KALESHWARAM PROJECT

Preamble:

Kaleshwaram Project has been conceived from the erstwhile Dr. B.R. Ambedkar Pranahita- Chevella Sujala Sravanthi project.

Originally, Dr. B.R. Ambedkar Pranahita- Chevella Sujala Sravanthi project was proposed to utilize 160 TMC of allocated water of Godavari basin as per GWDT award. A barrage was proposed at Tummidihetti(V) to divert 160 TMC of water to irrigate 16.40 lakh Ac in 7 districts of Telangana State viz., Adilabad, Nizamabad, Karimnagar, Medak, Warangal, Nalgonda & Rangareddy, besides drinking water & industrial water.

The project contemplated to provide Irrigation facilities for an ayacut of 16,40,000 Acres in drought prone areas in 7 Districts in Telangana State. Further, it also planned to provide 10 TMC of Drinking Water to the villages enroute, 30 TMC of Drinking Water to twin Cities of Hyderabad & Secunderabad and 16 TMC of water for Industrial use.

The entire project works are divided into 7 links & 28 packages. Agreements are concluded for all 28 Packages during 2007-08 & 2008-09.

But, due to the following aspects the project was taken up for re-engineering:

Inter State Aspect:

- Due to location of its head works, Dr.B.R.Ambedkar Pranahita-Chevella Sujala Sravanthi (PCSS) project is an Interstate project between Maharashtra and erstwhile Andhra Pradesh. The barrage was proposed with FRL +152.00 m and capacity +5.09 TMC.
- As per the Godavari Water Disputes Tribunal (GWDT) report, dated 06th October 1975, the State of Maharashtra and Andhra Pradesh have agreed to take up 3 projects namely (1) Lendi Project, (2) Lower Penganga and (3) Pranahita-Chevella at appropriate time with agreed water utilization. Accordingly, Dr.B.R.Ambedkar Pranahita-Chevella Sujala Sravanthi project was taken up.
- Maharashtra Government expressed concerns over fixing of the proposed FRL of +152.00 for construction of barrage near Tummidi Hetti due to submergence of large extent of land in their territory and requested to reduce the FRL and avoid submergence in their territory.
- An agreement for constitution of Inter State Board for PCSS was entered into by the then Hon'ble C.Ms of Maharashtra & AP on 05/05/2012.
- The Government of Maharashtra have repeatedly requested to lower the FRL from +152.00 m to +148.00 m and minimize the extent of submergence.
- Detailed Joint surveys by both the States and the actual submergence extent of Maharashtra territory was assessed as 3786 acres with barrage at FRL +152.00 m and 285 acres with FRL of +148.00 m.

- A meeting was held on 17th February 2015 between Hon'ble Chief Minister of Telangana and Hon'ble Chief Minister of Maharashtra along with Hon'ble Ministers and officers of Telangana and Maharashtra. In the meeting, the Hon'ble Chief Minister of Maharashtra expressed that considering the unrest, it is necessary to lower down the barrage level and minimize the submergence area.
- A co-ordinating committee meeting was held on 29-12-2015 to finalize the FRL of the barrage at +148.00m with a capacity of about 1.85 TMC which was agreed by Government of Maharashtra.
- The Government of Telangana exercised all-out efforts and after conducting as many as 12 meetings (Technical, Co-ordination committee, Hon'ble Minister's level & Hon'ble Chief Minster's level). An Interstate Board was constituted to resolve the issues between both the states on 08th March, 2016 and finally the Government of Maharashtra has agreed for construction of barrage at Tummidihetti across river Pranahita with FRL +148.00 m during Interstate Board meeting held in Mumbai on 23-08-2016.

Water availability

- The detailed water availability studies were carried out and assessed by the Central Water Commission, New Delhi. Accordingly, the net water availability at the barrage location (Tummidihetti) was assessed as about 165.38 TMC at 75% dependability which includes perceived surpluses of 63 TMC from the share of u/s states.
- Further, the CWC stated that availability of surpluses of 63 TMC from upstream states as estimated at the barrage site may not be reliably available in future.
- As per the Hydrology studies with FRL +152.00 m, the divertible water would be about 110 to 120 TMC against 160 TMC required & proposed.
- As per the studies done with FRL of +148.00 m, involving minimum submergence in Maharashtra, the divertible flows is 44 TMC only as against the allocation & utilization of 160 TMC.
- Thus, the water available is not sufficient to meet the planned utilization of this project.

Storage capacities

- Further, the Central Water Commission, suggested to re-look into the integrated Storage Planning aspects of the project to match the demand and supply as the proposed capacities of storage reservoirs is insufficient for success of the project and stated that there is requirement of artificial reservoirs within and around the project area either by increasing the capacity of existing reservoirs or creating additional new reservoirs.

Revised Scope of Project

The basic concern of Maharashtra on submergence and the insufficient availability of water at Tummidihetti location has rendered the basic assumption of location of barrage Head works at Tummidihetti as technically unsuitable for meeting the requirements of the entire contemplated ayacut, necessitating a total re-look and study of suitable alternative location for drawing the required quantum of water with assured dependability.

Hence, in order to make the project functional and achieve the contemplated benefits to effectively utilize the Telangana state's share of Godavari Basin, an alternate location of barrage across river Godavari had to be investigated by M/s WAPCOS Ltd., by using the latest technology

i.e., LiDAR technique and the location was proposed at Medigadda(V) (near Kaleshwaram), Mahadevpur (M), Karimnagar District.

The location of the barrage is most suitable at Medigadda(V) near Kaleshwaram, Jayashankar hupalapally District where the net availability of water has been assessed as 284.3 TMC (as against the proposed diversion of 195 TMC) considering ongoing and proposed utilization through the projects in Penganga, Wardha, Pranahita, Middle Godavari and Manair sub basins.

In view of the above, the original project has been divided into two components viz., Kaleshwaram and Dr.B.R.Ambedkar Pranahita Project (Adilabad) as follows:

Dr.B.R.Ambedkar Pranahita project

- To divert 20 TMC of water by constructing a barrage across river Pranahita near the confluence of Wainganga and Wardha rivers at Tummidihetti (V), Koutala (M), Adilabad District for irrigating an ayacut of 2,00,000 acres in East Adilabad district against the original proposed 56,500 acres in the district.

Kaleshwaram Project

- Construction of one barrage across river Godavari at Medigadda near Kaleshwaram, and two more barrages between Medigadda and Sripada Yellampally Project at Annaram & Sundilla and to convey water from Sripada Yellampally Project to the command area spread over in 7 districts of Telangana (now 13 districts after re-organization of districts in the state) through components such as canals, tunnels, lift systems, reservoirs, and distributory network for irrigating an ayacut of 18,25,700 acres against the original proposed ayacut of 16,40,000 acres. Further, it is proposed to stabilize the existing ayacut in other major projects viz., SRSP Stage-I, SRSP Stage-II, Flood Flow Canal, Singur & Nizamsagar projects to an extent of 18,82,970 acres. Besides irrigation, drinking water (30 TMC for twin cities & 10 TMC for enroute villages) & water for industrial use (16 TMC) is also proposed.
- Further, after careful planning, the proposed capacity of reservoirs is increased from 11.43 TMC to 147.71 TMC by enhancing the capacities of existing reservoirs and proposing new reservoirs to match the demand and supply.
- *It is re-iterated that the Kaleshwaram and Pranahita projects are the off-shoots of Dr.B.R.Ambedkar Pranahita-Chevella Sujala Sravanthi project, necessitated because of comments of CWC and inter-state issues with Maharashtra.*

Source & Location:

River Godavari, at Medigadda (V) near Kaleshwaram, Mahadevpur (M), Karimnagar (Dist.)

Components of Lift Scheme:

Sl. No.	Description
i)	Series of Barrages across the Godavari River
ii)	Water conveyer system consisting of Gravity canals & Tunnels
iii)	Lift System
iv)	Reservoirs
v)	Distributory Net work System

Salient features:

Sl No	Description	Particulars
1	Gravity Canal	1531 km
2	Tunnel	203 km
3	Pressure Mains/ Delivery Mains	98 km
4	Total Length of the Water Conductor System	1832 km
5	No. of Lifts	20
6	No. of reservoirs	20
7	Total Capacity of reservoirs	147.71 TMC
8	Total Water being lifted from Godavari river	195 TMC
9	Water lifted from SYP	20 TMC
10	Ground Water	25 TMC
11	Total Water Availability	240 TMC
12	Water for Irrigation (New + Stabilization Ayacut)	169 TMC
13	Drinking Water supply (Twin cities & enroute villages)	40 TMC
14	Water supply to Industries	16 TMC
15	Designed Power Rating	4627 MW
16	Districts Benefitted (New ayacut)	13 Districts
17	Total districts covered in New / Stabilization ayacut	20 Districts

List of reservoirs proposed under Kaleshwaram Project

Sl. No.	Name of the Reservoir	Capacity in TMC
1	Barrage at Medigadda with FRL 100.0 m	16.17
2	Barrage at Annaram with FRL 120.0 m	11.9
3	Barrage at Sundilla with FRL 130.0 m	5.11
4	Medaram Reservoir	0.78
5	Ananthagiri Reservoir	3.50
6	Sri Ranganayaka Sagar (Imamabad Reservoir)	3.00
7	Sri Komaravelly Mallana Sagar (Tadkapally)	50.00
8	Malkapet Reservoir	3.00
9	Konda Pochamma Reservoir (Pamulaparthy)	7.00
10	Amarlabanda Reservoir	5.00
11	Katchapur	2.50
12	Thimmakka Palli	3.00
13	Issaipet	2.50
14	Bhumpally Reservoir	0.09
15	Gujjal Reservoir	1.50
16	Katewadi Reservoir	5.00
17	Mothe Reservoir	2.90
18	Kondem Cheruvu	3.50
19	Gandhamalla Reservoir	9.87
20	Baswapuram Reservoir	11.39
	TOTAL	**147.71**

Actual Cost of the project

- The actual cost of the project worked out to Rs.80190.46 Crores which is approved by the CWC and TAC.

Sl. No.	Name of Item	Amount *(Rs. in Crores)*
1	Works	63352.00
2	Sub-Stations	2885.84
3	Land	6953.65
4	Resettlement & Rehabilitation	1464.34
5	Forest Land	741.52
6	Operation & Maintenance	661.08
7	Establishment charges @ 2%	1365.43
8	Tools & Plants and Recoveries	769.27
9	Miscellaneous	868.51
	Total Direct Charges (1+2+3+4+5+6+7+8+9)	**79061.64**
10	Indirect charges (Capital value of land abatement)	359.55
11	(Audit & Account charges)	769.27
	Total Indirect Charges (10+11)	**1128.82**
	GRAND TOTAL	**80190.46**

Irrigation Potential (in Acres):-

The project is divided into seven links. Each link conveys the water from a source to a storage system and/or distributory network system to irrigate the ayacut. These links are summarized in the table below:

Link No.	Particulars	Command Area	
		Hectares	Acres
Link-I	From Medigadda Barrage on Godavari River to Sripada Yellampally Project	12141	**30000**
Link-II	From Sripada Yellampally Project to Mid Manair Reservoir (Package 6, 7 & 8)	-	**-**
Link-III	From Mid Manair Reservoir to Upper Manair Reservoir (Package 9)	34864	**86150**
Link-IV	From Mid Manair Reservoir to Konda Pochamma Reservoir (Package 10, 11, 12, 13 & 14)	238478	**589280**
Link-V	From Anicut to Chityala (Package 15 & 16)	101902	**251800**
Link-VI	From Sri Komaravelly Mallana Sagar to Singur Reservoir (Package 17, 18, 19)	133161	**329042**
Link-VII	From SRSP Foreshore to Nizam Sagar Canals and upto Kondem cheruvu (Package 20, 21 & 22) and to Dilwapur (Package 27) and Hangarga (Package 28) village for Nirmal and Mudhole Constituency	218304	**539428**
	TOTAL	**7,38,851**	**18,25,700**

Districts Wise New / Stabilization Ayacut:

Ayacut in Acres

Sl. No	Name of the District	New	Stabilization Under				
			Flood Flow Canal	SRSP Stage-I	SRSP Stage-II	Nizamsagar	Singur
1	Kamareddy	184108					
2	Sangareddy	269744					40000
3	Medak	247418					
4	Medchal	29473					
5	Yadadri	249105					
6	Nalgonda	29169					
7	Rajanna Sircilla	153539					
8	Siddipet	329616					
9	Jangaon						
10	Jagityal	19979	200000				
11	Karimnagar	800					
12	Peddapalli	30000					
13	Warangal Urban						
14	Nirmal	100000					
15	Nizamabad	182749		968640		234330	
16	Prof.Jayashankar (Bhupalpalli)						
17	Warangal Rural						
18	Mahabubabad				440000		
19	Khammam						
20	Suryapet						
TOTAL		1825700	200000	968640	440000	234330	40000

TOTAL AYACUT (NEW+ STABILIZATION) = 3708670 Acres

The project is divided into 25 packages

Sl. No.	Description of work	No of Packages.
1	Diverting water to Sripada Yellampally Project by constructing barrages at Medigadda, Annaram & Sundilla across river Godavari	6
2	Sripada Yellampally Barrage to Mid Manair Reservoir	3
3	Mid Manair Reservoir to Upper Manair Reservoir	1
4	Mid Manair Reservoir to Sri Komaravelli Mallanna Sagar	3
5	Sri Komaravelli Mallanna Sagar to feed Package-14 & 15 by Gravity canal, to feed Package-17 through Parallel Canal and serve ayacut of 40000 acres	1
6	Package-13 OT-point to Sri Konda Pochamma Reservoir	1
7	End of Package-13 Gravity canal towards Chityala	2
8	End of Parallel canal of Package-13 to Singur Reservoir	3
9	Foreshore of Sri Ram Sagar Project to Kondem Cheruvu	2
10	From Kondem Cheruvu to irrigate an ayacut of Kamareddy & Yellareddy Constituencies	1
11	Foreshore of Sri Ram Sagar Project to Dilwarpur and Hangarga	2

RESERVOIRS SUBMERGENCE DETAILS:

ANANTHAGIRI Reservoir

Sl. No.	Description	Particulars
1	Capacity (TMC)	3.50
2	Forest Submergence (Acres)	324.27
3	Land Acquisition(Acres)	2,469
4	F.R.L.	+397.00
5	T.B.L.	+400.70
6	Length of Bund (KM)	6.40
7	Max. Height of Bund (M)	38.00
8	Name of the Villages Submerged	1. Ananthagiri(V), Ellanthakunta (M) = 854 2. Allipur Hamlets: a) Yellaipally Chinnakodur(M) = 26 b) Kochaguttapally Chinnakodur(M) = 109
9	No. of Houses	989

IMAMABAD/Sri Ranganayaka sagar Reservoir:

Sl. No.	Description	Particulars
1	Capacity (TMC)	3.00
2	Forest Submergence (Acres)	----
3	Land Acquisition(Acres)	2,176
4	F.R.L.	+490.00
5	T.B.L.	+493.60
6	Length of Bund (KM)	8.65
7	Max. Height of Bund (M)	32.63
8	Name of the Villages Submerged	
9	No. of Houses	----

Komaravelly Mallanna sagar Reservoir:

Sl. No.	Description	Particulars
1	Capacity (TMC)	50.00
2	Forest Submergence (Acres)	3280.14
3	Land Acquisition(Acres)	13,962
4	F.R.L.	+557.00
5	T.B.L.	+562.20
6	Length of Bund (KM)	22.90/1.60
7	Max. Height of Bund (M)	61.50
8	Name of the Villages Submerged	1.Bramhana Banjerupally (V) Thogutta (M) = 182 2.Rampoor (V) Thogutta (M) = 232 3. Yetigadda Kisthapur (V) Thogutta (M) = 547 4. Vemulaghat Thogutta (M) = 638 5. Pallephad (V) Thogutta (M) = 582 6. Singaram (V) Thogutta (M) = 120 7. Yerravally (V) Kondapaka (M) = 348 8. Laxmapur (V) Thogutta (M) = 170
9	No. of Houses	2819

Konda Pochamma Reservoir:

Sl. No.	Description	Particulars
1	Capacity (TMC)	15.00
2	Forest Submergence (Acres)	135.04
3	Land Acquisition(Acres)	4,636
4	F.R.L.	+618.00
5	T.B.L.	+622.60
6	Length of Bund (KM)	15.80
7	Max. Height of Bund (M)	46.70
8	Name of the Villages Submerged	1. Mamidala (V) Mulugu(M) = 548 2. Thanedarpally (V) Mulugu(M) = 159 3. Bailampur(V) Mulugu(M) = 352
9	No. of Houses	1059

Gandamalla Reservoir :

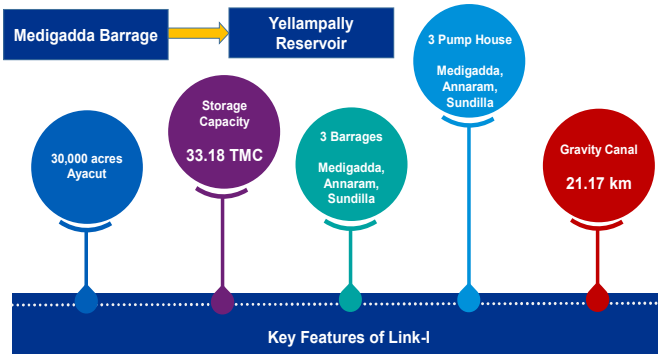
Sl. No.	Description	Particulars
1	Capacity (TMC)	9.87
2	Forest Submergence (Acres)	149.993
3	Land Acquisition(Acres)	4,027
4	F.R.L.	+510.00
5	T.B.L.	+514.20
6	Length of Bund (KM)	3.50
7	Max. Height of Bund (M)	51.022
8	Name of the Villages Submerged	1. Gandamalla, M.Turkapalle(M) = 814 2. Indiranagar H/o Gandamalla, M.Turkapalle(M) = 150 3. Thettukunta H/o Veerareddy Pally M.Turkapalle(M) = 95
9	No. of Houses	1059

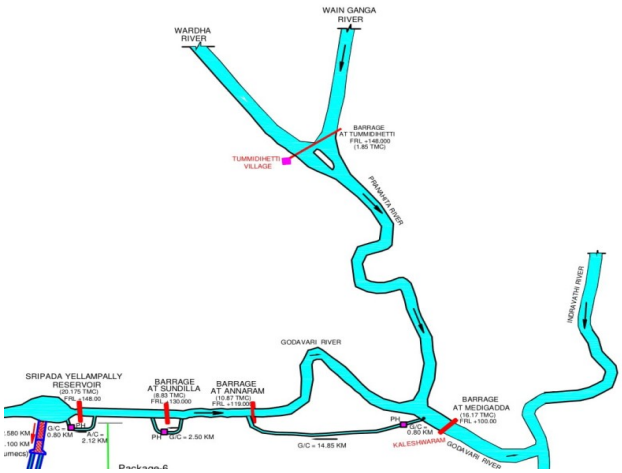
Basawapoor Reservoir :

Sl. No.	Description	Particulars
1	Capacity (TMC)	11.39
2	Forest Submergence (Acres)	---
3	Land Acquisition(Acres)	3,780
4	F.R.L.	+490.00
5	T.B.L.	+495.00
6	Length of Bund (KM)	14.55
7	Max. Height of Bund (M)	60.00
8	Name of the Villages Submerged	1. Thimmapur (v), Bhongir (M) = 643 2. Laxminayakudi thanda H/o Rallajangaon (V), Yadagirigutta (M) = 75 3. Chongalnayakudi Thanda H/o Rustapur (V), Turkapally (M) = 60
9	No. of Houses	**778**

1. Salient Features of Link-1

Link 1 of the project consists of construction of three barrages at Medigadda, Annaram and Sundilla barrages with a storage of almost 33 TMC and it is planned to lift the water through these barrages to Sripada Yellampalli reservoir via three lift systems at Medigadda, Annaram and Sundilla by means of conveyor system consisting of approach channel, gravity canals and delivery mains (Pipelines). The link is critical for lifting water from Godavari and dropping into Sripada Yellampally Project, which can then be conveyed further to feed various reservoirs and serve the command area under different Packages in other links.

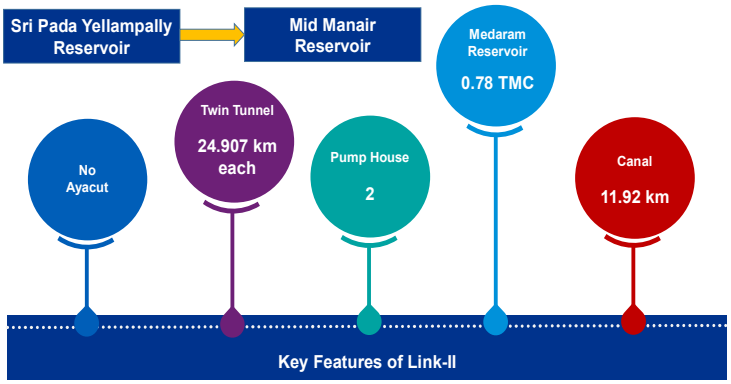


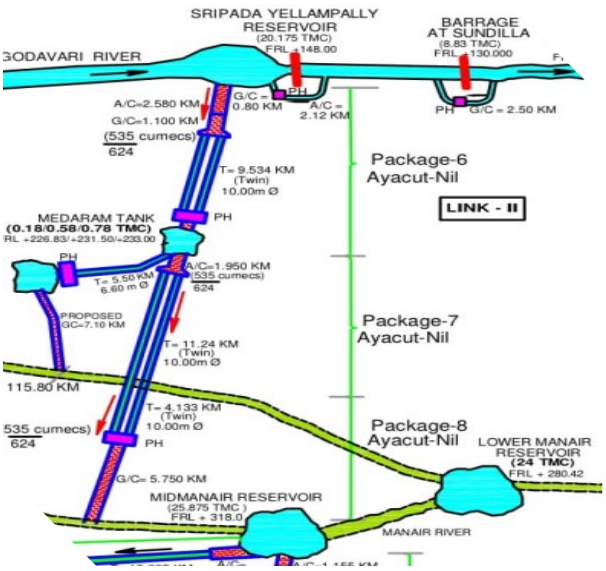


The total length of the link is 46.30 Km. an Approach channel of length 8.1 Km, Gravity Canal of 16.3 Km and delivery mains of total length 21.95 Km is provided.

2. Salient Features of Link-2

Link 2 carries water from Sripada Yellampalli reservoir to Mid-manair Reservoir, and feeding Medaram tank along the way. From Mid-Manair reservoir, water can further be conveyed to the downstream links 3, 4, 5 & 6. This link has no direct ayacut. This link is characterized by tunnels, canals and pump houses consisting of pumps and motors with huge capacity.

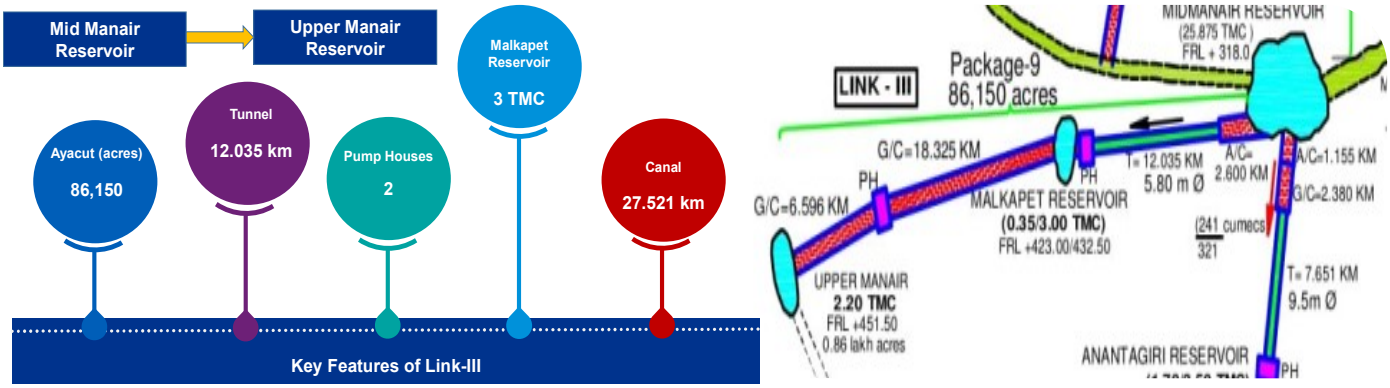




This link comprises of 3 sub links with a gravity canal of 12.20 km length, a twin tunnel each of 10 m diameter and total length of 49.80 km (2 X 24.9 Km) and delivery mains of total length 3.64 Km. The total length of conveyor system of Link – II is about 65.63 Km.

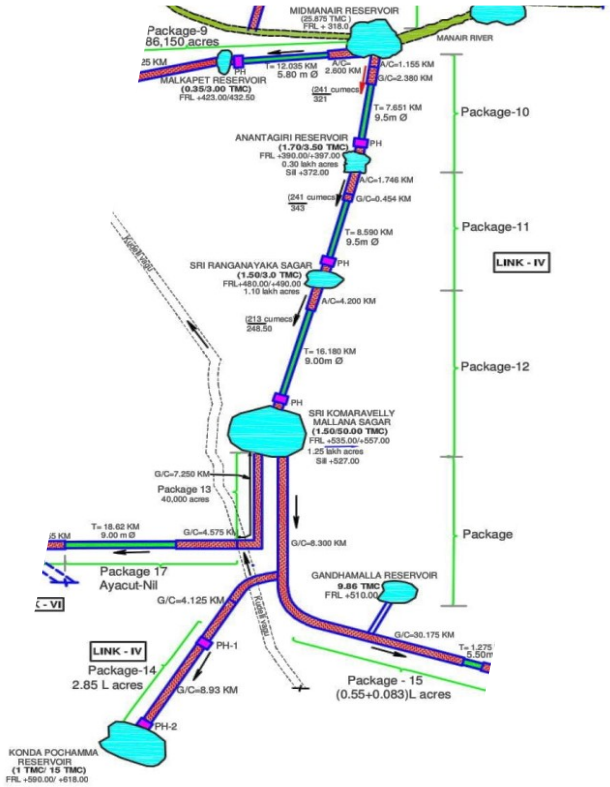
3. Salient Features of Link-3

Link 3 is proposed to convey water from Mid Manair Reservoir to Upper Manair Reservoir, feeding Malkapet Reservoir along the way. Link 3 is proposed to serve an ayacut of 86,150 Ac.

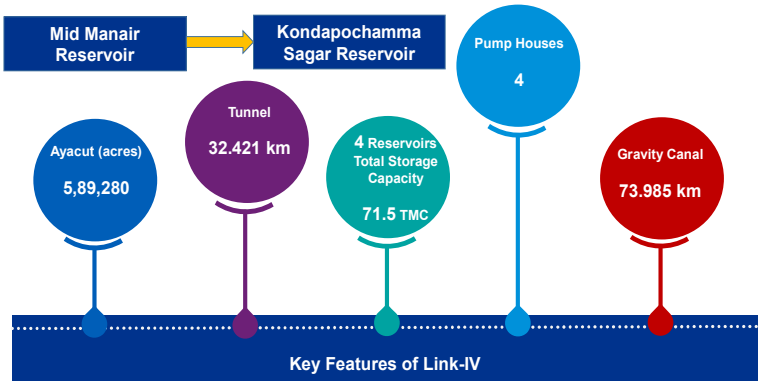


The link involves a gravity canal of 27.50 Km, tunnel of 12 Km length and pressure main of total length 5.92 Km. The total length of the conveyor system of Link III is about 45.48Km.

4. Salient Features of Link-4



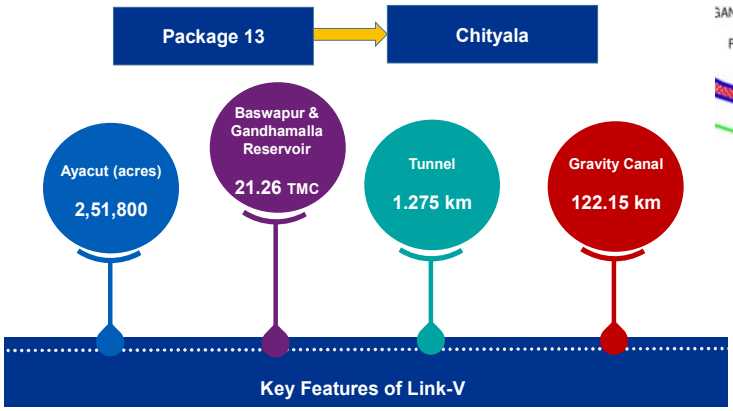
Link-4 is proposed to convey water from Mid manair Reservoir to Kondapochamma Sagar and feeding Ananthagiri, Sri Komaravelli Mallana Sagar, Sri Ranganayaka Sagar Reservoirs on the way. The total storage capacity along these packages is 71.5 TMC and total ayacut served through the Link is 5,89,280 acres.

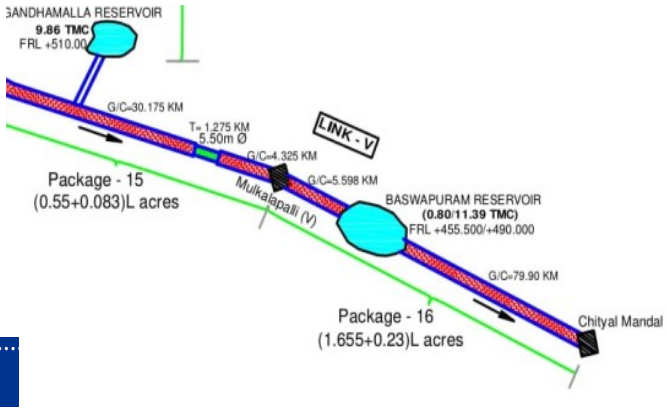


The Link Canal System IV comprises 5 sub links with an open gravity channel of 394.0 Km, tunnel of 41.40 Km length and delivery mains of total length 10.82 Km. The total length of the conveyor system of Link IV is about 446.22 Km.

5. Salient Features of Link-5

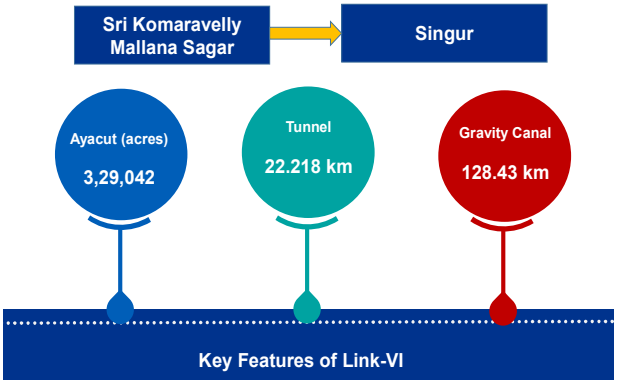
Link-5 is proposed to carry water from Sri Komaravelli Mallana Sagar to Mulkalapalli Village of Chityal Mandal and feeding Gandhamalla and Baswapur reservoirs having a total storage capacity of 21.26 TMC. The total ayacut under Link-5 is 2,51,800 Ac



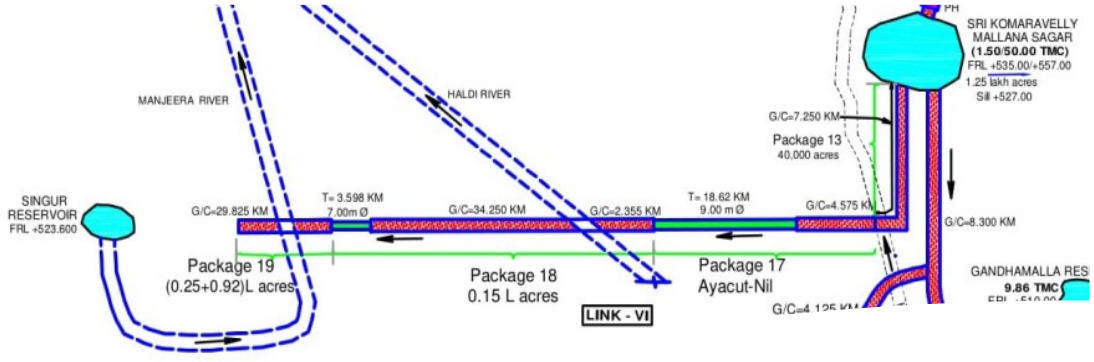


The total length of the gravity link is 207 km and a tunnel of 1.45 km length. The total length of the conveyor system of Link V is about 208.65 Km.

6. Salient Features of Link-6

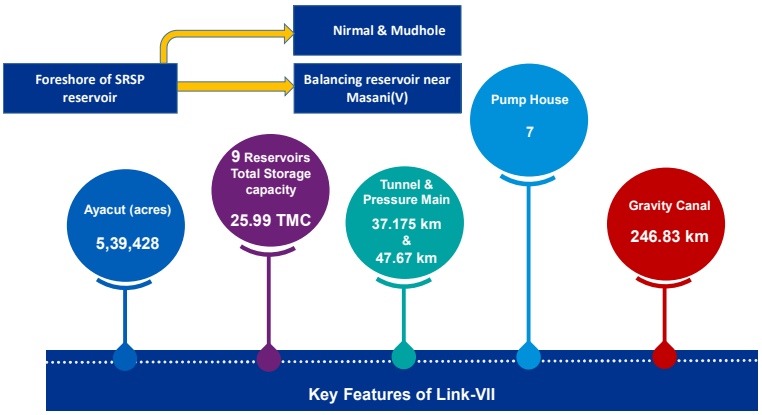


Link-6 is crucial as it creates an ayacut of 3,29,042 Acres and carries water from Package 13 to Singur Reservoir. The total length of the gravity canal is 581 km, 0.93 Km length of delivery mains and a tunnel length of 43 km. The total length of the conveyor system of Link VI is about 625 Km.

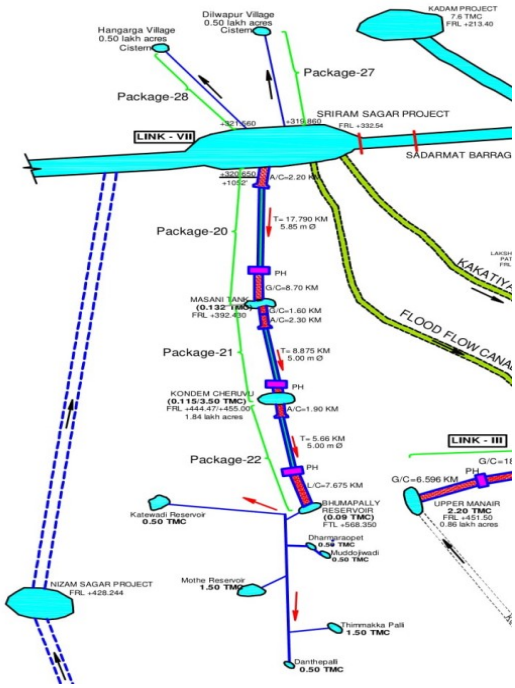


7. Salient Features of Link-7

Link-7 is crucial as it creates an ayacut of 5,39,428 Ac and a storage capacity of 8.72 TMC. It carries water from the fore shore of SRSP reservoir in three directions. One off-take is from Godavari River at Package 20, which conveys water to series of reservoir, canal and tunnel system in Package 20, 21 & 22 and irrigates ayacut under Nizamabad and Kamareddy districts. The second off-take for this link is from SRSP foreshore and it conveys water to irrigate ayacut in Nirmal district under Package 27. The third off-take for this link is from SRSP foreshore and creates ayacut in Nirmal district under Package-28.



The total length of the link includes a tunnel of 56 Km, gravity canal of 285 Km and pressure main of 55 Km length. The total length of the conveyor system of Link VII is about 395Km.



Project Benefits

Kaleshwaram Lift Irrigation Scheme of Telangana is one of the world's biggest irrigation project that is set to end water woes of the state where many regions are parched. This project aims at an ambitious target of diverting 195 TMC of water to the backward areas in the state of Telangana. The project envisages the following:

1. Diversion of 195 TMC of Godavari water to Sripada Rao Yellampally project and subsequently to Mid Manair Reservoir by lifting it to the lands on higher contour which is found to be economically viable, to bring large extents of lands in the basin under irrigation.

2. To Create an additional ayacut of about 18.25 lakhs acres in Adilabad, Karimnagar, Medak, Nalgonda, Nizamabad and Ranga Reddy districts including 40 TMC of drinking water to several towns and cities of the state, especially the most important twin cities of Hyderabad and Secunderabad and en route villages and 16 TMC of water for Industrial use and 18.82 Lakh acres of stabilization ayacut.

3. To stabilize shortfalls in planned utilization, under SRSP Stage-I & Stage-II, Flood Flow Canal, Singur project and Nizam Sagar project.

4. To restore the ground water level to its original state by the way of shifting from usage of groundwater for irrigation to usage of surface water and conjunctive use of groundwater for the same.

8. Statutory Clearances

The prestigious Kaleshwaram project taken up by the Telangana State Government has secured all the necessary clearances from Central Water Commission (CWC).

The major agreement with the Maharashtra government paved the way for early clearances for the project. The project has received ten clearances in a year including for hydrology and environment.

Here is the list of all the necessary approvals accorded with the dates.

KALESHWARAM PROJECT		
SL. NO.	**NAME OF DIRECTORATE/ MINISTRY/ BOARD**	**STATUS OF CLEARANCE**
1	Hydrology (S)	**Clearance received** from CWC vide Lr.F.No.6/231/2017-PA (S)/1327-28, **dt:30-10-2017.**
2	Inter State Matters (ISM)	**Clearance received** from CWC vide Lr.No. U.No. 4/2/TEL./ISM-I/2017/927-928, Dt: 03-11-2017 & Lr.No. U.No. 4/2/TEL./ISM-I/2017/974,
3	Construction Machinery Consultancy (CMC)	**Clearance received** from CWC vide U.O.No.21/Telangana/02/2017-CMC/432,**dt:24-11-2017.**
4	Irrigation Planning (S)	**Clearance received** CWC ID No.2/148/IP (S)/2013/272 **Dt: 13-04-2018** and B.C. Ratio finalized vide CWC ID No.2/1481/IP (S)/2013/320 **Dt: 11-05-2018.**
5	Ministry of Agriculture & Farmers Welfare (MoA &FW)	
6	Cost Appraisal (I)	**Finalized Cost received** from CWC vide ID No.10-A/27/2017/CA(I)-2/77, **dt:01-05-2018.**
7	Central Soil & Materials Research Station (CSMRS)	**Clearance received** from CSMRS vide U.O. No.29/36/Kaleshwaram/RM-I/CSMRS/2017/308, **dt:21-05-2018.**
8	Ministry of Environment, Forest and Climate Change (MoEF & CC)	**1) Environmental Clearance:** **Environmental clearance received** from MoEF vide Lr. No.J-12011/1/2017-IA-I(R) **Dt: 22-12-2017**
		2) Forest Clearance: **Stage-I clearance** received from MoEF vide F.No 8-31/2017-FC **Dt: 24-10-2017** **Stage-II clearance** received from MoEF vide F.No 8-31/2017-FC **Dt: 24-11-2017**
9	Central Ground Water Board (CGWB)	**Clearance received** vide Lr No: 4-1/CWC-PA/SML-CGWB/2017-1945, **Dt: 21-11-2017**
10	Technical Advisory Committee (TAC)	**Acceptance** of Kaleshwaram Project in the **136th TAC** Meeting held on **06-06-2018** communicated by CWC through **Minutes** vide Lr.No. 16/27/2018-PA(N)/939-70, **dt:14-06-2018**.

CONSTITUENCYWISE MANDALWISE AYACUT PARTICULARS

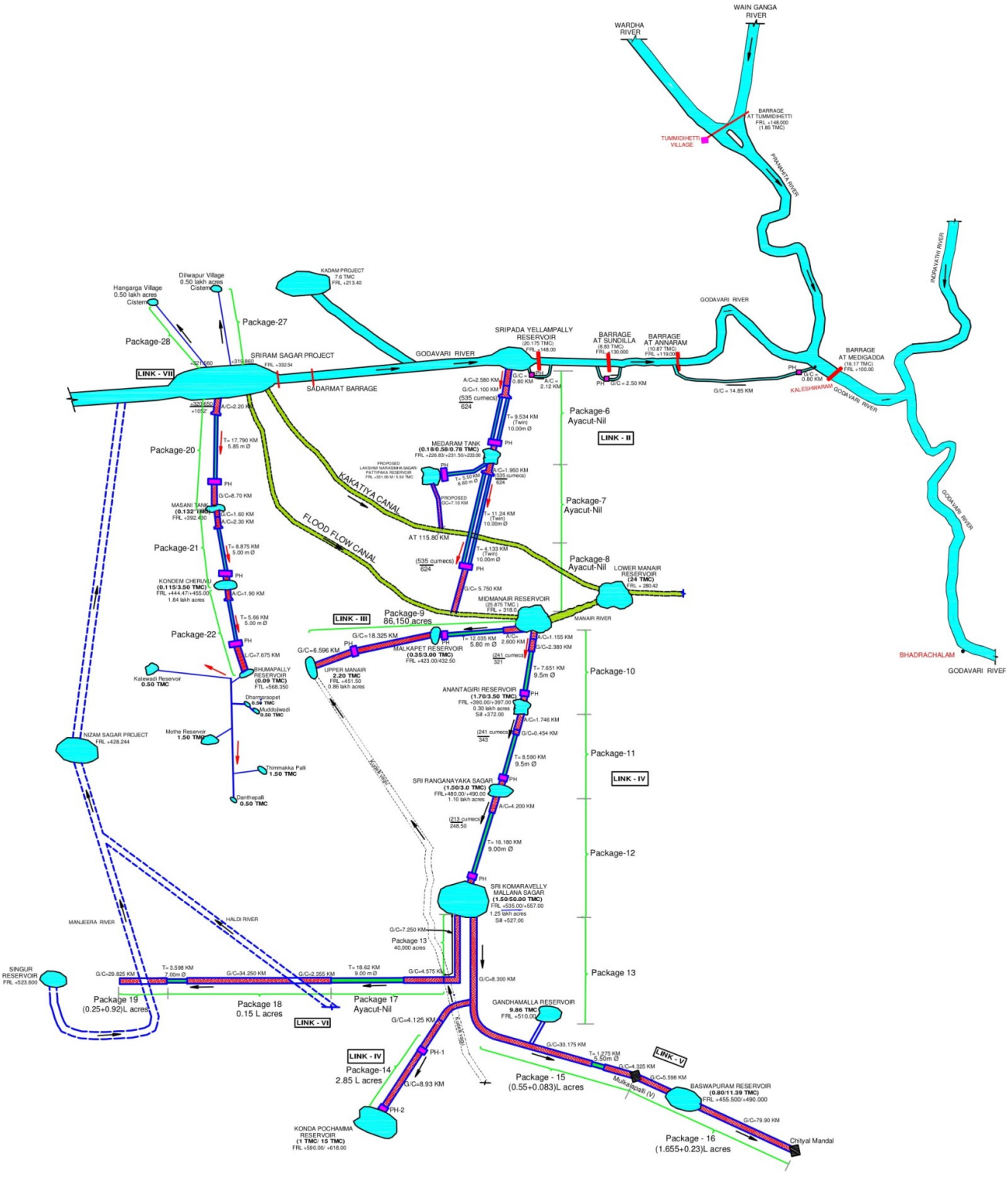
Sl. No.	Name of the Constituency	Name of the District	AYACUT (in acres)	Name of Mandal	AYACUT (in acres)	Pkg No	AYACUT (in acres)
1	Sircilla	Rajanna Sircilla	103305	Gambhiraopet	24609	9	15500
						12	9109
				Mustabad	23981	9	10000
						11	1971
						12	12010
				Sirsilla	8000	9	8100
						11	20540
				Yellareddi peta	26075	9	26075
Sub Total			**103305**		**103305**		**103305**
2	Vemulawada	Rajanna Sircilla	26475	Konaraopeta	17000	9	17000
				Vemulawada	9475	9	9475
Sub Total			**26475**		**26475**		**26475**
3	Manakondur	Karimnagar	800	Ganneruvaram	800	10	800
		Rajanna Sircilla	23759	Illanthakunta	23759	10	14000
						11	9759
		Siddipet	15000	Bejanki	15000	10	15000
Sub Total			**39559**		**39559**		**39559**
4	Husnabad	Siddipet	2263	Koheda	2263	11	2263
Sub Total			**2263**		**2263**		**2263**
5	Siddipet	Siddipet	107028	Chinnakodur	25620	10	200
						11	25420
				Siddipet U	22249	11	4589
						12	17660
				Siddipet R	31811	11	13789
						12	18022
				Nagnoor	27348	11	23621
						12	3727
Sub Total			**107028**		**107028**		**107028**
6	Korutla	Jagityal	19979	Metpalli	12442	21	12442
				Ibrahimpatnam	7537	21	7537
Sub Total			**19979**		**19979**		**19979**
7	Dubbak	Siddipet	114588	Dubbak	39730	12	37164
						13	2566
				Mirdoddi	28036	12	11655
						13	16381
				Thoguta	15864	12	13493
						13	2371
				Raipolu	506	13	506
				Doulathabad	30452	13	1438
						14	29014
		Medak	18164	Chegunta	18164	13	333
						14	15331
						22	2500
Sub Total			**132752**		**132752**		**132752**

8	Gajwel	Siddipet	82958	Kondapak	2429	11	269
						12	2160
				Gajwel	24217	13	3705
						14	20512
				Jagdevpur	13675	14	12804
						15	871
				Mulugu	13749	14	13749
				Markoor	7658	14	7658
				Wargal	21230	14	21230
		Medak	15572	Tupran	15572	14	15572
	Sub Total		**98530**		**98530**		**98530**
9	Jangaon	Siddipet	7779	Maddur	5318	11	5318
				Cheriyal	2461	11	2461
	Sub Total		**7779**		**7779**		**7779**
10	Medak	Medak	99693	Koheda	10952	13	10952
				Nizampet			
				Ramayampet	18639	13	400
						14	7019
						22	11180
				Shankarampet	29493	14	11493
						22	18000
				Papannapet	23389	19	23389
				Nizampet (New)	9620	22	9620
				Medak	7600	22	7600
	Sub Total		**99693**		**99693**		**99693**
11	Narsapur	Medak	69900	Shivampet	12816	14	12816
				Narsapur	10347	14	10347
				Yeldurthi	16659	14	2701
						18	9958
						22	4000
				Kowdipally	20862	14	7244
						18	1394
						19	12224
				Kulcharam	9216	18	3648
						19	5568
		Sangareddy	27837	Hathnura	27837	14	20629
						19	7208
	Sub Total		**97737**		**97737**		**97737**
12	Andole	Medak	30317	Alladurg	8827	19	8827
				Tekmal	18920	19	18920
				Regod	2570	19	2570
		Sangareddy	64357	Munipally	33902	26	33902
				Raikode	24110	26	24110
	Sub Total		**94674**		**94674**		**94674**

13	Alair	Yadadri	150279	M.Turkapalli	20530	14	13587
						15	3790
						16	3153
				Bommala Ramaram	13758	14	13758
				Rajapet	35131	15	35131
				Alair	18910	15	12420
						16	6490
				Bibinagar	8000	16	8000
				Yadagirigutta	34610	15	11088
						16	23522
				Atmakur	19340	16	19340
	Sub Total		**150279**		**150279**		**150279**
14	Bhongir	Yadadri	15139	Bhongir	20012	16	20012
				Valigonda	39466	16	39466
				Pochampally	7000	16	7000
	Sub Total		**66478**		**66478**		**66478**
15	Munugode	Yadadri	6537	Choutuppal	6537	16	6537
	Sub Total		**6537**		**6537**		**6537**
16	Nakrekal	Yadadri	25811	Ramannapet	25811	16	25811
		Nalgonda	29169	Chityal	27221	16	27221
				Narketpally	1948	16	1948
	Sub Total		**54980**		**54980**		**54980**
17	Narayankhed	Medak	13772	Shankarampet(A)	13772	19	13772
		Sangareddy	18177	Narayankhed	12959	19	12959
				Kalher	5218	19	5218
	Sub Total		**31949**		**31949**		**31949**
18	Sangareddy	Sangareddy	64044	Kondapur	19349	26	19349
				Sangareddy	10404	14	10404
				Sadashivapet	34291	26	34291
	Sub Total		**64044**		**64044**		**64044**
19	Patancheru	Sangareddy	9939	Patancheru	6830	14	6830
				Jikkinaram	3109	14	3109
	Sub Total		**9939**		**9939**		**9939**
20	Zaheerabad	Sangareddy	36644	Jharasangam	18303	26	18303
				Kohir	1644	26	1644
				Nyalkal	16697	26	16697
	Sub Total		**36644**		**36644**		**36644**
21	Armur	Nizamabad	1876	Armur	635	21	635
				Makloor	1241	21	1241
	Sub Total		**1876**		**1876**		**1876**
22	Balkonda	Nizamabad	71262	Bheemgal	27145	21	27145
				Kammar Palle	17712	21	17712
				Mortad	19586	21	19586
				Yeragatla	316	21	316
				Velpur	6503	21	6503
	Sub Total		**71262**		**71262**		**71262**

23	Nizamabad (R)	Nizamabad	106311	Nizamabad	169	21	169
				Mugpal	15669	21	15669
				Indalwai	12368	21	12368
				Dhar palle	27283	21	27283
				Dich palle	18554	21	18554
				Jakranpalle	10547	21	10547
				Sirkonda	21721	21	21721
	Sub Total		**106311**		**106311**		**106311**
24	Kamareddy	Kamareddy	82508	Machareddy	11883	22	11883
				Kamareddy	16500	22	16500
				Domakonda	13926	22	13926
				Bhiknur	17129	22	16983
						13	146
				Bibipet (new)	6217	22	6217
				Ramareddy(new)	6817	22	6817
	Sub Total		**82508**		**82508**		**82508**
25	Yellareddy	Kamareddy	95200	Ramareddy(new)	5874	22	5874
				Rajampet(new)	4024	22	4024
				Gandhari	21000	22	21000
				Sadashivanagar	19326	22	19326
				Tadwai	20576	22	20576
				Nagireddypet	3100	22	3100
				Lingampet	18100	22	18100
				Yellareddy	3200	22	3200
	Sub Total		**95200**		**95200**		**95200**
26	Banswada	Nizamabad	3300	Varni	3300	22	3300
		Kamareddy	6400	Birkur	1700	22	1700
				Banswada	4700	22	4700
	Sub Total		**9700**		**9700**		**9700**
27	Nirmal	Nirmal	41336	Dilwarpur	6873	27	6873
				Laxmanchanda	2622	27	2622
				Mamda	6151	27	6151
				Sarangapur	2924	27	2924
				Nirmal	8814	27	8814
				Narsapur	6734	27	6734
				Kuntala	7218	27	7218
	Sub Total		**41336**		**41336**		**41336**
28	Mudhole	Nirmal	58664	Bhainsa	16664	27	8664
						28	8000
				Mudhole	25000	28	25000
				Tanur	16000	28	16000
				Kubeer	1000	28	1000
	Sub Total		**58664**		**58664**		**58664**
29	Medchal	Medchal	29473	Keesara&Ghatkesar	20000	14	20000
				Shameerpet	9473	14	9473
	Sub Total		**29473**		**29473**		**29473**
30	Manthani		30000		30000	Brgs	30000
	Sub Total		**30000**		**30000**		**30000**
31	Additional	Sangareddy	48746		48746	26	48746
	GRAND TOTAL		**1825700**		**1825700**		**1825700**

LINE DIAGRAM OF KALESHWARAM PROJECT



** NOT TO SCALE