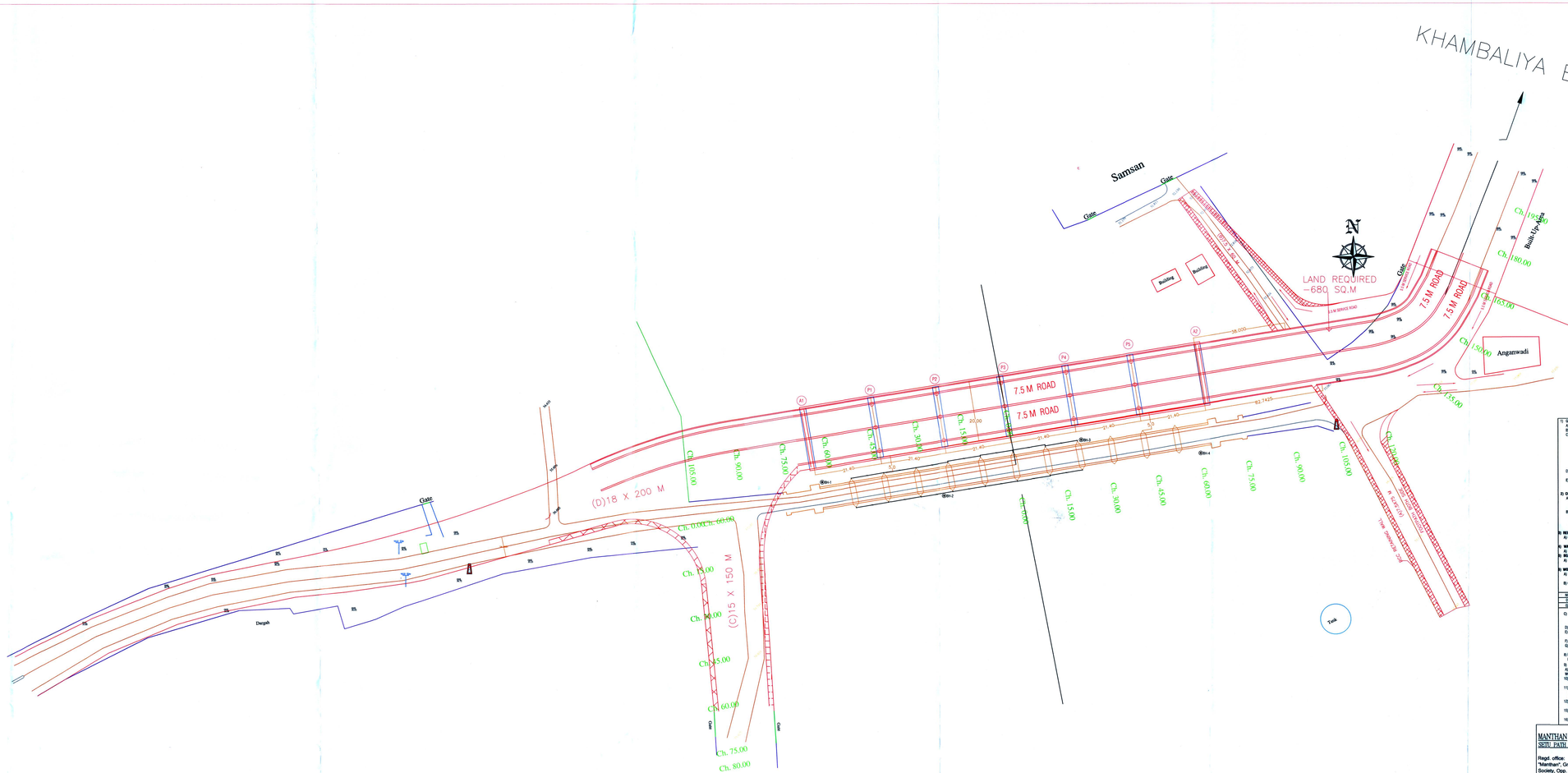

1) GENERAL:
 A) ALL DIMENSIONS ARE IN MILLIMETER & LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 B) WRITTEN DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING.
 C) DESIGN CRITERIA
  THE DESIGN IS ACCORDING TO THE FOLLOWING CODES:
  a. IRC 5-2015
  b. SP 13-2004
  c. IRC 6-2017
  d. IRC 112-2020
  e. IRC 83-2(SPART-II)
  f. IRC SP 114-2019
 D) THE DESIGN ARE APPLICABLE FOR * SEVERE * EXPOSURE CONDITIONS & SEISMIC ZONE IV.
 E) WIND LOAD DETAILS CONSIDERED IN DESIGN:
  i. BASIC WIND SPEED : 50 m/.Sec
  ii. TYPE OF TERRAIN : FLUID STREAM
2) CONCRETE:
 A) CEMENT SHALL BE OF OPC 53 GRADE WITH C3A CONTENT FROM 5% TO 8% AS PER MOTE NO55 UNDER CLAUSE 14.4.3 OF IRC:112-2020 & CONCRETE SHALL BE CODE CAPABLE OF ACHIEVING THE REQUIRED DESIGN CONCRETE STRENGTH IN SHALLOW & DEEP FOUNDATION.
 B) ONLY POTABLE WATER SHALL BE USED IN CONCRETE. CONCRETE FORMING TO IS:9903 AND IS:9103 MAY BE PERMITTED SUBJECTED TO SATISFACTORY PROVEN USE. ADMIXTURES GENERATING HYDROGEN, NITROGEN ETC. SHOULD NOT BE USED.
3) REINFORCEMENT:
 A) GRADE 1N500G CONFIRMING TO IS:1786-2008.
  (FUSION BONDED EPOXY COATED STEEL SHALL BE USED)
4) WATER:
 A) WATER TO BE USED IN CONCRETING AND CURING SHALL CONFIRM TO CLAUSE 18.4.5 OF IRC 112-2020.
5) BEARING:
 A) ELASTOMETRIC BEARING SHALL BE USED.
6) WORKMANSHIP/DETAILING:
 A) FOR ENSURING PROPER COVER OF CONCRETE TO REINFORCEMENT SPECIALLY MADE POLYMER COVER BLOCKS SHALL ONLY BE USED.
 B) CONCRETE GRADE:

NO	DESCRIPTION	GRADE OF CONCRETE	MIN. COVER	GRADE OF STEEL
01	RETAINING WALL	M35	50mm	Fe500D
02	CRASH BARRIER	M45	50mm	CONFIRMING TO IS:1786-2008

 C) LAPS IN REINFORCEMENT:
  i) FOR CLOSELY SPACED BARS LAPPING MAY BE AVOIDED BY PROVIDING SUITABLE TYPE OF MECHANICAL SPLICES.
 D) SPACING OF REINFORCEMENT BARS SHALL BE AS PER IS:2502.
 E) PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE OF FORM AND/OR NEEDLE VIBRATORS. USE OF FULL WIDTH AGREED VIBRATORS FOR COMPACTION OF CONCRETE IN DECK SLAB SHALL BE ENSURED.
 F) SHUTTERING PLATES SHALL SUITABLY BE STIFFENED TO ENABLE THE COMPACTION BY FORM VIBRATORS.
 G) SHARP EDGES OF CONCRETE SHALL BE CHAMFERED.
 H) BACKFILL MATERIAL BEHIND END WALL SHALL BE SELECTED SOIL HAVING PROPERTIES AS C=0kg/Sq. ft, Ø= 30°, DENSITY OF EARTH FILL γ = 18KN/M³ TO 20KN/M³ SHALL BE CONFIRM WITH IRC-78:2014.
7) SPECIFICATIONS:
 A) THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH MORTH (5TH REV.) SPECIFICATION FOR ROAD & BRIDGE WORKS.
 VOP AND DISCREPANCY IS FOUND BETWEEN BORE HOLE DATA, OF SOIL INVESTIGATION REPORT AND SITE,SAME SHALL BE IMMEDIATELY REPORTED TO ENGINEER-IN-CHARGE.
 TO BED LEVEL SHOULD BE CHECKED WITH GAD BEFORE EXECUTION AT SITE, IF ANY DISCREPANCY FOUND, IMMEDIATELY BROUGHT IT TO THE NOTICE OF DESIGN ENGINEER FOR NECESSARY MODIFICATION IN THE DESIGN.
10) FILL & CHAMBERS WILL BE SUBJECTED TO CORRESPONDING CHANGES IN APPROVED PLAN & PROFILE DRAWING.
11) SIZE OF RETURN WALL AND RETAINING WALL IN THIS DRG. ARE TENTATIVE, AND ARE SUBJECTED TO CHANGE IN FINAL DESIGN & DRAWING AS PER REQUIREMENT.
12) WEEP HOLES SHALL BE 100mm Ø PVC @100mm C/C IN STAGGERED FASHION.

STRUCTURE CONSULTANT
MANTHAN
SKITI PATH ENGINEER & CONSULTANT
Regd. office:
"Manthan", Ground floor, 24-C, Navdeta Housing Society, Opp. Shivalik-8, Near Gopal Chowk, Gujarat.
Mo. +918320693151
Gmail-manthansek@gmail.com

CONCEPT ARCHITECT & CONSULTANCY
ER Mayur Bhatt
Consulting Civil Engineer
Regd. office: 403, 4th Floor, The Garden Icon, Zanzarada Bypass Chokdi, Junagadh-362 001
Mo. +91 94 29 72 58 58
Email- kotecha.pradip@gmail.com
Concept Architect & Consultancy
Authorised Sign.

CLIENT:- EXECUTIVE ENGINEER, DEVBHOOMI -DWARKA R&B DIVISION,KHAMBALIYA

NAME OF WORK:-
CONSTRUCTION OF MAJOR BRIDGE NEAR KHAMNATH BRIDGE IN PLACE OF DAMAGED BRIDGE ON RIVER GHEE ON KHAMBALIYA PORBANDAR ROAD IN KHAMBALIYA NAGAR PALIKA LIMIT ON NEW ALIGNMENT. (MAJOR BRIDGE PORTION ONLY)

GENERAL ARRANGEMENT DRAWING

TITLE:- KAY PLAN OF APPROACH OF MAJOR BRIDGE 3X24 & 40m SPAN

DRAWING NO.:- KHAMBHALIYA BRIDGE APPROACH GAD SH - 01 OF 02

DEPUTY EXECUTIVE ENGINEER
R. & B. SUB DIVISION
JAM-KHAMBHALIA.

Exe. Engineer
Dev. Bhum R&B Division