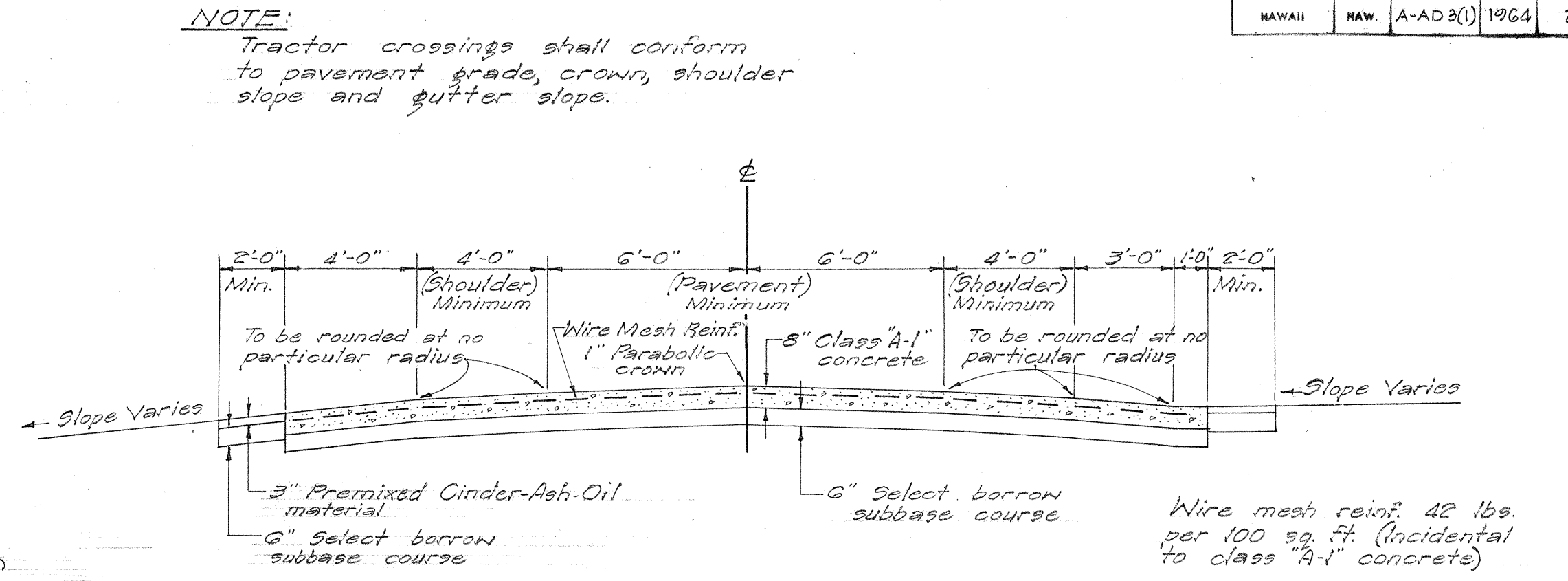
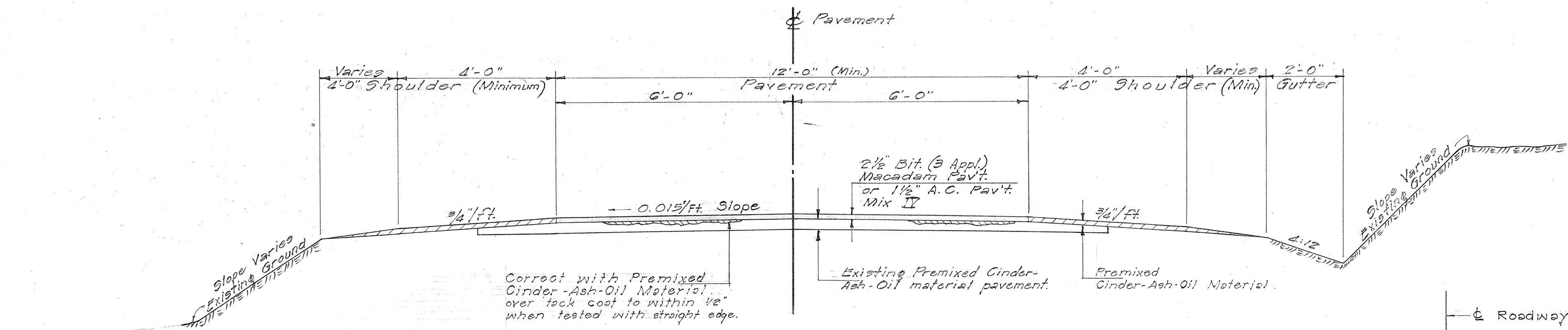




STATE - FEDERAL HIGHWAY CONSTRUCTION

DEFENSE ACCESS FUNDS \$ 000,000

U.S. DEPT. OF COMMERCE Bureau of Public Roads

HAWAII STATE HIGHWAYS DIVISION

HAWAII 20

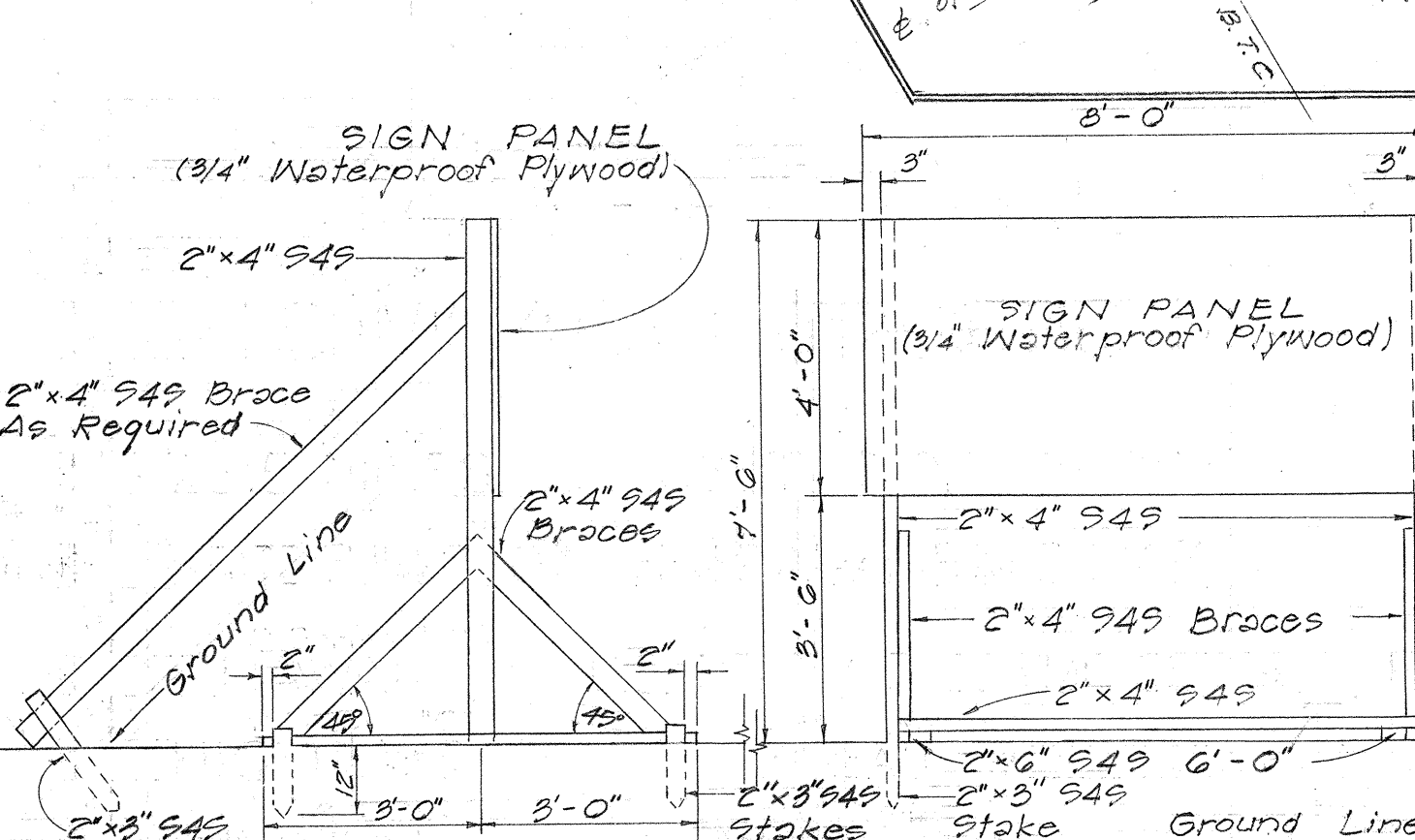
See Additional Detail of Shield on This Sheet

NOTE:

Contractor shall fill in proper figures in place of circles as ordered by the State Department of Transportation.

PLAN

Scale: Not to Scale

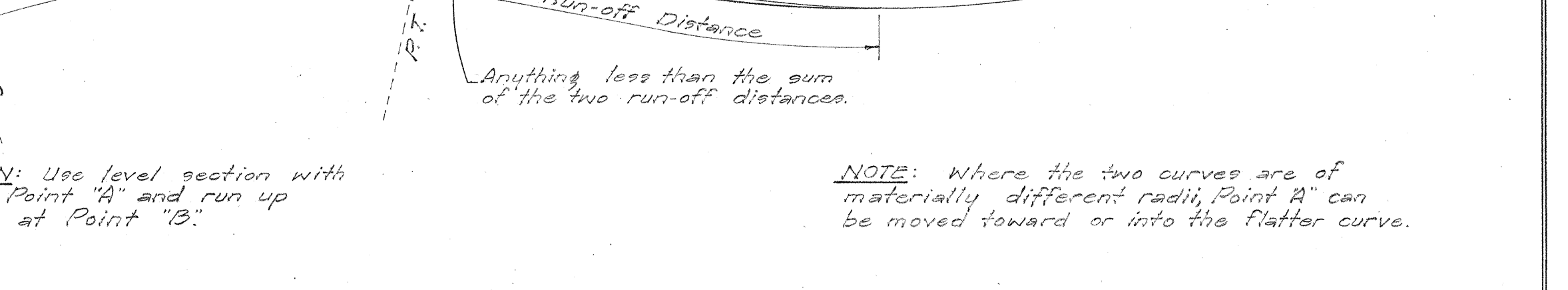
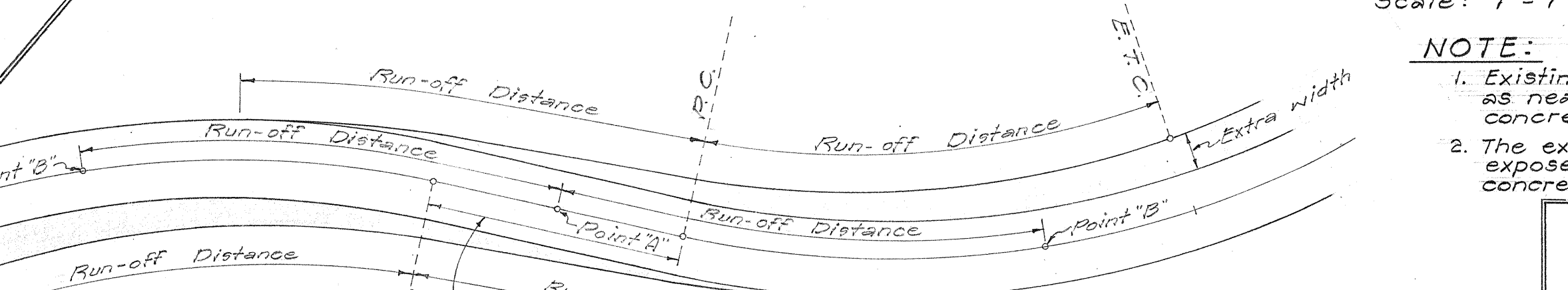
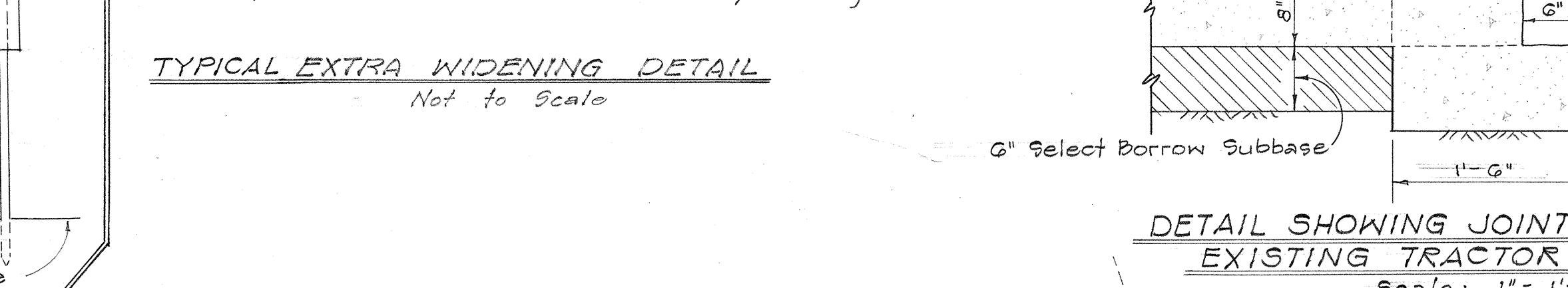
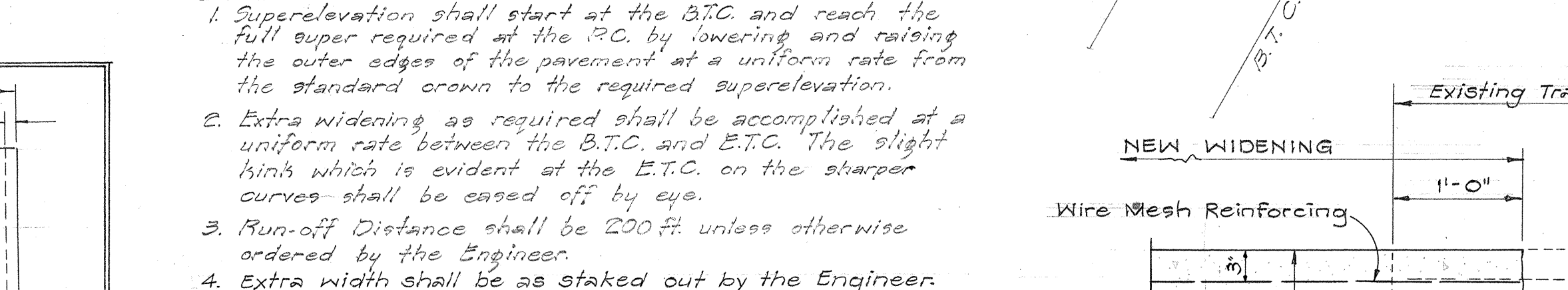
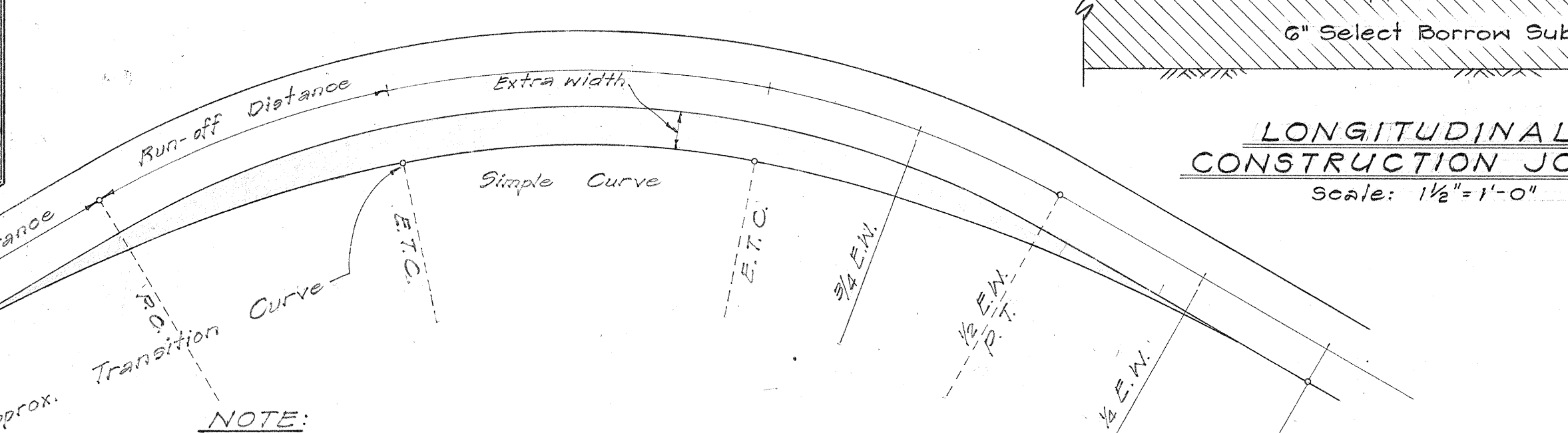
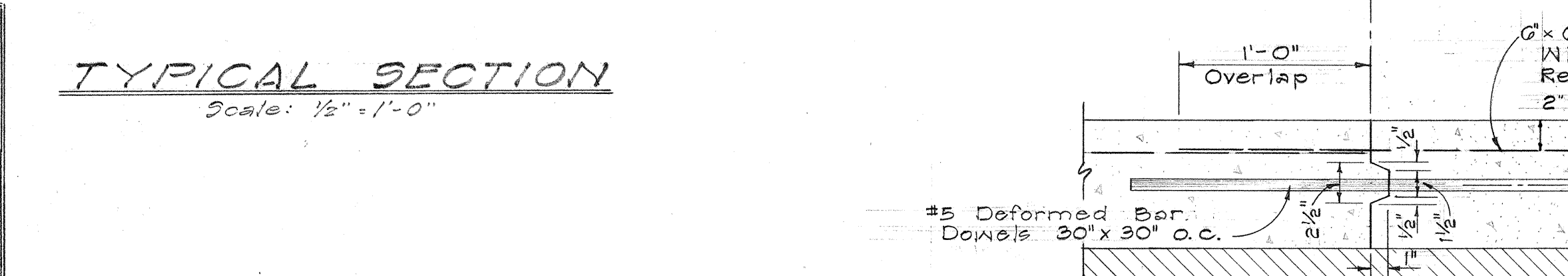


CONSTRUCTION IDENTIFICATION SIGN

Scales: As Noted

GENERAL NOTES

- The legend and shield shall be black on white background.
- All letters shall be of size and design shown and conform with Standard Alphabets for Highway Signs as set forth by the Public Roads Administration, Federal Work Agency.
- Letters shall be Series "D" sizes as shown, except where noted otherwise on the plan.
- Contractor shall be responsible for maintenance of sign.



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL SECTION & TYPICAL EXTRA WIDENING DETAILS.

IMPROVEMENT OF SADDLE ROAD

F.D.A. PROJ. NO. A-AD 3(1)

Districts of Hamakua & South Kohala

Scale: As Noted Date: Dec. 1963

NOTE:

Tractor crossings shall conform to pavement grade, crown, shoulder slope and gutter slope.

NOTE:

Contractor shall fill in proper figures in place of circles as ordered by the State Department of Transportation.

NOTE:

Existing concrete shall be cut off as neatly as possible to receive new concrete work.

NOTE:

The existing reinforcing shall be exposed and thoroughly cleaned of concrete and spliced to new reinforcing.

NOTE:

Where the two curves are of materially different radii, Point A can be moved toward or into the flatter curve.

NOTE:

Super-elevation shall start at the B.T.C. and reach the full super required at the P.C. by lowering and raising the outer edges of the pavement at a uniform rate from the standard crown to the required super-elevation.

NOTE:

Extra widening as required shall be accomplished at a uniform rate between the B.T.C. and E.T.C. The slight hump which is evident at the E.T.C. on the sharper curves shall be eased off by eye.

NOTE:

Run-off Distance shall be 200 ft. unless otherwise ordered by the Engineer.

NOTE:

Extra width shall be as staked out by the Engineer.

NOTE:

The location of the tractor crossing is approximate only and the exact location will be flagged by the engineer.

NOTE:

Number (2), an existing tractor crossing, shall be widened eight (8) feet.

NOTE:

Only one-half of a tractor crossing shall be constructed at a time to keep the other half open to traffic.

NOTE:

Wire Mesh Reinforcing and Steel Dowels will not be paid for separately, but shall be considered incidental to Item 40(1), Class A-1 Concrete other than in Bridges.

SUMMARY OF TRACTOR CROSSINGS

NO.	LOCATION	ANGLE TO E	ESTIMATED QUANTITIES
			STRUCT. EXG. SELECT BORROW MATERIAL CLASS A-1 CONCRETE
1	30.0 Mile	60°	15 c.y. 25 c.y. 15 c.y.
2	31.2 "	30°	15 c.y. 25 c.y. 15 c.y.
3	32.2 "	30°	15 c.y. 25 c.y. 15 c.y.
4	33.8 "	30°	15 c.y. 25 c.y. 15 c.y.
5	35.9 "	30°	15 c.y. 25 c.y. 15 c.y.
6	36.3 "	30°	15 c.y. 25 c.y. 15 c.y.
7	37.7 "	30°	15 c.y. 25 c.y. 15 c.y.
8	38.2 "	30°	15 c.y. 25 c.y. 15 c.y.
9	39.4 "	30°	15 c.y. 25 c.y. 15 c.y.
10	41.8 "	60°	15 c.y. 25 c.y. 15 c.y.
ESTIMATED TOTALS			270 c.y. 219 c.y. 140 c.y.
ACTUAL TOTALS			138 c.y. 22 c.y. 118.6 c.y.
SWALE 37 mi. (C.O.#2)			16 40.2

NOTE:

1. The location of the tractor crossing is approximate only and the exact location will be flagged by the engineer.

2. Number (2), an existing tractor crossing, shall be widened eight (8) feet.

3. Only one-half of a tractor crossing shall be constructed at a time to keep the other half open to traffic.

4. Wire Mesh Reinforcing and Steel Dowels will not be paid for separately, but shall be considered incidental to Item 40(1), Class A-1 Concrete other than in Bridges.