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Lambert Rehbein (Vic) Pty Ltd T/A ACN 093 367 072

# REFURBISHMENT OF POVERTY POINT BRIDGE WALHALLA

DRG. No. DESIGNED APPROVED DATE SCALE

FILE No.

14-3-01

909401

# 99094-1

## **GENERAL**

### STRUCTURAL STEELWORK

- G.1 THESE GENERAL NOTES ARE RELEVANT TO ALL DRAWINGS OIS. THEALL NEW STRUCTURAL STEEL SHALL BE GRADE 300, UNLESS S.9 NOTED, AND COMPLY WITH AS 3678, 3679,1 AND 3679,2. SET. VIZ: -99094-1 TO 5.
- G.2 THESE NOTES ARE SUPPLEMENTARY TO AND DO NOT REPLACE THALL STRUCTURAL STEEL PLATES AND ROUNDS SHALL BE GRADE SPECIFICATION TO WHICH THE CONTRACTOR MUST CONFORM. 250, UNLESS NOTED, AND COMPLY WITH AS 3678 AND 3679.1
- G.3 ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
- G.4 LOADING

THE REFURBISHED BRIDGE IS TO BE FOR FOOT TRAFFIC ONLY AND THE DECKING HAS BEEN DESIGNED FOR A MAX.

GUARDRAIL LOADING IS 0.35 kN/m IN, OUT OR DOWN.

THESE LOADS ARE SIGNIFICANTLY LESS THAN THE ORIGINALS.5 (a) ALL WELDS SHALL BE IN ACCORDANCE WITH AS DESIGN LOADS FOR THE BRIDGE STRUCTURE AND THE EXTENT OF STRUCTURAL REPAIR IS AIMED AT APPROXIMATING THE ORIGINAL CAPACITY OF THE BRIDGE AND TO MINIMIZE THE EFFECTS OF FURTHER CORROSION.

OBTAIN THE SUPERINTENDENT'S APPROVAL BEFORE MAKING ANY (c) PENETRATIONS OR ALTERATIONS TO ANY STRUCTURAL ELEMENT, THAT ARE NOT FULLY DETAILED ON THE STRUCTURAL DRAWINGS.

#### CONCRETE

C.1 ALL CONCRETE SHALL BE MANUFACTURED, PLACED AND CURED IN ACCORDANCE WITH AS 3600. CONCRETE SHALL BE GRADE N25, MAX. AGGREGATE 20, SLUMP 40-80, MINIMUM LAPS: 5.6 FABRIC: 2 EDGE BARS PER SHEET PLUS 25 mm.

SUBMIT DETAILS FOR ANY SITE MIXED CONCRETE PRIOR TO CONSTRUCTION.

NOTES

ALL CIRCULAR HOLLOW SECTIONS SHALL BE GRADE C250, UNLESS NOTED, AND COMPLY WITH AS 1163.

WITH AS 4100.

S.4 WELD STRUCTURAL STEEL WITH E48XX ELECTRODES.

- 1554.1.
- ALL BUTT WELDS AND WELDS NOMINATED BY NOTE OR SYMBOL ON THE DRAWINGS SHALL BE SP (STRUCTURAL PURPOSE) WELDS.
- UNLESS NOTED OTHERWISE, ALL WELDS FOR BEAM WEB PLATE AND END PLATE BOLTED CONNECTIONS SHALL BE A CONTINUOUS 6 mm SP (STRUCTURAL PURPOSE) FILLET WELD ALL ROUND.
- UNLESS NOTED OTHERWISE, JOIN ALL NEW UNBOLTED ELEMENTS IN CONTACT WITH A CONTINUOUS 5 mm GP (GENERAL PURPOSE) FILLET WELD ALL ROUND.
- (e) THOROUGHLY REMOVE ALL WELD SPATTER AND SLAG AFTER WELDING.

ALL BOLTS SHALL BE M16-8.8/TF UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE HOT DIP GALV. AND THREADS MAY BE INCLUDED IN SHEAR PLANE UNLESS NOTED OTHERWISE.

THE FOLLOWING SYMBOLS AND DEFINITIONS APPLY TO BOLTS:

2 NO. 16 DIAMETER METRIC BOLTS 2M16

HIGH STRENGTH STRUCTURAL GRADE 8.8 TO AS 1252 8.8

4.6 COMMERCIAL GRADE 4.6 TO AS 1111

S INSTALLED TO SNUG TIGHTENED CONDITION TO AS 4100

TENSIONED BY THE PART TURN METHOD TO AS 4100 TF FOR A FRICTION TYPE JOINT

PROVIDE A WASHER UNDER THE ROTATING COMPONENT OF EACH NUT AND BOLT ASSEMBLY. PROVIDE WASHERS UNDER BOTH BOLT HEAD AND NUT FOR SLOTTED OR OVERSIZE HOLES.

- VERIFY ALL RELEVANT SITE DIMENSIONS BEFORE COMMENCING SHOP DRAWINGS.
- AT LEAST SEVEN WORKING DAYS PRIOR TO THE ANTICIPATED COMMENCEMENT OF FABRICATION, SUBMIT TWO SETS OF SHOP DRAWINGS TO M J CONSULTING ENGINEERS FOR REVIEW.

THIS REVIEW IN NO WAY EXEMPTS THE CONTRACTOR FROM RESPONSIBILITY FOR THE WORK SHOWN ON THE DRAWINGS, AND THE CONTRACTOR REMAINS FULLY RESPONSIBLE FOR ALL DIMENSIONS AND AGREEMENT WITH THE CONTRACT.

SHOP DRAWINGS SHALL BE THOROUGHLY CHECKED BY THE CONTRACTOR FOR COMPLETENESS AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS BEFORE SUBMITTING THEM TO M J CONSULTING ENGINEERS.

DO NOT COMMENCE FABRICATION OF STEELWORK UNTIL THE RELEVANT SHOP DRAWING HAS BEEN STAMPED "FABRICATION MAY PROCEED" BY M J CONSULTING ENGINEERS.

PREPARE ALL SURFACES, FOR NEW GUARDRAIL AND DECKING STEELWORK, UNLESS NOTED OTHERWISE, FOR PAINTING BY EXPOSING WHITE METAL BY ABRASIVE BLASTING TO AS 1627 PART 4, CLASS 2-1/2. PAINT WITH AN APPROVED INORGANIC ZINC-SILICATE PAINT IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO GIVE A MINIMUM DRY FILM OF 0.075 mm WITH 0.3 kg/m2 ZINC.

WHERE INSTRUCTED BY THE SUPERINTENDENT, PREPARE AND S.2 ALL MATERIALS, WORKMANSHIP AND PROCEDURES SHALL COMPLY PAINT ANY SECTIONS OF THE EXISTING BRIDGE STRUCTURE AS T.3 SPECIFIED IN APPENDIX No. 5 OF THE SPECIFICATION.

DISTRIBUTED LIVE LOAD OF 5 KPg OR POINT LOAD OF 1.8 KSL3 ALL CLEATS SHALL BE 10 mm THICK UNLESS NOTED OTHERWISED RETAIN THE SERVICES OF, AND PAY ALL COSTS FOR AN APPROVED STEEL FABRICATION INSPECTION SERVICE TO:

- AND ERECTION TO ENSURE THAT ALL WORKMANSHIP COMPLIES WITH THIS SPECIFICATION, WITH PARTICULAR ATTENTION TO:
  - TESTING AND APPROVAL OF WELDING PROCEDURES AND OPERATORS,
  - PREPARATION AND FIT UP OF JOINTS
  - QUALITY, SIZE AND LENGTHS OF WELDS.
  - PREPARATION FOR SHOP PAINTING,
  - SHOP PAINTING.
  - HIGH STRENGTH BOLTING TECHNIQUE,
  - ERECTION PROCEDURES INCLUDING SITE WELDING AND TOUCH UP PAINTING.
  - PREPARATION AND APPLICATION OF PAINT TOP COATS.
- SUBMIT REPORTS TO THE SUPERINTENDENT, WITH COPIES TO THE CONTRACTOR AND THE STRUCTURAL STEELWORK SUBCONTRACTOR, DETAILING PROGRESS OF THE WORK. WHILE FABRICATION AND/OR ERECTION IS IN PROGRESS.
  - ON COMPLETION OF FABRICATION AND ERECTION, ISSUE THE SUPERINTENDENT WITH A CERTIFICATE STATING THAT ALL WORKMANSHIP COMPLIES WITH THE SPECIFICATION.

#### **TIMBER**

- T.1 FABRICATE, FIX AND ERECT ALL STRUCTURAL TIMBER MEMBERS IN ACCORDANCE WITH AS 1684, AS 1720 AND THE TIMBER FRAMING MANUAL
- T.2 CARRY OUT ALL STRUCTURAL TIMBER CONSTRUCTION UNDER THE SUPERVISION OF A PERSON CONVERSANT WITH THE REQUIREMENTS OF AS 1684, AS 1720 AND THE TIMBER FRAMING MANUAL.
  - TIMBER TYPES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE, F11 UNSEASONED YELLOW STRINGY BARK OF MINIMUM DURABILITY CLASS 2.

DECKING SHALL BE IN SINGLE LENGTHS.

CONDUCT ALL NECESSARY INSPECTIONS OF STEEL FABRICATION ALL TIMBER USED SHALL BE SELECT STOCK FREE FROM WARPS, WAINS & EXCESSIVE KNOTS. ALLOW TO REPLACE ANY TIMBER WHICH EXHIBITS DEFECTS DURING THE CONTRACT MAINTENANCE PERIOD.

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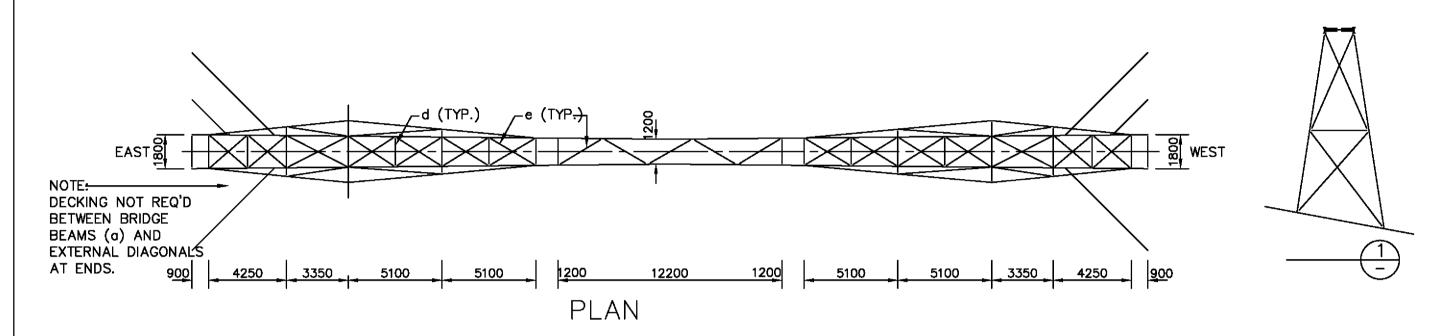
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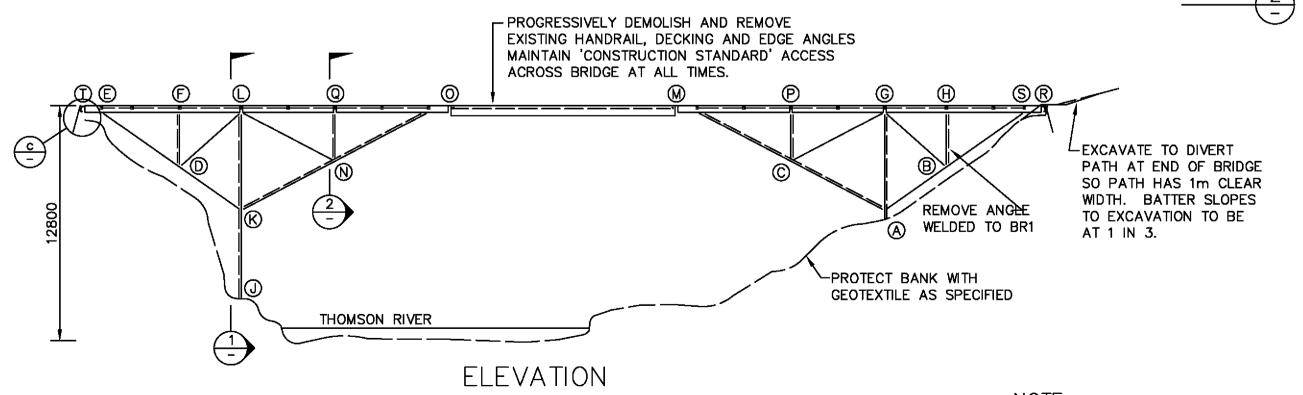
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1: 200

DATE STRUCTURAL FRAMING PLAN, ELEVATION & SECTIONS







# NOTE:

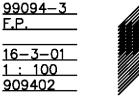
- 1. FOR NOTES REFER TO DRG. No. 99094-1.
- 2. REFER TO DRG. No. 99094-3 FOR MEMBER SIZES AND NEW HANDRAIL.

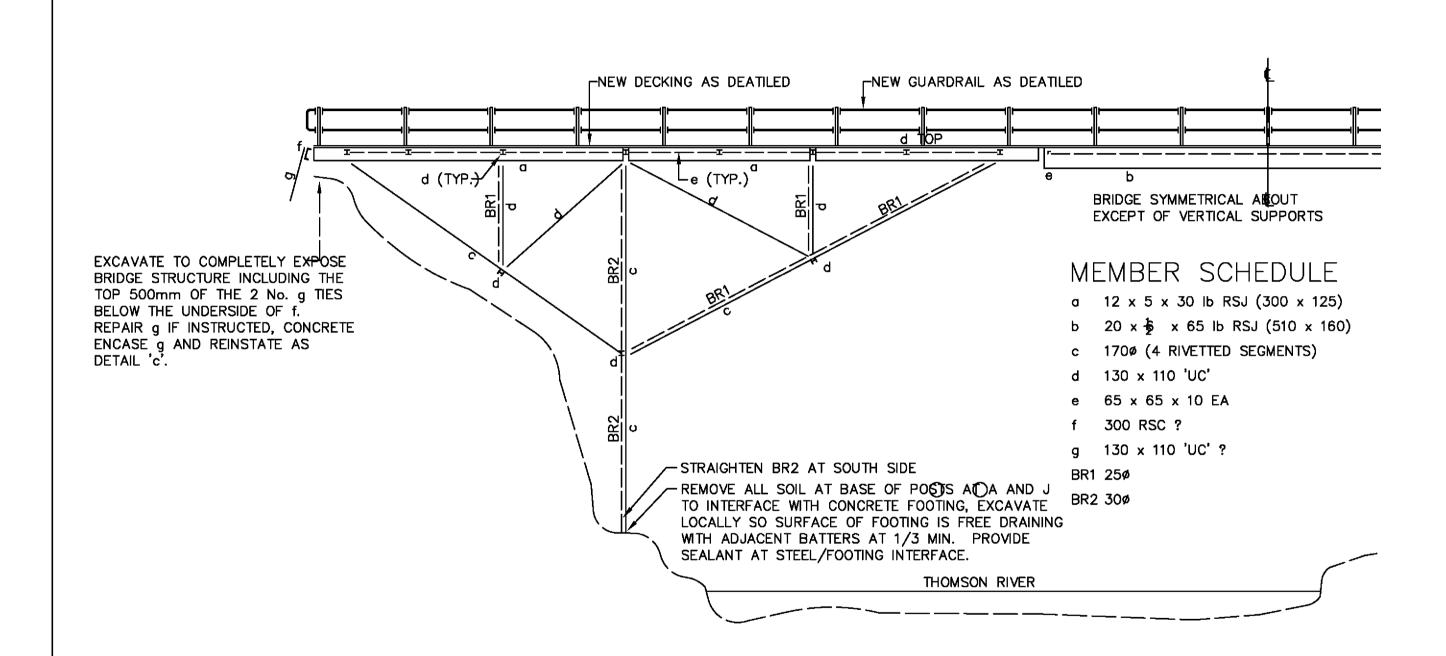
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# REFURBISHMENT OF POVERTY POINT BRIDGE WALHALLA FRAMING DETAILS

DRG. No. DESIGNED APPROVED DATE SCALE FILE No.

1:100 909402





## NOTE:

- 1. ALL MEMBER SIZES & DIMENSIONS ARE APPROXIMATE ONLY, CONFIRM ACTUAL SIZES ON SITE IF NECESSARY.
- 2. FOR NOTES REFER TO DRG. No. 99094-1.

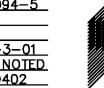
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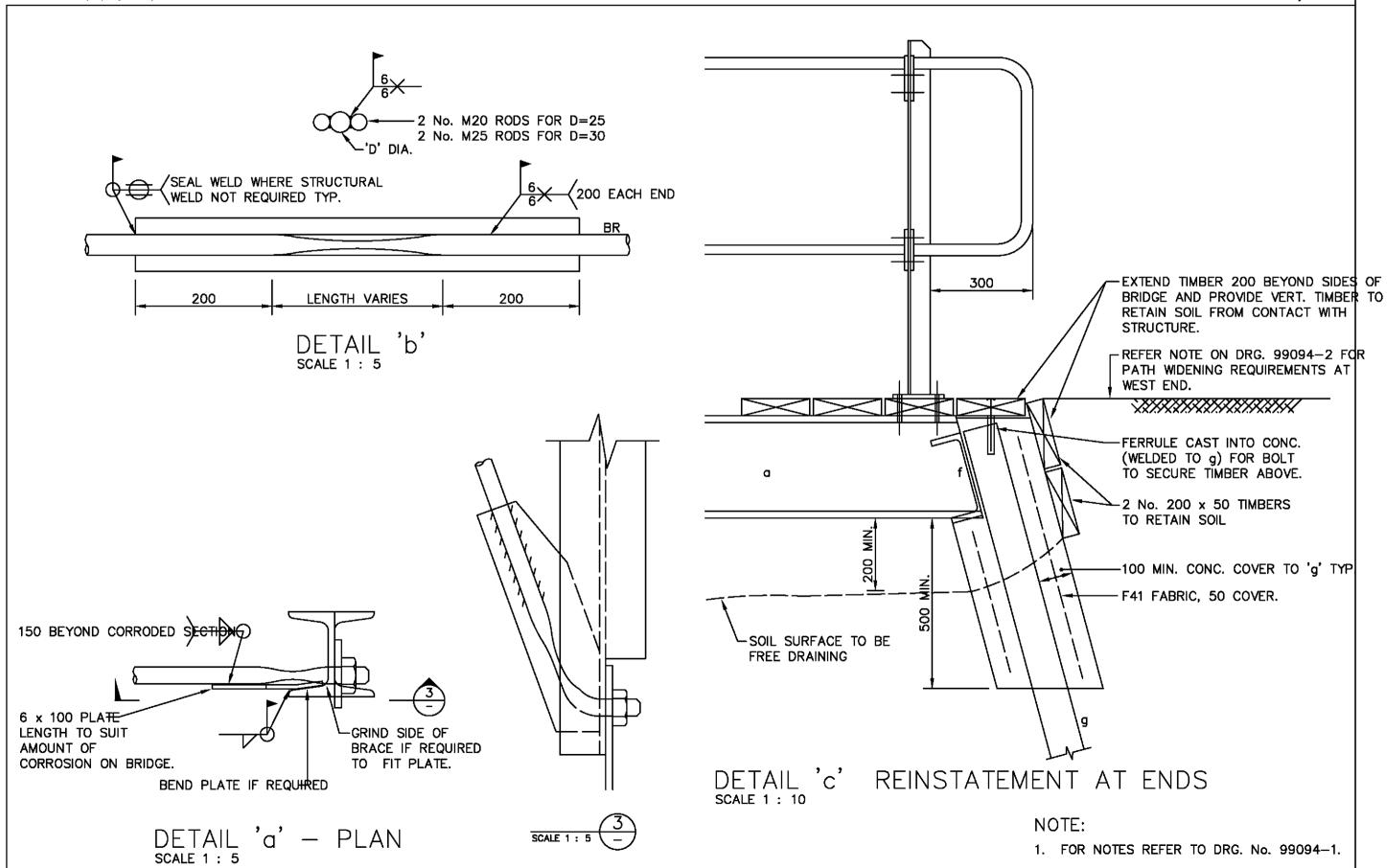
REFURBISHMENT OF POVERTY POINT BRIDGE WALHALLA
DETAILS

DRG. No.
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APPROVED
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SCALE
FILE No.

99094-5 F.P.

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REFURBISHMENT OF POVERTY POINT BRIDGE WALHALLA TIMBER DECK AND GUARDRAIL DETAILS

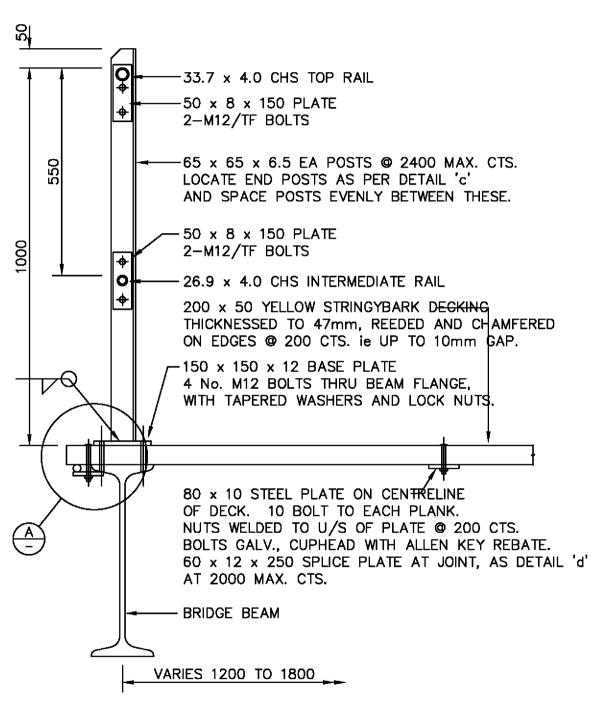
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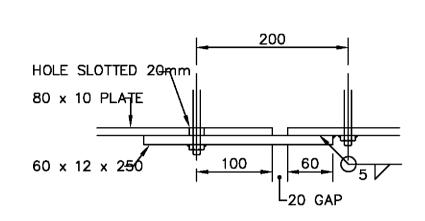
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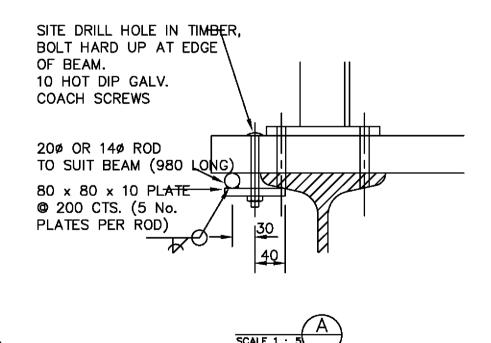




TIMBER DECK AND GUARDRAIL DET, **SCALE 1: 10** 



SPLICE DETAIL 'd' SCALE 1:5





1. FOR NOTES REFER TO DRG. No. 99094-1.