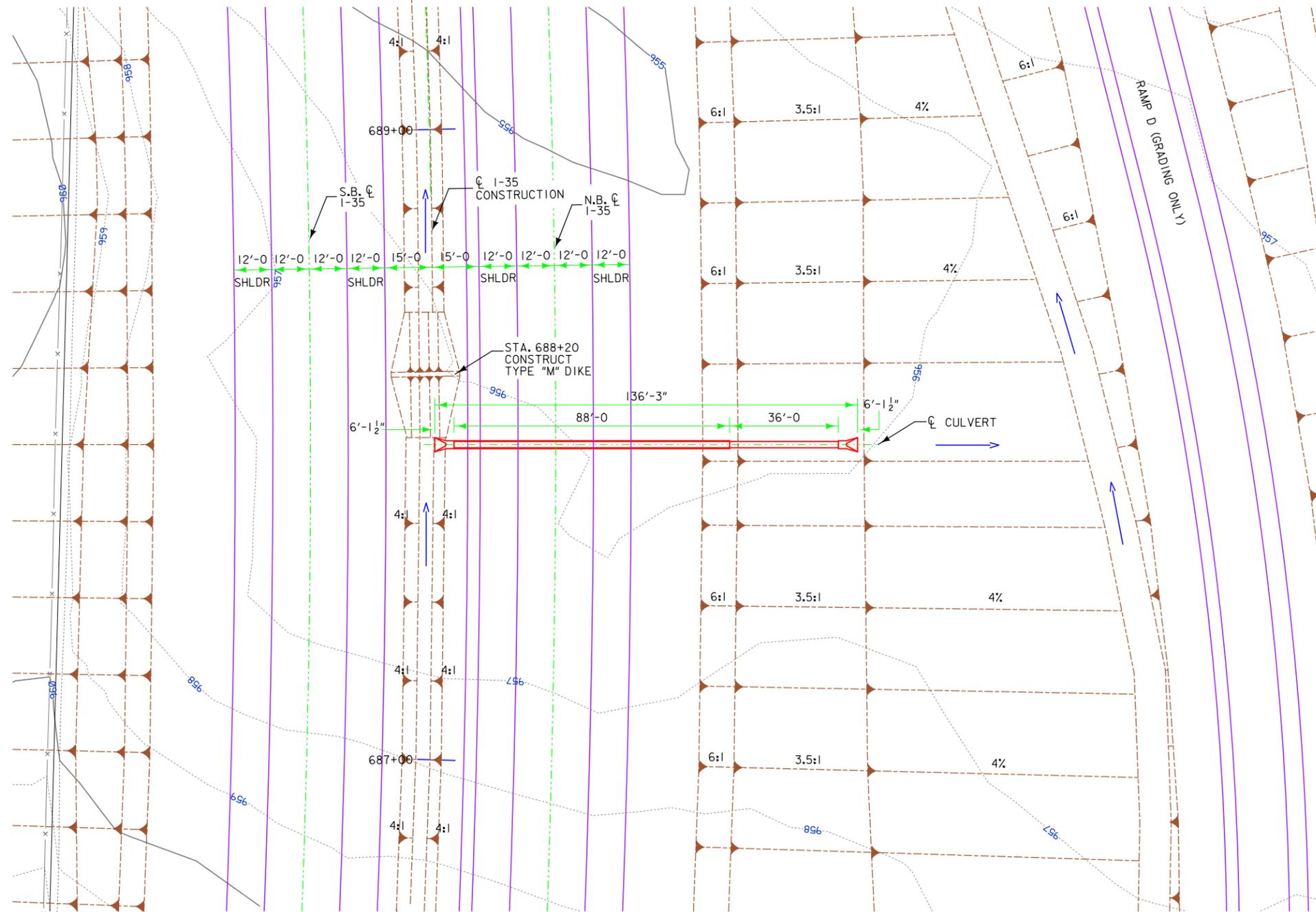


LONGITUDINAL SECTION ALONG ϕ CULVERT

BENCH MARK NO. 504, ELEV. 962.96, STA. 385+04, 96' LT.,
 "X" IN CONCRETE FOOTING E. POST "REST AREA" NEXT "RIGHT" SIGN
 NOTE: STATION AND OFFSET BASED ON I-35 SURVEY CENTERLINE

NOTES:
 PIPE DIMENSIONS SHOWN IN PLAN
 VIEW ARE BASED ON LAYING LENGTH



PLAT PLAN

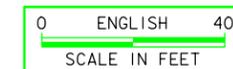


HYDRAULIC DATA

DRAINAGE AREA = 1.1 ACRES
 DESIGN DISCHARGE, Q50 = 4 CFS

LOCATION

ROUTE
 T-XX, R-XX
 SECTION
 TOWNSHIP
 COUNTY



DESIGN FOR 0° SKEW

24" X 124'
REINFORCED CONC. & CORRUGATED
METAL PIPE
PLAT PLAN
COUNTY

STATION: 688+00.00

DATE

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. _____ DESIGN NO. _____

COUNTY

PROJECT NUMBER

SHEET NUMBER

PRELIMINARY DESIGN PLAN CHECKLIST – PIPE CULVERT

DATE: 5-17-13

County: _____ Check By: _____ Date: _____

Project Location: _____ Consultant: _____

GENERAL

- Benchmark description
- Hydraulic Data table - include Drainage Area, Q_{50} cfs.
- Location table
- Title Block – Diameter x Length including pipe type
- Skew angle – same as shown in plan view
- Project number and file number
- Scale bar
- North arrow
- Culvert staging details: denote how drainage accounted for between stages
- NOTES: use as needed
- Revetment: use as-directed. Use quantity table as-needed
- Structural Design: use RCB culvert format/checklist if structural design required (flume, drop inlet, etc.)

PLAN VIEW

- Label "Plat Plan"
- Ground elevations, contours, and topography. Label contour elevations
- Existing utilities: as noted in CAD from survey
- Existing structures: include general description
- Proposed length: include dimensions as-needed from culvert typical, e.g., lengths left and right, total length, dimensions A, B, C, etc.
- Proposed station on road construction centerline
- Skew angle of culvert to roadway
- Skew angle of extension to existing pipe, if other than 0 degrees
- Proposed lane and shoulder widths
- Proposed embankment and ditch shaping
- Label centerline culvert/road construction
- Label stationing on at least two "tic" marks in the plan view
- Drainage: show direction of flow
- Check that all text and dimensioning is legible and not placed on top of other text or features

- Trenchless construction: use concrete pipe unless dictated by clearance or construction schedule. Use current specification directives

LONGITUDINAL SECTION

- Roadway section drawn perpendicular to road
- Projection along centerline of culvert (true length not shown for skewed culverts)
- Existing ground line and proposed grade line shown and labeled
- Show existing structure(s)
- Proposed flow-lines at inlet, outlet, or other breaks as needed from culvert typical
- Label degree of elbows used (1201, 1501, etc.)
- Label roadway fore-slope used (e.g., 6:1, 3.5:1)
- Profile grade elevation at intersection of culvert and road centerline
- Design high water elevation
- Note maximum fill height and location.
- If fill height greater than Road Standard Plan RF-31 Class B bedding charts, use PipePac for special design