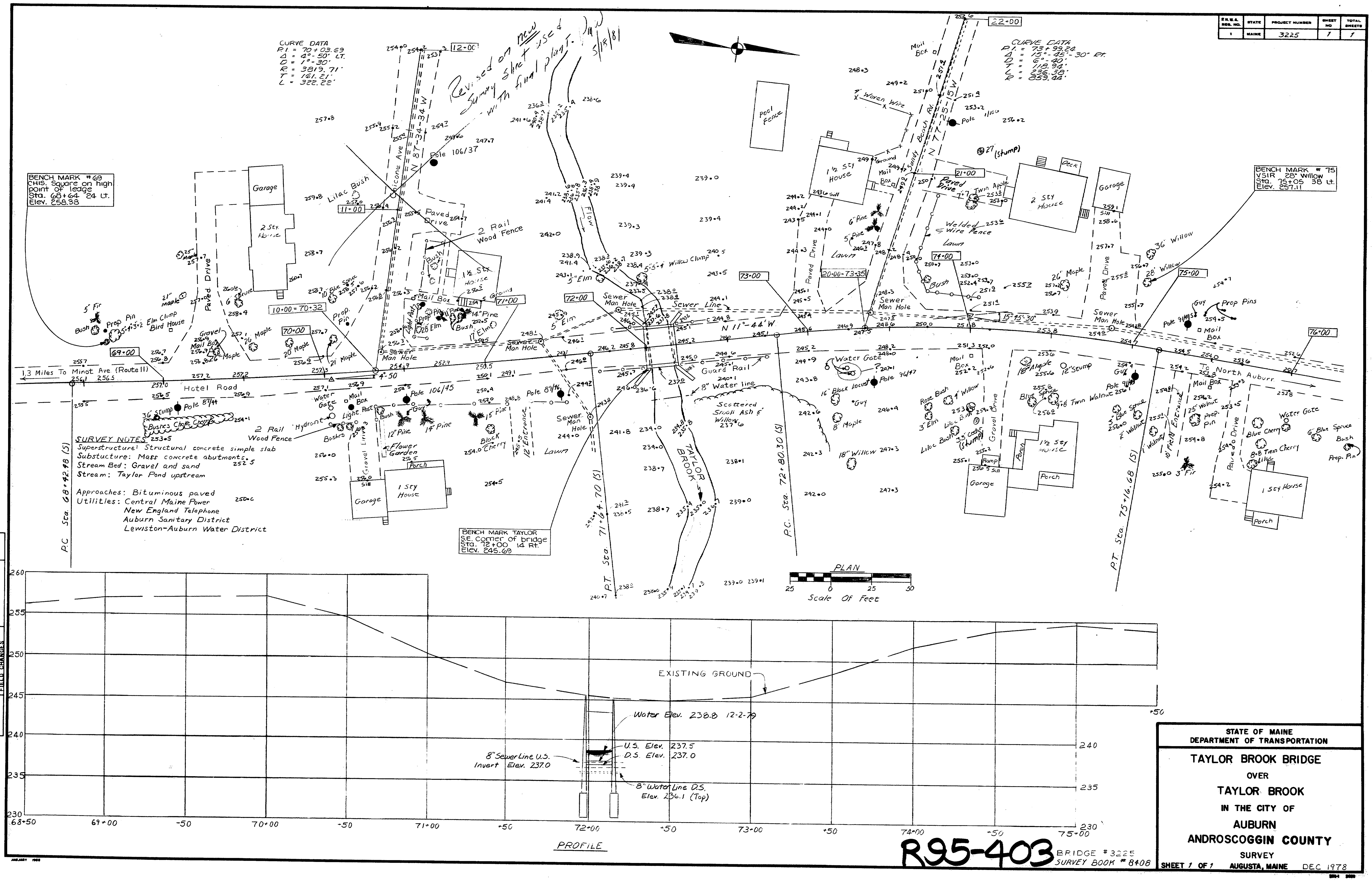
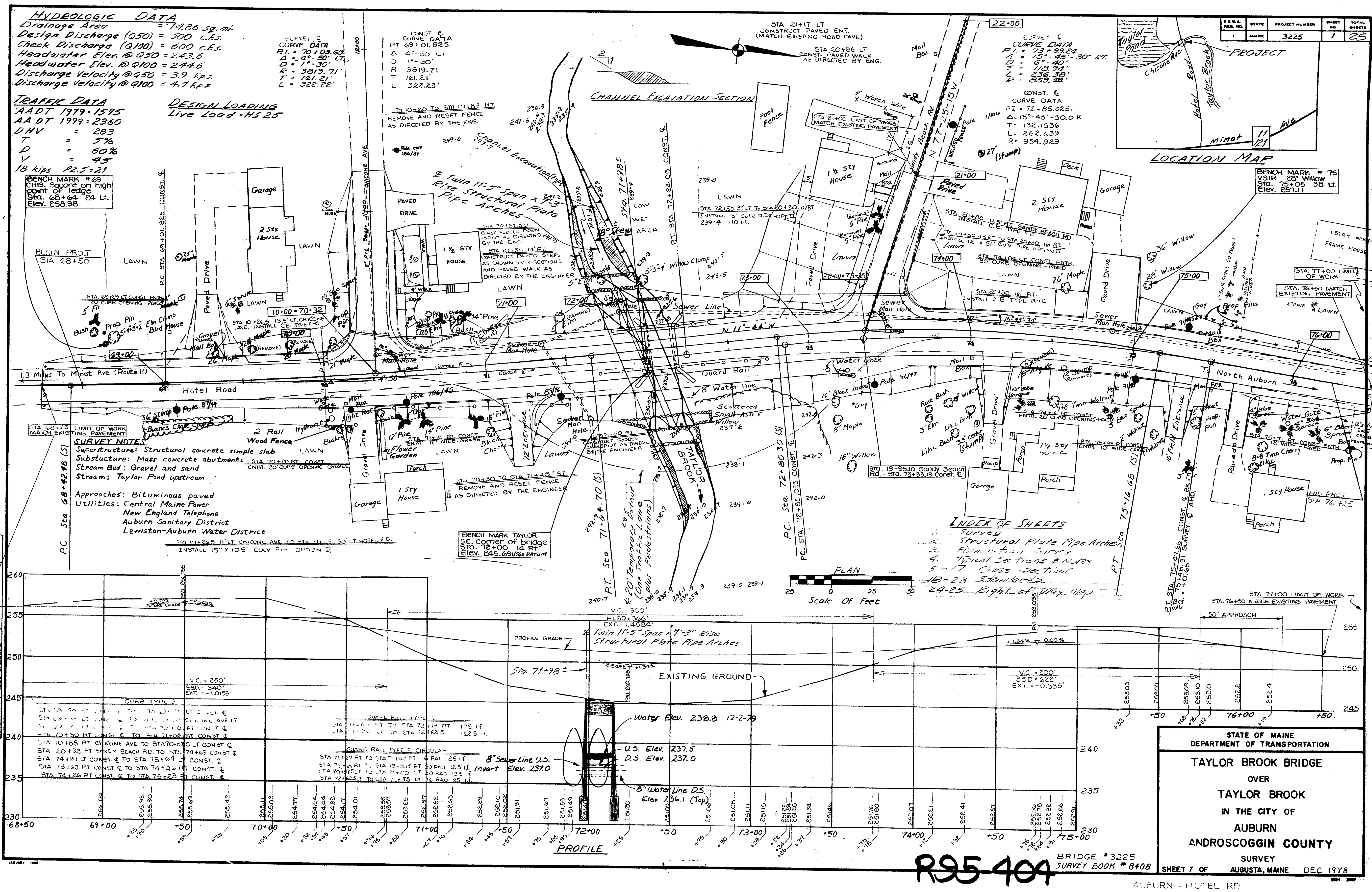
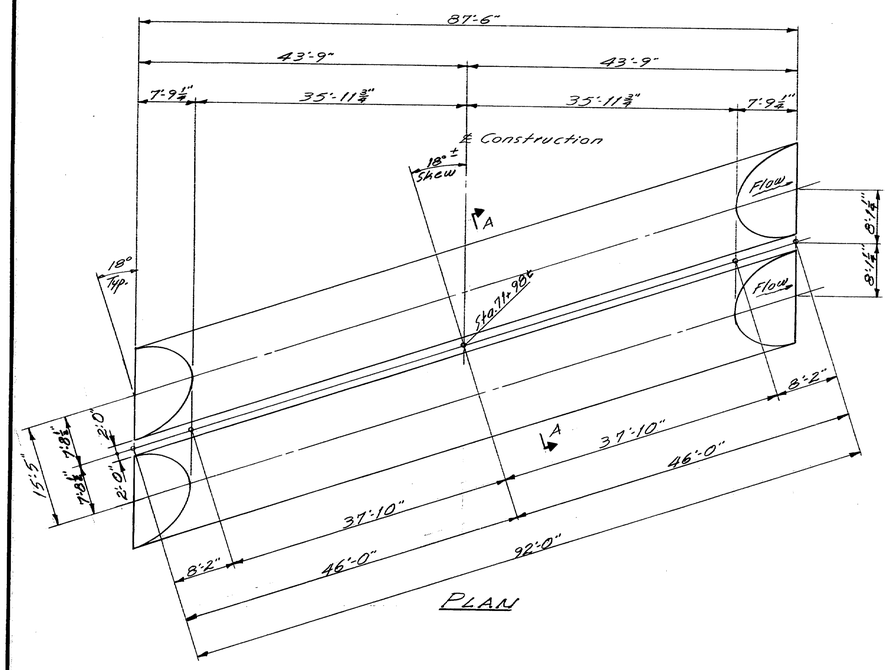


F.H.W.A. REG. NO. 1
STATE MAINE
PROJECT NUMBER 3225
SHEET NO 1
TOTAL SHEETS 1
CURVE DATA
P.I. = 70+03.69
Δ = 4°-50' LT.
D = 1°-30'
R = 3819.71'
T = 161.21'
L = 322.22'
CURVE DATA
P.I. = 73+99.24
Δ = 15°-45'-30" RT.
D = 6°-40'
T = 118.99'
L = 236.38'
R = 859.44'
Revised on new Survey sheet used with final plans. LW 5/8/81
BENCH MARK #69
CHIS. Square on high point of ledge
Sta. 68+64 24 Lt.
Elev. 258.38
BENCH MARK #75
VSIR 28" Willow
Sta. 75+05 58 Lt.
Elev. 257.11
BENCH MARK TAYLOR
S.E. Corner of bridge
Sta. 72+00 14 Rt.
Elev. 245.69
1.3 Miles To Minot Ave (Route 11)
Hotel Road
To North Auburn
Taylor Brook
N 11°-44' W
N 87°-34'-34" W
N 77°-25'-15" W
Sewer Line
8" Water line
Guard Rail
Scattered Small Ash & Willows
SURVEY NOTES
Superstructure: Structural concrete simple slab
Substucture: Mass concrete abutments.
Stream Bed: Gravel and sand
Stream: Taylor Pond upstream
Approaches: Bituminous paved
Utilities: Central Maine Power
New England Telephone
Auburn Sanitary District
Lewiston-Auburn Water District
PC Sta. 68+42.48 (S)
PT Sta. 71+64.70 (S)
P.C. Sta. 72+80.30 (S)
PT Sta. 75+16.68 (S)
PLAN
Scale Of Feet
25 0 25 50
PROFILE
EXISTING GROUND
Water Elev. 238.8 12-2-79
U.S. Elev. 237.5
D.S. Elev. 237.0
8" Sewer Line U.S. Invert Elev. 237.0
8" Water Line D.S. Elev. 236.1 (Top)
68+50 69+00 +50 70+00 +50 71+00 +50 72+00 +50 73+00 +50 74+00 +50 75+00
Survey Plotted W.D.A. 7/79
PLANS
PROJECT DESIGN ENGINEER
DESIGN-DETAILED
CHECKED
REVISIONS
FIELD CHANGES
BY
DATE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
TAYLOR BROOK BRIDGE
OVER
TAYLOR BROOK
IN THE CITY OF
AUBURN
ANDROSCOGGIN COUNTY
SURVEY
SHEET 1 OF 1
AUGUSTA, MAINE
DEC 1978
R95-403
BRIDGE #3225
SURVEY BOOK #8408

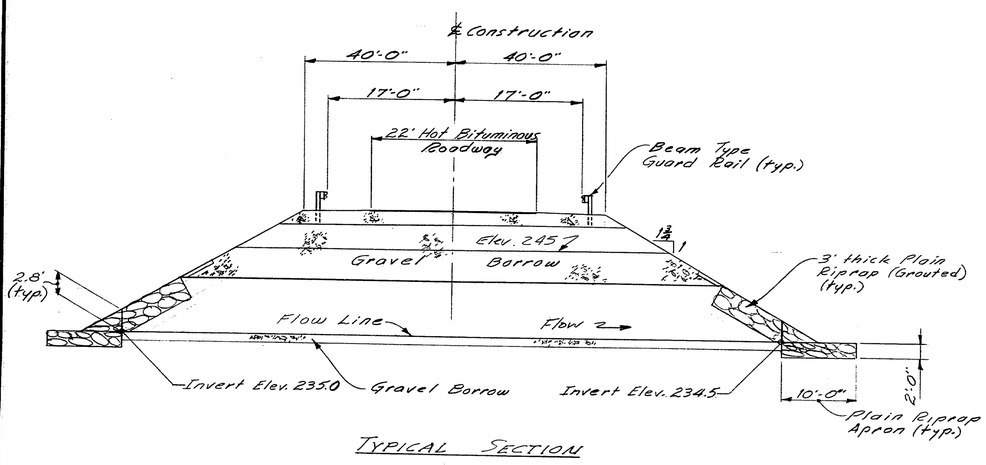


HYDROLOGIC DATA
Drainage Area = 14.86 sq. mi.
Design Discharge (Q50) = 500 c.f.s.
Check Discharge (Q100) = 600 c.f.s.
Headwater Elev. @ Q50 = 243.6
Headwater Elev. @ Q100 = 244.6
Discharge Velocity @ Q50 = 3.9 f.p.s.
Discharge Velocity @ Q100 = 4.7 f.p.s.
TRAFFIC DATA
AADT 1979 = 1575
AADT 1999 = 2360
DHV = 283
T = 5%
D = 60%
V = 45
18 kips P2.5 = 21
DESIGN LOADING
Live Load = HS25
CHANNEL EXCAVATION SECTION
LOCATION MAP
Taylor Pond
PROJECT
Chicone Ave
Hotel Road
Taylor Brook
Minot Ave
BENCH MARK #69
Chis. Square on high point of ledge
Sta. 68+64 24 Lt.
Elev. 258.38
BENCH MARK #75
VSIR 28" Willow
Sta. 75+05 38 Lt.
Elev. 257.11
BENCH MARK TAYLOR
SE corner of bridge
Sta. 12+00 14 Rt.
Elev. 245.6 USGS DATUM
BEGIN PROJ
STA 68+50
END PROJ
STA 76+25
Twin 11'-5" Span x 7'-3" Rise Structural Plate Pipe Arches
Hotel Road
1.3 Miles To Minot Ave. (Route 11)
To North Auburn
TAYLOR BROOK
SURVEY NOTES
Superstructure: Structural concrete simple slab
Substructure: Mass concrete abutments
Stream Bed: Gravel and sand
Stream: Taylor Pond upstream
Approaches: Bituminous paved
Utilities: Central Maine Power
New England Telephone
Auburn Sanitary District
Lewiston-Auburn Water District
INDEX OF SHEETS
1. Survey
2. Structural Plate Pipe Arches
3. Foundation Survey
4. Typical Sections & Notes
5-17 Cross Sections
18-23 Standards
24-25 Right of Way Map
PLAN
Scale Of Feet
PROFILE
EXISTING GROUND
PROFILE GRADE
Water Elev. 238.8 12-2-79
U.S. Elev. 237.5
D.S. Elev. 237.0
8" Sewer Line U.S. Invert Elev. 237.0
8" Water Line D.S. Elev. 236.1 (Top)
Survey Plotted W.D.P. 7/79
PLANS
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
TAYLOR BROOK BRIDGE
OVER
TAYLOR BROOK
IN THE CITY OF
AUBURN
ANDROSCOGGIN COUNTY
SURVEY
SHEET 1 OF
AUGUSTA, MAINE
DEC 1978
PROJECT NUMBER 3225
SHEET NO. 1
TOTAL SHEETS 25
BRIDGE #3225
SURVEY BOOK #8408
R95-404
AUBURN - HOTEL RD

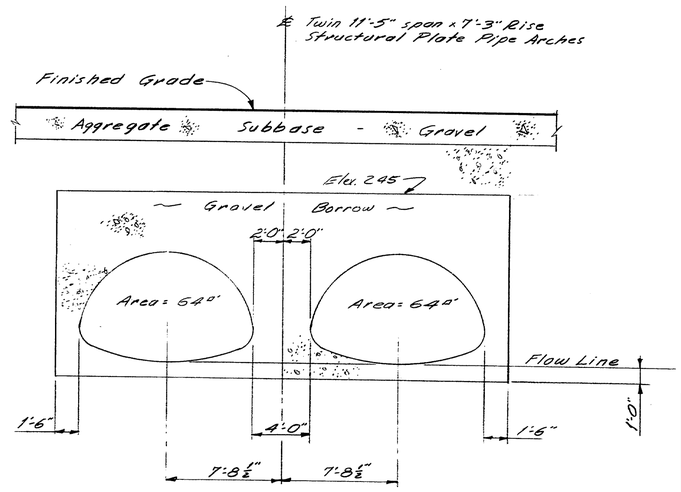
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3225	2	25



PLAN



TYPICAL SECTION



SECTION A-A

NOTES

1. Two 11'-5" span x 7'-3 rise Structural Plate Pipe Arches reqd. Top plates, corner plates, and bottom plates shall be 0.168 inches thick (8 gauge).

2. Gravel Borrow may be omitted under the pipe arches if the existing material is suitable.

3. Riprap shall be carefully placed around the ends of the pipe arches to avoid damage to the pipe and so that the finished slope will match the ends of the pipe. Riprap shall be grouted.

4. Place a 2 ft wide strip of sod along the top of the riprap and over the pipe arch. Typical at both ends of the pipe arch.

5. Backfill material shall be deposited evenly on both sides of the pipe arches in layers not exceeding 8 inches in depth. Each layer shall be throughly compacted.

6. Ends of the pipe arches shall be cut on a 1 3/4 : 1 bevel normal to the end skew.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN DETAILED	2-87
	CHECKED	2-87
	REVISIONS	
	FIELD CHANGES	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TAYLOR BROOK BRIDGE

HOTEL ROAD

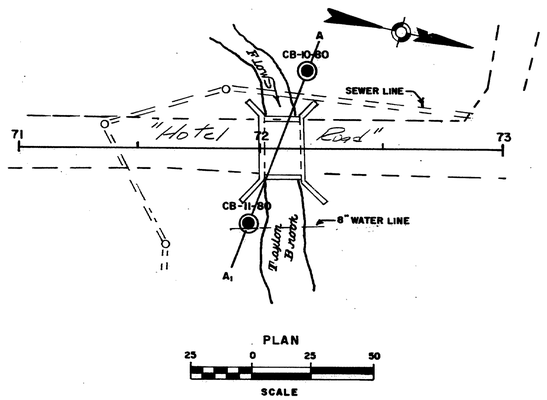
AUBURN

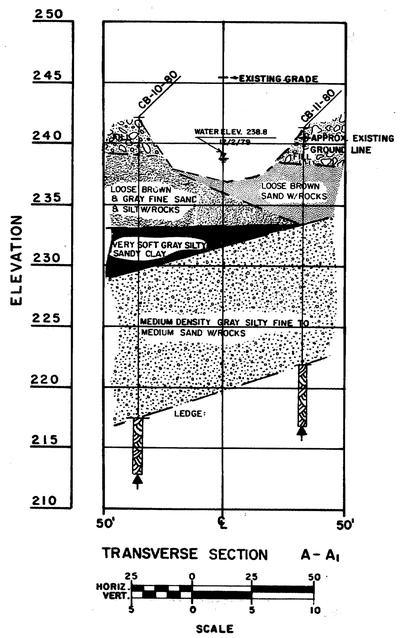
STRUCTURAL PLATE PIPE ARCH

SHEET 2 OF 25 AUGUSTA, MAINE FEB 1987

R95-405

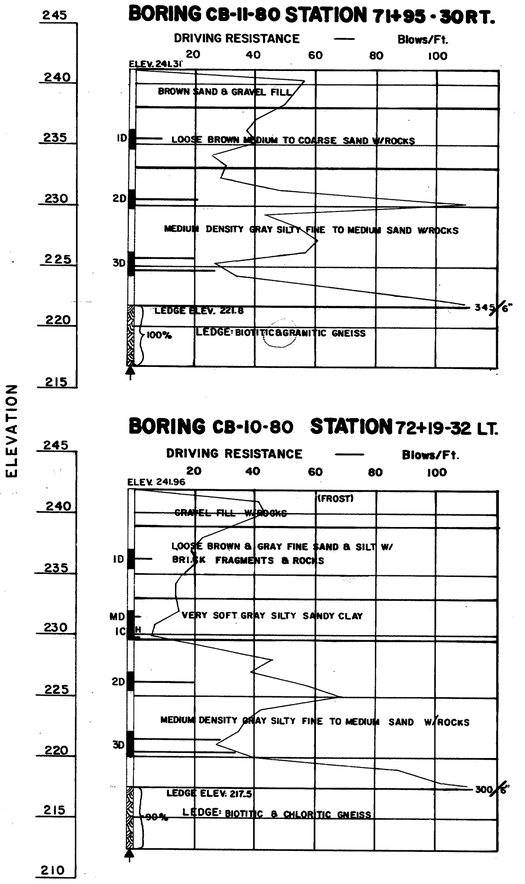
F.A.P. OR S.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	3225	3	25





BORING NOTES

- $2\frac{1}{2}$" Casing used
- All samples are made ahead of casing
- Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow
- Location of sample or sample attempt
- ID S & H Sampler #1290's
- IC 2" O.D. 16 ga. seamless tubing
- MD Unsuccessful sample attempt and type sampler
- Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow
- Bottom of boring (may not be bottom of soil strata)
- 71% Location cored by diamond bit and percent recovery of rock
- H Sampling spoon or seamless tubing driven by static weight of drill rods and hammer



PROJECT DESIGN ENGINEER

PLANS — DESIGN - DETAILED BY; CHECKED; REVISIONS; FIELD CHANGES; DATE

Soils Report 80-105

R95-406

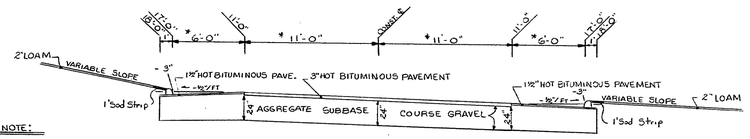
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TAYLOR BROOK BRIDGE
OVER
TAYLOR BROOK
IN THE CITY OF
AUBURN
ANDROSCOGGIN COUNTY

FOUNDATION SURVEY

SHEET 3 OF 25 AUGUSTA, MAINE FEB. 1980

TYPICAL SECTIONS HOTEL ROAD

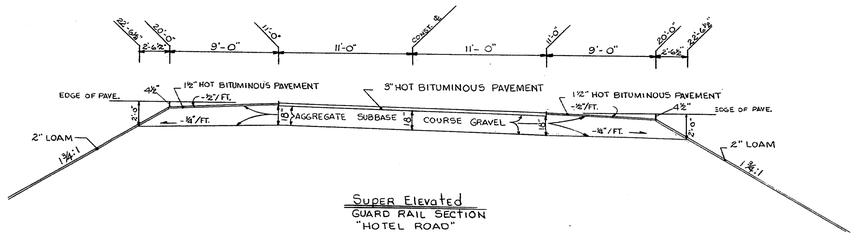


* NOTE:

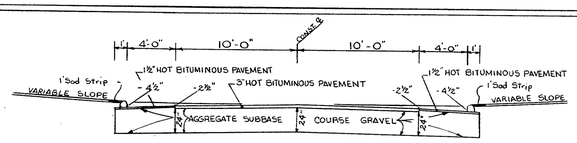
PAVEMENT AND SHOULDER TAPERS:

HOTEL RD.	STA 68 + 25	TO STA	70 + 00	10' TO 11'	TAPER PAVE.
" "	STA 75 + 00	TO STA	76 + 50	11' TO 10'	" "
" "	STA 68 + 25	TO STA	70 + 00	4 TO 6'	TAPER SHLD
" "	STA 75 + 00	TO STA	76 + 50	6' TO 4'	" "

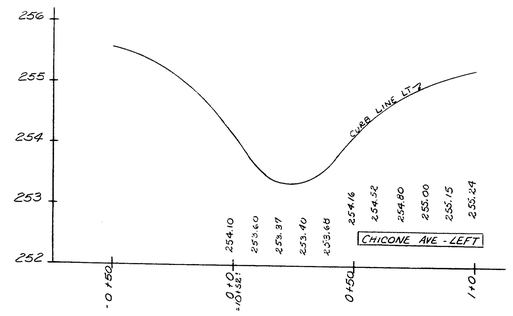
Super Elevated
"CUT SECTION"
HOTEL ROAD

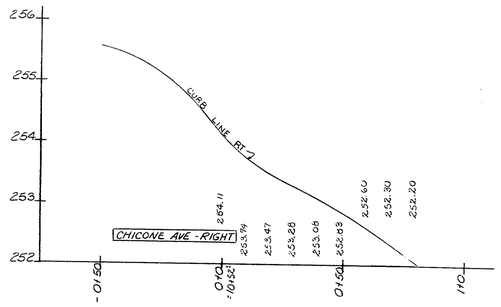


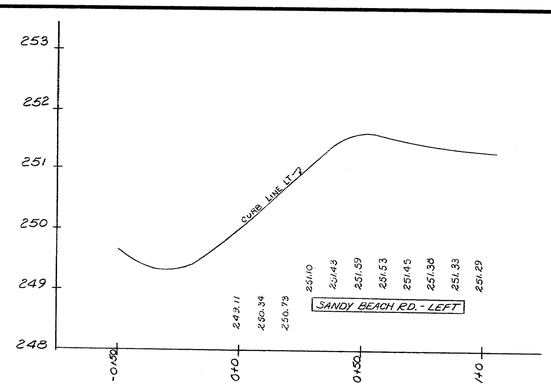
Super Elevated
GUARD RAIL SECTION
"HOTEL ROAD"

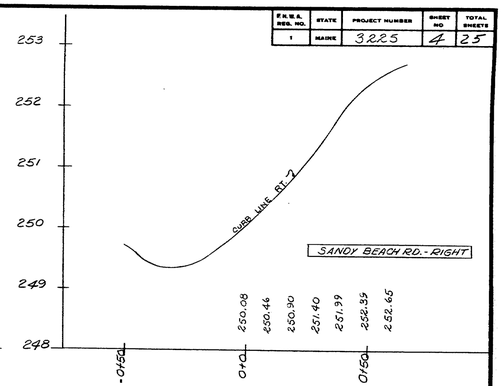


TYPICAL SECTION SIDE ROAD
"CHICONE AVE." AND "SANDY BEACH RD."









PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED		
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 4510

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	3225	4	25

GENERAL NOTES

1. THE UTILITIES ENVOLVED IN THIS PROJECT ARE: CENTRAL MAINE POWER COMPANY.
   NEW ENGLAND TELEPHONE COMPANY.
   AUBURN SEWERAGE DISTRICT.
   AUBURN WATER DISTRICT.
   ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.
2. ALL DITCH ELEVATIONS SHOWN ON THE PLANS AND CROSS SECTIONS ARE FINISH DITCH FLOW LINE.
3. DRIVEWAY FILL SIDE SLOPES SHALL BE THE SAME AS THE NON GUARD RAIL FILL SLOPES UNLESS OTHERWISE NOTED.
4. PAVED ENTRANCES SHALL CONSIST OF: 2" HOT BITUMINOUS PAVEMENT AND 12" AGGREGATE SUBBASE COURSE GRAVEL
5. PAVED WALKS SHALL CONSIST OF THE SAME MATERIALS AND DEPTHS AS PAVED ENTRANCES NOTE 4.
6. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACK FILL AND WILL BE PAID FOR AS GRANULAR BORROW OR COMMON EXCAVATION.
7. ONE GUARD RAIL DELINEATOR POST SHALL BE INSTALLED AT EACH GUARD RAIL END.
8. CURB TYPE 3 TO BE INSTALLED WITH MOLD ___ AND SEALED WITH BITUMINOUS HAND SEALING BLACK.
9. LOAM SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
10. LOAM DEPTHS ARE AS FOLLOWS:
    UNDER SOD 2"
    UNDER EROSION CONTROL MESH 2"
    SEEDED AREAS METHOD NO. 2 2"
    SEEDED AREAS METHOD NO. 1 2"
    DEPTHS SHOWN ARE NOMINAL
11. PLACE SOD STRIP 1' WIDE IN THE FOLLOWING LOCATIONS WHEN DIRECTED BY THE ENGINEER:
    OUTER EDGE OF SIDEWALKS
    EDGE OF PRIVATE WALKS
    BEHIND CURBS IN BOX SECTIONS
12. SOD INLETS AND OUTLETS OF ALL DRIVEWAY CULVERTS UNLESS OTHERWISE DIRECTED.
13. ALL SLOPES SHALL BE SEEDED WITH SEEDING, METHOD NO. 2 UNLESS OTHERWISE NOTED
    ALL LAWNS SHALL BE SEEDED WITH SEEDING, METHOD NO. 1 UNLESS OTHERWISE NOTED
14. ALL SEEDED AREAS SHALL BE MULCHED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

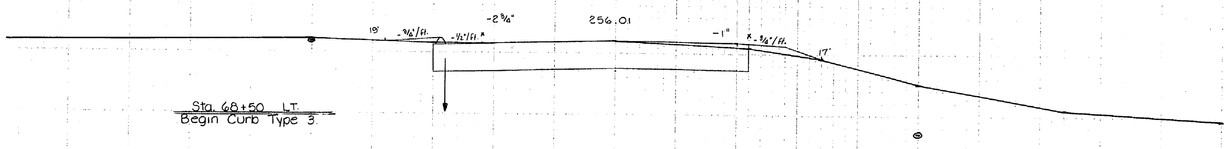
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Typical Sections
CURB PROFILES SIDE ROADS
AND
GENERAL Notes

R95-407

SHEET 4 OF 25 AUGUSTA, MAINE

8408	TRIBAULT GARDEN	12-19-78 S-2.80

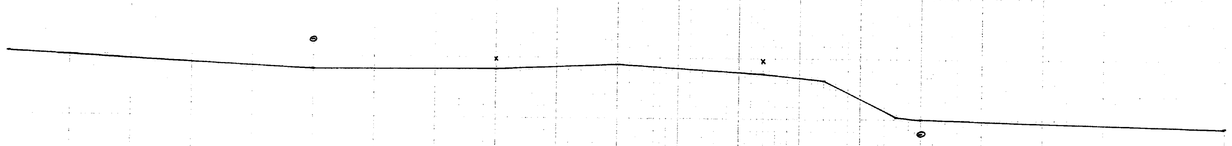


+50

245

* NOTE: TAPER TRAVELED WAY FROM 10' TO 11' IN 175' (STA 68+25 TO STA 70+00)
" SHOULDERS " 4' TO 6' " " " " " "

BEGIN PROJECT STA 68+50



68+00

245

Sta. 68+25 Limit of Work
Match Existing Pavement

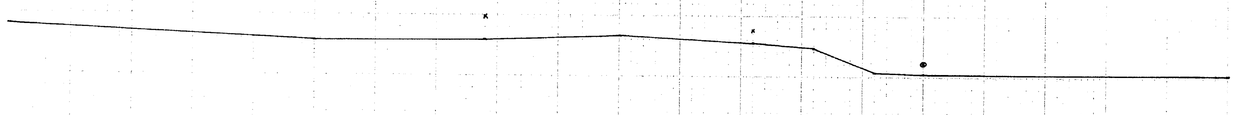
GROUND

HOUSE SILL

75' RT.

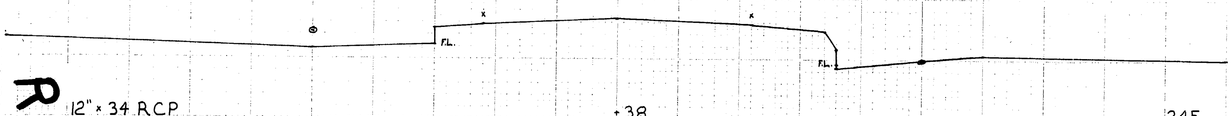
+90

245



+50

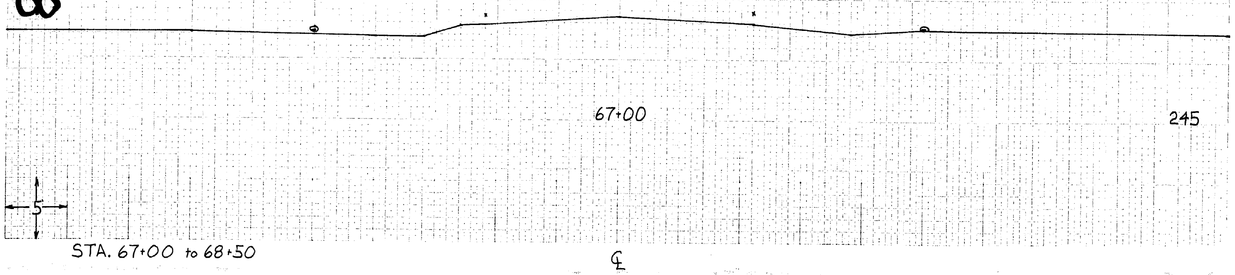
245



12" x 34 R.C.P.

+38

245



67+00

245

5

STA. 67+00 to 68+50

℄

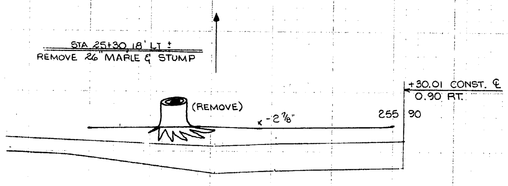
AUBURN - HOTEL RD.

R95-408

3225 5 25

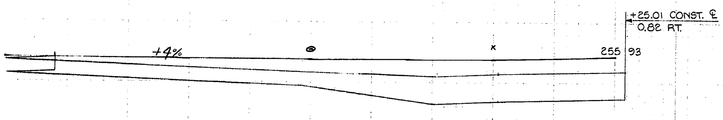
8408	THIBAULT MM. GARDEN	12-19-78 5-2-80

STA 25+30.18' Lt :
REMOVE 26 MAPLE & STUMP



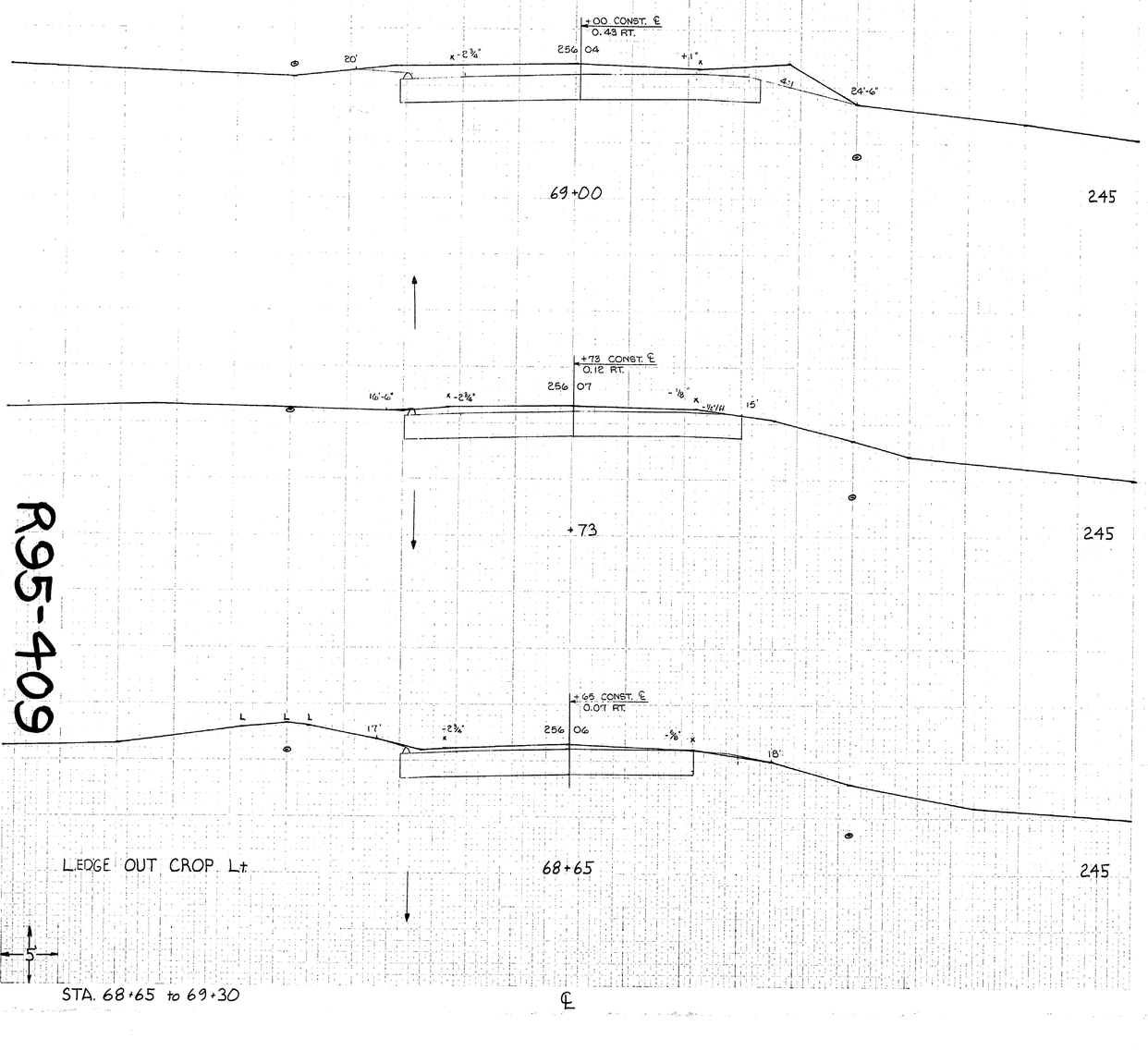
26" MAPLE Lt. +30 245

STA 69+39 LT
BEGIN CURB TYPE 3



DRIVE Lt. Sta. 69+29 Lt. Const. Entr. 20' Curb Opening -Paved +25 245

STA 69+19 LT
END CURB TYPE 3



69+00 245

+73 245

LEDGE OUT CROP Lt. 68+65 245

5

STA. 68+65 to 69+30 ℄

R95-409

AUBURN - HOTEL RD.

322.5 L 25'

2.

THIBAULT
MM BARDEN
12-19-78
5-2-80

8408

+37.08 CONST. ℄
2.56 RT.

254.44

TOP WG

+37

W.G. ON PIPE TO CHICONE ST. 255

+32.07 CONST. ℄
2.48 RT.

MH. COVER

MANHOLE COVER Lt.

+32

254.54

255

STA 70+30 RT.
BEGIN CURB TYPE 3

STA 70+30 TO STA 71+48± RT.
REMOVE AND RESET FENCE AS
DIRECTED BY THE ENGINEER

+20.06 CONST. ℄
2.30 RT.

254.77

+3%

+½"/ft.

GARAGE SILL

48'-6"

+20

DRIVE Rt. 250

Sta. 70+20 Rt. Const. Entr. 20' Curb Opening-gravel

STA 70+10 RT.
END CURB TYPE 3

STA 70+05, 23' LT.±
REMOVE 21" MAPLE & STUMP

(REMOVE)

+05.05 CONST. ℄
2.06 RT.

255.03

21" MAPLE Lt.

+05 250

W.G. @ +02-21 Rt. TO HYDRANT

+00.05 CONST. ℄
1.99 RT.

255.11

CAP W.G. @ +0℄

28'-6"

70+00 250

Sta. 69+75 RT.
Begin Curb Type 3

STA 69+78, 22'± LT
REMOVE 21" MAPLE & STUMP

(REMOVE)

+78.04 CONST. ℄
1.65 RT.

255.43

21" MAPLE

+78 250

HOUSE SILL

GR

STA 69+55, 20'± LT
REMOVE 26" MAPLE & STUMP

(REMOVE)

+55.02 CONST. ℄
1.29 RT.

26'-6"

255.69

HOUSE & 26" MAPLE Lt.

+55 250

R95-410

AUBURN HOTEL RD.

+50.02 CONST. ℄
1.21 RT.

25'

-3"

255.74

+3"

5:1

24'-6"

69+50 250

5

STA. 69+50 to 70+37

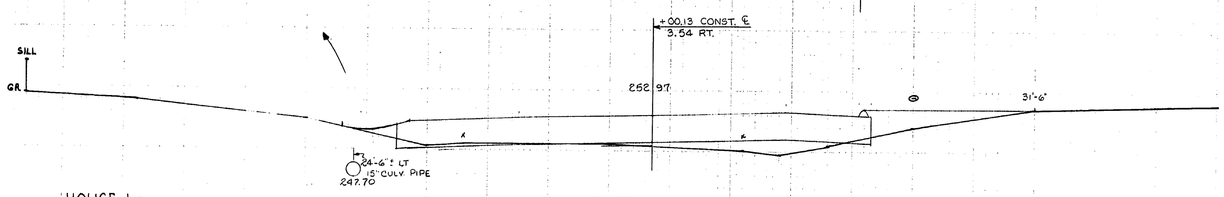
℄

3

8408

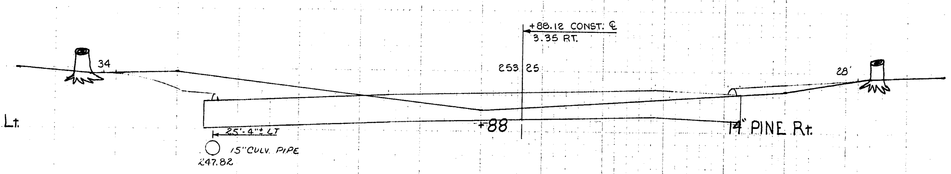
THIBAULT 11-13-78
MAN BARDEN 5-2-80

STA 71+00 to STA 71+50
TRANSITION FROM 24" AGGREGATE SUBBASE GRAVEL TO 18" AGGREGATE SUBBASE GRAVEL



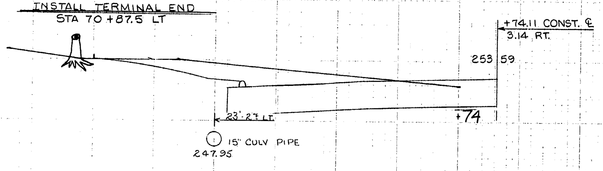
HOUSE Lt. 71+00 245

STA 70+87.5 LT
CONSTRUCT SODDED DOWNSPOUT AS DIRECTED BY THE ENGINEER



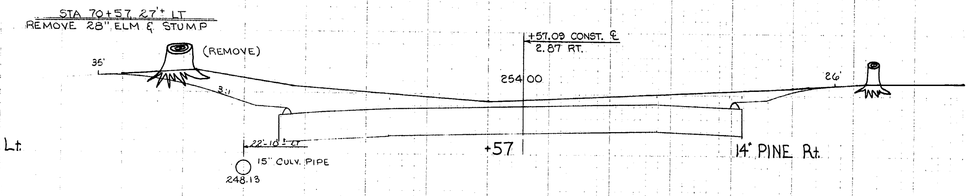
14" PINE Lt. 14" PINE Rt. 250

INSTALL GUARD RAIL TYPE 3 SINGLE RAIL
STA 71+00 TO STA 72+62.5 LT.
INSTALL GUARD RAIL TYPE 3 CIRCULAR
STA 70+87.5 TO STA 71+00 LT.
INSTALL TERMINAL END
STA 70+87.5 LT

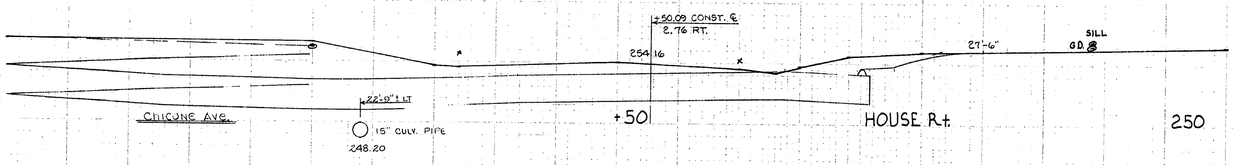


11' PINE Lt. 250

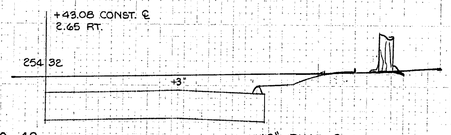
STA 70+57.27' LT
REMOVE 28" ELM & STUMP



28" ELM Lt. 14" PINE Rt. 250



HOUSE Rt. 250



70+43 12" PINE Rt. 250

AUBURN - HOTEL RD.

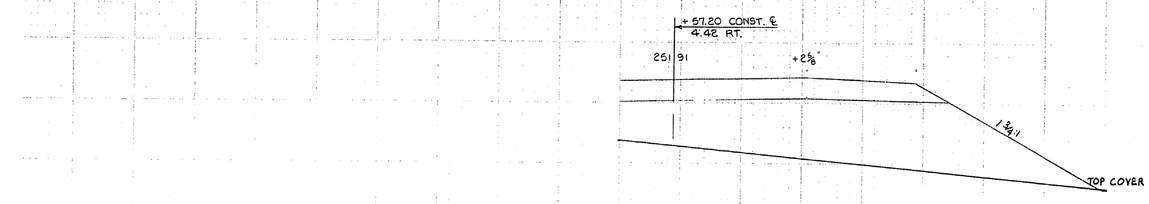
R95-411

STA. 70+43 to 71+00

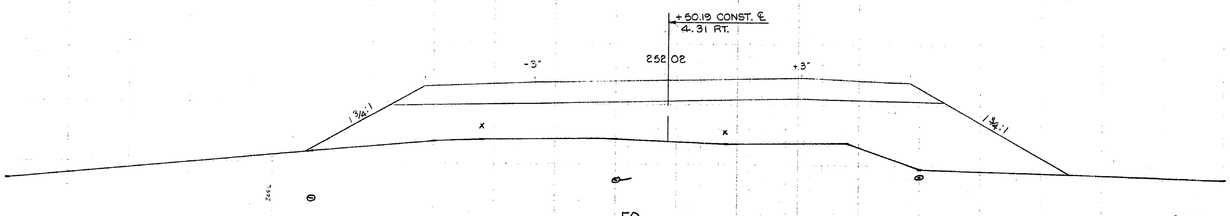
℄

3225 Ø.25

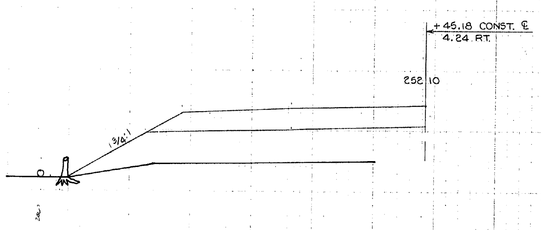
8408	TRIBAULT / MM BARDEN	12-19-78 / 5-2-80	



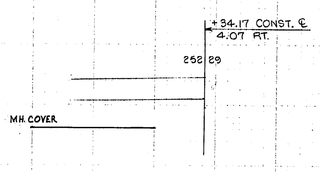
+ 57 SEWER MH. Rt. 240



+50 240



5' ELM Lt. (REMOVE) + 45 240



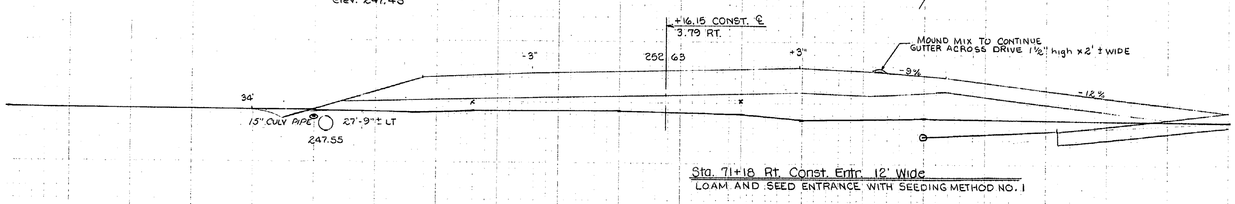
SEWER MH. Lt. + 34 240

INSTALL GUARD RAIL TYPE 3 - SINGLE RAIL
STA 71+43 RT TO STA 73+18 RT. 175 l.f.

INSTALL GUARD RAIL TYPE 3 - CIRCULAR
STA 71+27 RT. TO STA 71+43 RT. 16' RADIUS 25 l.f.

INSTALL TERMINAL END
STA 71+27 RT.

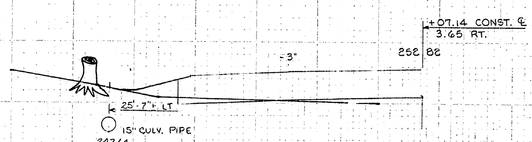
QUTLET 15" CULV. PIPE
STA 71+25, 30' RT ±
elev. 247.45



Sta. 71+18 Rt. Const. Entr. 12' Wide
LOAM AND SEED ENTRANCE WITH SEEDING METHOD NO. 1

+ 16 FIELD ENT. QUANTITY SECTION Rt. 240

Sta. 71+08 RT.
End Curb Type 3



17' ELM. Lt. (REMOVE) 71+07 245

Sta. 70+87.5, 24.5' ± Lt.
End Curb Type 3

STA. 71+07 to 71+57 ℄

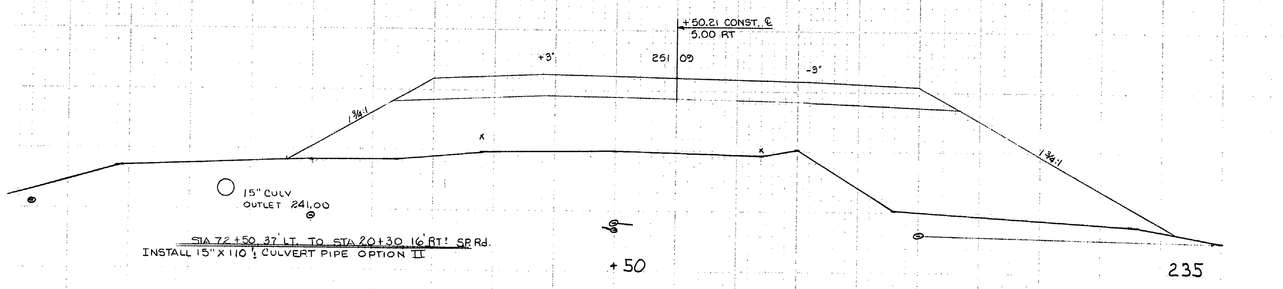
AUBURN - HOTEL R.D.

R-95-412

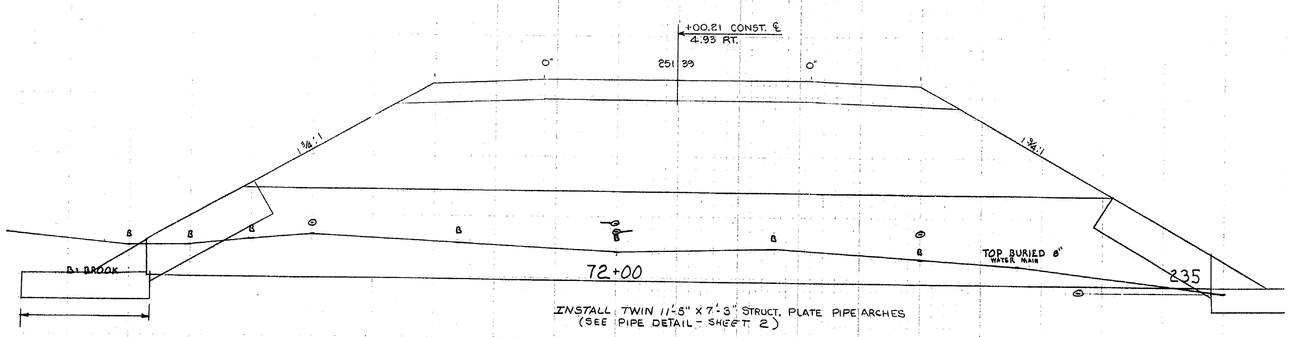
5

3225 9 25

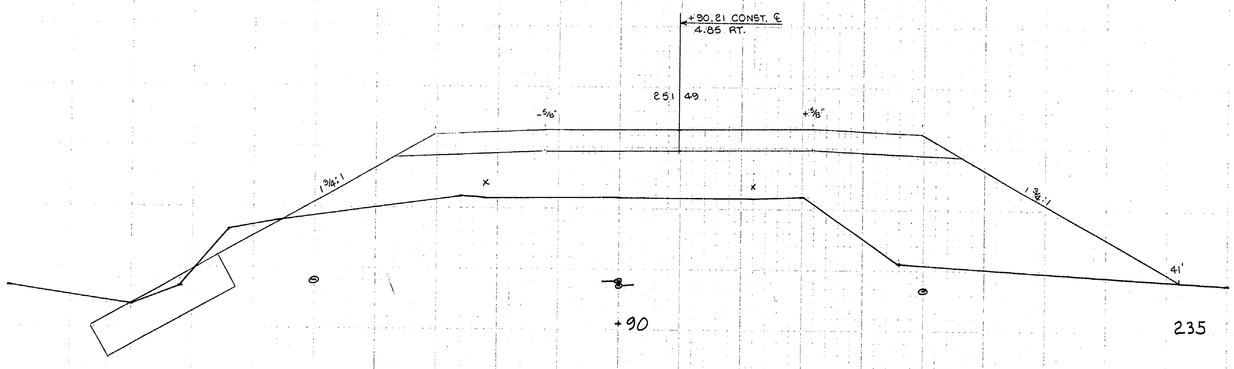
8408	THIBAULT INN. GARDEN	11-16-79 5-2-80

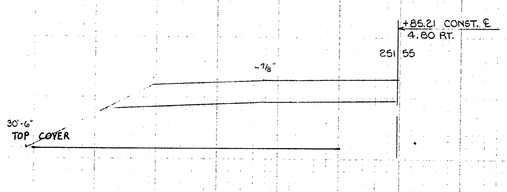


STA 72+50.37' LT. TO STA 20+30.16' RT.' SR Rd.
INSTALL 15" X 110'± CULVERT PIPE OPTION II



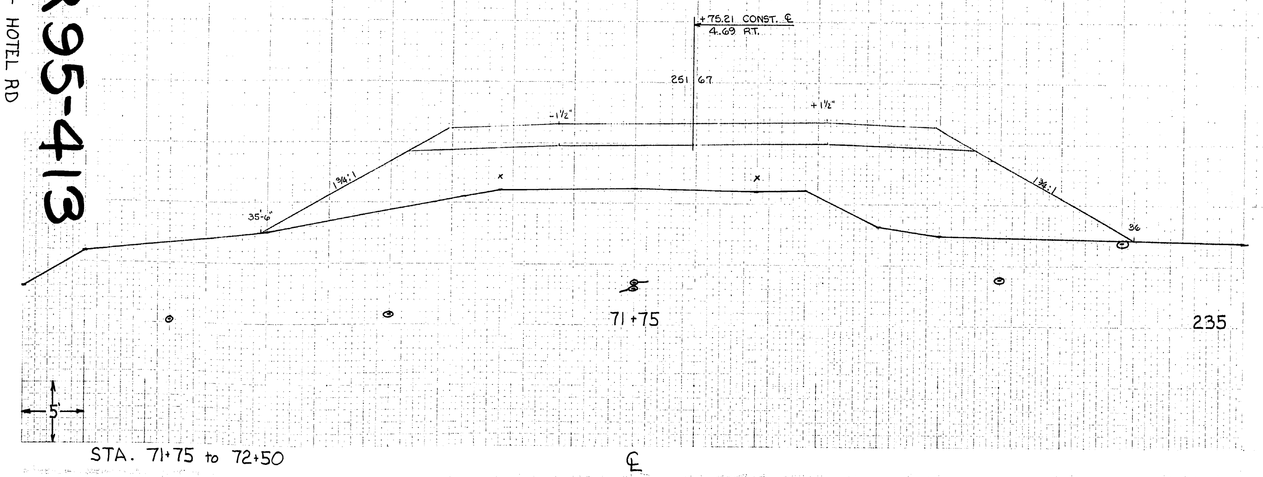
INSTALL TWIN 11'-5" X 7'-3" STRUCT. PLATE PIPE ARCHES
(SEE PIPE DETAIL - SHEET 2)





STA 71+80 RT.
CONSTRUCT SODDED DOWNSPOUT
AS DIRECTED BY THE ENGINEER

SEWER MH. Lt. +85 235

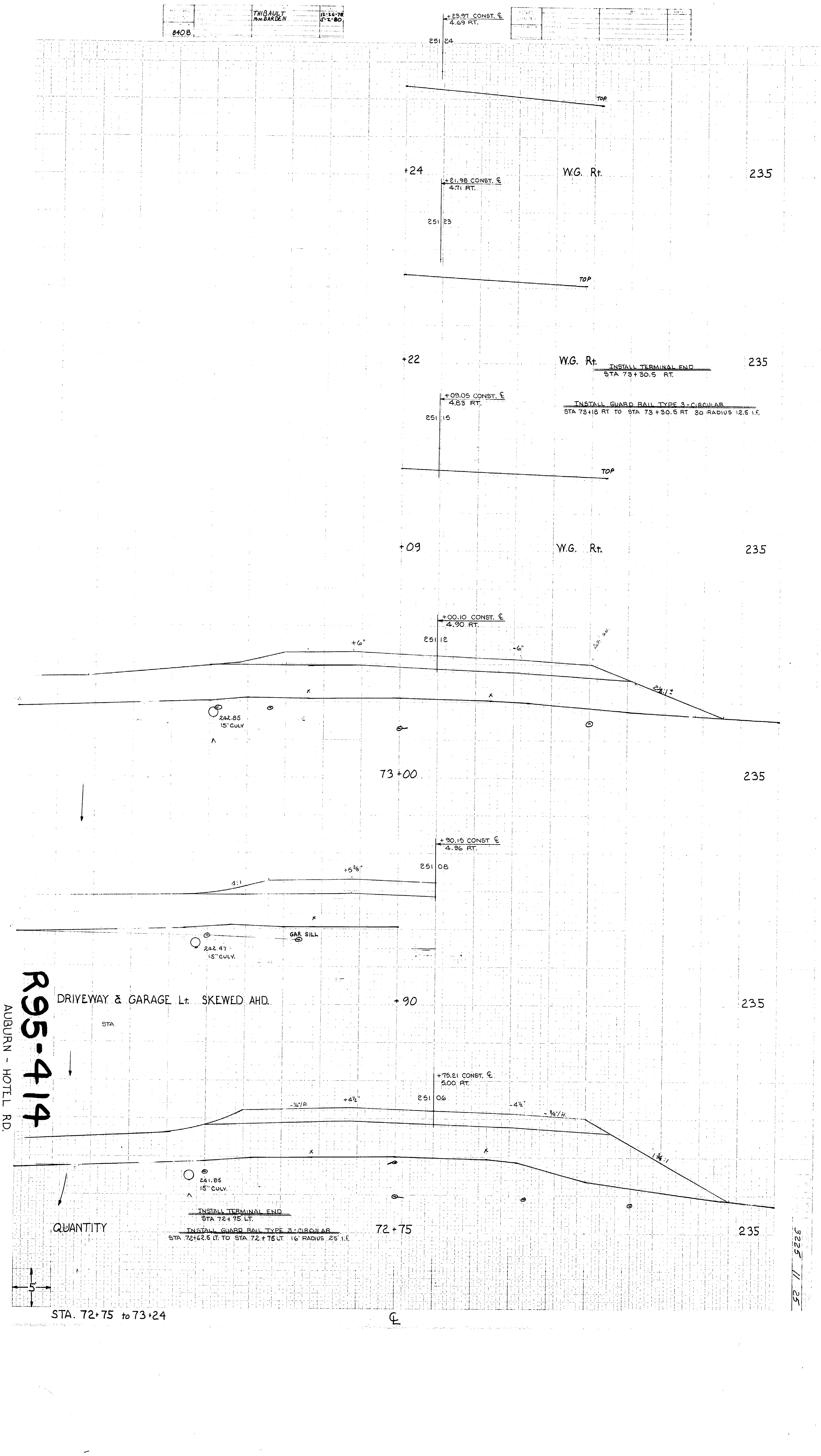


STA. 71+75 to 72+50 ℄

R95-413

AUBURN - HOTEL RD

3225 - 10 25



8408
THIBAULT
M.M. GARDEN
12-26-78
5-2-80
+23.97 CONST. ℄
4.69 RT.
251 24
TOP
+24
W.G. Rt.
235
+21.98 CONST. ℄
4.71 RT.
251 23
TOP
+22
W.G. Rt.
INSTALL TERMINAL END
STA 73+30.5 RT.
235
+09.05 CONST. ℄
4.83 RT.
INSTALL GUARD RAIL TYPE 3 - CIRCULAR
STA 73+18 RT TO STA 73+30.5 RT 30 RADIUS 12.5 l.f.
251 15
TOP
+09
W.G. Rt.
235
+00.10 CONST. ℄
4.90 RT.
251 12
+6"
-6"
2½:1±
242.85
15" CULV
73+00
235
+90.15 CONST ℄
4.96 RT.
251 08
+5⅜"
4:1
GAR. SILL
242.47
15" CULV.
DRIVEWAY & GARAGE Lt. SKEWED AHD.
STA
+90
235
+75.21 CONST. ℄
5.00 RT.
251 06
+4½"
-4½"
-¾"/ft
1¾:1
241.85
15" CULV.
INSTALL TERMINAL END
STA 72+75 LT.
INSTALL GUARD RAIL TYPE 3 - CIRCULAR
STA 72+62.5 LT. TO STA 72+75 LT. 16' RADIUS 25' l.f.
QUANTITY
72+75
235
5
STA. 72+75 to 73+24
℄
3225 11 25
R95-414
AUBURN - HOTEL RD.

8408.

THIBAULT
MM.BARDEN

12-24-78
5-2-80

+77.70 CONST. ℄
3.97 RT.
251 79

-9"

6:1±

+78 27" WILLOW Rt. 240

STA 73 + 75 14' LT
INSTALL CATCH BASIN TYPE B-1C

+74.71 CONST. ℄
4.02 RT.
251 75

+9"

-9"

6:1±

QUANTITY +75 240

Sta 73+63±
Begin Curb Type 3

+49.83 CONST. ℄
4.39 RT.
251 46

+9"

-9"

3:1

244.83
15" CULV.

QUANTITY +50 240

+36.90 CONST. ℄
4.55 RT.
251 34

RIM

SEWER MH. Lt. +37 240

STA 73+25 TO STA 73+75
TRANSITION FROM 18" AGG. SUBBASE CRSE-GRAVEL TO 24" DEPTH

+24.96 CONST. ℄
4.68 RT.
251 25

+7½"

-7½"

1½:1

243.82
15" CULV.

HOUSE Lt. QUANTITY 73+25 240

5

STA. 73+25 to 73+78 ℄

R95-415

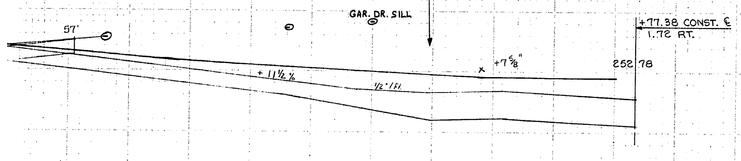
AUBURN - HOTEL RD.

3225 12 25

8

TWIBAULT
MM. BARDEN
12-26-78
6-2-80

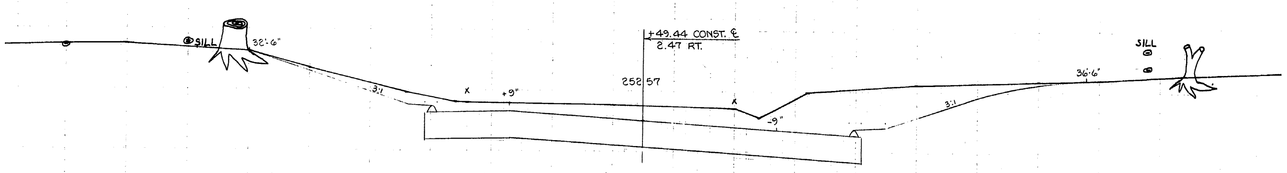
8408



Sta. 74+84 Lt. Const. Entr. 30' Curb Opening - Paved

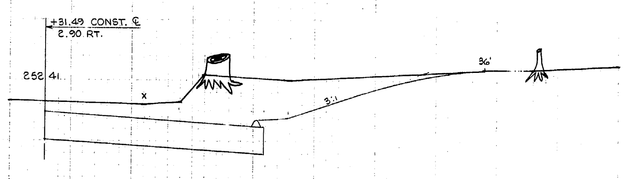
PAVED DRIVE Lt. +78 240

STA 74+69 LT
END CURB TYPE 3



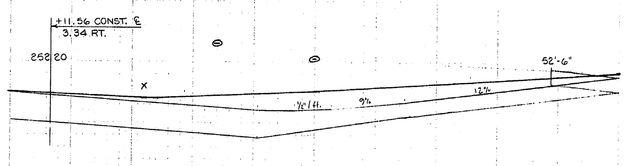
26" MAPLE @ 54-31' Lt. & HOUSE +50 9"-8" TWIN WALNUT & HOUSE Rt. 240

STA 74+32.13' RT.
REMOVE 22" MAPLE & STUMP



+32 22" MAPLE & 8" SPRUCE @ +36-43' Rt. 240

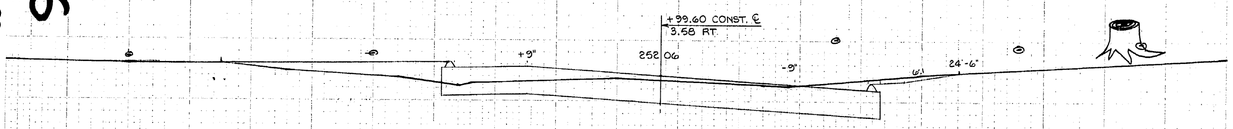
STA 74+26 RT.
BEGIN CURB TYPE 3



Sta. 74+16 Rt. Const. Entr. 20' Curb Opening Paved

+12 DRIVE Rt. GRAVEL 240

STA 74+06 RT.
END CURB TYPE 3



74+00 33" CEDAR Rt. 240

5'

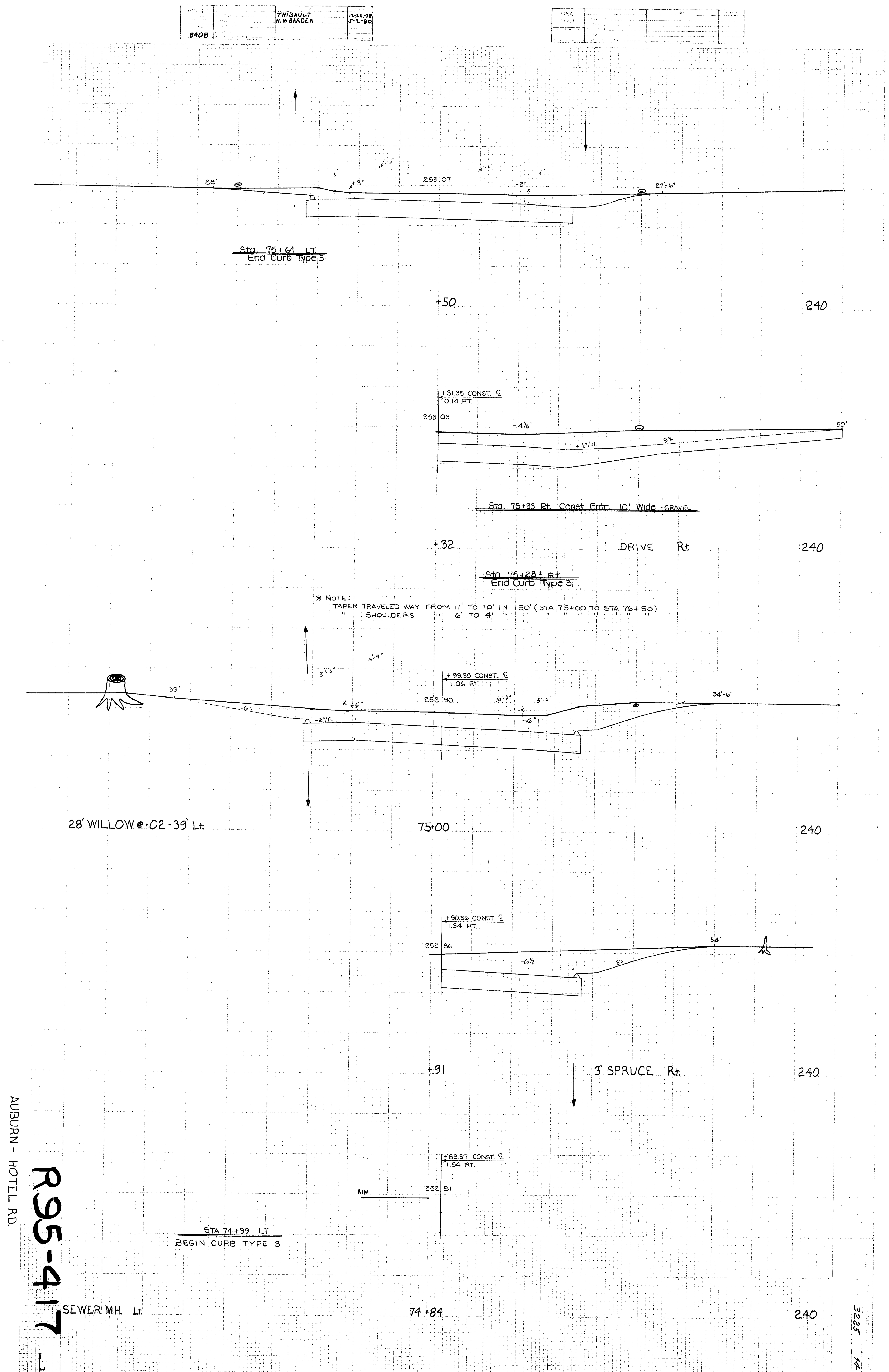
STA. 74+00 to 74+78

℄

R95-416

AUBURN - HOTEL RD.

3225 13 25



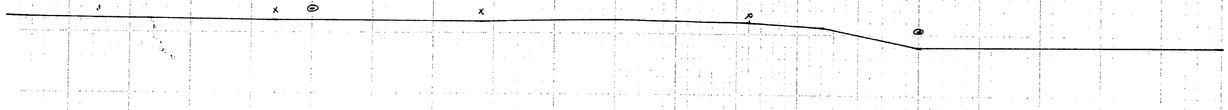
8408
THIBAULT
M.M.BARDEN
12-26-78
5-2-80
28'
+3"
253.07
-3"
27'-6"
Sta. 75+64 LT
End Curb Type 3
+50
240
+31.35 CONST. ℄
0.14 RT.
253 03
-4⅞"
50'
Sta. 75+33 Rt. Const. Entr. 10' Wide - GRAVEL
+32
DRIVE Rt.
240
Sta. 75+23± Rt
End Curb Type 3
* NOTE:
TAPER TRAVELED WAY FROM 11' TO 10' IN 150' (STA 75+00 TO STA 76+50)
" SHOULDERS " 6' TO 4' " " " " " " "
+99.35 CONST. ℄
1.06 RT.
252 90
33'
+6"
-6"
34'-6"
28" WILLOW @ +02 - 39' Lt.
75+00
240
+90.36 CONST. ℄
1.34 RT.
252 86
-6½"
34'
+91
3" SPRUCE Rt.
240
+83.37 CONST. ℄
1.54 RT.
RIM
252 81
STA 74+99 LT
BEGIN CURB TYPE 3
SEWER MH. Lt
74+84
240
STA. 74+84 to 75+50
℄
R95-417
AUBURN - HOTEL RD.
3225
14 25

8408

THIBAULT
MM. GARDEN

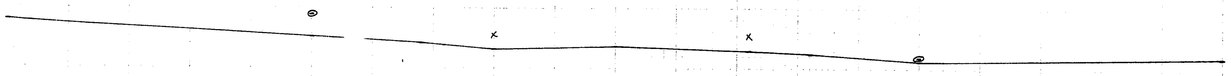
12-26-78
5-2-80

FINAL



77+00 245

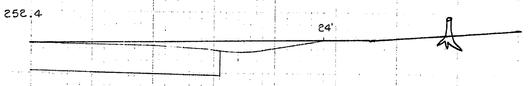
Sta. 77+00 Limit of Work



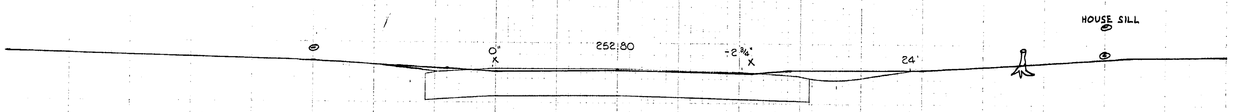
+50 FIELD ENT. Rt. 245

Sta. 76+50 Match Existing Pavement

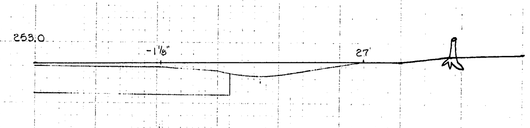
END PROJECT STA 76+25



+19 6" BLUE SPRUCE Rt. 245



76+00 4" BLUE SPRUCE & HOUSE Rt. 245



+82 4" BLUE SPRUCE Rt. 245

Sta. 75+71 Rt. Const. Entr. 12' Wide - Paved

75+68 DRIVE Rt. 245

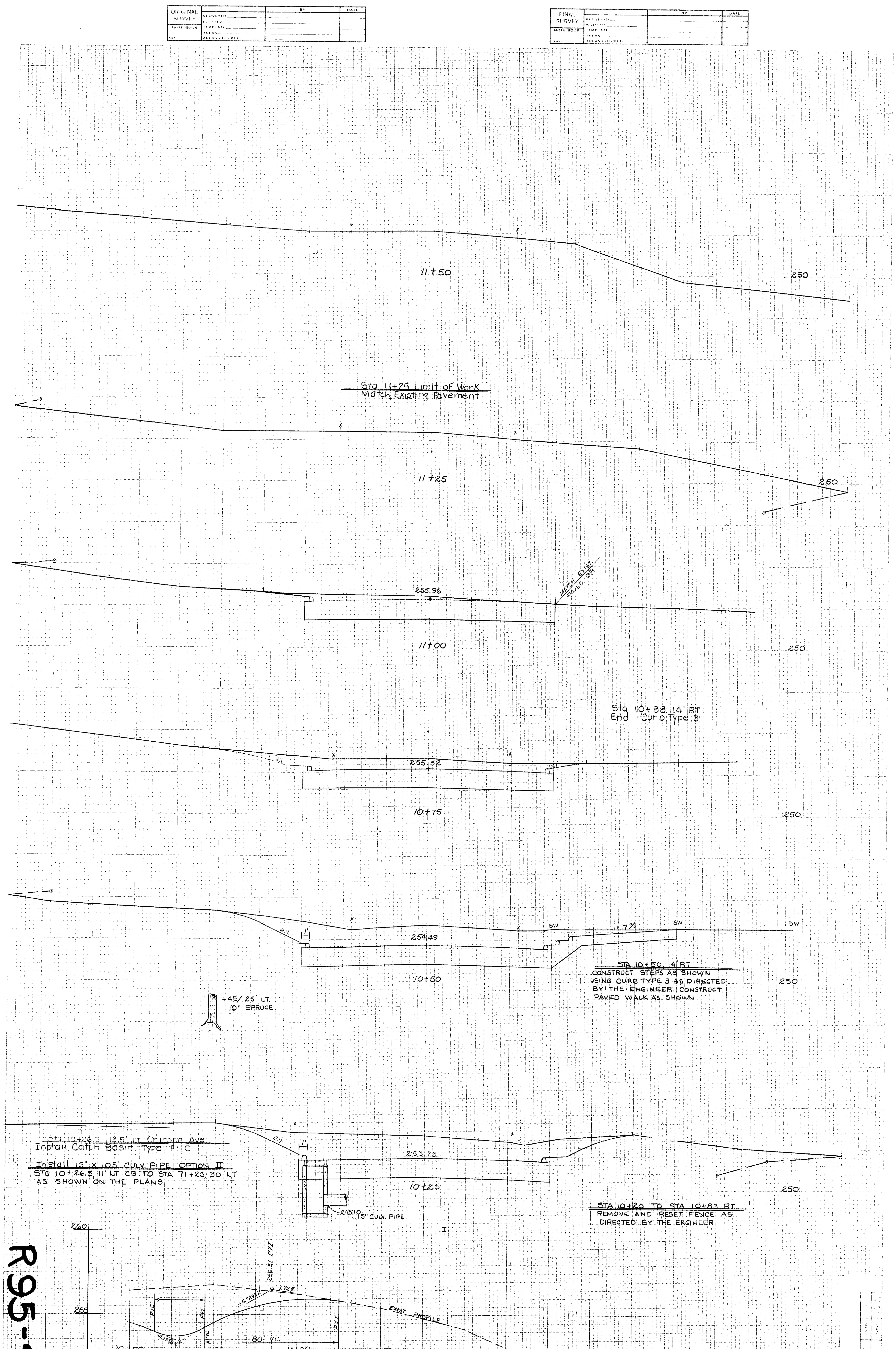
AUBURN - HOTEL RD.

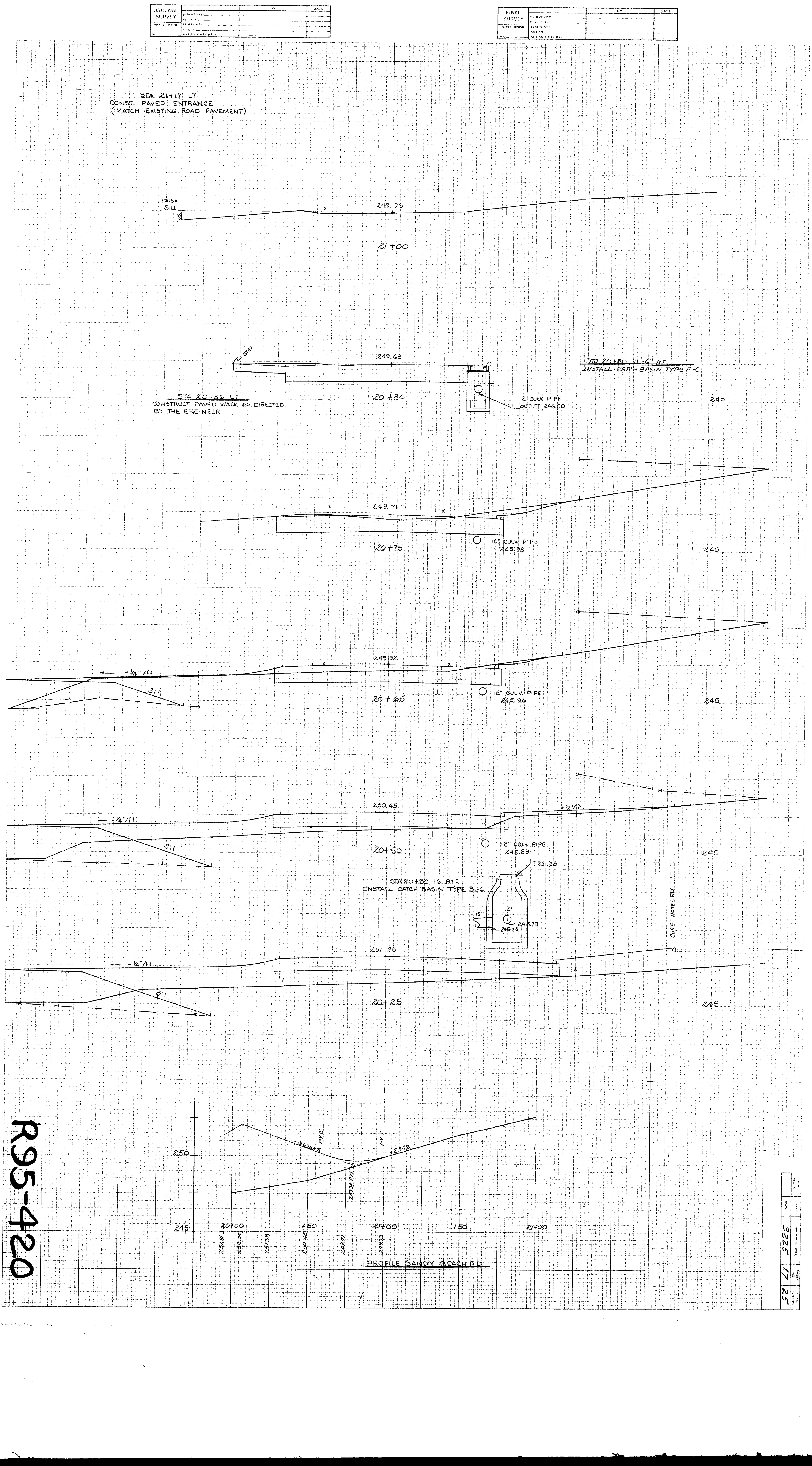
R95-418

STA. 75+68 to 77+00

℄

3225 15-25


3225
16
25
11+50
250
Sta. 11+25 Limit of Work
Match Existing Pavement
11+25
255.96
11+00
Sta. 10+88 14' RT
End Curb Type 3
255.52
10+75
254.49
10+50
SW
+7%
STA 10+50 14' RT
CONSTRUCT STEPS AS SHOWN USING CURB TYPE 3 AS DIRECTED BY THE ENGINEER. CONSTRUCT PAVED WALK AS SHOWN.
+45/ 25' LT.
10" SPRUCE
Install Catch Basin Type "F"-C
Install 15" x 105' CULV. PIPE, OPTION II
Sta 10+26.5, 11' LT CB TO STA 11+25, 30' LT
AS SHOWN ON THE PLANS.
253.73
10+25
15" CULV. PIPE
STA 10+20 TO STA 10+83 RT
REMOVE AND RESET FENCE AS DIRECTED BY THE ENGINEER
EXIST. PROFILE
60' V.C.
PROFILE CHICONE AVENUE
R95-419
TAYLOR BROOK AUBURN (CHICONE AVE)


ORIGINAL SURVEY
FINAL SURVEY
STA 21+17 LT
CONST. PAVED ENTRANCE
(MATCH EXISTING ROAD PAVEMENT)
HOUSE SILL
249.93
21+00
STEP
249.68
STA 20+86 LT.
CONSTRUCT PAVED WALK AS DIRECTED BY THE ENGINEER
20+84
12" CULV. PIPE OUTLET 246.00
STA 20+80, 11'-6" RT
INSTALL CATCH BASIN TYPE F-C
245
249.71
20+75
12" CULV. PIPE 245.98
245
-1/8"/FT.
3:1
249.92
20+65
12" CULV. PIPE 245.96
245
-1/4"/FT.
3:1
250.45
+1/2"/FT.
20+50
12" CULV. PIPE 245.89
245
STA 20+30, 16' RT.
INSTALL CATCH BASIN TYPE B1-C
251.28
15"
12"
245.79
246.24
CURB HOTEL RD.
-1/4"/FT.
3:1
251.38
20+25
245
250
245
P.V.C.
P.V.T.
+2.95%
20+00
+50
21+00
+50
21+00
PROFILE SANDY BEACH RD.
MAINE 3225 17 25
TAYLOR BROOK AUBURN (SANDY BEACH ROAD)
R95-420

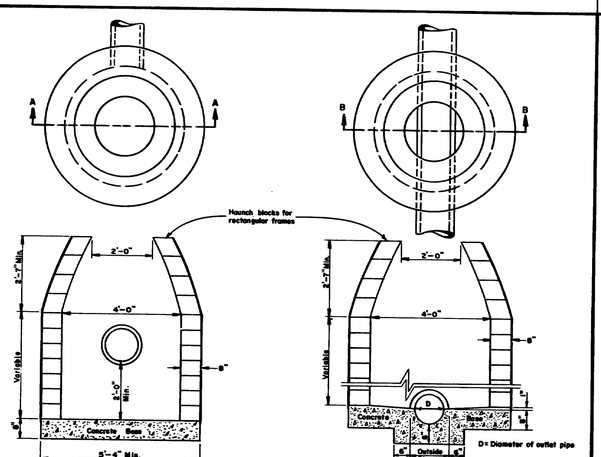
GENERAL NOTES — ALL CATCH BASINS AND MANHOLES

1. Any Catch Basin in excess of 8' in depth shall, if directed be provided with steps similar to those detailed for Manholes.
2. Frames, Grates & Covers shall be considered as part of the structure, and no separate payment shall be made.

GENERAL NOTES — PRECAST CATCH BASINS AND MANHOLES

1. Drain holes in precast sumps to be not over 3" in diameter, and shall be plugged with mortar when constructed.
2. All precast sections of less than 6" wall thickness shall have tongue and groove joints.
3. Cone and Ring sections wall thickness min. 4", max. 6"
4. Minimum wall thickness of sump may be 4" as specified in A.S.T.M. C-478, however, if concrete blocks are used around the inlet and outlet pipes, the wall thickness of sump shall be 6".
5. Wall around inlet and outlet pipes may be built of 6" concrete blocks or a precast ring with an opening 2" larger than the outside diameter of the pipe may be used.
6. Lift Holes shall be provided.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3225	18	25



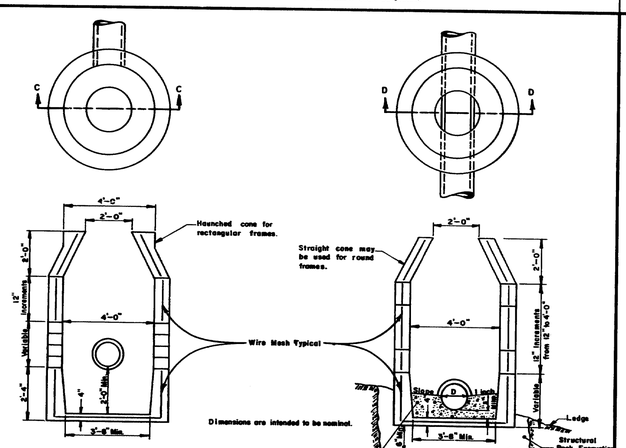
SECTION A-A
SHAPE "1"

SECTION B-B
SHAPE "2"

Dimensions are intended to be nominal.

CATCH BASINS (Concrete Blocks or Bricks)

A

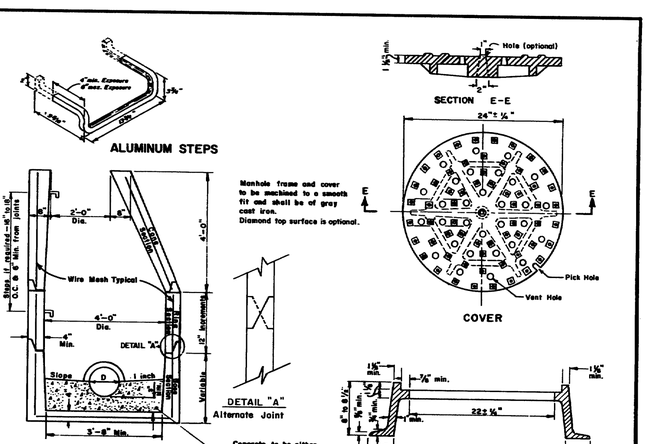


SECTION C-C
SHAPE "3"

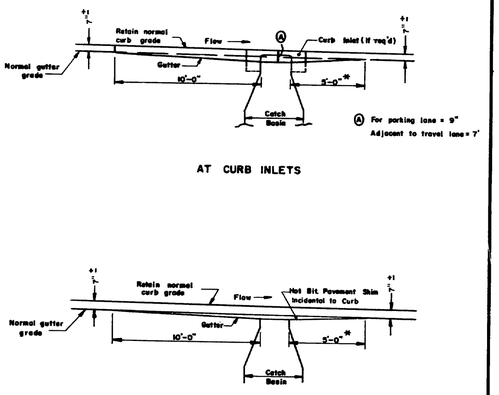
SECTION D-D
SHAPE "4"

CATCH BASINS (Precast Units)

B



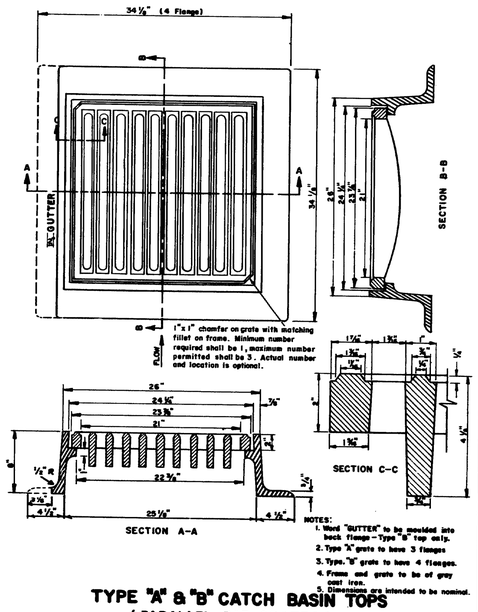
C



NOTE: PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT. CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF THE GUTTER. THE GRATES SHALL BE DEPRESSED 3" BELOW THE NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. DIMENSIONS ARE INTENDED TO BE NOMINAL.

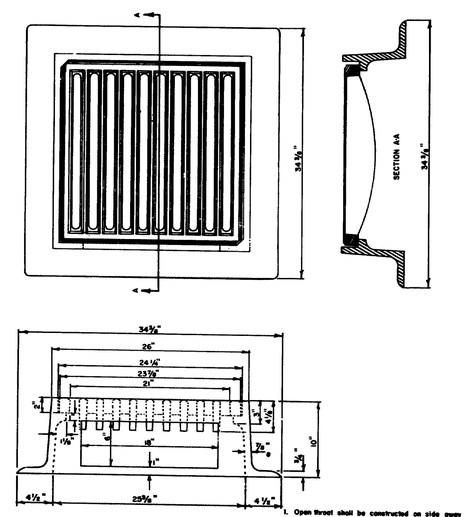
GUTTER GRADE TRANSITION AT CATCH BASIN

AD



TYPE "A" & "B" CATCH BASIN TOPS
(PARALLEL BAR GRATES)

E



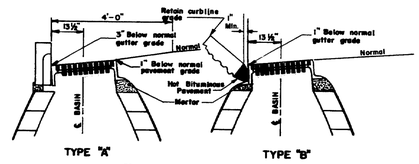
TYPE "C" CATCH BASIN TOPS

F

STRUCTURE	TOP				SHAPE				
CATCH BASIN	A	B	C	D	1	2	3	4	5
Type A-1	X				X		X		
Type A-2	X					X		X	
Type B-1		X			X		X		
Type B-2		X				X		X	
Type C-1			X		X		X		
Type C-2			X			X		X	
MANHOLE				X		X		X	X

TABLE OF CATCH BASIN TYPES
(COMBINATION OF TOPS AND SHAPES)

For Type "E" & Type"F"C.B. See Sheet No. 3



CATCH BASIN TOP INSTALLATION

LG

REVISIONS	
CATCH BASINS TYPE A-B-C	10-21-69
PLATE 'E'	4-21-71
PLATE 'D-E'	8-26-75
PLATE C	10-14-75
PLATE 'D-C'	7/31/78

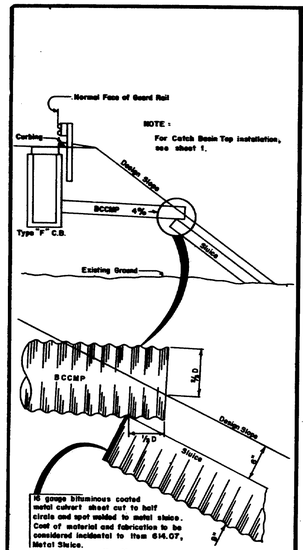
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

CATCH BASINS AND MANHOLES

AUG. 1969 (1)

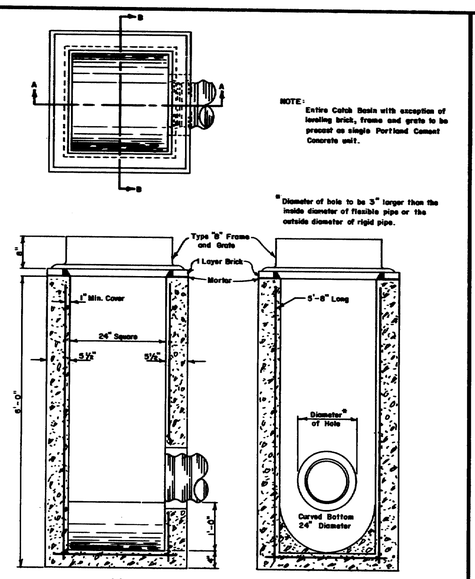
R95-421



TYPE "F" CATCH BASIN WITH OUTLET PIPE (SLUICE OPTIONAL)

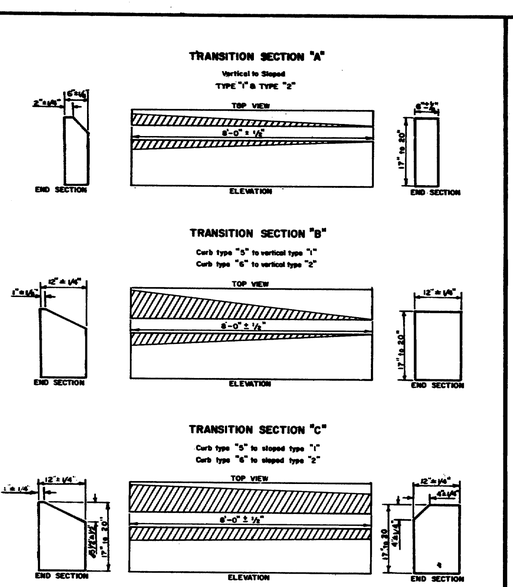
(SEE SHEET NO. 2 FOR STANDARD SLUICE DRAWING)

3-A



CATCH BASIN TYPE "F"

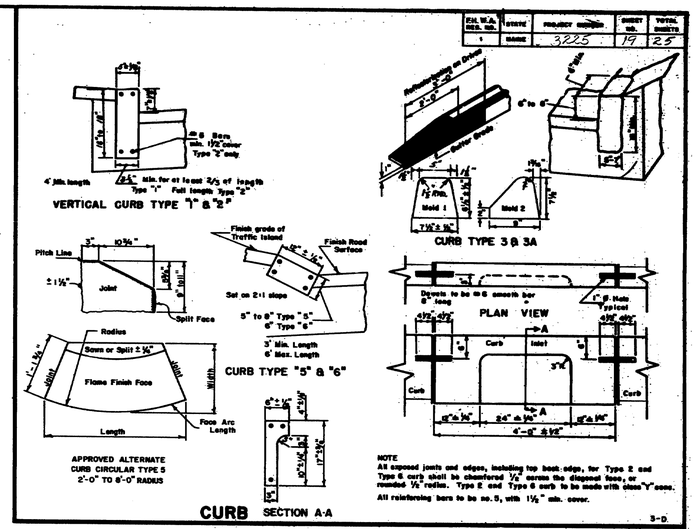
3-B



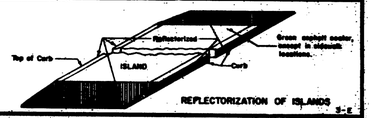
CURB TRANSITION

NOTE - TYPE 2 CURB
Precast concrete curb to be made with class "A" concrete.
All reinf. bars to be #5, 1½" min. cover.

3-C

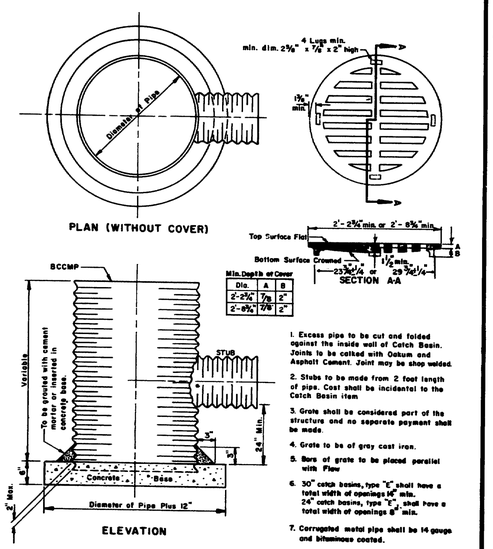


3-D



REFLECTORIZATION OF ISLANDS

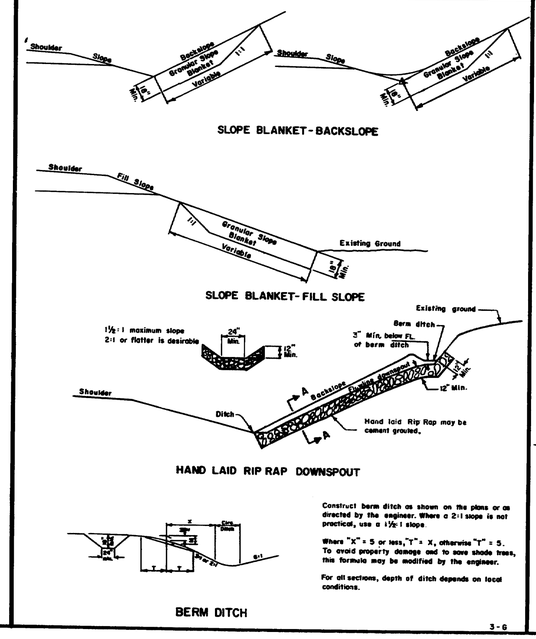
3-E



CATCH BASIN TYPE "E"

1. Excess pipe to be cut and folded against the inside wall of Catch Basin. Joints to be caulked with Oakum and Asphalt Cement. Joint may be shop welded.
2. Stubs to be made from 2 foot length of pipe. Cost shall be incidental to the Catch Basin item.
3. Grate shall be considered part of the structure and no separate payment shall be made.
4. Grate to be of gray cast iron.
5. Bars of grate to be placed parallel with Flow.
6. 30" catch basins, type "E" shall have a total width of openings 16" min. 24" catch basins, type "E" shall have a total width of openings 8" min.
7. Corrugated metal pipe shall be 14 gauge and bituminous coated.

3-F

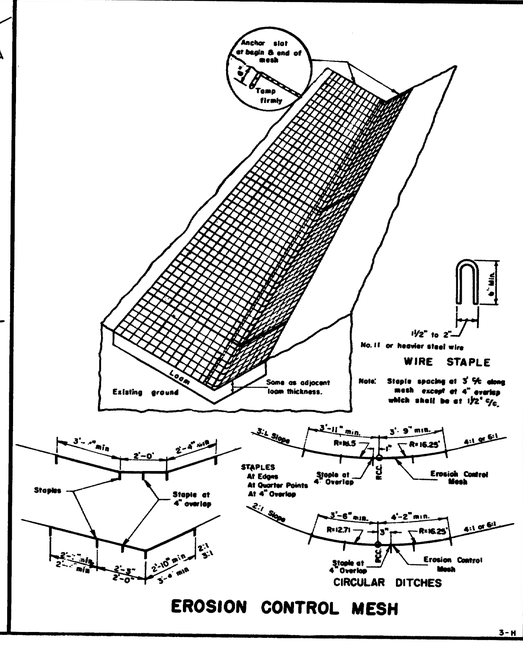


Construct berm ditch as shown on the plans or as directed by the engineer. Where a 2:1 slope is not practical, use a 1½:1 slope.

Where "X" = 5 or less, "Y" = X, otherwise "Y" = 5. To avoid property damage and to save shade trees, this formula may be modified by the engineer.

For all sections, depth of ditch depends on local conditions.

3-G



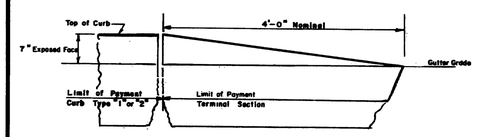
EROSION CONTROL MESH

3-H

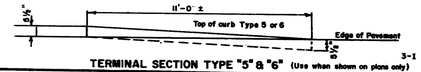
CURB TYPES (1&2), (5&6) ON CURVES				
	RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
1 & 2	0' To 60' Incl.	4' Min.	Circular	Arc To Fit Curve
	Over 60' To 160'	4' To 6'	Straight	Straight Pieces
5 & 6	0' To 8' Incl.	2' Min	Circular	To Fit Curve
	Over 8' To 30' Incl.	12" Min. Chord	Circular	Straight Pieces, Radial Ends
	Over 30' And Under 160'	2' To 3'	Straight	Straight Pieces
	160' And Over	3' To 8'	Straight	Straight Pieces

3-J

TERMINAL CURB SECTION



TERMINAL SECTION TYPE "1" & "2"



TERMINAL SECTION TYPE "5" & "6" (Use when shown on plans only)

3-I

REVISIONS	
Plate 3-G	12-23-69
Plate 3-F	5-27-70
Plate 3J	7-15-70
PLATE 3G	3-4-71
PLATE 3H	8-28-73
PLATE 3H	6-26-75
PLATE D	2-8-75
PLATE D-1	11-24-75
PLATE 3D	9/31/78
PLATE 3I	8/3/79

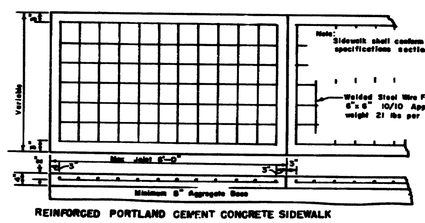
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

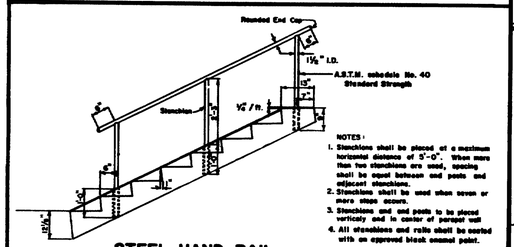
CURB, DITCHES AND SLOPES, AND CATCH BASINS TYPE "E"

R95-422 AUG. 1969 (3)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	3225	19	25



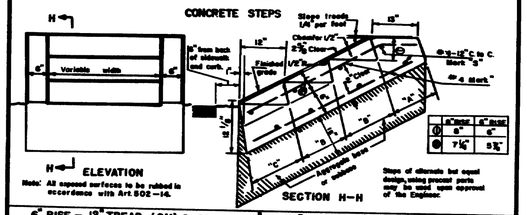
REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK



NOTES:
1. Stanchions shall be placed at a maximum horizontal distance of 5'-0". When more than two stanchions are used, spacing shall be equal between end posts and adjacent stanchions.
2. Stanchions shall be used when seven or more steps occurs.
3. Stanchions and end posts to be placed vertically and in center of parapet wall
4. All stanchions and rails shall be painted with an approved black enamel paint.

STEEL HAND RAIL 5-A

CONCRETE STEPS



Note: All exposed surfaces to be rubbed in accordance with Art. 502-14.

Steps of alternate but equal design, using precast parts may be used upon approval of the Engineer.

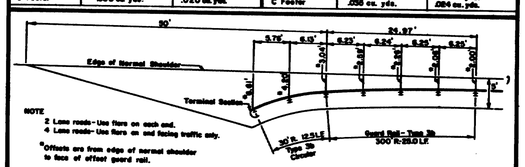
6" RISE – 12" TREAD (2:1) SLOPE				8" RISE – 12" TREAD (1½:1) SLOPE			
Mark	Size	Number	Length (Each)	Mark	Size	Number	Length (Each)
R	Gr 4 .668 lbs. per ft.	2 Each perapet 1 Each ft. of width	11" For "A" +13.4 For each "B" +12" For "C"	R	Gr 4 .668 lbs. per ft.	2 Each perapet 1 Each ft. of width	11" For "A" +10.5" For each "B" +12" For "C"
S	Gr 4 .668 lbs. per ft.	2 For "A" 2 For each "B" 2 For "C"	4" Each perapet + 12" per ft. of width	S	Gr 4 .668 lbs. per ft.	2 For "A" 2 For each "B" 2 For "C"	4" Each perapet + 12" per ft. of width

REINFORCING STEEL

CONCRETE CLASS "A"

Section	Slope per ft. of width	Perapet each wall
"A" Header	.030 cu. yds.	.018 cu. yds.
"B" Each later step	.030 cu. yds.	.020 cu. yds.
"C" Footer	.030 cu. yds.	.020 cu. yds.

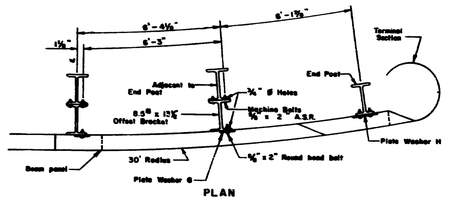
Section	Slope per ft. of width	Perapet each wall
"A" Header	.038 cu. yds.	.018 cu. yds.
"B" Each later step	.038 cu. yds.	.024 cu. yds.
"C" Footer	.038 cu. yds.	.024 cu. yds.



NOTE
2 Lane roads - Use flare on each end.
4 Lane roads - Use flare on end facing traffic only.
*Offsets are from edge of normal shoulder to face of offset guard rail.

GUARD RAIL END TRANSITION 5-B

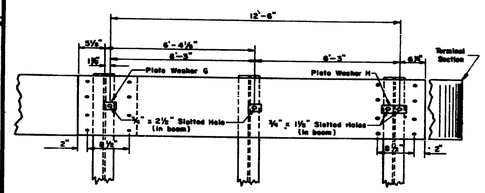
END BEAM ASSEMBLY - SPACING OF POSTS GUARD RAIL TYPE 3a and 3b



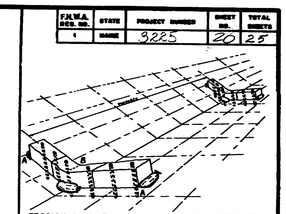
PLAN

To be used in all locations except on the end away from traffic on 4 lane divided.

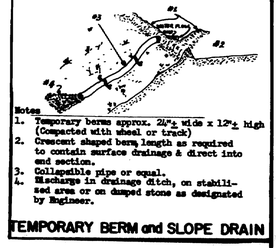
NOTE: Offset Bracket shall be installed on all posts, except end post.



ELEVATION 5-C



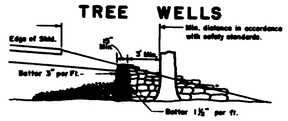
EROSION CHECK for DITCH



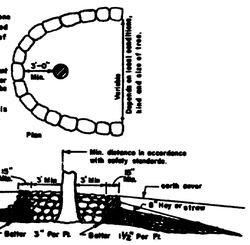
TEMPORARY BERM and SLOPE DRAIN

TEMPORARY EROSION CONTROL 5-D

TREE WELLS



NOTES:
1. Selected ledge excavation, crushed stone or other porous material shall be used to fill around the old ground area of the tree from the tree wall to the perimeter of the branches.
2. An 8" layer of hay or straw to prevent infiltration of fines shall be placed over the root fill except in areas under the roadway and shoulders.
3. If drainage away from the tree well is necessary, underdrain outlet pipe shall be used, and will be paid for under Item 606.10.

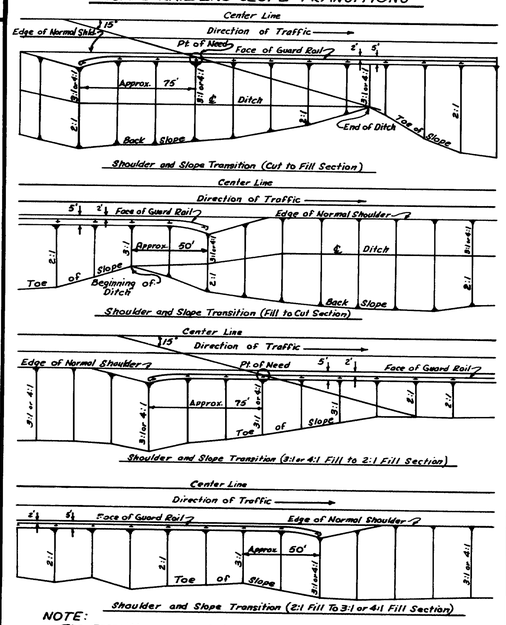


Plan

To be paid for under Item
610.09 Hand laid riprap.
605.10 6" Underdrain Outlet

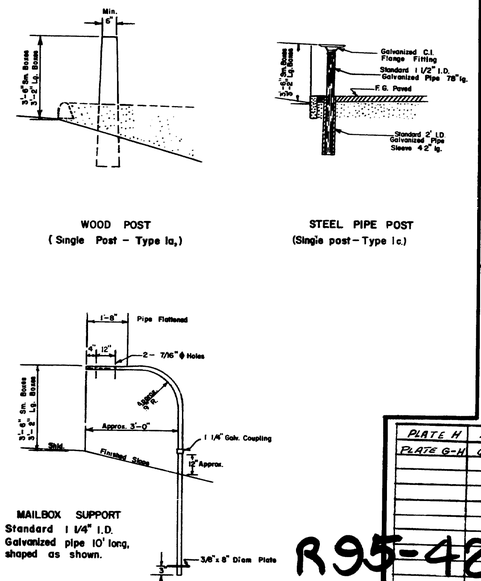
Plan 5-E

GUARD RAIL END SLOPE TRANSITIONS



NOTE: The Transitions are a design guide only. These slope Transitions shall be used with Beam Type Guard Rail.

5-F



WOOD POST (Single Post – Type Ia,)

STEEL PIPE POST (Single post – Type Ic.)

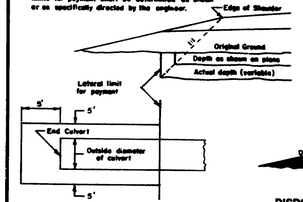
MAILBOX SUPPORT
Standard 1 1/4" I.D. Galvanized pipe 10' long, shaped as shown.

SUPPORTS FOR MAILBOXES 5G

MUCK EXCAVATION

PAYMENT LIMITS

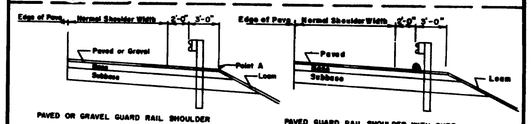
NOTE: When muck is excavated to a depth greater or less than what is shown on the plans, the vertical limits for payment shall be determined as shown or as specifically directed by the engineer.



Excavation for pipe culverts in grubbing and muck areas. Pay Earth Excav. or Muck Excav. as designated.

When directed by the engineer, waste material shall be used in this area, except that waste shall not be placed in fills designed with slopes of 2:1 or less. No additional payment will be made for this work.

DISPOSAL OF WASTE MATERIALS



LOCATION OF GUARD RAIL 5-H

PLATE H	11-3-77
PLATE G-H	6-1-76

REVISIONS	
Plate S-A	12-24-69
PLATE 5B	1-27-71
PLATE 5 H	5-12-71
PLATE 5B	1-19-72
PLATE 5G	6-7-72
PLATE 5D	6-7-72
PLATE 5B+C	10-22-74
PLATE A&F,H	3-18-75
PLATE 5 H	6-26-75
PLATE G	10-14-75

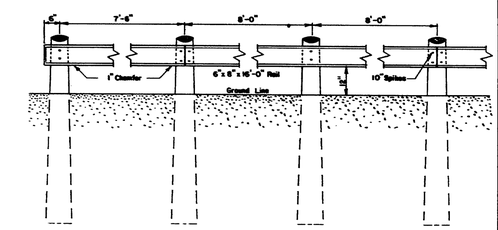
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

GUARD RAIL, MUCK EXCAVATION
CONCRETE STEPS & SIDEWALK
GUYING TREES
TREE WELLS, EROSION CONTROL,
MAILBOX SUPPORTS.

AUG. 1969 (S)

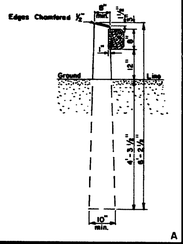
R95-423



ELEVATION

PLAN

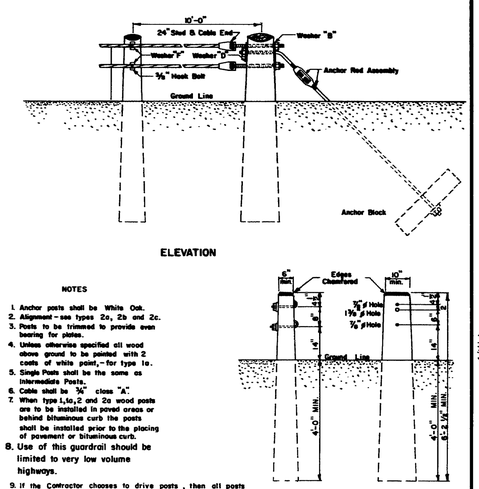
NOTE:
1. This guardrail should not be used adjacent to public highways. Location should be limited to driveways, dead ended roads, etc.
2. Unless otherwise specified, all exposed wood above ground, both posts and rails shall be painted with 2 coats of white paint.



FOR TYPE 6 GUARD RAIL SEE STANDARD DETAIL SHEET 21

GUARD RAIL type "5"

A



ELEVATION

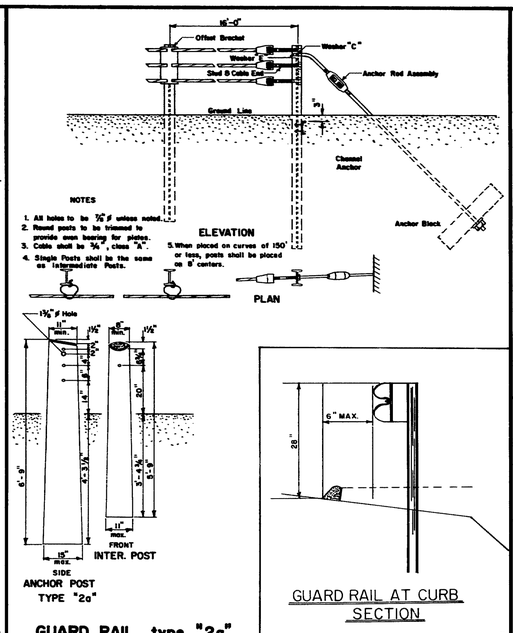
NOTES
1. Anchor posts shall be White Oak.
2. Alignment - see types 2a, 2b and 2c.
3. Posts to be trimmed to provide even bearing for plates.
4. Unless otherwise specified all wood above ground to be painted with 2 coats of white paint, - for type 1a.
5. Single Posts shall be the same as Intermediate Posts.
6. Cable shall be ⅜" class "A".
7. When type 1,1a,2 and 2a wood posts are to be installed in paved areas or behind bituminous curb the posts shall be installed prior to the placing of pavement or bituminous curb.
8. Use of this guardrail should be limited to very low volume highways.
9. If the Contractor chooses to drive posts, then all posts on the project, whether driven or placed in dug holes shall be set with the larger diameter at the top

GUARD RAIL type "1a"-"1b"

INTERMEDIATE POST

ANCHOR POST

B



NOTES
1. All holes to be ⅞" ø unless noted.
2. Round posts to be trimmed to provide even bearing for plates.
3. Cable shall be ⅜", class "A".
4. Single Posts shall be the same as Intermediate Posts.
5. When placed on curves of 150' or less, posts shall be placed on 8' centers.

ELEVATION

PLAN

INTER. POST

ANCHOR POST TYPE "2a"

GUARD RAIL type "2a"

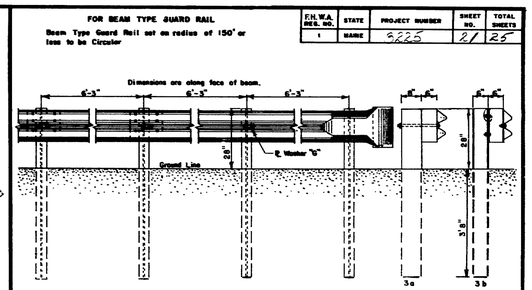
GUARD RAIL AT CURB SECTION

C

FOR BEAM TYPE GUARD RAIL

Beam Type Guard Rail set on radius of 150' or less to be Circular

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	9225	21	25



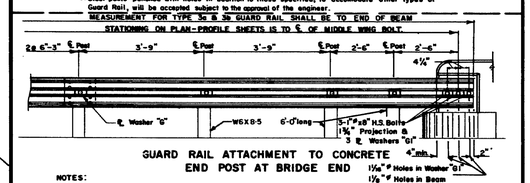
NOTE:
Intermediate post spacing shall be 6'-3" unless otherwise shown.

ELEVATION

1. Posts for type "3a" Guard Rail shall be 6"x8" and offset blocks for type "3a" Guard Rail shall be 6"x6".
2. Posts and offset brackets for type "3b" Guard Rail shall be W6X8.5
3. Steel posts punched with holes in addition to those specified, to accomodate other types of Guard Rail, will be accepted subject to the approval of the engineer.

MEASUREMENT FOR TYPE 3a & 3b GUARD RAIL SHALL BE TO END OF BEAM

STATIONING ON PLAN-PROFILE SHEETS IS TO ℄ OF MIDDLE WING BOLT.



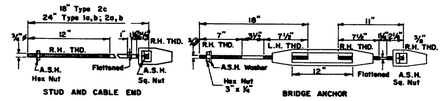
GUARD RAIL ATTACHMENT TO CONCRETE END POST AT BRIDGE END

1⅛"ø Holes in Washer "G"
1⅛"ø Holes in Beam

NOTES:
1. Where Bridge expansion is required at Connection, it will be detailed on the Construction Plans.
2. Guard Rail shall be connected to the structure as shown. Payment for the connection to the structure and additional posts shall be incidental to the Guard Rail Item.
3. Splice holes in Guard Rail Beam that are not used in connection, to be plugged with button head bolts, or omitted.

GUARD RAIL type "3a" & "3b"

D

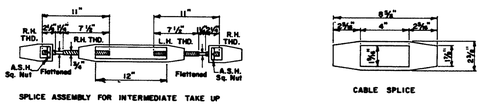


STUD AND CABLE END

BRIDGE ANCHOR

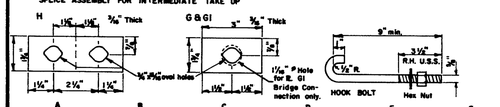
NOTES
1. Other designs may be used subject to the engineers approval.
2. All turnbuckles shall be installed midway of the threaded portion of each rod.

STANDARD FITTINGS



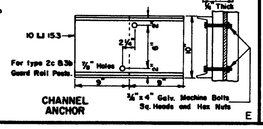
SPLICE ASSEMBLY FOR INTERMEDIATE TAKE UP

CABLE SPLICE



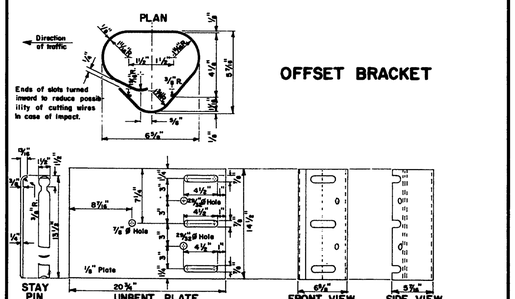
NOTES
1. All holes to be ⅞"ø unless otherwise noted.
2. Holes shall be drilled or punched before galvanizing.

PLATE WASHERS



CHANNEL ANCHOR

E



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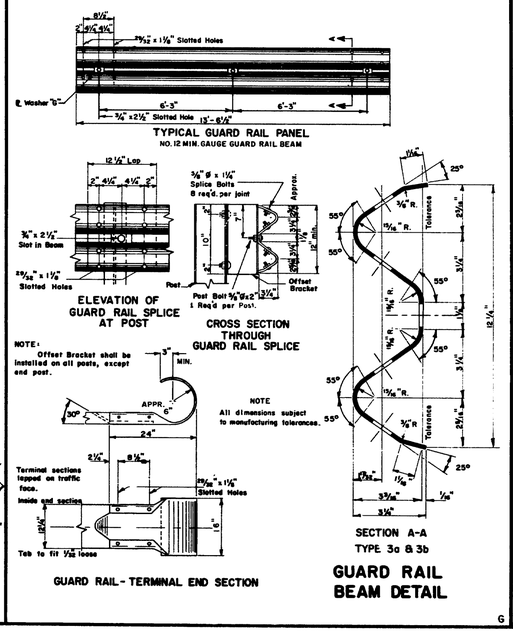

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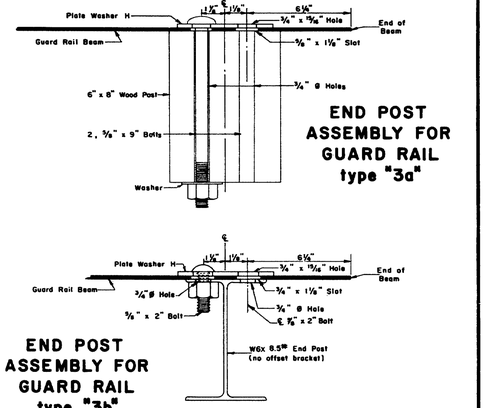


H

REVISIONS	
PLATE 'D'	11-22-71
— 11 —	2-17-72
PLATES C,D,G,H	10-22-74
PLATE 'C'	10-14-75
PLATE 'D'	8-17-76
PLATE 'B'	6-1-78

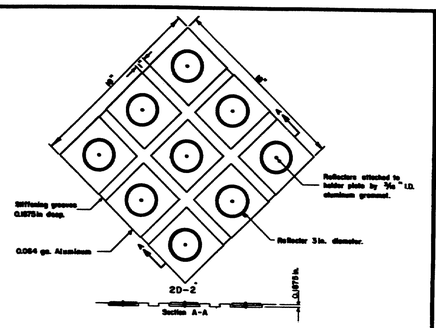
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

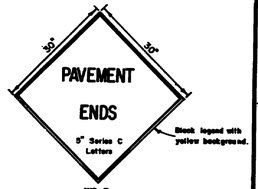
GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

AUG. 1969 (6)

R95-424



HAZARD MARKER



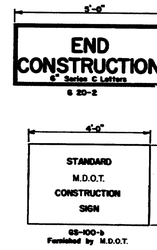
NOTE

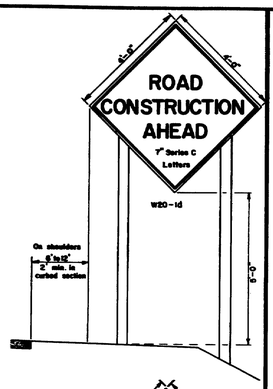
SIGNING IN AN AREA WHERE BLASTING IS NECESSARY SHALL BE PLACED AS OUTLINED IN THE "MANUAL", AND THE PRECAUTIONS OF SUBSECTION 107.12 OF THE STANDARD SPECIFICATIONS SHALL BE OBSERVED.

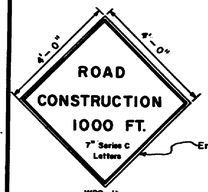
GENERAL NOTE
Construction Signs

1. Sign Borders: All signs shall have borders conforming to the size and spacing as shown below:
   a. 30" x 30" Sign - ¾" Border, ½" Space from sign edge.
   b. 2' x 5' Sign - ¾" Border, ½" Space from sign edge.
   c. 3' x 4' Sign - ¾" Border, ½" Space from sign edge.
   d. 4' x 4' Sign - 1¼" Border, ¾" Space from sign edge.

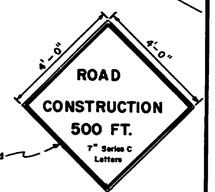
A







Erected in the same manner as W20-1d



CONSTRUCTION SIGNS

B

GENERAL NOTES - BARRICADES

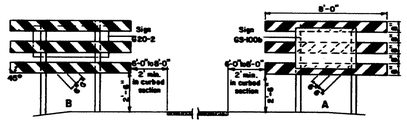
1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation, Federal Highway Administration, 1971.
2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 16 minimum gauge galvanized steel, or 1/4" plywood. Individual white sheets may be attached to an orange reflectorized background to form the orange and white stripes. At the Contractor's option the reflective sheeting and backing may extend the full width of the barricade with an opaque film or paint applied to form the stripes.
3. All signs shall be of reflective sheeting on 5/8" thick plywood. The plywood shall conform to subsection 712.25, Standard Specifications, June 1968.
4. Pressure sensitive reflective sheeting will be an acceptable alternate to the reflective sheeting required by Standard Specifications.

NOTES - PORTABLE BARRICADES

1. Lumber sizes for portable barricades shall be 2" x 8" except posts which shall be 1½" x 1½" (nominal sizes).
2. The detour sign shall be an oversized M4-10 sign with a demountable "DETOUR" message which shall be made of screened reflective sheeting on 1/4" plywood, masonite, sheet steel or sheet aluminum.
3. Hazard markers shall be attached to the barricade with a bolt assembly of steel cadmium plated 5/16" bolt, lock washer and vandal resistant nuts.
4. When two W1-6 signs are required, R11-2, R11-3, or R11-4 signs shall be omitted.
5. Flashing lights housings shall be mounted to permit rotating in a vertical axis to allow for adjustment to face oncoming traffic.
6. Location of electric service and meter to be determined after the power source has been located.

NOTES-WING BARRICADES

1. Lumber sizes for wing barricades shall be 1" x 8" except posts which shall be 1½" x 1½" (nominal sizes).
2. Wing barricades will not be required unless specifically called for in the special provisions.
3. Location of signs and barricades will be determined by the Engineer.

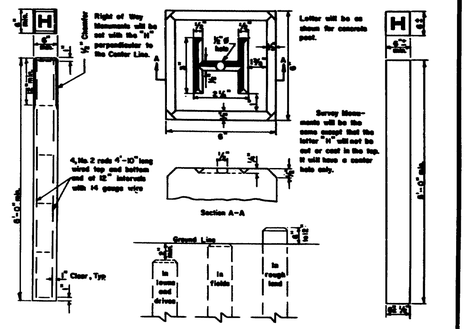


WING BARRICADES

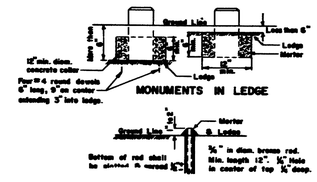
C

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3225	22	25

RIGHT OF WAY & SURVEY MONUMENTS

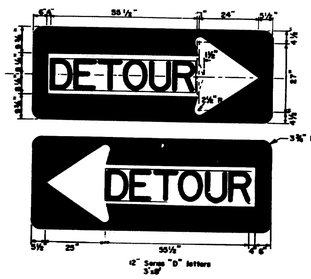


CONCRETE MONUMENT | MONUMENTS IN EARTH | GRANITE MONUMENT



BRONZE PIN MARKERS

D

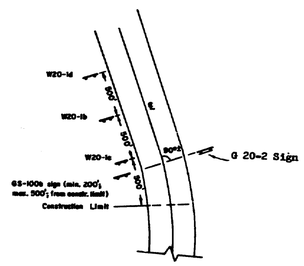


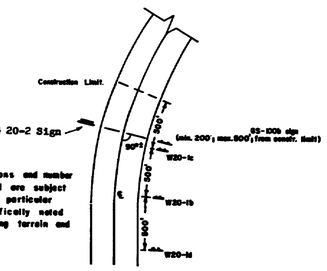
Demountable DETOUR message shall have 1" clearance from letters to edge on all sides.

DETOUR SIGN
M 4-(I)

E

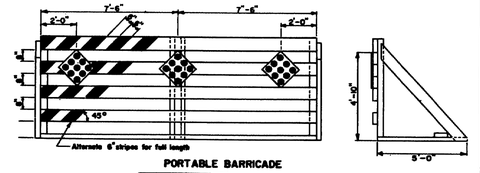
STANDARD SIGN LOCATIONS



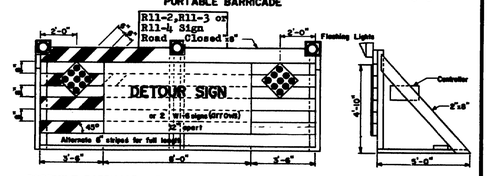


NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.

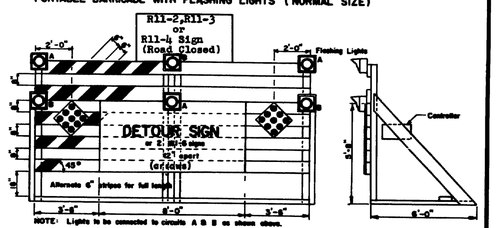
F



PORTABLE BARRICADE



PORTABLE BARRICADE WITH FLASHING LIGHTS (NORMAL SIZE)

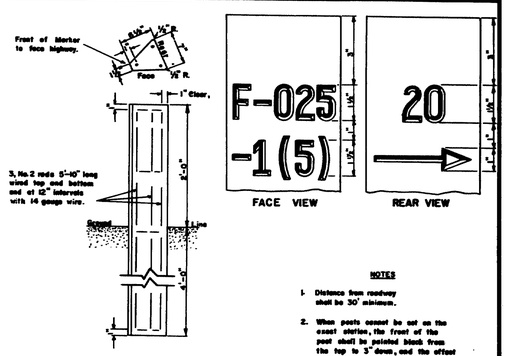


NOTE: Lights to be connected to circuits A B B as shown above.

OVERSIZED PORTABLE BARRICADE WITH FLASHING LIGHTS

BARRICADES

G



NOTES

1. Distance from roadway shall be 30' minimum.
2. When posts cannot be set on the exact station, the front of the post shall be painted black from the top to 3" down, and the offset distance marked on rear with an arrow pointing in direction of beginning or end of project.
3. All markings to be 1/16" deep and ⅛" wide.

PROJECT MARKERS

H

REVISION	
PLATE B	12-21-70
PLATES B, C, & F/G	12-15-71
PLATE C	10-12-72
PLATES C/G	3-25-76
Plate B	3-22-77

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

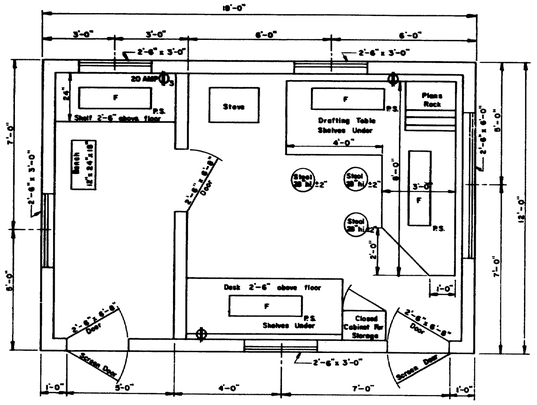
BARRICADES
WARNING SIGNS
MONUMENTS
PROJECT MARKERS

AUG. 1969

R95-425

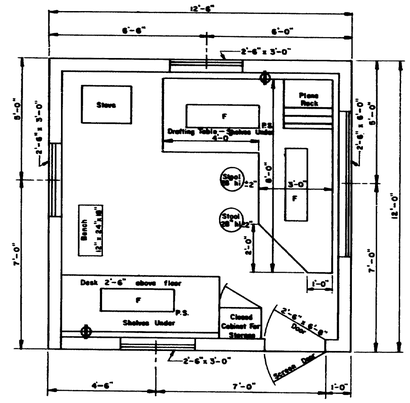
(11)

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3225	23	25



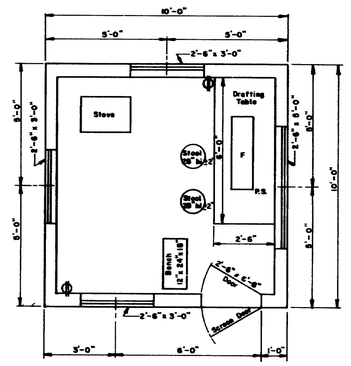
FLOOR PLAN
TYPE "A"

A



FLOOR PLAN
TYPE "B"

B

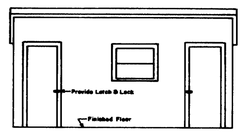


FLOOR PLAN
TYPE "C"

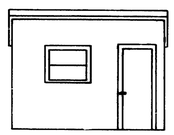
C

GENERAL NOTES

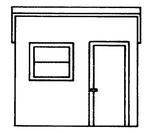
1. Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
2. Shelves under desk shall be constructed to received 11½" x 14" x 25" transfiles.
3. Windows shall be double hung.
4. Stovepipe shall not be in direct contact with combustible material ; the pipe shall be surrounded with at least 6" of fireproof material.
5. Continuous 110 volt 60 cycle electric service shall be supplied.
6. The engineer may rearrange the items shown on the plan views during construction of the field office.
7. FURNISHINGS TO BE SUPPLIED :
   - 2 Straight back chairs for types A and B
   - 1 Bench for types A, B & C
   - 3 Stool for type A
   - 2 Stools for types B & C
8. SYMBOLS :
   - F — Florescent lights (2 light , rapid start 48" strips and 40 watt bulbs.)
   - PS Pull switch
   - Duplex wall outlet — 15 amp unless otherwise noted.
   - Φ_3 Triplex Wall Outlet
9. For the Type "A" Field Office one clean 55 gal. drum shall be supplied , installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furished with water at all times.



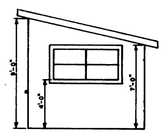
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



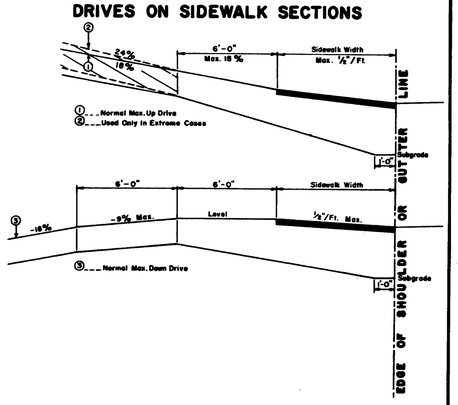
FRONT ELEVATION
TYPE "C"



SIDE ELEVATION
TYPES "A" "B" & "C"

F

DRIVES ON SIDEWALK SECTIONS

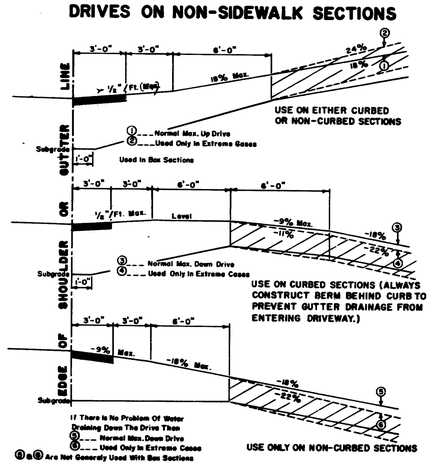


GENERAL NOTES
1. The sidewalk width shall be paved in all cases.
2. All residential or commercial drives 10% and over shall be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

D

DRIVES ON NON-SIDEWALK SECTIONS



GENERAL NOTES
1. The first 5' shown as pavement shall be paved only when abutting a paved area.
2. All residential or commercial drives 10% and over shall be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases , but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

E

REVISIONS	
PLATE 'D'& 'E'	3-16-73

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969

12

R95-426