1. SUMMARY

M/s J.H.V. Steels Limited, located at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-Dhauha Pargana Saktegarh, Tehsil-Chunar, District-Mirzapur, U.P., is a body corporate incorporated under the provisions of the Companies Act, 1956.

Objective:
The main objects of the company are to establish and carry in India or elsewhere the business to produce, manufacture, process, refine, prepare, import, export, purchase, sell, manipulate, finish, pack, repack, mix, grade, operate and to act as brokers agents, consultants, merchants, stockiest, distributors, suppliers, providers, collaborators, consignors, C & F agents, indenting agents, job workers. Wholesalers, retailers, traders concessionaries or otherwise to deal in all varieties, specifications, description, applications & uses of cements, whether ordinary, white, coloured, pozzolana, alumina blast furnace, silica lime, plaster of paris, fiber etc including grey cement, Portland cement, Portland pozzolana cement, Portland high alumina cement, Portland oil well cement, special cement, repitix cement, water proof cement, masonry cement, lime pozzolana cement, sagole cement and other allied products.

Proposed Industry: Cement Grinding Unit
Location: Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-Dhauha Pargana Saktegarh, Tehsil-Chunar, District-Mirzapur, U.P.
Capacity: 100 Ton per day (36000 T.P.A)
Category: B
Activity: 3(b)
Landuse: Industrial, UPSIDC Bijoli
Raw material: Clinker, Gypsum, and Fly Ash & Slag
No. of workers: 60 (Two Shift)
Power Req: 600 KW
1.1 Brief Description of nature of the project:

M/s J.H.V. Steels Limited located at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhauha Pargana Saktegarh ,Tehsil- Chunar ,District-Mirzapur , U.P., Main raw material is Clinker, Gypsum, Fly Ash & Slag. The different varieties of cement produced in Indian can be described as ordinary Portland, Portland pozzolana, Portland Blast Furnace Slag, special High Strength Cement, Low Heat Cement, Oil Well cement, Colored Cement and White Cement. This is Cement Grinding Unit. The company will set up 100 TPA Cement Grinding Unit. The company has already identified and acquired land and is in the process of implementation of the project.

1.2 Need for the project & its Importance to the Country and / or Region.

Cement is the most essential raw material in any kind of construction activity. Accordingly, cement industry plays a crucial role in the infrastructural development of the country. Given the vast geographical size and massive population of the country, various construction activities undertaken by the Central Government, State Governments, Public Sector Undertaking and other organizations, including private sector generate huge demand for cement. In India mainly three types of cement produced. The Portland Pozzolana Cement (PPC) enjoys the major share (67%) of the total production, followed by Ordinary Portland Cement (OPC) (25%) and Portland Slag Cement (PSC) (8%). During 2008-09, the industry consumed 35 million tonnes of fly-ash and 7.5 million tonnes of slag. According to the Ministry a continuous increase in the production of blended cement is expected to reduce the problem of waste disposal, improve energy efficiency and reduce carbon footprint. With regard to current status of cement concrete roads in National Highways Authority of India (NHAI) projects, the representatives of Ministry of Road Transport and Highways informed the Committee that the Ministry had issued a circular in 1998 in which it had directed that the Government should construct cement concrete road especially in high rain fall area, urban areas etc., where these roads are more durable and their maintenance cost is also less.
Cement consumption will also increase substantially with greater usage in new areas such as cement concrete roads, extensive cement concrete canal linings and pre-fabricated houses.

1.3 Demand Supply Gap

Cement is the most essential raw material in any kind of construction activity. Accordingly, cement industry plays a crucial role in the infrastructural development of the country. Given the vast geographical size and massive population of the country, various construction activities undertaken by the Central Government, State Governments, Public Sector Undertaking and other organizations, including private sector generate huge demand for cement. In addition, provision for housing is the first and foremost requirement of every household and, therefore, market demand of cement for private consumption is increasing constantly.

The Government took up the development of highways/roads by constructing/improving the highways/roads network through the programmes of Golden Quadrilateral and North-South, East-West corridors as also rural connectivity roads through Pradhan Mantri Gramin Sadak Yojana (PMGSY). Consequently in the profitability of the industry. Moreover, because of easy availability of low cost housing loans and tax incentives connected with such loans as evidenced in recent years, there is a boom for housing constructions, which consequently increase demand for cement. In view of above there is good scope for the Mini Cement Plants.

1.4 Import vs. Indigenous Production

1.4.1 Raw Material: Clinker and Gypsum as additive, Fly- Ash, Slag etc.

The main raw material for the grinding unit is Clinker and Gypsum as additive, Fly- Ash, Slag etc. India is also producing different varieties of cement like Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Blast Furnace Slag Cement (PBFS), Oil Well Cement, Rapid Hardening Portland Cement, Sulphate Resisting Portland Cement, White Cement etc. Production of these varieties of cement conform to the BIS Specifications. Also, some cement plants have set up dedicated jetties for promoting bulk transportation and export.

1.4.2 Domestic /Export markets

Cement consumption in India is expected to rise by 8–9 per cent over the next year, taking the estimated cement consumption in 2017–18 to about 480–485 MT, from around 60 MT in the 2012–13 fiscal, as per the Cement Manufacturers Association (CMA).
The cement industry may continue to witness a steady market for the better half of the year with fresh capacity of 20MT going on stream in 2014, taking the industry capacity to 370 MT.

The Indian cement sector is expected to witness positive growth in coming years, with demand set to increase at compound annual growth rate (CAGR) of more than 8 per cent during 2013–14 to 2015–16, according to RNCOS report titled, ‘Indian Cement Industry Outlook 2016’. The cement and gypsum products sector in India has attracted foreign direct investments (FDI) worth US$ 2,879.95 million between April 2000 to November 2013, according to data published by the Department of Industrial Policy and Promotion (DIPP). Apart from meeting the entire domestic demand, the industry is also exporting cement and clinker. The export of cement during 2001-02 and 2003-04 was 5.14 million tones and 6.92 million tons respectively. Export during April-May, 2003 was 1.35 million tones. Major exporters were Gujarat Ambuja Cements Ltd and L & T Ltd.

1.4.3 Employment generation (Direct & Indirect) due to the project.

The unit requires the following skilled, unskilled and administrative staff, which is available locally. The company will be recruiting these personnel before the trial production:

<table>
<thead>
<tr>
<th>S No.</th>
<th>Designation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manager (Works)</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Supervisor</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Assistant Miller</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Skilled Workers</td>
<td>18</td>
</tr>
<tr>
<td>5.</td>
<td>Unskilled Workers</td>
<td>20</td>
</tr>
<tr>
<td>6.</td>
<td>Electrician/Mechanical</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Security Guard</td>
<td>6</td>
</tr>
<tr>
<td>8.</td>
<td>Accountant</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>Assistant Clerk</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL :</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
2. PROJECT DESCRIPTION

2.1 Type of Project Including Interlinked & Interdependent Projects.

The company will set up Cement Grinding Unit with an installed capacity of 100 TPA.

2.2 Location (Map Showing General Location, Specific Location, & Project Boundary & Project site Layout) with coordinates.

Location: Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhuaha Pargana Saktegarh ,Tehsil- Chunar ,District-Mirzapur , U.P., Area, Bijoli, Jhansi, UP.

2.3 Detail of Alternate sites considered & the basis of selection the proposed site, particularly the Environmental Considerations gone into should be highlighted.

There is no other alternative site.

2.4 Size or magnitude of operation.

Cement Grinding Unit capacity of 100 TPD . Total Area 12140.6 sqm

2.5 Manufacturing process:

Technology for cement manufacturing is easily available and there are several cement plant suppliers who provide services on turnkey basis. Grinding unit mainly consist of few process which are detailed here.

All the raw material such as clinker, gypsum, fly-ash, slag etc. are used in a prefixed formula and fed through a volumetric feeder in fixed proportion to a bucket elevator which in turn feeds a hopper fitted with a volumetric table feeder, feeding the ball mill, the ball mill grind the mix to a homogeneous mixture and this mixture is known as cement. This homogeneous mixture is then stored in the silos and packed when needed. In between the ball mill and storing silos there is a dust collector, which plays a crucial role in the prevention of pollution by sucking all the dust produced by the grinding process.

2.6 Showing the project layout, component of the project etc should be given.

Project site layout plan is enclosed as Annexure-II (a) and manufacturing process is shown in Fig. 2.
2.7 Raw Material required along with estimated quantity, likely sources, marketing area of final products, Mode of transport of raw material & finished products.

**Raw Material:** Clinker and Gypsum as additive, Fly- Ash, Slag etc.

The different varieties of cement produced in India can be described as ordinary Portland, Portland Pozzolana, Portland Blast Furnace Slag, special High Strength Cement, Low Heat Cement, Oil Well cement, Colored Cement and White Cement. Raw material as well as finished product shall be transported mainly by Rail and Road. As the site is well located, so there is no problem regarding transportation of the same.

2.8 Resources optimization / Recycling & reuse envisaged in the project, if any, should be briefly produced.

All the raw material such as clinker, gypsum, fly-ash, slag etc. are used in a prefixed formula and fed through a volumetric feeder in fixed proportion to a bucket elevator which in turn feeds a hopper fitted with a volumetric table feeder, feeding the ball mill, the ball mill grind the mix to a homogeneous mixture and this mixture is known as cement. This homogeneous mixture is then stored in the silo and packed when needed. In between the ball mill and storing silo there is a
dust collector, which plays a crucial role in the prevention of pollution by sucking all the dust produced by the grinding process.

2.9 Availability of water its source, energy / power requirement & source should be given.

The company has acquired a plot of land measuring Total Area 12140.6 sqm. The power required will be 600 KW for 100 TPD Cement Plant. Water would be required for human consumption and for general purposes.

2.9.1 Quantities of wastes to be generated (liquid & solid) and scheme for their management / disposal.

Liquid Waste: Only domestic sewage for which septic tank with soak pit has been proposed. No waste water shall be generated in this unit which needs to be treated.

Solid Waste: Only domestic solid waste will be generated.

3. SITE ANALYSIS

3.1 Connectivity

Rail:
Railway Station near the project site is Chunar Railway Station (4 km). The nearest airport is Varanasi Airport lie at a distance of 64 km.

Road
Cement unit is located at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhauha Pargana Saktegarh ,Tehsil- Chunar ,District-Mirzapur , U.P., which are connected to NH-7.

3.2 Land Form, Land use & Land ownership

The company will set up 100 TPA Cement Grinding Unit. The company has already acquired land at Bijoli, Jhansi, UP and is in the process, of implementation of the project. The company has finalized a plot of land admeasuring 12140.6 sqm at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-
dhauha Pargana Saktegarh, Tehsil- Chunar, District-Mirzapur, U.P., The site is well connected by Road. Cost of land has not been considered for finance, but it will be available to bank as collateral security. Present market value of the land is Rs 364.00 lacs. Land use certificate is enclosed as Annexure- I.

3.3 Topography (along with map)

Bundelkhand lies between the Indo-Gangetic Plain to the north and the Vindhya Range to the south. It is a gently sloping upland, distinguished by barren hilly terrain with sparse vegetation, although it was historically forested. The plains of Bundelkhand are intersected by three mountain ranges, the Vindhya, Fauna and Bander chains, the highest elevation not exceeding 600 meters above sea-level. Beyond these ranges the country is further diversified by isolated hills rising abruptly from a common level, and presenting from their steep and nearly inaccessible scarps eligible sites for forts and strongholds of local kings. The general slope of the country is towards the northeast, as indicated by the course of the rivers which traverse or bound the territory, and finally discharge themselves into the Yamuna River.

The principal rivers are the Sindh, Betwa, Shahzad River, Ken, Bagahin, Tons, Pahuj, Dhasan and Chambal. The Kali Sindh, rising in Malwa, marks the western frontier of Bundelkhand. Parallel to this river, but further east, is the course of the Betwa. Still farther to the east flows the Ken, followed in succession by the Bagahin and Tons. The Yamuna and the Ken are the only two navigable river

3.4 Existing Land-use pattern (Agriculture, Non-agriculture, Forest, Water Bodies (Including area under CRZ), shortest distances from the periphery of the project to Periphery of forests, national park, wild life, eco-sensitive areas, water bodies (Distance from the HFL of the river), CRZ. In case of notified Industrial area, copy of Gazette Notification should be given.

The site / factory are located at Araji No.- 56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhauha Pargana Saktegarh, Tehsil- Chunar, District-Mirzapur, U.P., The land use pattern of proposed site is Industrial. It comes under the UPSIDC, Industrial area.

- Mostly rural and Industrial stretch present all around the proposed project site.
- **Nearest Railway station** – Chunar-4 km
- **Nearest City** – Chunar
- **Nearest Airport** – Varanasi Airport (64 km)
- **Road/Transport** – NH- 7
Almost the entire area within 10 Km. radius is semi-urban and Industrial area with some agricultural land sprinkled here and there. There is no forest, national park, wild life sanctuary, eco-sensitive area existing within 10 Km radius.

4.0 Existing Infrastructure

4.1 Soil Classification

Jhansí district area is gradually sloping in the north-easterly direction. The southern Bundelkhand plateau area in general resumes the height ranging from about 200m above mean sea level towards north to about 345 m. above mean sea level on the south. Viz (a) southern Bundelkhand pediplain province and (b) northern highly eroding composite plain province. Soil Characteristics: The soil found in the area may be classified into two group on the basis of colour and topography i.e. red (upland soils) and black (low land soils). On the basis of texture, the red soil is further divided into ‘Rakar’ and ‘Parwa’ and the black soil group into ‘Kabar’ and ‘Mar’.

4.2 Climate data from Secondary Sources (approx)

The average annual rainfall is 850.1mm. The climate is sub-humid and it is characterized by a hot dry summer and cold winter. About 91% of rainfall take 6 place from June to September. During monsoon surplus water is available for charging to ground water. January is the coldest month of the year when the mean daily maximum temperature is 24.10 C and the mean daily minimum temperature is 9.20 C, May is the hottest month with mean daily maximum temperature is 42.60 C and mean daily minimum temperature is 28.80 C. The mean monthly maximum temperature is 32.60 C and mean monthly minimum temperature is 19.20 C. In the summer season the air is very dry and during the monsoon season the moisture content of air is high. The mean monthly relative humidity is 41%. During the post monsoon and winter season winds are light and in the summer and monsoon season the winds strengthen slightly. The mean wind velocity is 4.8 Kmph. The potential evapotranspiration is 1603.3 mm.

4.2 Social infrastructure Available.

Schools, colleges, hospitals & healthcare centers & bazaars, community centers etc. are all available nearby.

5 PLANNING BRIEF

5.1 Planning Concept (types of industries, facilities, transportation etc.), Town & Country planning / Development Authority Classification.

The site / factory are located at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhauha Pargana Saktegarh, Tehsil- Chunar, District-Mirzapur, U.P.,
i. Population Projection

NA

ii. Land use planning (breakup along with green belt etc)

<table>
<thead>
<tr>
<th>Total land</th>
<th>12140.6 sqm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green area</td>
<td>5827.49 sqm</td>
</tr>
</tbody>
</table>

(48% of total area)

iii. Assessment of Infrastructure Demand (Physical & Social).

The industrial area is located on the periphery of Jaunpur town and all facilities / amenities like medical, educational, housing, transportation, communication, shopping etc are available in abundance. The employees make their own arrangements for transport, lodging, boarding etc.

Amenities / Facilities: As above

5.2 PROPOSED INFRASTRUCTURE

(i) Industrial area (Processing Area)

| Total land  | 12140.6 sqm |

(ii) Residential Area (Non-processing Area)

NA

(iii) Green Belt

Green area 5827.49 sqm (48% of total area). 100 no. of trees will be developed as green belt is within premises.

(iv) Social Infrastructure

Schools, colleges, hospitals & healthcare centers, shopping malls & bazaars, cinema halls, community centers etc. are all available nearby.

(v) Connectivity (Traffic & transportation Road/Rail/Metro/water ways etc.)

Raw material as well as finished product shall be transported mainly by Rail and Road. As the site is well located, so there is no problem regarding transportation of the same.
Rail:
Railway Station near the project site is Chunar-4 KM. The nearest airport is Varanasi Airport located at a distance of 64 km in North Direction.

Road
Cement unit is located at Araji No.-56,57,61/2,62/1,63,44Mi,46/2Mi,47,49,50,44/5,45,46/1,60,61/1,58 & 62/2 Village-dhauha Pargana Saktegarh, Tehsil- Chunar, District-Mirzapur, U.P., which are connected to NH-7.

(vi) Drinking Water Management (source & supply of water)
Water would be required for human consumption and for general purposes. Company have made Provision for tube-well with overhead tank in the scheme for meeting out water requirement.

(vii) Sewerage System
Sewerage system shall be proposed.

(viii) Industrial waste Management
Liquid Waste: Only domestic sewage for which septic tank with soak pit has been proposed. No waste water shall be generated in this unit which needs to be treated.

Solid Waste: Only domestic solid waste will be generated.

(ix) Solid waste Management

Solid Waste: Only domestic solid waste will be generated and will be managed as per MSW (M & H) Rule.

(x) Power requirement & supply /source.
The power required will be 600 KVA for 100 TPD Cement Plant. The company will apply for required power connection in due course.
6.0 REHABILITATION & RESETTLEMENT PLAN

(i) Policy to be adopted (central/state) in respect of the project affected persons including Home Oustees, Land Oustees & Landless Laborers.

NA

7.0 PROJECT SCHEDULE & COST ESTIMATES

(i) Likely date of start of construction & likely date of completion.

- Start of construction work : Soon after project approval
- Completion date : in 12 months thereafter.

(ii) Estimated Project Cost along with analysis in terms of Economic Viability of the project.

Project Cost
COST OF PROJECT & MEANS OF FINANCE:
PARTICULARS
TOTAL (Rs. In lacs)
COST OF PROJECTS

8.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION)

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COST OF PROJECT</strong></td>
<td></td>
</tr>
<tr>
<td>Land &amp; Site Development (existing)</td>
<td></td>
</tr>
<tr>
<td>Building &amp; Civil Construction</td>
<td>76.042</td>
</tr>
<tr>
<td>Plant &amp; Machinery</td>
<td>215.42</td>
</tr>
<tr>
<td>Site Development</td>
<td>10.026</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td>301.488</td>
</tr>
<tr>
<td>Preliminary and Pre-Operative Expenses</td>
<td>11.646</td>
</tr>
<tr>
<td>Security Deposit</td>
<td>2.000</td>
</tr>
<tr>
<td>Margin for Working Capital</td>
<td>48.33</td>
</tr>
<tr>
<td><strong>TOTAL (A)</strong></td>
<td>363.464</td>
</tr>
</tbody>
</table>
MEANS OF FINANCE

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoters Contribution :</td>
<td>363.464</td>
</tr>
<tr>
<td>Share Capital</td>
<td>0</td>
</tr>
<tr>
<td>Term Loan</td>
<td>0</td>
</tr>
<tr>
<td>Unsecured Loan (Intt. Free)</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL (B)</td>
<td>363.464</td>
</tr>
</tbody>
</table>

(i) **Financial & social benefits with special emphasis on the benefits to the local people including tribal population, if any, in the area.**

It is a well-known phenomenon that any industrial project, thereof, invariably impacts the surrounding economy in a positive way. This would very much apply to this case also. The proposed plant will generate direct & indirect employment within the plant. Additionally, there will be significant generation of employment and economic benefits to various suppliers and consumers linked with the project. The project is technically sound and financially viable. Hence, it deserves approval and implementation.