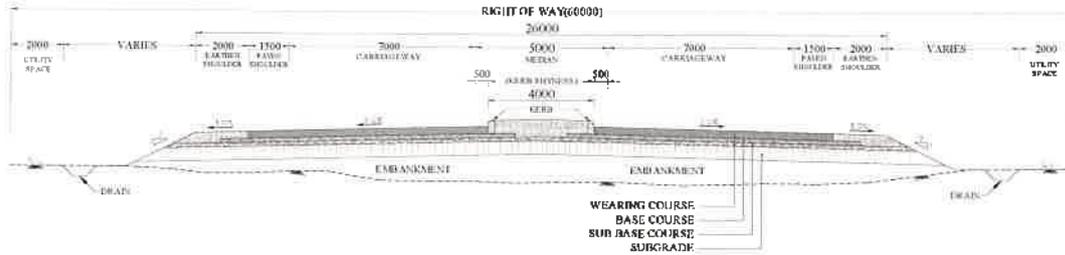


TYPICAL CROSS SECTION : TYPE - 1
ECCENTRIC WIDENING OF EXISTING 2-LANE ROAD TO 4-LANE WITH TRAPEZOIDAL
DRAIN ON RIGHT SIDE IN STRETCHES PARALLEL TO RAILWAY TRACK.



TYPICAL CROSS SECTION : TYPE - 2
CONSTRUCTION OF NEW 4 LANE CARRIAGEWAY WITH PAVED SHOULDER & 5.0m,
MEDIAN IN BYPASS/ REALIGNMENT STRETCHES

NOTE: - All Dimensions in mm



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

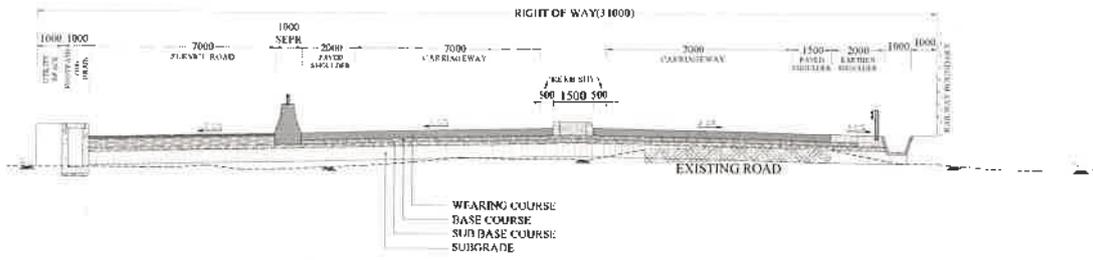
PROJECT CONSULTANCY SERVICES FOR
 Preparation of Feasibility Report for First Laying with Paved Shoulders
 from Aligarh to Gurgaon Section of NH-7 through Public Private
 Partnership in Design-Build-Finance-Operate and Transfer Back

SAI Consulting Engineers Pvt. Ltd.

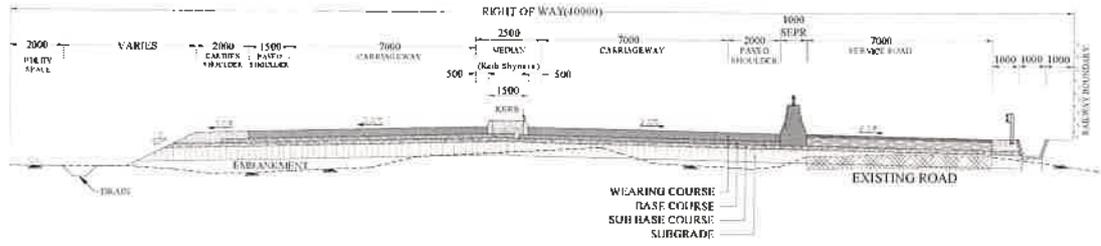
DESIGNED BY: SAI	CHECKED BY: SAI
DRAWN BY: SAI	APPROVED BY: SAI
DATE: 01/01/2018	SCALE: AS SHOWN

TYPICAL CROSS SECTION (TYPE - 1 & 2)
 ERW: SAI
 SAI-245/14/25K/TCE-01
 REVISION: P.01

(Signature)
 पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 3
 ECENTRIC WIDENNING OF EXISTING 2-LANE ROAD TO 4-LANE WITH TRAPEZOIDAL DRAIN ON RIGHT SIDE AND 7.0m. SERVICE/SLIP ROAD WITH RCC COVERED DRAIN ON LEFT SIDE IN STRETCHES PARALLAL TO RAILWAY TRACK

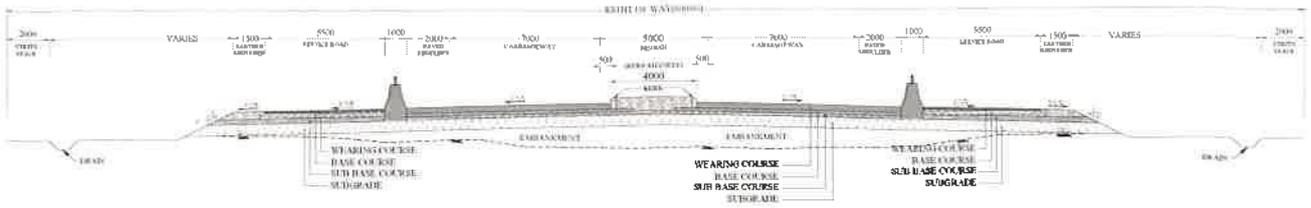


TYPICAL CROSS SECTION : TYPE - 4
 ECENTRIC WIDENNING OF EXISTING 2-LANE ROAD TO 4-LANE DIVIDED CARRIAGEWAY WITH 7.0m. SERVICE ROAD LANE RIIS SIDE AND EARTHEN SHOULDER ON LIIS SIDE IN STRETCHES PARALLAL TO RAILWAY TRACK

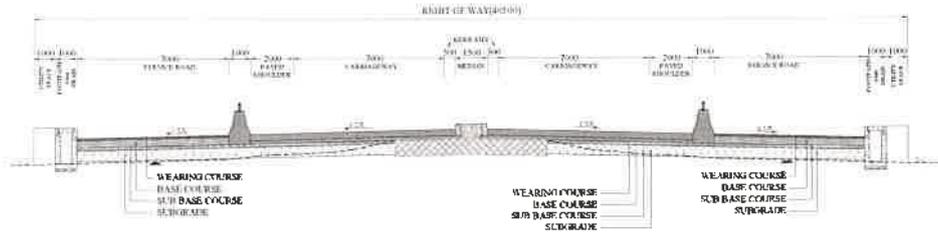
NOTE - All Dimensions in mm

	<p>CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA <small>(Ministry of Road Transport & Highways, Government of India)</small></p>	<p>PROJECT CONSULTANCY SERVICES FOR Preparation of Feasibility Report for Four Lane with Paved Shoulder from Aligarh to Kanpur Section of NH-101 Through Public Private Partnership on Design Build Finance Operate and Transfer basis</p>	<p>CONSULTANT SAL SAI Consulting Engineers Pvt. Ltd. <small>1779 SOCIETY</small></p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> <p>SCALE: 1:100</p>	NO.	DATE	DESCRIPTION	BY	CHKD BY						<p>TYPICAL CROSS SECTION (TYPE - 3 & 4)</p> <p>DATE: 2014 SAJ - 1143 HDSR-TR-02 REVISION: PA</p>
NO.	DATE	DESCRIPTION	BY	CHKD BY											


पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 7
CONSTRUCTION OF NEW 4 LANE CARRIAGEWAY WITH PAVED SHOULDER & 5.0m MEDIAN
AND 5.5m SERVICE ROAD IN BYPASS/REALIGNMENT STRETCHES



TYPICAL CROSS SECTION : TYPE - 8
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE ROAD WITH 1.5m MEDIAN
AND 7.0m SERVICE ROAD WITH RCC DRAIN ON BOTH SIDE

STATE : CAR (Uttarakhand) ROAD NO.



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 (Ministry of Road Transport & Highways, Government of India)

PROJECT :
CONSULTANCY SERVICES FOR Preparation of Feasibility Report, Bidding, and Pavement Structure, RCC Alignment in Empire Section of NH-1 through Public Private Partnership on Design Build Finance Operate and Transfer Basis

CONSULTANT :
SAI Consulting Engineers Pvt. Ltd.

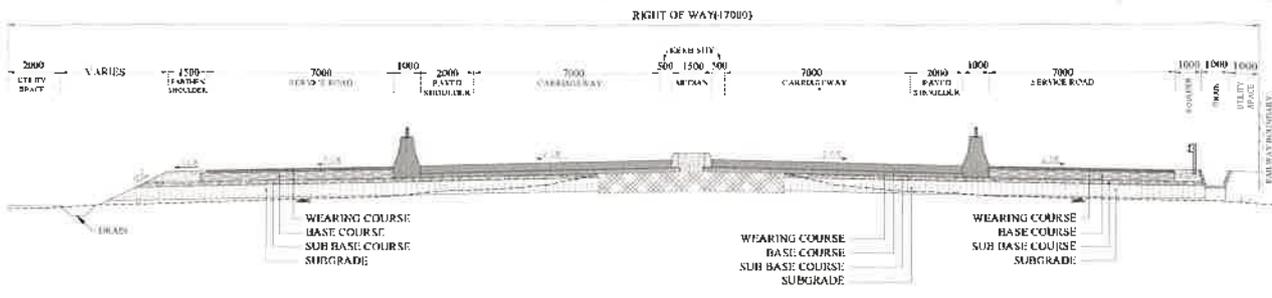
NO.	DATE	DESCRIPTION	BY

Scale: 1:100
 Date: 24/08/2014

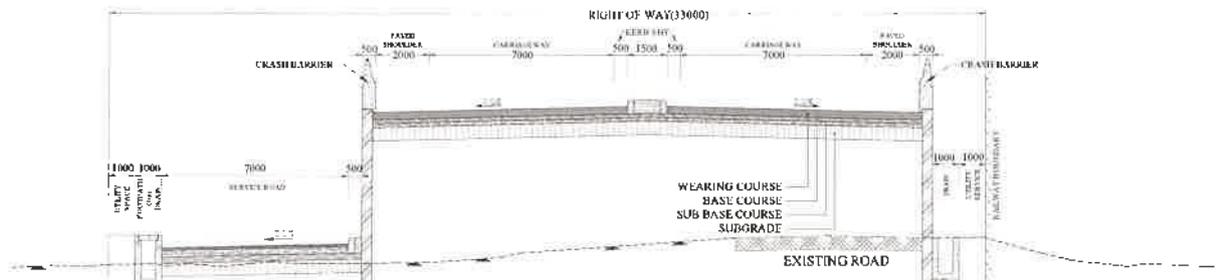
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 DATE: 24/08/2014
 TIME: 2:45:10 PM
 REVIEWER: PA

NOT TO SCALE


पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 9
 ECCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE ROAD WITH 1.5m. MEDIAN
 AND 7.0m. SERVICE ROAD WITH TRAPEZOIDAL DRAIN ON RHS



TYPICAL CROSS SECTION : TYPE - 10
 ECCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7.0m. SERVICE ROAD AND RCC DRAIN
 ON LHS IN THE APPROACHES OF VUP IN BUILT-UP STRETCHES PARALLEL TO RAILWAY TRACK

NOTE - All dimensions in mm.



CLB-1
 NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

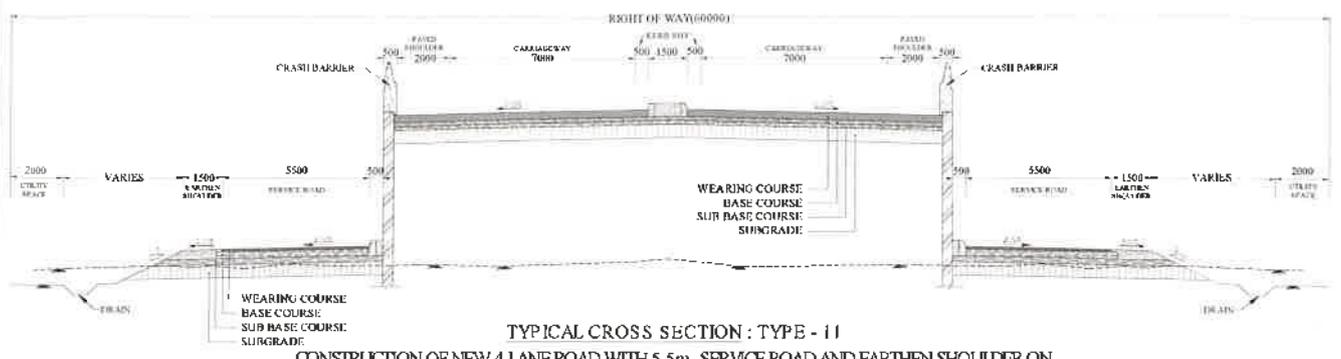
PROJECT
 CONSULTANCY SERVICES
 FOR
 Preparation of Feasibility Report for Four Lane with Paved Shoulder
 from Aligarh to Lucknow Section of NH-41 Through PMR Scheme
 Feasibility on Design, Bid, Finance, Operation and Maintenance

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.
 27/11/2011

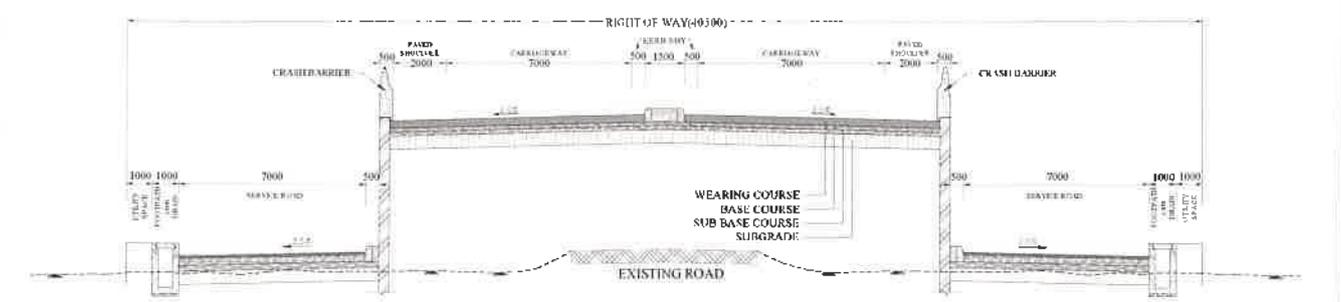
DATE OF PRESENTATION STUDY REPORT	DATE OF DESIGN
DATE OF APPROVAL	DATE OF REVIEW
DATE OF MODIFICATION	DATE OF MODIFICATION
DATE OF MODIFICATION	DATE OF MODIFICATION

TYPICAL CROSS SECTION
 (TYPE - 9 & 10)
 DRAWN BY
 SAI-2845-HR/2011/010
 CHECKED BY
 HR/2011/010

(Signature)
 पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 11
CONSTRUCTION OF NEW 4 LANE ROAD WITH 5.5m. SERVICE ROAD AND FARTHEN SHOULDER ON
BOTH SIDES IN THE APPROACHES OF LVU/ VUP IN BYPASS/ REALIGNMENT STRETCHES



TYPICAL CROSS SECTION : TYPE - 12
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7.0m. SERVICE ROAD WITH
RCC DRAIN ON BOTH SIDE IN THE APPROACHES OF VUP IN THE BUILT-UP LOCATION

NOTE - All Dimensions in mm



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

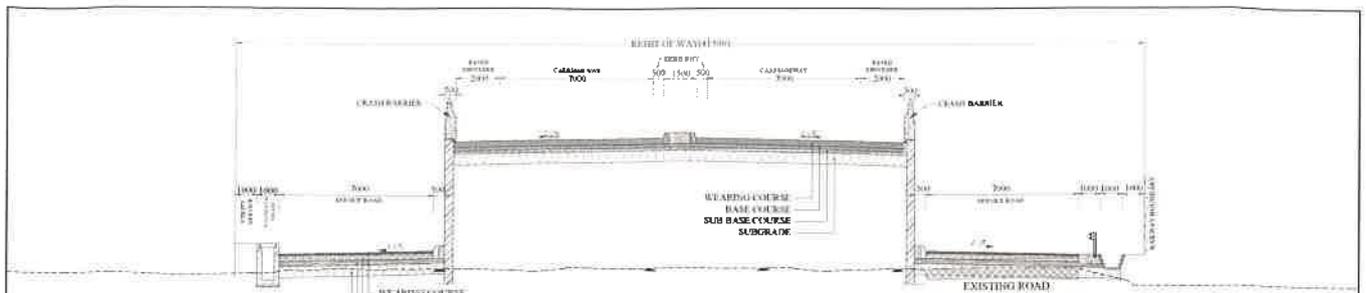
PROJECT
CONSULTANCY SERVICES
 FOR
 Preparation of Feasibility Report for Four Lane with Paved Shoulder
 Road Alignment in Kanpur Region of NH-10 through Public Trustee
 Partnership (Design Build Finance Operate and Transfer) Scheme

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.

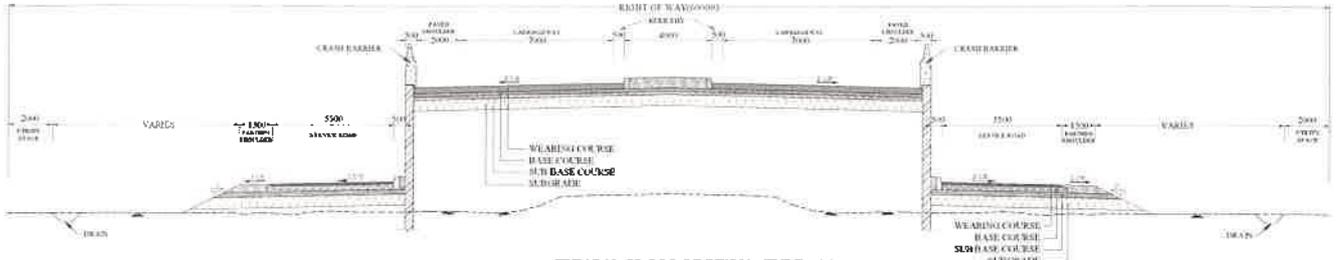
Drawn By: P.A.
 Checked By: P.A.
 Approved By: P.A.
 Date: 08/08/2018

TYPICAL CROSS SECTION
(TYPE - 11 & 12)
 DTD: 08/08/2018
 R/S: 2145-REVISION: 04
 REVISION: P.A.


पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (राजक परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 13
CONSTRUCTION OF NEW 4 LANE CARRIAGEWAY IN APPROACH OF LVLP/VUP WITH RE WALL & 7.0m SERVICE ROAD ON BOTH SIDES IN STRETCHES PARALLEL TO RAILWAY TRACK



TYPICAL CROSS SECTION : TYPE - 14
CONSTRUCTION OF NEW 4 LANE CARRIAGEWAY WITH 5.5m SERVICE ROAD ON BOTH SIDE AND 5.0m MEDIAN IN THE APPROACHES OF VUP/LVLP IN BYPASS/REALIGNMENT STRETCHES

NOTE - All Dimensions in mm



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highway, Government of India

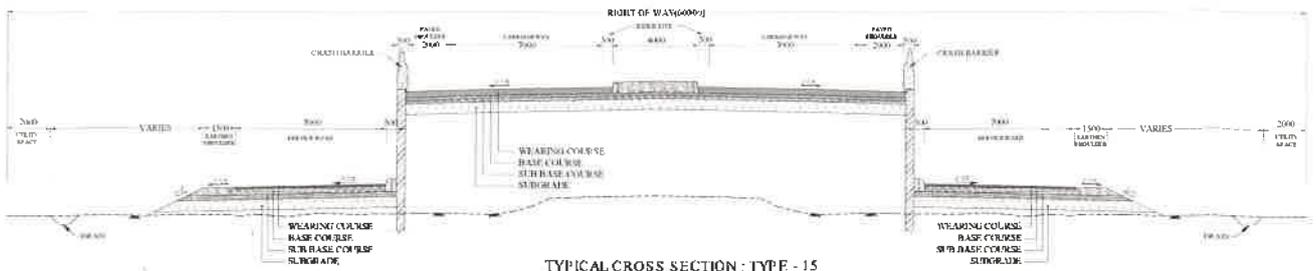
PROJECT : CONSULTANCY SERVICES FOR Preparation of Feasibility Report for Four Lanes with Paved Shoulder from Aligarh to Raigarh Section of NH-01 (Through) Phase - II/III. Participation in Design Build, Finance, Operate and Transfer (DBFOT).

CONSULTANT : SAI Consulting Engineers Pvt. Ltd.

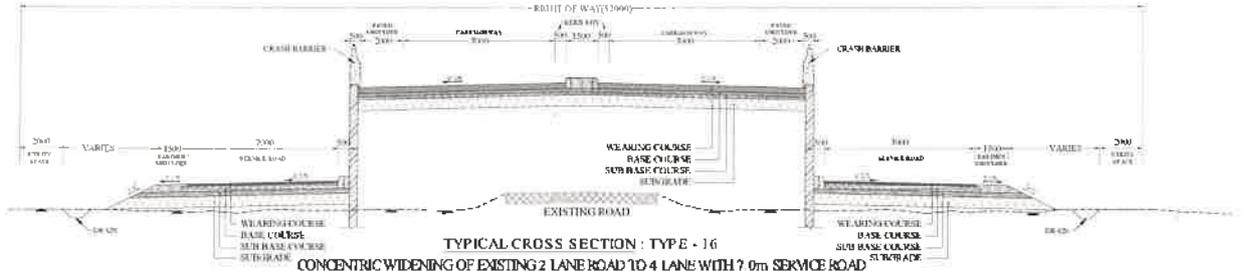
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Project No.	SAI-244/HE/SP/TC/07
Revision	
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Checked by	
Scale	NOT TO SCALE

TYPICAL CROSS SECTION (TYPE - 13A14)
 SAI-244/HE/SP/TC/07
 PRADEEP, RA


पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 15
CONSTRUCTION OF NEW 4 LANE WITH 7.0m SERVICE ROAD AND RCC DRAIN ON BOTH SIDE AND 5.0m
MEDIAN IN THE APPROACHES OF VUP IN BYPASS/REALIGNMENT STRETCHES



TYPICAL CROSS SECTION : TYPE - 16
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7.0m SERVICE ROAD
ON BOTH SIDE IN THE APPROACHES OF VUP IN THE BUILT-UP LOCATION

NOTE - All Dimensions in mm



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

PROJECT

CONSULTANCY SERVICES

Preparation of feasibility Report for four Lanes with Tared Shoulder from Aligarh to Kanpur Section of NH-161 Through Public Private Partnership on Design Build, Finance, Operate and Transfer Basis.

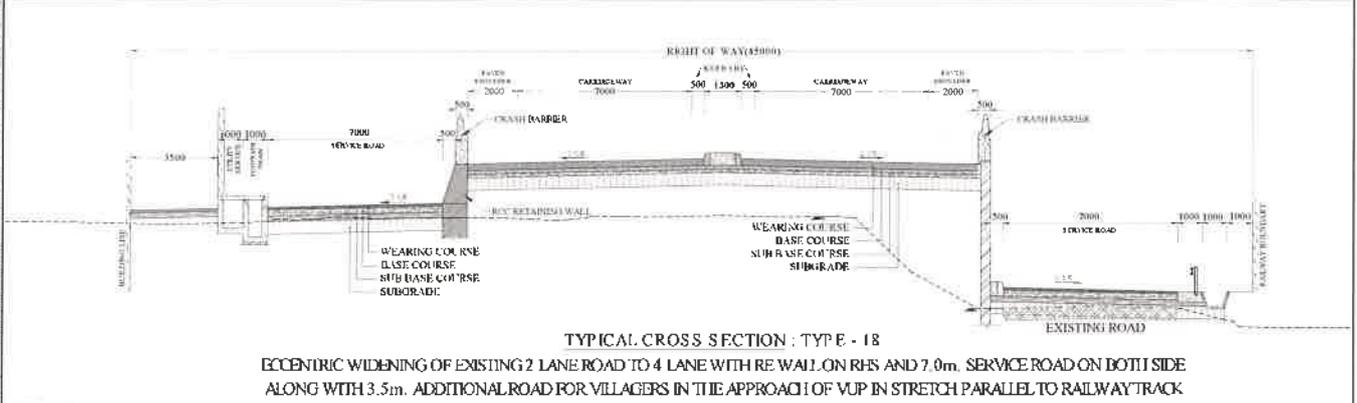
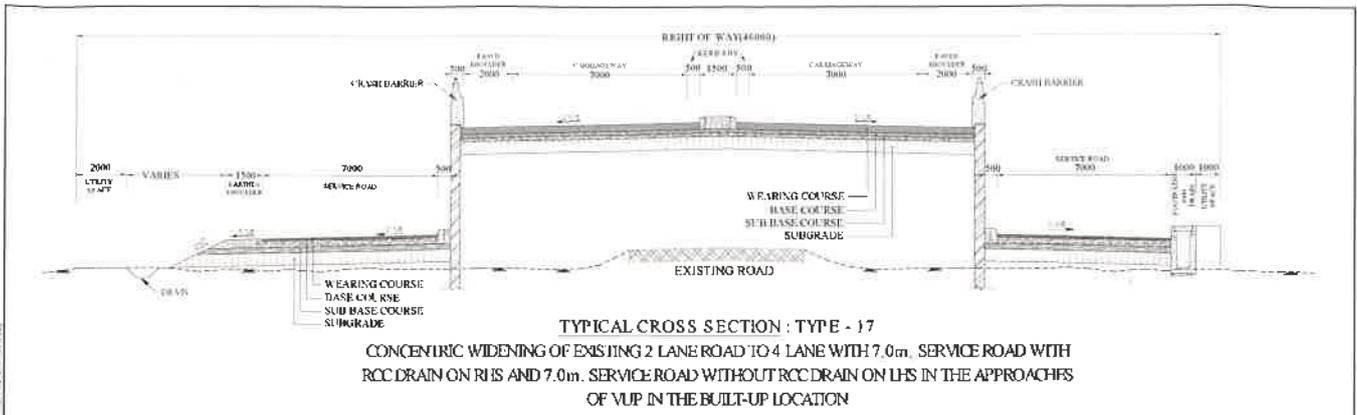
CONSULTANT

SAL SAI Consulting Engineers Pvt. Ltd.

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TOTAL NO. OF SHEETS	01
DATE	12/08/2016
SCALE	NOT TO SCALE

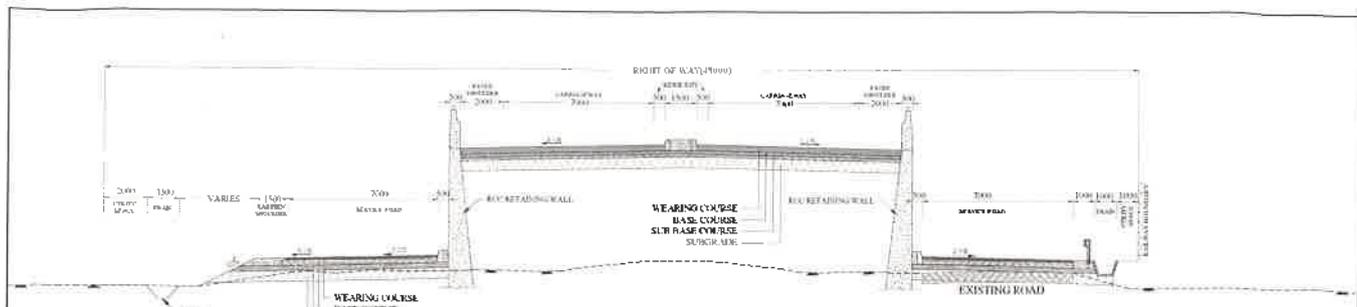
TYPICAL CROSS SECTION
(TYPE - 15 & 16)
DATE
NO. OF SHEETS
TOTAL NO. OF SHEETS
SCALE


पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.ई.-अलीगढ़
 National Highways Authority of India, PIU-Aligarh
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)

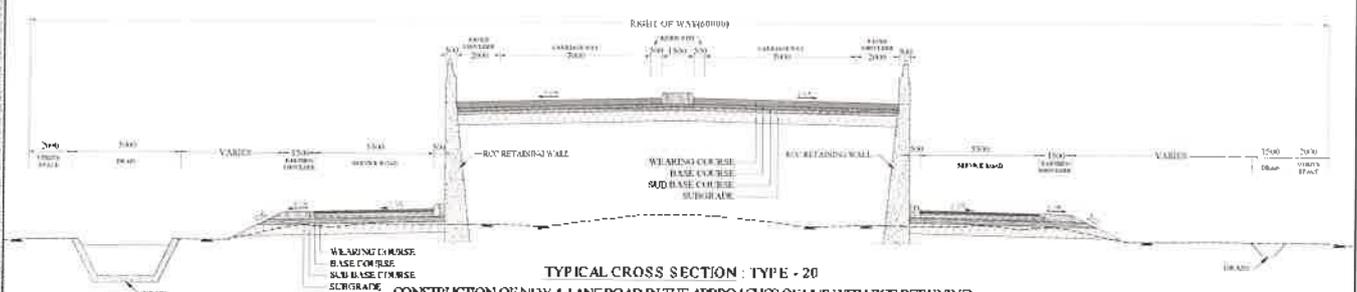


	NATIONAL HIGHWAYS AUTHORITY OF INDIA Ministry of Road Transport & Highways, Government of India	CONSULTANCY SERVICES FOR Preparation of Feasibility Report for Four Lane with Pavement Shoulder from Aligarh to Kanpur Section of NH-191 Through Public Private Partnership on Design Build Finance Operate and Transfer Basis	SAL SAI Consulting Engineers Pvt. Ltd.	TYPICAL CROSS SECTION (TYPE - 17.811)	
				DATE: 10/01/2017 SCALE: AS SHOWN	DRAWN BY: P.P. SINGH CHECKED BY: P.P. SINGH APPROVED BY: P.P. SINGH SCALE: AS SHOWN

पी.पी. सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.ई.-अलीगढ़
 National Highways Authority of India, PIU-Aliगढ़
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 19
 ECCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE CARRIAGEWAY IN APPROACH OF VUP WITH RCC RETAINING WALL AND 7.0M SERVICE ROAD ON BOTH SIDES IN STRETCHES PARALLEL TO RAILWAY TRACK



TYPICAL CROSS SECTION : TYPE - 20
 CONSTRUCTION OF NEW 4-LANE ROAD IN THE APPROACHES OF VUP WITH RCC RETAINING WALL AND 5.5M SERVICE ROAD ON BOTH SIDES IN BYPASS/REALIGNMENT STRETCHES

NOTE: ALL DIMENSIONS IN METERS



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

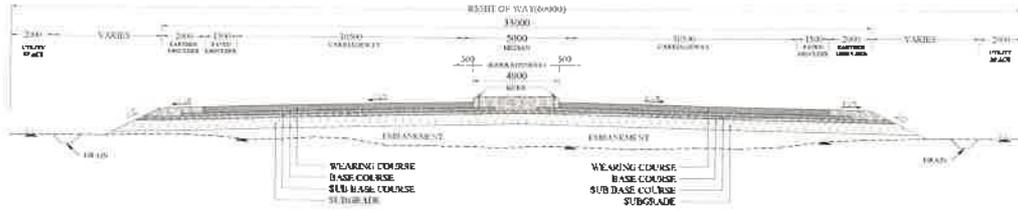
PROJECT: CONSULTANCY SERVICES FOR
 Preparation of Feasibility Report for Four Lanes (4x3) Flyover at Shikhar Road, Aligarh in Kanpur Section of NH-101 through Public-Private Partnership (PPP) Model (Build Finance Operate and Transfer) etc.

CONSULTANT: SAI Consulting Engineers Pvt. Ltd.
 201/1, Sector-17, Gurgaon, Haryana

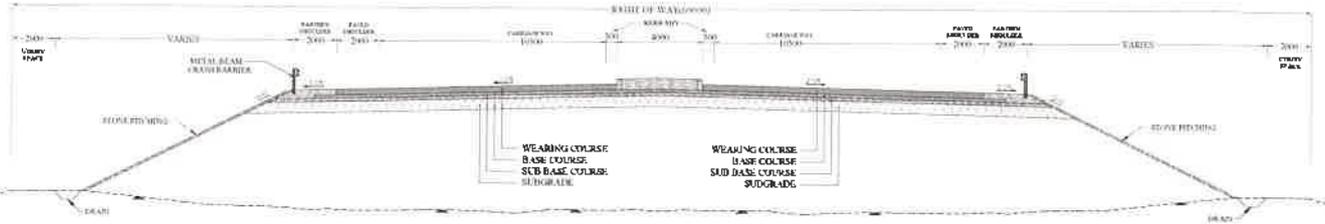
NO.	DATE	DESCRIPTION	FOR CHECKED BY	PREPARED BY

TYPICAL CROSS SECTION (TYPE - 19 & 20)
 DRAWN BY: SAI-2848-HIGHWAY/CEM
 CHECKED BY: SAI

(Signature)
 पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.फ. ३ - ४००००१
 National Highways Authority of India, Plot No. 3
 (राष्ट्रीय परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 21
CONSTRUCTION OF NEW 6-LANE DIVIDED CARRIAGEWAY WITH PAVED SHOULDER AND 5.0m MEDIAN IN BYPASS/REALIGNMENT STRETCHES



TYPICAL CROSS SECTION : TYPE - 22
CONSTRUCTION OF NEW 6 LANE CARRIAGEWAY IN APPROACH OF CUT/V/L/V/P IN BYPASS/REALIGNMENT STRETCHES

NOTE - All Dimensions in mm



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

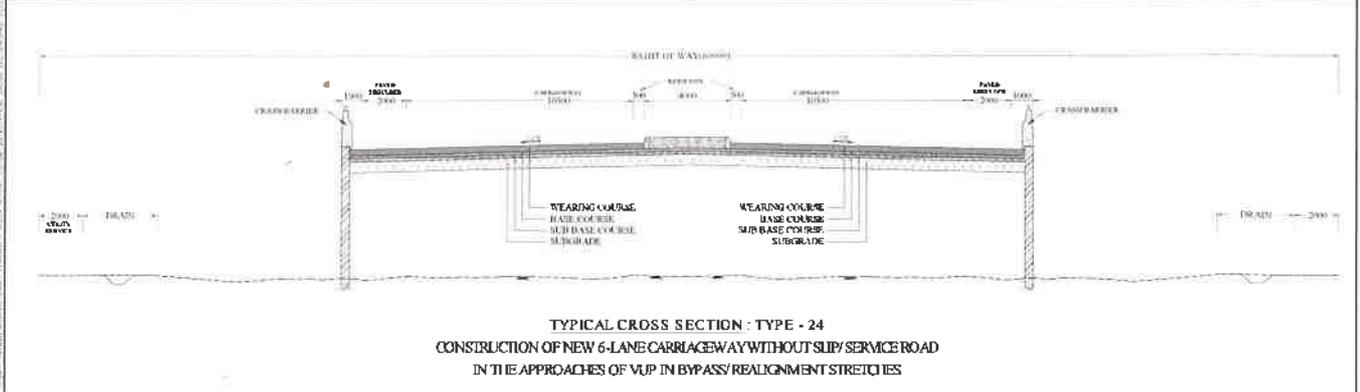
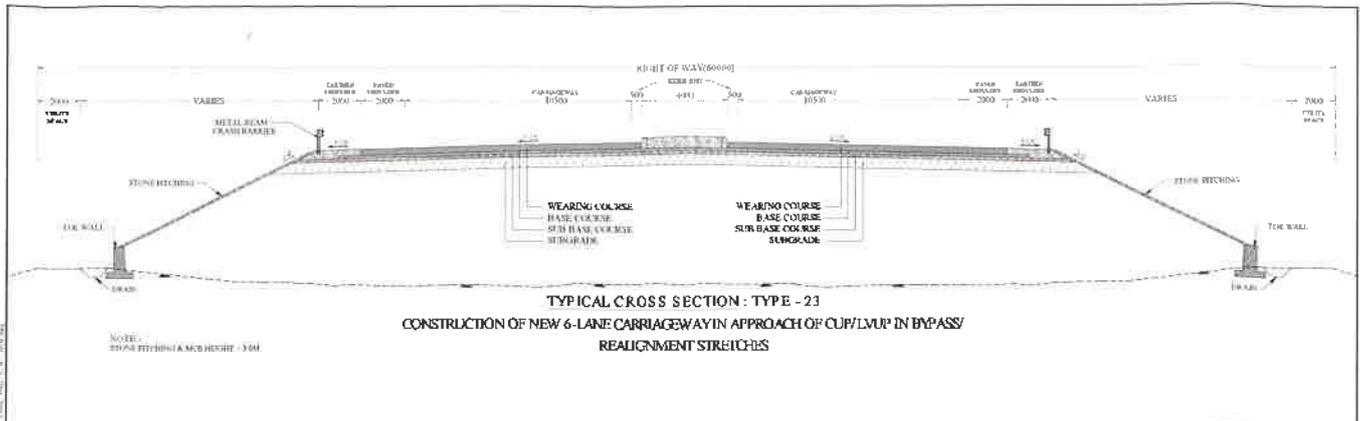
PROJECT
CONSULTANCY SERVICES FOR
 Preparation of Feasibility Report for Four Lanes with Paved Shoulders from Aligarh to Kanpur Section of NH 91 Through Public Private Partnership on Design-Build-Finance-Operate-and-Maintain Basis

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.
 17/11/2018

DATE OF ISSUE: 17/11/2018
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 SCALE: AS SHOWN

TYPICAL CROSS SECTION (TYPE - 21 & 22)
 SHEET NO: [Number]
 PLAN: [Number]
 REGION: [Number]

[Signature]
पी. पी. सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, पटना
 National Highways Authority of India, Patna
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



NOTE: All Dimensions in mm



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
Ministry of Road Transport & Highways, Government of India

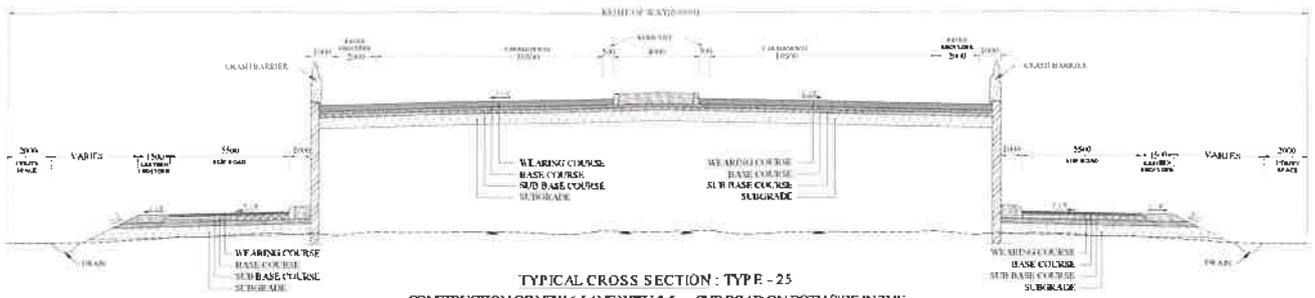
PROJECT
CONSULTANCY SERVICES FOR
Preparation of Feasibility Report for Four Lanes with Pavement Shoulder from Allahabad to Lucknow Section of NH-84 Through Public Private Partnership via Deoria, Bahi, Farukh, Orai and Tundwa Bypass

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.
SAI CONSULTING ENGINEERS PVT. LTD. 2012/2013

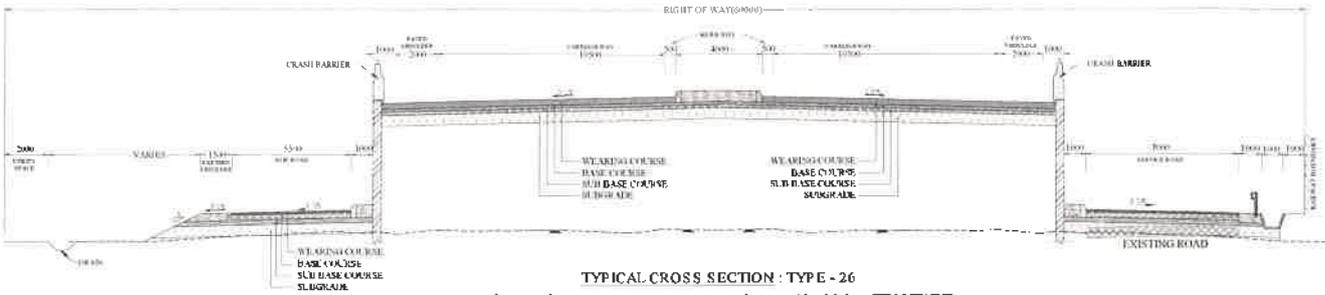
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TYPICAL CROSS SECTION (TYPE - 23 & 24)
 DATE: 24/11/2018
 DRAWN BY: P.P. SINGH
 CHECKED BY: P.P. SINGH
 APPROVED BY: P.P. SINGH
 SCALE: NOT TO SCALE

(Signature)
पी० पी० सिंह / P.P. Singh
परियोजना निदेशक / Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क.इ.-अ/मिड
National Highways Authority of India, PIU-Allahabad
(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
(Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 25
CONSTRUCTION OF NEW 6 LANE WITH 5m SLIP ROAD ON BOTH SIDE IN THE
APPROACHES OF VUP IN BYPASS/ REALIGNMENT STRETCHES



TYPICAL CROSS SECTION : TYPE - 26
CONSTRUCTION OF NEW 6 LANE CARRIAGEWAY WITH 5m SERVICE/SLIP
ROAD ON LHS AND 7m SERVICE ROAD ON RHS WITH TRAPEZOIDAL DRAIN IN
APPROACHES OF STRETCHES PARALLEL TO RAILWAY

NOTE: All Dimensions in mm



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

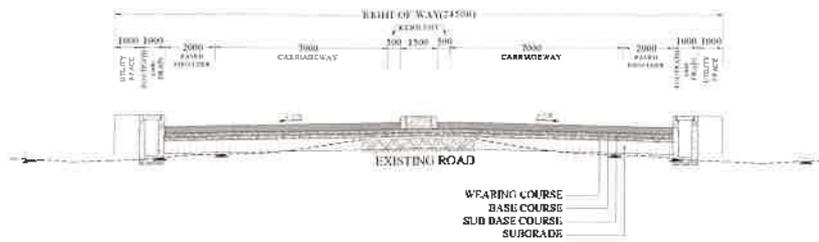
PROJECT
CONSULTANCY SERVICES
 FOR
 Preparation of Feasibility Report for Four Lanes with Paved Shoulders
 from Aligarh to Varanasi Section of NH-101, Through Public Private
 Partnership on Design-Build-Finance-Operate-and-Maintain Basis

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.

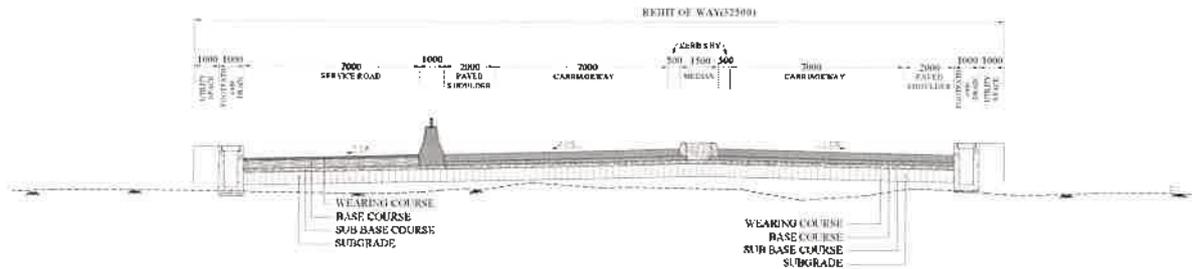
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NO. OF SHEETS TO BE REVISED	DATE
NO. OF SHEETS TO BE DELETED	DATE

TYPICAL CROSS SECTION
(TYPE - 25 & 26)
 DATE: 10/11/2015
 FILE NO: SAH/2845/14/HSR/1(CS)11
 REVIEWED: P.A.

(Signature)
पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क. ३ - १०००२
 National Highways Authority of India, Plot No. 3
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 1
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH PAVED SHOULDER & 1.5 M MEDIAN IN LAND CONSTRAINED LOCATION



TYPICAL CROSS SECTION : TYPE - 2
CONSTRUCTION OF 4 LANE CARRIAGEWAY WITH PAVED SHOULDER & 1.5 M MEDIAN IN STRETCHES PARALLEL TO RAILWAY TRACK WITH 7.0 M SERVICE ROAD ON LHS SIDE

NOTE - All Dimensions in mm



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

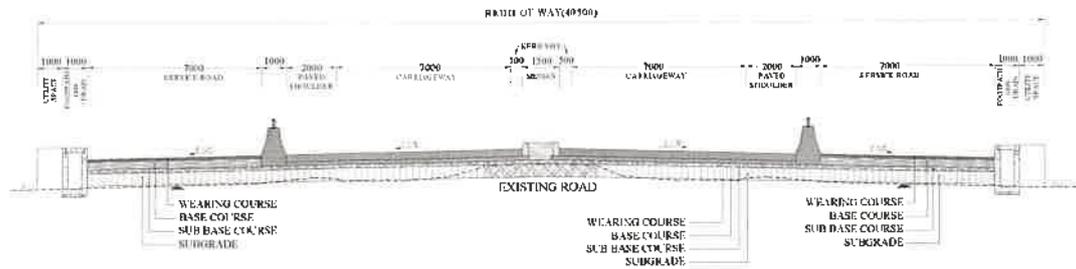
PROJECT : CONSULTANCY SERVICES FOR Preparation of Feasibility Report for Four Lanes with Paved Shoulder Both Ways in Section of NH-1 through Public Private Partnership on Design Build Finance Operate and Transfer Basis

CONSULTANT : **SAL** SAI Consulting Engineers Pvt. Ltd. 2012/2013

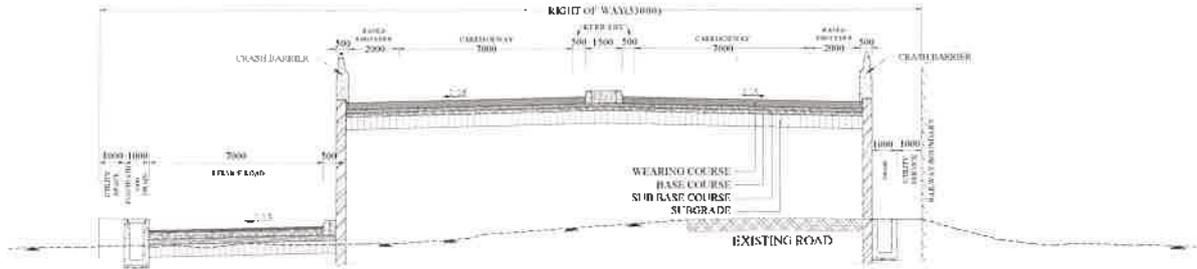
NO. TO SCALE

PROJECT NO. / 12	FAUKHAT
SECTION NO. / 12	(Km. 40+100 to Km. 41+000)
DATE OF ISSUE / 12	TYPICAL CROSS SECTION
SCALE / 12	(TYPE 1 & 2)
	DRG NO.
	SAI-2842-1111111111111111
	REVISION - PA

(Signature)
 पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प.क. ०११
 National Highways Authority of India, P.O. 011
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 3
CONCENTRIC WIDENING OF 2 LANE TO 4 LANE WITH 1.5 M MEDIAN IN STRETCHES
PARALLEL TO RAILWAY TRACK AND 7.0 M SERVICE ROAD ON BOTH SIDE



TYPICAL CROSS SECTION : TYPE - 4
ECCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7 M SERVICE ROAD AND RCC DRAIN ON
LHS IN THE APPROACHES OF VUP IN BUILT-UP STRETCHES PARALLEL TO RAILWAY TRACK

NOTE - ALL DIMENSIONS IN MM



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 (An Autonomous Body under the Ministry of Road Transport & Highways, Government of India)

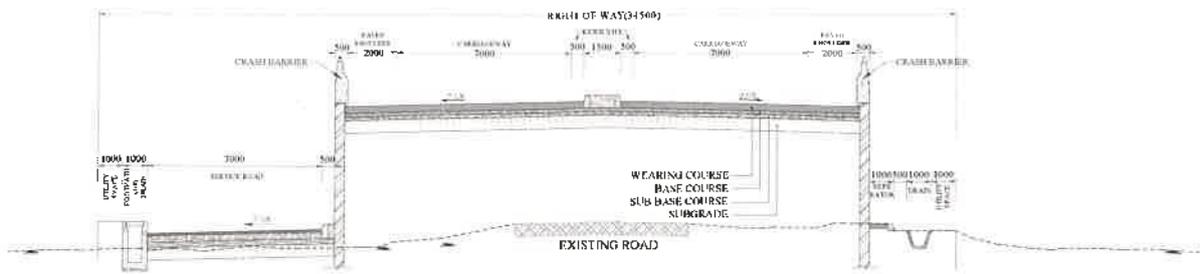
PROJECT
CONSULTANCY SERVICES
FOR
Preparation of Feasibility Report for Four Lanes and Paved Shoulders
from Algaoli to Kampur 3rd phase of NH-91 Through Public Private
Partnership on Design Build Finance Operate and Transfer Basis

CONSULTANT
SAI SAI Consulting Engineers Pvt. Ltd.
 100/1, 100/2, 100/3, 100/4, 100/5, 100/6, 100/7, 100/8, 100/9, 100/10, 100/11, 100/12, 100/13, 100/14, 100/15, 100/16, 100/17, 100/18, 100/19, 100/20, 100/21, 100/22, 100/23, 100/24, 100/25, 100/26, 100/27, 100/28, 100/29, 100/30, 100/31, 100/32, 100/33, 100/34, 100/35, 100/36, 100/37, 100/38, 100/39, 100/40, 100/41, 100/42, 100/43, 100/44, 100/45, 100/46, 100/47, 100/48, 100/49, 100/50, 100/51, 100/52, 100/53, 100/54, 100/55, 100/56, 100/57, 100/58, 100/59, 100/60, 100/61, 100/62, 100/63, 100/64, 100/65, 100/66, 100/67, 100/68, 100/69, 100/70, 100/71, 100/72, 100/73, 100/74, 100/75, 100/76, 100/77, 100/78, 100/79, 100/80, 100/81, 100/82, 100/83, 100/84, 100/85, 100/86, 100/87, 100/88, 100/89, 100/90, 100/91, 100/92, 100/93, 100/94, 100/95, 100/96, 100/97, 100/98, 100/99, 100/100

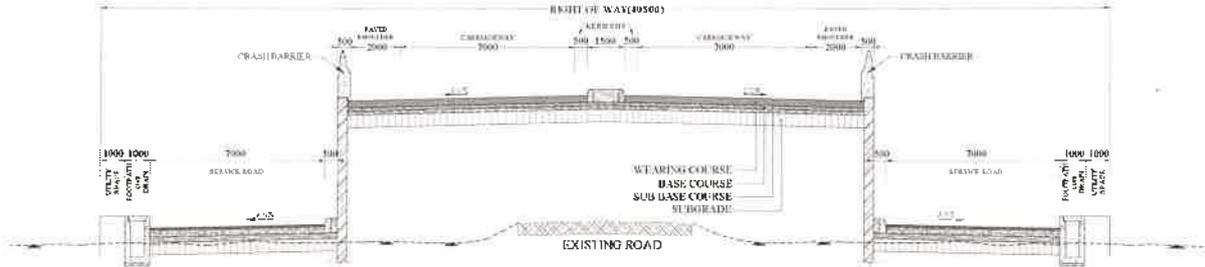
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NO. OF CHANGES
NO. OF ADDITIONS

PACK NO. 31
(Km 402400 to Km 414000)
TYPICAL CROSS SECTION
(TYPE 3 & 4)
1501/202
531-2845 HIDER PAVEMENTS 02
BUXERIN, PA

(Signature)
 पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, प्लॉट नं० १, २, ३, ४, ५, ६, ७, ८, ९, १०, ११, १२, १३, १४, १५, १६, १७, १८, १९, २०, २१, २२, २३, २४, २५, २६, २७, २८, २९, ३०, ३१, ३२, ३३, ३४, ३५, ३६, ३७, ३८, ३९, ४०, ४१, ४२, ४३, ४४, ४५, ४६, ४७, ४८, ४९, ५०, ५१, ५२, ५३, ५४, ५५, ५६, ५७, ५८, ५९, ६०, ६१, ६२, ६३, ६४, ६५, ६६, ६७, ६८, ६९, ७०, ७१, ७२, ७३, ७४, ७५, ७६, ७७, ७८, ७९, ८०, ८१, ८२, ८३, ८४, ८५, ८६, ८७, ८८, ८९, ९०, ९१, ९२, ९३, ९४, ९५, ९६, ९७, ९८, ९९, १००
 National Highways Authority of India, Plot No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
 (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 5
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7 M SERVICE ROAD AND RCC DRAIN ON L/S IN THE APPROACHES OF VUP



TYPICAL CROSS SECTION : TYPE - 6
CONCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO 4 LANE WITH 7.0 M SERVICE ROAD WITH RCC DRAIN ON BOTH SIDE IN THE APPROACHES OF VUP IN THE BUILT-UP LOCATION

NOTE - All Dimensions in mm.



NATIONAL HIGHWAYS AUTHORITY OF INDIA
 Ministry of Road Transport & Highways, Government of India

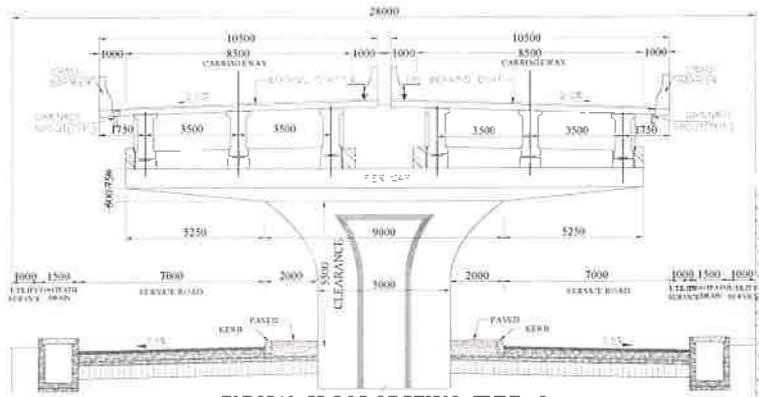
PROJECT
CONSULTANCY SERVICES FOR
 Preparation of Feasibility Report by four lane with Pav of Shoulder from Alapali to Kanpur Section of NH-61 Through Public Private Partnership on Design Build Finance Operate and Transfer Basis

CONSULTANT
SAL SAI Consulting Engineers Pvt. Ltd.
 22/11/2017

NO. OF SHEETS	NO. OF SHEETS	NO. OF SHEETS	NO. OF SHEETS
1	1	1	1
1	1	1	1
1	1	1	1

PROJECT NO. 403-00140-001-414-0001
TYPICAL CROSS SECTION TYPE - 5 & 6
 SHEET NO. SAJ-244-001-001-001-001-001
 REVISED: NA

पी० पी० सिंह / P.P. Singh
 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, भारत सरकार
 National Highways Authority of India
 (सड़क परिवहन एवं राजमार्ग विभाग, भारत सरकार)
 (Ministry of Road Transport & Highways, Govt. of India)



TYPICAL CROSS SECTION : TYPE - 9
CONSTRUCTION OF NEW 4 LANE VIADUCT WITH 7.00M SERVICE ROAD
UNDER VIADUCT ALONG EXISTING ROAD IN BUILT-UP SECTION

NOTE - All Dimensions in mm



NATIONAL HIGHWAYS AUTHORITY OF INDIA
Ministry of Road Transport & Highways, Government of India

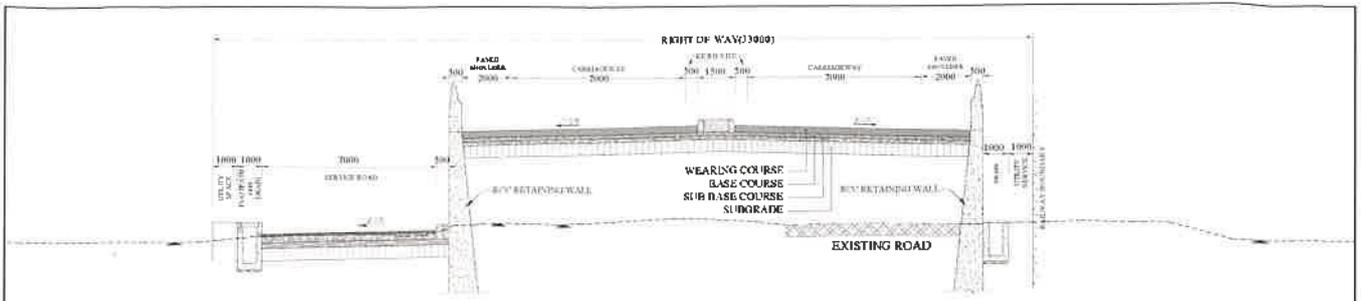
PROJECT :
CONSULTANCY SERVICES FOR
 Provision of Feasibility Report for Four Lane with Pavement Shoulder Area Along to Sanganu Section of NH-41 Through Public Private Partnership in Design Build Finance Operate and Transfer mode

CONSULTANT :
SAL SAI Consulting Engineers Pvt. Ltd.
100, 10th Floor, Connaught Place, New Delhi - 110028

NO. OF SHEETS	DATE	SCALE
1	10/01/2017	1:1
DATE OF APPROVAL	DATE OF APPROVAL	DATE OF APPROVAL
10/01/2017	10/01/2017	10/01/2017

PACKAGE-VI
 (Km 403+000 to Km 414+000)
TYPICAL CROSS SECTION (TYPE - 9)
 DRAWING NO. SAI-2845/01/DSR/PKG-VI/CS-01
 REVISION: NA

(Signature)
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 परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, भारत
 National Highways Authority of India
 (सिस्टम, परिवहन एवं राजमार्ग मंत्रालय)
 (Ministry of Road Transport & Highways, Government of India)



TYPICAL CROSS SECTION : TYPE - 12
ECCENTRIC WIDENING OF EXISTING 2 LANE ROAD TO RAISED 4 LANE CARRIAGEWAY WITH PAVED SHOULDER
& 1.5 M MEDIAN IN STRETCHES PARALLEL TO RAILWAY TRACK WITH 7.0 M SERVICE ROAD ON LHS SIDE

NOTE :- All Dimensions in mm



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways, Government of India)

PROJECT
CONSULTANCY SERVICES FOR
Preparation of Feasibility Report for Four Lanes with Paved Shoulder from Aligarh to Kanpur Section of NH-93 Through Public Private Partnership or Design Build Finance Operate and Transfer Basis

CONSULTANT
SAI Consulting Engineers Pvt. Ltd.
SAI CONSULTING ENGINEERS PRIVATE LIMITED

NO.	REV.	DESCRIPTION	DATE

PAC/SAE/01
(Rev. 01/10/16) (No. 414/1000)
TYPICAL CROSS SECTION
(TYPE 12)
REVISED
REVISION: PA

(Signature)
श्री पी० सिंह / P.P. Singh
परियोजना निदेशक / Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, पटना
National Highways Authority of India, Patna
(राजमार्ग परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
(Ministry of Road Transport & Highways, Govt. of India)