

CHARTERED ENGINEERS, ARCHITECTS, LAND SURVEYORS, GEOTECH, MATERIAL TESTING & PROJECT MANAGEMENT SERVICES



ORGANIZATION PROFILE

F - 91, Indl. Area, Phase VII, S.A.S. Nagar (Mohali)

Tel: (0172) 2236219

5091645

FAX: 0172-5091645

Tel. (R.) (0172) 2261901, 2270730 E-mail: syalassociates@yahoo.com

Please ask for an updated copy to: rajiv@syalassociates.com



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Website: www.syalassociates.com

ORGANISATION PROFILE

We offer our Consultancy services for the Architectural, Structural, Surveying, Highways, Land planning, Hydrological, Geotechnical Investigations, material testing and Project Management Services in this region. We have following manpower working us & we can employ more people as per the requirement of the client.

1. DESIGN EXPERTS:

S.No	. Name	Highest Qualification	Experience
1.	Dr. I.C. Syal (FIE)	Ph.D. (Structures)	35 years
2.	Kewal Singh (FIE)	M.E. (Highways)	39 years
3.	S.S. Mavi	M.E. (Survey)	35 years
4.	S.L. Khanna	M.I.E. (Electrical)	27 years
5.	I.J.S. Bakhshi	M.Arch(Arch. Deisgn)	30 years
6.	Rashmi	MCA,AIIA (Architect)	6 Years
7.	Upasana	M.E. (Structures)	2 Years
8.	Janesh Kalsi	M.E. (Highways)	2 Years

2. PROJECT MANAGEMENT:

S. No. Name		Highest Qualification/Field	Experience
1.	Rajiv Syal	M.E. (Structures)	8 years
2.	Er. Bhadur Singh	Civil	30 years
3.	Ravi Bajaj	B.E. (Electrical)	2 years
4.	Bindlesh	Civil	10 years
5.	Vikas Verma	Geotech	10 years

3. SITE MANAGEMENT:

S. No. Name		Highest Qualification	Experience
1.	Bharat Verma	Diploma in Civil Engg.	3 years

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2.	Vishal	Diploma in Civil Engg.	3 years
3.	Mukesh	Diploma in Civil Engg.	2 years
4.	Anamdeep	Diploma in Civil Engg.	2 years
5.	Rajesh Verma	Diploma in Civil Engg.	3 years
6.	Navdeep Singh	Diploma in Civil Engg.	2 years
7.	Kuldeep Singh	Diploma in Civil Engg.	2 years
8.	Manmohan	Diploma in Civil Engg.	2 years
9.	Monish	B.E. Civil	1 year
10.	Rajwinder	B.E. Civil	1 year

4. SUPPORTING TECHNICAL STAFF AT OFFICE:

S. No. Name		Highest Qualification	Experience	
1	Jagmeet	Diploma in Civil Engg.	4 years	
2.	Vinod Kumar	Diploma in Architecture	3 years	
3.	Parmod Kumar	B.E- Civil Engg	1 Year	
4.	Bhuwanesh	B.Tech Civil Engg	1 Year	
5.	Abhinav	B.Tech Civil Engg	1 Year	
6.	Pushpa	Diploma in Architecture	3 years	
7.	Gaurav	Diploma in Architecture	3 years	
8.	Rajni	Diploma in Architecture.	4 years	
9.	Karun	B. Tech Civil .	1 years	

5. NON TECHNICAL STAFF AT OFFICE:

S. No.	Name	DESIGNATION	
1.	Navneet Kaur	Secretary	
2.	Rajesh Rao	Assistant Surveyor	
3.	Rakesh	Lab Assistant	
4.	Ginny	Assistant Surveyor	
5.	Arun	Assistant Surveyor	

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DESIGN FACILITIES / EQUIPMENT:

Software:

- 1. STAAD/PRO2003 (2 Nos.) : A comprehensive & flexible general purpose structural software for analysis & design.
- 2. STAAD ETC : Structural Design Software of individual components.
- 3. AutoCAD 2004 & 2000: General purpose drafting software.
- 4. Primavera Project Planner Rel 3.0 (for Construction Management); PERT Network Planning & Management of Projects .
- 4. AutoCAD Land Development Desktop 2i; Survey, Earthwork Calculations, Design of Road Geometrics; Highway pavements.
- 5. HEC-RAS: Software for hydraulic / hydrological modelling & analysis.
- 6. STARDYNE : F.E.M. software with state-of-art Static/ Dynamic/ Non-linear/ buckling analysis with latest Graphics technology.
- 7. Software for Design and Detailing with graphic support of Retaining walls, slabs, various types of stairs, R.C.C. Pipes All types of foundations.
- 8. Software for hydraulic Modelling ;Flood plain Studies, Hydraulic Design of culverts ;Storm Water Design.

Hardware:

- 1. Pentium PIV with 2.8 GHz, 40 GB HBD, 1024 RAM 4 Nos.
- 2. Pentium PIV with 2.0 GHz, 40 GB Hard Disk, 256 MB RAM 2 Nos.
- 3. HP Plotter Designjet 500 (Size A₀)
- 4. A-2 Size EPSON 1520 Coloured Printer.
- 5. DeskJet HP Coloured Printer 695 C. 690 C & 840 C.
- 6. HP PSC 750 Printer, Scanner, Copier.

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Survey & Testing Facilities:

The survey equipment of very high quality and precision are available with the organisation i.e theodolites, auto levels, rodometers & other related equipments & softwares.

The test house has very high quality equipment for testing of Soil, Sand, Aggregates, Cement, Concrete, Steel, Bricks, Water, Bitumen & other construction related materials. The equipments are as per latest IS Codes to match the different test requirements is as follows:-

S. No. 1.	Name of the Apparatus 12 Speed Direct Shear Test Apparatus		Make AIMIL LIMITED
2.	3 Gang Consolidation Apparatus		AIMIL LIMITED
3.	Unconfirmed Compression Tester	AIMIL	LIMITED
4.	Standard Penetration Test (4 Set)	S.S.I.	
5.	Dynamic Penetration Test (4 Set)		S.S.I.
6.	Triaxial Shear Test Apparatus		S.S.I.
7.	Soil Resistively Test Apparatus		S.S.I.
8.	Marshall Stability Test Apparatus		AIMIL LIMITED
9.	C.B.R. Test Apparatus (20 Moulds)		AIMIL LIMITED
10.	Ring & Ball Apparatus		AIMIL LIMITED
11.	Universal Penetrometer		S.S.I.
12.	Ductility Testing Apparatus	TEST	WELL
13.	Bitumen Extractor		S.S.I.
14.	Compression Testing Machine		Allied
15.	Cube Moulding Machine (40 Moulds)		Allied

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S. No. 16.	Name of the Apparatus Concrete Mixer, Vibrating Table	Make Allied
17.	All latest Sieve Sizes, Sieve Shaker	ISCO
18.	Aggregate Impact Tester	ISCO
19.	Aggregate Crushing value	ISCO
20	Aggregate Bulkage, Specific Gravity,	ISCO
	Fineness Modulus, Water Absorption	
21.	Oven, Furnace	ISCO
22.	Ultra Sensitive Electronic Balance	Samsung
23.	Standard/ Modified Proctor Test	ISCO
24.	Compaction Test (60 Core Cutters)	ISCO
	Sand Replacement Test (4 Nos.)	
25.	Complete Apparatus for Physical/Chemical	ISCO
	Testing of Cement	
26.	Apparatus for testing of Tiles	
27.	All Related Accessories	
28.	Digital Universal Testing Machine, 600 KN	Blue Star

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LIST OF VALUEABLE CLIENTS

S. NO.	Name of the Organization
1.	Indian Oil Corporation Limited.
2.	Chandigarh Engineering Department & Capital Projects
3.	Chandigarh Water Supply
4.	Chandigarh Housing Board
5.	P.G.I., Sector-12, Chandigarh
6.	Punjab & Haryana Urban Development Authority
7.	Punjab & Haryana PWD B & R
8.	Punjab Panchayti Raj
9.	Haryana Tourism Corporation
10.	Punjab Mandi Board
11.	Punjab State Industrial & Export Corporation
12.	Punjab State Warehousing Corporation
13.	Punjab Water Supply & Sewerage
14.	Punjab State Electricity Board
15.	Milkfed & Markfed Punjab
16.	Reliance Infocomm, Industries and Retail Outlet Division.
17.	Quark Media House, USA.
18.	Ranbaxy Laboratories Ltd.
19.	Panacea Biotech Ltd.
20.	Pfizer India Ltd., Chandigarh.
21.	HFCL Infotel, Bharti Telecom, Spice Telecom
22.	Hindustan Petroleum Corp. Ltd.
23.	Bharat Petrolium Corp. Limited
24.	Simplex Concrete Piles Ltd.
25.	Him Chem Ltd.
26.	Satnam Namita & Associates, S.D.Sharma & Associates
27.	Micro Instrument Ltd., Ambala.

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28.	HUTCH.	TATA	TFI F	Services Ltd.
_0.	1101011	. , , .		COI VICCO LIG.

- 29. KUDOS Chemie Ltd., Dera Bassi.
- 30. M & B Shoes Baddi
- 31. Shreyans Group &

Many other organizations.

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RESUME OF Dr. I.C. SYAL

1. Name : Dr. ISHWAR CHANDER SYAL

2. Father's Name : Sh. Bakhshi Ram Syal

3. (a) **Date of Birth** : 6th August, 1942

(b) Nationality : INDIAN

4. Post Held : Professor & Head (Retd.)

Deptt. Of Civil Engg.,

Punjab Engineering College, Chandigarh.

(Superannuated on 31.8.2000)

5. Present Residential Address : H. No. 53, Sector 56, S.A.S Mohali

6. Permanent Address : H.No. 53, Sector 56 (Phase VI), Mohali

7. Educational / Technical Qualifications:

Sr. No.	Examination Passed	University	Year of Passing	Percentage	Division
1.	Matriculation	Punjab Uni. Chandigarh	1958	71 %	First Div
2.	B.Sc. Engg.(Civil)	Punjabi Uni. Patiala	1964	66.89%	First Div
3.	M.Sc. Civil Engg. (Structures)	Punjab Uni. Chandigarh	1965	76.7%	
4.	Ph.D. in Engg.	Punjab Uni. Chandigarh	1970		

(Topic: Inelastic Behaviour of Biaxially Loaded Steel Columns with Eccentricities of Loading Not Alike at Two Ends)

In addition to above, I have passed certificate courses in German & French languages in First Division from Punjab University, Chandigarh in 1969 & 1970 resp. and also additional subject of Punjabi of Matriculation standard from Punjab Education Board in 1971.

8. EXPERIENCES:

A.) Teaching / Research

Sr. No.	Post held	Employer/Organization	Period
1.	Assistant Professor	Principal, Thapar Institute of Engg.	23.9.1966 to 29.9.1967
2.	Senior Research Fellow,	& Tech., Patiala. Secretary, C.S.I.R., New Delhi	30.9.1967 to 8.9.1969
3.	Assistant Professor (Later designated as Senior Lecturer)	Home Secretary, Chandigarh Admn., U.T. Chandigarh.	9.9.1969 to 29.4.1975
4.	Associate Professor (Later designated as Assistant Professor)	do	30.4.1975 to 31.3.1985
5.	Professor (ON Merit Promotion)	do	1.4.1985 to 29.4.1993
6.	Professor & Head of the Deptt.	do	30.4.1993 to 31.8.2002

(B) PROJECTS COMPLETED/IN HAND (Struct. Design & Supervision)

(a) BRIDGE STRUCTURES(CONCRETE STEEL & SUSPENSION BRIDGES)

- (i) RCC Box culvert Bridges at Industrial Area, Panchkula,
- (ii) SUSPENSION BRIDGE WITH STIFFEING GIRDER 140m SPAN at Vill. Suru, Rampur, distt. Shimla over Satluj river
- (iii) Suspension Foot Bridge 140M span at Rupi Panchayeti near Chaura (H.P)
- (iv) Steel Bridge 60 m span over nallah at Rajpura(Punjab).
- (v) H.L. Bridge at Vill. Alam, Distt. patiala, Punjab.

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(vi) 60m span steel Bridge at Gehra, Chamba for Shivalik hydro Pvt. Ltd., Ropar

(b.) OFFICE BUILDINGS

- (i) Haryana State Electricity Board, Head Office, Sec 6, Panchkula
- (ii) H.U.D.A., Head Office Building, Sector 6, Panchkula
- (iii) H.A.F.E.D., Head Office Building, Sector 4, Panchkula
- (iv) P.S.I.D.C. Building, Sector 17, Chandigarh.
- (v) Pb. Financial Corp. Building, Sector 17, Chandigarh.
- (vi) D.C.Office Complex, Sector 17, Chandigarh
- (vii) Pb. Irrigation Deptt., Head Office Building, Sec. 18, Chandigarh
- (viii) Geological Survey of India Head OfficeBuilding, Sec 33, Chandingarh
- (ix) Income Tax. Office Buildings at Panchkula, Ambala, Ropar
- (x) Chandigarh Administrative Tribunal, Sector 17, Chandigarh
- (xi) Tourist Reception Centre, Anandpur Sahib
- (xii) "QUARK R & D Center Building", Industrial Area, Mohali (Under Construction)

(c,) Educational Buildings:

- (i) College for Girls, Sector 42, Chandigarh.
- (ii) College for Boys, Sector 46, Chandigarh.
- (iii) Central School, Sector 31, Chandigarh.
- (iv) Dev Samaj College, Sector 36, Chandigarh.
- (v) Administrative Block, Pb. Engg. College, Chandigarh.
- (vi) Computer Sc. & Electronic Block, Pb. Engg. College,Chandigarh.
- (vii) Mahatama Ganghi Institute of Public Administration, Sec 26, Chandigarh.
- (viii) Reginal Engg. College Complex, Hamirpur(H.P.) Admn Block,Civil Engg. Block, Elec. Engg. Block, Workshop Block, BoysHostel, Girls Hostel, etc
- (ix) Shiwalik Public School, Sector 41, Chandigarh.

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- (x) St. Kabir School, Sector 26, Chandigarh.
- (xi) Vivek Public School, Sector 38, Chandigarh
- (xii) Pb. State Education Board Building, Phase VIII, Mohali

(d.) Bank Buildings:

- (i) State Bank of India, Local Head Office, Sector 17, Chandigarh
- (ii) Reserve Bank of India Building Sector 17, Chandigarh.
- (iii) NABARD Bank, Sector 34, Chandigarh.
- (iv) Canara Bank Building, Sector 34, Chandigarh.
- (v) Punjab & Sind Bank Building, Sector 17, Chandigarh.

(e) Hospital Buildings

- (i) P.G.I. Chandigarh: Dental Block, Gastrology block, Sarai Building,Doctor's Hostel, New Library Block, Emergency O.P.D.
- (ii) E.S.I. Hospital at Jallandhar
- (iii) Blocks B and C of Chandigarh Medical College & Hospital, Sector 32, Chandigarh.
- (iv) Balbir Nursing Home Building at Faridjot (Under Construction)
- (v) Isvini Hospital Building, Colaba, Bombay

(f) Industrial Buildings:

- (i) I.C.L. Extn, Rajpura
- (ii) Punjab Tractor Ltd., Mohali, Majri, Chhapparchheri; Sawraj Engines, Industrial Area, Mohali, Sawaraj Mazda, Ropar
- (iii) Bhushal Steel & Strips, Indutrial Area Chandigarh, Derabasi,Sahibabad (Near Delhi)
- (iv) Spinning & General Mills, Bhatinda, Mansa, Malout
- (v) Extn of Pfizer India Ltd., Industrial Area, Chandigarh
- (vi) Extn of Ranbaxy Building at Industrial Phase I, Mohali & at Tonsa Ropar.
- (vii) Four Storey Building of TRIDENT GROUP at Barnala

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(g) PWD Pb. Referred Buildings

- (i) Judicial Court Complexes at Ludhdhiana, Jallandhar, Amritsar
- (ii) Lawyer Chamber at Ludhiana (Under Contruction)
- (iii) Polytechnic Building at Mukatsar

(h) Pb. MILKFED, Chandigarh referred Buildings

- (i) Head Office Building at Sector 34, Chandigarh
- (ii) Milk Plant at Sangrur
- (iii) Extn of Milk Plant at Patiala, Ludhiana, Amritsar
- (iv) Animal Sheds near Village Badal

(i) PWD Haryana referred Buildings

- (i) Panchayat Bhawan, Sector 28, Chandigarh.
- (ii) Judicial Court Complex at Ambala
- (iii) Yagya Shala & Puja Bhawan at Mansa Devi Complex, Manimajra Slabs Bridges at various places in Panchkula

(j) Haryana Tourism, Sector 17, Chandigarh referred Buildings

- (i) Tourist complexes at Panchkula, Tilyar, Yamuna Nagar, Hisar,
- (ii) Extn of Tourist complexes ar Karnal, Panipat, Pipli, Samalkha

(k) MARKFED Punjab

(i) Four Rice Plants and allied Buildings at Goniana, Giddarbaha, Jaiton & Batala

(l) **Pb. Mandi Board:**

(i) Mandi Sheds-Sheltor at various places in Punjab

(m) Indian Oil Corp. Chandigarh reffered jobs

- (i) Retail Outlets (12 Nos. in Punjab) St. Design, Architecture, & Supervision; 4 Nos. in Himchal
- (ii) Similarly 3 Nos. R.O.s from B.P.C.L.

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(n) <u>VARDHMAN GROUP INDUSTRIES</u>

Sheds & Factory Buildings at Mahavir Spining Milss at Hoshiarpur, Aura & Arihant at Baddi, Spinning & General Mills and Special Steels at Ludhiana

(o) M/S Satnam Namita & Associates

- (i) Dasmesh Academy at Anandpur Sahib, (School Buildings, Hostel Buildings, Library, Gymnasium, etc.)
- (ii) Naval Academy at Keral, Various buildings
- (iii) Martial Academy of Sports at Anandpur Sahib
 - (iv) Ellora Cinema, Model Town Patiala.
- (v) Pb. Warehousing corp, Container Freight Station at Bombay
 - (vi) Hotel SUN BEAM at Sector 22, Chandigarh
 - (vii) Cardioc Centre, P.G.I., Chandigarh in hand

(p) <u>SGPC. Referred projects</u>

- (i) Sarai Building at Golden Temple Complex, Amritsar
- (ii) Nada Sahib Parking Complex, NadaSahib
- (iii) Gurudwara Saheedawala, Sec 44, Chandigarh (Under Construction)
- (iv) Gurudwara, Sector 8, Chandigarh
- (v) Construction Parikarma. Minar 150' high at TaranTaran
- (q) Pb. Health Systems Dispensaries/ hospitals at various places in Punjab.
- (r) Haryana Housing Board, Chandigarh
 Different Housing categories at various places in Haryana
- (s) Chandigarh Housing Board, Chandigarh
 Category III in Modern Housing Complex at Manimajra,
 Category HIG (Upper) in Sector 38, Chandigarh.E.W.S. Housing Scheme,

(t) Punjab Urban Development Authority (PUDA)

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D.A.C. Jallandhar, D.A.C. Hoshiarpur, D.A.C. Bhatinda, PUDA Office Complex at Sec 62, Mohali, Spinal Injury Centre, S.A.S.Nagar, V.V.I.P. Guest House, Punjab Raj Bhawan, Chandigarh, India Gate Hussainiwala

(u) Five Star Hotel "Holiday Inn" at Kandghat in hand

9. FACILITIES AVAILABLE

- (i) Pentium PCs (4 Nos.)
- (ii) STAAD 3 (WINDOWS) & STAAD PRO, STARDYNE Software's
- (iii) Printing Machine
- (iv) Testing Facilities of Concrete ,Cement, Steel, Chemical Testing
- (v) Soil Investigation ?Testing Lab
- (vi) Printers 840C, 3 Nos. 690C
- 10. 1. Ph.D. thesis guided: one: Dr. N.P. Devgan has worked under my supervision on topic, "Flexural-Torsional Behaviour of Biaxially Loaded Spatial Steel Beam Columns," and was awarded degree by Punjab Uni. in 1997.
 - 2. M.E. Theses guided: More than 150 in Nos.
 - 3. Technical Books Published.
 - (a) Syal I.C. & Gupta S.P., "Computer Programming & Engineering Analysis" Pub. A..H. Wheeler & Co. Ltd., Allahabad, II nd Ed., 1986.
 - (b) Syal I.C., & Goel A.K., "Reinforced Concrete Structures", Pub. A.H. Wheeler & Co. Ltd, Allahabad, 3rd Ed. 1998.
 - (c) Syal ,I.C. & Ummat Ramesh," Behaviour, Analysis and Design of Reinforced Concrete Structural Elements," A.H.Wheeler & co. Ltd., Allahabad, 1989.
 - (d) Syal I.C., & Kukreja C.B & Arun Kumar "Structural Mechanics," Standard Pub, 1991.
 - e) Syal I.C & Satinder Singh, "Design of Steel Structures", Standard Pub., 1st Ed, August 2000).

11. Technical Papers Published:

- (i) Syal I.C. & Sharma S.S, "Econominal Design of Reinforced Concrete Rectangular Frames", Published in CEMENT & CONCRETE Magazine, April June, 1968.
- (ii) Syal I.C. & Sharma S.S, "Elastic Behaviour of Biaxially Loaded Steel Columns", Journal of the Structural Division, ASCE, Vol. 96, Proc. Paper 7143, March 1970.
- (iii) Syal I.C. & Sharma S.S, "Biaxially Loaded Beam- Columns", Journal of the Structural Division, ASCE, Vol. 97, Proc. Paper 8384, Sept 1971.
- (iv) Syal I.C. & Krishan Lal, "Imperfections in Biaxially Loaded Steel Columns", Journal of the Institution of Engineers (India) Calcutta, Vol. 52, No. 5, Jan 1972.
- (v) Syal I.C., "Biaxially Loaded Tapered Steel Columns", Journal of the Institution of Engineers (India) Calcutta, Vol. 54, No. CI3 5, Jan 1974.
- (vi) Syal I.C. & Jain H.L., "Design Criteria for Biaxially Loaded Steel Columns", Journal of the Institution of Engineers (India) Calcutta, Vol. 56, No. CI35, Jan 1976.
- (vii) Syal I.C. & Ramesh Ummat, "Analysis of Continuous Non Planner Plate Structures", Journal of the Institution of Engineers (India) Calcutta, Vol. 63, No. CI35, Nov 1982.
- (viii) Syal I.C.," Maintenance of Existing Buildings", Key Note address presented in National Seminar on Construction Management, T.I. E.T., Patiala, Oct 27-28, 1989.
- (ix) Syal I.C., Development of Graphics Saoftware for Design of Shallow Footings", National Seminar on Computer Applications in Civil Engg., T.I.E.T, Patiala 1994.
- (x) Syal. IC.,"Parametric Studies on Planner and Spatial Grid Roofing Systems,"
 National Seminar in Civil Engg., T.I.E.T., Patiala.

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- (xi) Syal I.C. & Devgan N.P.," Flexural Torsional Behaviour of Spatial Beam Columns," International Conference on Computational Metjods in Structural & Geotechnical Enginnering, Hongkong, Dec. 1994.
- (xii) Syal I.C. & Rajiv Syal," Welded Wire Fabric as Structural Reinforcement," Journal of Indian Building Congress, Vol, IV, No.3, 1997.
- (xiii) Syal I.C.and Syal Rajiv," New Trends in Construction with Welded Wire Fabric as Reinforcement," Indian Concrete Journal, Vol. 71, No.7, Julyu 1997.
- (xiv) Syal I.C., & Syal Rajiv, "Distresses & Rehabilitation in Housing," presented in National Conference on Construction, Power & Roads, Urban Infrastructure & Housing 2000", March 5-6, 1999,

12. TRAINING COURSES ATTENDED:

Punjab State Institute of Public Admn, Chandigarh" Office Management & Office Progresses" One week, 1995.

13. MEMBER Technical JOURNALS/Magazines

- (i) Fellow Institution of Engineers (Calcutta) F8168
- (ii) Life Member Indian Society for Wind Engineers
- (iii) Member Indian Society for Technical Education
- (iv) Member of Magazine New Materials
- 14. Member of Staff Selection boards & Research Boards for REC Kurukshetra, Roorkee Uni. Roorkee, T.I.E.T. Patiuala, Panjab Uni. Chandigarh, Guru Nanak Engg. College, Chandigarh, U.P.S.C., Delhi.
- **15.** <u>MEMBER:</u> SASE (Snow & Avalanche Study Estt.) Ministry of Defence R & D Center, Chandigarh.
- **16. PROOF CONSULTANT/ Structural EXPERT** for PUDA (Punjab Urban Planning & Development Authority, Chandigarh

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RAJIV SYAL

H.No.53, Phase - 6 Mohali, Punjab 160056 98142-13704 rajiv_syal@yahoo.com

OVERVIEW

Eight years of experience in land development, structures, hydraulics, water resource management, road improvement plans, grading, project planning & scheduling. Expertise in technical and economic analysis of land development projects.

EDUCATION

- Member Indian Road Congress 06/03
- Associate Member of Institution of Engineers(India) 04/03
- Engineer In Training (EIT) Certification, Maryland, USA 01/02
- Master of Engineering, Punjab Engineering College, Chandigarh, India 05/97

Specialization: Structural Engineering

 Bachelor of Engineering, Punjab Engineering College, Chandigarh, India 05/95

Specialization: Civil Engineering

SUMMARY OF SKILLS

Languages FORTRAN, Visual Basic, PL/SQL

Internet HTML, Dynamic-HTML

Development Tools MS Office 2000 Excel, Word, Power Point

Other Softwares Staad Pro Structural Engineering Software based on Stiffness

and Finite Element method

Auto Cad Land Software for design of storm drains, water, sewer,

Development 2i highways, and

surveying

AutoCAD 2000 Drafting package

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Website: www.syalassociates.com

HEC-RAS Hydraulic modeling software

TR 20/TR 55 Technical Releases

Primavera Project Planner 3.0: Planning & Scheduling software

WORK EXPERIENCE

Batta Goode & Associates (Engineers, Planners & Surveyors), Gaithersburg, Maryland, USA.

Project Engineer 01/01 – 01.03

- Site development and grading plans of Intercoastal Industrial Center, Frederick, Maryland
- Floodplain study and storm water management for Inter-Coastal Industrial Center, Frederick, MD
- Design of Utilities & Storm Drainage system for Inter-Coastal Industrial Center
- Floodplain modeling for Marlton East & part of Marlton South, Prince George's County, MD
- Design and alignment, grade establishment plans, design of culverts Lake Marlton Avenue, Prince George's County, MD
- Sediment control plans for Marlton Town Center Phase IV, Gleenbrook Phase-2, and Inter-Coastal Industrial Center.
- Water Quality Pond for Marlton Town Center Phase-II & Phase-IV, PG County, MD.
- Road Intersection design of Heathermore Blvd with Grandhaven Avenue and Heathermore Blvd. with Lake Marlton Avenue, Prince George's County, MD.
- Storm Drain & Paving Plans for Marlton Town Center, Phase-IV, PG County, MD.
- Flood Plain Study, Culvert design & SWM Concept for Todd Macdonald Property, Howard County, MD.

Syal & Associates (Engineers, Architects & Evaluators), Chandigarh, IndiaFounder / Executive Manager / Design Engineer 03/97 – 01/01 & 01/03- present

- Structural analysis and design of INHS Asvini Hospital (600-bed facility)
- Structural Analysis and design of Department of Communications Research and Development Center
- Project Management & Structural Design of Quack Inc., Research and Development Center
- Analysis and design of snow galleries and avalanche control structures for SASE part of Defense & Research Organization

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- Concept, tendering, design and preparation of land development, utility services and building plans of Conware Freight Station
- Analysis & design of telecommunication towers for Siemens Communications Ltd. & Himachal Futuristic Corporation Ltd.
- Design and site supervision of various gas stations in North India for Indian Oil Corporation Ltd. and Bharat Petroleum & Chemicals Ltd.
- Analysis and design of Ground based towers & Roof Top tower foundations for Reliance Infocom Ltd., for the sites in Punjab, Haryana & Himachal Pradesh.
- Design of Road network, Under passes, storm drainage system for City Center, Sector 62, Mohali.
- Design of New Road (alignment, L-sections, different junctions with link roads) from Dhanas to Maloya & Dadu Majra to Togan, U.T. Admistration, Chandigarh.
- Apna Punjab Homes Multi Storeyed Shopping & Housing Complex, Ludhiana.
- Design of Module II, IX, Multi Purpose Plant at Ranbaxy Labs Ltd., Mohali., Steroid Plant, Quality Control Lab, ETP at Ranbaxy Labs Ltd. Toansa.

RESEARCH PUBLICATIONS/ACADEMIC ACTIVITIES

 Visiting faculty at the Chandigarh College of Architecture, India 08/96-07/00

Taught various courses in structural design and construction management

- Published a book titled "Programming with Fortran, Graphics & Engineering Analysis" with Standard Publishers Distributors, India
- Life member of Indian Society for Construction Materials & Structures and member of Indian Concrete Journal
- Presented a paper in Second National Conference on Construction "Infrastructure 2000" by Construction Industry Development Council & Ministry of Surface Transport.

AWARDS

- *University Gold Medal* for securing *first* position in the Bachelor of Engineering examination
- Silver Medal for major project in the Bachelor of Engineering
- *Certificate of Merit* for outstanding academic performance for being among top 0.1% in All India Senior School Examination in mathematics

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RESUME OF PROF. KEWAL SINGH, FIE

Name : Prof. KEWAL SINGH

Father's Name : (Late) Sh. Pakhar Singh

Date of Birth : 8th December 1940

Nationality : Indian

Present & Permanent Address : Prof Kewal Singh FIE

H.No. 1007, Sector – 43- B, Chandigarh – 160022 (India)

Phone: 0172–2606633, Mobile: 8153 – 07227

Last Service Post Held : Professor in Civil Engg. Punjab Engg.

(At Retirement) College, Chandigarh (Retd. On 31/12/1998)

Technical Qualification : B.Sc. Engg. (Civil) Degree of Punjab

University, Chandigarh from Punjab Engg.

College, Chandigarh – 1963.

: M.Sc Engg. (Highways) Post -Graduate (P.G.) Degree 'WITH DISTINCTION' of Punjab University, Chandigarh, from Punjab Engg.

College, Chandigarh – 1971.

: Post –Graduate, Post -Experience Dip., IC – HPB Rotterdam (Holland) – under Netherlands

Govt. Fellowship - 1975

: Post -Graduate, Post -Experience Dip. SP -

ICHPB Rotterdam (Holland) – under Netherlands

Govt. Fellowship – 1980.

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Website: www.syalassociates.com

Professional Experience:

: 39 years to date

• Regular Service (35 years)

: Field Experience(3 years): - As Assistant Engineer Pb. PWD B & R 1963 – 1966 – Construction & Maintenance of Roads and

Buildings.

: Teaching as Regular Faculty Member at

Punjab Engg. College, Chandigarh (32 years)

: Assistant Professor in Civil Engg.— 1967 – 74.

: Associate Professor in Civil Engg.-1975-1983

: Professor in Civil Engg. - 1984 - 1998.

Engineering Courses
 Taught

a) At Graduate Level: - Highway Engg.

including Materials, Pavement design,

Construction Traffic Engineering, Soil

Mechanics, Building Construction,

Construction Management PERT/ CPM

Techniques.

Project Work: - Guiding Highway Projects (25

Nos.)

b) At Post Graduate Level: - Highway

Geometric Design, Pavement Materials,

Pavement Design, Traffic Engineering,

Statistical Methods in Highways Engg. &

Quality Control.

M.E. Thesis: - Supervising & Guiding M.E.

Thesis (55 Nos.) relating to Road Intersection

Design, Geometric Design, Pavement

Design, Traffic Engg. Studies, Transport

Mode Studies, Highway Materials.

Technical Professional Consultancy Work: -

Referred Consultancy Work: - Jobs on Road Mix Designs, job Mix formula for
 (While in service) Bituminous Macadam, Bituminous concrete,

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Wet Mix Materials, Pavement designs over 50 jobs.

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• Design & Investigations: -

- 1. Sub grade Soil Investigations including stabilization with lime and cement for International Airport at Amritsar.
- 2. Design of Pavements for about 50 link roads under PMGSY in Punjab for Punjab PWD (B&R) & Mandi Board.
- 3. Design of Pavements for Roads in Punjab Kandi Area Development Scheme financed by World Bank.
- 4. Investigations / Evaluation of Road aggregates and Bitumen.
- 5. Pavement Distresses and Rehabilitation.
- 6. Studies for pavement evaluation by Benkelman Beam Technique & design of over lay.
- 7. Design of Bituminous Mixes, BM & DBM, SDBC, BC and Mastic Asphalt.
- 8. Quality Control Consultant to Punjab Infrastructural Development Board along with Sh. R.S. Shukla, Former Head of Flexible Payment Division CRRI, New Delhi, for following road projects.
 - i) Widening & strengthening of Zirakpur Rajpura Road (NH 64)
 2002 2003 (Approx. Cost 21 crores).
 - ii) Widening & strengthening of Rajpura Patiala road (NH 64) 2002-2003 (Approx. Cost 20 crores).
 - iii) Widening & strengthening of Kharar- Khamano Road (NH 95) nearing completion (Approx cost 19 crores).
 - iv) Widening & strengthning of Ropar Balachaur Road (2002 2003) (approx cost 20 crores).
 - v) 4 laned Morinda Bye-pass about 7 KM (2002 2003 in progress) (approx. cost 18 crores).
 - vi) Specialist /Consultant for job Mix formula for Bituminous Mixes for other PIDB projects namely Phagwara Bye- pass, approaches to High level Bridge on River Beas near Mukerian, Approaches to HL Bridge on Satluej River on Jagraon - Nakodar Road.

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MAJOR PROJECTS RECENTLY IN HANDS

Sr.No.	Project	Referring Agency	Approximate Cost	<u>Year</u>
1.	C.I.I., Regional Office Building Sector 31, Chandigarh	Mehta & Associates Panchkula.	4 Crores	1995-96
2.	Canara Bank, Regional Head Office Building, Sec-34, Chd	Planners Group S.C.O. 4, Sec-17, Chandigarh.	8 Crores	1995-97
3.	Bhandari Exports & Spinning Mills, Derra Bassi.	-do-	15 Crores	1995-97
4.	P.T.L. & Swaraj EnginesMohali, Ropar, ChhaparChari.	-do-		
5.	Jai Mata Glass, Brotiwala	-do-		1995
6.	Nibber Casting Pvt. Ltd., Foundary, Dera Bassi		30 lakhs	1997
7.	Bhushan Steels & Strips Chandigarh, Dera Bassi, Shahibabad			1989-98
8.	Storage Sheds for PUNSUP at Samrala, Jandiala, Dasua	IRCON		1997
9.	Raw material Storage Sheds at Mudian Kalan, Vardhman	Vardhman Spinning & General Mills	50 lakhs	1996
10.	Checking Safety & Stability of Sheds of Hindustan Lever Ltd., Soap Factory & Animal Feed Plant at Rajpura.	Hindustan Lever Ltd., Rajpura.		1998
11.	Tourist Complexes at Hissar, Yamuna Nagar Panchkula, Pipli, Extn. Of Karnal.	Haryana Tourism Corp. Ltd., Sec-17, Chd.		1990-97
12.	Strom Water Drainage Scheme, Industrial Area, Mohali.	-do-	4 Crores	1995-96
13.	Mahatama Gandhi Institute of Public Administration Sector 26, Chandigarh.	Grover Architects (P) Ltd., New Delhi	16 Crores	1996-97
14.	Effluent Treatment Plant,Extension of Buildings,	Mahavir Spinning Mills, Hoshiarpur	30 lakhs	1994-95
15.	Kuka Memorial, Maler Kotla.	Kuka Memrial Trust		1994-95
16.	Containers Freight Shed Containers Freight Shed Bombay.	M/s Satnam Namita & Associates, Sec-8, Chd.	8 Crores	1996-97
17.	I.N.H.S., 800 Bedded Hospital Colaba, Bombay.	-do-	100 Crores	1996-97
18.	C.D.O.T., R & D Centre New Delhi	M/s Satnam Namita & Associates.	90 Crores	1996-97
19.	Checking of Safety & Stability of Cricket Stadium, Ph-9, Mohali.	Punjab Cricket Association.		1996
20.	Extension Of Golf Club, Sector 1, Chandigarh.	Golf Club, Chandigarh		1995
21.	Haryana Panchayat Bhawan Sector 28 A, Chandigarh.	Haryana P.W.D. B & R.	3.5 Crores	1997
22.	Chandigarh Housing Board H.I.G.(Upper) Cat-1, Sec-45, Chd. & Cat-3 Flats, Modern	Chandigarh Housing Board.		1991-93

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	Residential Complex, Mani Majra.			syalassociates.cor	
Sr. No.	Project	Referring Agency	Approximate Cost	<u>Year</u>	
23.	Haryana Police Housing Corp., Various Categories of Houses, Police Stations & Barracks at Rohtak, Hissar, Gurgaon, Narnaul etc.	Haryana Police Housing Corp., Gurgaon.		1994-96	
24.	Housing Complexes & various Categories of Houses at Rohtak, Sisra, Gurgaon, Kurukshetra.	Housing Board Haryana Sector 8, Chandigarh.		1992-94	
25	Extension of Pfizers Plant, Pfizer India Ltd. Siemens Ltd.,	Pfizer India Ltd.,	50 lakhs	1994-97	
26	Construction of Footings for Antenna Delta Frames on Roof Tops, all over Punjab, Chandigarh.	Siemens Ltd., Siemens Ltd., Chandigarh.		1997	
27	Extension of Pilot Plant Plant at Ropar, CPM, Tin & Solvent Recovery at Mohali.	RANBAXY LABS LTD.		1993-98	
28	I.M.A. Complex, Sec. 35, Chandigarh.	I.M.A., Chandigarh	50 lakhs	1998	
29	Snow Control Structures Banihal, J & K.	Ministry of Defence (Snow Avalanche & Study Estt.)	50 Crores	1997	
30.	Hydraulic & Structure Design of Water Treatment Plant	P.S.I.E.C. Ltd Chandigarh.	75 lakhs	1997	
31.	Disposal Works at I.F.P. Muktsar & Bhatinda	-do-	70 lakhs	1997	
32.	H.L. Bridge on Sanglana Choe near Suraj Theatre.	H.U.D.A.	30 lakhs	1998	
33.	Milk Chilling Centre, Bhattal Sehja Singh, Amritsar& Extension of Milk Plants at Chandigarh, Mohali.	MILKFED Punjab		1997	
34.	Chandigarh Cables Ltd., Kurali.		30 lakhs	1995	
35.	H.U.D.A., Head Office Building, Sector 8, Panchkula.	H.U.D.A.		1998	
36.	Trauma Centre, PGI MS, Rohtak	P.W.D.(B&R) Haryana		1998	
37.	Judicial Courts Complex at Ludhiana.	P.W.D. (B & R) Punjab.	15 Crores	1998	
38.	H.S.I.D.C. Corporate Office, Panchkula.	S.D. Sharma & Ass. Mani Majra.	4 Crores	1997-98	
44	ITC, at I.T.B.P. Base Ramgarh	C.P.W.D.		1998-99	
45.	QUARK Building, Mohali	M.D., QUARK, Chandigarh	3 Crores	1999-2000	
46.	Judial Courts Comples at Ludhiana, Jallandhar Amritsar	P.W.D.(B & R) Punjab	8 Crores	1999-2000	
47.	Indian Oil Corporation, Chandigarh Retail Outlets at various places in Punjab & Himachal	Indian Oil Corp., Chandigarh.	10 Crores	1999-2000	
48.	H.F.C.L. CONNECT, Mohali Checking safety & Stability of Building & Towers at various Place	H.F.C.L., Mohali	8 Crores	1999-2000	

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	in Punjab.			yaiassociates.com
Sr. No.	Project	Referring Agency	Approximate Cost	<u>Year</u>
49.	Pb. Ware Housing Corp., Chandigarh Container Freight Station at Dappar	PSWC, Chandigarh	12 Crores	1999-2000
50.	D.A.C. Complex at Hoshiarpur, Bathinda & Head Office at Mohali	PUDA, Chandigarh	10 Crores	2002
51.	Cardiac Block PGI, Chandigarh & Naval Academy in Kerala.	M/s Satnam Namita & Associates, Chandigarh	400 Crores	2002
52.	Apna Punjab Homes at Ludhiana.	Living Spaces, Arch. Interior 73-A, Saargodha Colony Ludhiana.	25 Crores	2003
53.	Infrastructure Development of City Center, Sec-62, Mohali.	Simplex Concrete Pile Ltd.	50 Crores	2003
54.	Module II, IX, Canteen Block, Cipro Plant, Utility Block, Multi Purpose Plant at Mohali.	Ranbaxy Labs Ltd, Mohali.	5 Crores	1995-2003
55.	Steroid plant, Quality Control Lab, ETP at Toansa.	Ranbaxy Labs Ltd. Toansa.	3 Crores	1998-2003
56.	New R.O. at Surajpur, Shadihari, Ganota, Kakarwal.	HPCL	2Crores	2004
57.	Sukhna Path, sec-28, Chandigarh	IOCL	1 Crore	2004