15	78.18	D16	78.74	12	56	1.0	RCP
D16	80.74	D17	80.97	12	23	1.0	RCP
D16	80.74	D20	81.56	4	82	1.0	CL.52 DIP
D20	81.56	C8	81.62	4	6	1.0	CL.52 DIP
D15	78.18	D18	78.60	12	42	1.0	RCP
C12	73.05	D19	73.14	8	9	1.0	CONC

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

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DSGN BARNES, ERICKSON, KLODZEN
SUPV VICK CH ENGR
SUBMITTED BY — DATE
FIRM MEMBER TITLE
E/C — BR. HD.
F/E — DIR.
APPROVED — DATE
OFFICER IN CHARGE
APPROVED — DATE
EFD FOR COMMANDER NAVFAC

DAMAGE CONTROL SCHOOL
GRADING AND DRAINAGE PLAN

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276433	C5-1

CONSTR CONTR NO. N62467-93-C-1143
SCALE 1" = 20'
SPEC 06-93-1143
SHEET 8 OF

ARCH. & ENGR. SEAL

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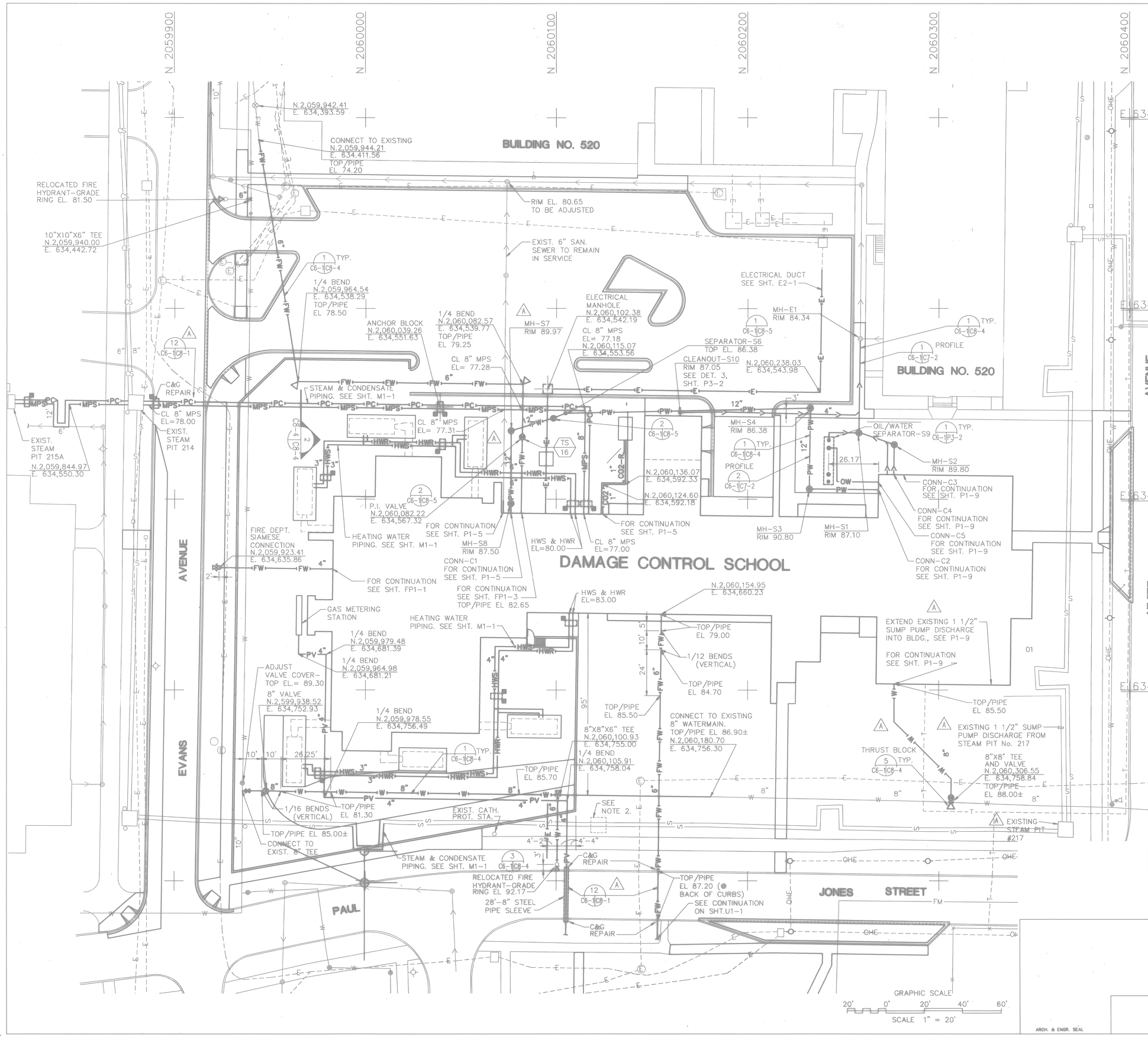

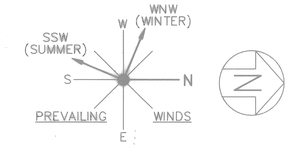

SANITARY STRUCTURE SCHEDULE

No.	TYPE	CASTING TYPE	RIM ELEV.	DOWNSTR. INVERT	NORTH	EAST
E1	EXIST. MH	EXIST.	84.34	75.56	2,060,259.06	634,515.86
S1	MH TY "A"	TY 1	87.10	78.11	2,060,258.40	634,569.29
S2	MH TY "A"	TY 1	89.80	80.36	2,060,281.80	634,577.14
S3	MH TY "A"	TY 1	90.50	81.30	2,060,232.41	634,594.52
S4	MH TY "A"	TY 1	86.15	81.47	2,060,232.93	634,552.21
S5	MH TY "A"	TY 1	86.10	81.95	2,060,124.12	634,549.84
S6	SEPARATOR	TY 1*	86.35	82.02	2,060,123.97	634,561.63
S7	MH TY "A"	TY 1*	86.80	82.32	2,060,123.68	634,583.92
S8	MH TY "A"	TY 1*	87.50	82.53	2,060,076.44	634,604.26
S9	SEPARATOR	–	–	78.33		–
S8	CLEANOUT	–	87.05	78.96	2,060,169.07	634,553.90

FOR STRUCTURE AND CASTING TYPES, SEE DETAILS 2-3 / C6-1C8-3

* CASTINGS SHALL BE OF NON-SPARKING BRONZE, WITH BOLTED AND GASKETED COVERS.

SANITARY SEWER SCHEDULE

DOWNSTREAM		UPSTREAM		SIZE in.	L ft.	SLOPE %	TYPE
STR.	INVERT	STR.	INVERT				
E1	77.56	S1	78.11	8	53	1.00	CL.52 DIP
S1	80.11	S2	80.36	8	25	1.00	CL.52 DIP
S2	80.36	C3	80.46	8	10	1.00	CL.52 DIP
WYE	80.39	C4	80.51	6	12	1.00	CL.52 DIP
C2	81.16	S3	81.30	12	36	0.40	CL.52 DIP
S3	81.30	S4	81.47	12	42	0.40	CL.52 DIP
S4	81.47	S5	81.91	12	109	0.40	CL.52 DIP
S5	81.91	S6	81.95	12	12	0.40	CL.52 DIP
S6	82.24	S7	82.32	12	22	0.40	CL.52 DIP
S7	82.32	S8	82.53	12	51	0.40	CL.52 DIP
S8	82.70	C1	82.75	10	5	1.00	CL.52 DIP
S1	78.17	S9	78.33	6	16	1.00	CL.52 DIP
S9	78.33	C5	78.59	6	26	1.00	CL.52 DIP
S10	78.96	WYE	78.06	4	90	1.00	CL.52 DIP

NOTES:

1. FOR LEGENDS, ABBREVIATIONS AND GENERAL NOTES, SEE SHEET C1-1.
2. EXISTING UNDERGROUND ANCHOR BLOCK. LOCATION SHOWN IS APPROXIMATE – VERIFY IN FIELD.

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

NAVAL TRAINING CENTER GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL
UNDERGROUND UTILITIES PLAN

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276434	C6-1
SCALE 1" = 20'		CONSTR CONTR NO. N62467-93-C-1143	
		SPEC 06-93-1143	SHEET 9 OF

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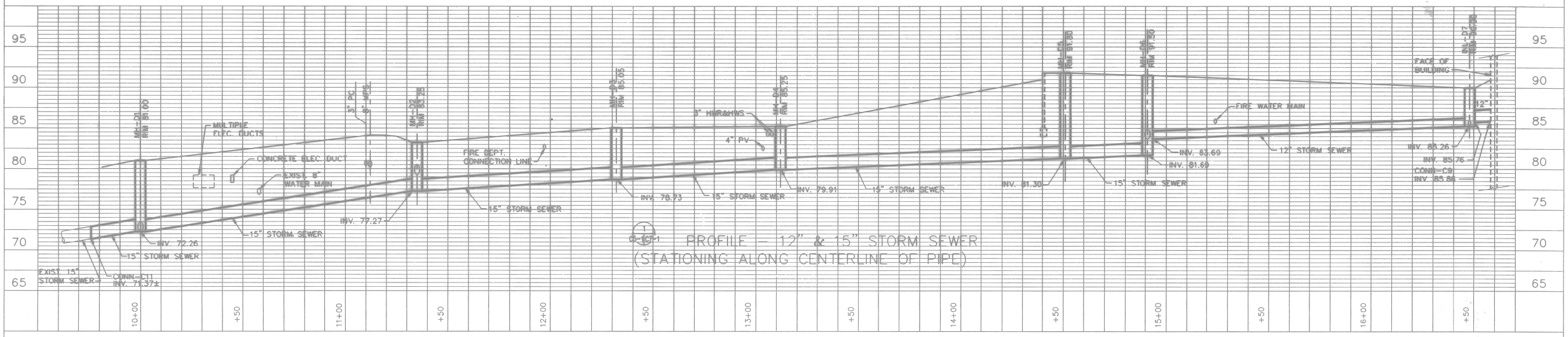

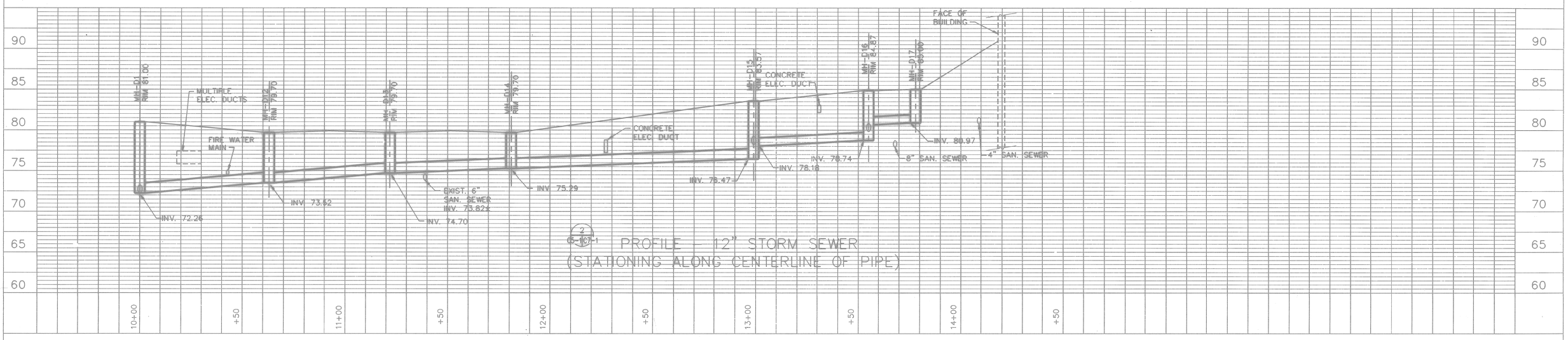

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EIC Stacy Hale BR HD
FPE DIR
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OFFICER IN CHARGE
APPROVED DATE
EFD FOR COMMANDER, NAVFAC 9/12/94

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

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL UNDERGROUND UTILITY PROFILES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
F	80091	5276435	C7-1

CONSTR CONTR NO. N62467-93-C-1143
SCALE 1" = 20' SPEC 06-93-1143 SHEET 10 OF

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Donald G. Barnes
ARCH. & ENGR. SEAL

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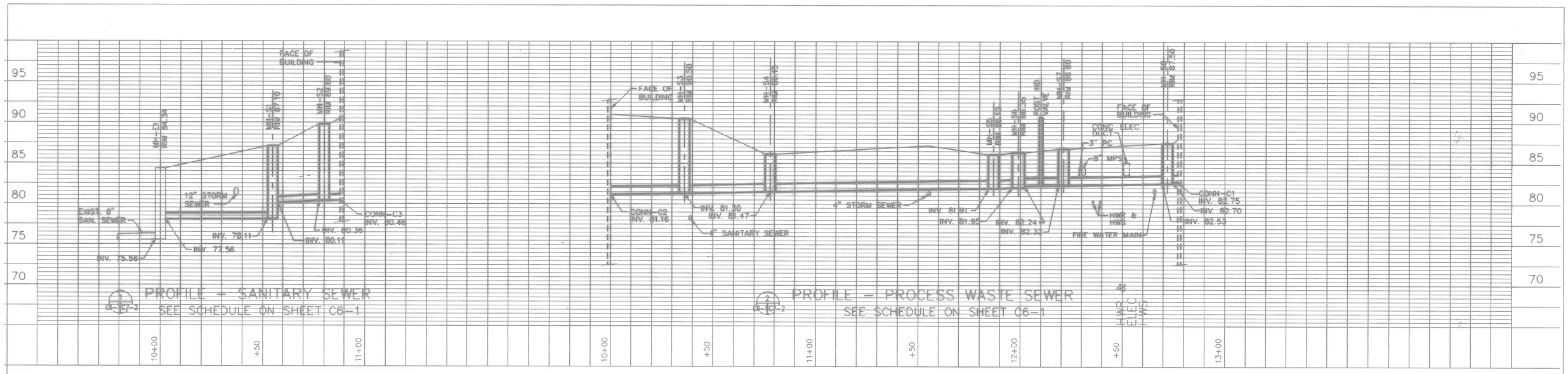

1 PROFILE – SANITARY SEWER
C6-1C7-2
SEE SCHEDULE ON SHEET C6-1

2 PROFILE – PROCESS WASTE SEWER
C6-1C7-2
SEE SCHEDULE ON SHEET C6-1

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DATE 07-31-97 REM AS-BUILT, NO CORRECTIONS BY _____ CHK'D M.M.N.

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DONALD G. BARNES 062-047599 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

ARCH. & ENGR. SEAL

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APPROVED DATE 9/12/98
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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
SOUTHERN DIVISION
CHARLESTON, S.C.

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

DAMAGE CONTROL SCHOOL UNDERGROUND UTILITY PROFILES

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
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SCALE 1" = 20'		CONSTR CONTR NO. N62467-93-C-1143	
		SPEC 06-93-1143	SHEET 11 OF

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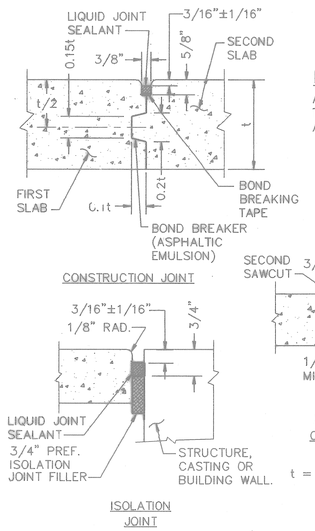
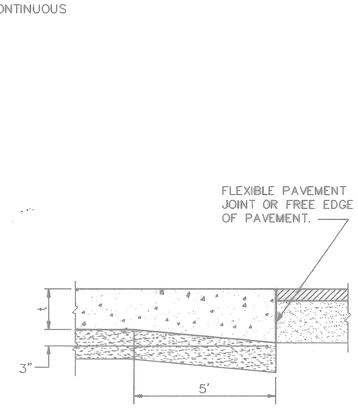


NOTE

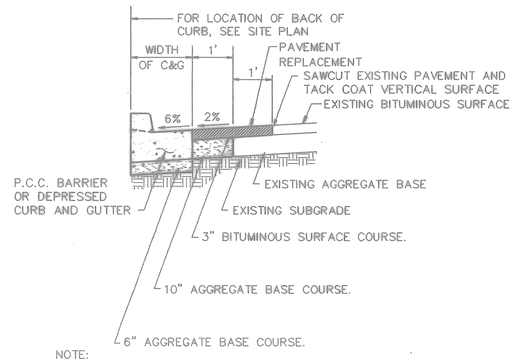
ALL TRAVERSE JOINTS MUST EXTEND THROUGH CURBS AND BE CONTINUOUS ACROSS PAVEMENT.

1 C4-1 C8-1 **TYPICAL CONCRETE PAVEMENT (NON-REINFORCED) JOINTS**
SCALE: NONE



t = THICKNESS OF PAVEMENT

2 C4-1 C8-1 **THICKENED EDGE OF PAVEMENT**
SCALE: NONE



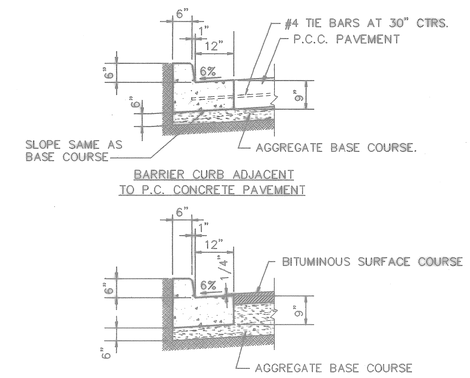
NOTE:

1. IF THE EXISTING PAVEMENT SLOPES AWAY FROM CURB, THEN THE SLOPE OF THE GUTTER FLAG AND PAVEMENT REPLACEMENT SHALL MATCH THE EXISTING SURFACE SLOPE.

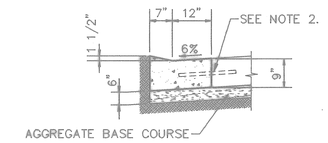
3 C4-1 C8-1 **CURB AND GUTTER ADJACENT TO EXISTING PAVEMENT**
SCALE: NONE

CURB AND GUTTER CONSTRUCTION NOTES:

1. A 3/4" THICK PREFORMED EXPANSION JOINT FILLER CONFORMING TO THE EXACT CROSS SECTION OF THE CONCRETE CURB AND GUTTER SHALL BE PLACED AT 50 FOOT INTERVALS, AT P.C.'S AND P.T.'S AND AT THE END OF EACH POUR. TWO NO. 6 SMOOTH DOWEL RODS, 18 INCHES IN LENGTH, AND PROPERLY GREASED, SHALL BE INSTALLED AT EACH OF THESE (EXPANSION) JOINTS.
2. NO. 6 REINFORCING BARS SHALL BE PLACED WHERE THE CURB CROSSES ANY UTILITY PIPE TRENCH. THE BARS SHALL EXTEND FIVE FEET EITHER SIDE OF THE TRENCH AND IN NO CASE SHALL BE LESS THAN TWELVE FEET IN LENGTH.
3. CONTRACTION JOINTS, TO BE PROVIDED AT TEN FOOT INTERVALS, SHALL BE SAW CUT OR FORMED BY AN APPROVED METHOD. SAW CUT CONTRACTION JOINTS SHALL BE A MINIMUM DEPTH OF 1/2 INCH ACROSS THE EXPOSED SURFACE OF THE CURB.
4. IF THE PAVEMENT SLOPES AWAY FROM CURB, THEN THE SLOPE OF THE GUTTER FLAG SHALL MATCH THE PAVEMENT SURFACE SLOPE.



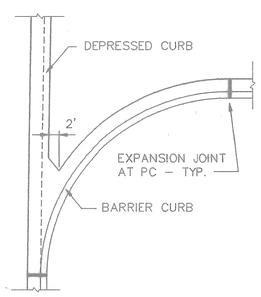
4 C4-1 C8-1 **P. C. CONCRETE BARRIER CURB AND GUTTER**
SCALE: NONE



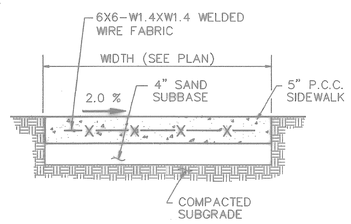
NOTES:

1. THE 1 1/2" RISE SHALL BE REDUCED TO 1/2" WHEN CURB IS PLACED ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED.
2. #4 TIE BARS AT 30" CTRS. WHERE CURB IS ADJACENT TO CONCRETE PAVEMENT.

5 C4-1 C8-1 **DEPRESSED CURB AND GUTTER**
SCALE: NONE

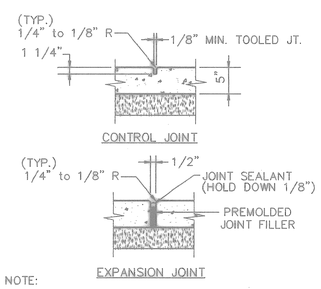


6 C4-1 C8-1 **CURB RADIUS**
SCALE: NONE



NOTE 1. SLOPE SIDEWALK AWAY FROM BUILDING UNLESS NOTED OTHERWISE.

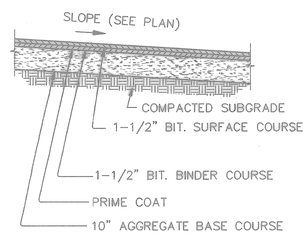
7 C4-1 C8-1 **TYPICAL SIDEWALK SECTION**
SCALE: NONE



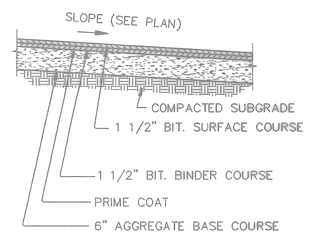
NOTE:

CONTRACTION JOINTS TO BE 5'-0" O.C. EXPANSION JOINTS TO BE 40'-0" O.C. MAX., AT ALL CHANGES OF DIRECTION, AND WHERE SIDEWALK ABUTS STRUCTURES, APPURTENANCES, BACK OF CURBS, OR OTHER SIDEWALKS.

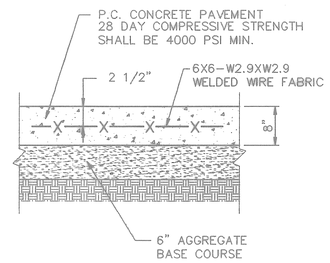
8 C4-1 C8-1 **TYPICAL SIDEWALK JOINTS**
SCALE: NONE



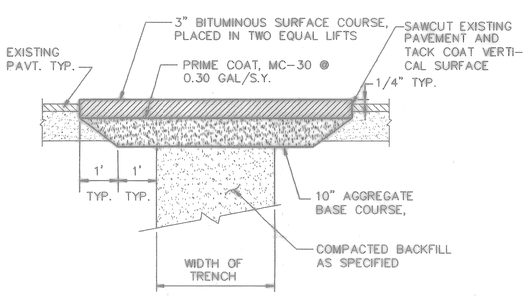
9 C4-1 C8-1 **BITUMINOUS PAVEMENT IN PARKING LOT**
SCALE: NONE



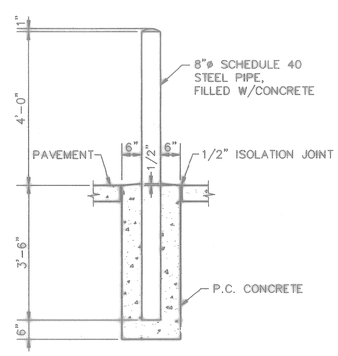
10 C4-1 C8-1 **BITUMINOUS PAVEMENT IN MECHANICAL YARD**
SCALE: NONE



11 C4-1 C8-1 **P.C. CONCRETE PAVEMENT IN LOADING AREAS**
SCALE: NONE



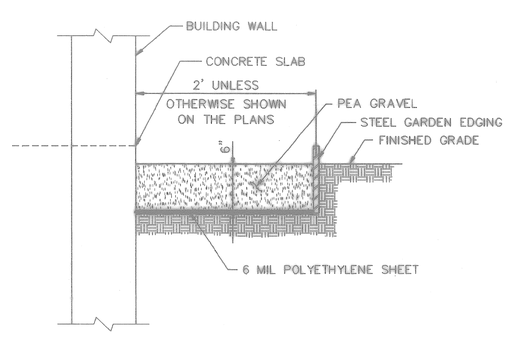
12 C6-1 C8-1 **BITUMINOUS PAVEMENT REPAIR**
SCALE: NONE



NOTE:

GUARD POSTS ARE TO BE PAINTED WITH TYPE PT5 PAINT

13 C4-1 C8-1 **TYPICAL BOLLARD**
SCALE: NONE



14 C6-1 C8-1 **MOWING STRIP**
SCALE: NONE

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549 West Randolph Street
Chicago, IL 60661
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DSGN BARNES, ERICKSON, KLODZEN
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SUBMITTED BY DATE
CHIEF DESIGNER DATE 8-31-97
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APPROVED DATE
OFFICIAL CHANGE
APPROVED DATE 9/18/98
FOR COMMANDER, NAVFAC

DONALD G. BARNES 062-047593 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

ARCH. & ENGR. SEAL

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

NAVAL TRAINING CENTER — GREAT LAKES, ILLINOIS

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SITE DETAILS

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.	DRAWING NO.
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