

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

258
646

CUYAHOGA COUNTY
CUY-71-17.83
CUY-176-12.76

8
54

DRAINAGE LEGEND

- ⊙ PROPOSED STORM SEWER MANHOLE
- ⊙ PROPOSED SANITARY MANHOLE
- PROPOSED PAVED SHOULDER INLET
- ▢ PROPOSED DITCH CATCH BASIN
- ▣ PROPOSED PAVEMENT CATCH BASIN
- PROPOSED STORM OR SANITARY SEWER
- EXISTING MANHOLE
- EXISTING CATCH BASIN
- EXISTING STORM OR SANITARY SEWER
- ▨ JUTE MATTING
- ▩ SODDED DITCH

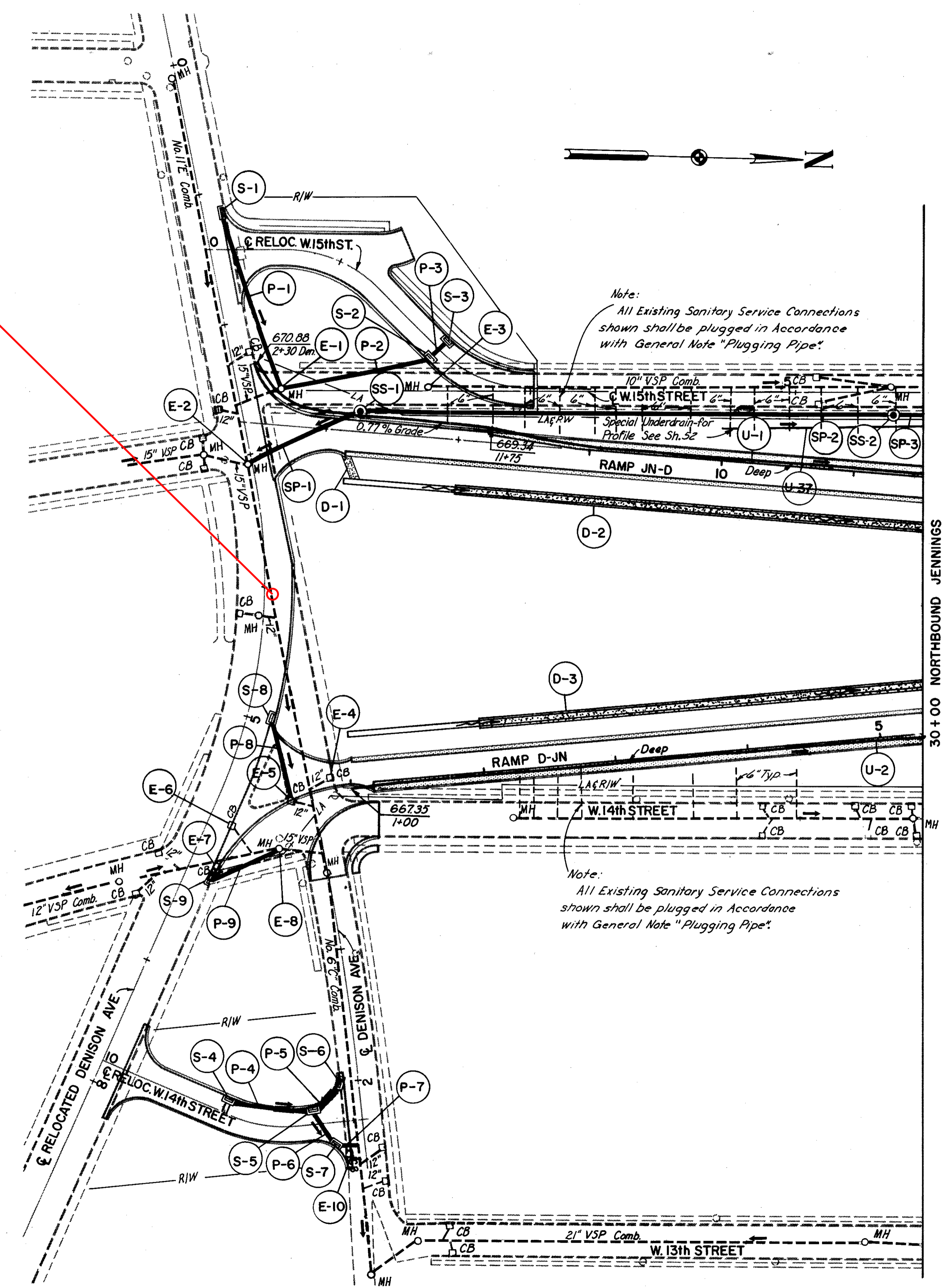
CODE IDENTIFICATION

- (P) STORM SEWER PIPE
- (S) STORM SEWER STRUCTURE
- (SP) SANITARY OR COMBINED SEWER PIPE
- (SS) SANITARY SEWER STRUCTURE
- (E) EXISTING STRUCTURE OF SEWER PIPE
- (U) UNDERDRAIN PIPE
- (D) DITCH PROTECTION

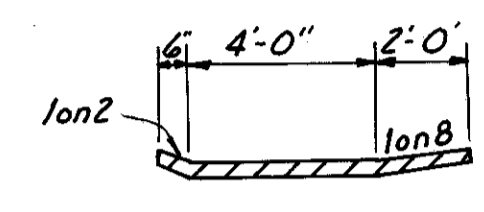
DRAINAGE QUANTITIES

CODE	LOCATION	I-1				I-8		I-16	L-10
		CI.I-3 Deep	CI.I-3 M6.4(h)	CI.E-1 M6.8(b)	CI.J-1 M6.8(b) Encased 21"	Std. No.2 MH W/O Drop Mod.	MH Adjusted to Grade	C.B. Aband.	Sodding
		6"	6"	21"	21"	Each	Each		Sq. Yd.
UNDERDRAINS									
U-1	Ramp JN-D Rt 8+50 to 2+30 Den.	520							
U-2	Ramp D-JN Rt 1+00 to 5+30	430							
U-37	Ramp JN-D Rt 8+50 to 10+00		150						
EXISTING STRUCTURES									
E-1	Reloc. Denison Ave.						1		
E-3	Reloc. West 15th St.						1		
E-4	Reloc. Denison Ave.							1	
E-5	Reloc. Denison Ave.							1	
E-6	Reloc. Denison Ave.							1	
E-7	Reloc. Denison Ave.							1	
E-8	Reloc. Denison Ave.						1		
E-10	Reloc. Denison Ave.							1	
DITCH PROTECTION									
D-1	Ramp JN-D Lt.								13
D-2	Ramp JN-D Lt.								253
D-3	Ramp D-JN Lt.								239
SANITARY SEWERS									
SP-1	Ramp JN-D				90				
SP-2	Ramp JN-D Rt			402					
SP-3	Ramp JN-D Rt			23					
SS-1	Ramp JN-D Rt					1			
SS-2	Ramp JN-D Rt					1			
TOTAL		950	150	425	90	2	3	5	505

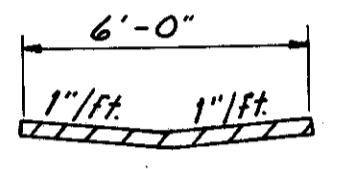
E-4, E-6, E-7 & E-10 Seal Pipe at Catch Basin
E-5 Connect Pipe through Catch Basin
For Sanitary Sewer Profiles See Sh. 54.
For Sewer Pipe & Drainage Structure Quantities See Sh. 3 to 7.



DENISON AVE
SLM 12.67



SECTION OF SODDED DITCH D-2 & D-3
D-2 Sta. 8+50 to 12+00 Lt. Ramp JN-D
D-3 Sta. 2+00 to 5+30 Lt. Ramp D-JN



SECTION OF SODDED FLUME D-1
D-1 Sta. 12+83 Lt. Ramp JN-D

M.H. ADJUSTED TO GRADE

Ref No.	Existing T/C Elev.	Adjusted T/C Elev.
E-1	677.17	677.6
E-3	675.63	676.0
E-8	673.64	674.7

SCALE 1"=50'
HOWARD, NEEDLES, TAMMEN & BERGENOFF
CONSULTING ENGINEERS
MADE D.D.S. DATE 8-7-64
TRCD R.D.I. DATE 8-10-64
CKD R.U.T. DATE 10-13-64
KANSAS CITY CLEVELAND NEW YORK

