STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	US 28(17)	1	111

REVISED AFTER PROPOSAL #1 DATE MAR 11 1970

REVISED AFTER PROPOSAL #2 DATE MAY 26 1970

REVISED AFTER PROPOSAL #3 DATE APR 12 1971

INDEX OF SHEETS

SHEET NO. 1	TITLE PAGE
2-7	TYPICAL SECTIONS OF IMPROVEMENT
8	BRIDGE APPROACH RAIL DETAILS
9-10	BEAM GUARD RAIL DETAILS
11-11A	LIGHTING DETAILS & SPECIAL SEWER MANHOLE DETAIL
12-21	SUMMARY OF QUANTITIES
22-26	GENERAL PLANS
27-31	R.O.W. AND SLOPE LIMIT PLANS
32-39	PROFILES
40-50	ALIGNMENT, CURB TIES AND GRADING PLANS
51-61D	DRAINAGE, LIGHTING, UTILITY AND DESIGN LANE USE PLANS
62-75	SIGNING
76-111	CROSS SECTIONS

FOR STANDARD SHEET CONSTRUCTION SIGN STANDARDS, SEE SHEET NO. 11
SIGN STANDARD SHEETS, SEE SHEET NO. 11
FOR STREET PARKING SCHEDULE SEE SHEET NO. 51

STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

PLANS OF PROPOSED
FEDERAL AID URBAN SECONDARY PROJECT
US 28(17)
CONTRACT NO. 1
N.H. PROJECT NO. C-7721-C
ROUTE 111 OVER THE MERRIMACK RIVER

DESIGN DATA			
AVERAGE DAILY TRAFFIC	1970	13250	
AVERAGE DAILY TRAFFIC	1990	13000	
TRAFFIC CLASSIFICATION		M	
DESIGN SPEED		30	M. P. H.
MAXIMUM CURVATURE		28.648	DEGREES
MAXIMUM GRADIENT		7.00	%
NON-PASSING SIGHT DISTANCE			
K FACTOR – CREST 45	SAG 45		
LENGTH OF PROJECT		0.456	MILES

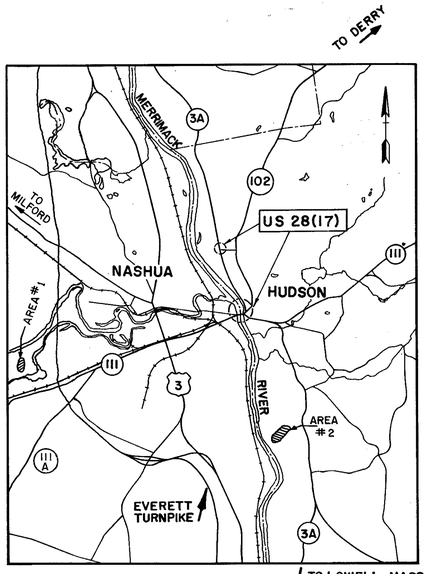
SCALES { PLAN 1" = 50' & 1"=20'
PROFILE VERT. 1" = 10' HOR. 1" = 50'
CROSS SECTION VERT. 1" = 10' HOR. 1" = 10'

THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS DATED 1969 AND STANDARD SHEETS LISTED IN THE INDEX ON FILE WITH THE BUREAU OF PUBLIC ROADS AND SPECIAL PROVISIONS ATTACHED TO PROPOSAL.

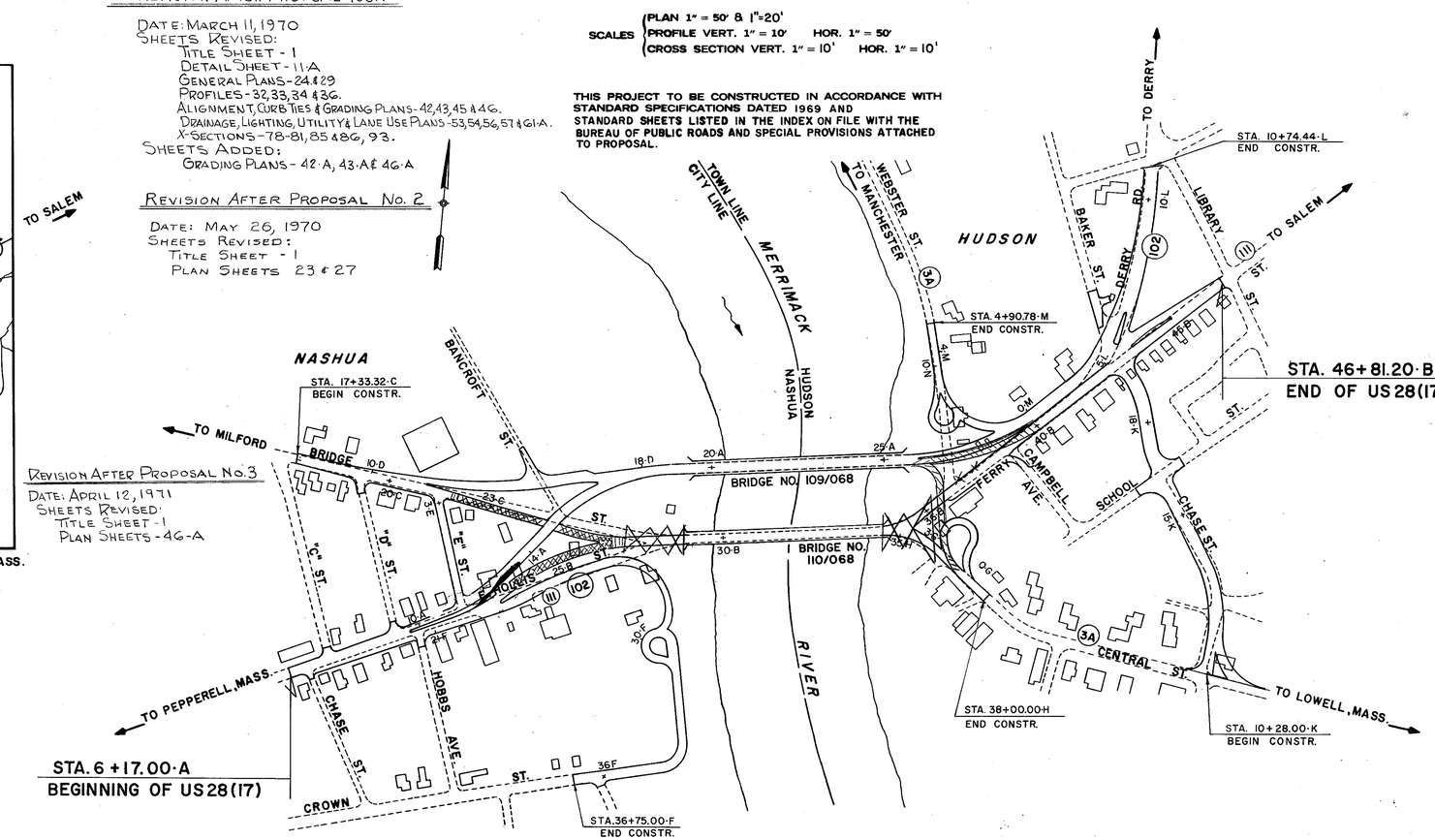
REVISION AFTER PROPOSAL NO. 1
DATE: MARCH 11, 1970
SHEETS REVISED:
TITLE SHEET - 1
DETAIL SHEET - 11-A
GENERAL PLANS - 24 & 29
PROFILES - 32, 33, 34 & 36.
ALIGNMENT, CURB TIES & GRADING PLANS - 42, 43, 45 & 46.
DRAINAGE, LIGHTING, UTILITY & LANE USE PLANS - 53, 54, 56, 57 & G1-A.
X-SECTIONS - 78-81, 85 & 86, 93.
SHEETS ADDED:
GRADING PLANS - 42-A, 43-A & 46-A

REVISION AFTER PROPOSAL NO. 2
DATE: MAY 26, 1970
SHEETS REVISED:
TITLE SHEET - 1
PLAN SHEETS 23 & 27

REVISION AFTER PROPOSAL NO. 3
DATE: APRIL 12, 1971
SHEETS REVISED:
TITLE SHEET - 1
PLAN SHEETS - 46-A



LOCATION MAP
1/2 0
SCALE IN MILES
DEPOSIT AREAS



LAYOUT
SCALE 1"=200 FEET

CITY OF NASHUA, TOWN OF HUDSON
COUNTY OF HILLSBOROUGH

APPROVED BY:
CITY OF NASHUA BOARD OF PUBLIC WORKS DATE
Dennis J. Sullivan — MAYOR
Joseph P. Labrie — COMMISSIONER
Dennis E. Lavoie — COMMISSIONER
Fred C. Pillsbury — COMMISSIONER
R. W. Pillsbury — COMMISSIONER

SELECTMEN TOWN OF HUDSON DATE
Robert P. Levesque — SELECTMAN
Frank A. Hutton, Jr. — SELECTMAN
Stanley Alekonis — SELECTMAN

RECOMMENDED FOR APPROVAL: DATE 2-9-70
Bernard W. Wood — DEPUTY COMMISSIONER AND CHIEF ENGINEER

APPROVED:
Robert H. Whittaker — COMMISSIONER

Floyd L. Avery — SECONDARY ROADS ENGINEER

DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS
APPROVED:
DIVISION ENGINEER DATE

THE STATE OF NEW HAMPSHIRE — WILLIAM A. HENDERSON No. 955 REGISTERED PROFESSIONAL ENGINEER

UNIVERSAL ENGINEERING CORPORATION
CONSULTING ENGINEERS
BOSTON MASS.

DRAWN BY J. DOWNEY DATE DEC. 3 1968
CHECKED BY J.P. LeBLANC DATE SEPT. 9 1969

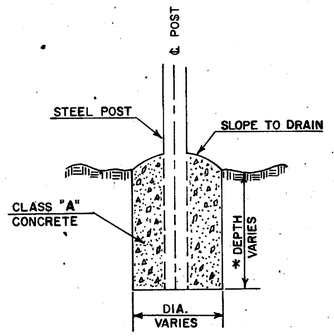
CONVENTIONAL SIGNS

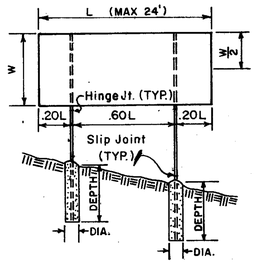
STATE LINE		R O W LINE	
TOWN LINE		SURVEY LINE	
FENCE		CULVERT	
STONE WALL		POWER POLE	
UNFENCED PROPERTY		TELEPHONE POLE	
TRAVELED WAY		TELEGRAPH POLE	
RAILROAD		JOINT POWER & TEL. POLE	
RETAINING WALL		GROUND ELEVATION (LEFT)	
SEWER MANHOLE		GRADE ELEVATION (RIGHT)	
HYDRANT		SLOPE LINE	
LEDGE		CATCH BASIN	
BRUSH LINE		DROP INLET	
SWAMP		BOUND	
PROPERTY PARCEL NO.	(2)	CLEARING & GRUBBING AREA	
N.E.T & T. BURIED CABLE	B		

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	1	111

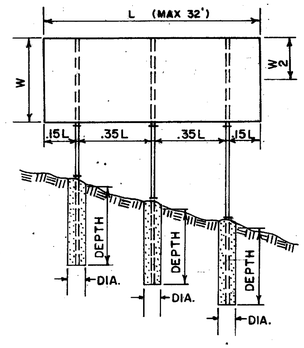
300 — 9-64 BRUNING

POSTS		USE FOOTING	
NUMBER	SIZE	DEPTH (FT.)	DIA. (IN'S.)
2	6B8.5	6	18
2	6B12	6	18
2	6WF15.5	7-1/2	18
2	8WF17	7-1/2	24
2	8WF20	8-1/2	24
2	10WF21	9	24
2	10WF25	8	36
3	10WF21	8½	30





2 POST SIGN



3 POST SIGN

NOTE: Unless otherwise specified, all flange faces shall be perpendicular to the travelled way and lie in the same plane.

Post length to be dictated by sign size and location and shall be determined by the Engineer.

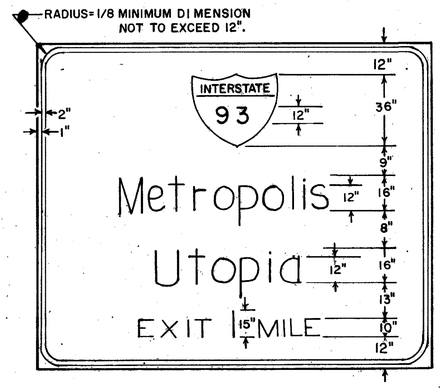
Top elevation of steel posts shall be the same for each sign and flush with sign top.

Concrete shall be Class A and shall be poured into the excavation in which no form work shall be present. No earth backfill should be required nor will be allowed after concrete is in place.

All signs mounted on steel posts shall be erected at a minimum height of 7' above edge of pavement to bottom of sign and the inside edge of the sign positioned a minimum of 6' beyond break in shoulder.

* Depth in ledge shall be determined by the Engineer.

ITEM 615.21 STEEL POSTS AND FOOTINGS



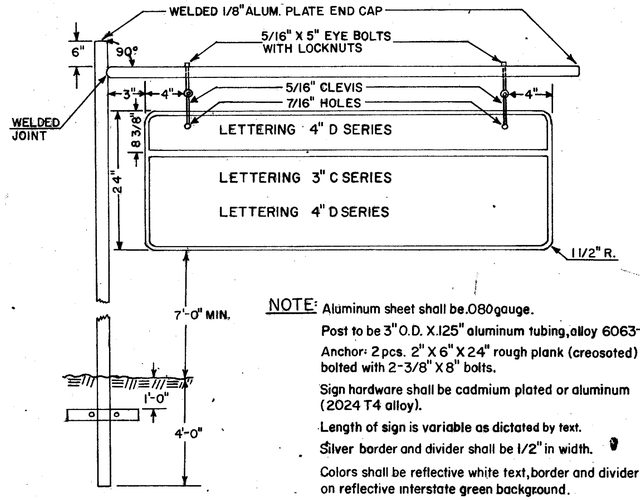
SHEET ALUMINUM GAUGES
Up to 9 sq. ft. of sign area, USE .080
All larger sign areas ---- USE .100

NOTE: Reflectorized background sheeting shall extend to the extreme edges of the sign.

Colors shall be white reflective text on reflective interstate green background.

For border and radii Item No. 615.23, refer to manual mentioned in Item 615-2.10.8.2 of the Standard Specifications and the Manual of Uniform Traffic Control Devices dated June, 1961 or as shown on the plans.

TYPICAL LAYOUT FOR TRAFFIC SIGNS ITEMS 615.21 & 615.22



NOTE: Aluminum sheet shall be .080 gauge.

Post to be 3" O.D. X.125" aluminum tubing, alloy 6063-T6.

Anchor: 2 pcs. 2" X 6" X 24" rough plank (creosoted) bolted with 2-3/8" X 8" bolts.

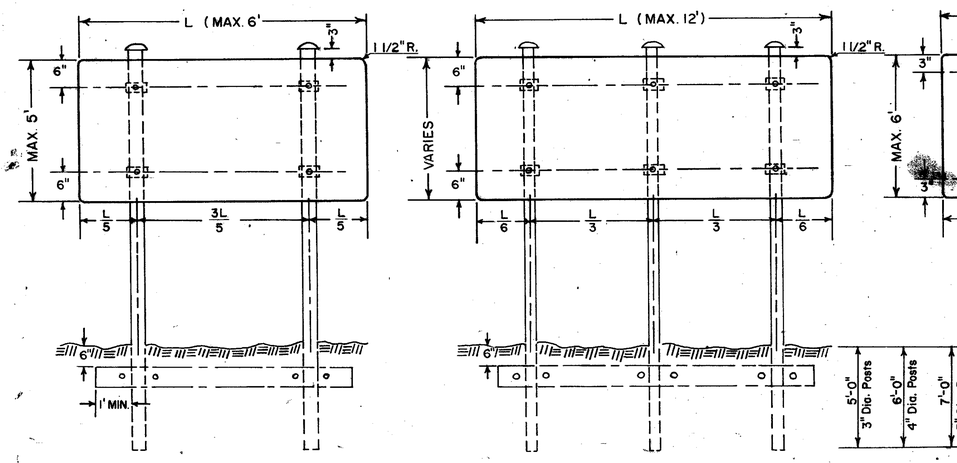
Sign hardware shall be cadmium plated or aluminum (2024 T4 alloy).

Length of sign is variable as dictated by text.

Silver border and divider shall be 1/2" in width.

Colors shall be reflective white text, border and divider on reflective interstate green background.

TOWN LINE SIGN ITEM 505



NOTE: All signs to be fastened with brackets as per detail.

When sign size exceeds 4'-0" in height, use 3 brackets per post.

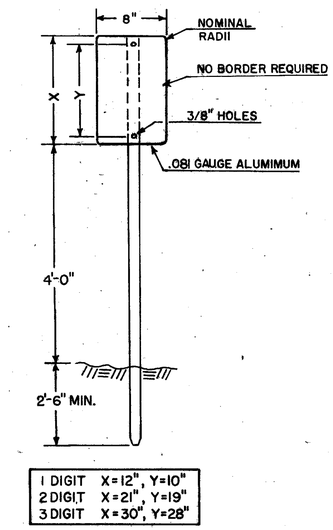
Posts to be equipped with cast aluminum caps as per detail.

ANCHORS: Use 2 pieces of 2" X 12" rough plank (creosoted) clamped post to post with a minimum of 1' overhang, to be parallel to sign face. Top edge of anchor shall be approximately parallel to the ground line.

All signs mounted on aluminum posts shall be erected at a minimum height of 7' above the level of the pavement edge excepting Route Markers and Regulatory and Warning signs within an interchange area. The latter signing may be mounted at a minimum of 6' above the level of the pavement edge.

The mininum horizontal clearance to any ground mounted sign shall be 4' beyond the shoulder break or at least 2' beyond the face of unmountable curb.

ALUMINUM POSTS AND FOOTINGS

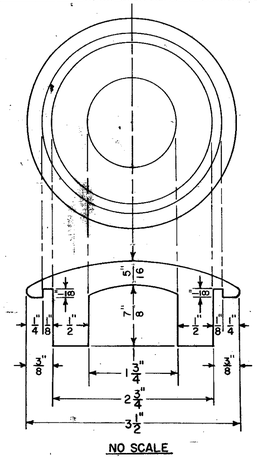


1 DIGIT	X=12",	Y=10"
2 DIGIT	X=21",	Y=19"
3 DIGIT	X=30",	Y=28"

NOTE: Post to be 7/16" X .125 GALV. "U" Channel Steel Post set 2' from curb or 2' beyond break in shoulder.

Use 6" white reflectorized digits on green reflectorized background.

MILEAGE MARKER ITEM 615.3

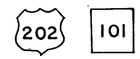


NO SCALE

CAST ALUMINUM CAP FOR SIGN POSTS (ALLOY 319)

Dimensions shown are for 3" O.D. X 2 3/4" I.D. ± commercial tolerances. Caps designed for drive fit. Dimensions are proportional for larger diameter tubing.

ROUTE MARKER OVERLAYS



NOTE: All Interstate and U.S. shields and N.H. route markers shall be fabricated from .064 aluminum sheet stock.

U.S. shield and N.H. route markers shall have a silver reflectorized background with black cutout digits. No border will be required. Detail drawings are available on Standard Sheet No. 6.

When used as an overlay, the state name shall not appear on the Interstate shield.

CARDINAL DIRECTION MARKER

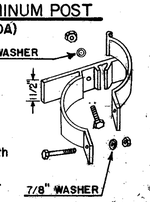
WEST

NOTE: For 9"X21", use 3/8" white border.
For 15"X30", use 1/2" white border.
Extend border to edge of marker.

SIGN BRACKET FOR ALUMINUM POST

(ALLOY 6062-T6 ALCOA)

SECTION NO'S. FOR BRACKETS	
84617	3" O.D. POST
84618	
92010	4" O.D. POST
92011	
13745	5" O.D. POST
13746	



Use 2-5/16" stainless steel cap screw with 7/8" O.D. washer and locknuts.

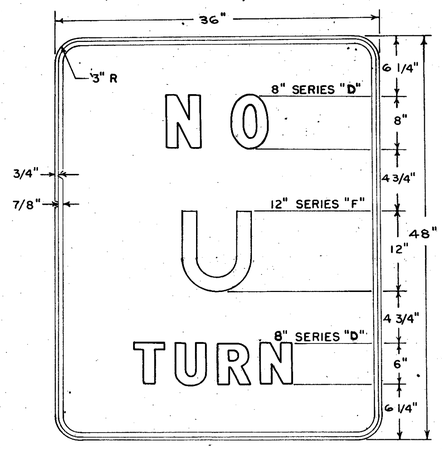
Sheet 1-A

DESIGN AND INSTALLATION DETAILS

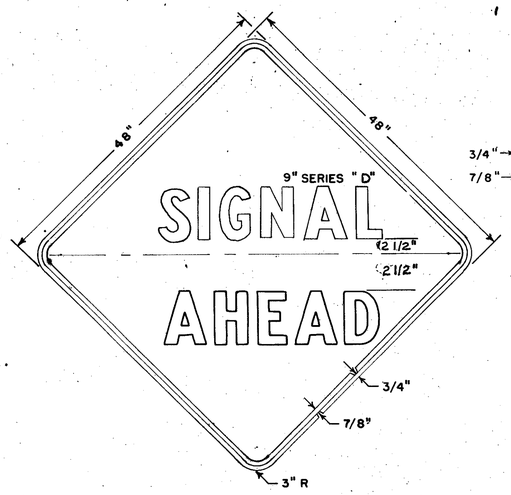
SIGN STANDARD SHEET NO. 3

10-8-58 MODERN BLUE PRINT CO. 23230

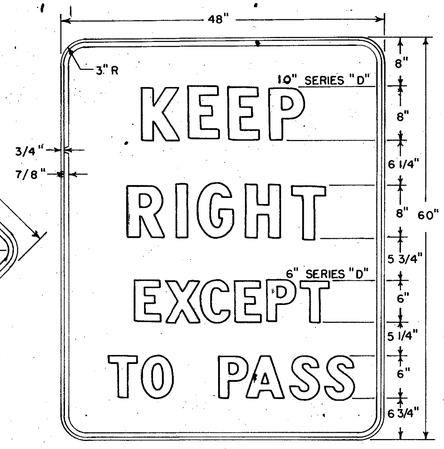
FED. ROAD DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	N. H.				



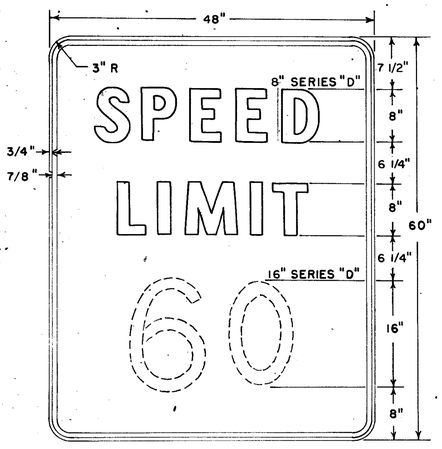
R-3-4



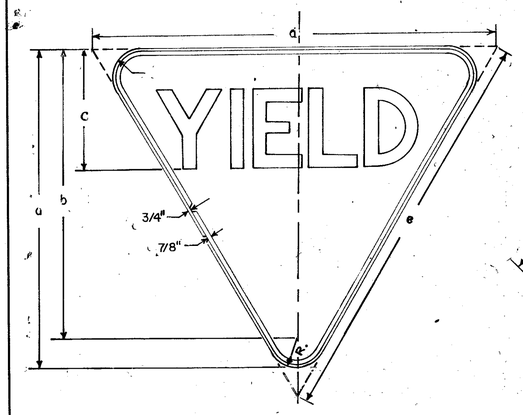
W-3-3
W-3-3A 36" X 36"
BLACK ON YELLOW



R-4-4

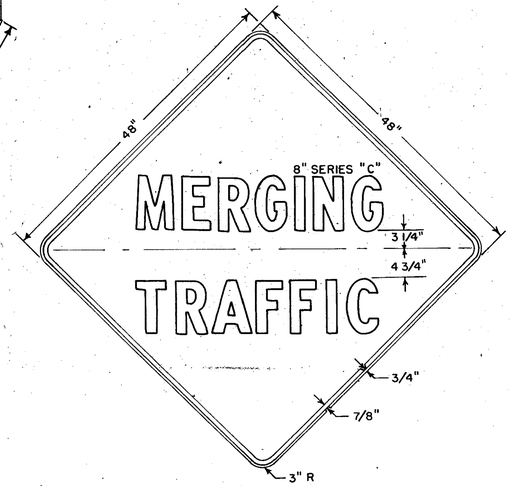


R-2-1 SERIES

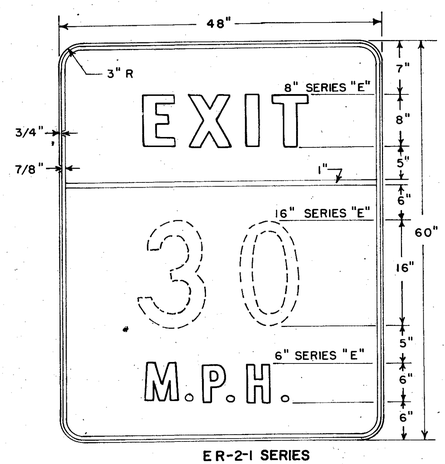


	a	b	c	d	e	Rad	Copy
R-1-2	48"	44"	18"	60°	60°	4"	12"-D
R 1-2A	36"	30-1/2	16"	48°	48°	5-1/2"	10"-B

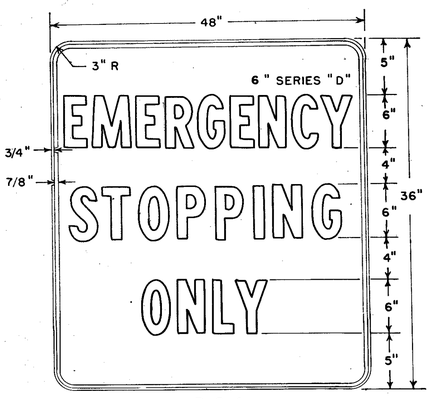
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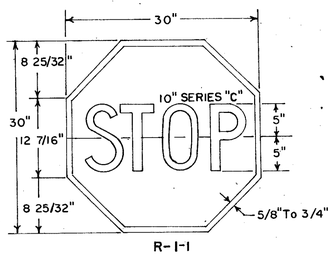
W-4-1
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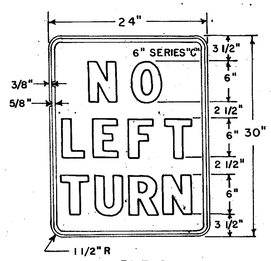
ER-2-1 SERIES
BLACK ON YELLOW



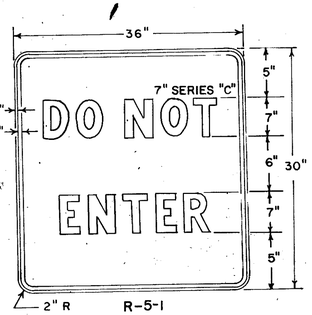
R-8-4



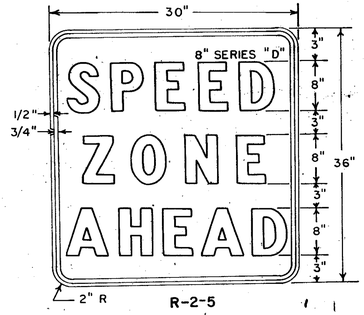
R-1-1



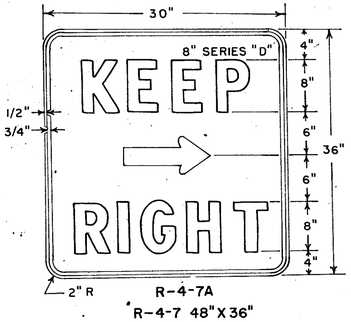
R-3-2
R-3-1 NO RIGHT TURN



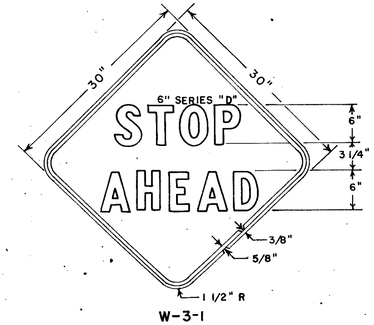
R-5-1



R-2-5



R-4-7A
R-4-7 48"X36"



W-3-1
BLACK ON YELLOW

Sheet 1-B

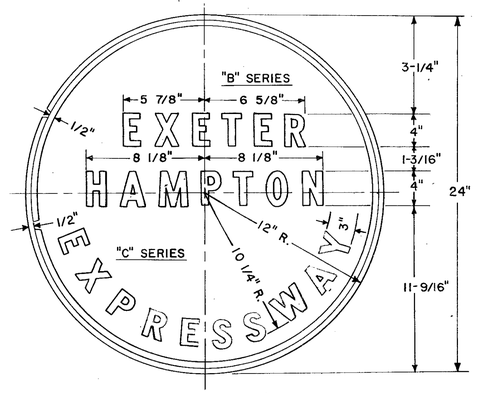
REVISIONS	
DATE	6-29-65

PLAN TRACED BY	R. NELSON
" CHECKED "	A. HARRISON
PROFILE TRACED BY	"
" CHECKED "	"
INKED BY	
CHECKED BY	

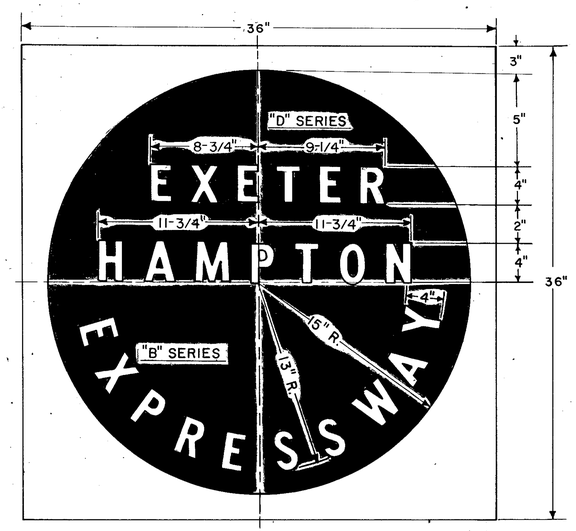
DATE AUG 1959 " " "

SIGN STANDARD SHEET NO. 5

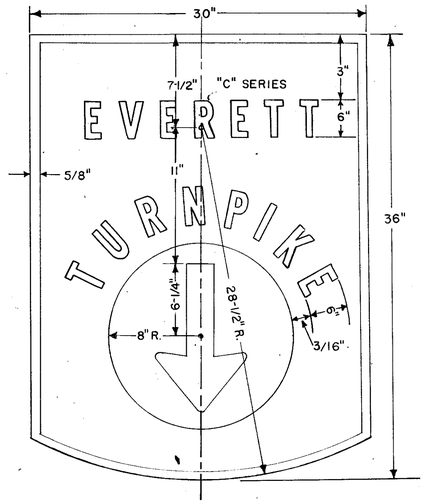
1500-5-58 MODERN BLUE PRINT CO., 23230

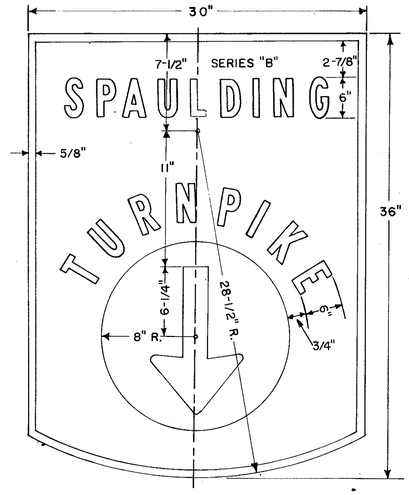


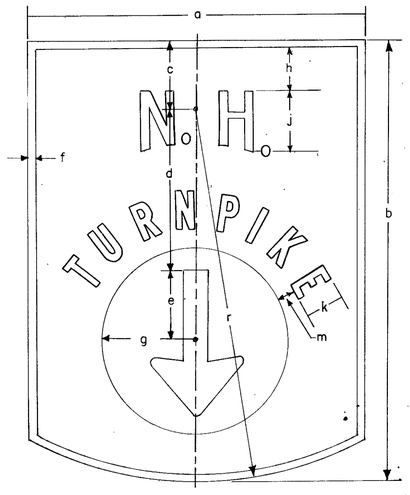
M-60-B



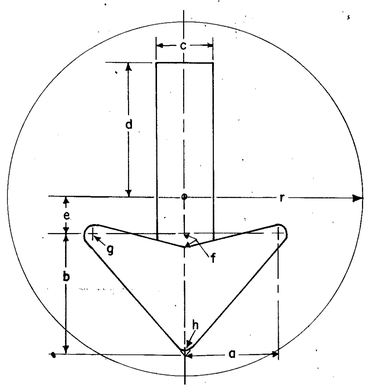
M-60-A





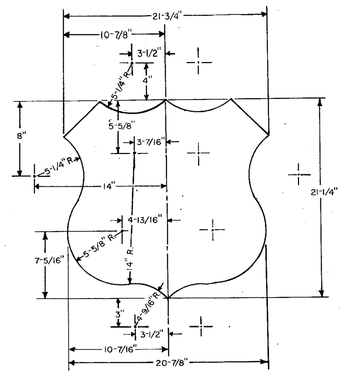


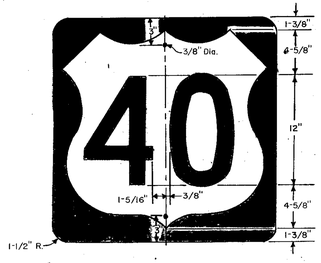
	20"X24"	30"X36"
a	20"	30"
b	24"	36"
c	8"	8"
d	3-1/4"	11"
e	4-3/4"	6-1/4"
f	1/2"	5/8"
g	6-1/8"R.	8"R.
h	2"	2-7/8"
j	5" D	8" E
K	3" C	6" B
m	1-1/4"	3/4"
r	17"	28-1/2"



DETAIL OF ARROW

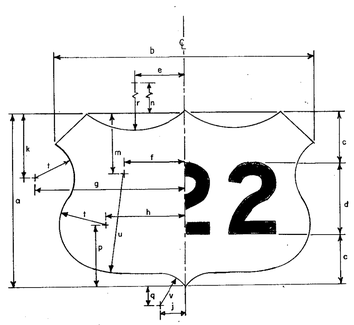
	20"X24"	30"X36"
a	2-1/4"	2-11/16"
b	4"	4-3/4"
c	1-3/4"	2-1/2"
d	4-3/4"	6-1/4"
e	1-1/4"	1-3/4"
f	5/16"	7/8"
g	5/16"R.	5/16"R.
h	1/4"R.	1/4"R.
r	6-1/8"R.	8"R.





M-1-2

24" X24" U.S. ROUTE MARKER
(INDEPENDENT USE)



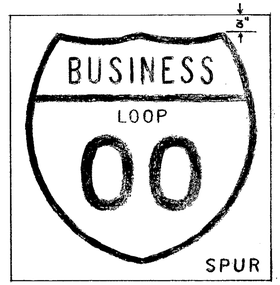
M-1-2A

U.S. ROUTE MARKER-OVERLAY

	12" NUMERALS	
	2 DIGITS	3 DIGITS
a	30	30
b	35	45
c	9	9
d	12	12
e	5-15/16	8-9/16
f	5-1/2	10-1/2
g	20-13/16	25-13/16
h	8-3/4	13-3/4
j	4-9/16	4-9/16
k	11	11
m	10-5/16	10-5/16
n	8-3/16	12-5/16
p	10-13/16	10-13/16
q	3-5/16	3-5/16
r	10-3/16	15
s	6-5/8	6-5/8
t	7-15/16	7-15/16
u	17-3/8	17-3/8
v	5-5/8	5-5/8



G-50-D
(INDEPENDENT USE)



G-50-E
(OVERLAY)

CODE	LEGEND / = LINE DIVISION	W x H	BORDER	LETTER-NUMERAL SIZE SERIES ON LINE		
				1	2	3
G-50-D	BUSINESS/LOOP/ (2 DIGITS)	24"x24"	3/4"	2-1/2" C	1-1/2" D	8" D
G-50-E	BUSINESS/ LOOP/ (2 DIGITS)	36"x36"	1-1/8"	3-3/4" C	2-1/4" D	12" D

NOTES:

Background for Exeter-Hampton Expressway and F.E. Everett Turnpike route markers shall be Interstate green screened on silver reflective sheeting. Background for Spaulding and N.H. Turnpikes shall be Interstate blue screened on silver reflective sheeting. Border, text and disk shall be silver. Overlay Business Loop (Spur) route markers shall be Interstate green screened on silver reflective sheeting background

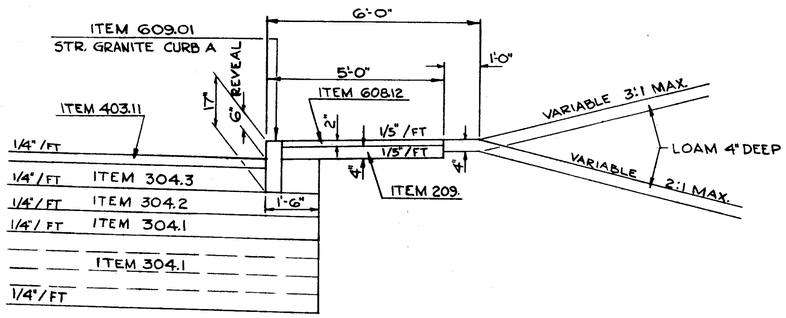
The degree of arrow inclination for each shall be as indicated on the sign text sheets.

The route marker as an overlay shall be of .064 guage aluminum.

Sheet 1-C

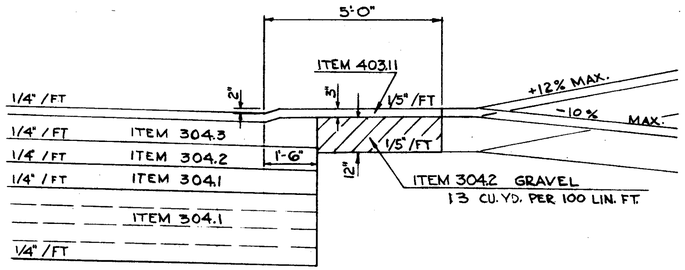
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	U.S. 28(17)	2	111

TYPICAL SECTION OF IMPROVEMENT



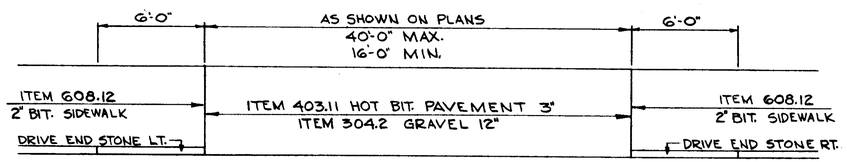
CROSS SECTION - CURB AND SIDEWALK DETAIL

Scale: 1/2" = 1'-0"

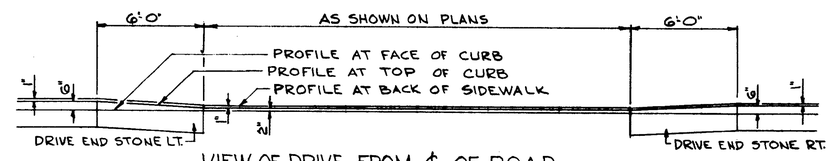


CROSS SECTION DETAIL AT URBAN DRIVE RAMP

Scale: 1/2" = 1'-0"



PLAN URBAN DRIVE RAMP



VIEW OF DRIVE FROM ℄ OF ROAD

URBAN DRIVE RAMP

GENERAL NOTES

ADJUSTMENTS OF UTILITIES, UTILITY COVERS, SHUTOFFS, OR SIMILAR STRUCTURES TO THE NEW PAVEMENT GRADE AND THE MOVING OF UTILITY POLES AND HYDRANTS WILL BE DONE BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE, NOT A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH THE OWNER IN EVERY WAY TO EXPEDITE SUCH ADJUSTMENTS.

LOCATION, SIZE, AND DEPTH OF EXISTING PIPES SHOWN ON PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED PRIOR TO CONSTRUCTION BY THE CONTRACTOR. DISPOSAL OF PIPES REMOVED TO BE IN ACCORDANCE WITH SUBDIVISION 104.041

UNSUITABLE MATERIAL, ROOTS, AND STUMPS WITHIN THE LIMITS OF THE ROADBED SHALL BE COMPLETELY REMOVED AS ORDERED BY THE ENGINEER.

MUCK SHALL BE REMOVED BY EXCAVATION UNDER ITEM 203.1 OR BY DISPLACEMENT, AS ORDERED BY THE ENGINEER.

ITEM 410.31 ASPHALT SURFACE TREATMENT INCLUDING BLOTTER MATERIAL AS A PRIME COAT ON THE FOUNDATION COURSE, 1.25 GALLON PER SQUARE YARD OR AS ORDERED, TO BE APPLIED IN THREE APPLICATIONS OF 0.50, 0.25, AND 0.50 GALLON PER SQUARE YARD RESPECTIVELY. THE THIRD APPLICATION SHALL BE APPLIED AS ORDERED BY THE ENGINEER.

ITEM 410.31 ASPHALT SURFACE TREATMENT INCLUDING BLOTTER MATERIAL AS A SHOULDER TREATMENT, 1.00 GALLON PER SQUARE YARD TO BE APPLIED AS ORDERED BY THE ENGINEER.

HUMUS (ITEM 647.1 AND ITEM 647.2) SHALL BE APPLIED TO ALL EARTH SLOPES NOT LOAMED AT THE RATE OF 0.006 C.Y. PER S.F., UNLESS OTHERWISE ORDERED BY THE ENGINEER.

DRIVES SHALL BE REPLACED IN KIND EXCEPT AT THOSE LOCATIONS WHERE GRADES HAVE BEEN STEEPENED TO THE EXTENT THAT A MORE STABLE SURFACE IS WARRANTED.

TOPSOIL SHALL BE REMOVED FOR ITS TOTAL DEPTH IN FIELD AND OPEN AREAS WITHIN THE LIMITS OF THE SLOPE LINES. UNLESS OTHERWISE DIRECTED, THE TOPSOIL SHALL BE STOCK-PILED AND USED IN ITS ENTIRETY UNDER ITEM 641.- LOAM

MAXIMUM SUPERELEVATION EQUALS 1/4"/FT. ON ALL ROADWAYS UNLESS OTHERWISE NOTED.

1 ½" FUTURE PAVING, BY OTHERS, IS NOT A PART OF THIS CONTRACT, AND FINISHED GRADES, AS SHOWN, REFLECT PRESENT CONSTRUCTION ONLY.

THE CONSTRUCTION OF CONCRETE STEPS AS SHOWN ON THE PLAN OR AS ORDERED SHALL BE OF PORTLAND CEMENT CONCRETE CLASS A SECTION 520 AND STANDARD SHEET NO. 5, STANDARD CS-1

NO CURB INLETS SHALL BE USED ON THIS PROJECT AND ADJUSTMENTS HAVE BEEN MADE ACCORDINGLY ON SUMMARY SHEET #16.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

	BOOK NO.	PAGE NO.

PLAN TRACED
PLAN CHECKED
PROFILE TRACED
PROFILE CHECKED

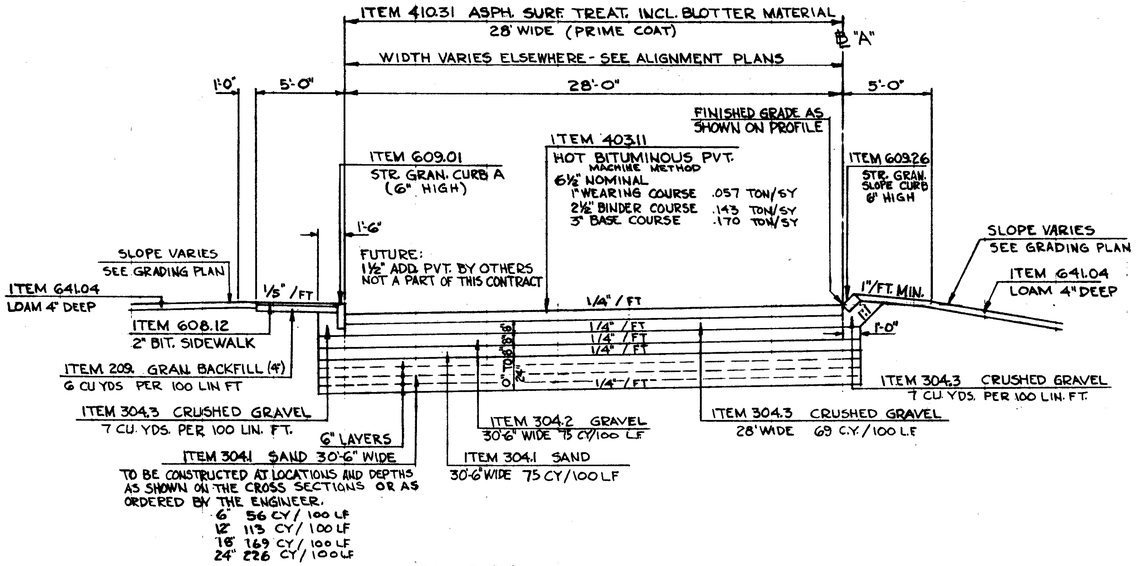
DATE :: SEPT. 2, 69
INKED C.A. PROOS
DATE SEPT. 9, 69
CHECKED J.P. LeBLANC

1500 1-66

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	2	111

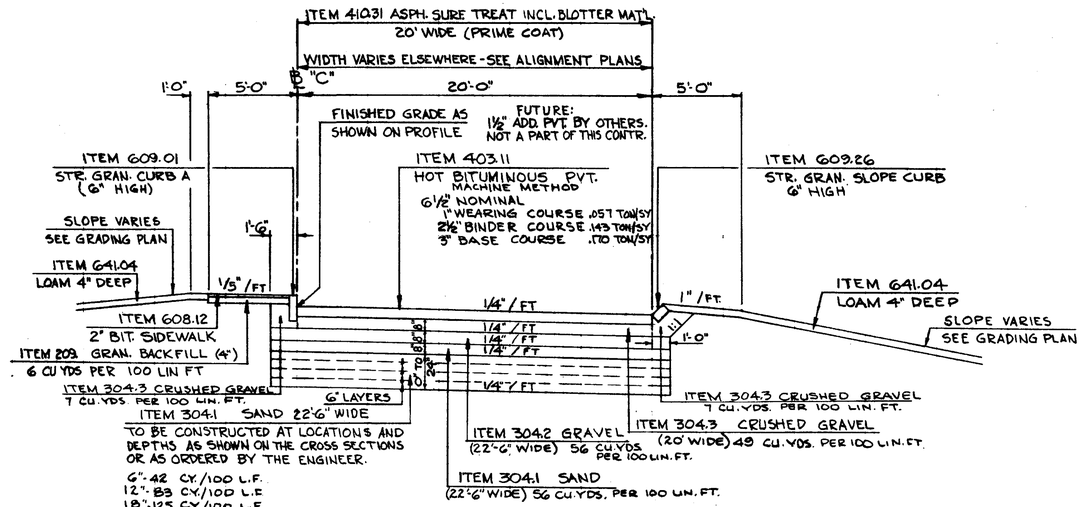
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	U.S. 28(17)	3	111

TYPICAL SECTION OF IMPROVEMENT



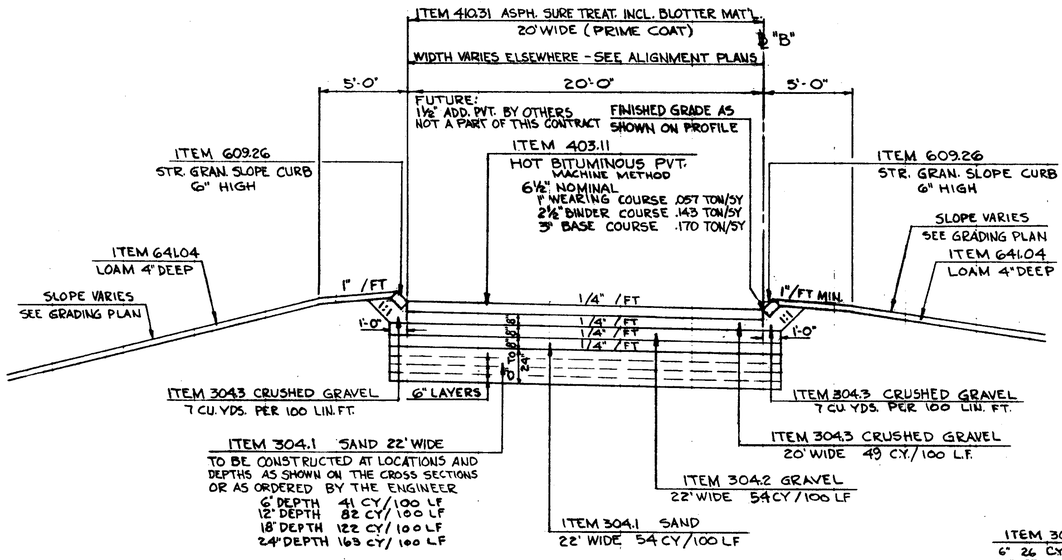
RAMP "A" STA. 11+69·A TO STA. 13+50·A

Scale: 1/4" = 1'-0"



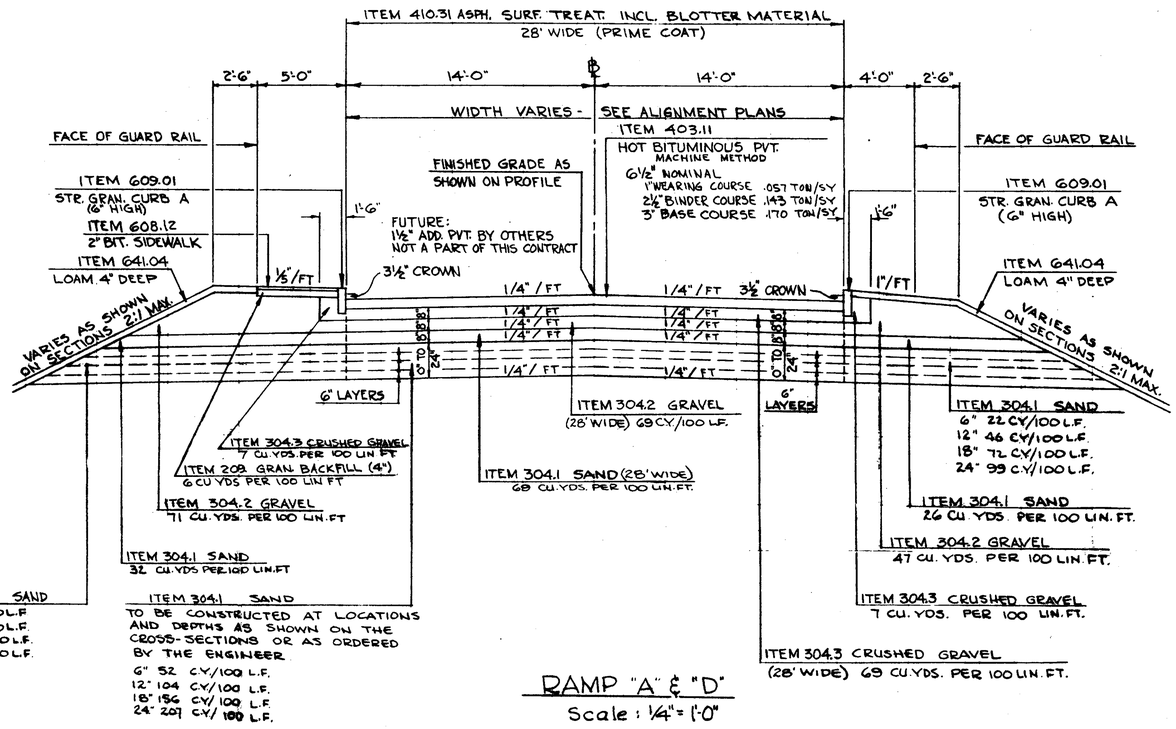
RAMP "C" STA. 25+25·C TO STA. 25+65·C

Scale: 1/4" = 1'-0"



RAMP "B" STA. 24+00·B TO STA. 25+83·B

Scale: 1/4" = 1'-0"



RAMP "A" & "D"

Scale: 1/4" = 1'-0"

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)	NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS	BOOK NO.	PAGE NO.	DATE	BOOK NO.	PAGE NO.
	..	..	..	..	..
	..	..	..	..	..
	..	..	SEPT. 3.69	..	..
	..	..	SEPT. 9.69	..	..

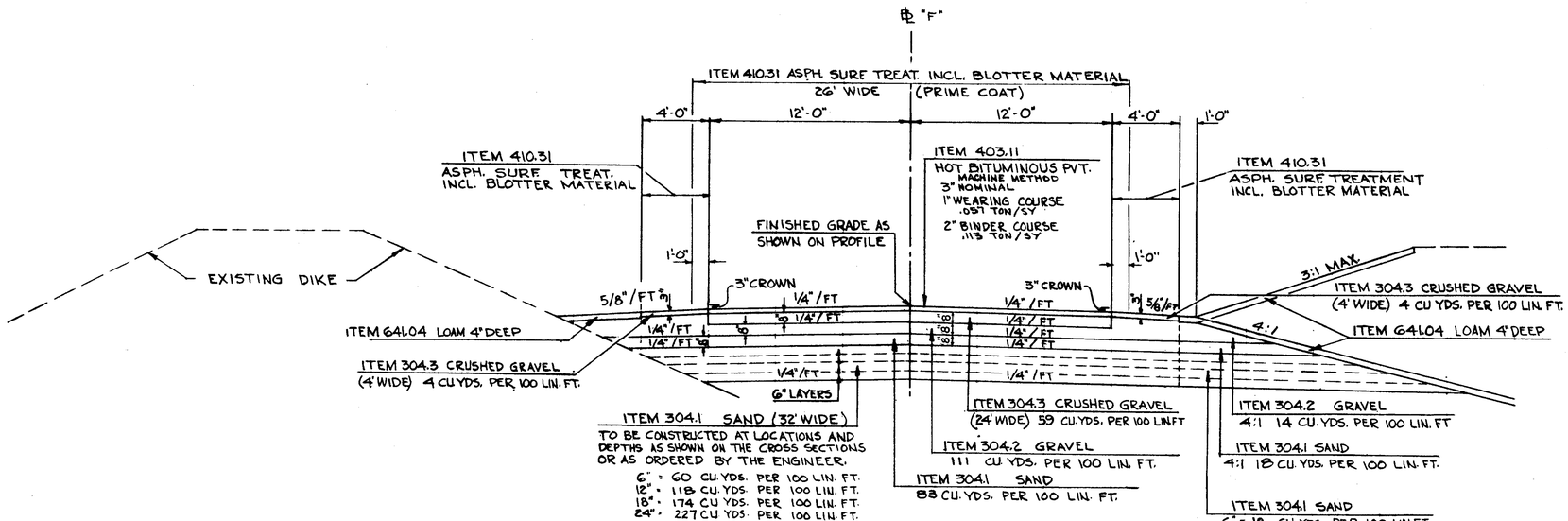
PLAN TRACED	
PLAN CHECKED	
PROFILE TRACED	
PROFILE CHECKED	
INKED	C.A. PROOS
CHECKED	J.P. LeBLANC

1500 1-86

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	3	111

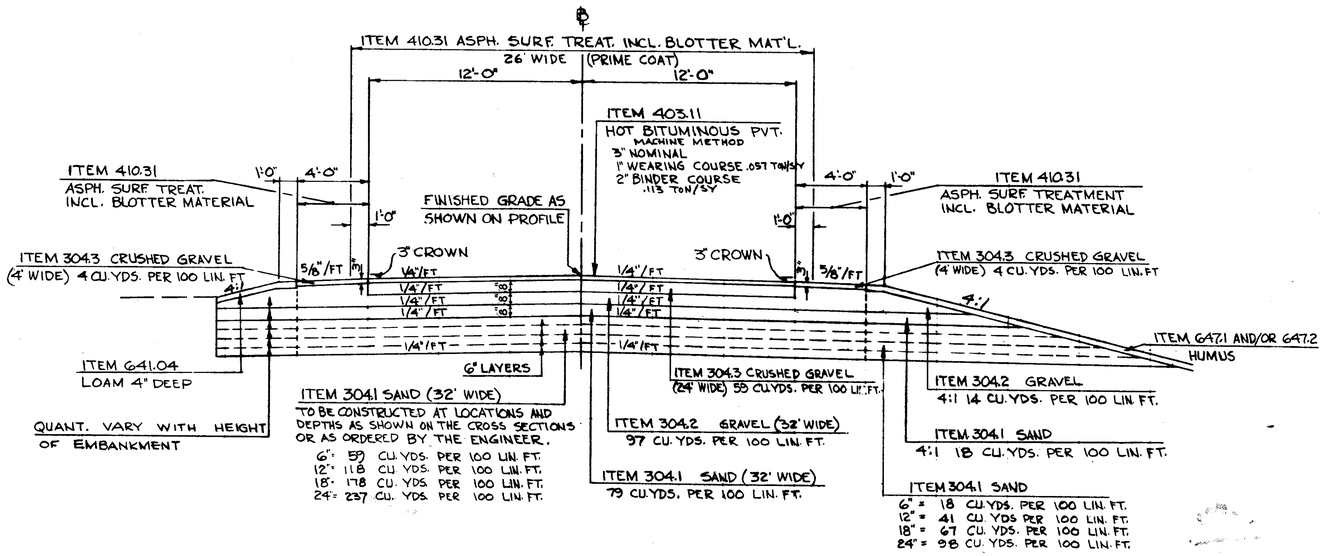
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	U.S. 28(17)	4	111

TYPICAL SECTION OF IMPROVEMENT



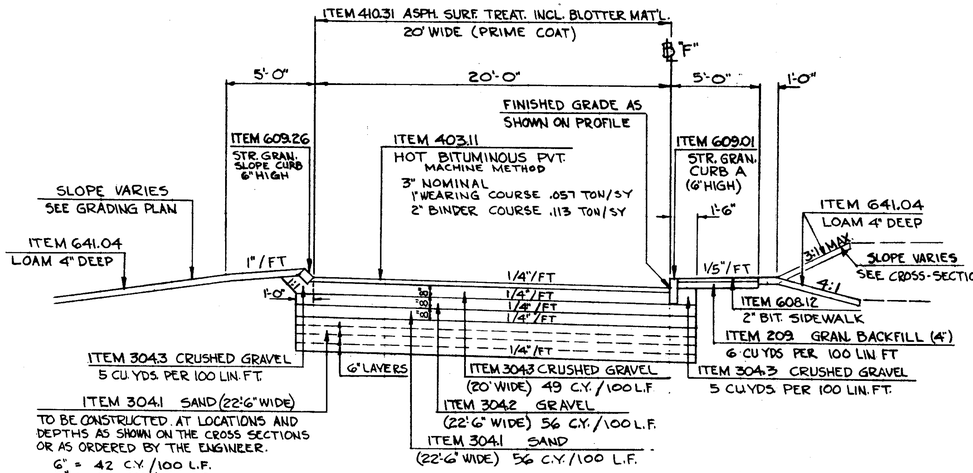
CROWN ST. EXTENSION

Scale: 1/4" = 1'-0"



RAMP "R"

Scale: 1/4" = 1'-0"



RAMP "F" STA. 23+30F TO STA. 26+57F

Scale: 1/4" = 1'-0"

REVISIONS AFTER PROPOSAL	NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS	BOOK NO.	PAGE NO.	DATE
PLAN TRACED			
PLAN CHECKED			
PROFILE TRACED			
PROFILE CHECKED			SEPT 4, 69
INKED	C.A. PROOS		
CHECKED	J.P. LeBLANC		SEPT 9, 69

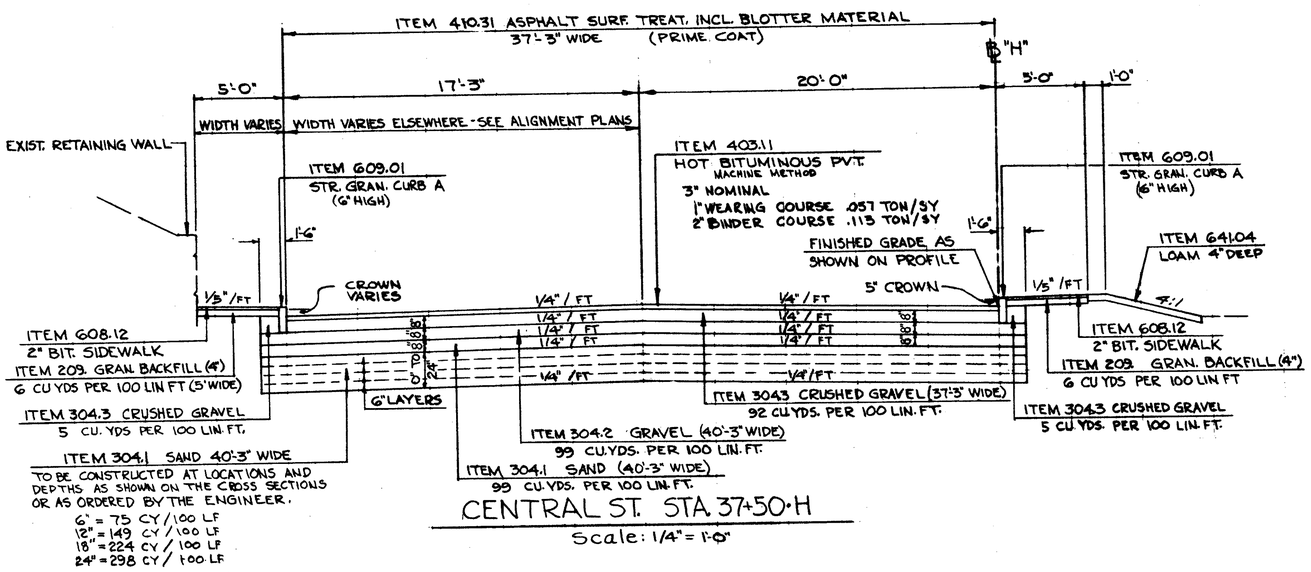
(USE BOTTOM LINES FIRST)

1500 1-86

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	4	111

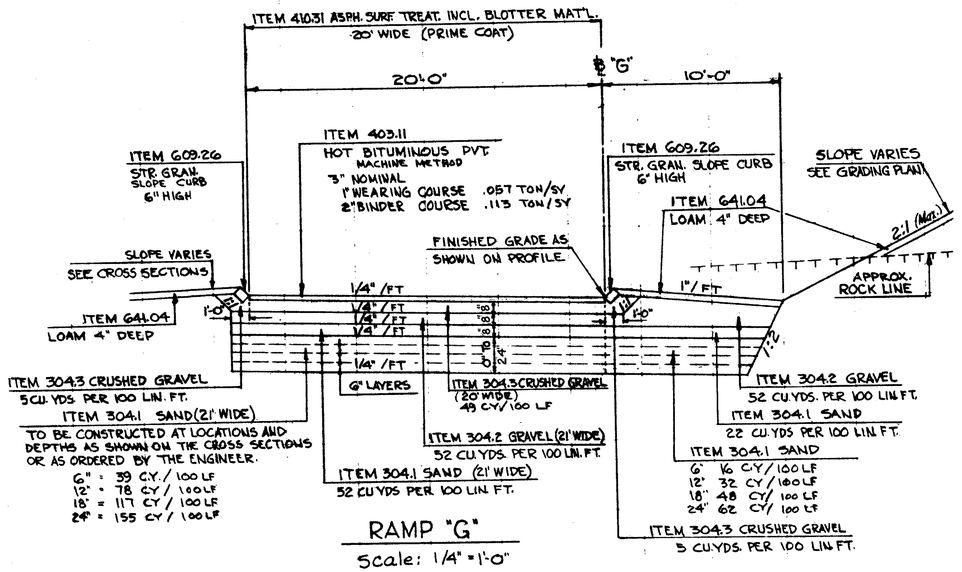
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	U.S. 28(17)	5	111

TYPICAL SECTION OF IMPROVEMENT



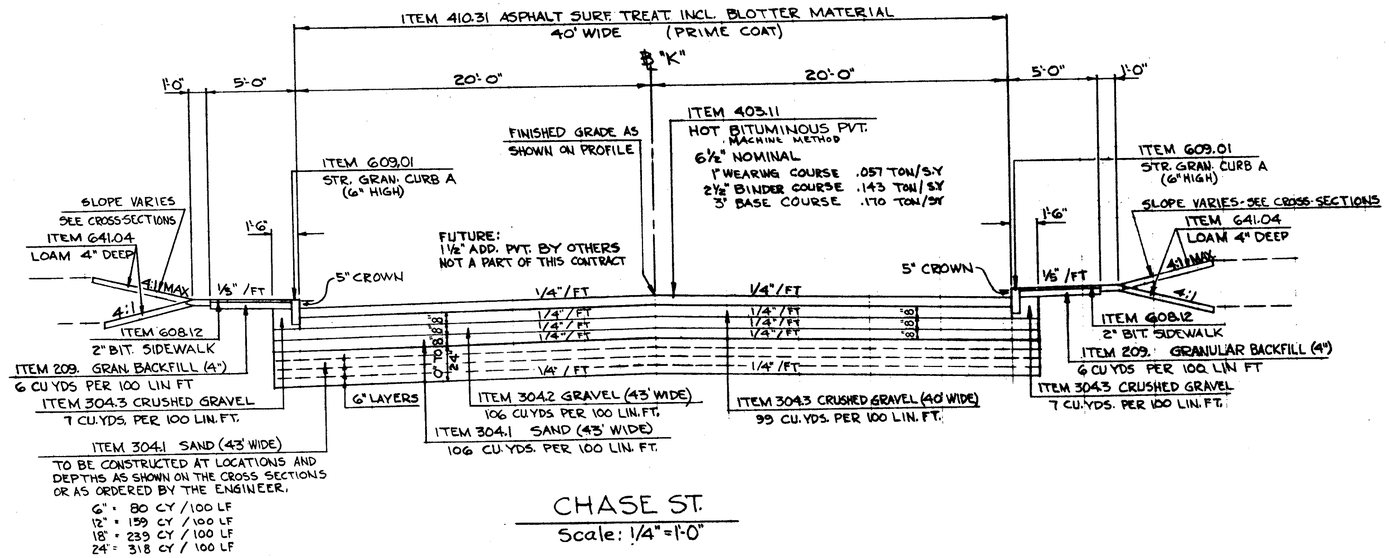
CENTRAL ST. STA. 37+50-H

Scale: 1/4" = 1'-0"



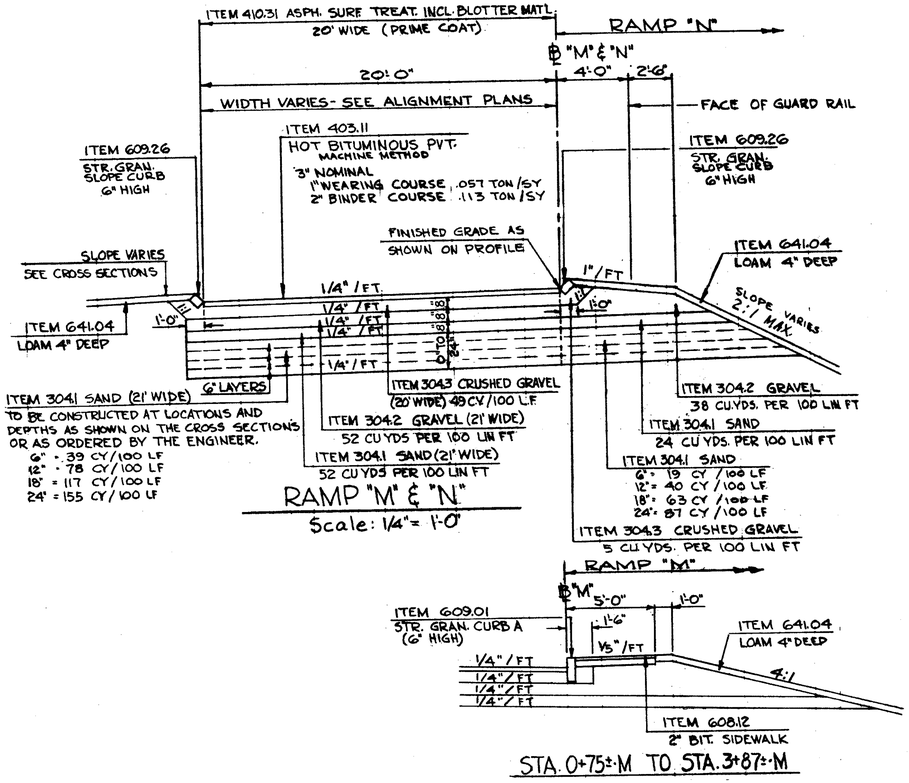
RAMP "G"

Scale: 1/4" = 1'-0"



CHASE ST.

Scale: 1/4" = 1'-0"



RAMP "M" & "N"

Scale: 1/4" = 1'-0"

STA. 0+75±-M TO STA. 3+87±-M

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	5	111

REVISIONS	DATE	DESCRIPTION

(USE BOTTOM LINES FIRST)

NOTEBOOKS	BOOK NO.	PAGE NO.	DATE

	DATE
PLAN TRACED	
PLAN CHECKED	
PROFILE TRACED	
PROFILE CHECKED	
INKED C.A. PROOS	SEPT. 5, 69
CHECKED J.P. LEBLANC	DATE SEPT. 10, 69

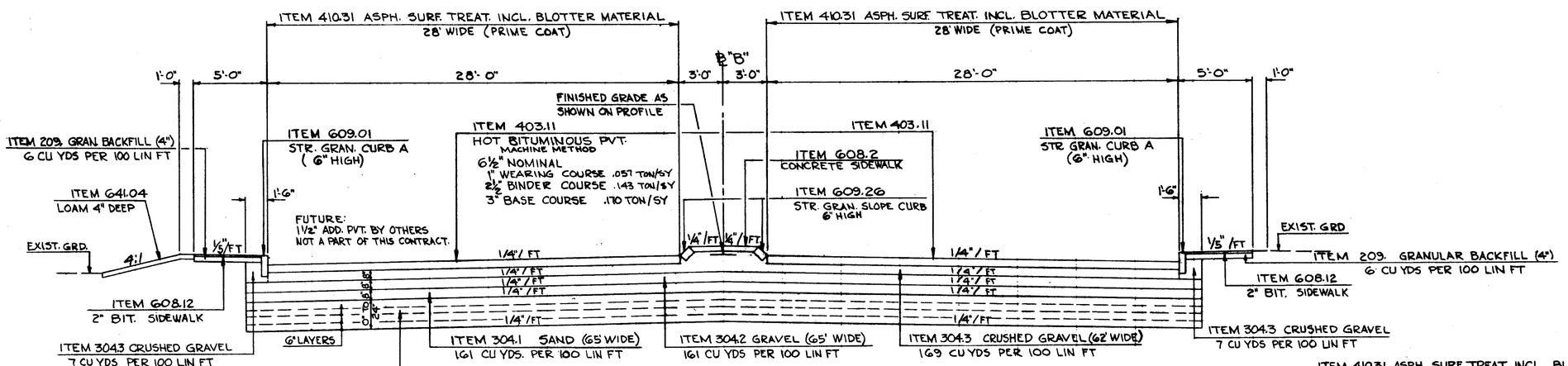
REVISIONS	NO.	DATE	STATION

NOTEBOOKS	BOOK NO.	PAGE NO.	STATION

1500 1-68

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	U.S. 28(17)	6	111

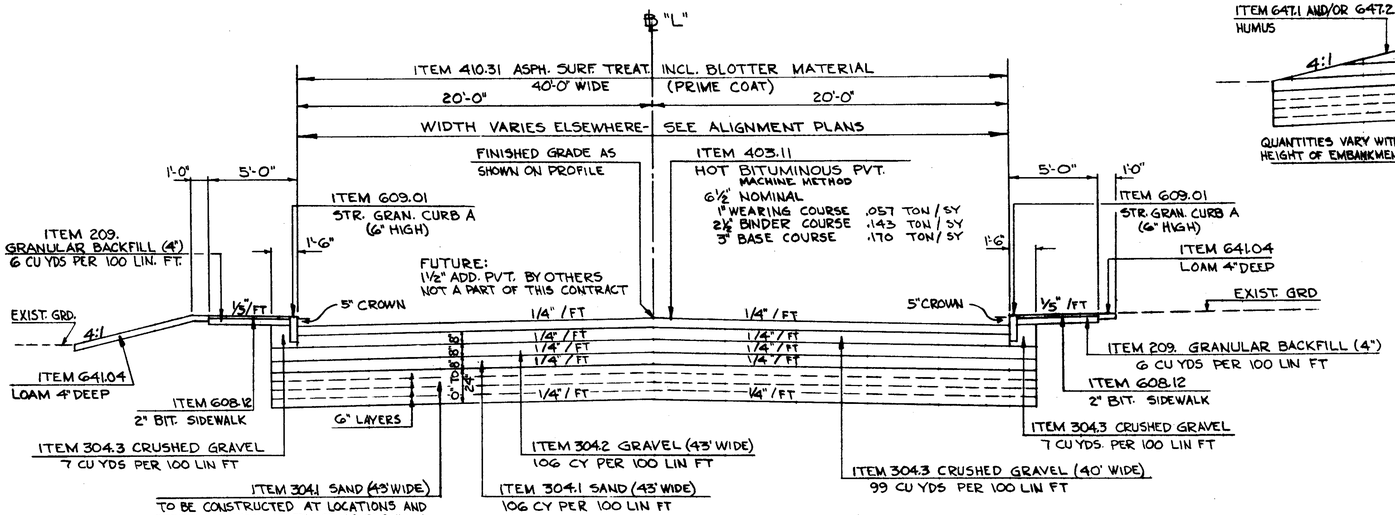
TYPICAL SECTION OF IMPROVEMENT



FERRY ST. STA. 40+04.97-B TO STA. 42+00-B

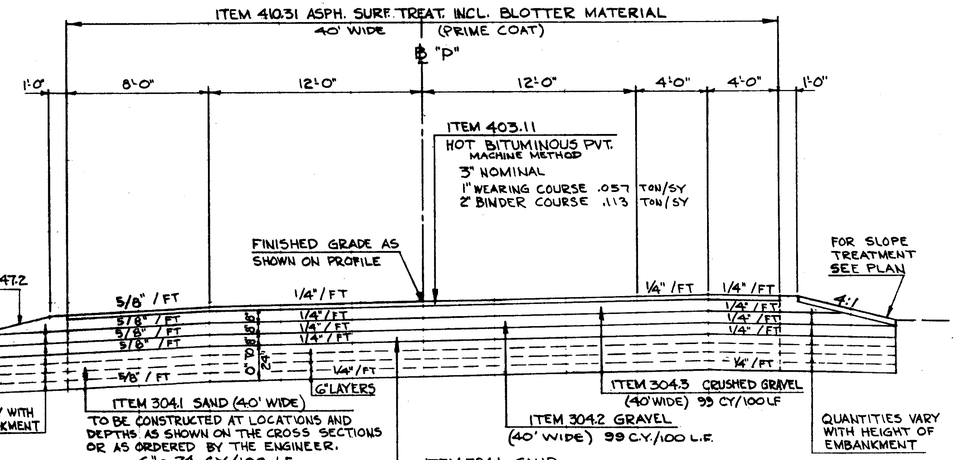
(WIDTH VARIES ELSEWHERE - SEE ALIGNMENT PLANS)

Scale: 1/4"=1'-0"



DERRY RD. STA. 10+50-L

Scale 1/4"=1'-0"



WEBSTER-ELM STS. INTERSECTION

Scale: 1/4" = 1'-0"

(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

	BOOK NO.	PAGE NO.
	"	"
	"	"
	"	"
	"	"

	DATE	BOOK NO.	PAGE NO.
PLAN TRACED	"		
PLAN CHECKED	"		
PROFILE TRACED	"		
PROFILE CHECKED	"		
INKED	SEPT. 8 69		
CHECKED	SEPT. 10 69		

C.A. PROOS

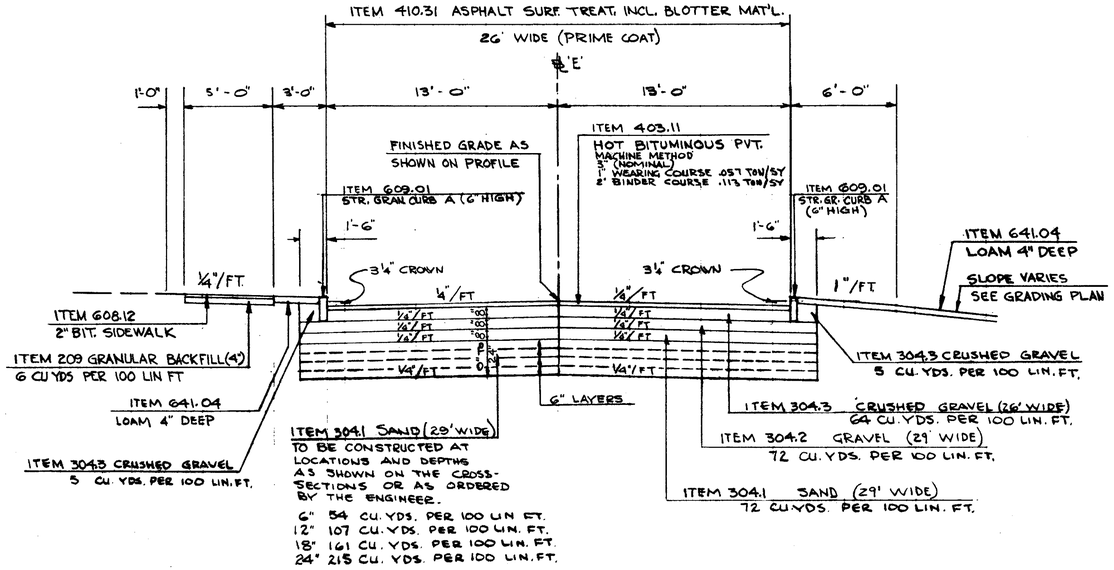
J.A. LeBLANC

1500 1-66

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	6	111

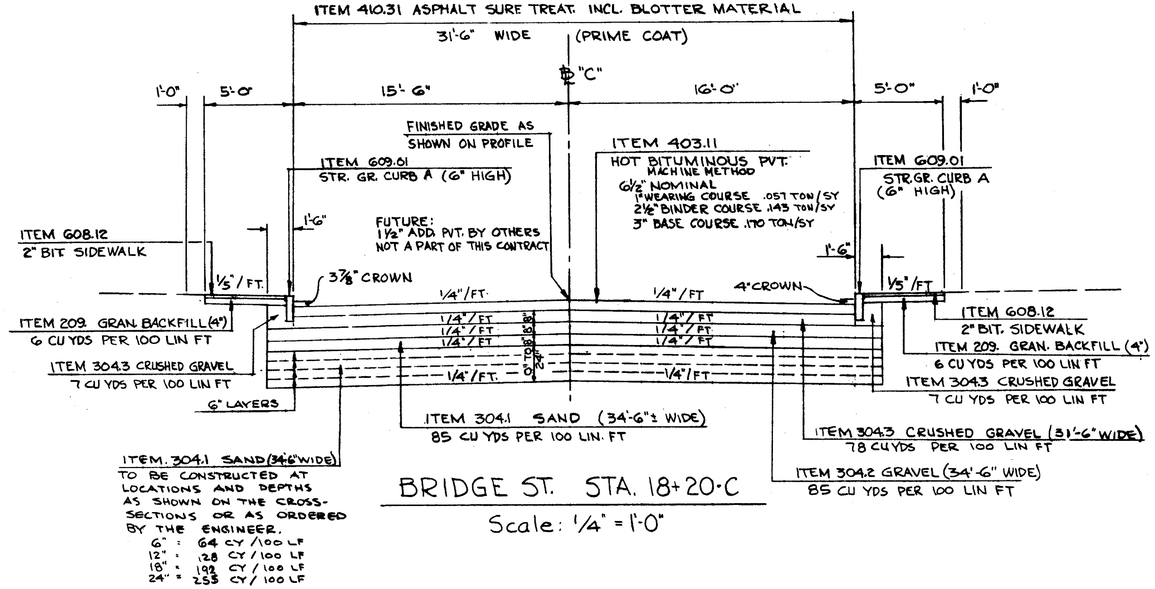
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	U.S. 28(17)	7	111

TYPICAL SECTION OF IMPROVEMENT



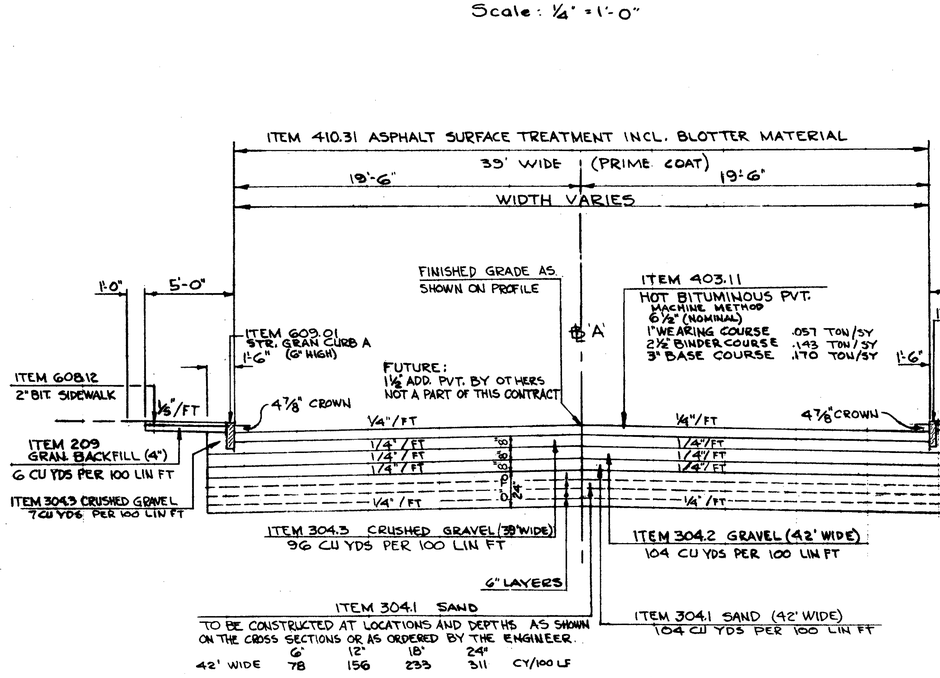
E STREET

Scale: ¼" = 1'-0"



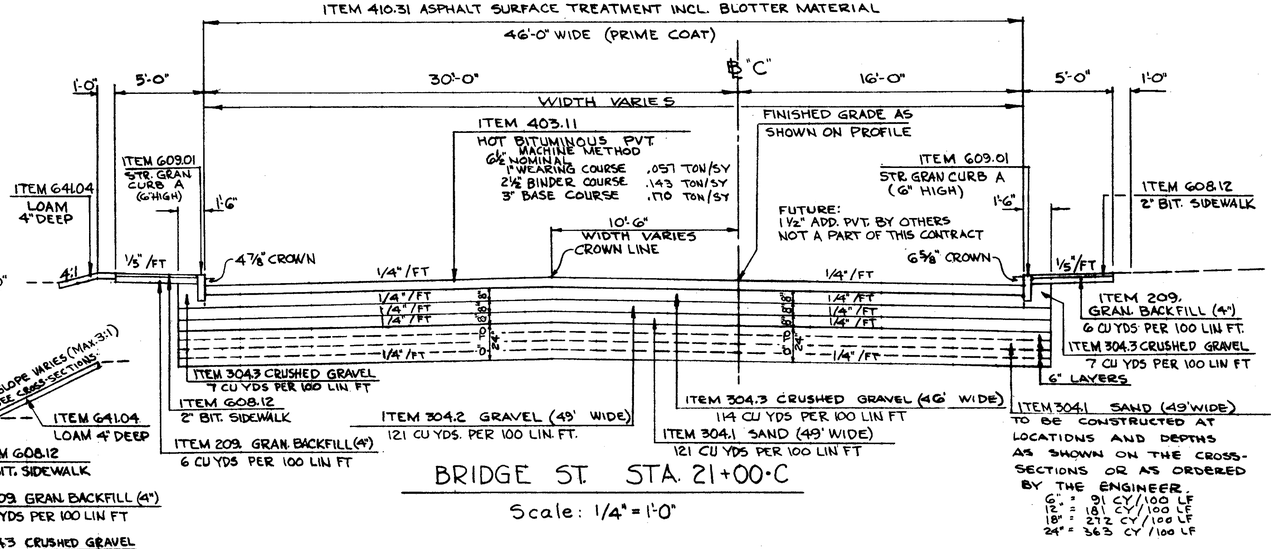
BRIDGE ST. STA. 18+20·C

Scale: 1/4" = 1'-0"



EAST HOLLIS ST. (ROUTE 111) AT STA. 6+25·A

Scale: ¼" = 1'-0"



BRIDGE ST. STA. 21+00·C

Scale: 1/4" = 1'-0"

PLAN TRACED			
PLAN CHECKED			
PROFILE TRACED			
PROFILE CHECKED			
INKED	C.A. PROOS	DATE	SEPT 9, 69
CHECKED	J.P. LeBLANC	DATE	SEPT 1969

NOTEBOOKS — BOOK NO. :: PAGE NO. :: BOOK NO. :: PAGE NO.

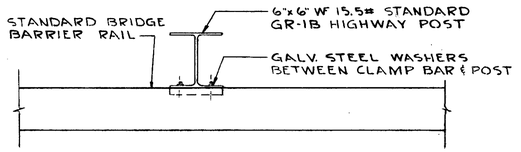
REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	DESCRIPTION	STATION	STATION	

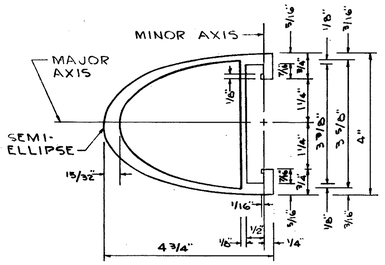
1500 1-66

PROJ. NO.	SHEET NO.	TOTAL SHEETS
U.S. 28(17)	7	111

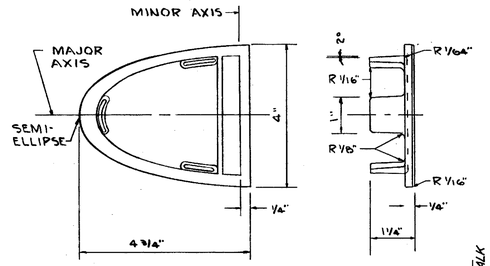
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	US 28(17)	8	111

RAIL NOTES:
ENDS OF TUBE SECTION SHALL BE SAWED OR MILLED. CUT ENDS TO BE TRUE AND SMOOTH. GRIND ALL EDGES SMOOTH. JOINTS IN RAIL LENGTH SHALL BE SPLICED AS DETAILED. EACH RAIL SECTION SHALL BE ATTACHED TO A MINIMUM OF FOUR POSTS.

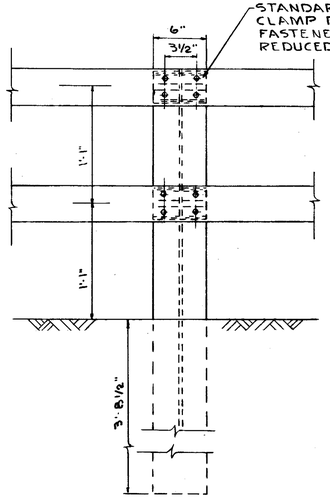


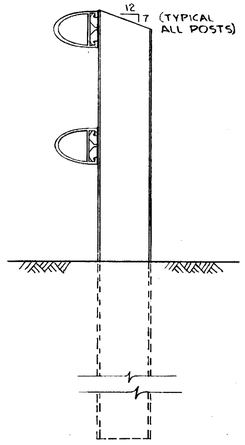


BARRIER RAIL SECTION
SCALE: HALF SIZE

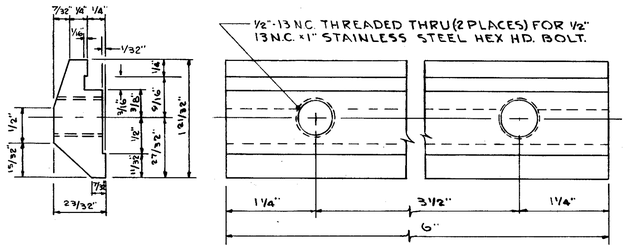


BARRIER RAIL END CAP
SCALE: HALF SIZE

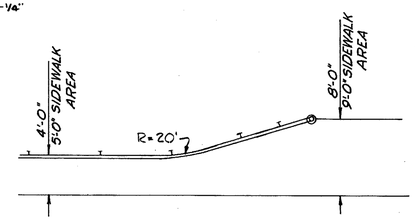




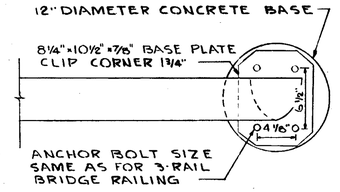
2-RAIL BRIDGE APPROACH RAIL
SCALE: 1 1/2" = 1'-0"



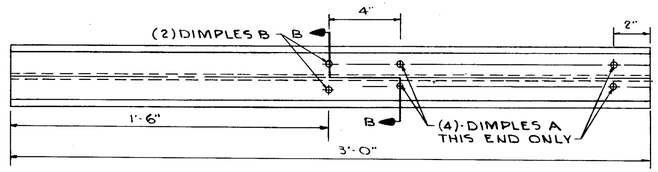
BARRIER RAIL CLAMP BAR
SCALE: FULL SIZE



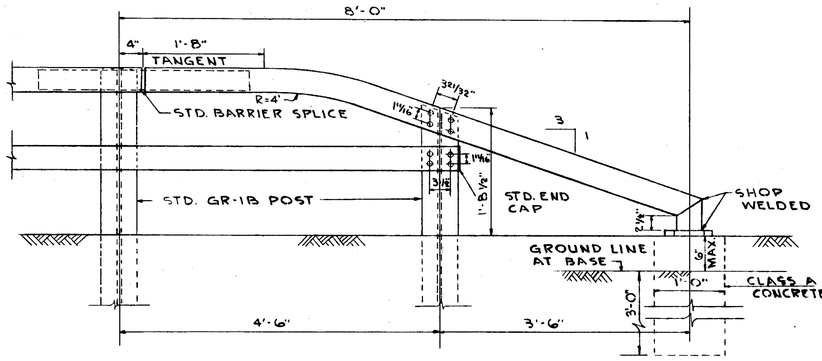
PLAN
SCALE: 1/8" = 1'-0"



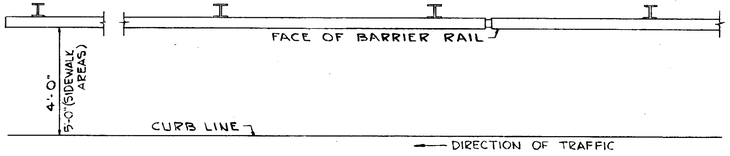
BASE PLATE DETAIL
SCALE: 1 1/2" = 1'-0"



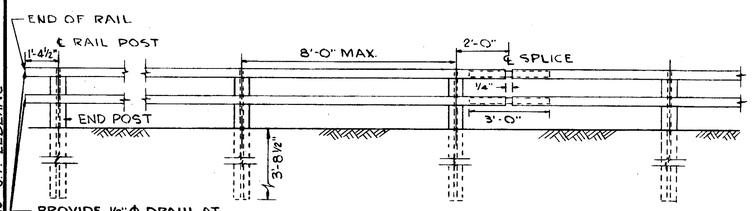
BARRIER RAIL SPLICE
SCALE: 3" = 1'-0"



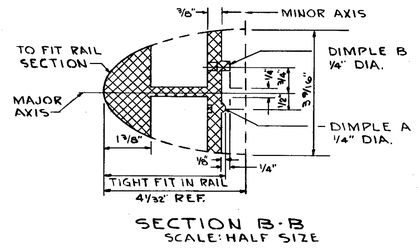
2 RAIL HIGHWAY END DETAIL
SCALE 1" = 1'-0"



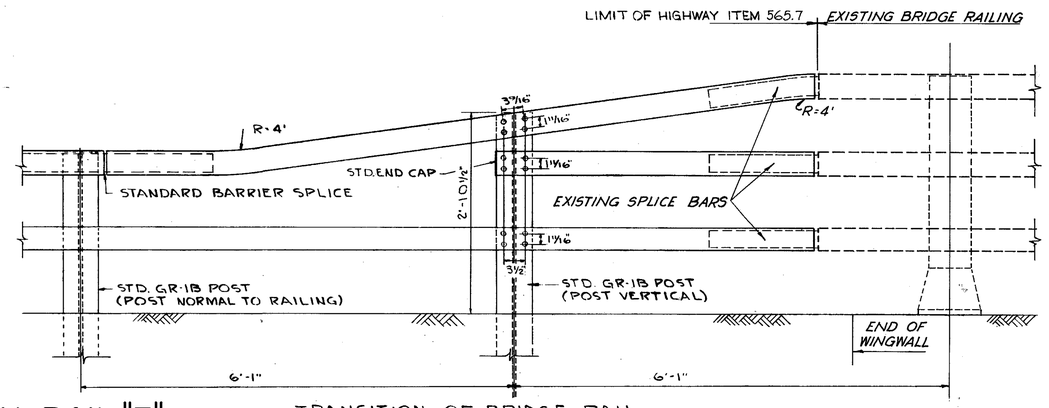
RAIL PLAN
SCALE: 3/8" = 1'-0"



RAIL ELEVATION
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: HALF SIZE



TRANSITION OF BRIDGE RAIL TO APPROACH RAIL
SCALE: 1" = 1'-0"

DETAILS OF BRIDGE APPROACH RAIL "F"

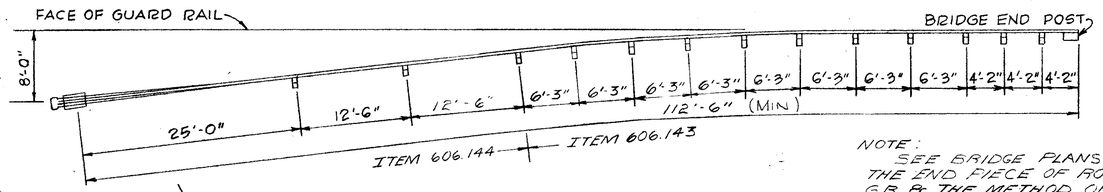
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	8	111

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

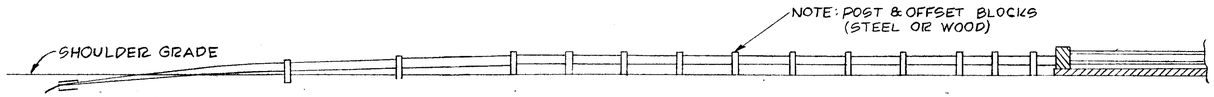
PLAN TRACED	
PLAN CHECKED	
PROFILE TRACED	
PROFILE CHECKED	M. L. PADD
INKED	J. P. LEBLANC
CHECKED	
DATE	May 28 '69
DATE	May 29 '69

NOTEBOOKS	BOOK NO.	PAGE NO.	BOOK NO.	PAGE NO.
	...	...	...	...
	...	...	...	...
	...	...	...	...



PLAN

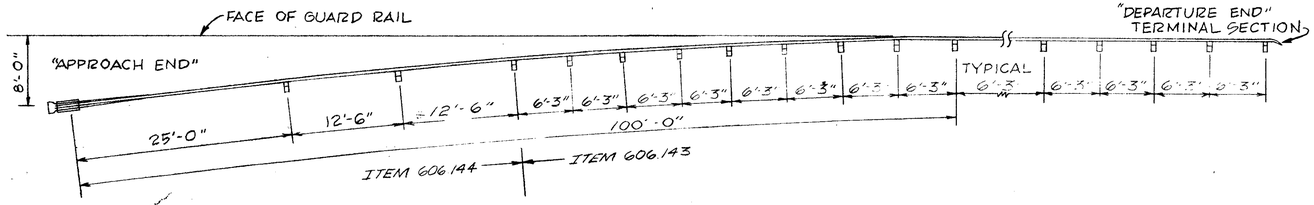
NOTE:
SEE BRIDGE PLANS FOR DETAILS OF THE END PIECE OF ROADWAY BEAM G.R. & THE METHOD OF ATTACHMENT TO THE END POST.
THE END PIECE OF BEAM G.R. SHALL BE PAID FOR UNDER THE ROADWAY G.R. ITEM. COST OF BOLTS, NUTS, WASHERS AND THE CONNECTIONS TO THE END POST SHALL BE SUBSIDIARY TO THE BRIDGE RAILING ITEM. ADDITIONAL POST & FIELD DRILLING SHALL BE SUBSIDIARY.



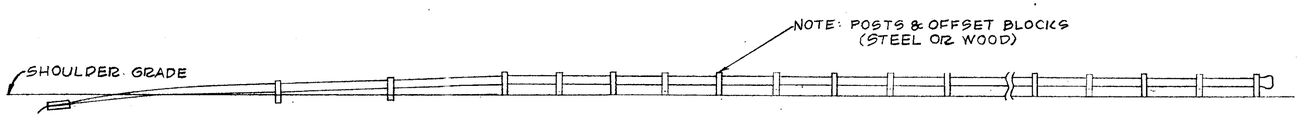
ELEVATION

TYPICAL INSTALLATION AT BRIDGE

Scale: 1/8" = 1'-0"



PLAN

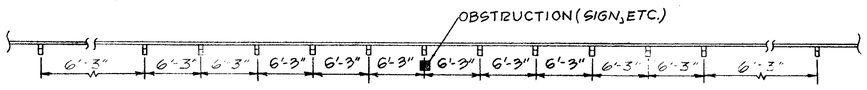


ELEVATION

STANDARD LAYOUT

Scale: 1/8" = 1'-0"

FOR TWO LANE TWO WAY TRAFFIC, USE "APPROACH ENDS" TREATMENT, SYMMETRICALLY, AT BOTH ENDS.
FOR DIVIDED ROADWAY - USE "DEPARTURE END" TREATMENT (SHOWN ABOVE) IN DIRECTION OF TRAFFIC.

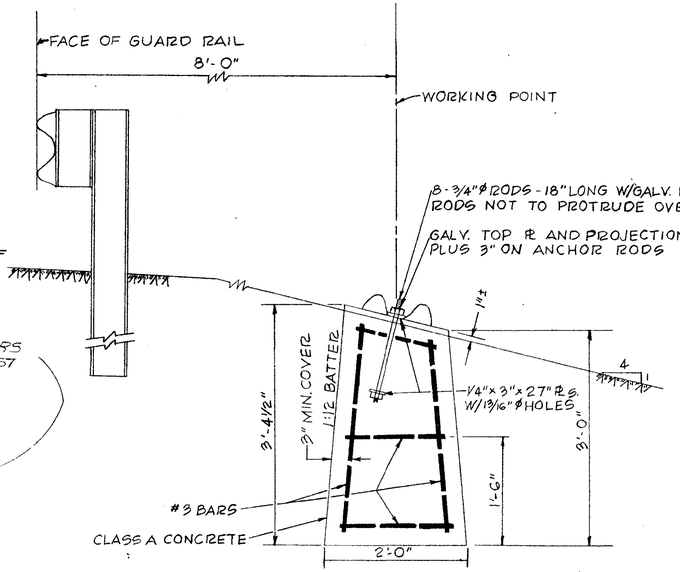


PLAN

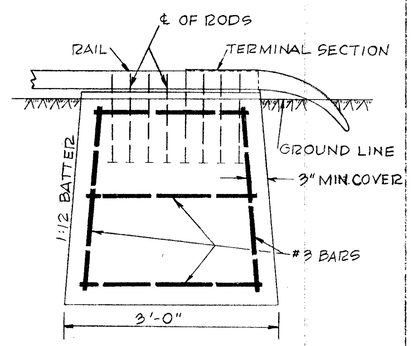
OBSTRUCTION LAYOUT

Scale: 1/8" = 1'-0"

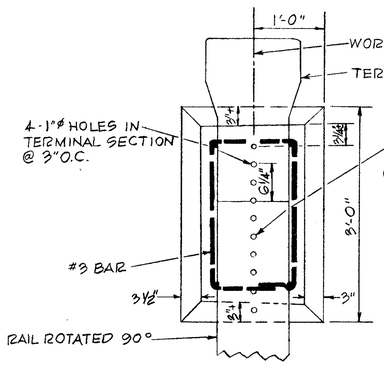
NOTE: TO BE USED WITH STANDARD LAYOUT WHEN REQUIRED.



℄ ELEVATION



SIDE ELEVATION



PLAN

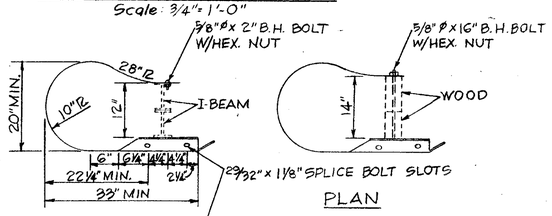
ITEM 606.82

SINGLE BEAM ANCHORAGE

Scale: 1" = 1'-0"

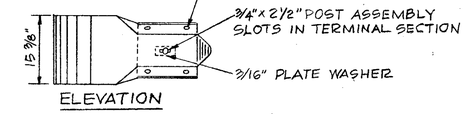
ALTERNATE TERMINAL SECTION for WOOD OR STEEL POSTS

Scale: 3/4" = 1'-0"

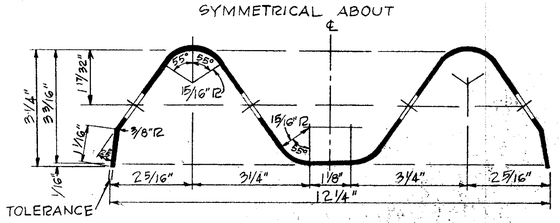


PLAN

PLAN



ELEVATION

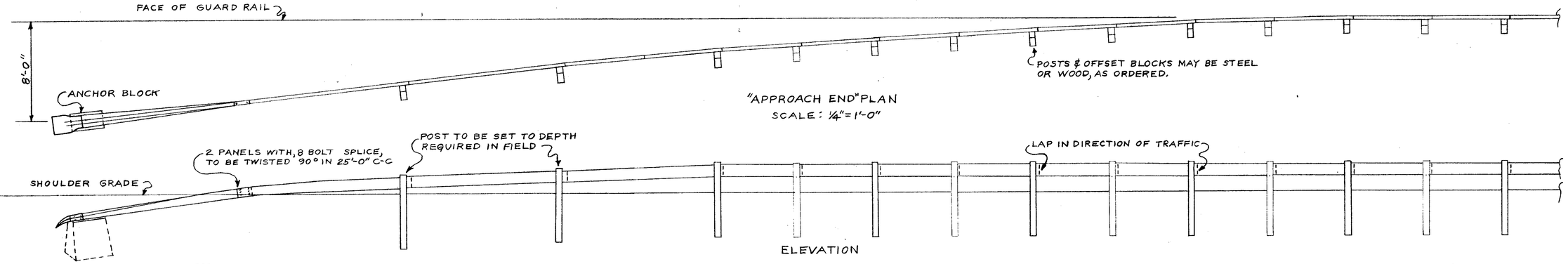


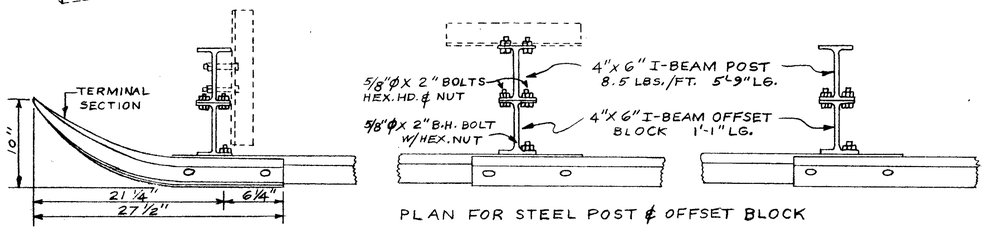
SECTION THRU RAIL ELEMENT

Half Scale

NOTE: FOR ADDITIONAL DETAILS SEE SHT. NO. 10

PROJ. NO	SHEET NO	TOTAL SHEETS
US 28(17)	9	111





PLAN FOR STEEL POST & OFFSET BLOCK

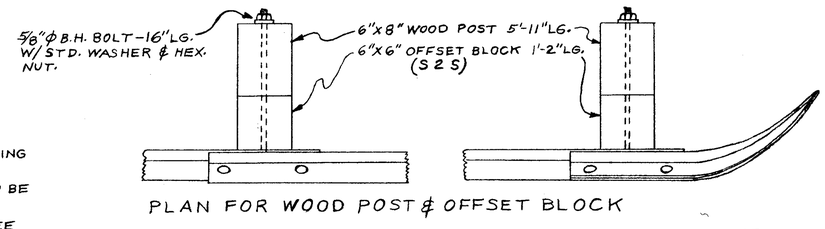
NOTES

STEEL POSTS, OFFSET BLOCKS, ANCHORS, PLATES AND ALL FITTINGS TO BE GALVANIZED.

ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

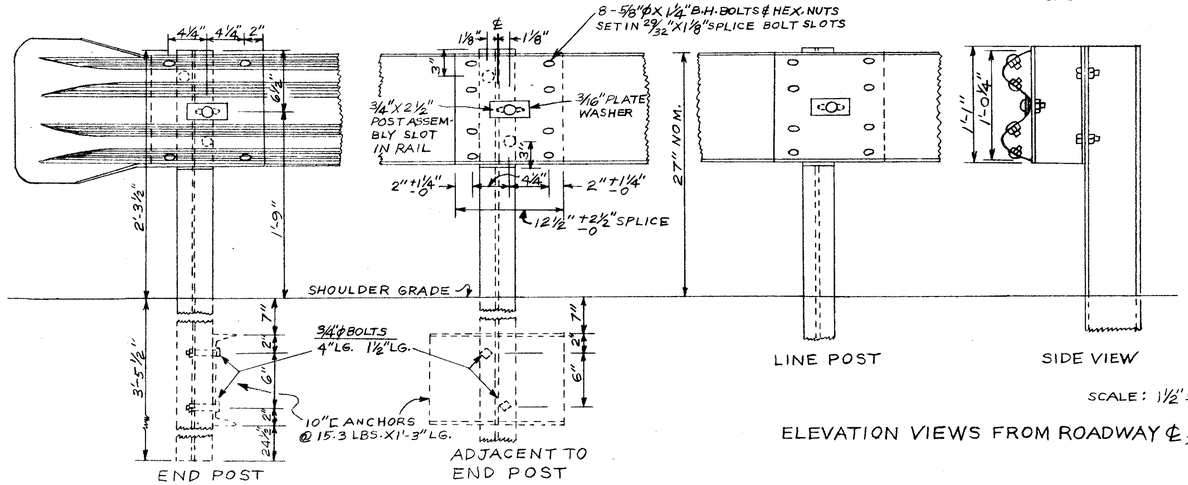
RAIL PANELS AND TERMINAL SECTIONS TO BE 12 GAGE STEEL.

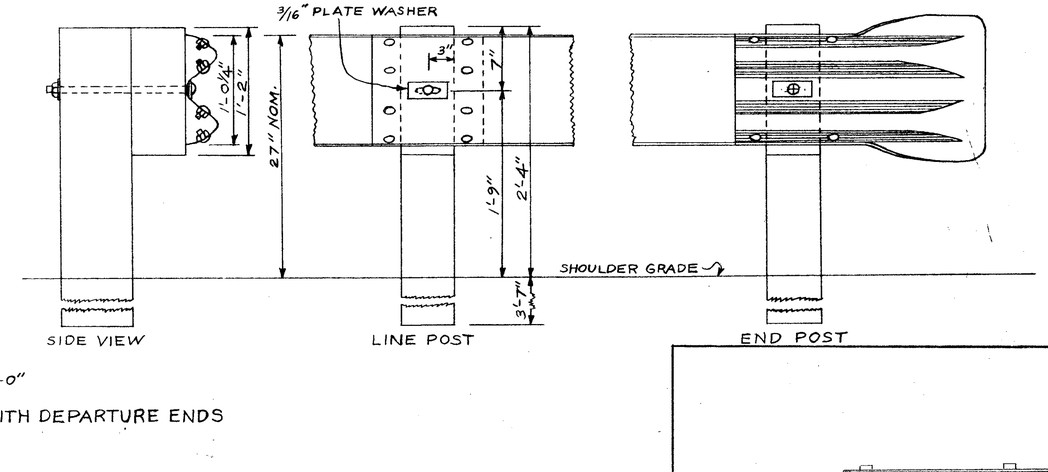
FOR ALTERNATE TERMINAL SECTION, SEE SHEET NO.



PLAN FOR WOOD POST & OFFSET BLOCK

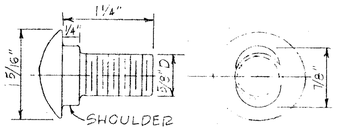
NOTE: FOR DETAILS OF RAIL ELEMENT, RAIL SPLICE AND TERMINAL SECTION, SEE PLANS FOR STEEL POST.



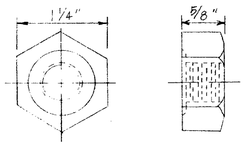


SCALE: 1 1/2" = 1'-0"

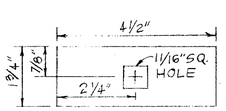
ELEVATION VIEWS FROM ROADWAY ℄, WITH DEPARTURE ENDS



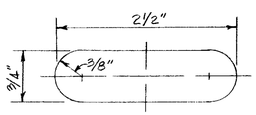
SPLICE BOLT (8 REQ'D PER SPLICE)
Full Scale



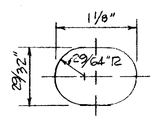
NUT (9 REQ'D PER RAIL ELEMENT)
Full Scale



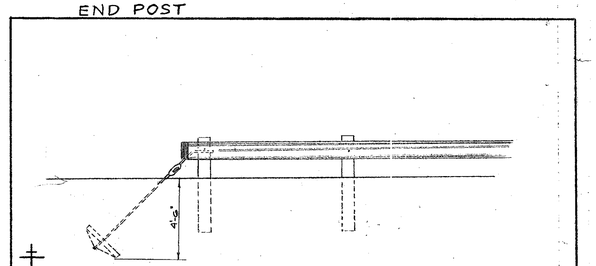
3/16" PLATE WASHER
Half Scale



POST ASSEMBLY SLOT
Full Scale



SPLICE BOLT SLOT
Full Scale



℄: CONST. ANCHORAGE AT STA. 12+50-N RT. THIS WILL BE SUBSIDIARY TO ITEM 606.144, ANCHORAGE ASSEMBLY SHALL INCLUDE: 1 ANCHOR BLOCK; 1 ANCHOR ROD A; 1 ANCHOR ROD B; 1 TURNBUCKLE. SEE STANDARD SHEET 6 & 7 FOR DETAILS.

NOTE: FOR ADDITIONAL DETAILS SEE SHT. NO. 9

POST BOLT
SAME EXCEPT LENGTH AND NO SHOULDER
1 REQUIRED PER POST
ST'D LENGTHS - 2", 5", 8", 10 1/2" & 16"

BEAM GUARD RAIL

ITEMS 606.143 & 606.144

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	10	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	11	111

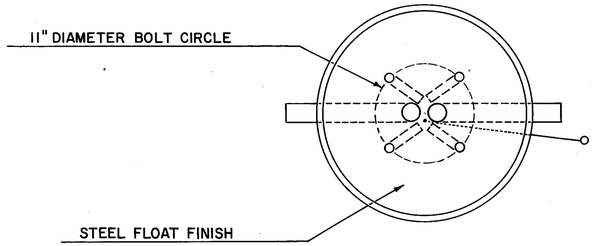
LEGEND

DIRECT-BURIAL CABLE

CONDUIT

ALUMINUM STANDARD

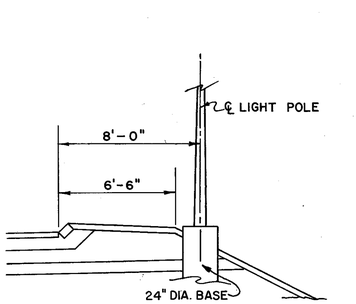
WOOD POLE



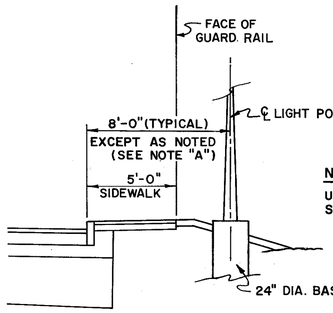
PLAN VIEW

NOTES :

1. POLES, LUMINAIRES, WIRES, & CABLES FURNISHED AND INSTALLED BY PUBLIC SERVICE CO. OF N.H.
2. ANCHOR BOLTS, NUTS, AND WASHERS, TO BE FURNISHED BY PUBLIC SERVICE CO. OF N.H. AND INSTALLED BY THE CONTRACTOR.
3. ANCHOR BOLT LOCATIONS SHOULD BE CHECKED BY PUBLIC SERV. CO. OF N.H. BEFORE CONCRETE BASE IS POURED.
4. GROUND WIRE, AND GROUND ROD FURNISHED BY PUB. SERV. CO. N.H. AND INSTALLED BY THE CONTRACTOR.
5. CONCRETE SHALL BE CLASS "A". (APPROX. 0.69 CU. YD. PER BASE.)
6. ALL BASES SHALL HAVE TWO RIGID STEEL CONDUITS.



(NO WALK, NO GUARD RAIL)



(WALK WITH/W.O. GUARD RAIL)

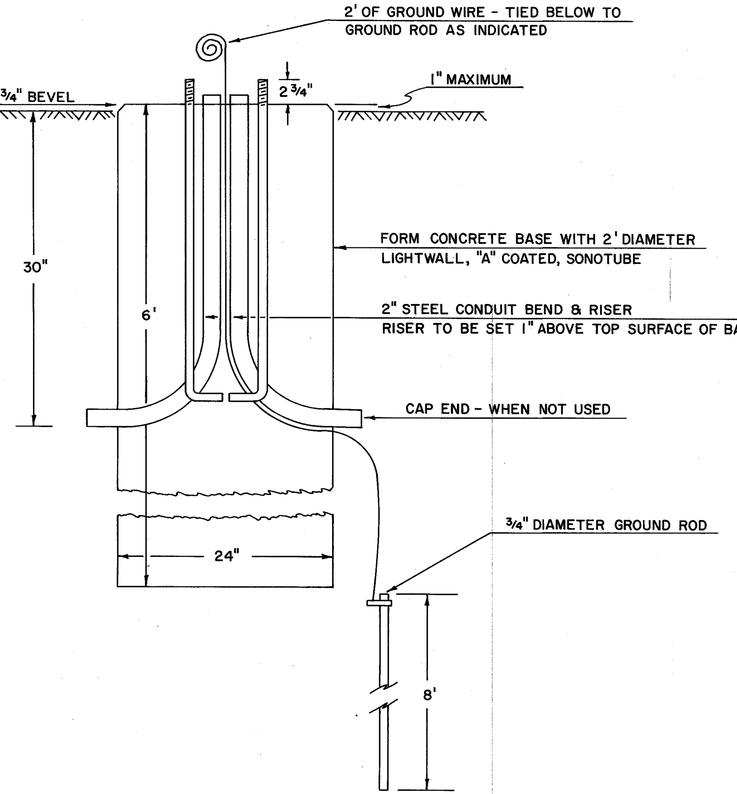
NOTE "A"

USE 6'-0" AT FOLLOWING STATIONS.
STA. 37+84 "B" RT.
STA. 16+74 "D" LT.
STA. 18+06 "D" LT.

TYPICAL LIGHT POLE LOCATIONS

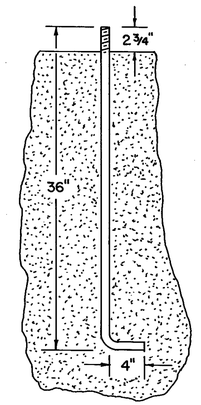
(NOT TO SCALE)

STANDARD SHEETS		
STANDARD NO. 1	REVISED	AUGUST 1, 1969
STANDARD NO. 1-A	REVISED	"
STANDARD NO. 2	REVISED	"
STANDARD NO. 3	REVISED	"
STANDARD NO. 3-A	REVISED	"
STANDARD NO. 4	REVISED	"
STANDARD NO. 5	REVISED	"
STANDARD NO. 6	REVISED	"
STANDARD NO. 7	REVISED	"
STANDARD NO. 8	REVISED	"
STANDARD NO. 9	REVISED	"
STANDARD NO. 10	REVISED	"
STANDARD NO. 11	REVISED	"
STANDARD NO. 12	REVISED	"
STANDARD NO. 13	REVISED	"
STANDARD NO. 14	REVISED	"
STANDARD NO. 15	REVISED	"
CONSTRUCTION SIGN STANDARD SHEETS		
STANDARD CS-1	REVISED	APRIL 5, 1963
STANDARD CS-2	NEW SHEET	JUNE 1, 1962
STANDARD CS-3	REVISED (NOTE ADDED)	JANUARY 23, 1967
STANDARD CS-4	REVISED	OCTOBER 25, 1962
SIGN STANDARD SHEETS		
STANDARD SHEET NO. 3		
STANDARD SHEET NO. 5&6	REVISED	JUNE 29, 1965



SECTION THRU BASE

TYPE "B"



1" ANCHOR BOLTS

CONCRETE LIGHT POLE BASE

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	STATION	STATION	DESCRIPTION	

NOTEBOOKS			
BOOK NO.	PAGE NO.	DATE	
"	"	"	PLAN TRACED
"	"	"	PLAN CHECKED
"	"	"	PROFILE TRACED
"	"	"	PROFILE CHECKED
"	"	"29 MAY 69	INKED D. E'SNOE
"	"	DATE 29 MAY 69	CHECKED J.P. LeBLANC

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	11	111

(USE BOTTOM LINES FIRST)

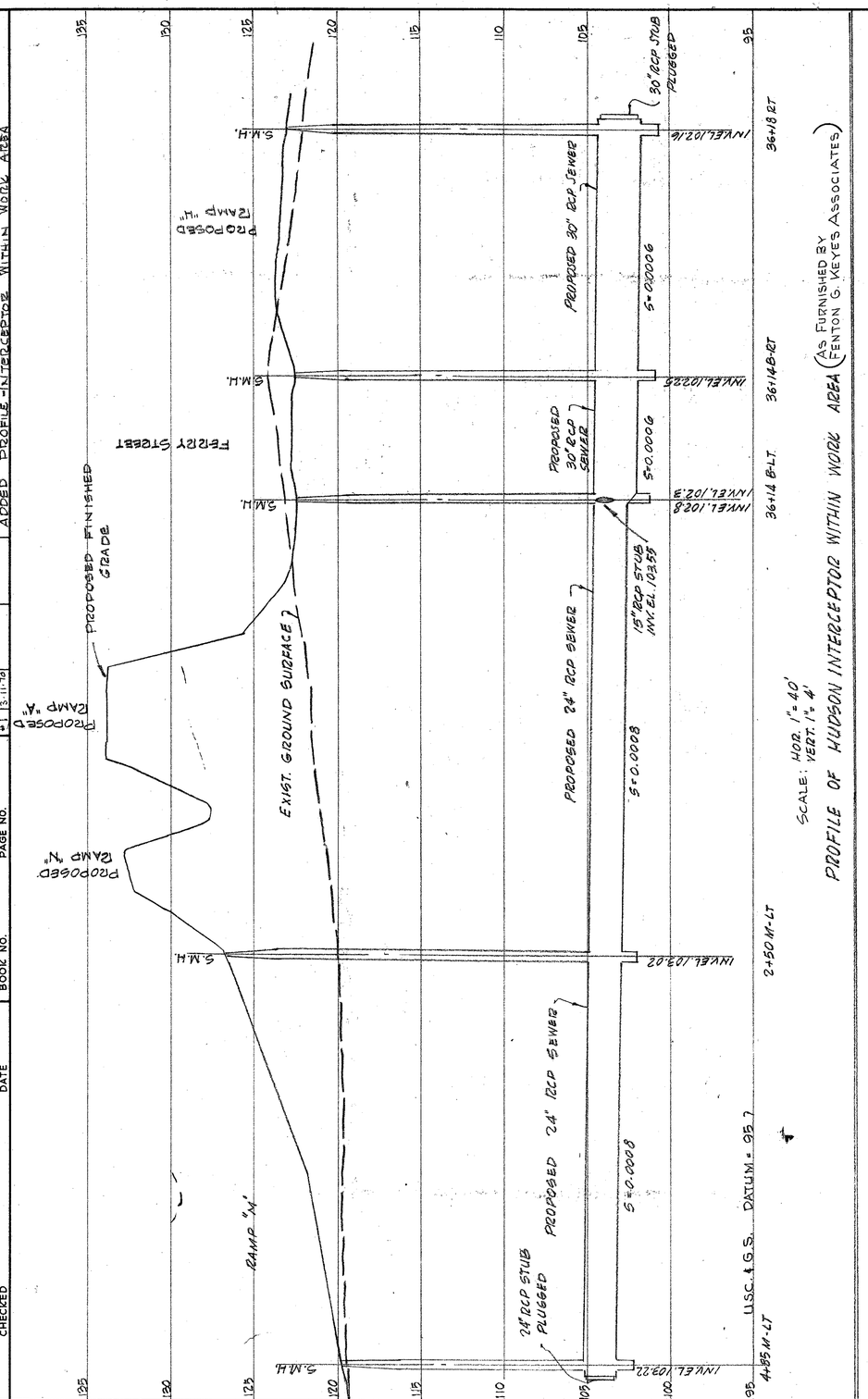
REVISIONS AFTER PROPOSAL

NO.	DATE	STATION	STATION	DESCRIPTION
#1	3-11-70			ADDED PROFILE - INTERCEPTOR WITHIN WORK AREA

NOTEBOOKS

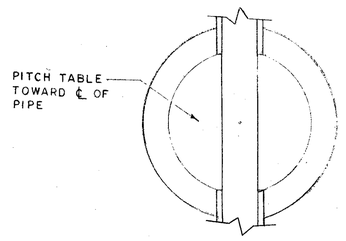
PLAN TRACED	R. Beers	DATE	11-12-69
PLAN CHECKED		"	
PROFILE TRACED		"	
PROFILE CHECKED		"	
INKED		"	
CHECKED		DATE	

BOOK NO.	PAGE NO.
"	"
"	"
"	"
BOOK NO.	PAGE NO.



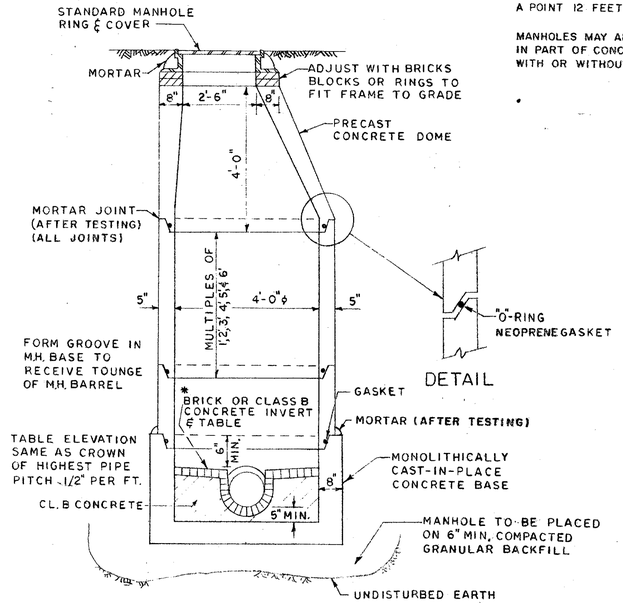
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

REVISED AFTER PROPOSAL #1
DATE MAR 11 1970



HOLES FOR STUBS SHALL BE ONLY SLIGHTLY LARGER THAN THE PIPES AND SHALL BE SEALED WITH "POR ROCK" OR APPROVED EQUAL.

TYPICAL PLAN OF MANHOLE

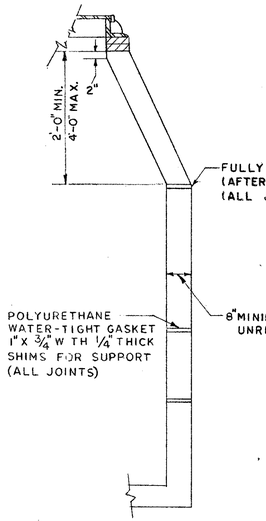


SPECIAL SEWER MANHOLE PRECAST CONSTRUCTION

NOTES:

WHERE MANHOLES OR DROP MANHOLES ARE MORE THAN 15'-0" DEEP FROM THE TOP OF FRAME TO THE INVERT OF THE OUTLET PIPE, THE WALL SHALL BE 12 INCHES THICK IF UNREINFORCED, OR DESIGNED FOR THE ADDITIONAL LOADING IF REINFORCED, BELOW A POINT 12 FEET FROM THE TOP OF THE FRAME.

MANHOLES MAY ALSO BE CONSTRUCTED IN WHOLE OR IN PART OF CONCRETE CAST MONOLITHICALLY IN PLACE, WITH OR WITHOUT REINFORCEMENT.



ALTERNATE WALL & BASE PRECAST CONSTRUCTION

* NOTE:
HALF PIPE LININGS FOR INVERT MAY BE USED FOR STRAIGHT THROUGH MANHOLES ONLY.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 25(17)	11-A	111

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

CLEARING AND GRUBBING

ITEM NO.	201.1
UNIT	ACRE

THE AREA LISTED BELOW IS SHOWN ON THE PLAN SHEET BY SHADING AND LETTER IDENTIFICATION.

LOCATION				DESIGNATED AREA	
11+55 P	+	13+55 P	LT.	A	0.27
14+25 P	+	14+75 P	RT.	B	0.01
2+85 R	+	4+45 R	RT.	C	0.05
				SUB-TOTAL	0.33
				ESTIMATE	0.07
				TOTAL	0.40

SUBSIDIARY ITEMS OF WORK

DESCRIPTION OF WORK	TOTAL
CONSTRUCTION IDENTIFICATION SIGNS CODE CI-2	TOTAL 2

CONSTRUCTION SIGNS & WARNING DEVICES

ITEM NO.		619.2	
TOTAL TYPE		CODE	UNIT NO. REQUIRED
PERMANENT SIGNS		W-20-1d	8
		G-20-1	8
		G-20-2	8
OPERATIONAL CONTROLS		W-20-2d	4
		W-20-5d	2
		W-20-6d	6
		W-20-7	4
		W-1-6	12
		W-1-7	6
		W-11-1	10
		M-5-7	8
		M-5-7A	6
		R-4-1	4
		R-4-7	6
		R-10-2	4
		R-200-S	2
		R-300-S	2
(EASELS)			6
(BARRICADES)		CL-I (ALTERNATE)	16 (8' SECTIONS)
		CL-II	12
(18" BLAZE ORANGE TRAFFIC CONES)			48
(DELINEATORS)		OM-1	36
		D-100	100
(HAZARD MKR)		18" CLUSTER	16
		24" CLUSTER	8

GRANULAR BACKFILL

ITEM NO.	209
UNIT	CU.YD.
LOCATION	
FOR SIDEWALKS	
ROAD A	103
" B	94
" C	70
" D	30
" E	9
" F	26
" H	13
" K	109
" L	57
" M	15
SUB-TOTAL	526
ESTIMATED	24
TOTAL	*550

2" BITUMINOUS SIDEWALK

ITEM NO.	608.12
UNIT	SQ.YD.
LOCATION	
ROAD A	923
" B	836
" C	643
" D	266
" E	79
" F	232
" H	118
" K	989
" L	511
" M	136
SUB-TOTAL	4723
ESTIMATED	67
TOTAL	4800

4 INCH CONCRETE SIDEWALK

ITEM NO.	608.2
UNIT	SQ.YD.
LOCATION	
ROAD A	99
" B	414
" D	36
" F	16
" K	79
" L	143
SUB-TOTAL	787
ESTIMATED	13
TOTAL	800

REMOVING TREES

ITEM NO.	201.2	201.3
ITEM	REMOVING SMALL TREES	REMOVING LARGE TREES
UNIT	EACH	EACH
LOCATION		
8+10 A RT.		1
11+23 A LT.		1
37+49 B LT.	1	
44+02 B LT.		1
44+34 B LT.		1
45+04 B LT.		1
45+75 B LT.		1
46+28 B LT.		1
34+50 F RT.	1	
34+57 F RT.	1	
34+63 F RT.		1
36+15 H LT.	1	
36+20 H-37+00 H LT.	12	
37+10 H LT.	1	
10+36 K RT.	1	
10+42 K RT.	2	
10+77 K LT.	1	
11+05 K RT.		1
13+13 K LT.		1
13+63 K LT.		1
14+15 K RT.	1	
14+17 K LT.		1
15+63 K RT.	1	
15+91 K RT.		1
16+05 K LT.	1	
16+61 K LT.	1	
16+71 K RT.	1	
5+81 L RT.	1	
6+57 L RT.		1
6+64 L LT.		1
6+66 L RT.	1	
7+00 L RT.	1	
7+22 L RT.	1	
8+00 L RT.	1	
8+99 L RT.	1	
9+30 L RT.	1	
9+64 L RT.	1	
2+67 M RT.		1
SUB-TOTALS	34	16
ESTIMATED	10	5
TOTALS	44	21

EARTHWORK SUMMARY

UNIT	HUDSON CU.YD	NASHUA CU. YD.	CONTRACT TOTAL CU. YD
COMMON EXCAVATION IN SECTIONS	21,297	14,867	36,164
TOPSOIL REMOVED BENEATH FILL SECTIONS	200	100	300
DRIVE EXCAVATION (COMMON)	50	45	95
TOTAL COMMOM EXCAVATION	21,547	15,012	36,559
COMMOM EXCAVATION FOR EST. ITEM 203.1	21,600	15,100	36,700
COMMOM STRUCTURE EXCAV. (INCL. INTERSEPTOR SEWER)	1,184	700	1884
TOPSOIL REMOVED FOR USE AS LOAM	200	100	300
COMMOM EXCAVATION FOR FILL	22,531	15,612	38143
ROCK EXCAV. IN SECTIONS (INCL CONC. PAVE.)	154	433	499
ROCK EXCAVATION FOR EST. ITEM 203.2	250	350	600
SECTIONS FILL	15,526	12,380	27,906
TOPSOIL REPLACEMENT	200	100	300
TOTAL FILL BEFORE EXPANSION	15,726	12,480	28,206
EXPANDED EARTH FILL	19,653	15,600	35,253
COMMOM EXCAVATION FOR FILL	22,531	15,612	38,143
WASTE (ROCK EXCAVATION)	461	433	806
SURPLUS	2,878	12	2,890

CONCRETE STEPS

ITEM NO.	520.1	544
ITEM	CONCRETE CLASS A	REINF. STEEL
UNIT	CU. YD.	LB.
LOCATION		
7+46A RT.	0.41	20
7+94A RT.	0.41	20
8+83A RT.	1.22	62
40+25B RT.	0.41	20
40+56B RT.	0.41	20
41+33B RT.	0.41	20
23+58F RT.	0.41	20
23+80F RT.	0.41	20
SUB-TOTALS	4.09	202
ESTIMATED	.91	8
TOTALS	* 5.0	*210

LANDSCAPING AND SLOPE PROTECTION

ITEM NO.	641.04	643.1	644.1	644.2	645.1	647.2
ITEM	LOAM 4" DEEP	FERTILIZER	PARK SEED TYPE II	SLOPE SEED TYPE 21	MULCH	REHANDLING HUMUS
UNIT	SQ. YD.	LB.	LB.	LB.	TON	CU. YD.
LOCATION						
LANDSCAPING	26600	7200	600			
SLOPE PROTECTION				15	17	32
SUB-TOTALS	26600	7200	600	15	17	32
EST.	400	800	50	5	3	18
TOTAL	27,000	8000	650	20	20	50

NOTE BOOKS

BOOK NO.	PAGE NO.

PROPOSAL DESCRIPTION

AFTER STATION

REVISIONS

DATE	
DATE 5/22/69	COMPILED BY N. DOOLEY
DATE 6/4/69	CHECKED BY R.L. MABARDY
DATE 9/1/69	INKED BY H.N. CARLSON
DATE 9/12/69	CHECKED BY N. DOOLEY

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28(17)	12	111

M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

SURFACING MATERIALS

ITEM NO.	304.1	304.2	205	304.3	410.31 ASPH. SURF. TREAT. INCL. BLOTTER MATERIAL	403.11 HOT BIT. PAVEMENT MACHINE METHOD	403.12 HOT BIT. PAVEMENT HAND METHOD
ITEM	SAND	GRAVEL	OVERHAUL	CRUSHED GRAVEL			
UNIT	CU. YD.	CU. YD.	C.Y.M.	CU. YD.	TON	TON	TON
LOCATION							
ROAD A	1817	2164		1681	32	2387	
B	1989	2062		2203	41	3035	
C	722	731		784	15	1115	
D	612	762		488	9	681	
E	202	235		210	4	160	
F	1437	1611		1180	26	1032	
G	191	275		149	3	95	
H	212	236		220	4	164	
K	1245	1291		1321	26	1966	
L	700	874		660	13	1017	
M	308	352		261	5	177	
N	129	147		111	2	71	
P	867	862		821	17	580	
R	204	285		158	4	117	
BAKER ST.	18	18	—	18	1	14	—
SUB-TOTALS	10653	11905	—	10265	202	12611	—
ESTIMATED	347	95	149600	735	18	389	10
TOTALS	11000	12000	149600	11000	220	13000	10

GUARD RAIL

ITEM NO.	± 606.144	606.82	606.143
ITEM	BEAM GUARD RAIL INCLUDING TERMINAL SECTIONS GR-1D4	ANCHORAGES FOR BEAM GUARD RAIL	BEAM GUARD RAIL INCLUDING TERMINAL SECTIONS GR-1D3
UNIT	L.F.	EACH	L.F.
LOCATION			
4+90.78·M, LT – 4+41·M, LT		1	50
4+41·M, LT – 12+50·N, RT	330		
SUB-TOTALS	330	1	—
ESTIMATED	20	—	—
TOTALS	350	1	50

± See Sht. # 10

BRIDGE APPROACH RAIL "F"

ITEM NO.	565.7
UNIT	L.F.
LOCATION	
17+50·A – 19+23·A LT.	173
17+50·A – 19+17·A RT.	167
25+74·A – 27+50·A LT.	176
25+74·A – 27+74·A RT.	200
SUB-TOTAL	716
ESTIMATED	14
TOTAL	730

SUBSIDIARY ITEMS OF WORK

DESCRIPTION OF WORK	TOTAL
JUNCTION BOX 6"X6"X6" WATERPROOF SEE SHEET NO. 54 & 56	2
REMOVAL OF GAS TANKS SEE SHEET 22	

CONDUIT SUMMARY

ITEM NO.		614.131 3 IN. CONDUIT CONC. ENCASED INCL. SPEC. EXCAVATION	614.231 3 IN. CONDUIT TYPE II INCL. SPEC. EXCAVATION
ITEM			
UNIT		L.F.	L.F.
LOCATION			
LIGHTING			
14+70·A – 15+05·A	LT.	35	
15+54·A	LT.	37	
19+00·A	LT. & RT.	37	
19+13·A – 19+48·A	LT.	35	
25+50·A – 25+87·A	LT.	34	
28+15·A – 28+32·A	LT.	35	
26+18·B – 26+29·B	RT.	11	
35+21·B – 35+38·B	RT.	35	
38+60·B – 38+90·B	RT.	35	
25+53·C	LT. & RT.	29	
14+43·D – 15+00·D	LT.	58	
24+83·F	LT. & RT.	30	
SLEEVE			
11+70±·P	LT. & RT.	46	
SIGNALS			
15+00·A – 15+44·A	RT.	30	
15+44·A – 17+17·A	RT.		175
26+25·B – 26+26·B	LT. & RT.		30
40+70·B – 42+51·B	℄		175
42+51·B – 42+62·B	LT.	42	
42+51·B – 42+76·B	RT.	46	
42+62·B – 43+64·B	LT.	90	
43+64·B – 44+18·B	LT.	40	
43+80·B – 43+90·B	RT.	36	
43+90·B – 44+18·B	LT.	44	
44+18·B – 46+81·B	LT.		250
22+79·C – 24+62·C	RT.		175
24+62·C – 25+08·C	RT.	40	
25+08·C – 25+54·C	RT.		35
26+26·C	LT. & RT.		28
17+85·K – 19+72·K	RT.		215
6+03·L – 6+85·L	LT.		75
SUB-TOTALS		825	1158
ESTIMATED		25	22
TOTALS		850	1180

INCIDENTAL ITEMS

ITEM NO.	ITEM (DATE)		UNIT	TOTAL
202.101	DEMOLISHING BLDG. SUBJECT TO REMOVAL BY:	FEB. 1, 1970 12+50·A, LT	UNIT	1
202.102	"	" 13+05·A, LT	UNIT	1
202.103	"	" 13+30·A, ℄	UNIT	1
202.104	"	" 13+70·A, LT	UNIT	1
202.105	"	" 25+60·B, LT	UNIT	1
202.106	"	" 22+62·C, RT	UNIT	1
202.107	"	" 23+70·C, RT	UNIT	1
202.108	"	" 1+21·E, RT	UNIT	1
202.109	"	" 1+78·E, RT	UNIT	1
202.110	"	" 2+50·E, RT	UNIT	1
202.111	"	" 27+65·F, ℄	UNIT	1
202.112	"	MARCH 1, 1970 27+50·A, LT	UNIT	1
202.113	"	" 27+50·A, ℄	UNIT	1
202.114	"	" 27+95·A, ℄	UNIT	1
202.115	"	" 37+00·B, RT	UNIT	1
202.116	"	FEB 1, 1970 43+65·B, RT	UNIT	1
202.117	"	MARCH 1, 1970 24+30·G, ℄	UNIT	1
202.118	"	" 10+65·K, RT	UNIT	1
202.119	"	" 19+35·K, LT	UNIT	1
202.120	"	" 19+45·K, ℄	UNIT	1
202.121	"	" 1+00·M, ℄	UNIT	1
202.122	"	" 2+10·M, ℄	UNIT	1
214.	FINE GRADING		UNIT	1
615.19	OVERHEAD TRAFFIC SIGN SUPPORT (SHEETS 62-65)		UNIT	1
615.191	OVERHEAD TRAFFIC SIGN SUPPORT (SHEETS 62-65)		UNIT	1
615.22	TRAFFIC SIGNS TYPE "B" (SHEETS 62-65)		S.F.	110
615.23	TRAFFIC SIGNS TYPE "C" (SHEETS 62-65)		S.F.	253
617.3	URBAN PROJECT MARKERS		EACH	2
617.5	CONCRETE BOUNDS		EACH	125
618.	UNIFORMED OFFICERS & FLAGMEN		HOUR	5000
619.1	MAINTENANCE OF TRAFFIC INCLUDING DUST LAYING		UNIT	1
620.	CALCIUM CHLORIDE		TON	50
698.1	FIELD OFFICES		EACH	1
698.2	PHYSICAL TESTING LABORATORY		UNIT	1
615.42	AMBER DELINEATORS		EA	30

FORCE ACCOUNT WORK BY UTILITY

(PARTICIPATING)

PUBLIC SERVICE COMPANY

SEE SHEETS 51 THRU 61

DATE	COMPILED BY	CHECKED BY	INKED BY	CHECKED BY
9/8/69	N. DOOLEY			
9/9/69		P. MABARDY		
9/10/69			G. COUTOUMAS	
9/11/69				N. DOOLEY

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28 (17)	13	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.
"	"
"	"
"	"
"	"

SUMMARY OF QUANTITIES (ESTIMATED)

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LIGHT POLE BASES
TRENCH FOR UNDERGROUND CABLE

ITEM NO.			216.	625.2
ITEM			TRENCH FOR UNDERGROUND CABLE	CONC. LIGHT POLE BASES, TYPE B
UNIT			L.F.	EACH
LOCATION				
11+85 A	- 12+40 A	LT.	60	
12+40 A	- 14+00 A	LT.	155	
14+00 A LT.	- 23+96 C	RT.	69	
14+00 A	- 14+70 A	LT.	70	
15+54 A RT.	- 25+53 C	LT.	24	
19+00 A		RT.	86	
19+00 A	- 19+13 A	LT.	12	
27+08 A	- 28+15 A	LT.	101	
28+32 A	- 28+75 A	LT.	42	
15+05 A	- 15+59 A	LT.	54	
24+20 B	- 25+75 B	RT.	150	
24+88 B		RT.	24	
25+75 B	- 26+18 B	RT.	44	
26+29 B	- 27+42 B	RT.	112	
34+95 B	- 35+21 B	RT.	36	
35+38 B	- 36+33 B	RT.	101	
36+33 B	- 37+84 B	RT.	153	
37+84 B	- 38+60 B	RT.	80	
38+90 B	- 39+39 B	RT.	50	
22+46 C	- 23+96 C	RT.	150	
25+53 C	- 25+92 C	RT.	39	
10+65 D	- 12+17 D	LT.	150	
12+17 D	- 13+70 D	LT.	147	
13+70 D	- 14+43 D	LT.	72	
15+00 D	- 15+25 D	LT.	37	
15+25 D LT	- 16+74 D	LT.	152	
16+74 D	- 18+06 D	LT.	129	
C[illegible]	- [illegible]	[illegible]	[illegible]	
1+18 M	- 2+90 M	RT.	172	
12+40 A		LT.		1
14+00 A		LT.		1
15+59 A		LT.		1
27+08 A		LT.		1
28+75 A		LT.		1
24+20 B		RT.		1
25+75 B		RT.		1
27+42 B		RT.		1
34+95 B		RT.		1
36+33 B		RT.		1
37+84 B		RT.		1
22+46 C		RT.		1
23+96 C		RT.		1
25+92 C		RT.		1
12+17 D		LT.		1
13+70 D		LT.		1
15+25 D		LT.		1
16+74 D		LT.		1
18+06 D		LT.		1
SUB-TOTALS			2471	19
ESTIMATED			129	-
TOTALS			2600	19

WATER SUPPLY SUMMARY

ITEM NO.	604.19	611.7015	
ITEM	SPECIAL CATCH BASINS	1 1/2" PLASTIC WATER PIPE INCL. SPEC. EXCAV.	[illegible]
UNIT	U	L.F.	[illegible]
LOCATION			
10+75 P LT.	1		
11+75 P LT. & RT.		70	
SUB-TOTAL	1	70	
ESTIMATED	-	10	
TOTAL	1	80	

SUMMARY OF NASHUA INTERCEPTOR SEWER ITEMS

ITEM NO.	ITEM	UNIT	QUANTITY
612	FURNISH AND INSTALL REINFORCED CONC. SEWER AND APPURTENANCES (NASHUA)	U.	1
612.01	EXCAV. BELOW NORMAL GRADE & GRAVEL REFILL (NASHUA)	C.Y.	50
612.03	ROCK EXCAVATION (NASHUA)	C.Y.	25
612.05	BOULDER EXCAVATION (NASHUA)	C.Y.	50
612.07	WOOD SHEETING ORDERED LEFT IN PLACE (NASHUA)	MBM	10

SUMMARY OF HUDSON INTERCEPTOR SEWER ITEMS

ITEM NO:	ITEM	UNIT	QUANTITY
206.1	COMMOM STRUCTURE EXCAVATION	C.Y.	#1600
206.2	ROCK STRUCTURE EXCAVATION	C.Y.	# 212
612.08	WOOD SHEETING ORDERED LEFT IN PLACE (HUDSON)	MBM	4
612.2324	24" R.C. SEWER PIPE, 3000D (6000 PSI) WITH NEOPRENE GASKETS, INC. SPEC. EXCAVATION	LF	521
612.2330	30" R.C. SEWER PIPE, 3000D (6000 PSI) WITH NEOPRENE GASKETS, INC. SPEC. EXCAVATION	LF	226
604.389	SPECIAL SEWER MANHOLES (5 ACTUAL M.H.'S @ 8' UNIT DEPTH)	U.	12.5

REVISIONS			AFTER PROPOSAL
DESCRIPTION	DATE	STATION	STATION

COMPILED BY N. DOOLEY DATE 6-2-69
CHECKED BY R. L. MALBARDY DATE 6-4-69
INKED BY C. HARKINS DATE 9-12-69
CHECKED BY N. DOOLEY

PROJ. No.	SHEET No.	TOTAL SH'TS.
US 28(17)	14	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.
"	"
"	"
"	"
"	"
"	"
"	"

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

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CURB SUMMARY

ITEM NO.			MARK NO.	RADIUS	609.01 STRAIGHT GRANITE CURB A	609.02 CURVED GRANITE CURB A	609.26 STRAIGHT GRANITE SLOPE CURB 6" HIGH		609.27 CURVED GRANITE SLOPE CURB 6" HIGH
							SQ. JTS.	RAD. JTS.	
UNIT					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
LOCATION									
"A" LINE									
6+17.0·A	6+54.0·A	RT.	A-8	25	50				
6+71.5·A		RT.	A-29		13				
6+73.0·A		RT.	A-28	10		15			
6+80.0·A	7+53.1·A	RT.	A-9		73.1				
7+44.0·A	9+06.0·A	LT.	A-3		162				
7+73.1·A	8+17.8·A	RT.	A-10		44.7				
8+67.8·A	20+31.0·F	RT.	A-11		112.7				
9+06.0·A	9+17.5·A	LT.	A-4	20		15			
9+61.0·A	9+74.5·A	LT.	A-30	20		15			
9+65.0·A		LT.	A-12	3					8
9+68.5·A	14+23.0·A	℄	A-13				454.5		
9+78.5·A	10+50.4·A	LT.	A-5		71.9				
10+70.4·A	11+10.5·A	LT.	A-6		36.1				
11+69.0·A	13+23.0·A	LT.	A-15		147.5				
13+27.0·A	14+73.0·A	LT.	A-16		146				
14+27.0·A	14+97.0·A	℄	A-14				70		
15+05.0·A		LT.	A-17	3		7.5			
15+08.5·A	16+74.0·A	LT.	A-18		173.5				
15+31.5·A	17+58.0·A	℄	A-20				226.5		
16+77.0·A		LT.	A-19	3.5		13			
17+62.0·A	19+17.0·A	℄ RT.	A-21		155				
18+87.3·A	19+48.5·A	LT.	A-22		61.4				
25+51.5·A	26+03.0·A	LT.	A-23		51				
25+74.0·A	29+48.9·A	RT.	A-26		386.5				
26+07.0·A	28+20.5·A	LT.	A-24	90	210.5				
26+22.0·A		LT.	A-25	3.5		10			
"B" LINE									
9+68.5·A	26+22.0·B	LT.	B-1				601.5		
23+37.5·B	26+22.0·B	℄	B-4				284.5		
26+22.0·B	26+27.0·B	LT.	B-5		5				
26+22.0·B	27+23.0·B	℄	B-6		101				
26+27.0·B	26+80.5·B	LT.	B-3				57		
26+81.0·B		LT.	B-2	2.5					7
27+27.0·B	29+02.0·B	℄ RT.	B-7		175				
28+28.0·B	29+02.0·B	LT.	B-8		75.5				
34+45.0·B	34+55.3·B	RT.	B-9		10				
34+45.0·B	35+21.0·B	LT.	B-10		71.5				
35+25.0·B	35+84.0·B	LT.	B-11		54.5				
35+33.0·B		RT.	B-12	3.5		7			
35+39.0·B	36+58.5·B	RT.	B-14		124				
35+84.0·B	42+40.0·B	LT. RT.	B-13				656		
36+63.0·B	36+77.5·B	RT.	B-16		16				
36+77.5·B	36+84.0·B	RT.	B-17	10		7			
36+88.0·B	38+83.0·B	RT.	B-18	50	264				
38+84.0·B	39+02.0·B	RT.	B-21				54.5		
38+86.0·B		RT.	B-22	3.5		7			
38+91.0·B	39+95.0·B	RT.	B-23		104				
39+04.0·B		RT.	B-20	3					6
39+07.0·B		RT.	B-19				7.5		
40+05.0·B	42+40.0·B	LT.	B-29				235		
40+15.0·B	40+69.5·B	RT.	B-24		59				
40+35.0·B	40+69.5·B	LT.	B-28		34.5				
41+09.5·B	41+21.5·B	LT.	B-48		12				
41+16.1·B	41+73.0·B	RT.	B-26		56.9				
41+41.5·B	41+73.0·B	LT.	B-32		32				
41+77.0·B	41+95.0·B	LT.	B-33		18				
41+77.0·B	42+29.0·B	RT.	B-27		52				
42+40.0·B	42+68.7·B	LT.	B-30		28.7				
42+40.0·B	42+68.7·B	RT.	B-46		28.7				
42+72.0·B		℄	B-31	3		10			
43+81.0·B		℄	B-34	3		9.5			
43+83.0·B	44+20.0·B	LT.	B-35		37.5				
43+83.0·B	44+20.0·B	RT.	B-37		37.5				
43+97.0·B	44+23.5·B	RT.	B-41		26.5				
44+12.0·B	44+19.0·B	LT.	B-47		7				
44+20.0·B	45+36.5·B	LT.	B-36				118		
44+20.0·B	45+36.5·B	RT.	B-38				118		
44+23.0·B	46+60.0·B	LT.	B-40		242.3				
44+43.5·B	44+69.6·B	RT.	B-42		25.5				
SUB-TOTALS					3,593.5	116	2,883	—	21

CURB SUMMARY

ITEM NO.			MARK NO.	RADIUS	609.01 STRAIGHT GRANITE CURB A	609.02 CURVED GRANITE CURB A	609.26 STRAIGHT GRANITE SLOPE CURB 6" HIGH		609.27 CURVED GRANITE SLOPE CURB 6" HIGH
							SQ. JTS.	RAD. JTS.	
UNIT					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
LOCATION									
"B" LINE									
44+89.6·B	45+13.5·B	RT.	B-43		23.9				
45+33.5·B	45+57.0·B	RT.	B-44		23.5				
45+37.0·B		RT.	B-39	3					9.5
45+77.0·B	46+16.0·B	RT.	B-45		39				
"C" LINE									
17+33.3·C	18+21.0·C	LT.	C-18		87.7				
17+40.5·C	18+24.5·C	RT.	C-1		84				
18+48.5·C	18+89.6·C	RT.	C-2		41.1				
18+89.6·C	19+05.5·C	RT.	C-16	20		20			
19+53.0·C	19+73.0·C	RT.	C-3	25	48				
19+77.0·C	21+49.0·C	RT.	C-4		183				
21+08.0·C		LT.	C-5	3.5				10	
21+10.0·C	24+82.5·C	LT ℄	C-6				374		
21+70.0·C		RT.	C-7	5		13			
21+77.0·C	24+63.0·C	RT.	C-8		286				
24+68.0·C		RT.	C-9	5		11			
25+07.0·C		RT.	C-10	4				5	
25+10.0·C	25+67.0·C	RT.	C-11				57		
25+22.0·C		LT.	C-13	3		6			
25+25.0·C	27+23.0·C	℄	C-14		198				
25+71.0·C	26+20.0·C	RT.	C-19				49		
26+20.0·C	26+25.0·C	RT.	C-17		5				
26+25.0·C	26+81.0·C	RT.	C-12				59		
27+27.0·C	28+08.0·B	℄	C-15		81				
"D" LINE									
8+98.5·D	9+47.0·D	℄ LT.	D-3		48.5				
9+67.5·D	10+27.0·D	LT.	D-4		60				
10+31.0·D	12+73.0·D	LT.	D-6		242				
11+64.0·D	16+61.5·D	RT.	D-15				503.5		
12+77.0·D	14+62.0·D	LT.	D-7	30	207				
14+86.0·D	15+18.0·D	LT.	D-8	30	57.5				
15+22.0·D	16+36.0·D	LT.	D-9		113.5				
16+36.0·D	16+41.0·D	LT.	D-10	10		5			
16+41.0·D	16+58.5·D	LT.	D-11		20				
16+58.5·D	16+63.3·D	LT.	D-12	10		5.5			
16+63.3·D	17+58.0·D	℄	D-13		94.7				
17+62.0·D	18+87.3·D	℄	D-14		126.5				
"E" LINE									
0-03.0·E	0+16.0·E	LT.	E-1	20		25			
0+16.0·E	0+29.5·E	LT.	E-2		13				
0+22.0·E		RT.	E-6	3.5		8			
0+26.0·E	0+54.0·E	RT.	E-7		28				
0+58.0·E	3+09.0·E	RT.	E-8		251				
0+83.2·E	1+08.0·E	LT.	E-3		24.8				
1+36.2·E	1+74.0·E	LT.	E-4		37.8				
1+94.3·E	2+61.6·E	LT.	E-5		67.3				
SUB-TOTALS					2,491.8	93.5	1,042.5	15	9.5

REVISIONS AFTER PROPOSAL

DESCRIPTION	STATION	DATE

COMPILED BY	R.L. MABARDY
CHECKED BY	P.E. KORDA
INKED BY	M.L. PAPP
CHECKED BY	N. DOOLEY

DATE 4-29-69
DATE 5-9-69
DATE 9-10-69
DATE 9-10-69

PROJ. No.	SHEET No.	TOTAL SH'TS.
US 28 (17)	15	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS
BOOK NO. PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

CURB SUMMARY

ITEM NO.			MARK NO.	RADIUS	609.01 STRAIGHT GRANITE CURB A	609.02 CURVED GRANITE CURB A	609.26 STRAIGHT GRANITE SLOPE CURB 6" HIGH		609.27 CURVED GRANITE SLOPE CURB 6" HIGH
							SQ. JTS.	RAD. JTS.	
UNIT					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
LOCATION									
"F" LINE									
20+38.0·F		RT.	F-2	5		10			
20+39.0·F		RT.	F-1	42	17				
20+52.5·F	20+94.5·F	℄ RT.	F-19	25	54				
21+34.5·F	21+82.5·F	℄	F-3		48				
22+02.5·F	22+50.0·F	℄	F-4		47.5				
22+90.0·F	23+24.0·F	℄	F-5		34				
23+25.0·F		LT.	F-12	3.5				10	
23+28.0·F	24+30.0·F	℄	F-20		102				
23+29.0·F	26+08.0·F	LT.	F-13				280		
24+70.0·F	24+98.0·F	℄	F-6		28				
25+02.0·F	25+40.0·F	℄	F-7		38				
25+80.0·F	26+57.0·F	℄	F-8		77				
26+08.0·F	26+13.0·F	LT.	F-14		5				
26+13.0·F	29+19.5·F	LT.	F-15	145,120,80			356		
26+57.0·F	26+98.0·F	℄	F-9	125			41		
27+02.0·F	29+44.3·F	℄	F-10	125, 55			242.3		
29+20.0·F		LT.	F-16	1.5					3
30+94.9·F(EXT)	31+05.5·F	LT.	F-17	30,34,55			230		
31+08.0·F		LT.	F-18	3.5				8	
"G" LINE									
0+18.5·G	1+23.0·G	℄	G-1	60,50			104.5		
0+38.0·G		LT.	G-4	3.5				8	
0+40.0·G	2+50.5·G	LT.	G-5	30,80			169		
1+27.0·G	3+17.7·G	℄	G-2	50			190.7		
2+55.0·G	37+02.2·H	LT.	G-6	30,150			125		
3+19.0·G		RT.	G-3	5				12	
"H" LINE									
34+55.3·H	35+33.0·H	℄	H-1		77.7				
35+34.0·H	36+15.0·H	LT.	H-4				90		
35+37.0·H	36+22.0·H	℄ RT.	H-2		85				
36+62.0·H	37+55.4·H	℄ RT.	H-7		93.4				
37+51.5·H	38+00.0·H	LT.	H-5		48.5				
"K" LINE									
10+28.0·K	10+64.0·K	RT.	K-1	150	108				
10+29.0·K	10+72.0·K	LT.	K-11	30	57.8				
10+31.0·K		RT.	K-3		19				
10+33.0·K		RT.	K-4			8			
10+36.7·K	10+64.0·K	RT.	K-6				29		
10+38.0·K		RT.	K-5	5		12			
10+42.0·K	10+71.0·K	RT.	K-8				38		
10+67.0·K	11+33.0·K	RT.	K-2	150	82				
10+70.0·K		RT.	K-7	2.5					6.5
10+77.0·K	12+08.5·K	LT.	K-12		125				
11+53.0·K	12+21.0·K	RT.	K-9		71				
12+28.5·K	12+75.0·K	LT.	K-13		42				
12+49.0·K	12+61.0·K	RT.	K-28		12				
12+79.0·K	14+58.0·K	LT.	K-14		177				
12+84.0·K	14+58.0·K	RT.	K-15		180				
14+62.0·K	14+69.0·K	RT.	K-16		7				
14+62.0·K	14+72.0·K	LT.	K-20		10				
14+89.0·K	15+01.0·K	RT.	K-17		12				
14+92.0·K	15+98.5·K	LT.	K-21	50	109				
15+21.0·K	16+32.5·K	RT.	K-18	30	139				
16+02.5·K	16+16.0·K	LT.	K-22	50	45				
16+33.0·K	16+34.5·K	RT.	K-19		8				
16+49.5·K	16+71.0·K	LT.	K-28	30	41				
16+67.5·K	17+23.0·K	RT.	K-29	40	78				
16+76.0·K	18+73.0·K	LT.	K-23		198				
17+27.0·K	18+73.0·K	RT.	K-24		151				
18+77.0·K	19+61.0·K	LT.	K-30	40	81				
18+77.0·K	19+76.0·K	RT.	K-25	50	125				
19+64.0·K	19+78.0·K	LT.	K-27	40	39				
SUB-TOTALS					2671.9	30	1895.5	38	9.5

CURB SUMMARY

ITEM NO.			MARK NO.	RADIUS	609.01 STRAIGHT GRANITE CURB A	609.02 CURVED GRANITE CURB A	609.26 STRAIGHT GRANITE SLOPE CURB 6" HIGH		609.27 CURVED GRANITE SLOPE CURB 6" HIGH
							SQ. JTS.	RAD. JTS.	
UNIT					LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
LOCATION									
"L" LINE									
5+95.0·L		RT.	L-2	10		33			
6+02.0·L	6+25.0·L	RT.	L-4		24				
6+04.0·L	6+25.0·L	RT.	L-3		22				
6+25.0·L	6+80.0·L	RT.	L-6					56	
6+25.0·L	6+84.0·L	RT.	L-5					59.5	
6+35.0·L		RT.	L-8	5		14			
6+39.0·L	7+73.0·L	RT.	L-9		138.5				
6+87.0·L		RT.	L-7	3.5				11	
7+68.0·L	7+73.0·L	LT.	L-12		4				
7+77.0·L	8+09.0·L	LT.	L-13		31.5				
7+77.0·L	10+74.4·L	RT.	L-10		302				
8+29.0·L	9+78.0·L	LT.	L-14		147				
9+98.0·L	10+74.4·L	LT.	L-15		76.4				
42+15.0·B	7+28.0·L	LT.	L-1		260.5				
"M" LINE									
0+10.0·M	0+98.0·M	℄	M-1		88				
1+02.0·M	1+14.5·M	℄	M-2		12.5				
1+14.5·M	1+17.5·M	LT.	M-5		3.5				
1+14.5·M	3+50.0·M	℄	M-3		235.5				
1+17.5·M	1+95.6·M	LT.	M-6					88.5	
2+13.0·M	2+80.0·M	LT.	M-7	30				78	
2+82.0·M		LT.	M-8	3.5					7.5
3+54.0·M	3+87.0·M	℄	M-4		33				
"N" LINE									
10+27.0·N	13+00.0·N	℄	N-1	50				27.3	
10+75.5·N	12+98.0·N	LT.	N-3	30				161.5	
13+01.0·N		RT.	N-2	2					3.5
SUB-TOTALS					1378.4	47	716.5	18.5	3.5
SUB-TOTALS CARRIED FORWARD (THIS SHEET)					2671.9	30	1895.5	38	9.5
" " " (SHEET 15)					3593.5	116	2883.	—	21
" " " (SHEET 15)					2491.8	93.5	1042.5	15	9.5
IN LIEU OF CURB INLETS					196	—	48	—	—
TOTALS					10331.6	286.5	6585.5	71.5	43.5
ESTIMATED					8.4	3.5	13.0		1.5
GRAND TOTALS					10340.0	290.0	6610.0		45

REVISIONS AFTER PROPOSAL

DESCRIPTION	DATE	STATION

COMPILED BY R.L. MABARDY DATE 4-29-69
CHECKED BY P.E. KONDA DATE 5-9-69
INKED BY M.L. PAPP DATE 5-7-69
CHECKED BY N. DOOLEY DATE 9-2-69

PROJ. No.	SHEET No.	TOTAL SH'TS.
US 28(17)	16	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	206.1	206.2	209.	520.2	544.		583.1	603.00212	603.00215	603.00218	603.00224	603.00230	603.00236	603.07242	603.07430	603.31042	604.12		604.22		604.3		REMARKS
ITEM	COMMON STRUCTURE EXCAVATION	ROCK STRUCT. EXCAV.	GRAN. BACK-FILL	CONC. CLASS B	REIN-FORCING STEEL	HEADER STD. NUMBER	RIPRAP A	REINFORCED CONCRETE PIPE 2000 D INCLUDING SPECIFIED EXCAVATION						B.C.C. STEEL PIPE 12 GAGE INCL. SPEC. EXC.	B.C.C. STEEL PIPE 14 GAGE INCL. SPEC. EXC.	STEEL END SECTIONS FOR 42" PIPE INCL. SPEC. EXC.	CATCH BASINS TYPE B ALT 2 GRATE & FRAME		DROP INLETS TYPE B		MANHOLES		
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	LB.		C.Y.	12" L.F.	15" L.F.	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	30" L.F.	EA.	ACT U	EST U	ACT U	EST U	ACT U	EST U	
LOCATION																							
BASELINE "A"																							
6+44 A RT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
6+82 A RT.																							" " " " " "
6+94 A LT.																							RETAIN EXIST. C.B.
7+87 A LT.																							" " "
7+92 A RT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
9+11 A LT.																							RETAIN EXIST. C.B.
11+18 A LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
11+68 A ℄																							" " " " " "
28+91 A ℄																							" " " " " "
BASELINE "B"																							
23+30 B LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
27+40 B LT.																							" " " " " "
27+46 B LT.																							" " " " " "
35+04 B RT.																							" " " " " "
35+14 B LT.																							" " " " " "
35+27 B LT.																							" " " " " "
35+60 B LT.																							" " " " " "
35+66 B RT.																							" " " " " "
35+76 B RT.																							" " " " " "
37+53 B RT.																							" " " " " "
37+63 B LT.																							" " " " " "
38+73 B LT.																							" " " " " "
38+77 B RT.																							" " " " " "
39+24 B RT.																							" " " " " "
40+35 B RT.																							" " " " " "
46+61 B RT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
																							RETAIN EXIST. C.B.
BASELINE "C"																							
17+37 C LT.																							RETAIN EXIST. D.I.
18+13 C LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
18+50 C RT.																							" " " " " "
19+05 C LT.																							" " " " " "
19+60 C RT.																							" " " " " "
19+99 C LT.																							" " " " " "
20+12 C RT.																							" " " " " "
20+26 C LT.																							" " " " " "
21+25 C LT.																							" " " " " "
21+26 C RT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
21+80 C RT.																							RETAIN EXIST. C.B.
23+34 C LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
23+34 C RT.																							" " " " " "
24+60 C LT.																							" " " " " "
24+78 C RT.																							" " " " " "
25+17 C LT.																							" " " " " "
25+86 C LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
BASELINE "E"																							
0+35 E LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
0+65 E RT.																							" " " " " "
BASELINE "F"																							
20+32 F LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
20+54 F RT.																							" " " " " "
20+58 F LT.																							" " " " " "
23+39 F LT.																							" " " " " "
25+77 F LT.																							" " " " " "
26+13 F LT.																							" " " " " "
26+16 F ℄																							" " " " " "
27+18 F LT.																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
BASELINE "H"																							
36+72 H ℄																							WRECK EXIST. C.B.- PLUG EXIST. PIPES
37+95 H LT.																							RETAIN EXIST. C.B.
38+11 H RT.																							" " "
SUB TOTAL																							

REVISIONS — DATE — STATION — AFTER STATION — DESCRIPTION

PROPOSAL

COMPILED BY N. DOOLEY — DATE 5-27-69
CHECKED BY W. MARTIN — DATE 6-3-69
INKED BY C. HARKINS — DATE 9-11-69
CHECKED BY N. DOOLEY — DATE 9-11-69

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28(17)	17	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	206.1	206.2	209.	520.2	544.		583.1	603.00212	603.00215	603.00218	603.00224	603.00230	603.00236	603.07242	603.07430	603.31042	604.12		604.22		604.3		REMARKS
ITEM	COMMON STRUCTURE EXCAVATION	ROCK STRUCT. EXCAV.	GRAN. BACK-FILL	CONC. CLASS B	REIN-FORCING STEEL	HEADER STD. NUMBER	RIPRAP A	REINFORCED CONCRETE PIPE 2000 D INCLUDING SPECIFIED EXCAVATION						BCC STEEL PIPE 12 GAGE INCL. SPEC. EXC.	BCC STEEL PIPE 14 GAGE INCL. SPEC. EXC.	STEEL END SECTIONS FOR 42" PIPE INCL. SPEC EXC.	CATCH BASINS TYPE B ALT 2 GRATE & FRAME		DROP INLETS TYPE B		MANHOLES		
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	LB.		C.Y.	12" L.F.	15" L.F.	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	30" L.F.	EA.	ACT U	EST U	ACT U	EST U	ACT U	EST U	
LOCATION																							
BASELINE "K"																							
10 + 27 K LT.																							WRECK EXIST. C.B.-PLUG EXIST PIPES
10 + 27 K RT.																							" " " " " "
16 + 16 K LT.																							" " " " " "
16 + 24 K RT.																							" " " " " "
16 + 56 K LT.																							WRECK EXIST. C.B.-PLUG EXIST PIPES
BASELINE "L"																							
5 + 75 L RT.																							WRECK EXIST. C.B.-PLUG EXIST PIPES
6 + 60 L RT.																							" " " " " "
6 + 79 L RT.																							" " " " " "
7 + 49 L LT.																							WRECK EXIST. C.B.-PLUG EXIST PIPES
BASELINE "M"																							
3 + 50 M RT.																							WRECK EXIST. C.B.-PLUG EXIST PIPES
BASELINE "P"																							
11 + 15 P RT.																							REMOVE EXIST. D.I. & PIPE
12 + 15 P RT.							24																REMOVE EXIST. PIPE
12 + 25 P RT.							12																REMOVE EXIST. R.C. PIPE
BASELINE "R"																							
4 + 35 R RT.							30																REMOVE EXIST. R.C.P. & HEADERS
4 + 46 R LT.																							RETAIN EXIST. D.I.
SUB TOTAL	66																						

REVISIONS

DATE	STATION	AFTER STATION

PROPOSAL

DESCRIPTION

COMPILED BY N. DOOLEY DATE 5-27-69
CHECKED BY W. MARTIN DATE 6-3-69
INKED BY C. HARKINS DATE 9-11-69
CHECKED BY N. DOOLEY DATE 9-11-69

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28(17)	18	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.
"	"
"	"
"	"
"	"
"	"

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	206.1	206.2	209.	520.2	544.		583.1	603.00212	603.00215	603.00218	603.00224	603.00230	603.00236	603.07242	603.07430	603.3042	604.12		604.22		604.3			
	COMMON STRUCTURE EXCAVATION	ROCK STRUCT. EXCAV.	GRAN BACK-FILL	CONC. CLASS B	REIN-FORCING STEEL	HEADER STD. NUMBER	RIPRAP A	REINFORCED CONCRETE PIPE 2000 D INCLUDING SPECIFIED EXCAVATION						B.C.C. STEEL PIPE, 12 GAGE INCL. SPEC. EXC.	B.C.C. STEEL PIPE, 14 GAGE INCL. SPEC. EXC.	STEEL END SECTIONS FOR 42" PIPE INCL. SPEC. EXC.	CATCH BASINS TYPE B ALT. 2 GRATE & FRAME		DROP INLETS TYPE B		MANHOLES		REMARKS	
ITEM																								
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	LB.		C.Y.	12" L.F.	15" L.F.	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	30" L.F.	EA.	ACT U	EST U	ACT U	EST U	ACT U	EST U		
LOCATION																								
SHEET 51																								
9+76 A	1.6																							
9+76 A 11+00 A								124									1	1.25						
20+28 F																	1	1						
20+31 F 9+76 A								42																
SHEET 52																								
8+77 D																	1	1						
8+77 D 18+26 C								28																
10+29 D LT.																	1	1						
10+29 D 19+75 C								32																
18+26 C RT.																	1	1						
18+26 C 19+75 C								148																
19+75 C RT.	1.6																1	1.25						
19+75 C 21+00 C									124															
SHEET 53																								
0+56 E RT																	1	1						
0+56 E 11+12 A								72																
0+81 E LT.																	1	1						
0+81 E 0+56 E								32																
10+00 A 11+12 A								12																
11+12 A LT.	36																1	1.38						
11+12 A 13+25 A										200														
12+75 D																	1	1						
12+75 D 21+75 C								70																
12+92 A LT.																			1	1				
12+92 A 13+25 A								68																
13+25 A LT.	1.6																1	1.25						
13+25 A 24+65 C	33.3										150													
14+25 A																	1	1						
14+25 A 15+30 A								104																
15+20 D LT.	4.7																1	1.38						
15+20 D 24+59 C								90																
15+30 A	16.4																1	2						
15+30 A 25+50 C								30																
15+30 A 25+50 C	28.9											26												
21+00 C 21+75 C									74															
21+75 C	7.0																1	1.50						
21+75 C 24+65 C										284														
22+73 F																	1	1						
22+73 F 23+26 F								52																
23+26 F																	1	1						
23+26 F 23+35 B								26																
23+35 B	1.6																1	1.25						
23+35 B 13+25 A									90															
24+65 C RT.	14.1																1	1.88						
24+65 C 15+30 A	68.8											62												
24+59 C LT.																			1	1				
24+59 C 15+30 A								64																
24+97 F LT.																			1	1				
24+97 F 25+00 F								28																
25+00 F																	1	1						
25+00 F 25+50 F								48																
SHEET 54																								
17+60 A	3.1																1	1.25						
17+60 A 18+60 A								100																
17+60 D																	1	1						
17+60 D 17+60 A								32																
18+52 A RT.																			1	1				
18+52 A 18+60 A								8																
25+50 C 25+69 C								22																
25+50 F 27+00 F								150																
25+50 C 27+25 C	94											170												
25+69 C RT.																	1	1						
27+00 F	7.0																1	1.75						
27+00 F 27+25 B	10.0								56															
27+00 F 28+88 F	26.1							188																
27+25 B	9.4																1	1.88						
27+25 B 27+25 C	7.0								26															
27+25 C	9.4																1	1.88						
27+25 C 27+73 B	78.3												94											
27+73 B LT.	9.4																				1	1.62		
27+73 B 28+28 B	51.5												58*											
28+20 B RT.																			1	1.6				
28+20 B 27+25 C								130																
SUB TOTAL	488.4							1700	370	484	150	258	152				26	32.88	5	5.6	1	1.62		

*CONNECTION TO PUMP HOUSE SUBSIDIARY. SEE SHEET #54

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28(17)	19	111

REVISIONS AFTER PROPOSAL

DATE	STATION	DESCRIPTION

COMPILED BY K. FULOP DATE 5-27-69
CHECKED BY M. PAPP DATE 6-3-69
INKED BY J.G. HALE DATE 9-1-69
CHECKED BY N. DOOLEY DATE 9-11-69

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	206.1	206.2	209.	520.2	544.		583.1	603.00212	603.00215	603.00218	603.00224	603.00230	603.00236	603.07242	603.07430	603.31042	604.12		604.22		604.3		
ITEM	COMMON STRUCTURE EXCAVATION	ROCK STRUCT. EXCAV.	GRAN BACK-FILL	CONC. CLASS B	REIN-FORCING STEEL	HEADER STD. NUMBER	RIPRAP A	REINFORCED CONCRETE PIPE 2000 D INCLUDING SPECIFIED EXCAVATION						B.C.C. STEEL PIPE, 12 GAGE INCL. SPEC. EXC. 42"	B.C.C. STEEL PIPE, 14 GAGE INCL. SPEC. EXC. 30"	STEEL END SECTIONS FOR 42" PIPE INCL. SPEC. EXC.	CATCH BASINS TYPE B ALT. 2 GRATE & FRAME		DROP INLETS TYPE B		MANHOLES		REMARKS
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	LB.		C.Y.	12" L.F.	15" L.F.	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	30" L.F.	EA.	ACT U	EST U	ACT U	EST U	ACT U	EST U	
LOCATION																							
SHEET 55																							
28+88 · F - 31+18 · F	53.4							160															
31+18 · F RT.	4.7																				1	1.38	
31+18 · F - 34+00 · F								288															
34+00 · F LT.																			1	1.8			
34+00 · F - 35+87 · F								196															
35+87 · F RT.																			1	1.2			
35+87 · F LT.																			1	1.2			
35+87 · F - 35+87 · F LT & RT.								36															
SHEET 56																							
1+25 · G LT.		20.3	13.2														1	1.25					
1+25 · G - 2+52 · G		24.7	8.2					74															
2+52 · G LT.		11.4	7.4														1	1					
2+52 · G - 35+71 · B									64														
26+05 · A LT.	9.4																1	1.88					
26+05 · A - 36+42 · B	40.0							80															
34+26 · B LT.	9.1		3.3	2.6	25	PC-1																	
34+26 · B - 36+40 · B	88.2	161.0													170								
35+23 · B LT.																	1	1					
35+23 · B - 35+38 · B								32															
35+35 · H																	1	1					
35+35 · H - 35+38 · B								28															
35+38 · B RT.																	1	1					
38+38 · B - 35+71 · B									36														
35+73 · B RT.																			1	1			
35+73 · B - 35+71 · B								10															
36+42 · B LT.	3.1																				1	1.25	
36+42 · B - 37+50 · B												108											
36+86 · B RT.																	1	1					
36+87 · B - 2+52 · G								92															
SHEET 57																							
1+00 · M																	1	1					
1+00 · M - 38+78 · B								66															
3+52 · M																	1	1					
3+52 · M - 10+25 · N								24															
10+25 · N																	1	1.12					
10+25 · N TO RIVER								110															
13+03 · N LT.																	1	1.38					
37+50 · B - 38+40 · B												92											
38+40 · B LT.																					1	1.12	
38+78 · B LT.																					1	1.12	
38+78 · B - 38+40 · B												38											
38+90 · B RT.																	1	1					
38+90 · B - 38+78 · B								34															
41+00 · B - 38+78 · B											218												
SHEET 58																							
6+50 · L RT.																					1	1	
6+50 · L - 6+81 · L								34															
6+50 · L - 7+75 · L									124														
6+82 · L RT.																	1	1					
7+75 · L LT. & RT.								44															
7+75 · L LT. & RT.																	2	2					
19+33 · K - 42+85 · B											26												
41+00 · B - 41+68 · B											68												
41+70 · B - 41+75 · B								28															
41+70 · B - 41+75 · B								30															
41+70 · B LT.																					1	1	
41+70 · B - 42+64 · B											94												
41+75 · B LT.																	1	1					
41+75 · B RT.																	1	1					
42+64 · B LT.																					1	1	
42+64 · B - 42+70 · B								4															
42+64 · B - 42+85 · B											50												
42+64 · B - 6+50 · L										158													
42+85 · B RT.	1.2																1	1.38					
42+85 · B - 43+73 · B								86															
43+74 · B RT.																	1	1.25					
44+21 · B LT.																	1	1					
44+21 · B - 6+50 · L								20															
TOTALS	209.1	217.4	321	2.6	25			1476	224	158	456	238			170		20	22.26	4	52	7	7.87	

PROPOSAL DESCRIPTION

REVISIONS | DATE | STATION | AFTER STATION

		DATE
COMPILED BY	K. FULOP	9/8/69
CHECKED BY	M. PAPP	9/9/69
INKED BY	G. COUTOUMAS	9/10/69
CHECKED BY	N. DOOLEY	9/11/69

PROJ. No.	SHEET No.	TOTAL SH'TS
US 28 (117)	20	111

1M 1 68 BRUNING 40-21 50500

NOTE BOOKS

BOOK NO.	PAGE NO.

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	206.1	206.2	209.	520.2	544.		583.1	520.1	603.00212	603.00215	603.00218	603.00224	603.00230	603.00236	603.07242	603.07430	603.31042	604.12		604.22		604.3		
ITEM	COMMON STRUCTURE EXCAVATION	ROCK STRUCT. EXCAV.	GRAN BACK-FILL	CONC. CLASS B	REIN-FORCING STEEL	HEADER STD. NUMBER	RIPRAP A	CONC. CLASS A	REINFORCED CONCRETE PIPE 2000 D INCLUDING SPECIFIED EXCAVATION						B.C.C. STEEL PIPE, 12 GAGE INCL. SPEC. EXC.	B.C.C. STEEL PIPE, 14 GAGE INCL. SPEC. EXC.	STEEL END SECTIONS FOR 42" PIPE INCL. SPEC. EXC.	CATCH BASINS TYPE B ALT 2 GRATE & FRAME		DROP INLETS TYPE B		MANHOLES		REMARKS
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	LB.		C.Y.	C.Y.	12" L.F.	15" L.F.	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	30" L.F.	EA.	ACT U	EST U	ACT U	EST U	ACT U	EST U	
LOCATION																								
SHEET 60																								
14+50·K - 14+60·K												10												
14+60·K RT.																		1	1					
14+60·K LT. & RT.									36															
14+60·K LT.	5.6																	1	1.50					
14+60·K - 16+74·K												212												
16+00·K LT.																		1	1					
16+00·K - 16+48·K									46															
16+34·K RT.																		1	1					
16+34·K - 16+74·K									90															
16+48·K LT.																		1	1					
16+48·K - 16+74·K									34															
16+74·K LT.	7.0																	1	1.62					
16+74·K - 18+75·K												198												
17+25·K RT.																		1	1					
17+25·K - 17+85·K									150															
18+75·K RT.																		1	1					
18+75·K LT. & RT.									36															
18+75·K LT.	5.4																	1	1.50					
18+75·K - 19+33·K												58												
SHEET 59																								
10+28·K LT.																		1	1					
10+28·K - 10+75·K									50															
10+66·K RT.																		1	1					
10+66·K - 10+67·K									32															
10+67·K RT.																		1	1					
10+67·K - 10+75·K									38															
10+75·K LT.																		1	1.12					
10+75·K - 12+77·K											190													
12+77·K RT.																		1	1					
12+77·K LT. & RT.									36															
12+77·K LT.	3.0																	1	1.38					
12+77·K - 14+50·K												166												
SHEET 61																								
11+50·P - 13+25·P LT.	361						42																	
13+25·P LT. & RT.			290												188		4							TWIN CULVERT (10'C-C
3+25·R - 4+50·R RT.	311						13																	
4+42·R LT. & RT.									160															
SUB-TOTAL - THIS SHEET	693.0	—	290	—	—		55		708	—	190	644	—	—	188	—	4	15	17.12	—	—	—	—	
SUB-TOTAL CARRIED FORWARD SHEET 17	—	—	—	—	—		—		—	—	—	—	—	—	—	—								
SUB-TOTAL CARRIED FORWARD SHEET 18	66.0	—	—	—	—		—		—	—	—	—	—	—	—	—								
SUB-TOTAL CARRIED FORWARD SHEET 19	488.4	—	—	—	—		—		1700	370	484	150	258	152	—	—		26	32.88	5	5.6	1	1.62	
SUB-TOTAL CARRIED FORWARD SHEET 20	209.1	217.4	32.1	2.6	25		—		1476	224	158	456	238	—	—	170		20	22.24	4	5.2	7	7.87	
SUB-TOTAL	1456.5	217.4	322.1	2.6	25		55		3884	594	832	1250	496	152	188	170	4	61	72.24	9	10.8	8	9.49	
ESTIMATED	34.5	3.6	27.9	0.4	5		5		116	36	18	70	14	8	12	10	—		1.76		1.2		.51	
DRAINAGE TOTALS	1490.0	221.0	350.0	3.0	30		60		4,000	630	850	1270	510	160	200	180	4		74		12		10.0	
FROM SIDEWALKS	—	—	550.0	—	—		—	—	—	—	—	—	—	—	—	—	—		—		—		—	
FROM SIGNS	20.0	—	—	—	350		—	5.0	—	—	—	—	—	—	—	—	—		—		—		—	
FROM CONCRETE STEPS	—	—	—	—	210		—	5.0	—	—	—	—	—	—	—	—	—		—		—		—	
PARTICIPATING TOTAL	1511.0	221.0	900.0	3.0	590		60	10.0	4,000	630	850	1270	510	160	200	180	4		74		12		10	
NON-PARTICIPATING (HUDSON INTERCEPTOR SEWER)	1600.0	212.0																						
GRAND TOTAL	3111.0	433.0	900.0	3.0	590		60	10.0	4,000	630	850	1270	510	160	200	180	4		74		12		10	

REVISIONS AFTER PROPOSAL

DATE	STATION	DESCRIPTION

COMPILED BY K. FULOP DATE 9/5/69
CHECKED BY N. DOOLEY DATE 9/8/69
INKED BY G. COUTOUMAS DATE 9/11/69
CHECKED BY N. DOOLEY DATE 9/11/69

PROJ. No.	SHEET No.	TOTAL SH'TS.
US 28 (17)	21	111

1M 1 68 BRUNING 40-21 50500

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	22	111

WRECK EXIST. C.B. : PLUG EXIST. PIPE/S AT LOCATIONS LISTED BELOW.

6+44 - A RT.	20+32 - F LT.
6+82 - A RT.	20+54 - F RT.
7+92 - A RT.	20+58 - F LT.
11+18 - A. LT.	23+39 - F LT.
11+68 - A ℄	26+16 - F ℄
	27+18 - F LT.
	0+35 - E LT.
23+30 - B LT.	0+65 - E RT.

ITEM 202.108 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

ITEM 202.101 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

22+10 - F LT. RETAIN EXIST. SMH

23+58 - F RT. (7' WIDE)
23+80 - F RT. (5' WIDE)
CONSTR. 2 CEM. CONC. STEPS

FOR DETAIL IN THIS AREA SEE SHEET NO. 23

27+25 - F LT.
REMOVE EXISTING UNDERGROUND GAS TANKS, OR CUT & FILL WITH SAND. SUBSIDIARY TO THE SEVERAL ITEMS OF THE CONTRACT

9+11 - A LT. RETAIN EXIST. C.B.

7+87 - A LT. RETAIN EXIST C.B.

*REMOVE POLES

RETAIN EXISTING BURIED CABLE AND CONDUIT EASTERLY BEYOND MANHOLE # 220 (By Others)

ABANDON EXISTING BURIED CABLE AND CONDUIT IN PLACE EASTERLY BEYOND MANHOLE #220 (By Others)

ITEM 202.111 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

28+35 - F LT.
RETAIN EXIST. SMH.

31+04 - F (EXT.) LT.
RETAIN EXIST. SMH.

33+60 - F LT.
RETAIN EXIST. SMH

34+44 - F LT.
RETAIN EXIST. SMH.

34+54 - F LT.
RETAIN EXIST. SMH.

34+64 - F LT.
RETAIN EXIST. SMH.

*REMOVE HYDRANT

*REMOVE POLE

CUT WEST RETAINING WALL & RETAIN PORTION TO MEET NEW GRADING

REMOVE RET. WALL, STEPS & WALK GRADE AREA, LOAM.

* REMOVAL OF EXISTING POLES OR HYDRANTS AND RELOCATION OF POLES OR HYDRANTS, BY OTHERS, NOT A PART OF THIS CONTRACT.

RETAIN DRIVE
AT LOCATIONS LISTED BELOW

0+40 - E LT.	21+15 - F RT.
0+68 - E LT.	
1+15 - E LT.	

CONSTRUCT DRIVE
AT LOCATIONS LISTED BELOW

7+62 - A RT.	21+95 - F RT.
8+27 - A RT.	22+70 - F RT.
8+50 - A RT.	24+50 - F RT.
10+60 - A LT.	25+60 - F RT.
	36+10 - F RT.

CONSTRUCT CEMENT CONCR. SDWLK. AT LOCATIONS LISTED BELOW

26+07 - F RT.
26+18 - F RT.
26+47 - F RT.

CONSTRUCT BITUMINOUS SIDEWALK AT LOCATIONS LISTED BELOW

10+45 - A LT.
10+83 - A LT.

CONST. PROJECT MARKER
(VIEW FROM ℄ OF ROAD) BEGINNING OF US 28(17)
STA. 6+17.00 - A RT.

B.M. No. 11 - Book No. 7991, Sta. 11+60, Rt. 3', E. Hollis St. North Traverse Line (or Sta. 6+42, Lt 23', ℄ A) hydrant, letter "T" in Troy... Elev. 125.26.

MERRIMACK RIVER

BELKNAP ST. — CHASE ST. — HOBBS AVE — CROWN ST. — HOLLIS ST. — "D" ST. — "E" ST. — RAMP "F"

(USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION
				Row Verified By MacPherson 4-12-71

	NOTEBOOKS		
PLAN TRACED	D.EISNOR	DATE Mar. 1, 69	
PLAN CHECKED	N.DOOLEY	" Mar. 10, 69	
PROFILE TRACED		"	BOOK NO. " PAGE NO. "
PROFILE CHECKED		"	" " " "
INKED	D.EISNOR	" Mar. 18, 69	" " " "
CHECKED	N.DOOLEY	DATE Apr. 23, 69	BOOK NO. " PAGE NO. "

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	22	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	23	111

WRECK EXIST. C.B., PLUG EXIST. PIPE/S AT LOCATIONS LISTED BELOW.

27+40·B LT.	23+34·C LT.
27+46·B LT.	23+34·C RT.
	24+60·C LT.
18+13·C LT.	24+78·C RT.
18+30·C RT.	25+17·C LT.
19+05·C LT.	25+86·C LT.
19+60·C RT.	
19+99·C LT.	25+77·F LT.
20+12·C RT.	26+13·F LT.
20+26·C LT.	26+16·F ℄
21+25·C LT.	27+18·F LT.
21+26·C RT.	

* REMOVAL OF EXISTING POLES OR HYDRANTS AND RELOCATION OF POLES OR HYDRANTS, BY OTHERS, NOT A PART OF THIS CONTRACT.

ITEM 202.106 DEMOLISHING BUILDING SUBJECT TO PRIOR REMOVAL

ITEM 202.110 DEMOLISHING BUILDING SUBJECT TO PRIOR REMOVAL

REVISED AFTER PROPOSAL #2 DATE MAY 26 1970

REVISION AFTER PROPOSAL #2
FOR CONSTRUCTION OF CHAIN-LINK FENCE ALONG NORTH SIDE OF BRIDGE ST & WEST OF BANCROFT ST.
SEE PLAN SHEET #27

REVISION AFTER PROPOSAL #2
FOR DRIVES IN THIS AREA
SEE SHEET #27

ITEM 202.107 DEMOLISHING BUILDING SUBJECT TO PRIOR REMOVAL

ITEM 202.101 DEMOLISHING BUILDING SUBJECT TO PRIOR REMOVAL

ITEM 202.102 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

ITEM 202.104 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

ITEM 202.103 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

ITEM 202.109 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.105 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL.

19+04·C LT. CONSTRUCT DRIVE
28+13·B LT. CONSTRUCT DRIVE

RETAIN DRIVE AT LOCATIONS LISTED BELOW

18+35·C LT. 1+30·E LT.
18+38·C RT. 1+85·E LT.
2+80·E LT.

ITEM 203.2 REMOVE REINF. CEMENT CONCRETE PAVEMENT STA. 17+33.32·C ± TO 27+70·C ±

17+37·C LT. RETAIN EXIST. D.I.

19+80·C 28' LT. | 11+97.20·D 15' LT. | 21+37·C ℄ RETAIN EXIST. SMH. | 19+33·C ℄ RETAIN EXIST. SMH. | 20+38·C ℄ RETAIN EXIST. SMH.

21+80·C RT. RETAIN EXIST. C.B.

27+97·B LT. RETAIN EXIST. SMH.

24+97·C LT. RETAIN EXIST. SMH.

28+08·B ℄ RETAIN EXIST. SMH.

17+92.91·D 50' LT. | 14+70·D 95' LT. | 14+46·D 51' LT. | 15+25·D 50' LT.

27+42.00 8 AHEAD 35' RT.

82+00 24.4' LT.

B.M.#82 - Book No. 7991, Sta. 82+70 Lt. 18' Bridge St. traverse line, hydrant west nut on top cap..... ELEV. 118.38

B.M.#88 - Book No. 7991 Sta. 88+15 Lt. 22' Bridge St. traverse line, (or Sta. 22+50 Lt. 20' ℄ C) hydrant west nut on top cap..... ELEV. 117.37

B.M.#60 - Book No. 7991, Sta. 60+30 Rt. 30' E. Hollis St. traverse line, (or Sta. 29+21 Rt. 15' ℄ B) S.E. corner of south side of west abutment..... ELEV. 120.15

ABANDON EXISTING BURIED CABLE & CONDUIT IN PLACE EASTERLY BEYOND MANHOLE #220 (BY OTHERS)

FOR DETAIL IN THIS AREA SEE SHEET #22

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					NOTEBOOKS		
NO.	DATE	STATION	STATION	DESCRIPTION			
				Row Verified By Wm. Benton 4-12-74			

PLAN TRACED	D. EISNOR	DATE 10 Apr 69		BOOK NO.	PAGE NO.
PLAN CHECKED	N. DOOLEY	" 11 Apr 69		" "	" "
PROFILE TRACED		"		" "	" "
PROFILE CHECKED		" 21 Apr 69		" "	" "
INKED	D. EISNOR	DATE 25 Apr 69		BOOK NO.	PAGE NO.
CHECKED	N. DOOLEY				

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	23	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	24	111

WRECK EXIST. C.B.; PLUG EXIST. PIPE/S AT LOCATIONS LISTED BELOW.

28+91 · A ℄

35+04 · B RT.
35+14 · B LT.
35+27 · B LT.
35+60 · B LT.
35+66 · B RT.
35+76 · B RT.
37+53 · B RT.
37+63 · B LT.
38+73 · B LT.
38+77 · B RT.
39+24 · B RT.
40+35 · B RT.
37+67 · B RT.

36+72 · H ℄

5+75 · L RT.
6+60 · L LT.
6+79 · L RT.
7+49 · L LT.
7+52 · L LT.

3+50 · M ℄

CONST. PROJECT MARKER

US 28(17)

STA. 46+81.20 · B LT. (VIEW FROM ℄ OF ROAD) END OF US 28(17)

MERRIMACK RIVER

Edge of River

ITEM 203.2 REMOVE CEM. CONC. STEPS

ABANDON IN PLACE 4" & 8" C.I. WATER (BY OTHERS)

GRADE & CONSTR. 4" LOAM

REMOVE SURFACE & CONSTR. 4" LOAM

ABANDON EXIST. NET & T BURIED CABLE (BY OTHERS)

REMOVE POLES

REMOVE HYD.

CUT OFF & PLUG 8" WATER (BY OTHERS)

CUT OFF & PLUG 2" W. (Dead Line) (BY OTHERS)

CONSTRUCT TURNAROUND RETAIN D.I.

REMOVE SURF. & CONSTR. 4" LOAM

RETAIN EXIST. S.MH.

REMOVE HYDRANT

REMOVE AND RESET MONUMENT (BY OTHERS)

RETAIN EXIST. C.B.

Ramp "N"

Ramp "M"

Ramp "A"

Ramp "G"

Campbell Ave.

Derry Rd.

Library St.

Central St.

Webster St.

Park

Asphalt Parking Lot

Stores Brick & Wood

Wd. House

Wd. Bldg.

Store

Brick Church

Gas. Station

Auto Land

Woods

Trees

Bushes

Gravel

Paved

Asph. Paved

Asph. Curb

Asph. Walk

Gran. Curb

Flag Pole

Top of Bank

ITEM 202.122 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.112, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.113, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.114, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.121, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.115 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.117 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.119, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.120, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

ITEM 202.116, DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL

CONT. ON SHEET # 25

* REMOVAL OF EXISTING POLES OR HYDRANTS AND RELOCATION OF POLES OR HYDRANTS, BY OTHERS, NOT A PART OF THIS CONTRACT.

CONSTR. DRIVE AT LOCATIONS LISTED BELOW

40+05 · B RT.
40+15 · B LT.
42+08 · B LT.
42+39 · B RT.

36+50 · H RT.

DRIVE TO BANK FROM CAMPBELL AVE.

3+95 · M RT.

7+50 · L LT.
8+17 · L LT.
9+90 · L LT.

CONSTR. CEM. CONC. SIDEWALK AT LOCATIONS LISTED BELOW

7+98 · L LT.

RETAIN DRIVE AT LOCATIONS LISTED BELOW

40+82 · B RT.
41+00 · B LT.
41+10 · B RT.
41+30 · B LT.
43+87 · B RT.
44+34 · B RT.
44+80 · B RT.
45+24 · B RT.
45+67 · B RT.
46+31 · B RT.

0+10 · G RT.

37+85 · H RT.

4+75 · M RT.

Keep with orig. set of plans

Sht. 24 Superseded by Brown line. Rev. #1 in Richardson March 11, 1970

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)	DESCRIPTION	STATION	STATION	NO.	DATE

NOTEBOOKS	BOOK NO.	PAGE NO.	DATE
PLAN TRACED D. EISNOR			3-4-69
PLAN CHECKED N. DOOLEY			3-7-69
PROFILE TRACED			
PROFILE CHECKED			
INKED D. EISNOR			3-10-69
CHECKED N. DOOLEY			4-25-69

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	24	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28 (17)	24	111

REVISED AFTER PROPOSAL # 1 DATE MAR 11 1970

DATE	STATION	DESCRIPTION
3-11-70	25+50-A 41+00-B	Showing Area of Temp Approach.
		Row Verified By Mac Pierson 4-9-74

PLAN CHECKED	N. DOOLEY	BOOK NO.	
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	3-10-69
INKED	D. EISNOR	"	"
CHECKED	N. DOOLEY	BOOK NO.	DATE 4-25-69

WRECK EXIST. CB., PLUG EXIST. 8" S.L.

25+91-A Rt.

35+73-B Rt.	36+73-H Rt.
35+14-B Lt.	
35+27-B Lt.	5+75-L Rt.
35+60-B Lt.	6+60-L Lt.
35+66-B Rt.	6+79 L Rt.
35+76-B Rt.	7+47-L Lt.
37+53-B Rt.	7+52-L Lt.
37+67-B Lt.	
37+73-B Lt.	3+50-M Rt.
38+77-B Rt.	
39+24-B Rt.	
40+36-B Rt.	
41+10-B Rt.	

MERRIMACK RIVER

Edge of River

Top of Bank

Rip Rap

Edge of River

ITEM 203.2 REMOVE CEM. CONC. STEPS

ABANDON IN PLACE 4"&8" C.I. WATER (BY OTHERS)

4-3" Ducts (N.E.T.&T. Co.)

ABANDON EXIST. NET BURIED CABLE (BY OTHERS)

ABANDON EXIST. NET BURIED CABLE AND EMPTY DUCT (BY OTHERS)

RETAIN 1 EXIST. NET & T BURIED CABLE AND EMPTY DUCT (BY OTHERS)

CUT OFF & PLUG 8" WATER (BY OTHERS)

CUT OFF & PLUG 8" WATER (BY OTHERS)

CUT OFF & PLUG 8" WATER (BY OTHERS)

CUT OFF & PLUG 8" WATER (Dead Line)

REMOVE SURF. & CONSTR. 4" LOAM

CONSTRUCT TURNAROUND RETAIN D.I.

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE POLES

REMOVE HYDRANT

RETAIN EXIST. SMH.

RETAIN EXIST. SMH.

RETAIN EXIST. SMH.

RETAIN EXIST. SMH.

RETAIN EXIST. SMH.

RETAIN EXIST. SMH.

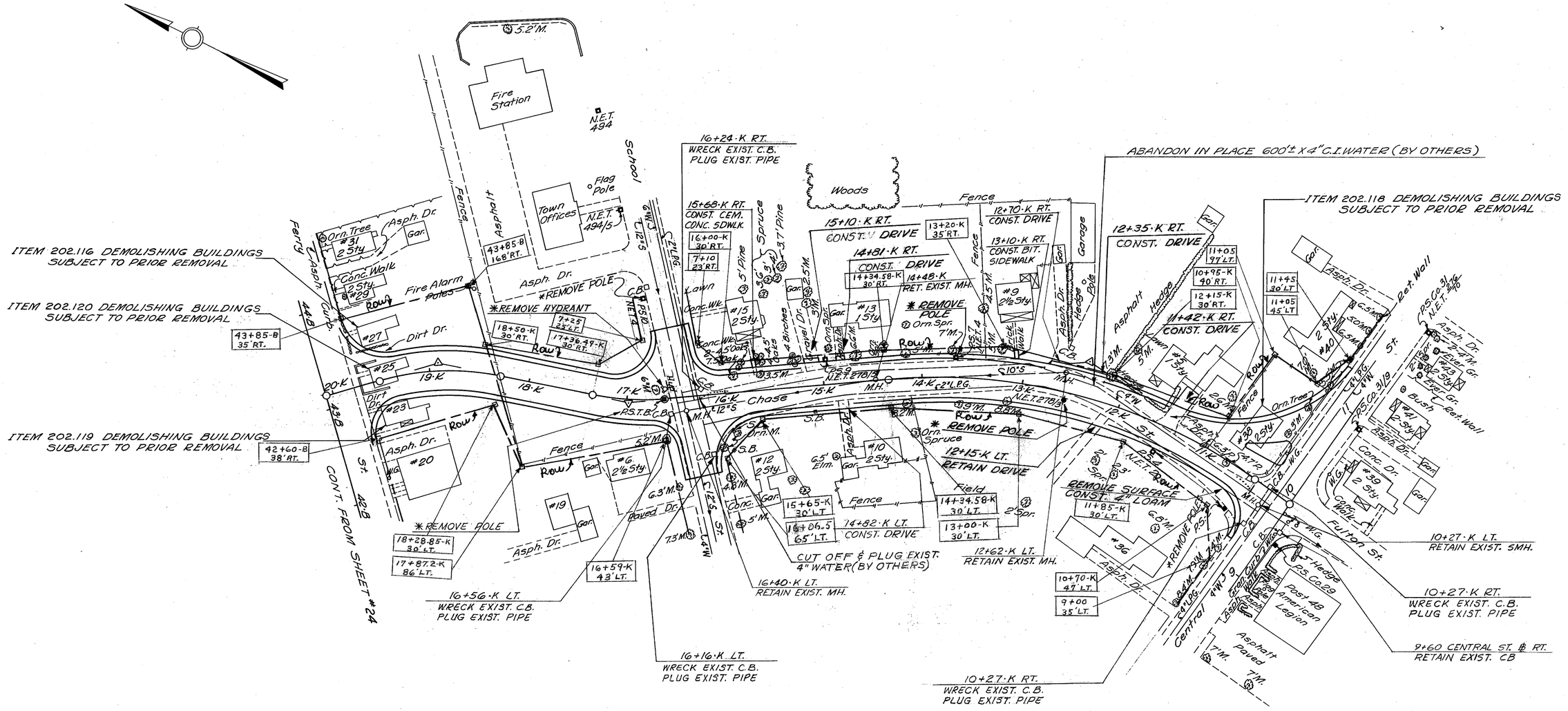
RETAIN EXIST. SMH.

RETAIN EXIST. C.B.

RETAIN EXIST. C.B.

RETAIN EXIST. C.B

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	25	111


ITEM 202.116 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL
ITEM 202.120 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL
ITEM 202.119 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL
ABANDON IN PLACE 600'± X 4" C.I. WATER (BY OTHERS)
ITEM 202.118 DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL
Fire Station
Town Offices
Flag pole
N.E.T. 494
N.E.T. 494/5
School
Asphalt
Fence
Ferry
Asph.
Curb
Conc. Walk
Orn. Tree #31 2 Sty.
Asph. Dr.
Gar.
Fire Alarm poles
#25
#27
#23
#20
#G 2½ Sty.
#16 2½ Sty.
#19
#12 2 Sty.
#10 2 Sty.
#15 2½ Sty.
#13 1½ Sty.
#9 2½ Sty.
#5 1½ Sty.
#40
#41 2-2½ Sty.
#42 2½ Sty.
#30 2½ Sty.
#39 2½ Sty.
#36
Dirt Dr.
Row
Chase
Paved Dr.
Conc. Dr.
Conc. Walk
Fulton St.
Central St.
Woods
Hedge
Lawn
Conc. Wk.
Orn. Spruce
Orn. Pine
Orn. Shrub
Retaining Wall
Bush
Garage
Field
Post 48 American Legion
Asphalt Paved
Grass Island
Granite Curb
Cat. P.G.
Cat. W.G.
Cat. Curb
Cat. Gutter
Cat. Sidewalk
Cat. Driveway
Cat. Fence
Cat. Hedge
Cat. Retaining Wall
Cat. Bush
Cat. Tree
Cat. Flag Pole
Cat. Fire Alarm Poles
Cat. Orn. Spruce
Cat. Orn. Pine
Cat. Orn. Shrub
Cat. Lawn
Cat. Field
Cat. Woods
Cat. Asphalt
Cat. Paved Dr.
Cat. Conc. Dr.
Cat. Conc. Walk
Cat. Asph. Dr.
Cat. Gar.
Cat. Flag Pole
Cat. Fire Station
Cat. Town Offices
Cat. School
Cat. Chase
Cat. Row
Cat. Dirt Dr.
Cat. Ferry
Cat. Asph.
Cat. Curb
Cat. Conc. Walk
Cat. Orn. Tree
Cat. Asph. Dr.
Cat. Gar.
Cat. Fire Alarm poles
Cat. Dirt Dr.
Cat. Row
Cat. Chase
Cat. Paved Dr.
Cat. Conc. Dr.
Cat. Conc. Walk
Cat. Fulton St.
Cat. Central St.
Cat. Woods
Cat. Hedge
Cat. Lawn
Cat. Conc. Wk.
Cat. Orn. Spruce
Cat. Orn. Pine
Cat. Orn. Shrub
Cat. Retaining Wall
Cat. Bush
Cat. Garage
Cat. Field
Cat. Post 48 American Legion
Cat. Asphalt Paved
Cat. Grass Island
Cat.

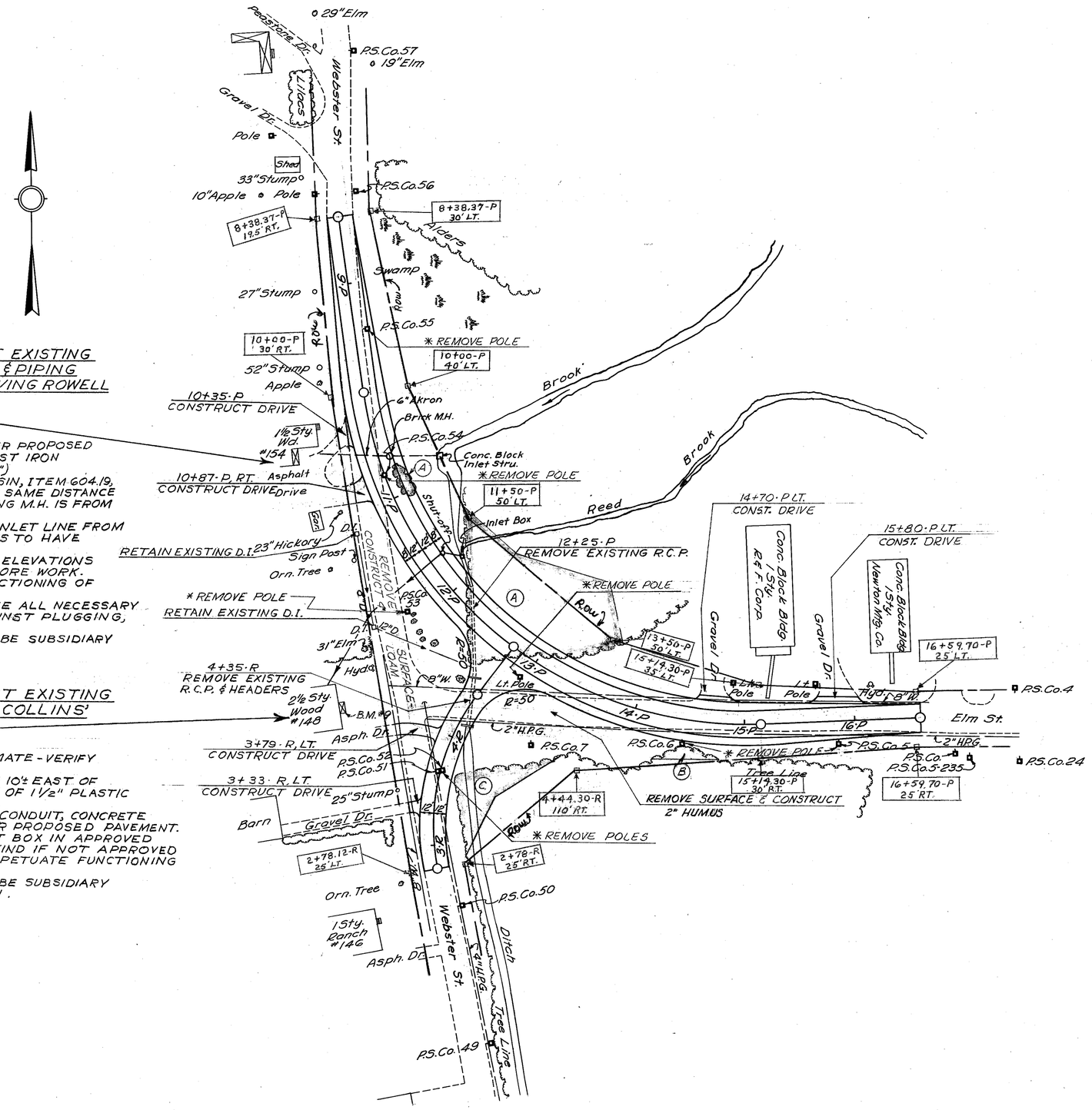
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	26	111

RETAIN AND RECONSTRUCT EXISTING WATER INLET STRUCTURES & PIPING FOR FLOWING SEWER SERVING ROWELL PROPERTIES.

1. REMOVE EXISTING BRICK M.H.
2. REPLACE EXISTING V.C. PIPE UNDER PROPOSED PAVEMENT WITH SAME SIZE CAST IRON WATER PIPE. (ASSUMED 60'×6")
3. CONSTRUCT SPECIAL CATCH BASIN, ITEM 604.19, IN APPROVED LOCATION, ABOUT SAME DISTANCE FROM NEW PAVEMENT AS EXISTING M.H. IS FROM OLD PAVEMENT.
4. CONNECT TO EXISTING 6" V.C. INLET LINE FROM BROOK. SPECIAL CATCH BASIN IS TO HAVE STANDARD 30" C.I. M.H. COVER.
5. CHECK SYSTEM & CONTROLLING ELEVATIONS WITH ENGINEER CAREFULLY BEFORE WORK. INTENT IS TO PERPETUATE FUNCTIONING OF SYSTEM IN ALL RESPECTS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE AGAINST PLUGGING, ETC, DURING CONSTRUCTION.
6. ALL INCIDENTAL WORK SHALL BE SUBSIDIARY TO ITEM 604.19.

RETAIN AND RECONSTRUCT EXISTING WATER SUPPLY PIPING TO COLLINS' RESIDENCE.

1. LOCATION SHOWN IS APPROXIMATE - VERIFY WITH OWNER AND ENGINEER.
2. REPLACE EXISTING PIPE FROM 10± EAST OF EXISTING PAVEMENT WITH 70'± OF 1½" PLASTIC WATER PIPE, ITEM 611.7015.
3. CONSTRUCT ABOUT 46' OF 3" CONDUIT, CONCRETE ENCASED, ITEM 614.131, UNDER PROPOSED PAVEMENT.
4. RELOCATE SHUT-OFF AND INLET BOX IN APPROVED LOCATION. REPLACE SAME IN KIND IF NOT APPROVED FOR REUSE. INTENT IS TO PERPETUATE FUNCTIONING OF SYSTEM IN ALL RESPECTS.
5. ALL INCIDENTAL WORK SHALL BE SUBSIDIARY TO ITEMS 611.7015 AND 614.141.



* REMOVAL OF EXISTING POLES AND RELOCATION OF POLES BY OTHERS, NOT A PART OF THIS CONTRACT.

B.M. No. 9 - Book No. 5312, Sta. 9+98, Rt. 58' Webster St. Traverse Line (or Sta. 3+87 Lt. 100; ℄ R) S.E. Corner of bottom concrete step #148 Webster St. Elev.... 124.77

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					NOTEBOOKS		
NO.	DATE	STATION	STATION	DESCRIPTION		BOOK NO.	PAGE NO.
				ROW Verified By MacPherson 4-18-44	PLAN TRACED	Q. ESVOE	DATE 19 Dec 68
					PLAN CHECKED	N. DOOLEY	" 20 Dec 68
					PROFILE TRACED	"	"
					PROFILE CHECKED	"	"
					INKED	Q. ESVOE	DATE 7 Jan 69
					CHECKED	N. DOOLEY	DATE Jan 69

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	26	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	27	111

REVISED AFTER PROPOSAL #2 DATE MAY 26 1970

STA. 17+33.32± 27±LT. - 19+80 C 28±LT.
CONST 231'± CHAIN LINK 6' HIGH ON R.O.W. LINE
CONST 2-12' GATES AT 18+88.5 & 19+04
" 1-4' GATE AT 18+78 LT FOR WALK

STA. 19+80 C LT - 11+97.20 D LT 15'
CONST 160'± CHAIN LINK FENCE 6' HIGH

CONSTRUCT DRIVE, FIELD LOCATION
20' WIDE, 12' GRAVEL BASE, 2.5" HOT BIT. PAVE. ON PROPERTY OF MAINE MFG. CO. TO CONNECT BANCROFT ST. & STOREHOUSES AS SHOWN.

STA. 11+97.20 D - 14+46±D 51±LT.
CONST 243'± CHAIN LINK FENCE 6' HIGH

STA 14+46±D 51' LT.
CONST 50' CHAIN LINK FENCE 6' HIGH NORTERLY ALONG EXISTING WESTERLY ROW LINE OF BANCROFT ST. AS SHOWN

REVISED JUNE 3, 1969

BEGIN CONSTRUCTION
SANDERS ST
OLD
NEW
CONNECT TO EXIST. PAVED PARKING LOT
BANCROFT EXIST. ROW 51'
PC 21+42.22 C
R=42.51' E=
PT. 18+87.33 A BACK = 18+87.33 D (14.00' LT.)
PT. 18+87.33 A BACK = PT. 18+87.33 D (14.00' LT.)
PC 17+92.91 D
LIM. A. R.O.W.
742.77'
MERRIMACK
N82°-21'-49.9"E
20-A
19-A
18-D
17-D
16-D
15-D
14-D
13-D
12-D
11-D
10-D
9-D
8-D
7-D
6-D
5-D
4-D
3-D
2-D
1-D
SLOPE LINE
EXIST. R.O.W.
R.O.W.
BRIDGE ST
SURVEY ℄
TAYLORS FALLS BRIDGE
30-B
29-B
28-B
27-B
26-B
25-B
24-B
23-B
22-B
21-B
20-B
19-B
18-B
17-B
16-B
15-B
14-B
13-B
12-B
11-B
10-B
9-B
8-B
7-B
6-B
5-B
4-B
3-B
2-B
1-B
"C" ST.
"D" ST.
"E" ST.
E. HOLLIS ST.
RIVER
ENTRANCE
EXIT
LIM. A. R.O.W. EXIST. R.O.W.
LIM. A. R.O.W.
LIM. A. R.O.W. EXIST. R.O.W.
LIM. A. R.O.W. EXIST. R.O.W.
LIM. A. R.O.W. EXIST

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	28	111

FOR R.O.W. IN THIS AREA SEE SHEET No.27

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
PLAN TRACED J. DOWNEY	DATE 27 MAR 69	BOOK NO.	PAGE NO.
PLAN CHECKED K. FULOP	" Apr 11, 69	"	"
PROFILE TRACED		"	"
PROFILE CHECKED		"	"
INKED J. DOWNEY	DATE 27 MAR 69	BOOK NO.	PAGE NO.
CHECKED K. FULOP	DATE Apr 11, 69		

PARCEL NO.	OWNER
113	REAL L & LINDA C. BOUCHER
114	ANNIE ALUKONIS
115	ARTHUR & ANNE GAGNON
116	ROGER P. & SHIRLEY M. MORIN
117	CORRINE H. MORIN
120	ALFRED L. & IRENE THERIAULT
122	JOSEPH J.F. PIERETTE LEVESQUE
123	MARY T. WILSON
124	HAROLD D. & PATRICIA R. MacRICHIE
125	LEON DAME, EST.
126	MOBIL OIL CORP.
128	INDIAN HEAD CASKET CO. INC.
131	E.E. NADEAU & SONS, INC.
132	EDMOND E. & BERTHA NADEAU
133	MERCIER BROS., INC.
134	EDMOND E. & BERTHA NADEAU
135	TREMARCO CORP.
136	CITY OF NASHUA
139	CLEOMENE A. & ANDREA NEVENS
131-A	E.E. NADEAU & SONS, INC.
143	NORMAN & MAURICE NADEAU

BASELINE CURVE DATA

NO.	P.I.	Δ	D	T	L	R
1	11+79.99-A	24°-52'-37.1"L	11.459°	110.28'	217.09'	500.00'
4	25+38.37-B	40°-41'-31.2" R.	9.549°	222.49'	426.13'	600.00'
10	24+04.80-F	06°-38'-40.8"L	3.820°	87.08'	173.96'	1500.00'
11	25+67.72-F	12°-23'-57.6"R	8.185°	76.04'	151.49'	700.00'
12	28+29.93-F	112°-24'-40.9"R	45.837°	186.76'	245.24'	125.00'
13	29+19.02-F	58°-11'-39.3" R.	104.174°	30.61'	55.86'	55.00'
14	31+52.65-F	153°-00'-49.8"L	114.592°	208.38'	133.53'	50.00'
15	31+11.99-F	81°-03'-03.5"R	143.240°	34.19'	56.58'	40.00'
16	33+93.19-F	86°-31'-54.9"R	76.394°	70.59'	113.27'	75.00'

4 DENOTES BASELINE CURVE NUMBER

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	28	111

STATE	PROJ NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	29	111

REVISED AFTER PROPOSAL #1 DATE MAR 11 1970

PARCEL NO.	OWNER
223	J. W. SIMONEAU REALTY CORP.
224	BERNADETTE & ROBERT L. LEVESQUE
225	THELMA LEMIRE & GEORGE & JOANNE BRIAND
226	AMELDA I. JOHNSON
227	INDIAN HEAD NATIONAL BANK
228	ROLAND J. & GRACE M. LEVESQUE
229	ROLAND J. LEVESQUE & LEO A. NOEL
230	ROGERS REALTY, INC.
231	C & R FURNITURE
232	THE COMMUNITY CHURCH OF HUDSON
233	TOWN OF HUDSON
~~234~~	~~ELSA M. ROGERS~~ (DELETED)
237	FRANK A. & ROSAMOND H. NUTTING, JR.
256	NORMAN & ROBERTA JODOIN
258	JOS & CECELIA FORRESTAL

N96,612.865 E560,043.904 5+07 · M 75'± LT.

N75°-39'-15.1"E 40.05'

5+05 · M 35'± LT. N96,622.789 E560,082.706

N 96,460.173 E 560,045.132 3+60.78 · M 95' LT.

POT 3+60.78 · M = PC 10+00.00 · N (24.00° LT)

R.P.C. 11+29.26 · N

N72°-47'-30.0"E 144.00'

STA. POT 4+90.78 · M END CONSTR

4+06 · M 10'± RT. N96,541.533 E560,154.980

N85°-33'-33.8"W 47.64'

3+60.78 · M 25' RT. N96,502.775 E560,182.687

N33°-16'-37.8"W 59.19'

3+08.71 · M 40' RT. N96,457.470 E560,212.921

P.T. 3+08.71 · M

N79°-32'-38.7"E 87.62'

P.C. 2+31.16 · M = P.R.C. 0+44.06 · N

N96,530.720 E560,571.432

2+50± · M 125'± RT. N96,473.370 E560,298.583

N96,658.201 E560,588.027 P.C. 6+01.26 · L

6+01.26 · L 81'± LT.

42+10.00 · B = 3+00.00 · L

42+20 · B 36' LT.

P.C. 0+00.00 · M = 40+04.97 · B AHD (31.00° LT.)

39+50 · B 88'± LT. N96,371.186 E560,356.810

N79°-13'-39.5"E 65.17'

40+04.97 · B AHEAD 36' LT. N96,383.366 E560,420.829

N96,893.094 E560,675.088 3+60 · L 35'± LT.

N96,762.909 E560,659.156 7+25 · L 35'± LT.

N72°-43'-10.3"E 50.93'

N96,747.781 E560,610.527 7+00 · L 80'± LT.

STA. 10+74.94 · L END CONSTR.

N26°-13'-59.1"W 86.37'

10+74.94 · L 65' LT. N97,102.385 E560,693.693

P.T. 9+95.48 · L

9+95.48 · L 30' LT. N97,024.912 E560,681.870

9+95.48 · L 35' RT. N97,027.551 E560,746.817

N59°-05'-14.5"E 51.25'

10+20 · L 80'± RT. N97,053.878 E560,790.784

10' L

N02°-56'-44.2"E 131.99'

N06°-58'-37.1"E 131.16'

N02°-03'-10.8"E 200.75'

8+00 · L 35' RT. N96,826.939 E560,739.275

N02°-04'-11.6"E 140.22'

44+39.44 · B 44' LT. N96,686.923 E560,731.766

N03°-04'-11.6"E 140.22'

46+90± · B 45'± LT. N96,853.405 E560,921.267

N48°-41'-59.8"E 252.24'

N48°-56'-09.3"E

46+84± · B 25'± RT. N96,796.686 E560,962.728

44+39.44 · B 35' RT. N 96,629.389 E 560,785.903

N 46°-44'-34.4"E 54.44'

STA. 46+81.20 · B END OF US 28(17) C-7721

N96,931.316 E560,046.172

34+35.25 · B 70' RT.

P.C. 34+55.25 · B = P.T. 34+55.25 · H (15.00° RT.)

N07°-47'-17.7"E 141.82'

P.T. 36+19.35 · H

36+19.35 · H 7'± RT. N 95,936.789 E 560,187.882

S50°-37'-24.5"E 130.65'

37+50.00 · H 7'± RT. N 95,853.903 E 560,288.873

37+50.00 · H = 0+00.00 · G (40.00° LT.) S 50°-37'-24.5" E 50.00'

STA. 38+00.00 · H END CONSTR.

38+00 · H 7'± RT. N 95,822.183 E 560,327.522

37+35± 45'± LT.

37+50.00 · H 42'± LT. N 95,891.781 E 560,319.958

38+00 · H 42'± LT. N 95,860.060 E 560,358.608

N39°-22'-35.5"E 32.60'

37+60± · B 100'± RT. N96,104.066 E560,347.267

37+60± · B 50'± RT. N96,140.49 E560,396.75

39+30 · B 70' RT. N96,242.911 E560,450.517

39+30 · B 21' RT. N96,278.098 E560,416.939

37+41± · H 178'± LT. N96,002.616 E560,399.283

37+68 · B 282'± RT. N 95,977.001 E 560,477.814

39+60 · B 21' RT. N96,298.656 E560,438.188

38+75± B 50'± RT N 96,219.30 E 560,396.75

38+75± B 70'± RT N 96,204.73 E 560,410.46

40+04.97 B BACK = 40+04.97 B AHD (17.00° LT.) = P.T. 29+98.87 A (17.00° LT.)

P.T. 19+51.89 · K

P.C. 18+28.85 · K

42+60± · B 38'± RT. N96,504.238 E560,657.274

17+90± · K 84'± LT. N96,361.547 E560,698.085

18+28.85 · K 30'± LT. N96,413.093 E560,740.137

18+50± · K 30' RT. N96,451.269 E560,790.963

43+85± · B 35' RT. N 96,592.083 E 560,746.255

43+85± · B 168'± RT N 96,495.214 E 560,837.383

43+4000 · B = 20+09.09 · K

ANGLE PT. 44+39.44 · B

FOR R.O.W. IN THIS AREA SEE SHEET No. 30

BASELINE CURVE DATA

NO.	P.I.	Δ	D	T	L	R
3	27+68.61 · A	35°-37'-15.8" L	9.549°	192.76'	373.02'	600.00'
5	35+19.50 · B	35°-37'-15.6" L	28.648°	64.25'	124.34'	200.00'
17	35+42.24 · H	47°-00'-45.2" R	28.648°	86.99'	164.11'	200.00'
20	18+91.64 · K	28°-11'-55.9" L	22.918°	62.79'	123.04'	250.00'
21	8+00.02 · L	18°-04'-11.8" L	4.584°	198.76'	394.23'	1250.00'
22	2+44.15 · M	116°-02'-55.5" R	37.591°	244.15'	308.71'	152.42'
23	10+66.98 · N	37°-01'-53.0" R	28.648°	66.98'	129.26'	200.00'
24	∞	246°-08'-46.3" L	114.592°	∞	219.80'	50.00'

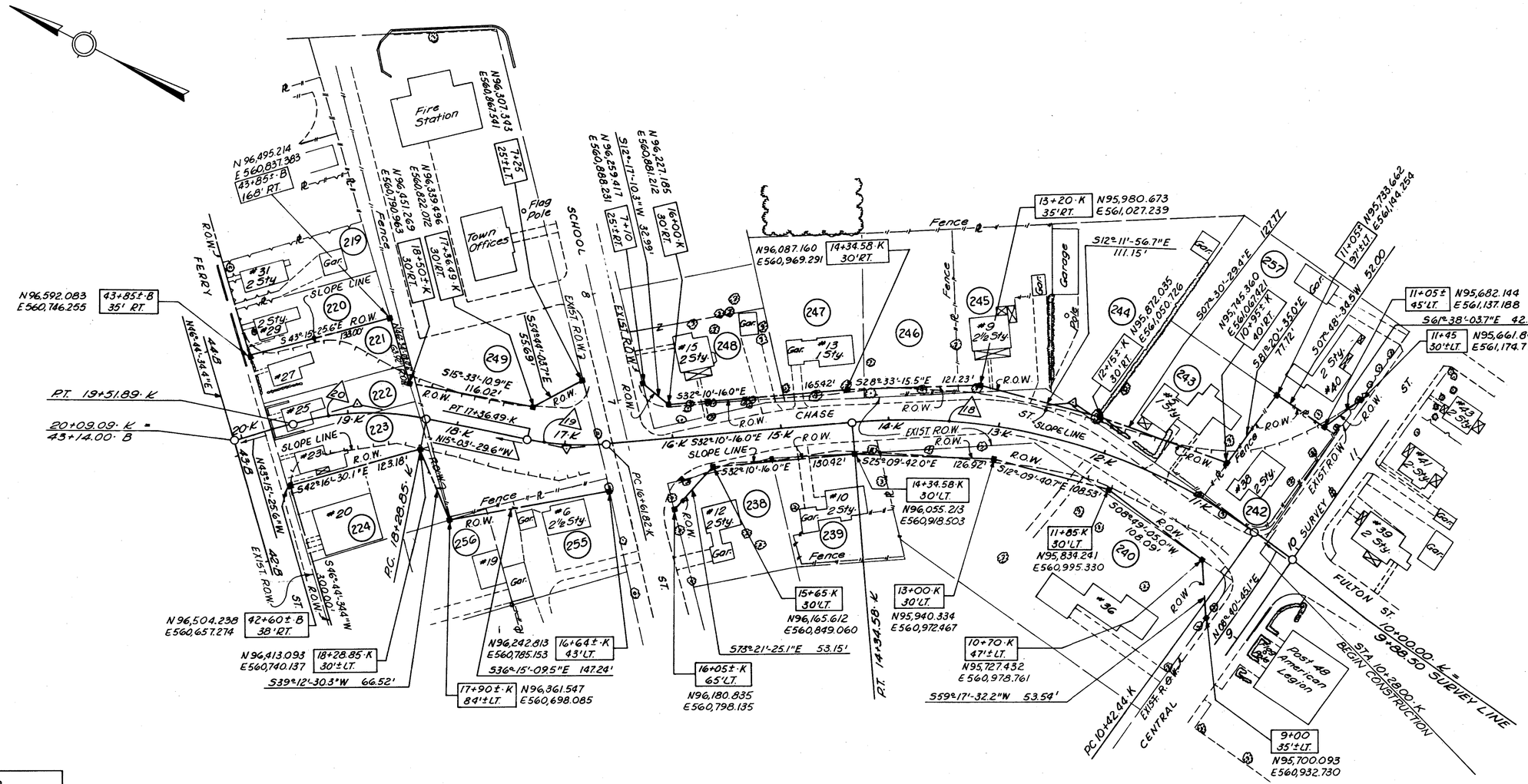
(3) DENOTES BASELINE CURVE NUMBER

PARCEL NO.	OWNER
200	TOWN OF HUDSON
201	LAMOY REALTY, INC.
202	BUILDING REALTY INC.
203	ERNEST R. MOREY
204	ROBERT M. & ELIZABETH M. HACKETT
205	JOHN K. SMITH
206	ROLAND LEVESQUE
207	KENNETH J. ROGERS
208	KIRBY H. & HAZEL A. LAWRENCE
208A	KIRBY H. & HAZEL A. LAWRENCE
209	HUMBLE OIL & REFINING CO.
210	OSWALD H. & ADRIENNE BOILARD
211	FRED A. & HAZEL A. FELBER
213	LEONARDA & CLAIRE F. SMITH
214	TOWN OF HUDSON
215	J.W. SIMONEAU REALTY
216	ROLAND & JEANETTE A. BIBEAU
217	EDGAR L. & LILLIAN H. TRUDEAU
218	EDMOND S. & MAURINE T. HUTCHINS
219	ERVIN J. & MARY BURTON
220	OSCAR P. & MARY L. CAMPBELL
221	MILES L. & JANE RUITER
222	ALIDA LAFLAMME
208B	ERMA CAMPBELL

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)	DATE	NOTEBOOKS	BOOK NO.	PAGE NO.	DESCRIPTION	STATION	NO.	DATE
					Deleted Prop # 234	37+50.H		3-11-70
					R.O.W. Verified By R.A. Flynn 5-3-76	140		
PLAN TRACED J. DOWNEY	DATE 24 MAR 69							
PLAN CHECKED K. FULOP	" Apr 17, 67							
PROFILE TRACED	"							
PROFILE CHECKED	"							
INKED J. DOWNEY	" 24 MAR 69							
CHECKED K. FULOP	DATE Apr 17, 67							

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	29	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	30	111



PARCEL NO.	OWNER
238	RAYMOND T. & ALICE FRASER
239	ALICE M. DURANT
240	DOROTHY MAXFIELD
242	LEO A. & STELLA M. NOEL
243	ARTHUR H. & EVA B. DUVALL
244	ROMAN CATH. BISH. OF MANCHESTER
245	ROBERT P. & ANN T. BERGERON
246	BRUCE D. & BRIAN B. FARMER
247	ARCHIBALD & LUCILLE V. WILLIAMSON
248	FRANCIS C. & MATILDE O'NEILL
249	TOWN OF HUDSON
255	JEAN P. & CECILE H. CHABOT
257	WILFRED J. & ALICE M. BERNAICHE

BASELINE CURVE DATA

NO.	P.I.	Δ	D	T	L	R
18	12+47.26·K	40°-51'-01.1"L	10.417°	204.82'	392.13'	550.00'
19	16+99.43·K	17°-06'-46.3"R	22.918°	37.61'	74.67'	250.00'
20	18+91.64·K	28°-11'-55.9"L	22.918°	62.79'	123.04'	250.00'

⚠18 DENOTES BASELINE CURVE NUMBER

FOR R.O.W. IN THIS AREA SEE SHEET No 29

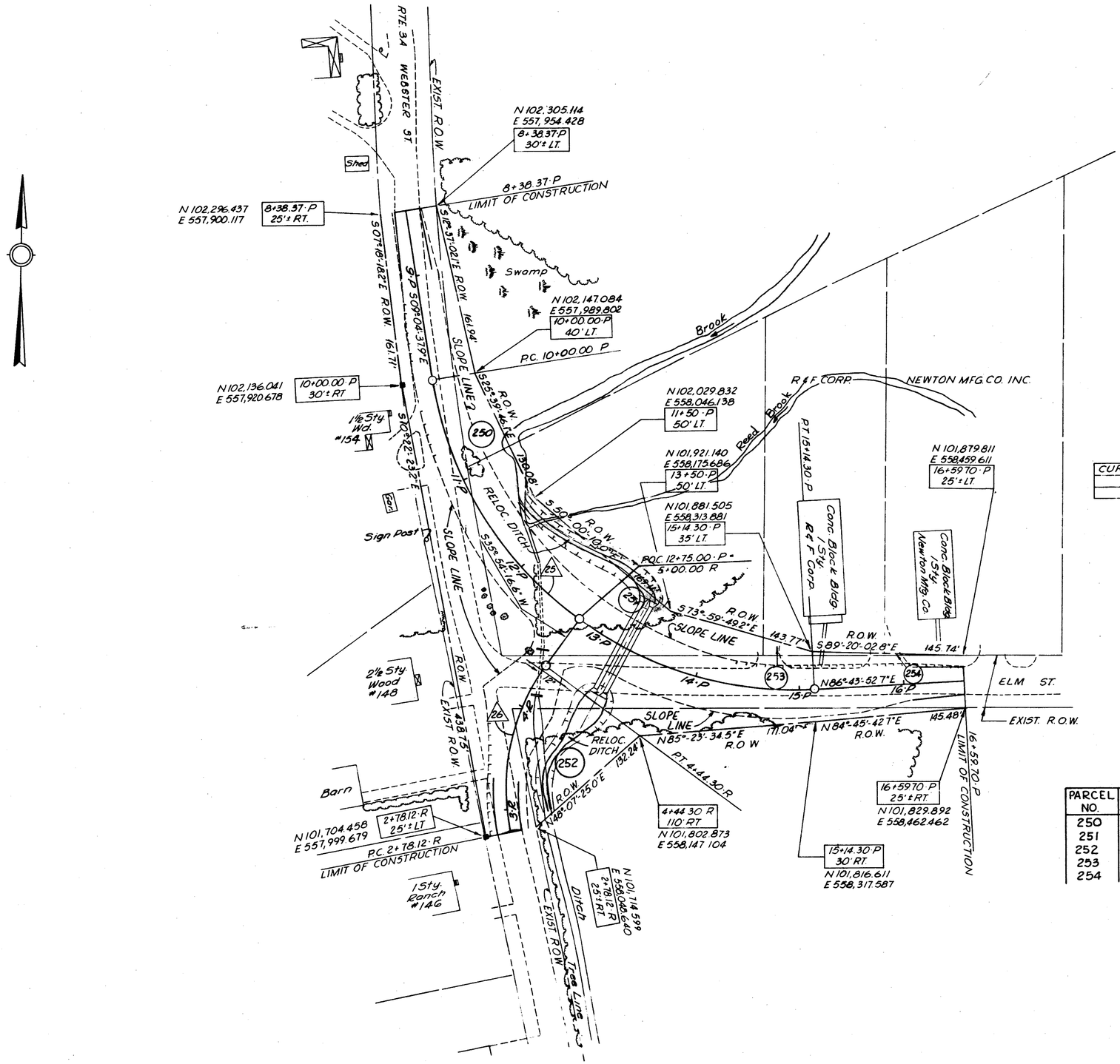
	DATE	NOTEBOOKS	BOOK NO.	PAGE NO.
PLAN TRACED	J. DOWNEY	25 MAR 69		
PLAN CHECKED	K. FULOP	" Apr 11, 69		
PROFILE TRACED		"	"	"
PROFILE CHECKED		"	"	"
INKED	J. DOWNEY	" 25 MAR 69	"	"
CHECKED	K. FULOP	DATE Apr 11, 69	BOOK NO.	PAGE NO.

(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL				
NO.	DATE	STATION	STATION	DESCRIPTION

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	30	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	31	111



BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
25	13+16.20-P	84°-11'-29.2"-L	16.370°	316.20'	514.30'	350.00'
26	3+66.34-R	47°-36'-23.4"-R	28.648	88.22'	166.18'	200.00'

(26) DENOTES BASELINE CURVE NUMBER

PARCEL NO.	OWNER
250	ZOULA F. ROWELL
251	ANDREW OGREN
252	ERNEST R. MOREY
253	R & F CORPORATION
254	NEWTON MFG. CO. INC.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

		NOTEBOOKS
PLAN TRACED	J. DOWNEY DATE 21 MAR 69	
PLAN CHECKED	K. FULOP " Apr. 17 69	BOOK NO. PAGE NO.
PROFILE TRACED		" "
PROFILE CHECKED		" "
INKED	J. DOWNEY " 21 MAR 69	" "
CHECKED	K. FULOP DATE Apr. 17 '69	BOOK NO. PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	31	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	32	111

REVISED AFTER PROPOSAL #1
DATE MAR 11 1970

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION
1	3-11-70	11+00	13+00	GRADE REVISION FOR STRUCTURE APPROACHES

NOTEBOOKS		
DATE	BOOK NO.	PAGE NO.
"	"	"
"17 Jan. 69	"	"
"18 Jan. 69	"	"
"22 Jan. 69	"	"
DATE 28 Jan. 69	BOOK NO.	PAGE NO.

PLAN TRACED	
PLAN CHECKED	
PROFILE TRACED	D. EISNOR
PROFILE CHECKED	N. DOOLEY
INKED	D. EISNOR
CHECKED	N. DOOLEY

P.T.=29+48.87·A' = P.O.T. 40+04.97·B AHEAD (17.00'RT.)
P.O.T. 40+04.97·B BACK (17.00'RT.)

GRADE LINE - ℄ OF PROPOSED PVM'T.

Exist. Ground @ Grade Line

V.C.=100'
K=50

+20 NOSE

+0.60%

+2.60%

+34.53

+34.53

+84.53

P.I ELEV=135.25

ARMY CORPS OF ENGINEER PROJECT FLOOD ELEV. (122.5)

20·A	21·A	22·A	23·A	24·A	25·A	26·A	27·A	28·A	29·A
111.4 / 130.54	85.8 / 30.84	83.1 / 31.14	82.3 / 31.44	80.0 / 31.74	76.4 / 32.04	75.7 / 32.34	78.3 / 32.64	78.1 / 32.94	86.0 / 33.24	109.5 / 33.54	31.5 / 33.84	28.50 / 34.14	23.0 / 34.44	23.7 / 34.74	27.5 / 35.07	33.0 / 35.77	37.8 / 36.95	38.5 / 38.25	140.0 / 139.52

U.S.C. & G.S. DATUM = 60.00

"A"

6+17.00·A
END CONSTRUCTION

VERT. EQUATION:
ELEV. 118.48 BACK =
ELEV. 118.37 AHEAD
(-0.11')

9+50.00·A BACK = 9+50.00·A AHEAD (5.66'LT.) =
20+00.85·F (23.66'RT.)

11+41.78·A =
0-13.01·E

15+22.31·A =
25+20.66·C

P.T. 18+87.33·A BACK = 18+87.33·A AHEAD (14.00'LT.) =
P.T. 18+87.33·D (14.00'LT.)

VERT. EQUATION:
ELEV. ~~129.46~~ BACK =
ELEV. ~~129.75~~ AHEAD
(+0.29')

P.I ELEV=129.05

MATCH
EXIST. PVM'T.

P.I. ELEV=122.94

+1.00%

-1.78%

+0.60%

+2.52 %

+60 NOSE

+74 NOSE

+25

+25

+75

+75

V.C.=250'
K=90

V.C.=200'
K=50

V.C.=250'
K=130

P.I. ELEV=113.93

6·A	7·A	8·A	9·A	10·A	11·A	12·A	13·A	14·A	15·A	16·A	17·A	18·A	19·A	20·A
120.8	21.4	21.9 / 22.01	22.0 / 22.13	21.9 / 22.07	21.7 / 21.74	20.9 / 21.12	20.0 / 20.27	19.0 / 19.38	18.0 / 18.48	18.37	17.0 / ~~17.42~~ 17.49	16.2 / ~~16.58~~ 16.60	15.3 / ~~15.69~~ 15.71	~~14.95~~ / ~~14.93~~ 15.09	14.5 / ~~14.55~~ 15.01	14.6 / ~~14.90~~ 15.46	15.2 / ~~14.05~~ 16.45	17.3 / ~~14.01~~ 17.71	16.7 / ~~14.39~~ 18.97	15.6 / ~~15.15~~ 20.23	15.0 / ~~16.33~~ 21.49 / ~~15.06~~ 22.05	14.7 / ~~18.00~~ 22.75	14.7 / ~~20.35~~ 24.01	15.3 / ~~22.30~~ 25.27	15.0 / ~~21.50~~ 26.51	20.0 / ~~26.36~~ 27.57	25.0 / ~~27.63~~ 28.45	26.0 / ~~29.91~~ 29.13	27.0 / ~~29.52~~ 29.92	29.52 BK = 29.81 AHD	28.0 / 30.24	111.4 / 130.54

+25 30.09

U.S.C. & G.S. DATUM = 90.00

"A"

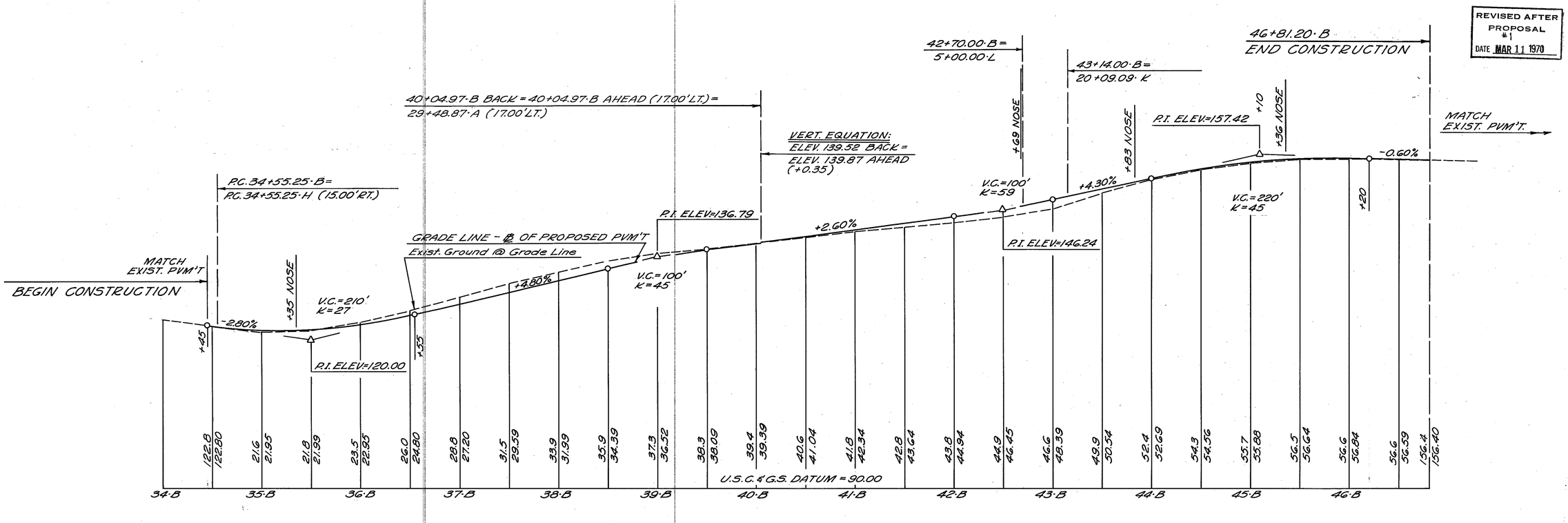
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	32	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	33	111

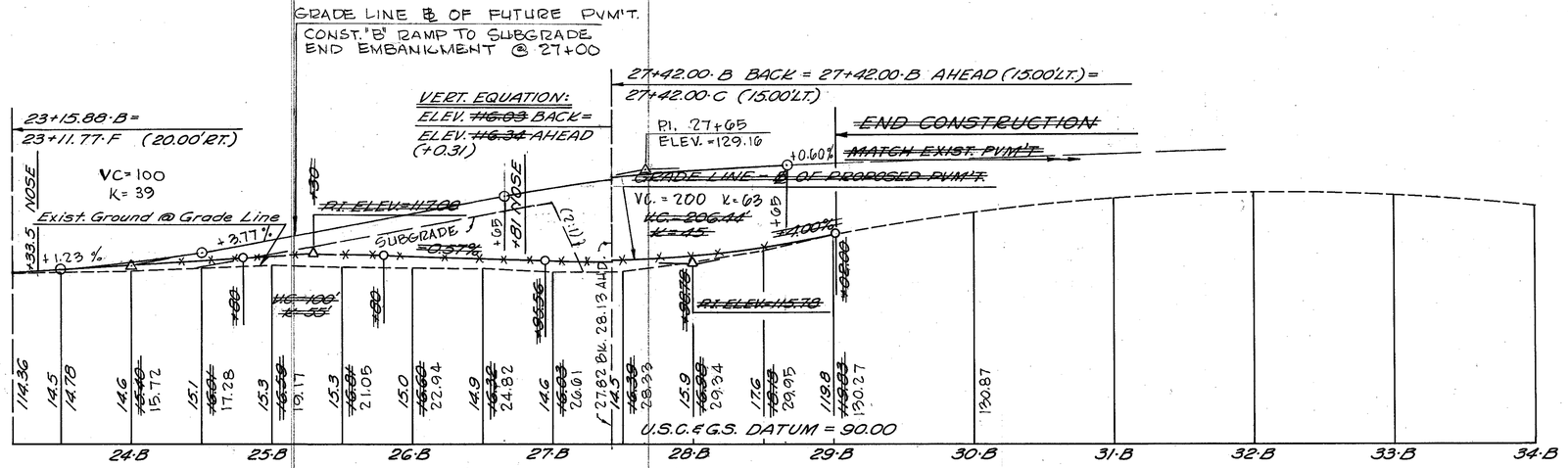
REVISED AFTER PROPOSAL #1
DATE MAR 11 1970

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION
1	3-11-70	23+50	29+00	GRADE REVISION FOR STRUCTURE APPROACHES

NOTEBOOKS			DATE
PLAN TRACED			
PLAN CHECKED			
PROFILE TRACED	D. ELSNOR	BOOK NO.	"14 Jan. 69
PROFILE CHECKED	N. FOOLEY	PAGE NO.	"15 Jan. 69
INKED	D. ELSNOR	BOOK NO.	"23 Jan. 69
CHECKED	N. DOOLEY	PAGE NO.	DATE 29 Jan. 69



"B"

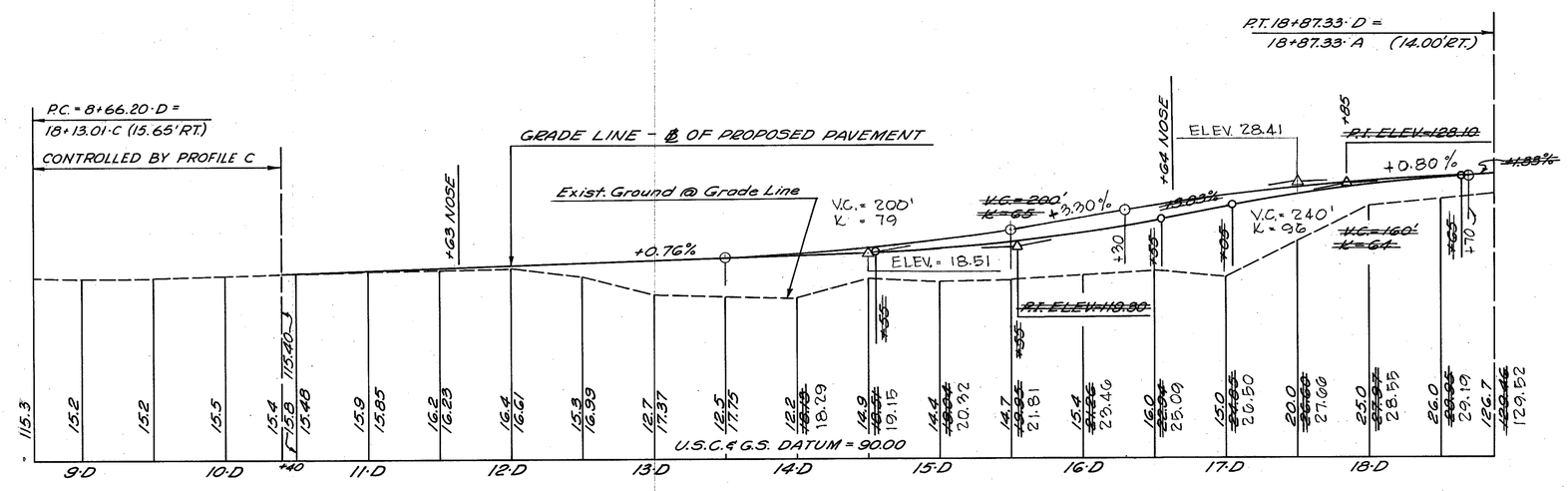


"B"

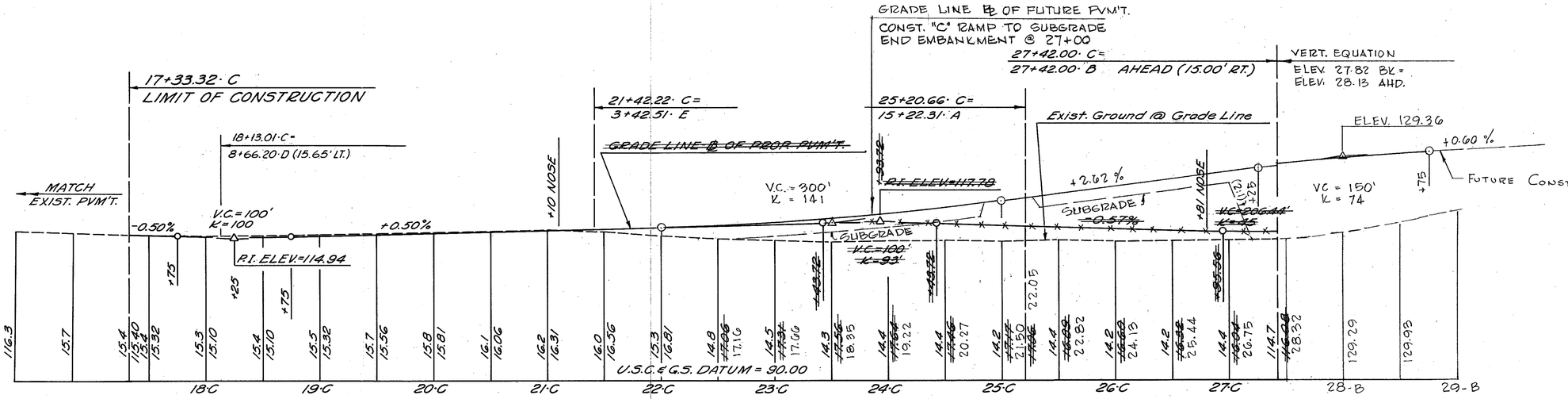
PROJ. NO.	SHEET NO.	TOTAL
US 28(17)	33	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	34	111

REVISED AFTER PROPOSAL #1 DATE MAR 11 1970



"D"



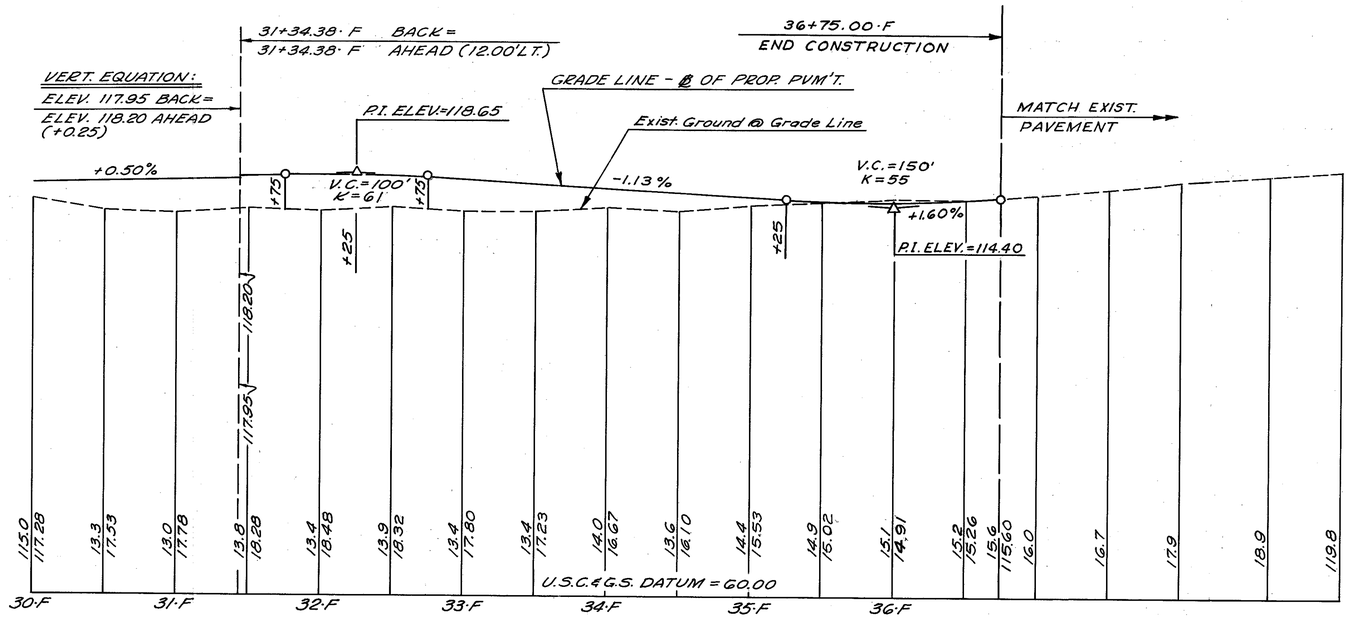
"C"

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	BEGIN STATION	END STATION	DESCRIPTION	
1	3-11-70	13+50 D	18+87.33 D	GRADE REVISION FOR STRUCTURE APPROACHES	
1	3-11-70	22+00 C	27+50 C	"	"

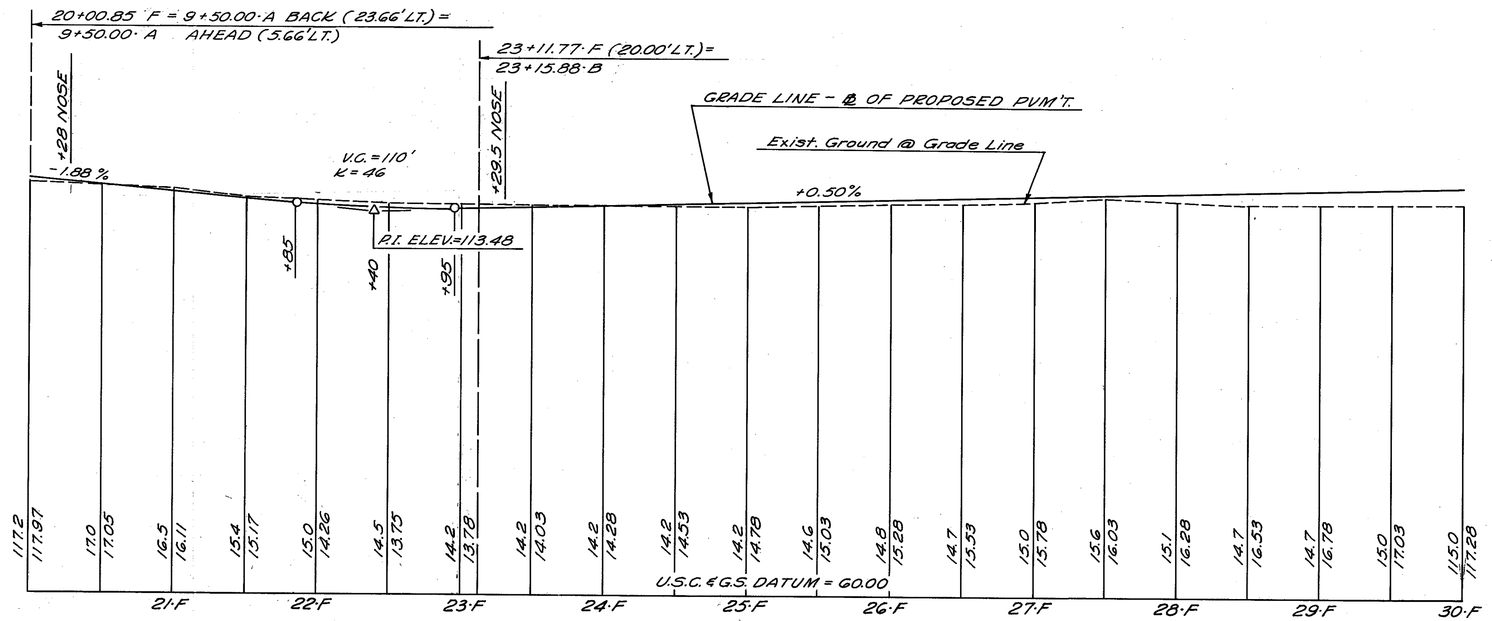
NOTEBOOKS			
	DATE	BOOK NO.	PAGE NO.
PLAN TRACED	"	"	"
PLAN CHECKED	"21 Jan 69	"	"
PROFILE TRACED	D. EISNOR	"23 Jan 69	"
PROFILE CHECKED	"24 Jan 69	"	"
INKED	D. EISNOR	"28 Jan 69	"
CHECKED	N. DOOLEY	DATE 28 Jan 69	BOOK NO.
			PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	34	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	35	111



"F"



"F"

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	STATION	STATION		DESCRIPTION

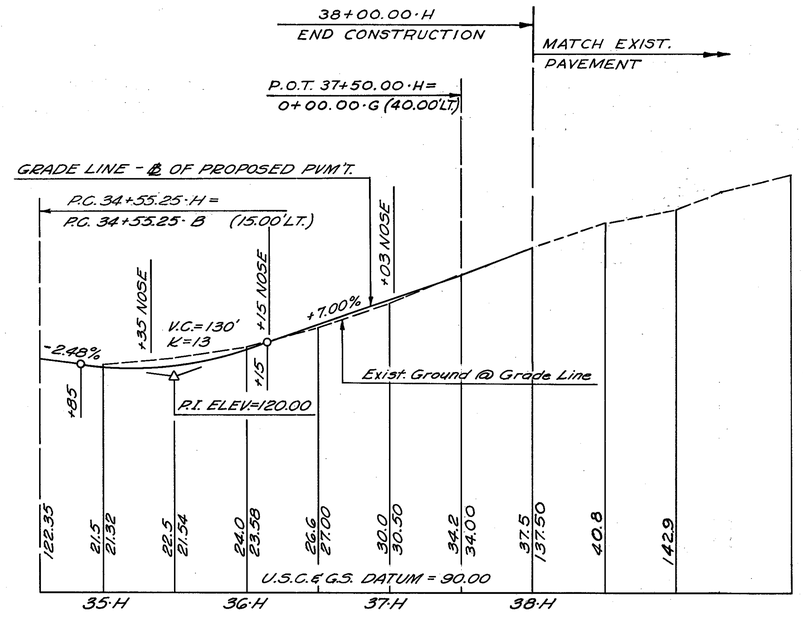
NOTEBOOKS		DATE
BOOK NO.	PAGE NO.	"
"	"	"13 Jan 69
"	"	"13 Jan 69
"	"	"13 Jan 69
BOOK NO.	PAGE NO.	DATE 29 Jan 69

PLAN TRACED		
PLAN CHECKED		
PROFILE TRACED	D. EISNOR	
PROFILE CHECKED	N. DOOLEY	
INKED	D. EISNOR	
CHECKED	N. DOOLEY	

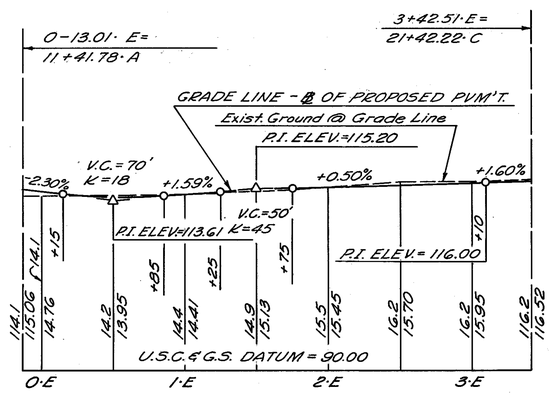
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	35	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	US 28(17)	36	111

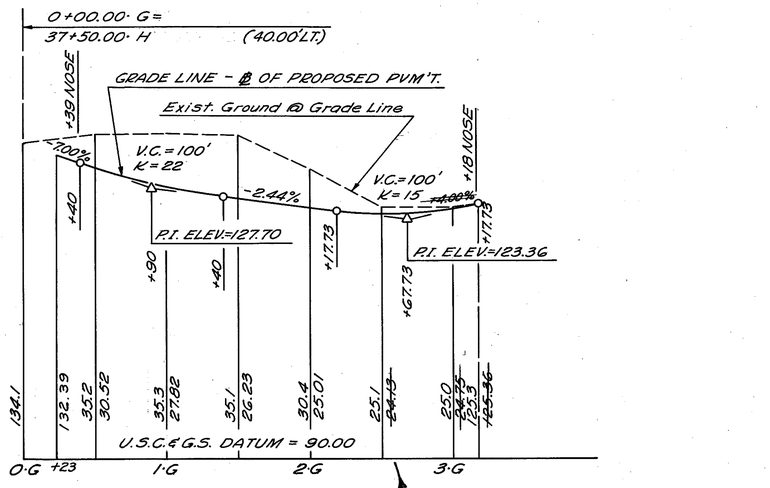
REVISED AFTER PROPOSAL #1
DATE MAR 11 1970



"H"



"E"



NOTE: FOR GRADE 2+50·G & AHEAD SEE GRADING PLAN SHT.# 42-A.

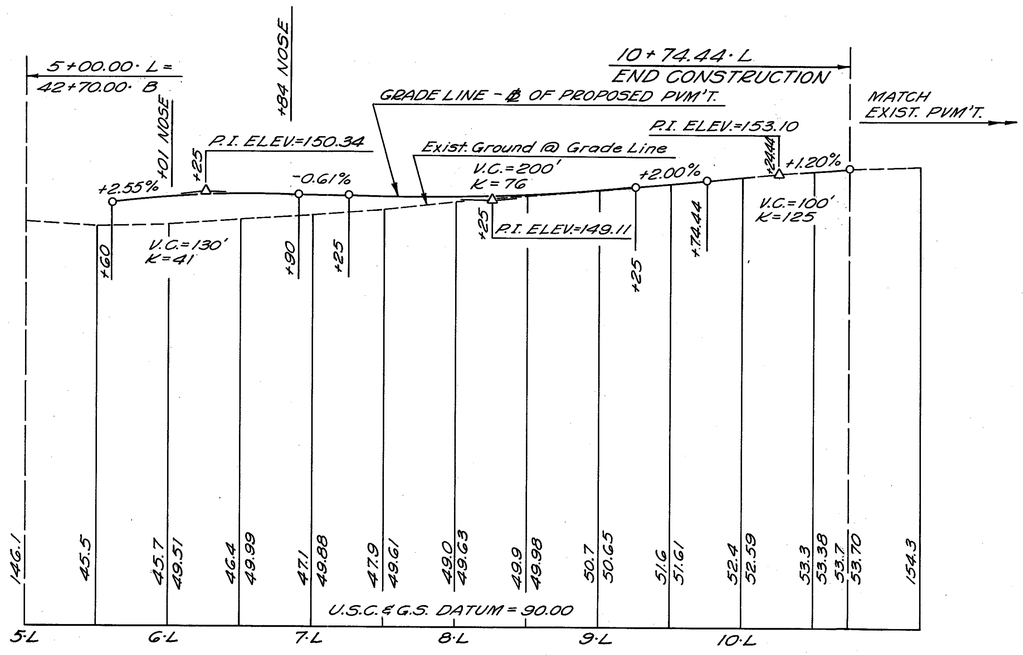
"G"

REVISIONS AFTER PROPOSAL	NO.	DATE	STATION	STATION	STATION	DESCRIPTION
(USE BOTTOM LINES FIRST)	1	3-11-70	2+50·G	3+18·G		CHANGED GRADES DUE TO TEMP. APPROACH

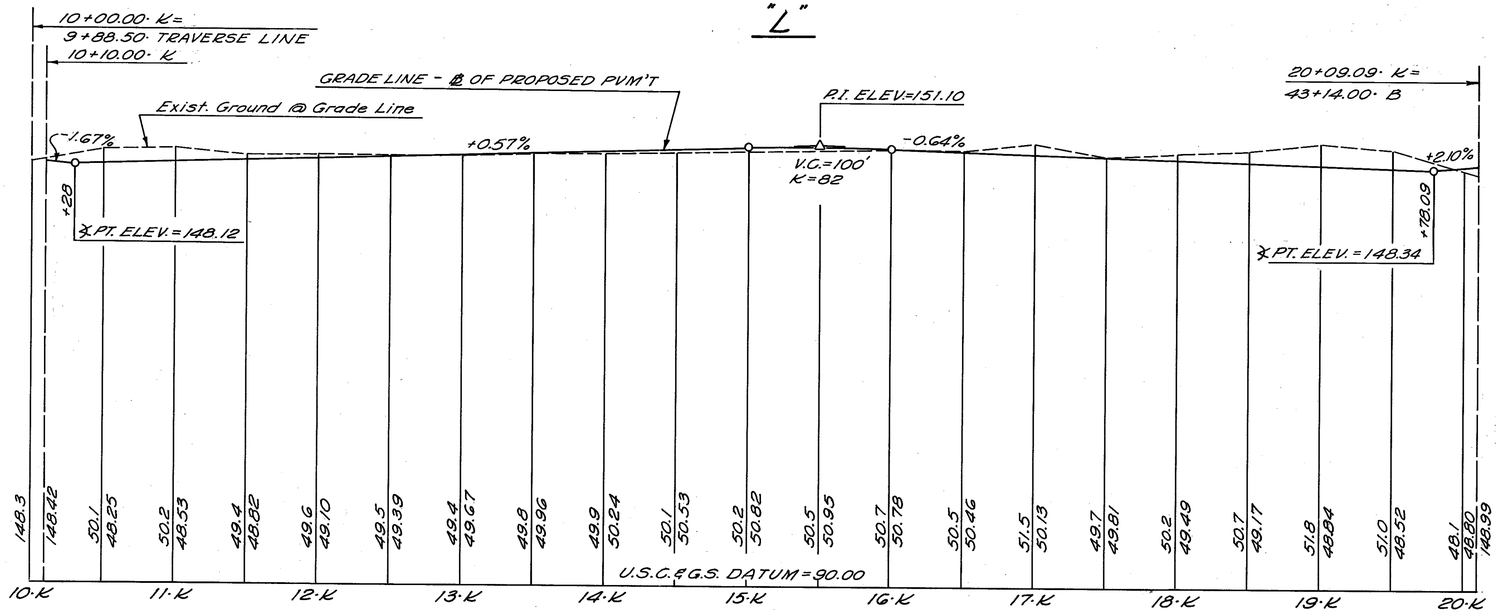
		NOTEBOOKS		
PLAN TRACED	DATE			
PLAN CHECKED	"			
PROFILE TRACED	D. EISNOR	"19 Jan. 69	BOOK NO.	PAGE NO.
PROFILE CHECKED	N. DOOLEY	"21 Jan. 69	"	"
INKED	D. EISNOR	"24 Jan. 69	"	"
CHECKED	N. DOOLEY	DATE 31 Jan. 69	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	36	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	37	111



"L"

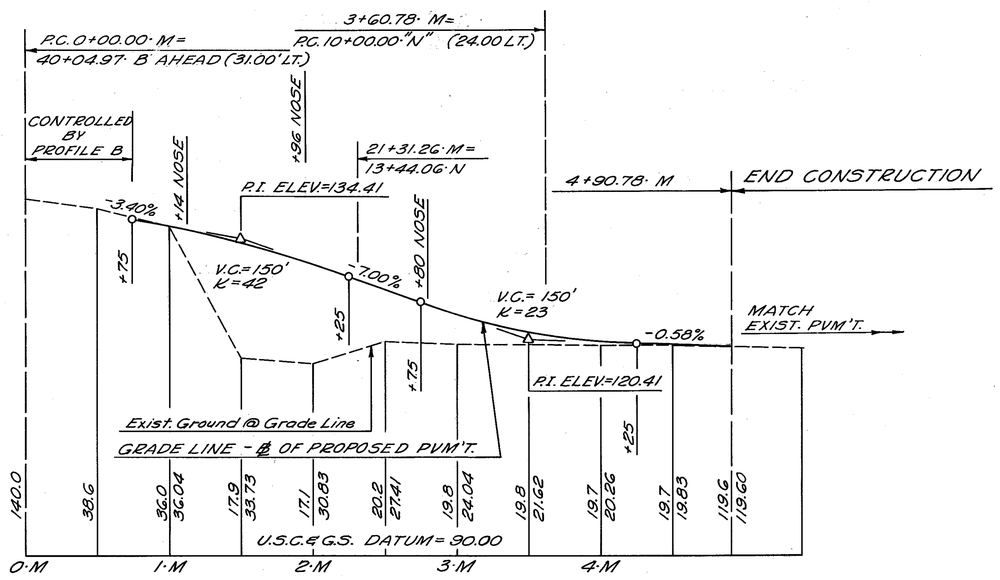


"K"

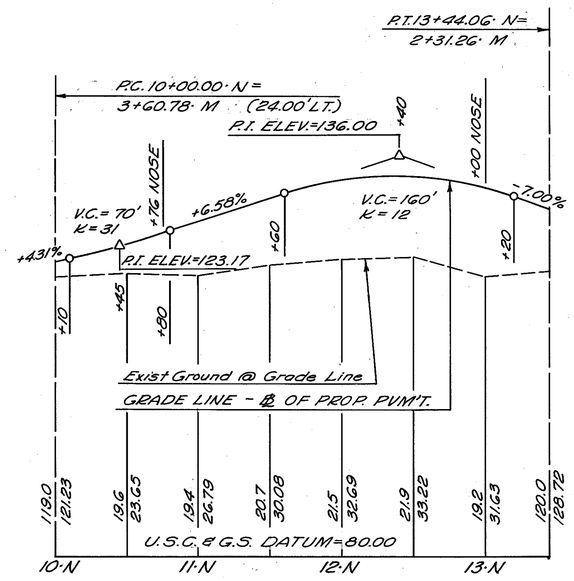
PLAN TRACED		DATE	NOTEBOOKS		REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
PLAN CHECKED		"							
PROFILE TRACED	D. ELSNOR	"24 Jan 69	BOOK NO.	PAGE NO.					
PROFILE CHECKED	N. DOOLEY	"26 Jan 69	"	"					
INKED	D. ELSNOR	"27 Jan 69	"	"	NO.	DATE	STATION	STATION	DESCRIPTION
CHECKED	N. DOOLEY	DATE 29 Jan 69	BOOK NO.	PAGE NO.					

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	37	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	38	111



"M"



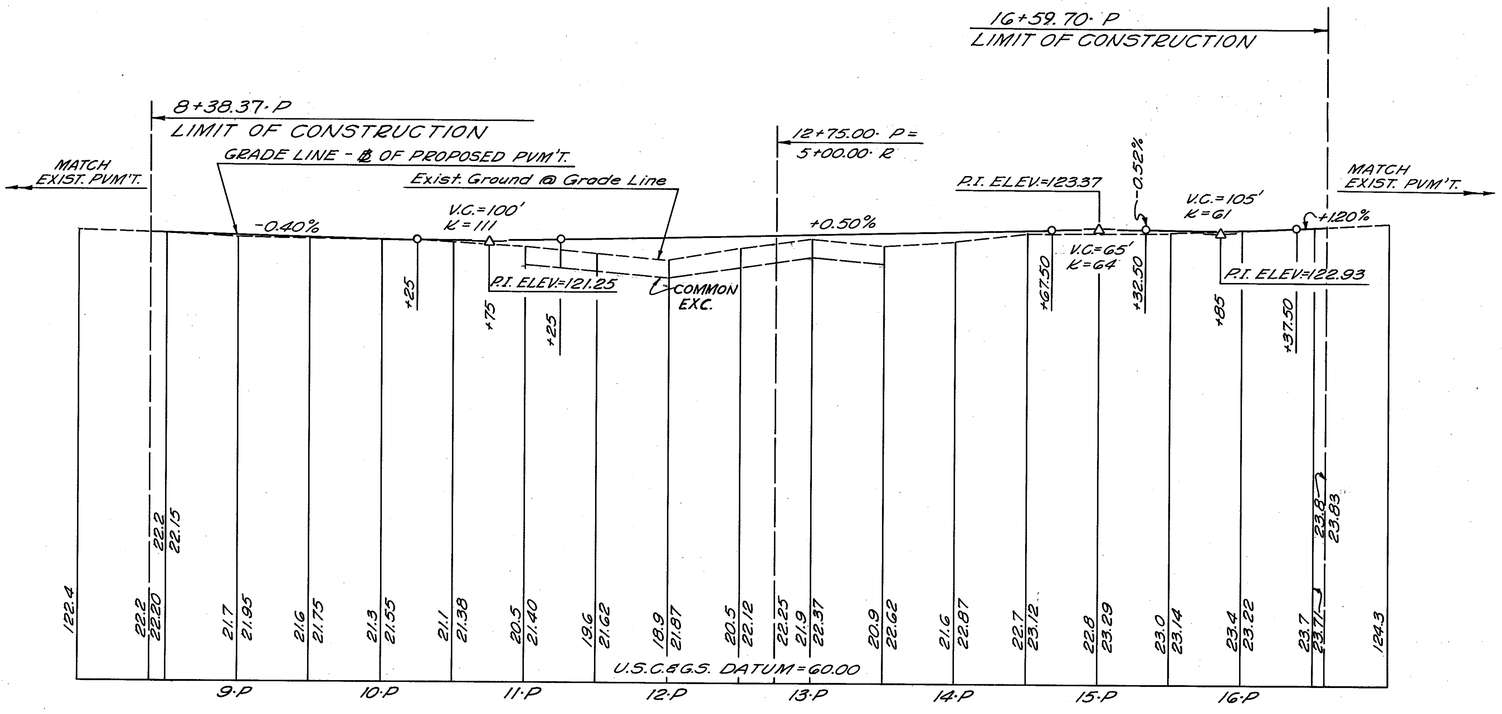
"N"

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

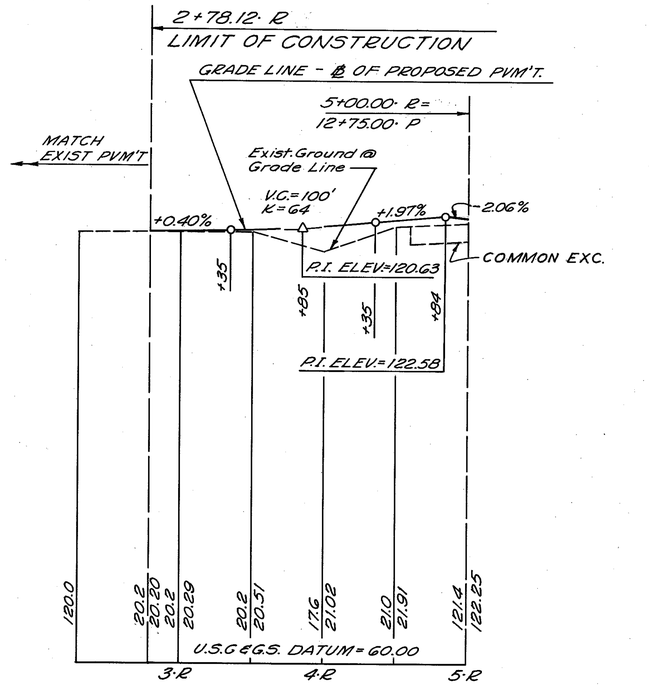
NOTE BOOKS			
	DATE	BOOK NO.	PAGE NO.
PLAN TRACED	"	"	"
PLAN CHECKED	"25 Jan 69	"	"
PROFILE TRACED	D. EISNOR	"	"
PROFILE CHECKED	"	"	"
INKED	"27 Jan 69	"	"
CHECKED	DATE 31 Jan 69	BOOK NO.	PAGE NO.
	D. EISNOR		
	N. DOOLEY		

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	38	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	39	111



"P"



"R"

PLAN TRACED	DATE	NOTEBOOKS	
PLAN CHECKED	"		
PROFILE TRACED	D. EISNOR	"21 Jan. 69	BOOK NO. PAGE NO.
PROFILE CHECKED	N. DOOLEY	"22 Jan. 69	" " " "
INKED	D. EISNOR	"27 Jan. 69	" " " "
CHECKED	N. DOOLEY	DATE 29 Jan. 69	BOOK NO. PAGE NO.

(USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL

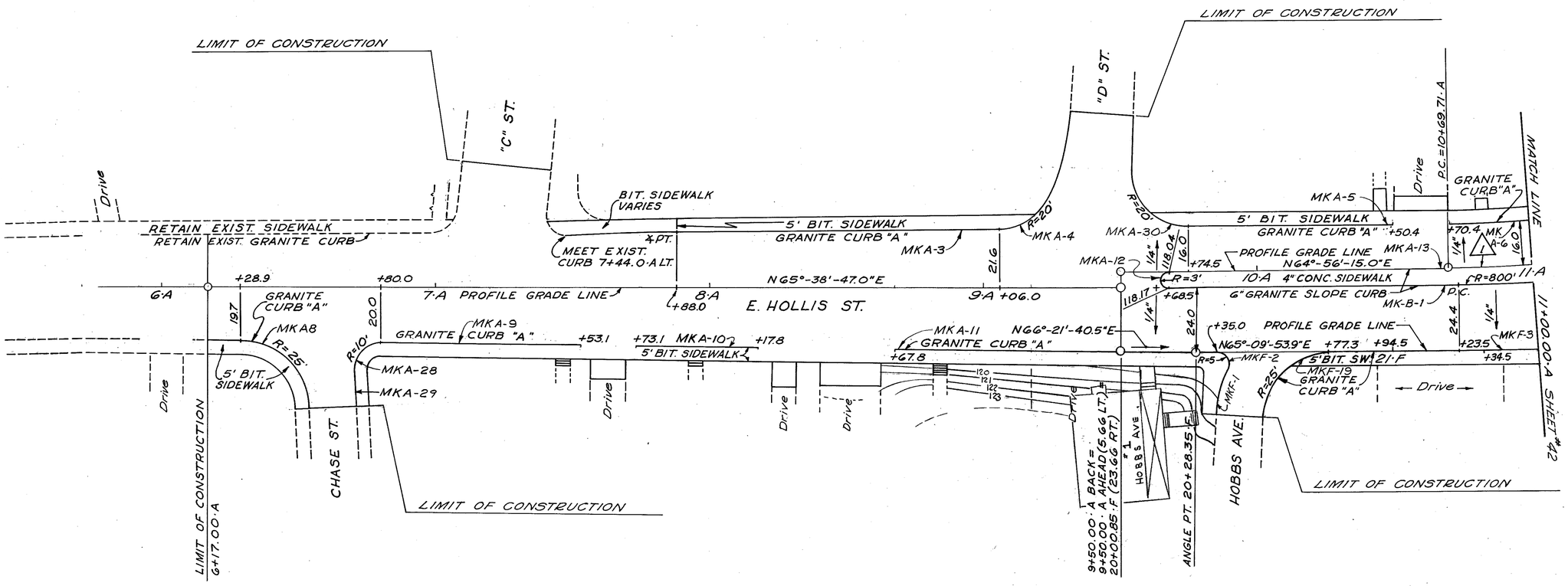
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	39	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	40	111

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
1	111+79.99·A	24°-52'-37.1"LT.	11.459°	110.28'	217.09'	500.00'

△1 DENOTES BASELINE CURVE NUMBER



ALIGNMENT, CURB TIES, AND GRADING PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	DESCRIPTION

NOTEBOOKS			
PLAN TRACED	D. EISNOR	DATE 9 APR. 69	
PLAN CHECKED	N. DOOLEY	" 10 APR. 69	
PROFILE TRACED		"	BOOK NO. " PAGE NO.
PROFILE CHECKED		"	BOOK NO. " PAGE NO.
INKED	G. COUTOUMAS	" 22 APR. 69	
CHECKED	R. MABARDY	DATE 23 APR. 69	BOOK NO. " PAGE NO.

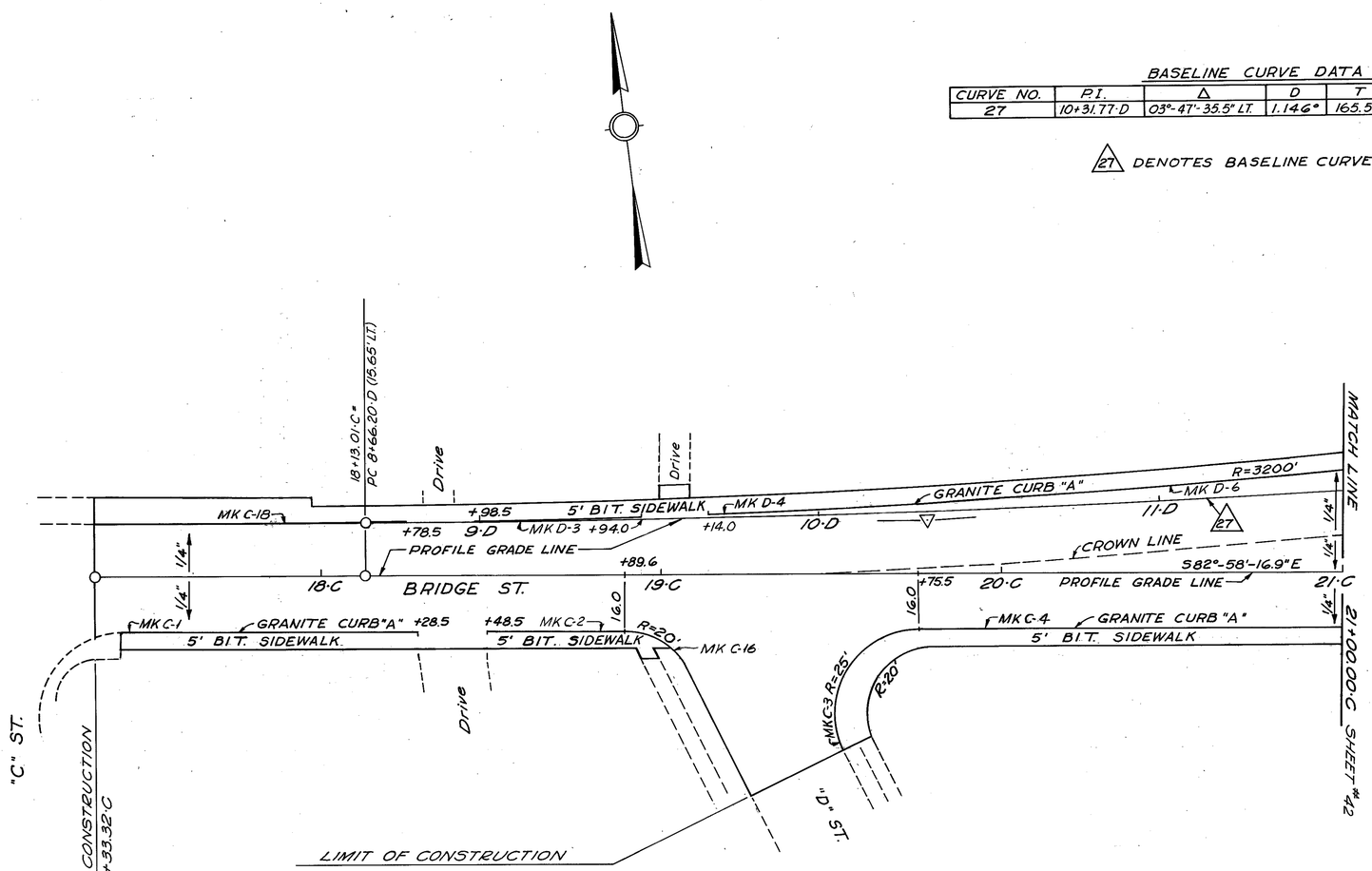
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	40	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	41	111

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
27	10+31.77-D	03°-47'-35.5" LT.	1.146°	165.57	331.00	5000.00'

△27 DENOTES BASELINE CURVE NUMBER



ALIGNMENT, CURB TIES, AND GRADING PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

		NOTEBOOKS	
PLAN TRACED	D. EISNOR	DATE 8 APR. 69	
PLAN CHECKED	N. DOOLEY	" 9 APR. 69	BOOK NO.
PROFILE TRACED		"	PAGE NO.
PROFILE CHECKED		"	BOOK NO.
INKED	G. COUTOUMAS	" 22 APR. 69	" "
CHECKED	R. MABARDY	DATE 23 APR. 69	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	41	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	42	111

REVISED AFTER PROPOSAL # 1
DATE MAR 11 1970

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)			
NO.	DATE	STATION	DESCRIPTION
1	2-11-70	11+00.00-A	ADDED TEMP APPROACH & CHANGED GRADES
		15+00.00-A	

NOTEBOOKS		
PLAN TRACED	D. EISNOR	DATE 10 APR. 69
PLAN CHECKED	N. DOOLEY	" 11 APR. 69
PROFILE TRACED		"
PROFILE CHECKED		" 24 APR. 69
INKED	G. COUTOUMAS	DATE 25 APR. 69
CHECKED	R. MAGARDY	

BOOK NO. — PAGE NO.

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
1	11+79.99-A	24°-52'-37" LT.	11.459°	110.28'	217.09'	500.00'
2	17+11.61-A	42°-18'-11" RT.	11.459°	193.45'	349.17'	500.00'
4	25+38.37-B	40°-41'-31.2" RT.	9.549°	222.49'	426.13'	600.00'
6	22+56.09-C	03°-08'-27" LT.	1.048°	149.85'	299.63'	5465.52'
8	13+40.25-D	16°-55.6' LT.	5.730°	143.05'	284.17'	1000.00'
10	24+04.80-F	06°-38'-40.8" LT.	3.820°	87.08'	173.96'	1500.00'
11	25+61.72-F	12°-23'-57.6" RT.	8.185°	76.04'	151.49'	700.00'

△ DENOTES BASELINE CURVE NUMBER

NOTE:
GRADING ON THIS SHEET SUPERSEDED BY SHEET # 42-A WITH THE EXCEPTION OF "E" & "F" LINE WHICH WILL BE CONSTRUCTED AS SHOWN.

NOTE:
FOR LAYOUT OF TEMP. APPROACH SEE SHT. # 42-A.

ALIGNMENT, CURB TIES, AND GRADING PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	42	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

REVISED AFTER PROPOSAL # 1
DATE MAR 11 1970

MATCH LINE SHEET #43-A

MATCH LINE SHEET #43-A

CONST. TO SUBGRADE LOAM, FERT. & SEED.

CONST. TO SUBGRADE LOAM, FERT. & SEED.

CONST. TEMP. SLOPE CURB

PROP. N.E.T. & T. MANHOLE

CURBED ISLAND

SLOPE CURB

MATCH LINE SHEET #41

MATCH LINE SHEET #40
P.C. 0+00-AA=
P.O.T. = 21+44-F RT 12.2'

CURVE DATA "AA" LINE

ATT. SURVEY:
CURVES TO BE FIELD LOCATED
P.C. = 0+00-AA = P.O.T. 21+44-F RT 12.2
DEGREE OF CURVATURE = 17°-30" 1A
P.R.C. = 2+24± AA
DEGREE OF CURVATURE = 18°-45" 2A
P.T. = 2+93± AA = 13+79± A

THIS SHEET ADDED BY
N.H. DEPT. OF PUBLIC WORKS & HIGHWAYS.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	A2-A	11

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	DESCRIPTION
1	3-11-70	11+00 -A	THIS SHEET ADDED.
		15+00 -A	

NOTEBOOKS

	DATE	BOOK NO.	PAGE NO.
PLAN TRACED	Rich.		
PLAN CHECKED	...	...	...
PROFILE TRACED	...	...	...
PROFILE CHECKED	...	...	...
INKED	...	...	...
CHECKED	DATE	BOOK NO.	PAGE NO.

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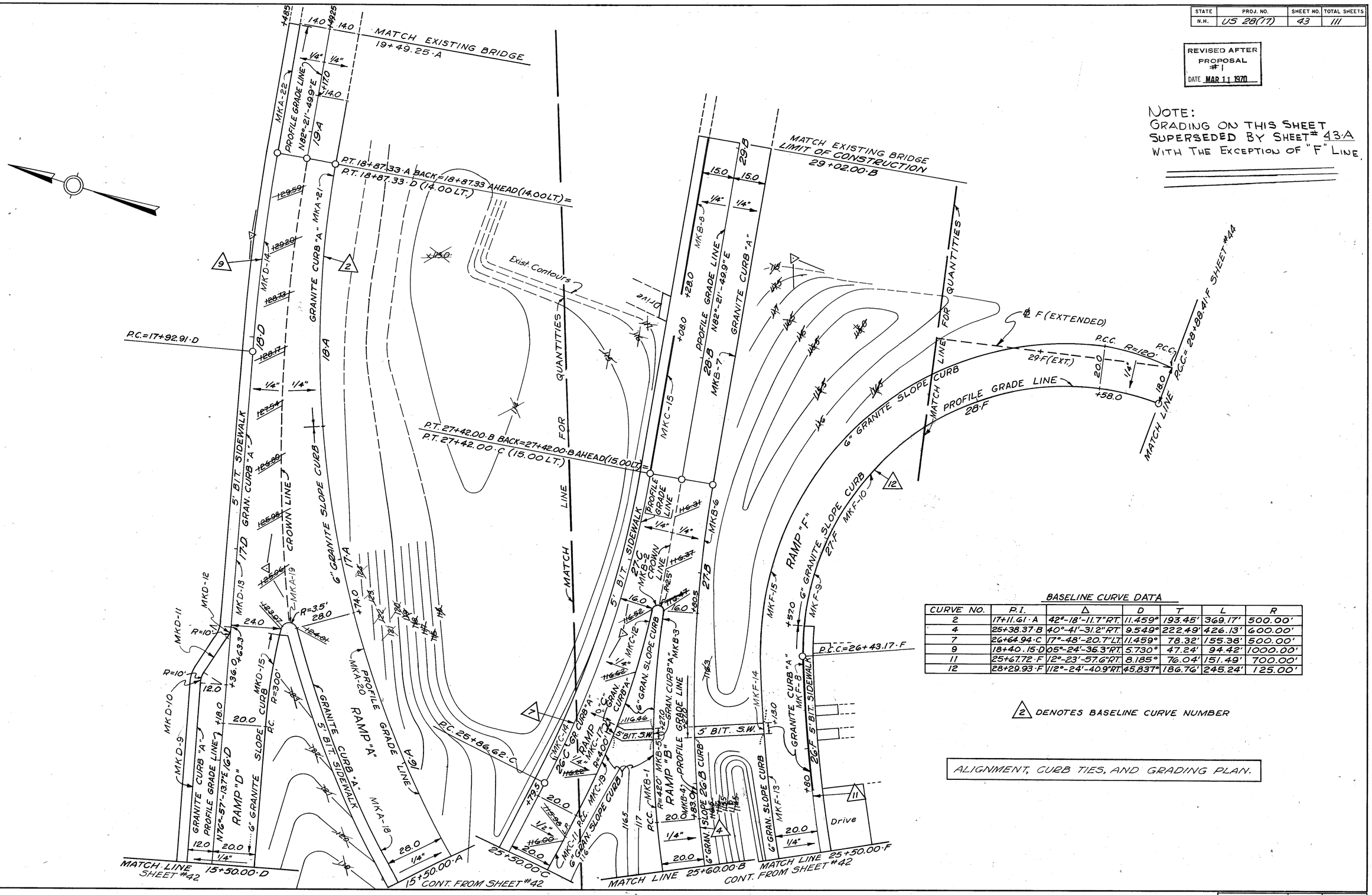
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	43	111

REVISED AFTER PROPOSAL #1
DATE MAR 11 1970

NOTE:
GRADING ON THIS SHEET SUPERSEDED BY SHEET # 43-A WITH THE EXCEPTION OF "F" LINE.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION
1	3-11-70	15+50-A	19+50-A	CHANGED GRADES

NOTEBOOKS		
PLAN TRACED D.EISNOR	DATE 7 APR 69	
PLAN CHECKED N.DOOLEY	" 8 APR 69	
PROFILE TRACED	BOOK NO.	PAGE NO.
PROFILE CHECKED	" "	" "
INKED G.COUTOUMAS	" 22 APR 69	" "
CHECKED R.MABARDY	DATE 23 APR 69	BOOK NO. PAGE NO.



BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
2	17+11.61-A	42°-18'-11.7"RT.	11.459°	193.45'	369.17'	500.00'
4	25+38.37-B	40°-41'-31.2"RT.	9.549°	222.49'	426.13'	600.00'
7	26+64.94-C	17°-48'-20.7"LT.	11.459°	78.32'	155.38'	500.00'
9	18+40.15-D	05°-24'-36.3"RT.	5.730°	47.24'	94.42'	1000.00'
11	25+67.72-F	12°-23'-57.6"RT.	8.185°	76.04'	151.49'	700.00'
12	28+29.93-F	112°-24'-40.9"RT.	45.837°	186.76'	245.24'	125.00'

△2 DENOTES BASELINE CURVE NUMBER

ALIGNMENT, CURB TIES, AND GRADING PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	43	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

REVISED AFTER PROPOSAL # 1 DATE MAR 11 1970

MATCH EXISTING BRIDGE

129.52 129.61 19A P.T. 18+87.33 A BACK = 18+87.33 AHEAD (14.00 LT.) = P.T. 18+87.33 D (14.00 LT.)

129.19 129.61 129.52 129.13 128.48 128.82 129.13 128.45 128.65 18D 18A 128.78 128.04 128.42 125.51 127.66 127.99 127.06 127.56 127.51 127.07 124.46 125.88 125.27 125.87 124.01 124.59 122.75 123.46 16D 16A 125 124 123 122 121 120

P.T. 27+42.00 B BACK = 27+42.00 B AHEAD (15.00 LT.) P.T. 27+42.00 C (15.00 LT.)

29.B 29.B FUTURE CONST. 28.F 27.F 27.C 27.B 27.F 126.58 126.39 CONST. TO SUBGRADE LOAM, FERT. & SEED. CONST. TO SUBGRADE LOAM, FERT. & SEED. 124 123 122 121 120

MATCH TO SHT# 42.A MATCH TO SHT# 42.A

THIS SHEET ADDED BY N.H. DEPT. OF PUBLIC WORKS & HIGHWAYS.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	DESCRIPTION
1	3-11-70	16+50 A STATION	This Sheet Added
		24+50 A STATION	

NOTEBOOKS

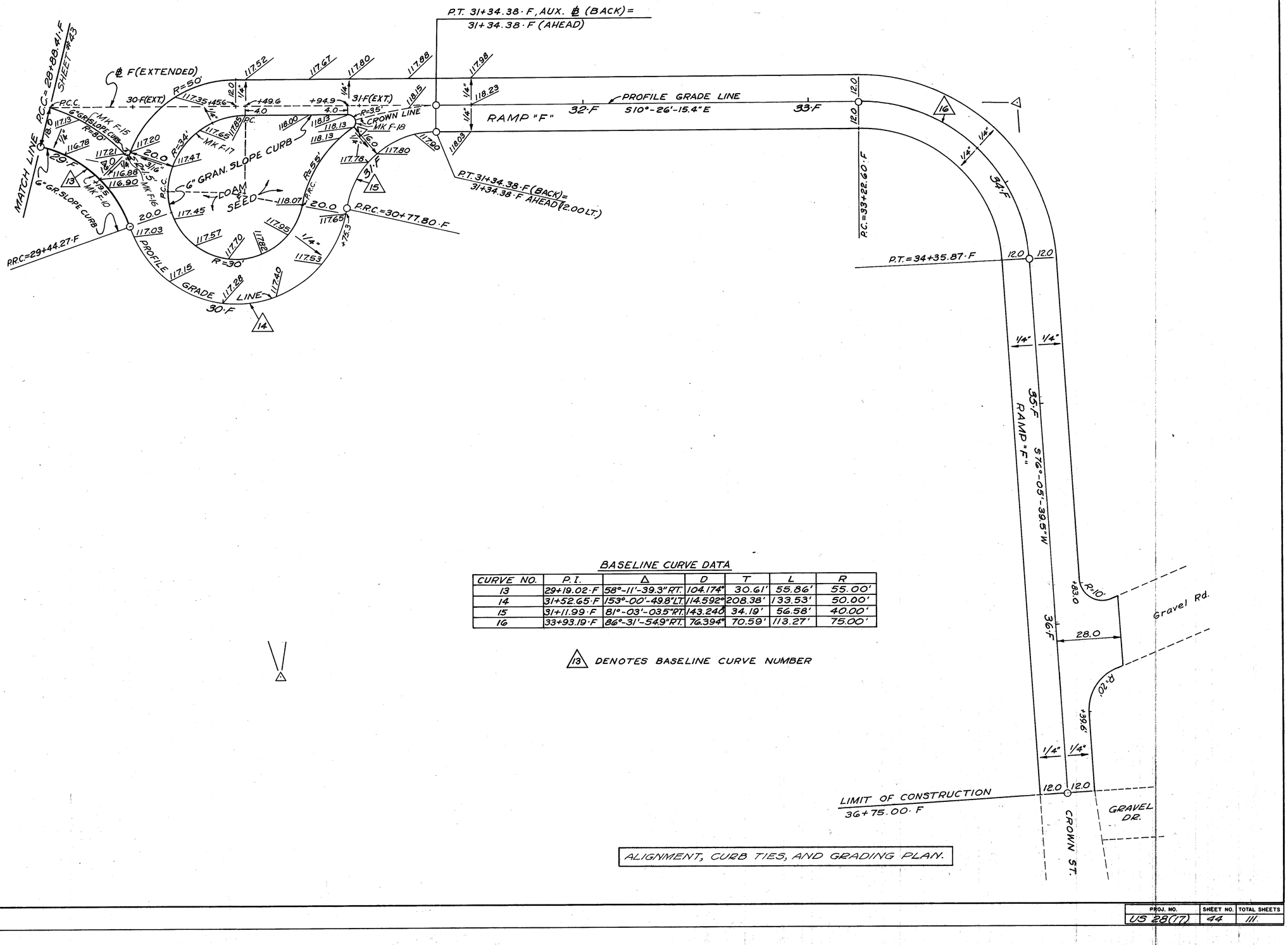
		BOOK NO.	PAGE NO.
PLAN TRACED	KCH.		
PLAN CHECKED			
PROFILE TRACED			
PROFILE CHECKED			
INKED			
CHECKED			

DATE

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PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28 (17)	43-A	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	44	111



BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
13	29+19.02·F	58°-11'-39.3" RT.	104.174°	30.61'	55.86'	55.00'
14	31+52.65·F	153°-00'-49.8" LT.	114.592°	208.38'	133.53'	50.00'
15	31+11.99·F	81°-03'-035" RT.	143.240	34.19'	56.58'	40.00'
16	33+93.19·F	86°-31'-54.9" RT.	76.394°	70.59'	113.27'	75.00'

△13 DENOTES BASELINE CURVE NUMBER

ALIGNMENT, CURB TIES, AND GRADING PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

		NOTEBOOKS	
PLAN TRACED	D. EISNOR	DATE 11 APR 69	
PLAN CHECKED	N. DOOLEY	" 14 APR 69	
PROFILE TRACED		"	BOOK NO. PAGE NO.
PROFILE CHECKED		"	" "
INKED	G. COUTOUMAS	"22 APR 69	" "
CHECKED	R. MABARDY	DATE 23 APR 69	BOOK NO. PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	44	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	45	111

REVISED AFTER PROPOSAL #1 DATE MAR 11 1971

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
3	27+68.61·A	35°-37'-15.8" LT.	9.549°	192.76'	373.02'	600.00'
5	35+19.50·B	35°-37'-15.6" LT.	28.648°	64.25'	124.34'	200.00'
17	35+42.24·H	47°-00'-45.2" RT.	28.648°	86.99'	164.11'	200.00'
28	0+64.92·G	79°-31'-27.5" RT.	95.493°	49.92'	83.28'	60.00'
29	∞	218°-06'-52.9" LT.	114.592°	∞	190.34'	50.00'
30	3+03.21·G	9°-48'-36.1" LT.	33.703°	14.59'	29.11'	170.00'

△3 DENOTES BASELINE CURVE NUMBER

NOTE:
FOR LAYOUT & GRADING OF TEMP. APPROACH SEE SHEET# 46·A.

NOTE:
EXISTING ROADWAY SURFACE ON FERRY ST. TO BE REMOVED & AREAS TO BE LOAMED, FERT. & SEEDED.

ALIGNMENT, CURB TIES, AND GRADING PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	DESCRIPTION		
1	3-11-70	ADDED AREA SHOWING TEMP. APPROCH.	2.5+15.0·A	2.74.00·A
			STATION	STATION

NOTEBOOKS			
	BOOK NO.	PAGE NO.	
	"	"	"
	"	"	"
	"	"	"
	BOOK NO.	PAGE NO.	

PLAN TRACED	D. EISNOR	DATE 8 Apr 69
PLAN CHECKED	N. DOOLEY	" 9 Apr 69
PROFILE TRACED		"
PROFILE CHECKED		"
INKED	D. EISNOR	" 18 Apr 69
CHECKED	B. MABARDY	DATE 22 Apr 69

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	45	111

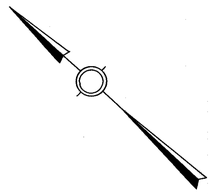
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	46	111

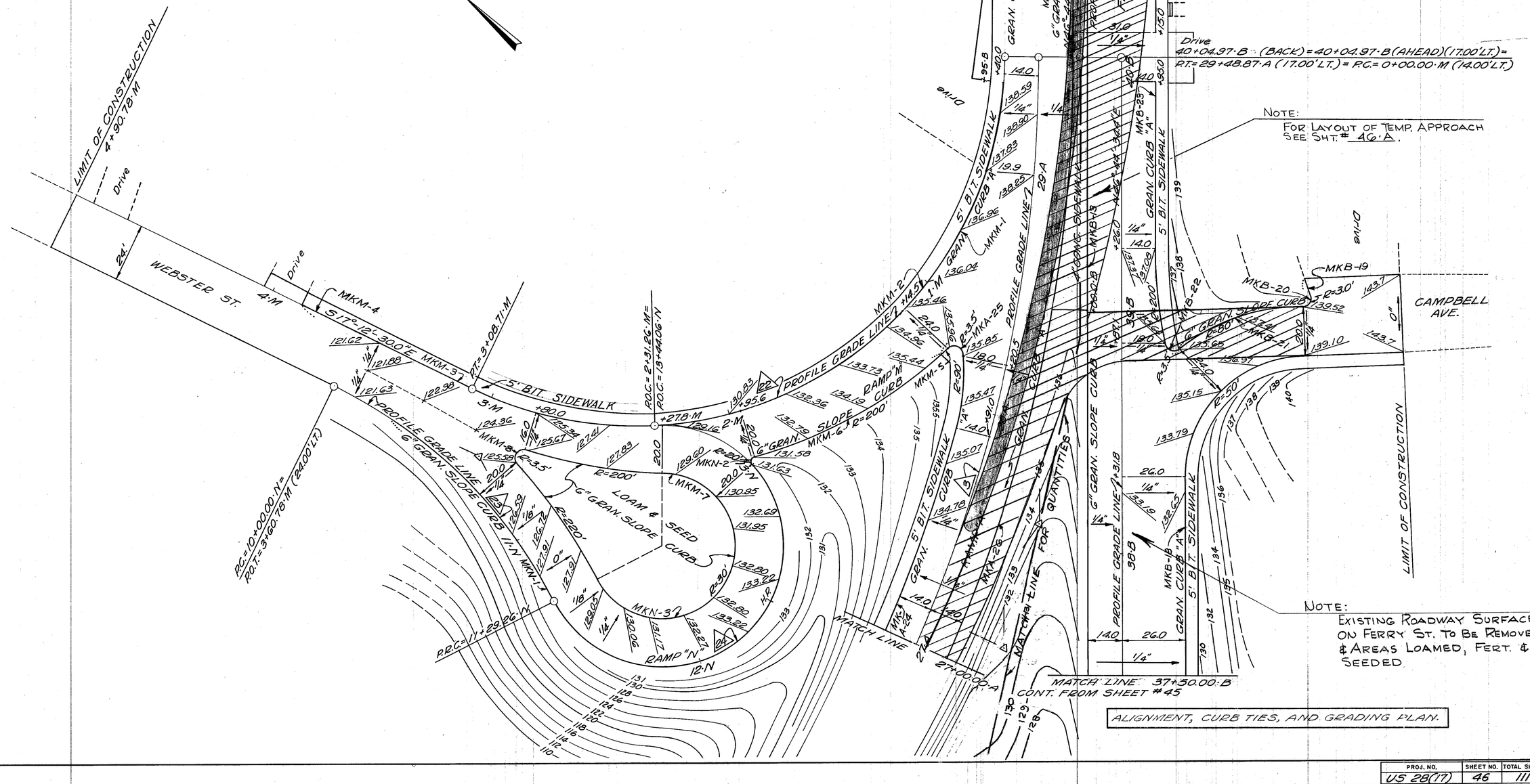
REVISED AFTER PROPOSAL # 1
DATE MAR 11 1970

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
3	27+68.61·A	35°-37'-15.8"LT.	9.549°	192.76'	373.02'	600.00'
22	2+44.15·M	116°-02'-55.5"RT.	37.591°	244.15'	308.71'	152.42'
23	10+66.98·N	37°-01'-53.0"RT.	28.648°	66.98'	129.26'	200.00'
24	∞	246°-08'-46.3"LT.	114.592°	∞	214.80'	50.00'

(3) DENOTES BASELINE CURVE NUMBER





NOTE:
FOR LAYOUT OF TEMP. APPROACH SEE SHT. # 46·A.

NOTE:
EXISTING ROADWAY SURFACE ON FERRY ST. TO BE REMOVED & AREAS LOAMED, FERT. & SEEDED

ALIGNMENT, CURB TIES, AND GRADING PLAN.

	DATE	NOTEBOOKS	REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
PLAN TRACED	D.EISNOR 8 Apr 69	BOOK NO.	NO.	DATE	DESCRIPTION	STATION	
PLAN CHECKED	N.DOOLEY 10 Apr 69	PAGE NO.	1	3-11-70	ADDED AREA SHOWING TEMP. APPROACH.	41+00·B	27+00·A
PROFILE TRACED	"	" "					
PROFILE CHECKED	"	" "					
INKED	D.EISNOR "22 Apr 69	" "					
CHECKED	B.MABARDY DATE 23 Apr 69	BOOK NO.					
		PAGE NO.					

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	46	111

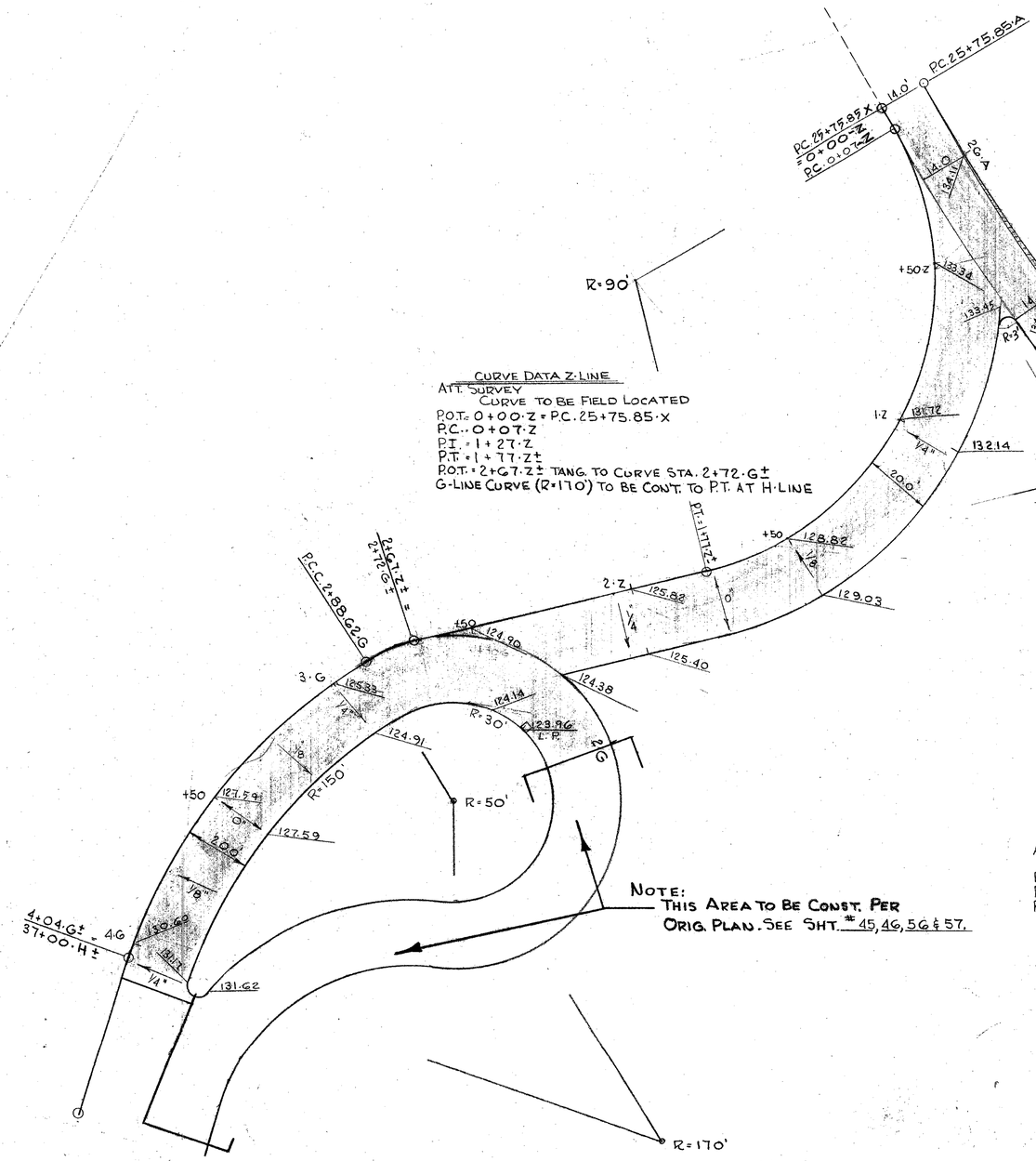
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

REVISED AFTER PROPOSAL # 1 DATE MAR 11 1970

REVISED AFTER PROPOSAL # 3 DATE APR 12 1971

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION
3	4-12-71	CAMPBELL ST.		ADDED CURB ISLAND AT CAMPBELL ST.
1	3-31-70	25+50	41+50 Rt.	THIS SHEET ADDED. LAYOUT OF TEMP APPROACH

NOTEBOOKS						
	DATE	BOOK NO.	PAGE NO.		BOOK NO.	PAGE NO.
PLAN TRACED		..	..		..	..
PLAN CHECKED		..	..		..	..
PROFILE TRACED		..	..		..	..
PROFILE CHECKED		..	..		..	..
INKED		..	..		..	..
CHECKED		..	..		..	..



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PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28 (17)	46-A	111

THIS SHEET ADDED BY N.H. DEPT. OF PUBLIC WORKS & HIGHWAYS.

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	47	111

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
20	18+91.64·K	28°-11'-35.9" LT.	22.918°	62.79'	123.04'	250.00'
21	8+00.02·L	18°-04'-11.8" LT.	4.584°	198.76'	394.23'	1250.00'

(20) DENOTES BASELINE CURVE NUMBER

REVISIONS	DATE	STATION	DESCRIPTION

(USE BOTTOM LINES FIRST)

NOTEBOOKS	BOOK NO.	PAGE NO.	DATE
PLAN TRACED O.ESNOR			10/22/69
PLAN CHECKED N.DOOLEY	"	"	11/22/69
PROFILE TRACED	"	"	
PROFILE CHECKED	"	"	
INKED O.ESNOR	"	"	23 Apr 69
CHECKED B.MASBARDY	"	"	24 Apr 69

LIMIT OF CONSTRUCTION 10+74.44·L

MATCH LINE B-B +20.0

B-B R.T.=9+95.46·L THIS SHEET

Drive

MK L-15 1/4" 20.0

MK L-10 1/4" 20.0

N02°-19'-37.8"W

GRAN. CURB "A" 5' BIT. SIDEWALK

R.T. 5' BIT. SIDEWALK GRAN. CURB "A" +98.0

SEE 'E' ST. TYPICAL SECTIONS FOR PAVEMENT MATERIALS & DEPTHS

Drive

BAKER ST.

36'

27'

R=20' 33' R=10' 20'

ALIGN WITH EDGE OF DRIVE

12°

P.C.=9+00.02·L

5' BIT. SIDEWALK

MATCH LINE

147.80

147.10

30.0

30"

N15°-44'-34.0"E

49.5

FOR QUANTITIES MK L-2

33.0

5+00.00·L = 42+70.00·B

MK L-1

R=200'

146.42

145.73

45.00

P.C. +15.0

MKB-32 MKB-33 +95.0

GRAN. CURB "A" +41.5

MKB-48 Drive

#22

Drive

41+00.00·B SHEET #46

+09.5 +21.5

28.0 1/4" 3"

6" GRAN. SLOPE CURB 4" CONC. SIDEWALK

MK B-29 +08.7

MK B-30 +40.0 1/4" 53.3'

147.12 R=3.0'

MKB-31 +68.7

N46°-44'-34.4"E

41·B PROFILE GRADE LINE 42·B

MK B-13 +40.0 GRAN. CURB "A"

MK B-46 147.12

43·B

20+09.09·K = 43+14.00·B

MK B-34 +64.0

GRAN. CURB "A" +20.0 MK B-37

MK B-27 MK B-26 GRAN. CURB "A" 5' BIT. SIDEWALK +14.0 +29.0

145.78 P.C. 146.73 147.75 148.34 149.90 150.67 P.T. 152.03 MK B-41

+49.0 146.60 150.62 +77.0 +97.0 +23.5

MATCH LINE

Drive

MK K-27

R=20' 147.20

P.T.=19+51.89·K

MATCH MK K-30 LINE 1/2"

147.57 PROFILE GRADE LINE

N43°-15'-25.6"W

149.53 149.15 149.02 1/4"

R=50'

FOR QUANTITIES MK K-25

20.0 20.0

P.C.C. P.R.C.

MATCH LINE 19+33.00·K SHEET #49

Drive Drive Drive Drive Drive Drive Drive Drive

Drive

+78.0 P.T. 20.0

+69.22 20.0 P.T.

MATCH LINE B-B THIS SHEET

R.T.=9+95.46·L

Drive

+29.0 GRAN. CURB "A" MK L-14

+09.0 149.18 1/4"

MK L-13

+68.0 149.12 L.P.

MK L-12 149.13

+28.0 149.25

8·L PROFILE GRADE LINE 9·L DERRY RD.

8·L 1/4" 149.11

R=1600' 5' BIT. SIDEWALK GRAN. CURB "A"

151 152

+25.0 149.06 L.P. 1/8" MK L-10

+25.0 149.45 0" 149.45 1/8" 23.5

+25.0 149.45 1/8" MK L-9 P.C.

150 151

R=1100' 149.45 149.59 149.60 +24.0 F.P.

+24.0 149.51 150.06 MK L-5

GRAN. CURB 149.16 150.04

+24.0 149.50 3/8" 149.83 MK L-4

6·L GRAN. CURB "A" MK L-3

6·L GRAN. SLOPE CURB 4" CONC. SIDEWALK +25.0 MK L-6 150.39 1/4" 150.99

150.63 1/4"

151.48 20.0 MK L-8

150.87 152.17 P.C.

152 153 154 155 156

5·B 5' BIT. SIDEWALK GRAN. CURB "A"

P.C. MK B-40 P.T.

152.49 MK B-47 28.0 28.0 28.0

MK B-35 1/4" 151.91 R=3.0' 33.0

44·B +20.0 P.C. MK B-36 R=640' P.T. 45·B

3.0' 4" CONC. SIDEWALK 12.7' 6" GRAN. SLOPE CURB MK B-38

156.49 +36.5 P.C. SR=3.0' MK B-39

PROFILE GRADE LINE N48°-36'-04.3"E 46·B

FERRY ST. MK B-45

MK B-42 GRAN. CURB "A" MK B-43 MK B-44

+43.5 +69.6 +89.6 +13.5 +33.5 +57.0 +77.0 +16.0 +46.0

5' BIT. SIDEWALK

Retain Exist. Gran. Curb

LIMIT OF 5' BIT. SIDEWALK 46+60.0·B LT.

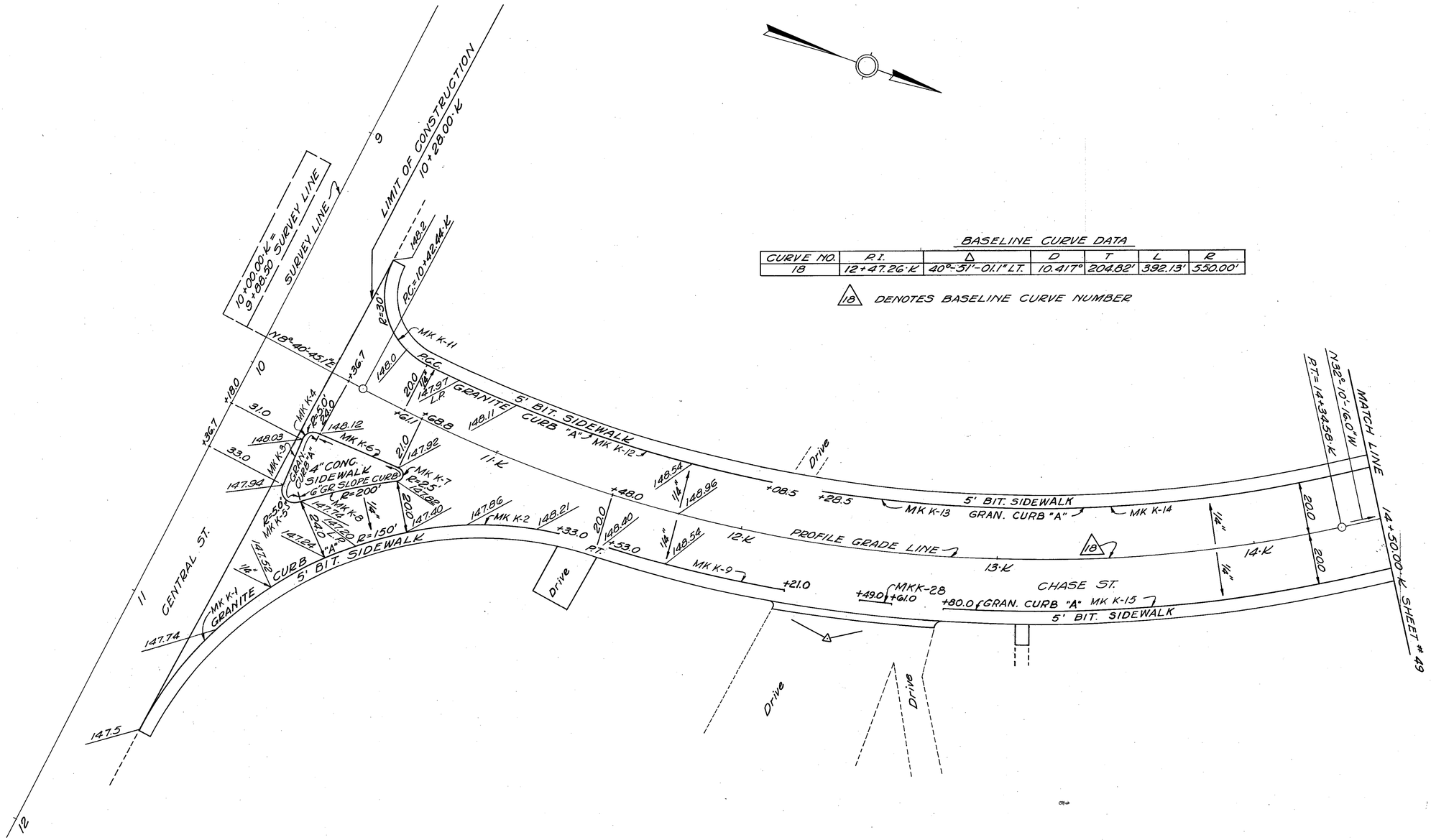
LIMIT OF CONSTRUCTION 46+81.20·B

X P.T.=44+39.44·B

ALIGNMENT, CURB TIES, AND GRADING PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	47	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	48	111.



BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
18	12+47.26·K	40°-31'-01.1" LT.	10.417°	204.82'	392.13'	550.00'

(18) DENOTES BASELINE CURVE NUMBER

ALIGNMENT, CURB TIES, AND GRADING PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
PLAN TRACED	D. ESMOE	DATE 9 Apr. 69	
PLAN CHECKED	N. DOOLEY	" 9 Apr. 69	
PROFILE TRACED		"	BOOK NO. " PAGE NO. "
PROFILE CHECKED		"	" " " "
INKED	D. ESMOE	" 15 Apr. 69	" " " "
CHECKED	B. MABARDY	DATE 22 Apr. 69	BOOK NO. PAGE NO.

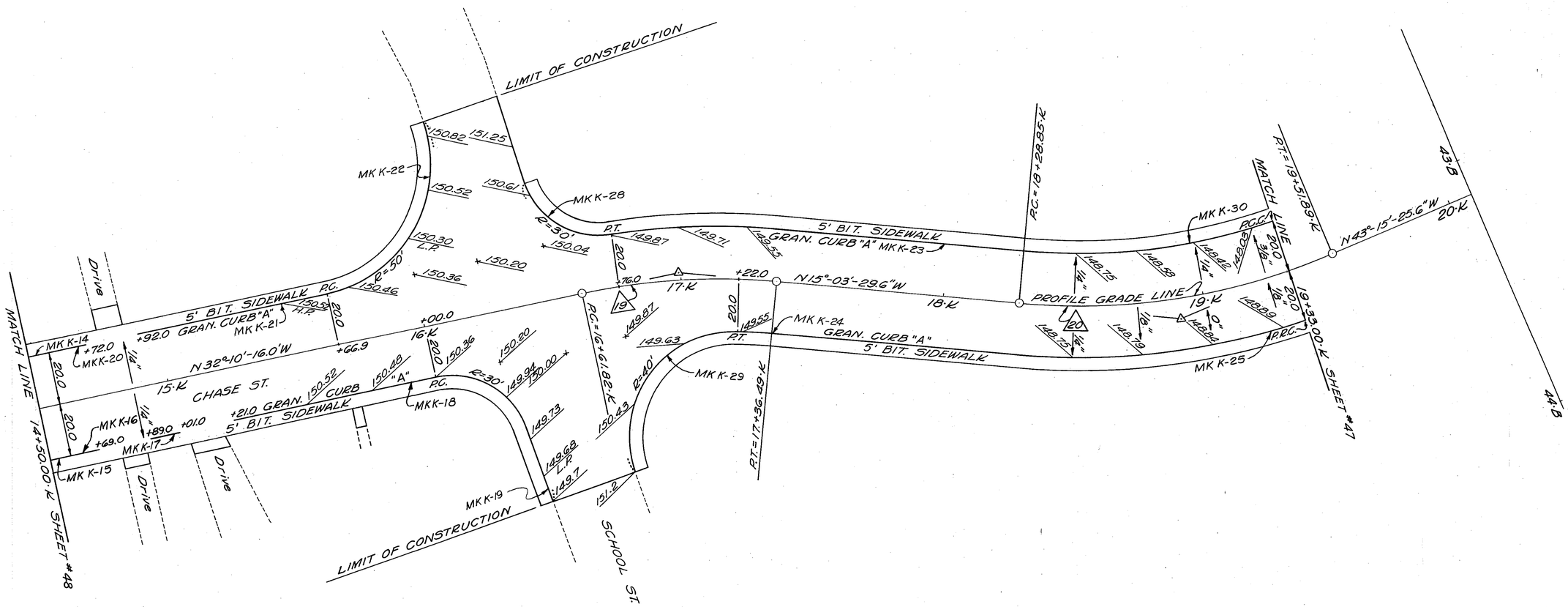
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	48	111.

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	US 28(17)	49	111

BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D.	T.	L.	R
19	16+99.43·K	17°-06'-46.3" RT.	22.918°	37.61'	74.67'	250.00'
20	18+91.64·K	28°-11'-55.9" LT.	22.918°	62.79'	123.04'	250.00'

19 DENOTES BASELINE CURVE NUMBER



ALIGNMENT, CURB TIES, AND GRADING PLAN.

NOTEBOOKS	BOOK NO.	PAGE NO.
PLAN TRACED D.E.SNOE DATE 9 Apr. 69		
PLAN CHECKED N. DOOLEY " 10 Apr. 69		
PROFILE TRACED	"	"
PROFILE CHECKED	"	"
INKED D.E.SNOE " 16 Apr. 69	"	"
CHECKED B. MABARDY DATE 22 Apr. 69	BOOK NO.	PAGE NO.

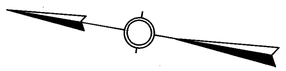
REVISIONS' AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

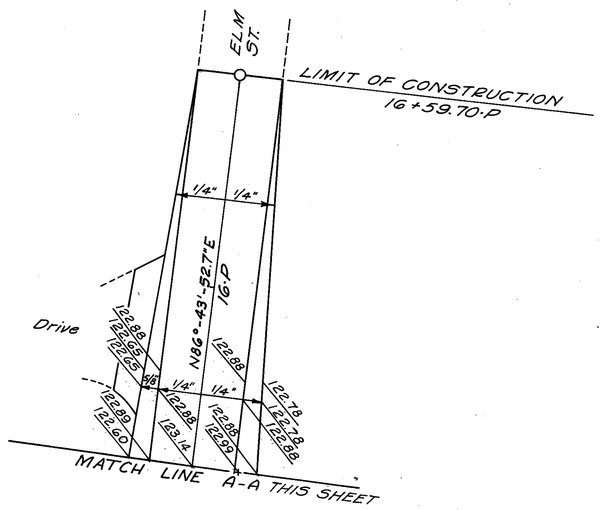
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	49	111

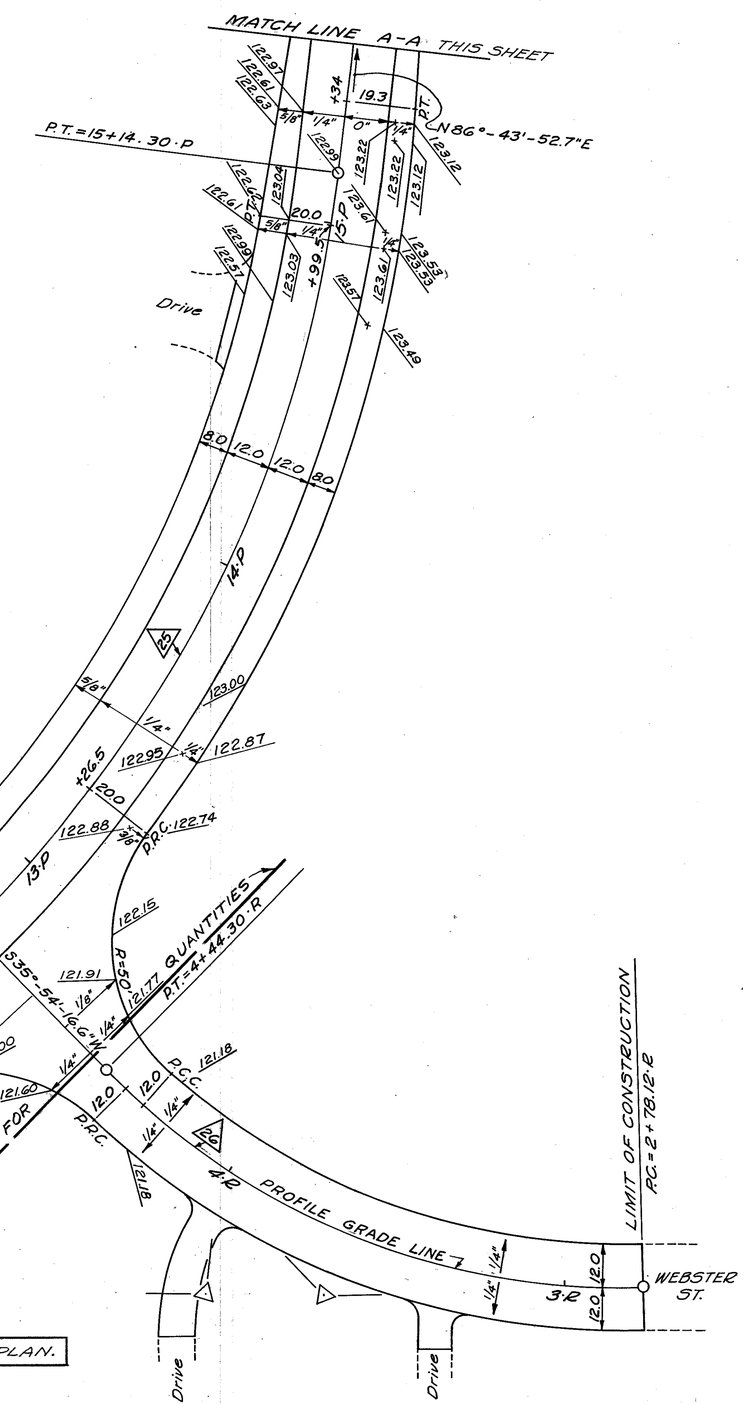
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	50	111

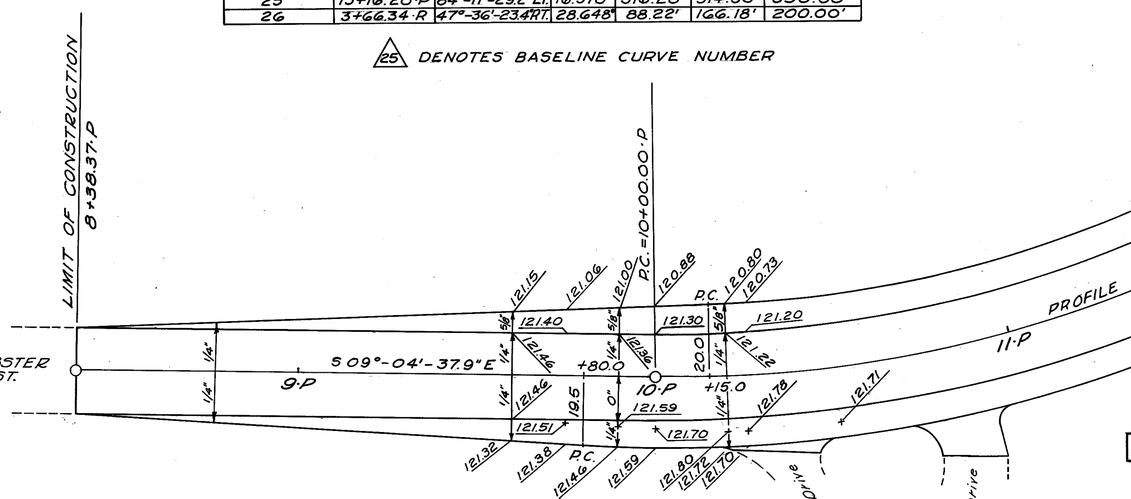
REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	STATION	DESCRIPTION		

NOTEBOOKS			
	DATE	BOOK NO.	PAGE NO.
PLAN TRACED	D. EISNOR	7 APR 69		
PLAN CHECKED	N. DOOLEY	8 APR 69		
PROFILE TRACED		"	"	"
PROFILE CHECKED		"	"	"
INKED	G. COUTOUNIAS	23 APR 69	"	"
CHECKED	R. MABARDY	24 APR 69	"	"









BASELINE CURVE DATA

CURVE NO.	P.I.	Δ	D	T	L	R
25	13+16.20·P	84°-11'-29.2"LT.	16.370°	316.20'	514.30'	350.00'
26	3+66.34·R	47°-36'-23.4"RT.	28.648°	88.22'	166.18'	200.00'

25 DENOTES BASELINE CURVE NUMBER

ALIGNMENT, CURB TIES, AND GRADING PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	50	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	51	111

STREET PARKING SCHEDULE

NASHUA

STREET NAME	PARKING
ROUTE 111 (E.B.) STA. 6+17.00·A TO STA. 31+90.00±B (TOWN LINE)	NO
EAST HOLLIS ST. (E.B. - ONE WAY) RAMP "F"	NO
ROUTE 111 (W.B.) STA. 22+40.00±·A (TOWN LINE) TO STA. 6+17.00·A	NO
BRIDGE ST. (E.B.) STA. 17+33.32·C TO STA. 27+42.00·C	NO
BRIDGE ST. (W.B.) STA. 18+87.33·D TO STA. 17+33.32·C	NO
CROWN ST. EXTENSION (TWO WAY & CUL-DE-SAC)	NO
"E" ST. (ONE WAY)	WEST SIDE ONLY

HUDSON

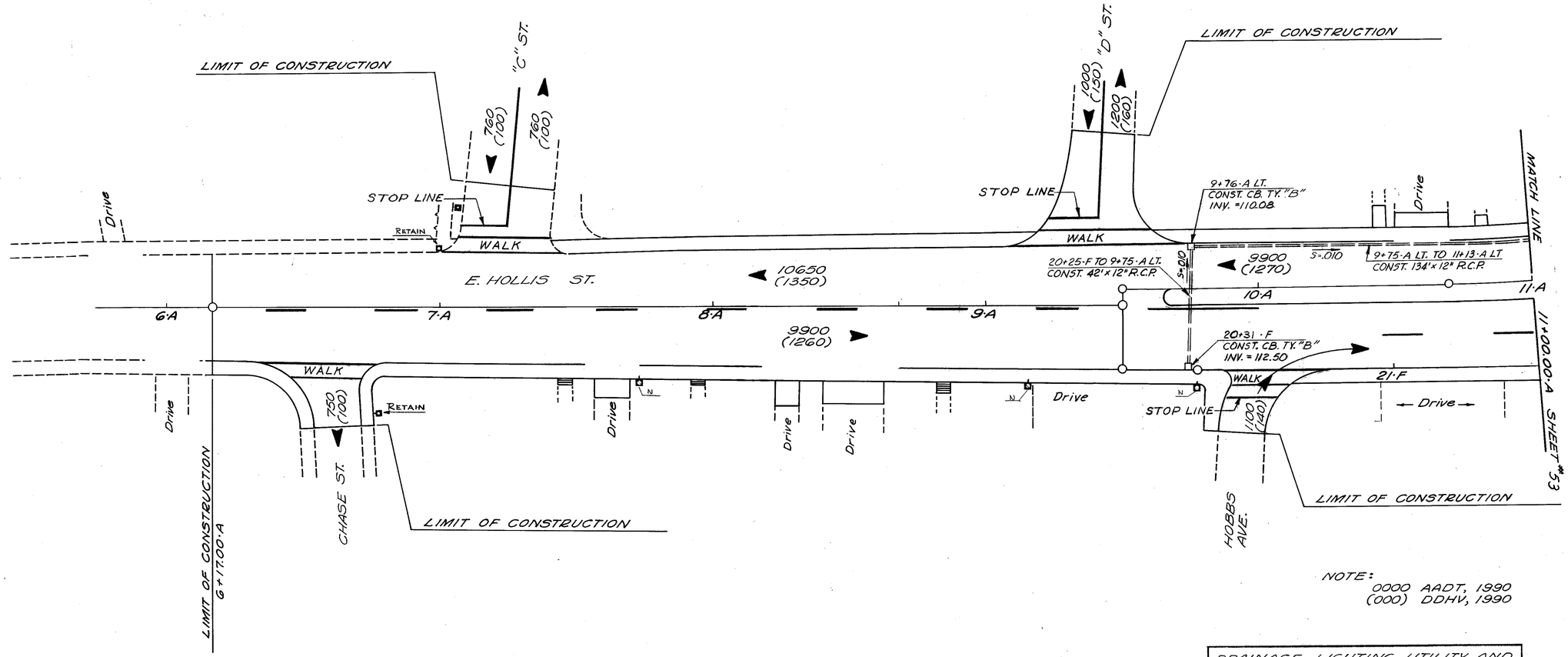
STREET NAME	
ROUTE 111 (E.B. & W.B. - FERRY ST.)	NO
DERRY ROAD	NO
CHASE ST. & EXTENSION	NO
CENTRAL ST. (RAMP & CUL-DE-SAC)	NO
WEBSTER ST. (RAMP & CUL-DE-SAC)	NO TO STA. 3+50·M
WEBSTER ST. - ELM ST. INTERSECTION	NO

N

KEY

□ = NEW POLE BY OTHERS, NOT A PART OF THIS CONTRACT.

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11



NOTE:
0000 AADT, 1990
(000) DDHV, 1990

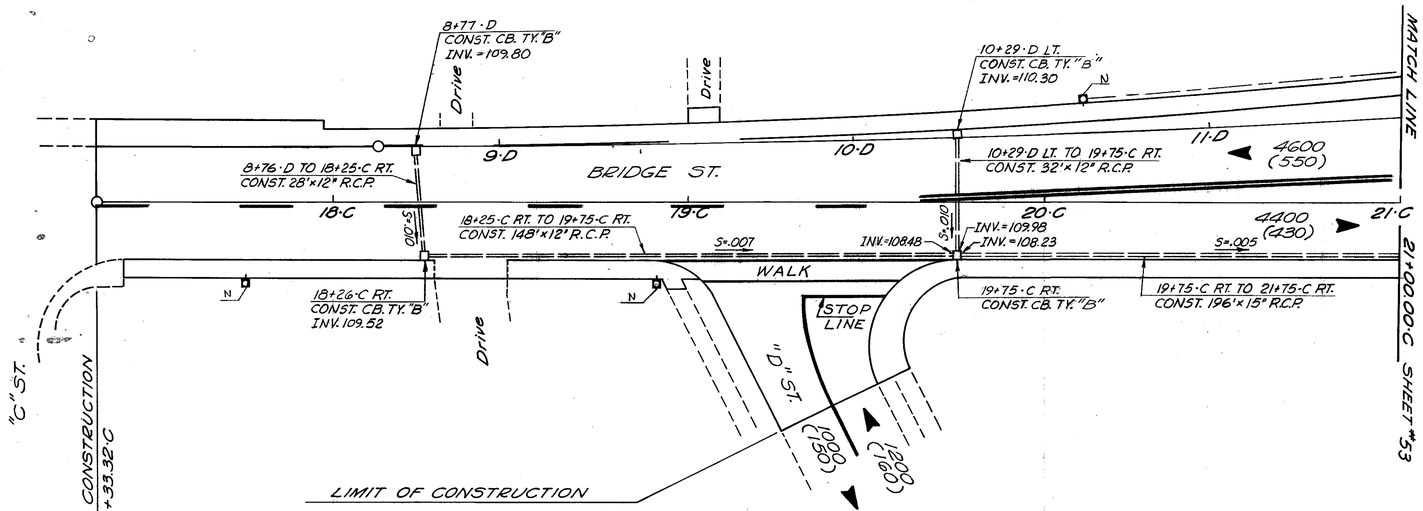
DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					NOTEBOOKS		
NO.	DATE	STATION	STATION	DESCRIPTION			
					PLAN TRACED M.L. PAPP	DATE MAY 69	BOOK NO.
					PLAN CHECKED R.L. MABARDY	" JUNE 69	BOOK NO.
					PROFILE TRACED	"	BOOK NO.
					PROFILE CHECKED	"	BOOK NO.
					INKED M.L. PAPP	"30 MAY 69	BOOK NO.
					CHECKED R.L. MABARDY	DATE 2 JUNE 69	BOOK NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	51	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	52	111

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11



NOTE:
0000 AADT, 1990
(000) DDHV, 1990

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

		NOTEBOOKS	
PLAN TRACED	M.L. PAPP	DATE MAY 69	
PLAN CHECKED	R.E. MABARDY	" JUNE 69	BOOK NO.
PROFILE TRACED		"	PAGE NO.
PROFILE CHECKED		"	BOOK NO.
INKED	M.L. PAPP	" 30 MAY 69	" "
CHECKED	R.E. MABARDY	DATE 2 JUNE 69	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	52	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	53	111

REVISED AFTER PROPOSAL # 1
DATE MAR 11 1970

CONT. ON SHEET #54

MATCH LINE 15+50.00·D SHEET #54

15+30·A CONST. CB. TY."B"

15+50.00·A

25+69·C RT. TO 15+30·A CONST. 52"x12" R.C.D. INV. IN 111.00

25+50.00·C

MATCH LINE 25+60.00·B

MATCH LINE 25+50.00·F

PROP. FUTURE 24" SEWER CONN. TO PROP 66" INTERCEP. FOR SEWER (BY OTHERS)

INV=103.99

INV=103.33

15+20·D LT. CONST. CB. TY. "B" INV.=111.10

15+44·A RT. TO 17+17·A RT. CONST. 175'x3" TRAFFIC SIGNAL CONDUIT-TYPE II

15+20·D LT. TO 24+59·C LT. CONST. 90"x18" R.C.P.

S=.007

14+43·D LT. TO 15+00·D LT. CONST. 58'x3" LIGHTING CONDUIT TYPE I

LIMIT OF CONSTRUCTION

200 (50)

200(50)

WALK

15·D

PROP. 12" GAS (BY OTHERS)

24+59·C LT. CONST. DI. TY."B" INV.=110.97

24+59·C LT. TO 15+30·A CONST. 64"x12" R.C.P.

STOP LINE

RETAIN EXISTING 6" GAS MAIN

14+70·A-15+05·A LT. CONST. 35'x3" LIGHTING CONDUIT, TYPE I

24" EXISTING 12" GAS MAIN

24+65·C RT. CONST. CB. TY. "B" INV.=105.85 INV.=104.67

FUTURE CONST.

66" NASHUA INTERCEPTOR SEWER SEGEMENT SEE SEE SHEETS NO'S 61 B,C,D FOR DETAILS & SHEET NO. 14 FOR SUMMARY.

14·D

RAMP "D"

4600 (50)

3500 (500)

S=.004

23·C

RAMP "C"

21+75·C RT. TO 24+65·C RT. CONST. 288'x18" R.C.P.

22+79·C RT. TO 24+62·C RT. CONST. 175'x3" TRAFFIC SIGNAL CONDUIT-TYPE II

12+75·D LT. CONST. CB. TY."B" INV.=111.90

12+75·D LT. TO 21+75·C RT. CONST. 70"x12" R.C.P.

13·D

FUTURE CONST.

S=.010

22·C

INV.=107.00

12·D

21+75·C RT. CONSTR. CB. TY."B"

INV.=111.80

INV.=107.25

12+75·C RT. TO 21+75·C RT. CONST. 78"x5'-6" R.C.P. S=.005

WALK

3·E

2·E

"E" ST.

1·E

0·E

MATCH LINE 21+00.00·C SHEET #52

Drive

Drive

Drive

Drive

Drive

Drive

21·C

25·C

5'-0" x 2'-6" R.C.P. CONST. 62"x30" R.C.P.

INV=108.97

INV=108.16

25·B

FUTURE R/W LINE

25·A

5'-0" x 2'-6" R.C.P.

24+65·C RT. TO 25+08·C RT. CONST. 35'x3" TRAFFIC SIGNAL CONDUIT - TYPE II

15+00·A RT. TO 15+44·A RT. CONST. 30'x3" TRAFFIC SIGNAL CONDUIT - TYPE I

25+08·C RT. TO 25+54·C RT. CONST. 35'x3" TRAFFIC SIGNAL CONDUIT - TYPE II

24+62·C RT. TO 25+08·C RT. CONST. 40'x3" TRAFFIC SIGNAL CONDUIT - TYPE I

PROP MH

14+25·A TO 15+30·A CONST. 104'x12"R.C.P

S=.007

14+25·A CONST. C.B. TY. B, INV. 109.70

14·A

9500 (200)

PROP. NET & T 20 DUCTS (By Others)

9000 (150)

13+27·A RT. TO 13+25·A LT. CONST. 36"x12" R.C.P. INV=107.74

13+27·A RT. CONST. DI. TY."B" INV.=108.60

13+25·A LT. CONST. CB. TY. B

INV=105.66

INV=107.22

S=.010

S=.005

13·A

INV=107.92

INV=107.67

23+35·B CONST. CB. TY."B"

23+35·B TO 13+25·A LT. CONST. 60"x1.5" R.C.P.

23+26·F CONST. 26"x12" R.C.P.

23+26·F CONST. CB. TY."B" INV.=108.18

23·F

22+73·F TO 23+26·F CONST. 52"x12" R.C.P.

22+73·F CONST. CB. TY. B INV.=108.70

Drive

12·A

S=.005

11+13·A LT. TO 13+25·A LT. CONST. 200'x18" R.C.P.

12+92·A LT. TO 13+25·A LT. CONST. 66"x12" R.C.P.

12+92·A LT. CONST. DI. TY."B" INV.=107.50

RAMP "A"

RAMP "B"

24·B

24·F

22·F

11·A

25+00·F CONST. CB. TY. "B" INV.=109.30

66" NASHUA INTERCEPTOR SEWER SEGEMENT SEE SHEET NO'S 61 B,C,D FOR DETAILS SEE SHEET NO. 14 FOR SUMMARY

24+83·F CONST. 30'x3" LIGHTING CONDUIT, TYPE I

25+00·F TO 27+00·F CONST. 78"x12" R.C.P.

24+97·F LT. TO 25+00·F CONST. 28"x12" R.C.P.

24+97·F LT. CONST. DI. TY."B" INV.=109.50

S=.007

S=.010

Drive

FUTURE CONST.

RAMP "F"

PROP. 12" C.I. WATER (BY OTHERS)

LT. TO REPLACE 6" C.I. WATER

1050 (250)

#173

#169

RET. EXIST. 12" C.I. WATER

RET. EXIST. 6" C.I. WATER

RET. EXIST. 8" C.I. WATER

Drive

Drive

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

NOTE:
0000 AADT, 1990
(000) DDHV, 1990

NOTE:
FOR LAYOUT OF TEMP. APPROACH SEE SHT. # 42-A

RETAIN EXIST. POLE # P5 8

RETAIN EXIST. POLE # P5 14 POWER SOURCE

0+56·E RT. CONST. CB. TY. B INV.=108.38

900 (120)

0+82·E LT. TO 0+56·E RT. CONST. 32"x12" R.C.P.

S=.010

STOP LINE

WALK

0+81·E LT. CONST. CB. TY. B INV. 108.70

0+56·E RT. TO 11+13·A LT. CONST. 72"x12" R.C.P.

11+12·A LT. CONST. CB. TY. B INV.=107.16

INV.=107.66

INV.=108.14

MATCH LINE 11+00.00·A SHEET #51

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	53	111

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)						NOTEBOOKS		
							BOOK NO.	PAGE NO.

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	54	111

REVISED AFTER PROPOSAL # 1 DATE MAR 11 1970

EXIST. 2" CONDUIT

19+13·A LT. TO 19+48·A. LT.
CONST. 35'X3" LIGHTING CONDUIT TYPE I

19+48·A LT
SUBSIDIARY TO ITEM 614.131
PLACE JUNCTION BOX 6"x6"x6" (WATER PROOF)

19+00·A
CONST. 37'x3" LIGHTING CONDUIT TYPE I
CONNECT TO EXIST. 12" R.C.P. STUB
REMOVE PLUG
INV. = 109.04

MATCH EXISTING BRIDGE 19+49.25·A

PROP. NET & T 21 DUCTS (By Others)

EXIST. M.H. & 42" R.C.P.

PROP. NET & T 20 DUCTS (By Others)

18+52·A RT.
CONST. D.I. TY."B"
INV. = 108.00

17+60·A TO 18+60·A RT.
CONST. 100'x12" R.C.P.

17+60·D TO 17+60·A
CONST. 32'x12" R.C.P.

17+60·D
CONST. C.B. TY. "B"
INV. = 112.90

17+60·A
CONST. C.B. TY. "B"
INV. IN = 112.58
INV. OUT = 110.00

PROP. NET & T 20 DUCTS (By Others)

PROP. 12" GAS (BY OTHERS)

FUTURE PROP. 24" SEWER CONNECT TO PROP. 66" I.I. INTERCEPTOR SEWER (BY OTHERS)

15+30·A TO 27+25·C
CONST. 196'x 30" R.C.P.

15+44·A RT. TO 17+17·A RT.
CONST. 175'x 3" TRAFFIC SIGNAL CONDUIT TYPE II

26+26·C
CONST. 28'x 3" TRAFFIC SIGNAL CONDUIT TYPE II

25+69·C, RT.
CONST. C.B. TY."B"
INV. 111.36

15+30·A TO 25+69·C RT., CONST. 52'x12" R.C.P.

25+53·C
CONST. 29'x3" LIGHTING CONDUIT TYPE I

15+54·A
CONST. 37'x3" LIGHING CONDUIT, TYPE I

MATCH LINE 15+50.00·D SHEET # 53

15+50.00·A SHEET # 53

18+52·A RT. TO 18+60·A RT.
CONST. 8'x12" R.C.P.
CONNECT TO EXIST. 12" R.C.P. STUB
REMOVE PLUG
INV. = 108.96

NEW POLE (BY OTHERS)

PROP. FUTURE DIVERSION CHAMBER (BY OTHERS)

EXISTING PUMPING STATION

EXIST. 54" R.C.P.

28+28·B LT.
CONN. TO EXIST. PUMPING STA. CHAMBER
INV. 101.53
(SEE DETAIL "A")

27+73·B LT. TO 28+28·B LT.
CONST. 58'x36" R.C.P.

27+73·B LT.
CONST. M.H.
INV. IN 101.72
INV. OUT 101.70

TOE 2:1 (FUTURE)

27+25·C TO 27+73·B LT.
CONST. 94'x36" R.C.P.

27+25·B TO 27+25·C
CONST. 26'X15" R.C.P.
INV. = OUT 102.00

27+25·C
CONST. C.B. TY."B"
INV. = IN 103.60

FUTURE CONST.

27+25·B
CONST. C.B. TY. "B"

27+25·B TO 27+00·F
CONST. 56'x15" R.C.P.

27+00·F
CONST. C.B. TY. "B"
INV. = IN 107.91

25+00·F TO 27+00·F
CONST. 198'X12" R.C.P.

PROP. HYDRANT (BY OTHERS)

RETAIN EXIST. 6" C.I. WATER (BY OTHERS)

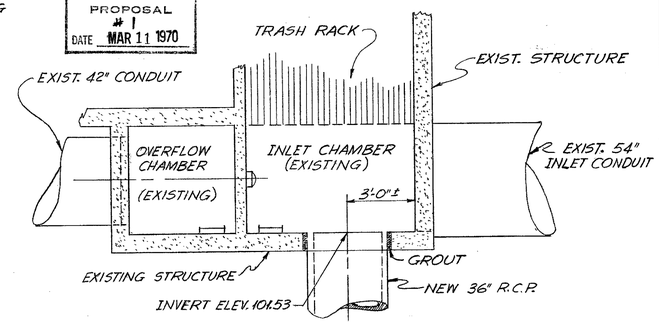
(TO BE REPLACED 6" C.I. WATER) PROP. 12" C.I. WATER (BY OTHERS)

MATCH LINE 25+60.00·B CONT. FROM SHEET # 53

MATCH EXISTING BRIDGE LIMIT OF CONSTRUCTION 29+02.00·B

FUTURE PROPOSED BRIDGE APPROACH

NOTE: SEE DETAIL "A" CUT 46" DIA. OPENING THROUGH EXISTING STRUCTURE WALL. INSERT 36" R.C. PIPE FLUSH WITH INSIDE FACE OF EXIST. WALL. GROUT AROUND-BETWEEN PIPE AND EXIST. STRUCTURE.



DETAIL "A"
SUBSIDIARY TO ITEM # 603.00236

CONNECTION OF THE PROPOSED 36" R.C. PIPE TO EXISTING PUMPING STATION. (NOT TO SCALE)

28+20·B RT. TO 27+25·C RT.
CONST. 130'x12" R.C.P.

EXIST. 36" R.C.P.

28+20·B RT.
CONST. D.I. TY."B"
INV. 107.43

RAMP "F"

27+00·F TO 31+18·F RT.
CONST. 348'x12" R.C.P.

MATCH LINE R.C.C. = 28+38.41·F SHEET # 55

SERVICE FOR OLD TAYLORS FALLS BRIDGE LIGHTING (BY OTHERS)

RAMP "D"

RAMP "A"

RAMP "C"

RAMP "B"

FUTURE CURB LINE

STOP LINE

WALK

Drive

NOTE:
SEE SHT. # 43-A REF. CONST. OF B & C RAMPS.

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

NOTE:
0000 AADT. 1990
(000) DDHV. 1990

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

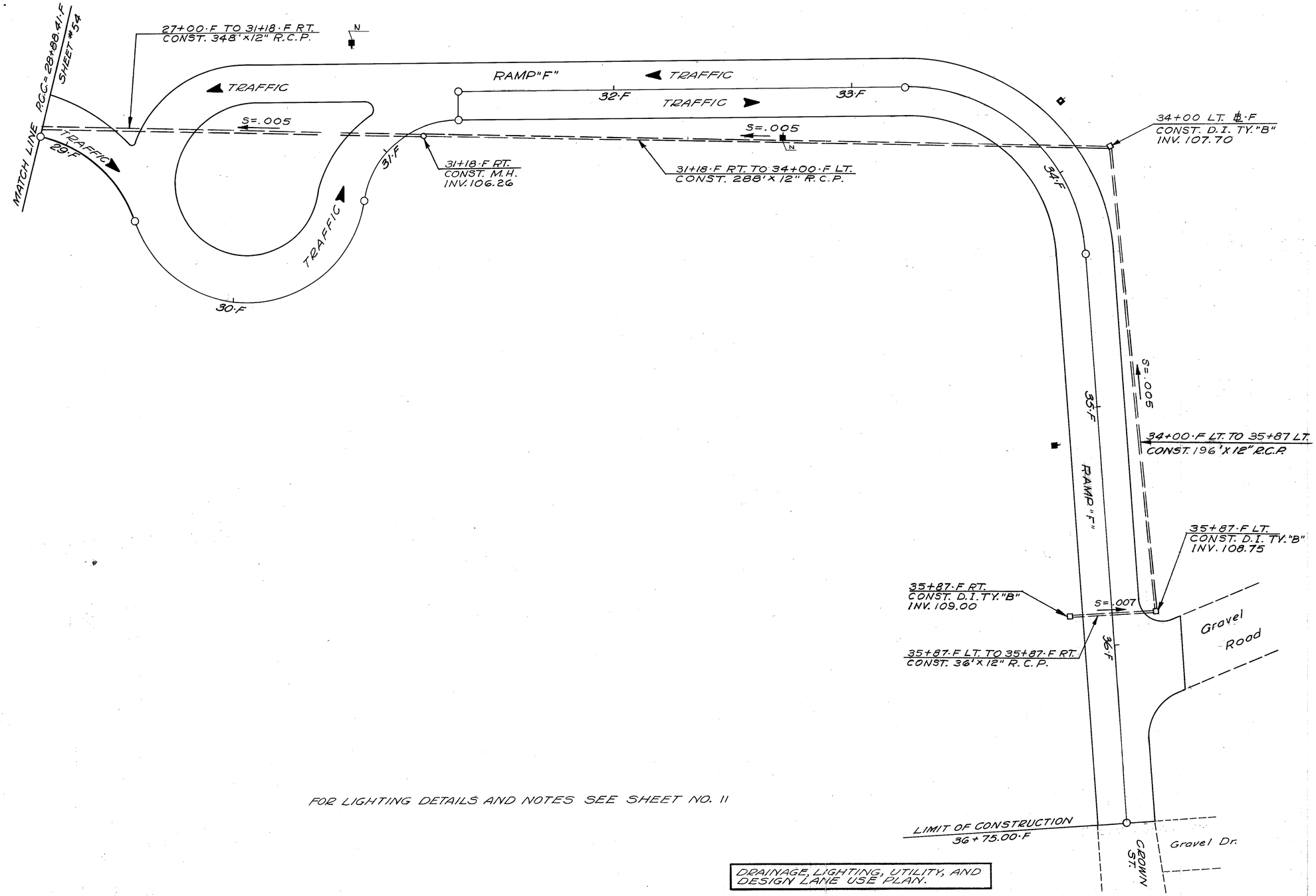
NO.	DATE	STATION	DESCRIPTION
1	3-11-70	19+20·A	ADDED NOTE REF. CONST. OF "B & C" RAMP & DELETED SOME LIGHTING.
		15+20·A	

NOTEBOOKS

		BOOK NO.	PAGE NO.
PLAN TRACED	D. EISNOR	DATE JUNE 69	
PLAN CHECKED	R.L. MABARDY	" JUNE 69	
PROFILE TRACED		"	"
PROFILE CHECKED		"	"
INKED	D. EISNOR	"2 JUNE 69	"
CHECKED	R.L. MABARDY	DATE 3 JUNE 69	BOOK NO. PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	54	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	55	111



FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

		NOTEBOOKS	
PLAN TRACED	D.E'SNOR	DATE MAY '69	
PLAN CHECKED	R.L. MABARDY	" JUNE '69	BOOK NO. / PAGE NO.
PROFILE TRACED		"	" "
PROFILE CHECKED		"	" "
INKED	D.E'SNOE	" 28 MAY '69	" "
CHECKED	R.L. MABARDY	DATE 2 JUNE'69	BOOK NO. / PAGE NO.

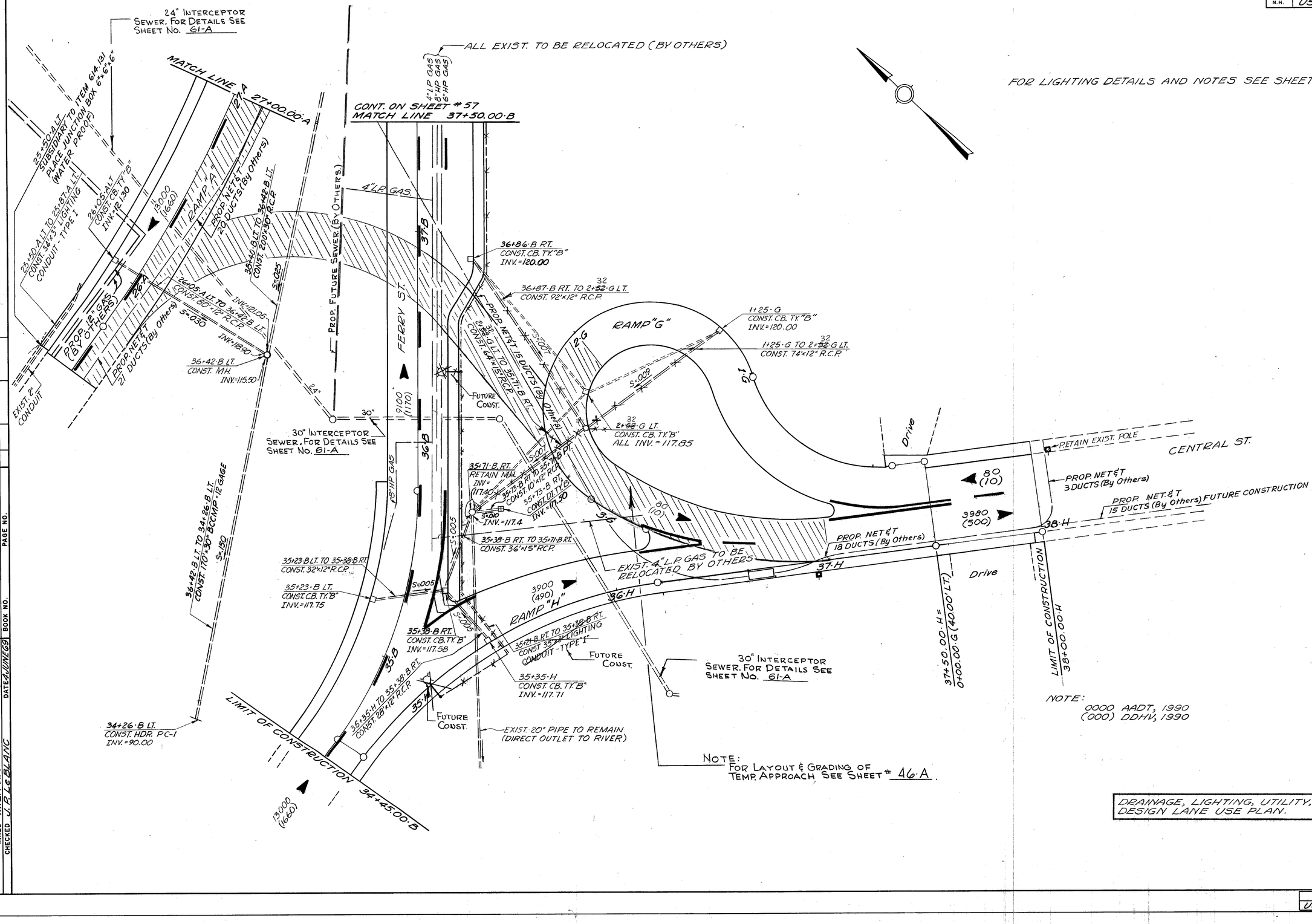
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	55	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	56	111

REVISED AFTER PROPOSAL #1
DATE MAR 11 1970

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	DESCRIPTION	
1	3-11-70	25+50-A	ADDED AREA SHOWING TEMP. APPROACH & DELETED SOME LIGHTING	

NOTEBOOKS		
	DATE	BOOK NO.
PLAN TRACED	M.L. PAPP	JUNE 69
PLAN CHECKED	N. DOOLEY	" "
PROFILE TRACED		" "
PROFILE CHECKED		" "
INKED	M.L. PAPP	3 JUNE 69
CHECKED	J.P. LeBLANC	4 JUNE 69



FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

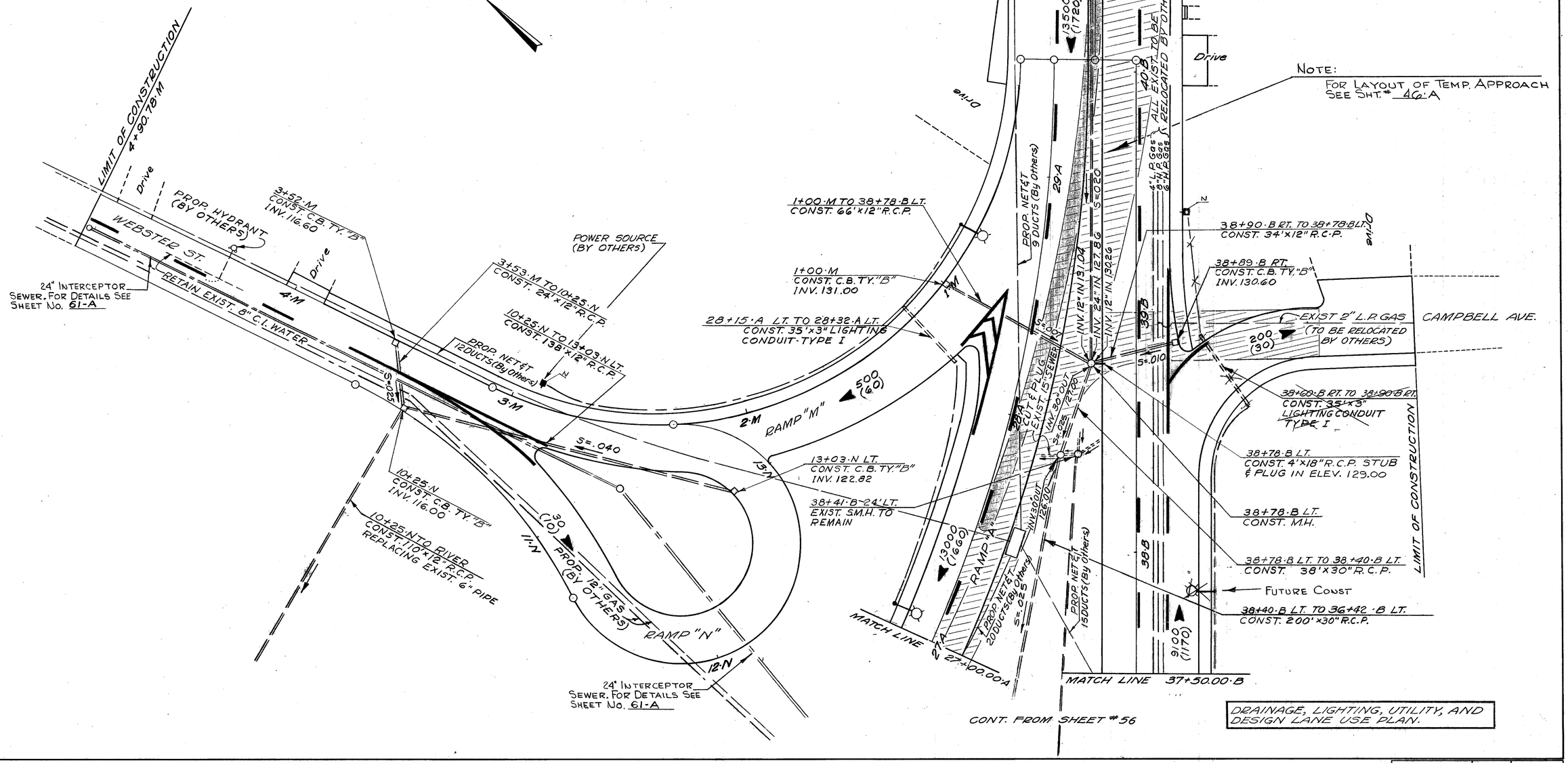
DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	56	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	57	111

REVISED AFTER PROPOSAL #1 DATE MAR 11 1970

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11



DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				NOTEBOOKS		DATE
NO.	DATE	STATION	DESCRIPTION			
1	3-11-70	27+00.00·A	ADDED AREA SHOWING TEMP. APPROACH & DELETED SOME LIGHTING			
		41+00.00·B STATION				
PLAN TRACED	G. COUTOUMAS			N.	BOOK NO.	DATE MAY 69
PLAN CHECKED	N. DOOLEY				PAGE NO.	" JUNE 69
PROFILE TRACED					BOOK NO.	"
PROFILE CHECKED					PAGE NO.	"
INKED	G. COUTOUMAS				BOOK NO.	"30 MAY 69
CHECKED	R.L. MABARDY				PAGE NO.	DATE 2 JUNE 69

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	57	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	58	111

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

LIMIT OF CONSTRUCTION
10+74.44-L

Drive

STOP LINE

10L

MATCH LINE THIS SHEET B-B

38+78-B-LT. TO 41+70-B, LT.
CONST. 288' x 24" R.C.P.

42+51-B TO 42+62-B, LT.
CONST. 42' x 3" TRAFFIC
SIGNAL CONDUIT TYPE I

41+70-B, LT. TO 41+75-B, LT.
CONST. 28' x 12" R.C.P.

41+75-B, LT.
CONST. C.B. TY."B"
INV. 138.70

41+70-B, LT. TO 42+64-B, LT.
CONST. 94' x 24" R.C.P.

5' BREAK IN RUN OF COND.

SHEET #57

#22

PROP. NET&T 9 DUCTS (By Others)

INV. 24" OUT 133.62

INV. 12" IN 138.42
INV. 24" IN 136.62
S=.020

5' BREAK IN RUN OF COND.

41+00.00-B

S=.010

13500
(1720)

S=.020

42+64-B, LT.
CONST. M.H.
INV. 24" OUT
138.50

WALK

41-B

42-B

8900
(1140)

STOP LINE

42+51-B TO 42+76-B, RT.
CONST. 46' x 3" TRAFFIC
SIGNAL CONDUIT TYPE I

MATCH LINE

41+70-B, LT.
CONST. M.H.

40+70-B TO 42+51-B
CONST. 175' x 3" TRAFFIC
SIGNAL CONDUIT - TYPE II

41+70B, LT. TO 41+75-B, RT.
CONST. 30' x 12" R.C.P. (S=.010)
INV. 12" IN 138.40

41+75-B, RT.
CONST. C.B. TY."B"
INV. 138.70

42+85-B, RT.
CONST. C.B. TY."B"

42+64-B, LT. TO 42+85-B, RT.
CONST. 50' x 24" R.C.P. (S=.010)
INV. 24" IN 138.50

Drive

BAKER ST.

Drive

Drive

42+62-B, LT. TO 43+64-B, LT.
CONST. 90' x 3" TRAFFIC
SIGNAL CONDUIT
TYPE I

STOP LINE

PROP. NET&T
2 DUCTS (By Others)

WALK

6+03-L, RT. TO 6+85-L, RT.
CONST. 75' x 3" TRAFFIC
SIGNAL CONDUIT - TYPE II

DERRY RD.

6L

5' BREAK IN RUN OF COND.

INV. 18"
OUT 140.79

5' BREAK IN RUN OF COND.

2850
(360)

600
(60)

S=.005

42+64-B, LT. TO 6+50-L, RT.
CONST. 158' x 18" F.C.P.
INV. 18" IN 140.00
PROP. 8" C.I. WATER
(BY OTHERS)

42+64-B, LT.
CONST. 4' x
15" R.C.P. & PLUG
INV. ELEV.
140.4

20L

43-B

2850
(360)

5' BREAK
IN RUN
OF COND.

PROP. NET&T
2 DUCTS (By Others)

WALK

INV. 24" OUT 138.65

S=.010

STOP LINE

1800
(230)

4900
(630)

1-15" x 3"
TRA. SIG.
COND. TY. II
(SEE SH. #60)

MATCH LINE 19+33.00-K SHEET #60

18+75-K, LT. TO 42+85-B, RT.
CONST. 84' x 24" R.C.P. (S=.0024) INV. 24" IN 138.65

42+85-B, RT. TO 43+73-B, RT.
CONST. 86' x 12" R.C.P.
INV. 12" IN 142.20

43+74-B, RT.
CONST. C.B. TY."B"
INV. 143.04

44+21-B, LT.
CONST. C.B. TY."B"
INV. 146.70

7+75-L, LT.
CONST. C.B. TY."B"
INV. 144.10

Drive

3450
(440)

2950
(380)

9L

S=.010

8L

7+75-L, LT. & RT.
CONST. 44' x 12" R.C.P.

7+75-L, RT.
CONST. C.B. TY."B"
INV. 12" R.C.P. 143.66
INV. 15" R.C.P. 143.41

6+50-L, RT. TO 7+75-L, RT.
CONST. 124' x 15" R.C.P.

MATCH LINE B-B THIS SHEET

Drive

S=.005

6+82-L, RT.
CONST. C.B. TY."B"
INV. 145.30

6+50-L, RT. TO 6+81-L, RT.
CONST. 34' x 12" R.C.P.
(INV. 12" IN 144.96)

6+50-L, RT.
CONST. M.H.

INV. 15" IN 142.79

44+21-B, LT. TO 6+50-L, RT. (S=.010)
CONST. 20' x 12" R.C.P.
INV. 12" IN 146.50

44+18-B, LT. TO 46+81-B, LT.
CONST. 250' x 3" TRAFFIC
SIGNAL CONDUIT - TYPE II

5' BREAK IN RUN OF COND.

PROP. NET&T 9 DUCTS (By Others)

5' BREAK IN RUN OF COND.

LIMIT OF CONSTRUCTION
46+81.20-B

STOP LINE

43+64-B, LT. TO 44+18-B, LT.
CONST. 40' x 3" TRAFFIC SIGNAL CONDUIT TYPE I

43+90-B TO 44+18-B, LT.
CONST. 44' x 3" TRAFFIC SIGNAL CONDUIT TYPE I

7050
(900)

FERRY ST.

WALK

44-B

45-B

46-B

STOP LINE

43+80-B, RT. TO 43+90-B
CONST. 36' x 3" TRAFFIC SIGNAL CONDUIT TYPE I

6050
(770)

Drive

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

NOTE:
0000 AADT, 1990
(000) DDHV, 1990

(USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

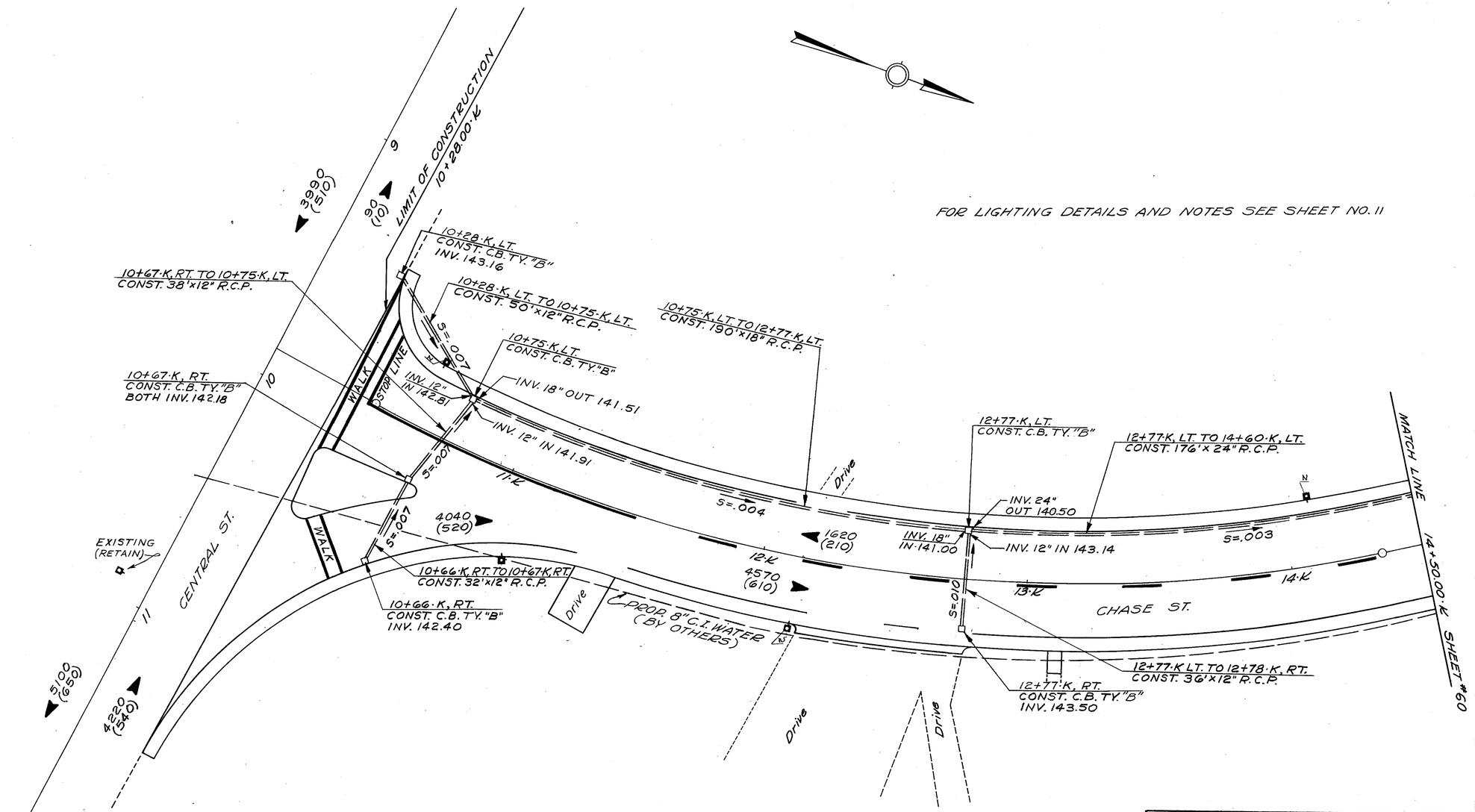
REVISIONS AFTER PROPOSAL

NOTEBOOKS

	DATE/CAR NO.	BOOK NO.	PAGE NO.
PLAN TRACED	O. ESNOR	"	"
PLAN CHECKED	W. DOOLEY	"	"
PROFILE TRACED		"	"
PROFILE CHECKED	G. COUTOUMAS	"3 JUNE 69	"
INKED		BOOK NO.	PAGE NO.
CHECKED	R.L. MABARDY	DATE 4 JUNE 69	

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	58	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	59	111



FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11

DRAINAGE, LIGHTING, UTILITY, AND DESIGN LANE USE PLAN.

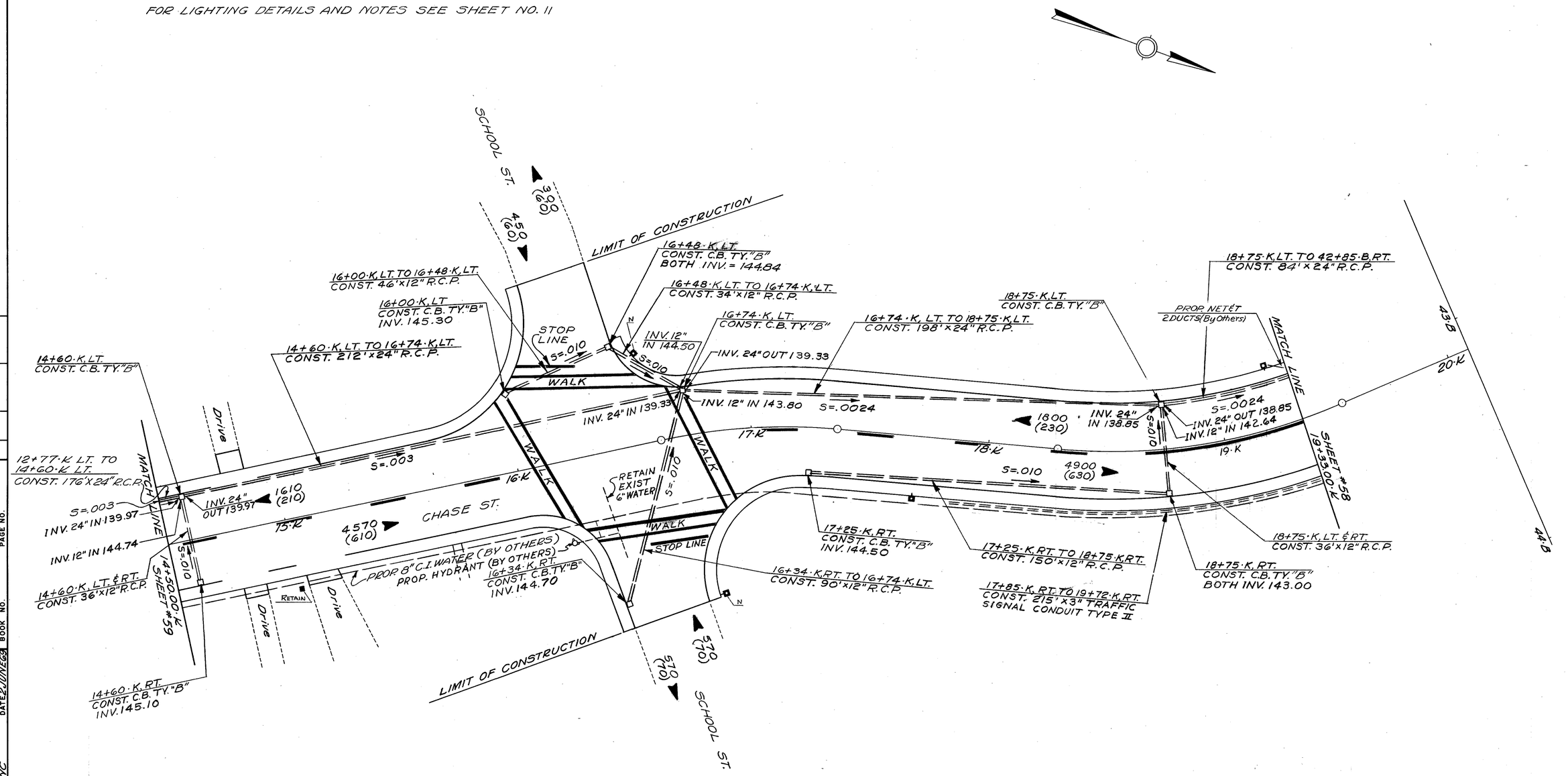
NOTE:
0000 AADT, 1990
(000) DDHV, 1990

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					NOTEBOOKS	
NO.	DATE	STATION	STATION	DESCRIPTION		
					PLAN TRACED D. ESNOE DATE 10 Apr 69	
					PLAN CHECKED N. DOOLEY " 11 Apr 69	BOOK NO.
					PROFILE TRACED "	PAGE NO.
					PROFILE CHECKED "	" "
					INKED G. COUTOUMAS " 2 JUNE 69	" "
					CHECKED J. P. LeBLANC DATE 3 JUNE 69	BOOK NO.
						PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	59	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	60	111

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11



DRAINAGE, LIGHTING, UTILITY, AND DESIGN USE PLAN.

NOTE:
0000 AADT, 1990
(000) DDHV, 1990

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
	BOOK NO.	PAGE NO.	DATE
PLAN TRACED	G. COUTOUMAS		DATE JUNE 69
PLAN CHECKED	N. DOOLEY		" JUNE 69
PROFILE TRACED		"	"
PROFILE CHECKED		"	"
INKED	G. COUTOUMAS	"	"2 JUNE 69
CHECKED	J. P. LE BLANC	"	DATE 2 JUNE 69

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	60	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)	61	111

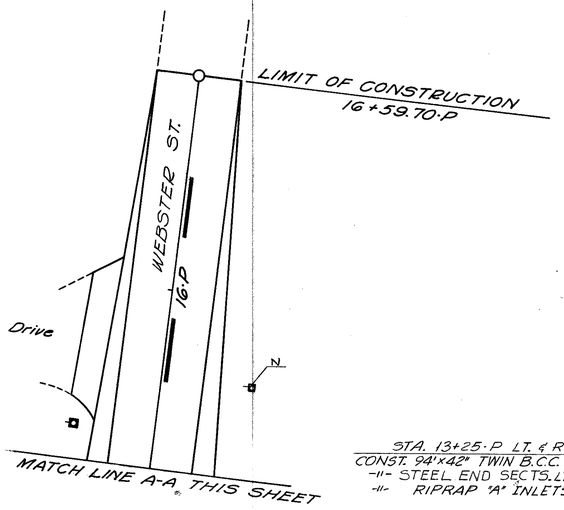
REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION		DESCRIPTION

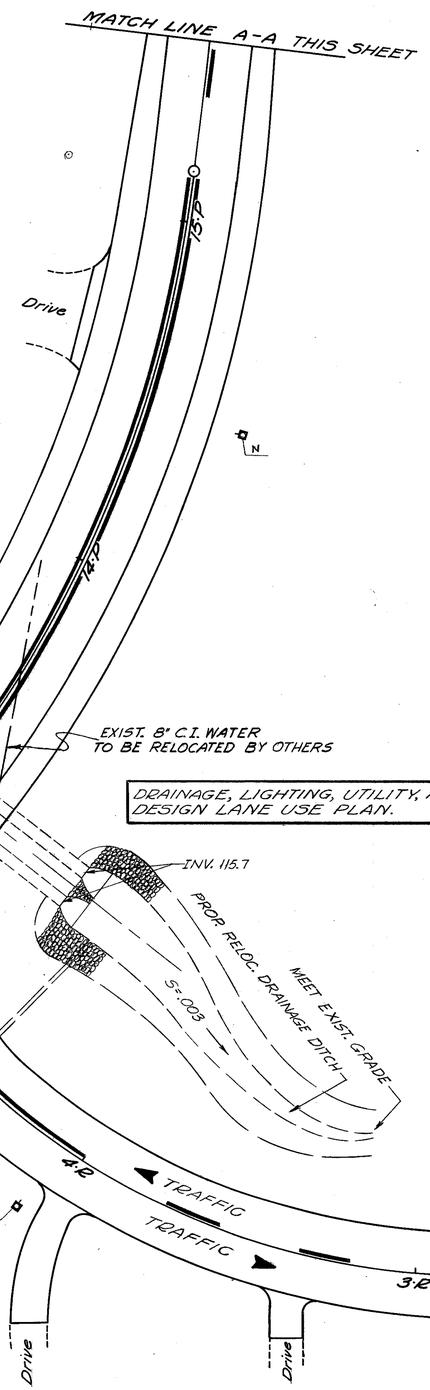
NOTEBOOKS		
PLAN TRACED	D.E.SNOW	DATE 10 Apr 69
PLAN CHECKED	W. DODLEY	" 11 Apr 69
PROFILE TRACED		"
PROFILE CHECKED		"
INKED	D.E.SNOW	" 30 MAY 69
CHECKED	R.L. MABARDY	DATE 2 JUNE 69

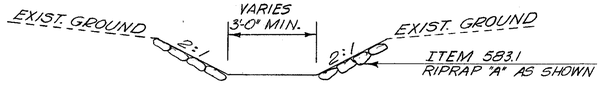
BOOK NO.	PAGE NO.
" "	" "
" "	" "
BOOK NO.	PAGE NO.

NOTE:
FOR ALTERATIONS TO EXISTING WATER SUPPLY SYSTEMS SERVICING THE ROWELL PROPERTIES AND THE COLLINS' RESIDENCE SEE SHEET # 26

FOR LIGHTING DETAILS AND NOTES SEE SHEET NO. 11







TYPICAL RELOC. DITCH SECTION
(Not To Scale)

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	61	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.	US 28(17)		111

REVISED AFTER PROPOSAL
DATE MAR 11 19/0

NO.	DATE	STATION	DESCRIPTION
#1	3-11-70	12+25 N TO 13+03 N LT.	CHANGED C.B. TO "G" LINE REVISED INV. ELEVS. INTERCEPTOR SEWER. ADDED NOTE 36+14.15" STUB

(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL

NOTEBOOKS — BOOK NO. .. PAGE NO. .. (repeated)

DATE

PLAN TRACED
PLAN CHECKED
PROFILE TRACED
PROFILE CHECKED
INKED
CHECKED

3+52 M
CONST. C.B. TY. "B"
INV. 116.60

PROP. HYDRANT (BY OTHERS)

Drive

WEBSTER ST.

RETAIN EXIST. 8" C.I. WATER

4.M

3+53 M TO 10+25 N
CONST. 24"x12" R.C.P.

12+25 N TO 13+03 N LT.
CONST. 138'x12" R.C.P.

PROP. NET & 12 DUCTS (By Others)

2.M

RAMP "M"

500 (60)

13+03 N LT.
CONST. C.B. TY. "B"
INV. 122.82

38+41.8-24" LT. TO EXIST. S.M.H. TO REMAIN

28+15 A LT. TO 28+32 A LT.
CONST. 35'x3" LIGHTING CONDUIT TYPE I

28A CUT & PLUG EXIST. 15" SEW

INV. 30" OUT 125.00

38+78 B LT.
CONST. 4'x18" R.C.P. STUB & PLUG (CAMPBELL AVE.)

38+78 B LT.
CONST. M.H.

38+78 B LT. TO 38+40 B LT.
CONST. 38"x30" R.C.P.

38+40 B LT. TO 36+42 B LT.
CONST. 200'x30" R.C.P.

38.B

4+85 M LT 15' ~~25'~~ ±
CONST. M.H. INV. EL. OUT ~~103.72~~* 103.22
" 24" RCSP STUB PLUGGED.
EXIST. GROUND ELEV. 120.3±

2+50 M - 4+85 M LT.
CONST. 246'x24" RCSP, (3000 D)

S=.025

S=.040

4 @M.H.

10+25 N
CONST. C.B. TY. "B"
INV. 116.00

30 (10)

11.N

PROP. 12" GAS (BY OTHERS)

RAMP "N"

12.N

10+25 N TO RIVER
CONST. 110'x12" R.C.P.
REPLACING EXIST. 6" PIPE

2+50 M LT. 27'±
CONST. M.H. INV EL. OUT ~~103.52~~* 103.02
EXIST. GROUND ELEV. 120.5±

2+50 M LT. - 36+14 B LT.
CONST. 275'x24" RCSP, 3000 D

LIMIT OF CONSTRUCTION
4+90.78 M

13000 (1660)

RAMP "A"

2.A

PROP NET & 20 DUCTS (By Others) S=.025

PROP NET & 15 DUCTS (By Others)

PROP FUTURE SEWER (BY OTHERS)

4" L.P. GAS

91000 (1170)

37.B

36+84 B RT.
CONST C.B. TY. "B"
INV = 120.00

36+87 B RT. TO 2+~~50~~ 32 G LT.
CONST. 92"x12" R.C.P.

RAMP "G"

2.G

S=.009

S=.007

36+14 B RT. ~~37.5'~~ 38'
CONST. M.H. INV. ELEV. ~~102.85~~* 102.25
EXIST. GROUND ELEV. 125.0±

+32
2+~~52~~ G. LT.
CONST. C.B. TY. "B"
ALL INV. = 117.85

35+71 B RT.
RETAIN M.H.
INV = 117.40

35+71 B RT. TO 35+71 B PT.
CONST. 10'x12" R.C.P.

35+71 B PT. TO 35+71 B RT.
CONST. 10'x12" R.C.P.

35+71 B RT. TO 35+71 B RT.
CONST. 36"x15" R.C.P.

S=.005

INV. = 117.4

INV. = 117.50

3.6

EXIST. 4" L.P. GAS RELOCATED BY OTHERS

35+38 B RT.
CONST. C.B. TY. "B"
INV = 117.58

35+35 H
CONST. C.B. TY. "B"
INV. = 117.71

36+14 B Rt - 36+18 H Rt
Const 150'x30" RCSP, 3000

EXIST. 20" PIPE TO REMAIN (DIRECT OUTLET TO RIVER)

36+18 H 51' Rt. 102.16
CONST M.H. INV. ELEV ~~102.76~~*
" 30" RCSP. STUB PLUGGED
EXIST. GROUND ELEV. 124.8±

THIS SHEET ADDED BY N.H. DEPT. OF PUBLIC WORKS & HIGHWAYS.

RAMP "H"

35.H

35+23 B LT. TO 35+38 B RT.
CONST. 32"x12" R.C.P.

35+23 B LT.
CONST. C.B. TY "B"
INV. = 117.75

35+38 B RT. TO 35+38 A RT.
CONST. 28"x12" R.C.P.

35+38 A RT. TO 35+38 B RT.
CONST. 3" LIGHTING CONDUIT TYPE I

35+21 B RT. TO 35+38 B RT.
CONST. 3" LIGHTING CONDUIT TYPE I

35.B

S=.150

36+42 B LT. TO 34+26 B LT.
CONST. 170'x30" BCCMP-12 GA.

26+05 A LT. TO 36+42 B LT.
CONST. 80'x12" R.C.P.

S=.030

INV=12105

INV=118.90

36+42 B LT
CONST M.H.
INV=115.50

26+05 A LT.
CONST C.B. TY
INV=12.30

26.A

PROP 12" GAS (BY OTHERS)

PROP NET & 21 DUCTS (By Others)

EXIST 2" CONDUIT

36+14 B LT. ~~39'~~ 38'
CONST M.H
INV. ELEV. IN ~~103.3~~* 102.8
INV. ELEV OUT ~~102.9~~* 102.3
EXIST. GR. ELEV 123.0±

36+14 B LT - 36+14 B RT.
CONST. 76'x30" RCSP, 3000 D

36+14 B
CONST. 16' 12GSP STUB PLUGGED
INV. EL. 109.55

FERRY ST.

LIMIT OF CONSTRUCTION

1 @M.H.
2 @M.H.
3 @M.H.
4 @M.H.
5 @M.H.
6
7
8
9
10
11
12
13
14
15

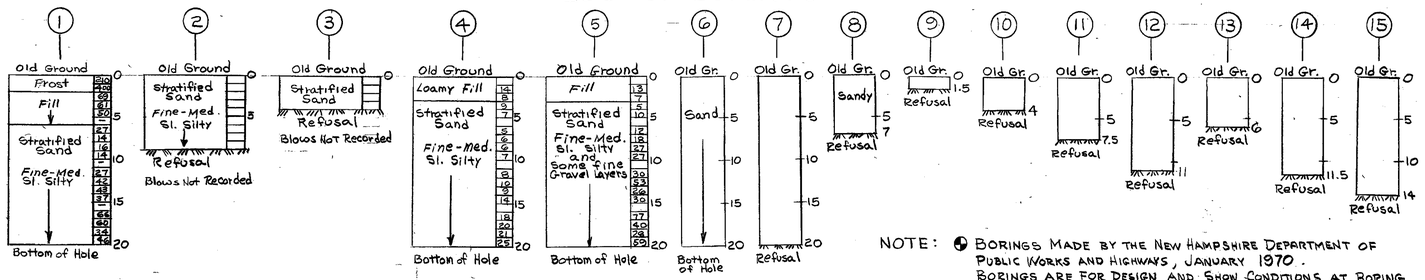
NOTES

~~*INVERT ELEVATIONS INDICATED ARE FOR BIDDING PURPOSES, AND SHOULD NOT BE USED FOR CONSTRUCTION. FINAL INVERT ELEVATIONS WILL BE FURNISHED FOR CONSTRUCTION BY THE ENGINEER.~~
~~IT IS ANTICIPATED THAT FINAL INVERT ELEVATIONS MAY VARY + OR - 0.5 FROM INVERTS SHOWN.~~
~~SEE "SPECIAL PROVISIONS" FOR HUDSON SEWER WORK.~~

INVERT ELEVATION REVISIED. SEE SEWER PROFILE SHEET # 11.A

FOR SUMMARY OF INTERCEPTOR SEWER BID ITEMS SEE SHEET NO. 14

LOG OF BORINGS



NOTE: NO EVIDENCE OF GROUND WATER WAS NOTICED DURING SOIL INVESTIGATIONS.

NOTE: ⊕ BORINGS MADE BY THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, JANUARY 1970. BORINGS ARE FOR DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY AND DO NOT NECESSARILY INDICATE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.

500 8-67

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	6-A	111

Limits of construction. This contract (435 ft.±)

Existing 10" Sewer to remain in service

Future 66" R.C. Sewer

Paved Rd.

Exist. 42" Sewer to remain in service

MATCH LINE — STA. 53+94 SHEET NO. 5.

P.C. Sta. 54+12

Δ = 19° R = 1000

Pt. "1"

Flood Protection Dike

Exist. 36" Sewer

S.M.H.

2-36" Conc. drains, Inv. 12.52 (Abandoned)

B-20

Future const. by others

P.C. Sta. 59+98

P.T. Sta. 57+44

Dirt Rd.

Pt. "2"

Fill Area Limits

Garage 60+85

Sill El. 24.08

Δ = 5° R = 1000

P.T. Sta.

Paved area

Car Wash Sill 24.34

Wood fence

Provide 66" R.C. precast cap. See specifications

New GG" R.C. Sewer

Exist. 54"x40" Brick Sewer To remain in service.

M.H. Sta. G 5+05 Type "A" See details Sht. No. 16

EAST HOLLIS ST. (Rt. 111)

Exist. 6" Water

Exist. 6" Gas

Paved Parking Area

Sign

Gravel area

Pt. "A"

Gas fill

Shell Gas Station

Bit. Conc.

Pipe crossing see detail Sheet No. 9

New 24" R.C. Sewer See sheet no. 9 for limits.

Granite Curb

No. 178 Sill 26.97

BRIDGE ST.

Existing 18" Sewer To remain in service

Exist. 12" Gas

Exist. 6" Gas

Exist. 6" Gas

Sta. G 4+34 GG" to 24" Y branch See: Det. Dwg. #9

B-21

Exist. 8" Water

6" Dirt Rd.

Exist. 2" Gas

12'x4' Conc. box shutoff

Fountain

Provide 66" R.C. precast plug see specifications

Future GG" R.C. Sewer

PLAN

Scale: 1" = 40'

Limit trench width to 10 ft wide, 1 ft over pipe

Approximate Proposed finished surface see Road Profiles

Approximate Exist. ground surface

Exist. ground surface

Exist. 6" Gas

Exist. 12" Gas

Exist 6" Gas

Exist 8" water

Exist. 6" water

18" Sewer

Reinf. concrete Cradle Support See Detail Sheet No. 9

Reinf. concrete Cradle Support See Detail - Sht. No. 3

54" x 40" Brick Sewer

Bankrun gravel compacted in 6 in. layers see Detail Sheet No. 9

42" Sewer

10" Sewer

curve

Future construction by others

curve

Backfill with bankrun gravel compacted in 6" layers from GG" R.C. to bott. of exist. 54"x40" Sewer

Wood Sheeting to be left in place, below and 10 Ft each side of 54"x40" brick sewer. Limit trench width to 10 Ft. in sheeted section

Provide 66" R.C. precast cap see specifications

66" R.C. SEWER S = 0.00051

GG" R.C. SEWER S = 0.00051

Provide 66" R.C. Firm fine sand precast plug trace of gravel see specifications

Limits of Construction this contract See Sheet No. 9 for Limits of 24" R.C. Pipe

6	Firm fine sand	
4	Loose loamy sand	
5	Firm fine sand, trace of loam	
24	Hard fine sand, trace of clay	
7	Firm medium sand	
2	Loose loamy sand	
3	Loose fine sand, trace of loam	
4	Firm fine sand	
10	Firm medium sand, trace of gravel	
11	Firm coarse sand & gravel	
13	Firm fine sand, trace of gravel	

Inv. El. 0.67

Inv. El. 0.69

Inv. El. 0.79

Inv. El. 1.00

Inv. El. 1.23

Inv. El. 1.36

53+94 54+12 54+42 STA 58+65 59+98 60+85 61+37 63+05 65+72

ELEVATION CITY OF NASHUA DATUM

30 20 10 0 -10

PROFILE

Scale: Hor. 1" = 40' Vert. 1" = 4'

Note: Elevations on City of Nashua Base To convert to USGS elev. add 30.47

NOTE:

1. Sewer construction Drawings for Nashua sewer work consist of sheet Nos. 6, 9, & 16 of 16.
2. Sewer stations refer to stations established for future complete sewer project.
3. For Legend and General Notes pertaining to Sewer Drawings See Sheet No. 16.

CITY OF NASHUA, NEW HAMPSHIRE
BOARD OF PUBLIC WORKS
SEWAGE WORKS IMPROVEMENTS
NORTH MERRIMACK RIVER INTERCEPTOR - I

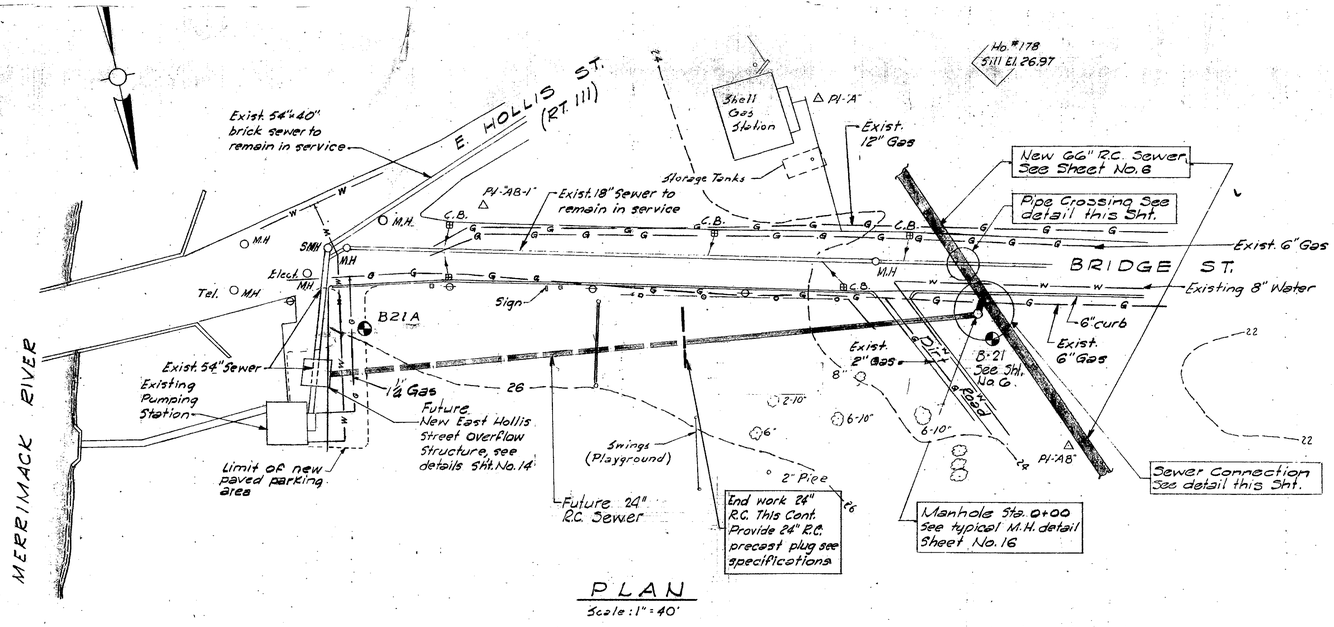
US 28(17) G.I.B. 1.1

Date	Ch'k'd.	Revision
10/24/68	WEM	Revised for Highway Construction

Drawn by: B.M.G.
Checked by: WEM
Approved by: JEC
Date: Dec. 1968
Scale: As noted

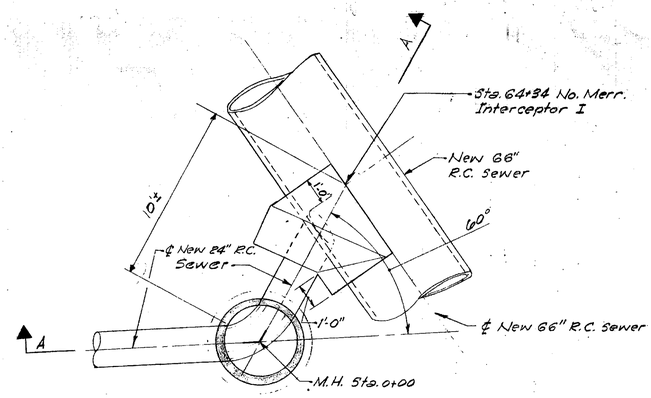
CAMP, DRESSER & McKEE
Consulting Engineers
Boston, Mass.

SHEET NO. 6 of 16

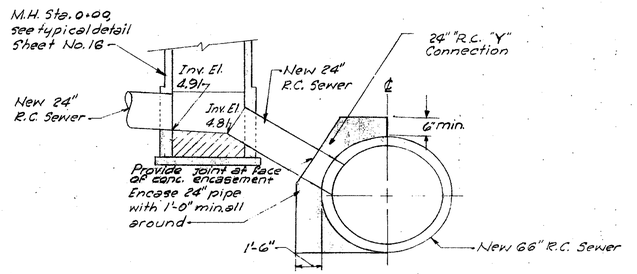


PLAN

Scale: 1" = 40'



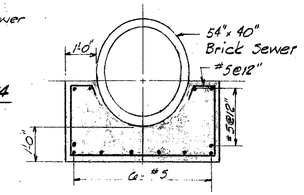
PLAN



SECTION A-A

SEWER CONNECTION 66" R.C. @ STA. 64+34

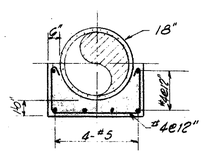
Scale: 1/8" = 1'-0"



PIPE CRADLE DETAIL

(54"x 40" @ EAST HOLLIS ST.)

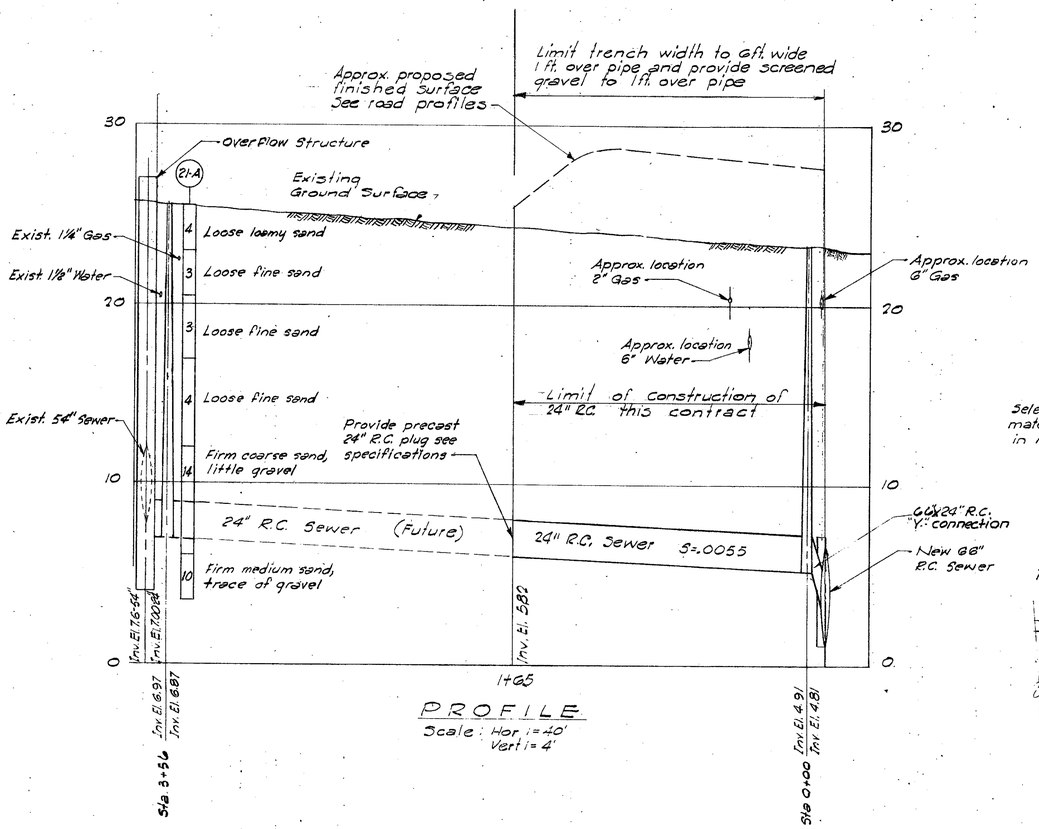
N.T.S.



PIPE CRADLE DETAIL

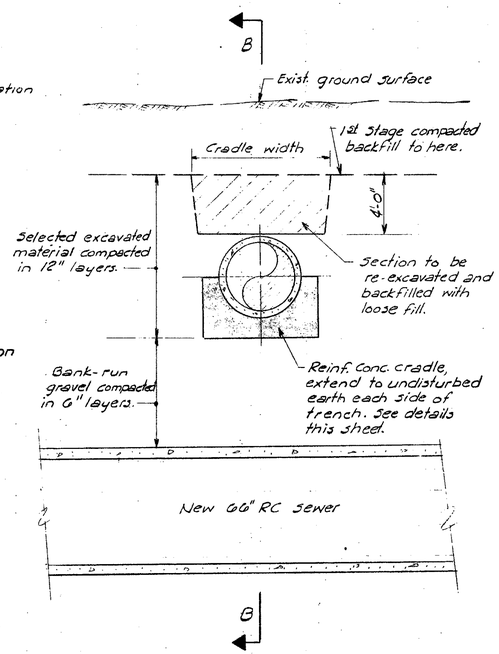
(18" @ BRIDGE ST.)

N.T.S.



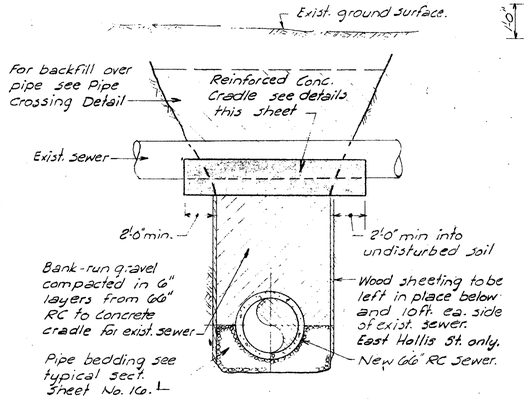
PROFILE

Scale: Hor. 1" = 40'
Vert. 1" = 4'



PIPE CROSSING DETAIL

N.T.S.



SECTION B-B

N.T.S.

CITY OF NASHUA, NEW HAMPSHIRE
BOARD OF PUBLIC WORKS
SEWAGE WORKS IMPROVEMENTS
NORTH MERRIMACK RIVER INTERCEPTOR-I

BRIDGE STREET STA. 0+00 TO STA. 3+56 AND MISCELLANEOUS DETAILS

US 28(17) 61C 111

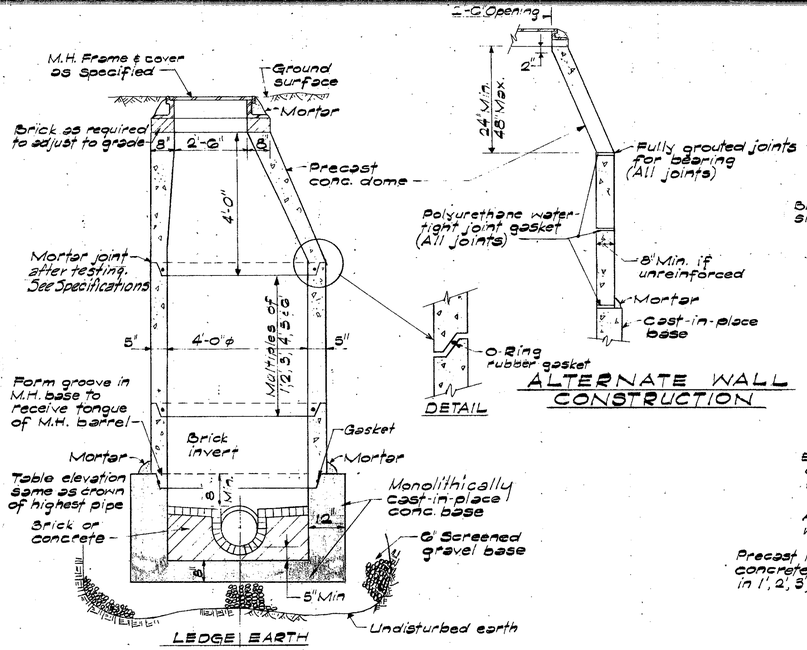
Date	Ch'k'd.	Revision
10/24/68	WEM	Revised for Highway Construction

Drawn by: EMS
Checked by: WEM
Approved by: JCL
Date: December, 1968
Scale: As Noted

CAMP, DRESSER & McKEE
Consulting Engineers
Boston, Mass.

SHEET NO. 9 of 16

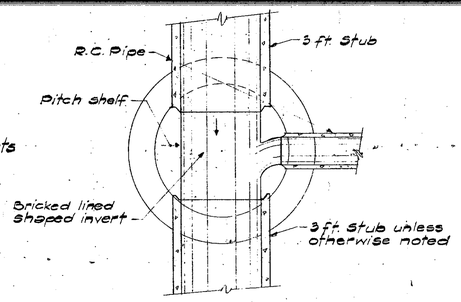
242-9439



PRECAST MANHOLE DETAILS

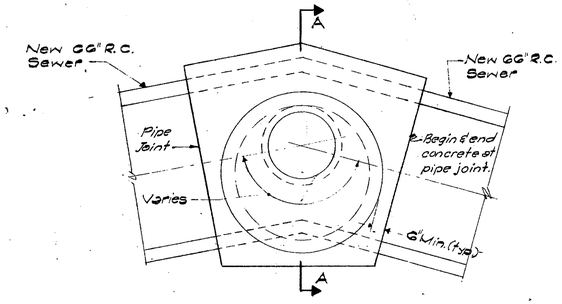
(See adjacent detail for alternate wall construction)
N.T.S.

ALTERNATE WALL CONSTRUCTION



TYP. PLAN OF M.H. FOR R.C. PIPE

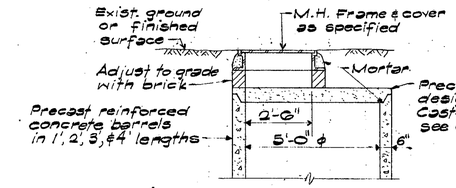
N.T.S.



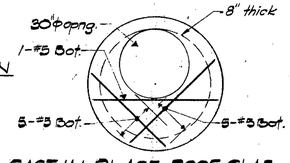
PLAN

GENERAL NOTES

1. Plan and Topography from surveys made by Camp, Dresser & McKee, February-April 1968.
2. Manhole locations are approximate and in some cases may be altered to minimize pipe cutting or for other approved reasons.
3. The location of pipes and other underground structures or of property lines shown on these plans are not warranted to be exact nor is it warranted that all underground structures and pipes are shown.
4. All elevations refer to the City of Nashua Datum. For elevations on U.S.G.S. datum add 90.47 feet.
5. Boring logs are shown on the profiles.
6. See Sheet No. 16 for miscellaneous details
7. The City will aquire easements across private property
8. Underground utilities to houses and buildings not shown.

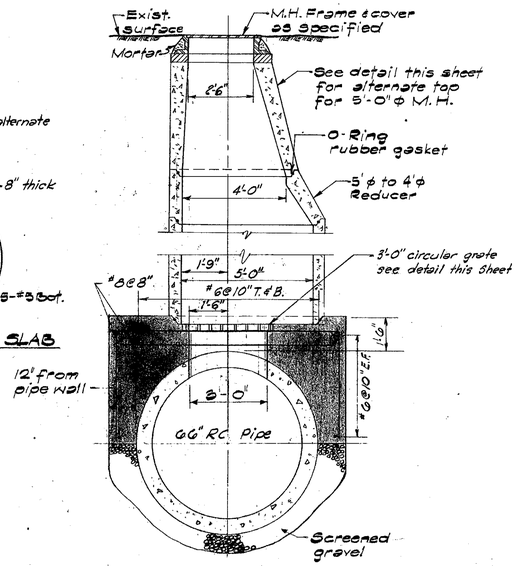


ALTERNATE TOP SECTION FOR TYPE "A" M.H.



CAST-IN-PLACE ROOF SLAB

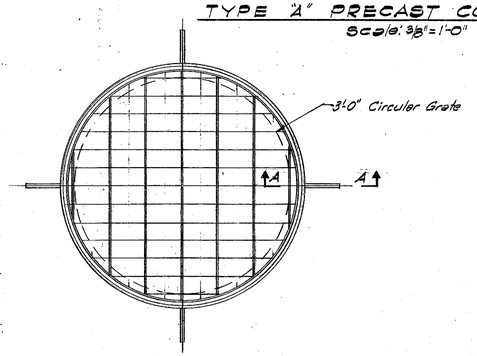
N.T.S.



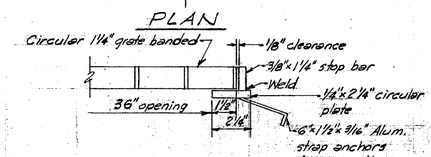
SECTION A-A

TYPE "A" PRECAST CONCRETE M.H.

Scale: 3/8" = 1'-0"



PLAN

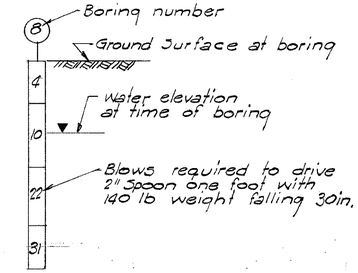


SECTION A-A

CIRCULAR GRATE DETAILS

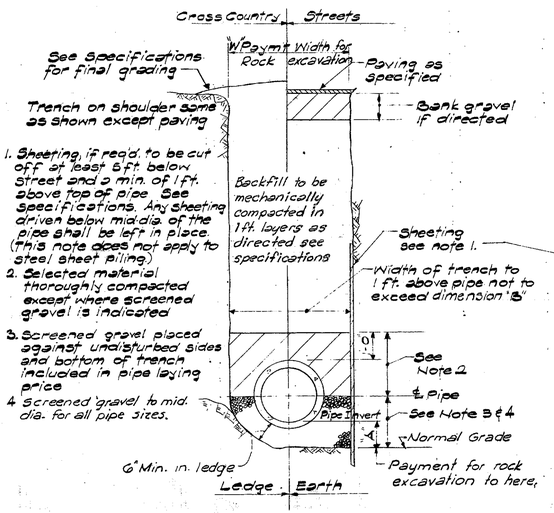
LEGEND

- New Storm Drains, or Sanitary Sewers
- Exist. Sanitary Sewer
- Exist. Storm Drain
- Exist. Water, hydrant, gate valves,
- G — Existing Gas.
- UGE — Underground Electric
- Exist. Catch Basin
- SB — Stone Bound
- Pole
- Wire Fence
- Chain Link Fence
- Stone Wall
- Edge of Woods
- Tree
- ▽3-8 Survey Point
- C.I. Cast Iron
- R.C. Reinforced Concrete
- V.C. Vitrified Clay
- C.M. Corrugated Metal
- B-7 Indicates location and number of Boring.

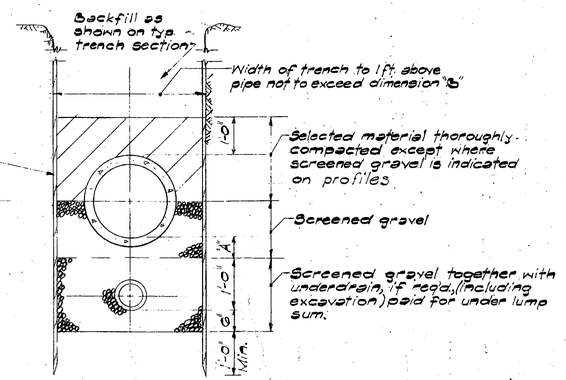


TYPICAL BORING LOG

TABLE			
Pipe Size	"A"	"W"	"B"
8"&10"	0.7	3.0	Dimension "B" where limited is indicated on pipe line profiles
24"	0.7	4.5	
66"	1.4	9.0	



TYPICAL TRENCH SECTION



Note: If underdrains are reqd. in rock, additional rock excavation will be directed and dimensions established by the Engineer. All other costs to be paid for under lump sum for Drainage

TRENCH UNDERDRAIN DETAIL

Date	Ch'k'd.	Revision
10/24/68	WEM	Added Grate Details

CITY OF NASHUA, NEW HAMPSHIRE
BOARD OF PUBLIC WORKS
SEWAGE WORKS IMPROVEMENTS
NORTH MERRIMACK RIVER INTERCEPTOR I

MISCELLANEOUS DETAILS

US 28(17) GID

STEEL SCHEDULE

SIGN POSTS FOR ITEM NO. 615.21

IDENT. NUMBER	SIZE	NUMBER REQ'D.	LENGTHS L	C	R	SPACING ON CENTER

ALL SIGNS ITEM 615.21 NOTED ABOVE SHALL BE ERECTED A MINIMUM OF 6' BEYOND THE EDGE OF THE BREAK OF SHOULDER TO THE NEAREST EDGE OF SIGN.

SEE TABLE STANDARD SHEET NO. 3 FOR FOOTING DEPTHS.

BREAKAWAY STEEL SCHEDULE

SIGN POSTS FOR ITEM NO. 615.211

IDENT. NUMBER	SIZE	NUMBER REQ'D	* LENGTHS L	C	R	SPACING ON CENTER

* ESTIMATED SIGN POST LENGTHS ABOVE GROUND.

ALL SIGNS ITEM 615.211 NOTED ABOVE SHALL BE ERECTED A MINIMUM OF 7' ABOVE EDGE OF PAVEMENT TO BOTTOM OF SIGN AND THE INSIDE EDGE OF SIGN POSITIONED A MINIMUM OF 20' BEYOND BREAK OF SHOULDER UNLESS OTHERWISE NOTED.

SEE STANDARD SHEET NO. 3A, FOOTING DEPTHS AND STUB PROJECTION.

ALUMINUM TUBING SUMMARY

IDENT.	NO. POSTS	DIA.	DIA.	DIA.
GA-1	2		4"	
GA-2	3		4"	
GA-3	2		4"	
GA-4	3		4"	
GA-5	2		4"	
M-2-2	2		4"	
R-3-1	1	3"		
R-3-2	1	3"		
R-4-7	2		4"	
R-5-1, R-5-4	1		4"	
W-4-1	2		4"	
RTE. MARKER ASSEMBLIES	1 PER. ASSEMBLY		4"	
		3" DIA.	4" DIA.	5" DIA.
TOTAL LIN. FT.		128	687	

NOTE:

3" DIA. = 1/8" WALL THICKNESS
4" DIA. = 1/8" " "
5" DIA. = 3/16" " "

TUBING SHALL BE ALUM. A.S.T.M. B221, ALLOY 6061-T6 OR 6063-T6.

DELINEATOR SUMMARY

ITEM NO.	615.41	615.42
DELINEATOR W/POST	QUANT.	QUANT.
CRYSTAL 3"		
AMBER 3"		30

LEDGE TRENCH EXCAV. R *

ITEM NO.	ESTIMATED CU. YDS.
206.2	

* FOR ITEMS 615.21 THRU 615.23

SIGN COVERS (APPLIED)

ITEM NO.	SQ. FT.	NO. COVERS
515		

PROTECTION FOR OVERHEAD STRUCTURES

IDENT. NO.	ITEM NO.	751.2		606.2213	
	ITEM	BEAM GRD. RAIL INCL. TERMINAL SECTIONS		BOX BEAM GUARD RAIL	
	STANDARD NO.	GR-1B		SEE STD. SHT.	
	UNIT	LIN. FT.		LIN. FT.	
	LOCATION	LT.	RT.	LT.	RT.
	TOTAL				

ANCHORAGES FOR BEAM GUARD RAIL

ITEM NO.	761.1	
UNIT	EACH	
LOCATION	LT.	RT.
TOTAL		

SIGN AREA SUMMARY

ITEM NO.	615.21	615.211	615.22	615.23	615.3
SHEET NO.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.
63			108.5	44.0	
64				176.5	
65				32.0	
SUB TOTAL			108.5	252.5	
ESTIMATED			1.5	0.5	
TOTAL			110.0	253.0	

OVERHEAD SIGN SUMMARY

ITEM NO.	ITEM	UNIT
G15.19	WOA-1 & 2	1
G15.191	WOA-3	1

ESTIMATED QUANTITIES-OVERHEAD STRUCTURE BASES

ITEM NO.	206.1	206.2	520.1	544
ITEM	COMMON STRUCT. EXCAVATION	ROCK STRUCT. EXCAVATION	CONCRETE CL. A	REINF. STEEL
UNIT	CU. YDS.	CU. YDS.	CU. YDS.	LBS.
	*20	—	*5.0	*350

* NOT A ITEM TOTAL

COMPUTED BY NELSON DATE 8-27-69
CHECKED BY HARRISON DATE 8-28-69

SIGN PROJECT US 28 (17)

SHEET 62 OF 111

1500—8/63

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POST. PER SIGN	TEXT	TEXT DIMENSIONS LETTER HEIGHT * U.C.	LETTER HEIGHT * L.C.	LETTER HEIGHT * CAPS.	RTE. MKR. OR SHIELD	ARROW	NUMERAL	NO. SIGNS REQ'D.	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	CONST. PROJECT A PART OF
615.22	GA-1	2'-6"	6'	2	↖ RTES 3A-102-111 / TO CROWN ST. ↑			4" / 4"		6" @ 60° / 6"	4"	1	15.0	15.0	US 28 (17)
"	GA-2	5'	7'-6"	3	3-A NORTH 102 EAST 111 EAST / FERRY ST.			4" / 4"	24"	6" @ 60°	12"	1	37.5	37.5	"
"	GA-3	4'	5'	2	3-A SOUTH / CENTRAL ST. ↗			4" / 4"	24'	6" @ 60°	12"	1	20.0	20.0	"
"	GA-4	3'	7'	3	↑ LOCAL TRAFFIC / TO RTES. 102-111 → / NASHUA →			4" / 4" / 4"		6" / 6" / 6"	4"	1	21.0	21.0	"
"	GA-5	5'	5'	2	3-A SOUTH / TYNGSBORO LOWELL ←			4" / 4" / 4"	24"	6" X 18"	12"	1	25.0	25.0	"
615.19	WOA-1	6'-6"	8'-6"		102 111 / E. HOLLIS ST. ↖			8"	24"	8" @ 60°	12"	1	55.3	55.3	"
"	WOA-2	4'	7'-6"		BRIDGE ST. ↑			8"		8"		1	30.0	30.0	"
615.191	WOA-3	5'	10'		102 ↵ 3-A ↑ 111 ↔ / ← NASHUA			8"	30"	6" / 8"	10"	1	50.0	50.0	"

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POST. PER SIGN	TEXT	TEXT DIMENSIONS LETTER HEIGHT * U.C.	LETTER HEIGHT * L.C.	LETTER HEIGHT * CAPS.	RTE. MKR. OR SHIELD	ARROW	NUMERAL	NO. SIGNS REQ'D.	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	CONST. PROJECT A PART OF
M-2-2	615.23	4'	6'	2	3-A 102 111				18"	6" X 14" @ 60°	10"	1	24.0	24.0	US 28 (17)
** M-2-2	615.23	2'-6"	3'		111 ↑ / EAST			4"	18"	6" X 14"	10"	1	7.5	7.5	"
** "	"	2'-6"	5'		3-A NORTH ↖ 102 EAST			4"	18"	6" X 14" @ 45°	10"	1	12.5	12.5	"

LINE SEPARATORS WHERE USED SHALL BE SAME WIDTH AS BORDER.

ROUTE MARKERS SHALL BE BLACK CUT-OUT LETTERS ON HIGH INTENSITY SILVER BACKGROUND

SHEET SUMMARY

ITEM NO.	SQ. FT.
615.21	
615.211	
615.22	108.5
615.23	44.0
615.3	

* U.C. = UPPER CASE LETTERS
L.C. = LOWER CASE "
CAPS. = CAPITAL "

** TO BE ATTACHED TO SIGNAL MAST ARM. SEE PLAN SHEET NO. 73
SIGN HANGERS TO BE FURNISHED UNDER CONTRACT #2

COMPILED BY NELSON DATE 8-26-69
CHECKED BY HARRISON DATE 8-27-69

SUMMARY OF TRAFFIC SIGNS

SIGN PROJECT

SHEET NO.	TOTAL SHEETS
63	111

30-8-5-1 MODERN BLUE PRINT CO. 23230

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POSTS PER SIGN	TEXT	ARROW WIDTH	NUMERAL H'GHT.	CLUSTER SIZE	LETTER H'GT. CAPS.*	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	NO. SIGNS REQ'D. CONST.	NO. SIGNS REQ'D. PROJECT A PART OF				
615.23	R-1-1	30"	30"	1	STOP				10"	6.25							
"	R-1-2	48"	48"	2	YIELD				12"	8.00							
	R-1-2A	36"	36"	2					10"	4.50							
"	R-2-1A	60"	48"	2	SPEED LIMIT 60		16"		8" 8"	20.00							
"	R-2-1B	60"	48"	2	SPEED LIMIT 50		16"		8" 8"	20.00							
"	R-2-1C	60"	48"	2	SPEED LIMIT 40		16"		8" 8"	20.00							
"	R-2-1D	60"	48"	2	SPEED LIMIT 35		16"		8" 8"	20.00							
"	R-2-1E	60"	48"	2	SPEED LIMIT 25		16"		8" 8"	20.00							
"	▲ ER-2-1	60	48"	2	EXIT 30 M.P.H.		16"		8" 6"	20.00							
"	▲ ER-2-1A	60"	48"	2	EXIT 25 M.P.H.		16"		8" 6"	20.00							
"	R-2-5	36"	30"	1	SPEED ZONE AHEAD				8" 8" 8"	7.50							
"	R-3-1	30"	24"	1	NO RIGHT TURN				6" 6" 6"	5.00	25.0	5					
"	R-3-2	30"	24"	1	NO LEFT TURN				6" 6" 6"	5.00	15.0	3					
"	R-3-4	48"	36"	2	NO U TURN				8" 12" 6"	12.00							
"	R-4-1	30"	24"	1	DO NOT PASS				6" 6" 6"	5.00							

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POSTS PER SIGN	TEXT	ARROW WIDTH	NUMERAL H'GHT.	CLUSTER SIZE	LETTER H'GT. CAPS.	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	NO. SIGNS REQ'D. CONST.	NO. SIGNS REQ'D. PROJECT A PART OF				
615.23	R-4-4	60"	48"	2	KEEP RIGHT EXCEPT TO PASS				8" 8" 6" 6"	20.00							
"	R-4-7	48"	36"	2	KEEP →	12"			10"	12.00	96.0	8					
"	R-4-7A	36"	30"	1	RIGHT	6"			8"	7.50							
"	R-5-1	30"	36"	1	DO NOT ENTER				7" 7"	7.50	22.5	3					
"	R-6-3	48"	60"	2	TWO WAY TRAFFIC AHEAD				10" 10" 10"	20.00							
"	R-8-4	36"	48"	2	EMERGENCY STOPPING ONLY				6" 6" 6"	12.00							
"	R-10-1	60"	48"	2	KEEP OFF MEDIAN				8" 8" 8"	20.00							
"	R-10-2	30"	48"	2	ROAD CLOSED				8" 8"	10.00							
"	R-11-1	60"	60"	2	TRAFFIC ISLAND AHEAD				9" 9" 9"	25.00							
"	R-3-3	24"	24"	1	NO TURNS				6" 6"	4.00							
"	R-8-3	30"	24"	1	NO PARKING				5"D 5"C	5.00							
	● R-5-4	24"	36"	1	WRONG WAY				6" 6"	6.00	18.0	3					

* CAPS. = CAPITAL LETTERS

▲ BLACK ON YELLOW BACKGROUND

● WHITE ON RED BACKGROUND

ATT'N: RESIDENT ENGINEER

Prior to the erection of STOP and YIELD signs by the Contractor, the Engineer shall be notified so that the erection of these signs shall be duly recorded by the N.H.P.W. & H..

SHEET SUMMARY

ITEM NO.	SQ. FT.
615.23	176.5

COMPILED BY NELSON DATE 8-27-69

CHECKED BY HARRISON DATE 8-27-69

SUMMARY OF TRAFFIC SIGNS

SHEET NO.	TOTAL SHEETS
64	111

MODERN BLUE PRINT CO. 23230

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POSTS PER SIGN	TEXT	ARROW WIDTH	NUMERAL H'GHT.	CLUSTER SIZE	LETTER H'GT. CAPS.	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	NO. SIGNS REQ'D. CONST. PROJECT A PART OF
615.23	W-3-1	30"	30"	1	STOP AHEAD				6" 6"	6.25		
"	W-3-3	48"	48"	2	SIGNAL AHEAD				8" 8"	16.00		
"	W-4-1	48"	48"	2	MERGING TRAFFIC				8" 8"	16.00	32.0	2
"	W-5-1	54"	54"	2	ROAD NARROWS				8" 8"	20.25		
"	W-6-1	54"	54"	2	DIVIDED HIGHWAY				8" 8"	20.25		
"	W-6-2	54"	54"	2	DIVIDED HIGHWAY ENDS				8" 8" 8"	20.25		
"	W-14-1	48"	48"	2	SLOW				12"	16.00		
"	W-15-1	6'	12'	3	TEMPORARY EXIT 1 MILE		12"		SERIES "F" 12" 12" 12"	72.00		
"	W-16-1	6'	12'	3	WARNING ALL TRAFFIC MUST EXIT ½ MI. AHEAD		8"		SERIES "F" 8" 8" 8" 8"	72.00		

ITEM NO.	IDENT. NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	POSTS PER SIGN	TEXT	ARROW WIDTH	NUMERAL H'GHT.	CLUSTER SIZE	LETTER H'GT. CAPS.	SIGN AREA IN SQ. FT. NOM. AREA	SIGN AREA IN SQ. FT. TOTAL AREA	NO. SIGNS REQ'D. CONST. PROJECT A PART OF

SHEET SUMMARY

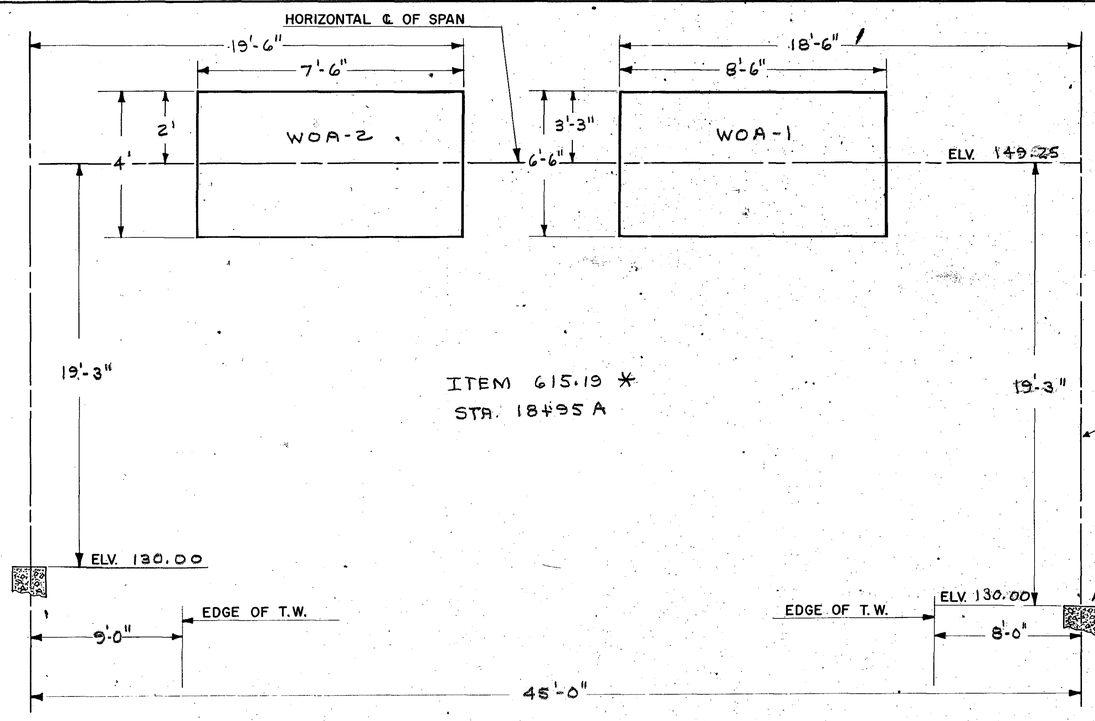
ITEM NO.	SQ. FT.
615.23	32.0

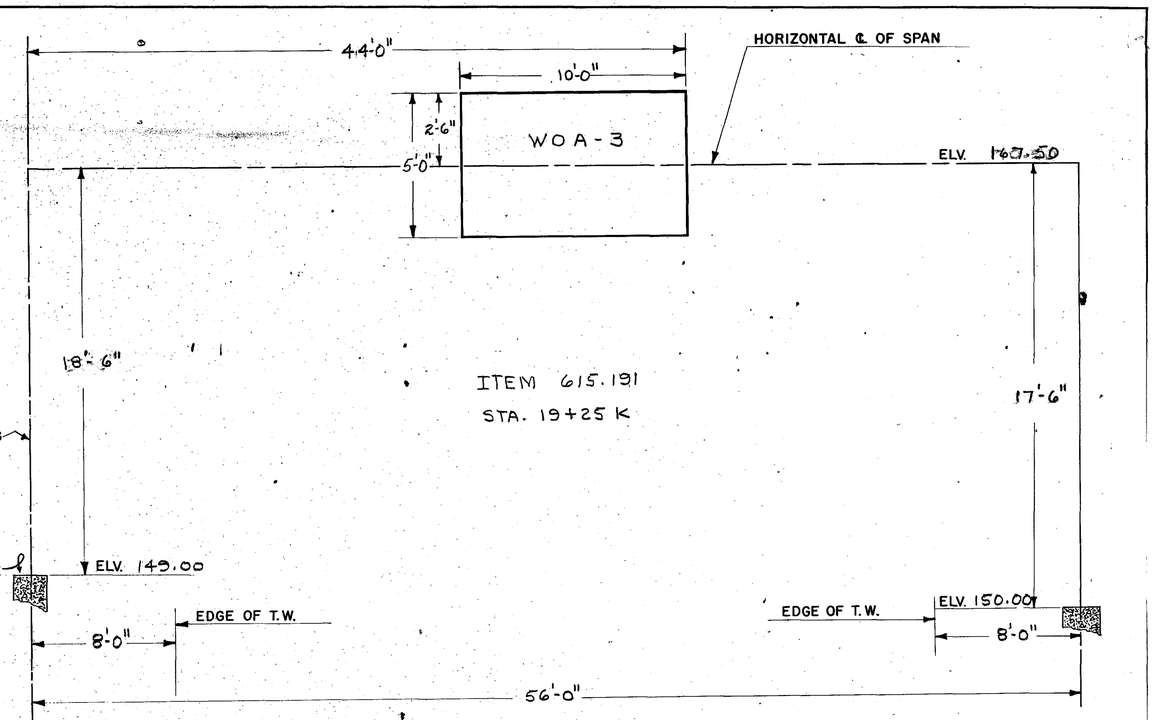
COMPILED BY NELSON DATE 8-27-69
CHECKED BY HARRISON DATE 8-27-69

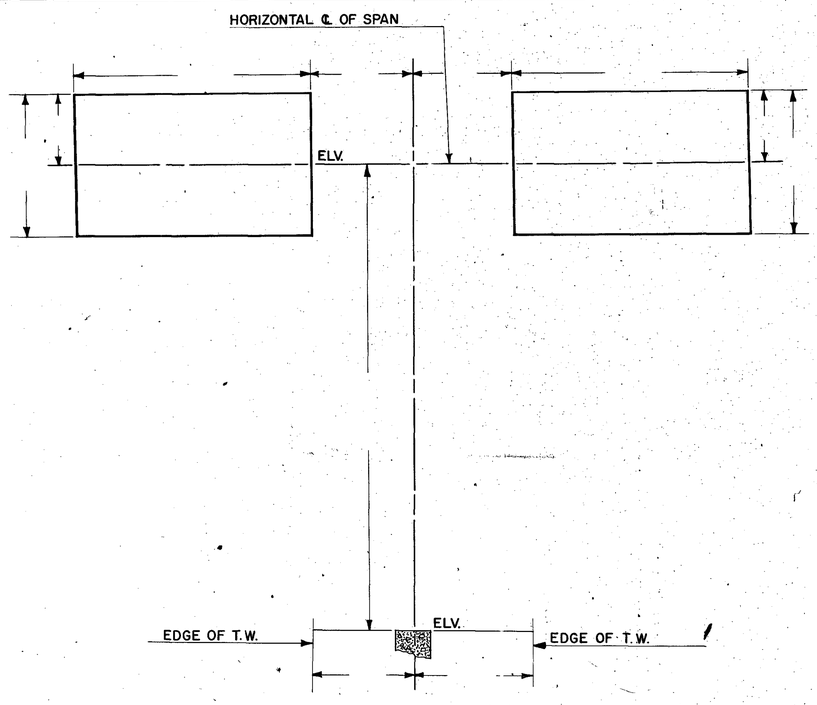
SUMMARY OF TRAFFIC SIGNS

SHEET NO.	TOTAL SHEETS
65	111

10-8-58 MODERN BLUE PRINT CO. 23230







ESTIMATED QUANTITIES FOR OVERHEAD STRUCTURE BASES

ITEM NO.	206.1	206.2	520.1	544
ITEM	COMMON STRUCT. EXCAVATION	ROCK STRUCT. EXCAVATION	CONC. CLASS A	REIN. STEEL
UNIT	CU. YDS.	CU. YDS.	CU. YDS.	LBS.
	* 20		*5.0	*350

* NOT A ITEM TOTAL

NOTE:

Signs shall be mounted tilted foward facing on coming traffic at an angle 5° from vertical.

Horizontal centerline of signs shall be fastened to the horizontal centerline of span sections with a minimum clearance of 16' to bottom edge of all signs.

WIND PRESSURE 30 LBS./SQ. FT.

Drawings not to scale.

* Sign is shown rear view as stationing increases.

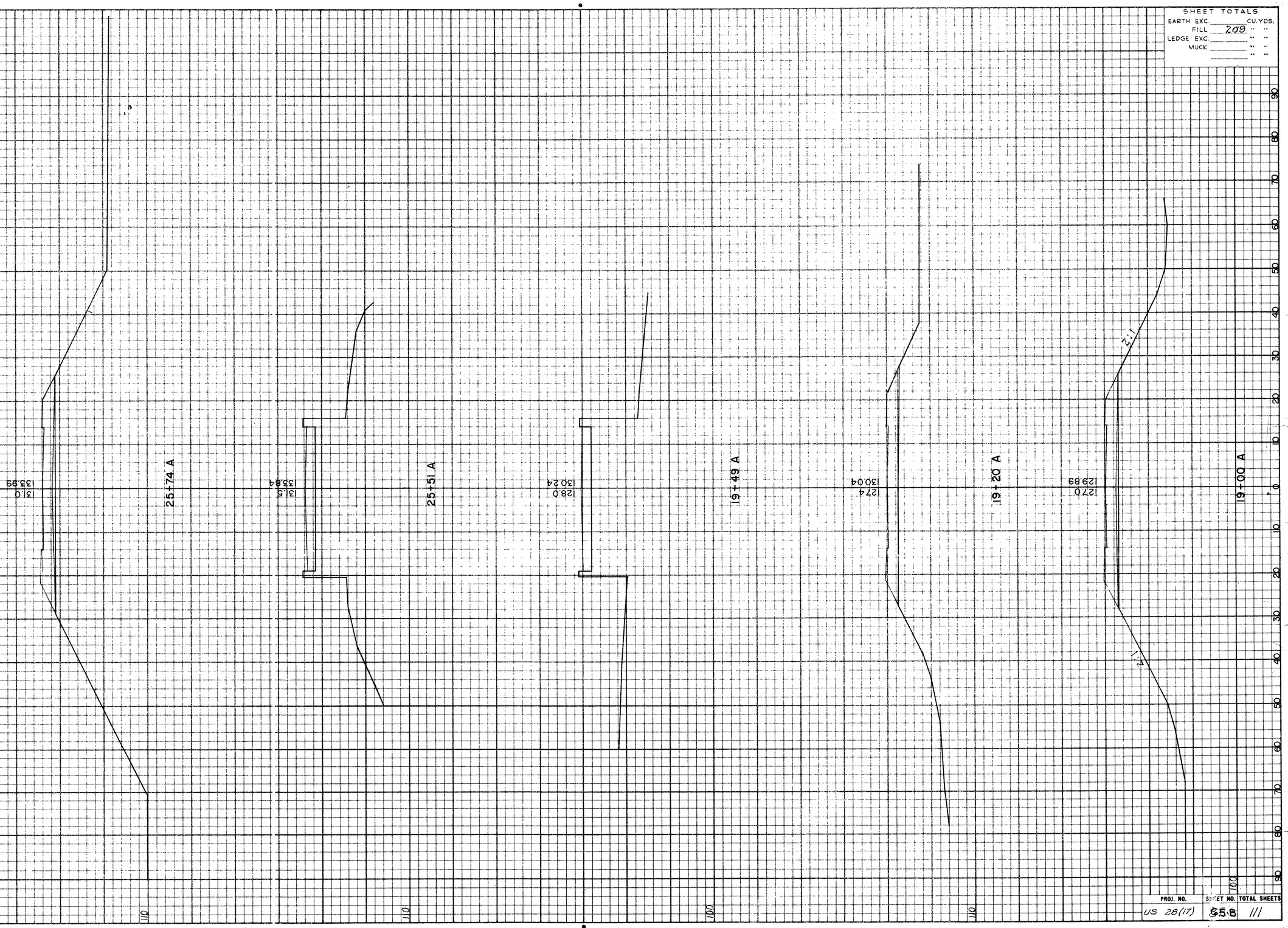
DATA FOR OVERHEAD STRUCTURE DESIGN

	BY	DATE	BY	DATE
DESIGNED	PCW	11-69	CHECKED	
DRAWN	PCW	11-69	CHECKED	

PROJ. NO.	SHEET NO.	TOTAL SHEETS
C-7721-C	65.A	11

SHEET TOTALS

EARTH EXC.		CU.YDS.
FILL	209	" "
LEDGE EXC.		" "
MUCK		" "
		" "



(USE BOTTOM LINES FIRST)

REVISIONS (AFTER PROPOSAL)			
NO.	DATE	STATION	DESCRIPTION

NOTEBOOKS

SECTIONS PLOTTED	P. KOBZA	DATE 2-3-69			
SECTIONS CHECKED	N. DOOLEY	" 2-3-69	BOOK NO.	"	PAGE NO. "
TEMPLATE PLOTTED	P. KOBZA	" 2-3-69		"	" "
TEMPLATE CHECKED	N. DOOLEY	" 2-3-69		"	" "
PLANIMETERED	A. KAZAN	" 5-2-69		"	" "
PLANIM. CHECKED	G. CONLY	" 5-6-69		"	" "
INKED	D. ESSIG	" 4 Mar 69		"	" "
CHECKED	A. DUNCAN	" 4 Sept 69		"	" "
SHEET APPROVED	J. PLAKIAS	DATE 5 Sept 69	BOOK NO.	"	PAGE NO. "

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	65B	111

198 M Ageproof Vellum

SHEET TOTALS
EARTH EXC. 1,144 CU.YDS.
FILL ... ..
LEDGE EXC ... ..
MUCK ... ..
... ..

20+09.09 · K = 43+14.00 · B

510 48.52

50

518 48.84

19 K

507 49.17

18 + 50 K

DESCRIPTION

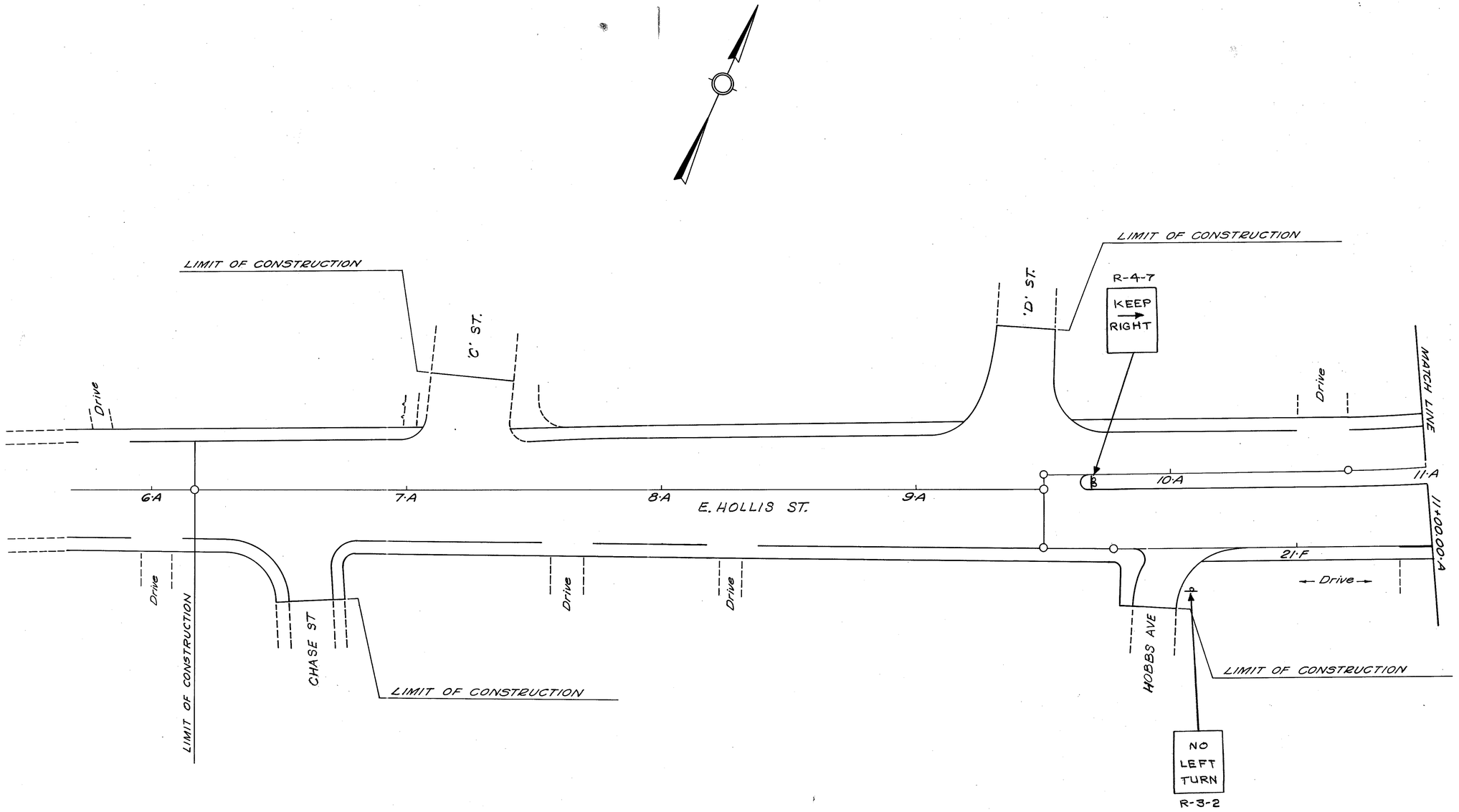
NO. DATE STATION STATION

		BOOK NO	PAGE NO
SECTIONS CHECKED	G Szabo	1-9-69	
TEMPLATE PLOTTED	R. KORDA	1-21-69	
TEMPLATE CHECKED	A. LAKE	1-27-69	
PLANIMETERED		2-12-69	
PLANIM. CHECKED	B. COMEY	2-13-69	
INKED	R. EISNOR	10 DAYS	
CHECKED	N. DODGE	9-5-69	
SHEET APPROVED	D. FERRARO	DATE 9-9-69	

PROJ. NO. US 28(17) | SHEET NO. 66 | TOTAL SHEETS 111

198 M Ageproof Vellum

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		



REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

	DATE	BOOK NO.	PAGE NO.
PLAN TRACED			
PLAN CHECKED	"	"	"
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	DATE	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	67	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		

MATCH LINE 15+50.00·D

LIMIT OF CONSTRUCTION

BANCROFT ST.

15·D

14·D

15+50.00·A

25+50.00·C

25·C

15·A

NO RIGHT TURN
R-3-1

24·C

23·C

13·D

22·C

MATCH LINE 25+60.00·B

MATCH LINE 25+50.00·F

Drive

25·B

25·F

E. HOLLIS ST.

MERGING TRAFFIC
W-4-1

14·A

24·B

24·F

#173

13·A

23·F

Drive

R-3-1
NO RIGHT TURN

R-3-2
NO LEFT TURN

RTES. 3A-102-111
TO CROWN ST.
GA-1

12·A

#169

22·F

Drive

R-4-7
KEEP RIGHT

Drive

12·D

'E' ST.

3·E

2·E

1·E

0·E

MATCH LINE 21+00.00·C

21·C

Drive

Drive

Drive

Drive

11·A

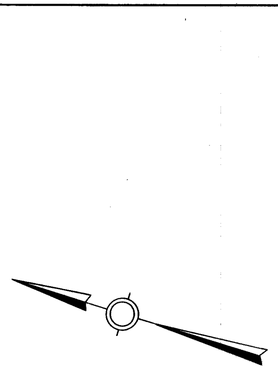
MATCH LINE 11+00.00·A

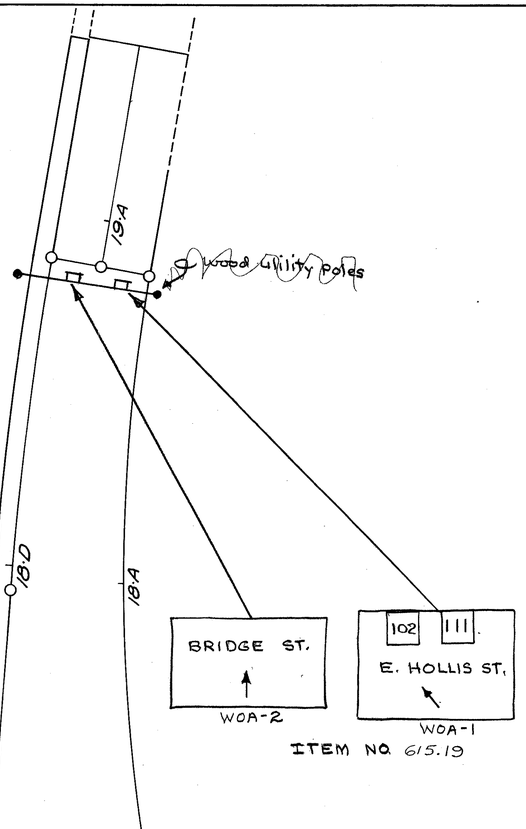
REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
	BOOK NO.	PAGE NO.	DATE
PLAN TRACED			
PLAN CHECKED	"	"	"
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	"	"	"

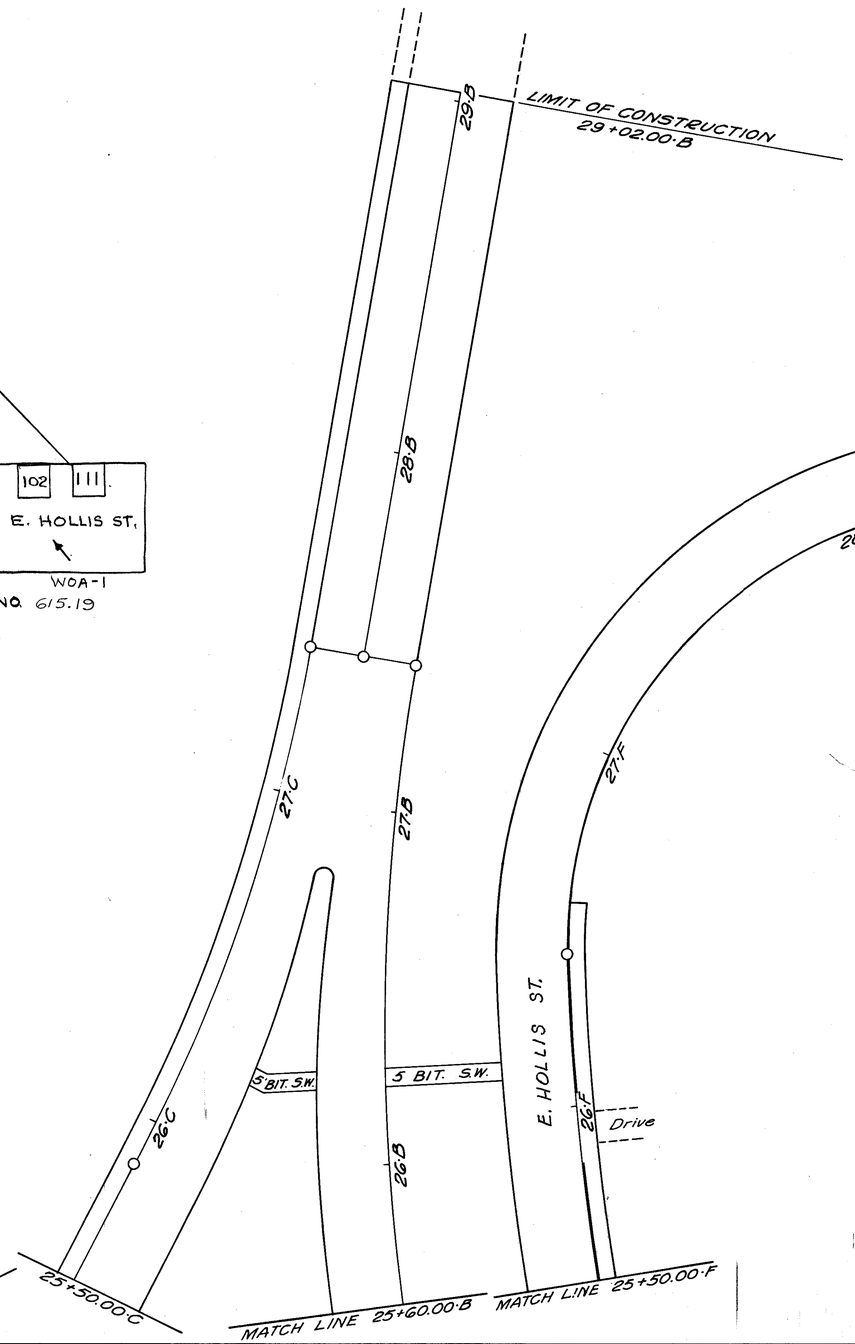
PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	68	111

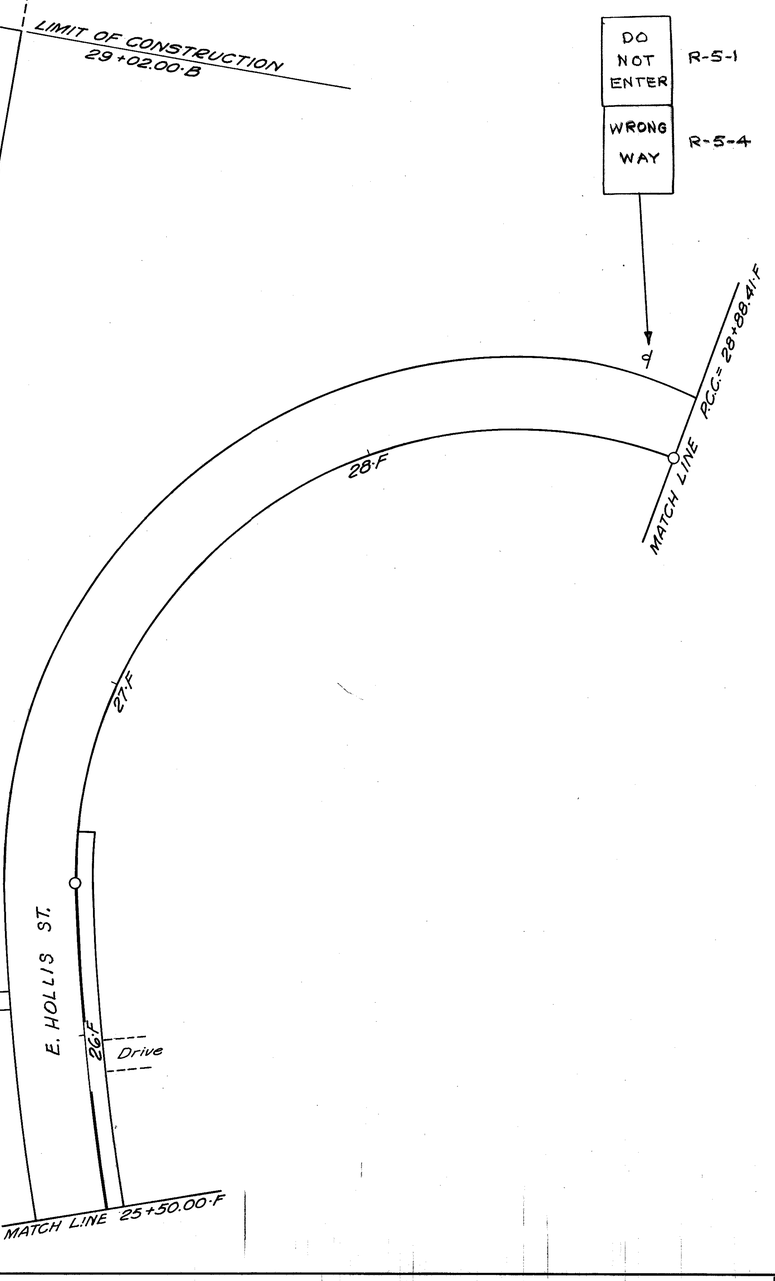
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		





ITEM NO. 615.19



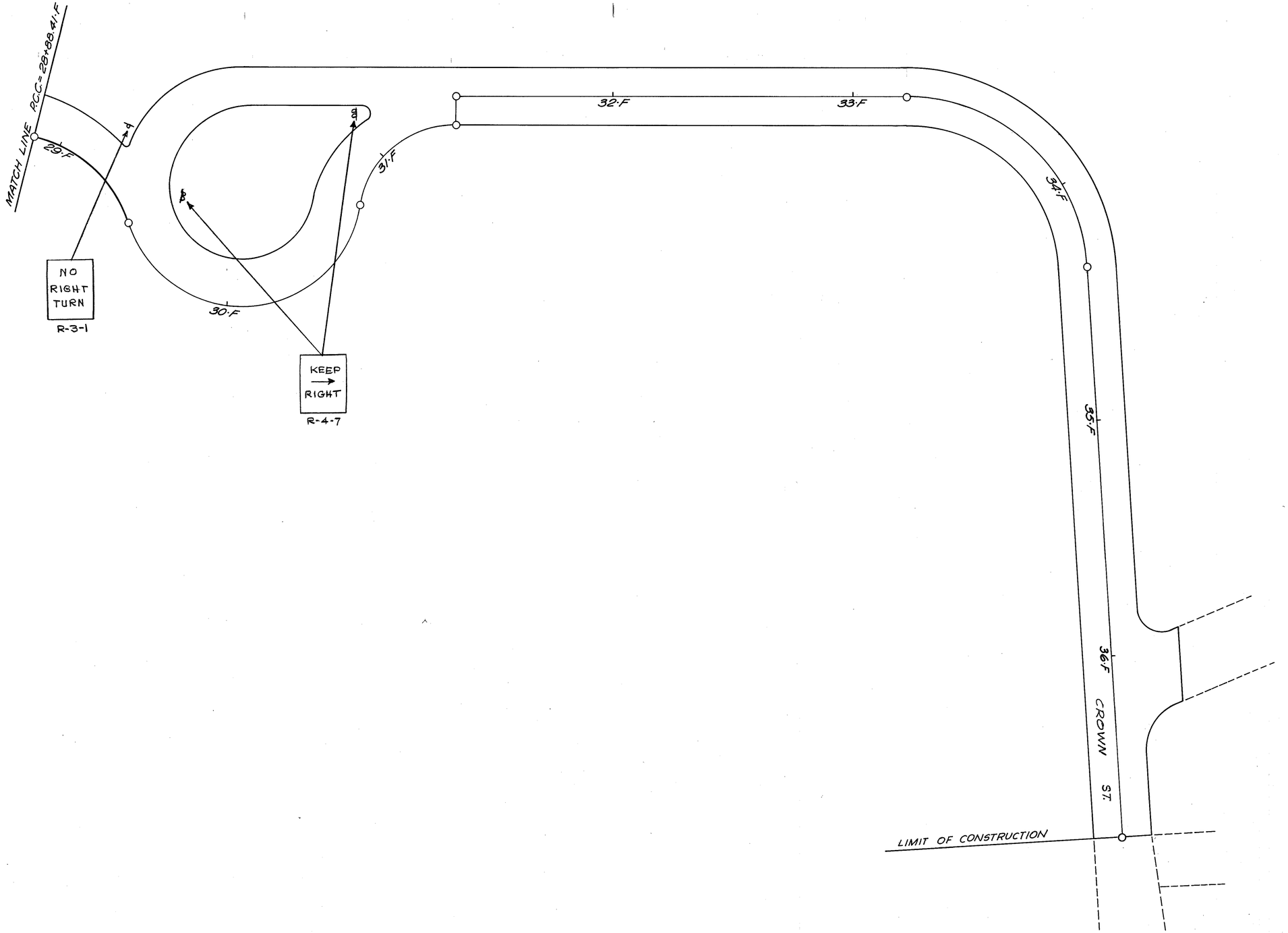


REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	STATION	STATION	DESCRIPTION	

NOTEBOOKS			
PLAN TRACED	DATE	BOOK NO.	PAGE NO.
PLAN CHECKED	"	"	"
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	DATE	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	69	115

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		



REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			DATE
BOOK NO.		PAGE NO.	
PLAN TRACED			"
PLAN CHECKED			"
PROFILE TRACED			"
PROFILE CHECKED			"
INKED			"
CHECKED			DATE

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	70	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		

MATCH LINE 27+00.00-A

MATCH LINE 37+50.00-B

FERRY ST.

CENTRAL ST.

Drive

Drive

LIMIT OF CONSTRUCTION

LIMIT OF CONSTRUCTION 34+45.00-B

R-3-1 NO RIGHT TURN

R-4-7 KEEP → RIGHT

DO NOT ENTER R-5-1

WRONG WAY R-5-4

3-A | 102 | 111
NORTH | EAST | EAST
FERRY ST.

GA-2

3-A SOUTH
CENTRAL ST.

GA-3

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

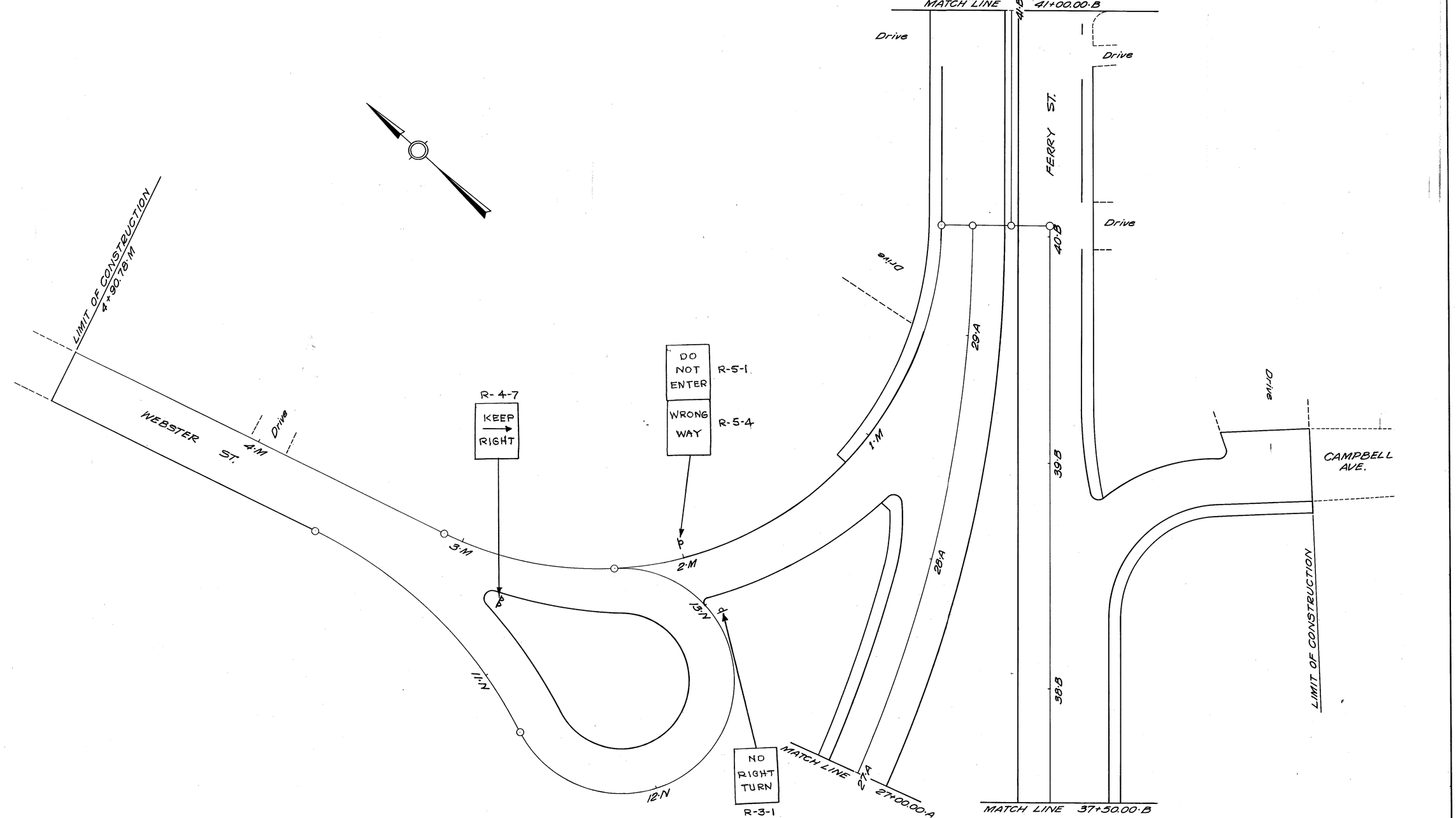
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

	DATE	BOOK NO.	PAGE NO.
PLAN TRACED			
PLAN CHECKED	"		
PROFILE TRACED	"	BOOK NO.	PAGE NO.
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	"	BOOK NO.	PAGE NO.
	DATE		

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	71	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		



REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)					
NO.	DATE	STATION		DESCRIPTION	

NOTEBOOKS		DATE	
BOOK NO.	PAGE NO.	PLAN TRACED	
" "	" "	PLAN CHECKED	"
" "	" "	PROFILE TRACED	"
" "	" "	PROFILE CHECKED	"
" "	" "	INKED	"
BOOK NO.	PAGE NO.	CHECKED	"

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	72	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		

MATCH LINE B-B

Drive

LIMIT OF CONSTRUCTION
10+74.44·L

M-2-2
3-A | 102 | 111

Drive

BAKER ST.

R-4-7
KEEP
RIGHT

Drive

Drive

9·L

DERRY RD.

8·L

Drive

MATCH LINE
B-B

10·L

M-2-2
3-A NORTH | 102 EAST

M-2-2
111 EAST

Drive

7·L

DD

R-4-7
KEEP
RIGHT

6·L

LIMIT OF CONSTRUCTION
46+81.20·B

LIBRARY ST

Drive

#22

Drive

41+00.00·B

41·B

42·B

43·B

20·K

44·B

45·B

46·B

FERRY ST.

MATCH LINE

Drive

Drive

CHASE ST.

Drive

Drive

Drive

Drive

Drive

SIGNAL MAST ARM
(BY OTHERS CONTRACT #2)

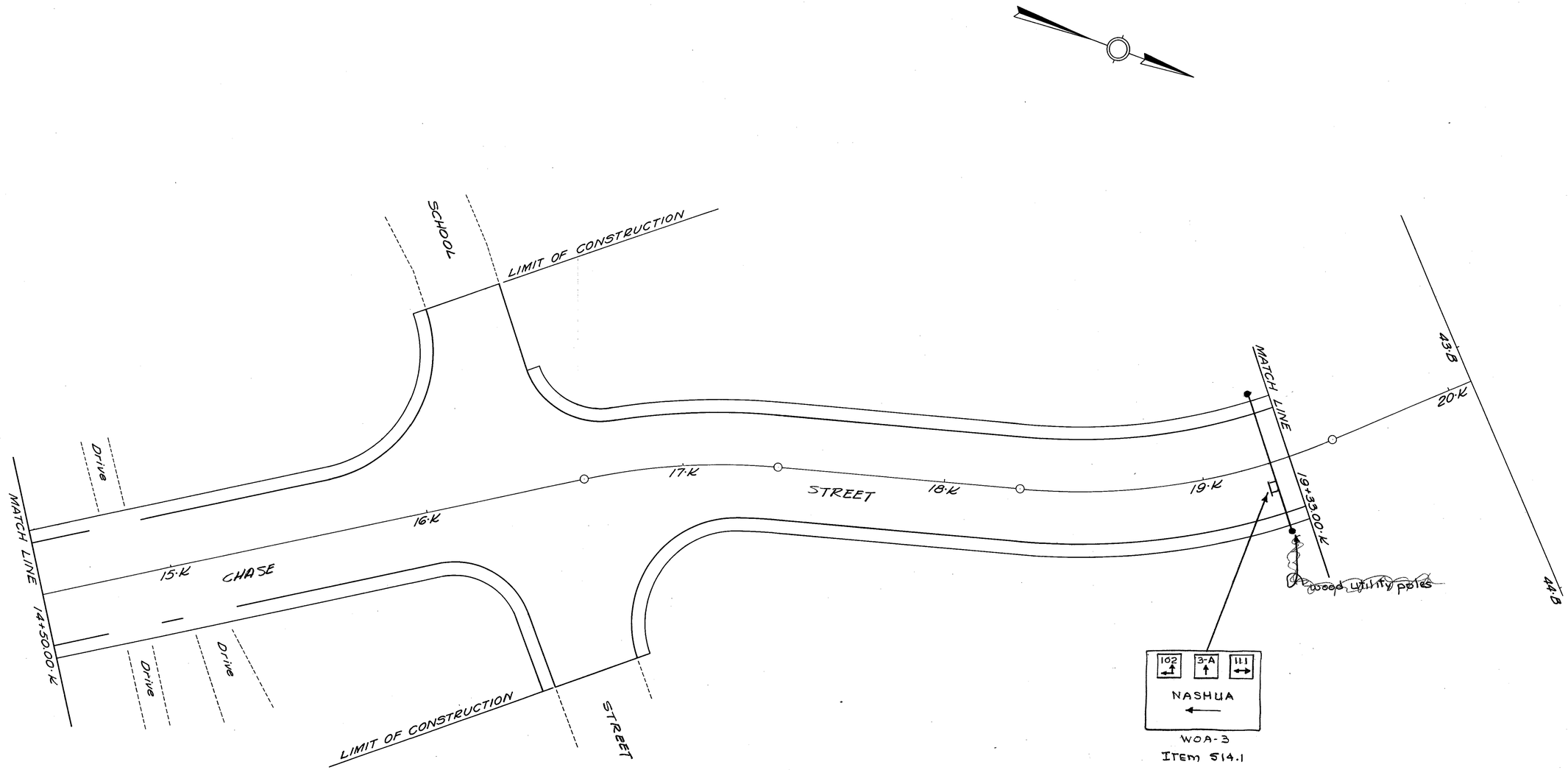
MATCH LINE 19+33.00·K

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
	DATE	BOOK NO.	PAGE NO.
PLAN TRACED			
PLAN CHECKED	"	"	" "
PROFILE TRACED	"	"	" "
PROFILE CHECKED	"	"	" "
INKED	"	"	" "
CHECKED	DATE	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	73	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		



WOA-3
Item 514.1

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

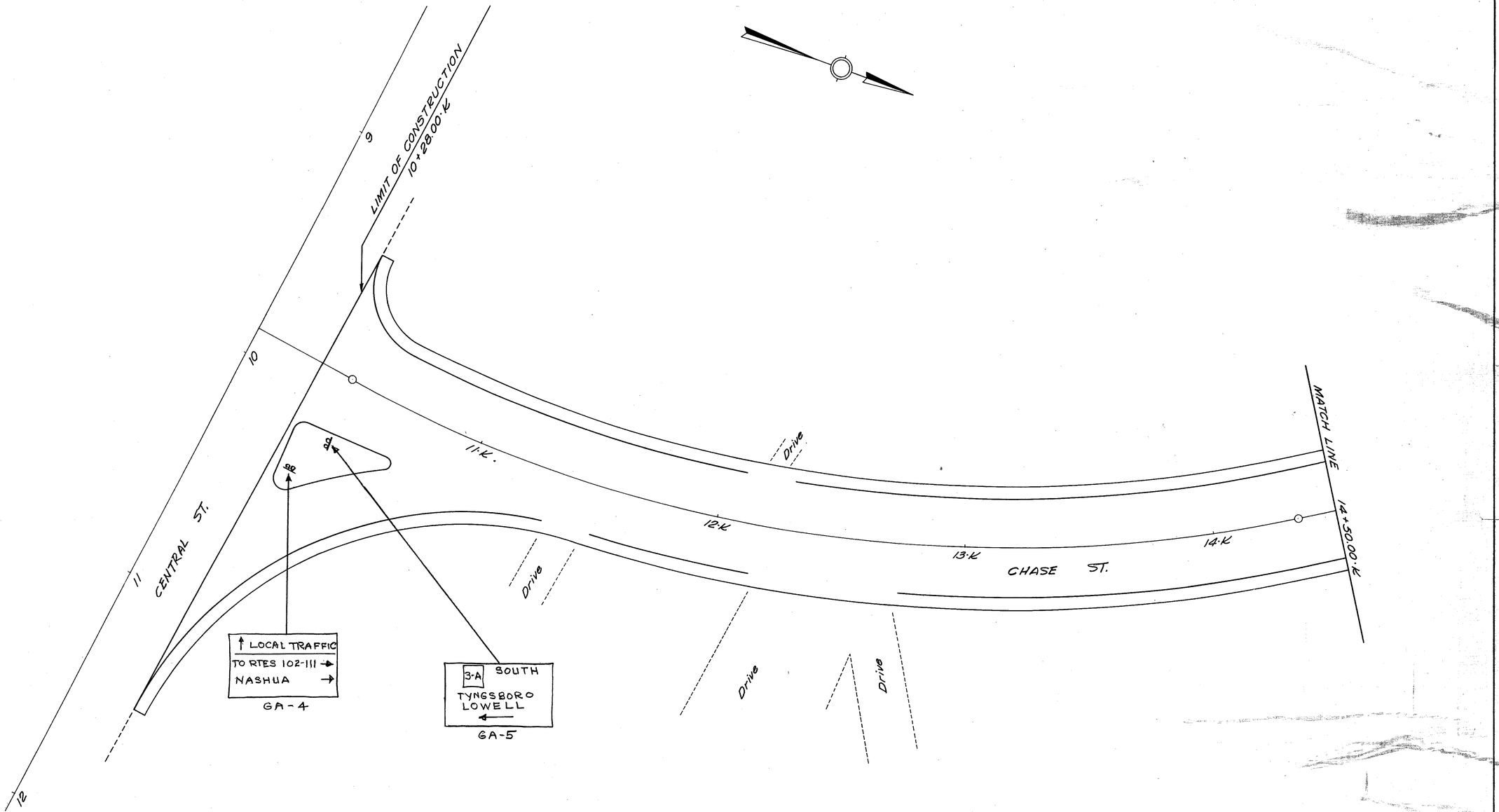
NO.	DATE	STATION	DESCRIPTION

NOTEBOOKS

	DATE	BOOK NO.	PAGE NO.
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PLAN CHECKED	"	"	"
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	DATE	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
US 28(17)	74	111

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.	US 28(17)		



REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

	DATE	BOOK NO.	PAGE NO.
PLAN TRACED			
PLAN CHECKED	"	"	"
PROFILE TRACED	"	"	"
PROFILE CHECKED	"	"	"
INKED	"	"	"
CHECKED	DATE	BOOK NO.	PAGE NO.

PROJ. NO	SHEET NO.	TOTA. SHEETS
US 28(17)	75-	111