LUNCHEON BRIEFING ON AMARAVATI DEVELOPMENT AND OPPORTUNITIES FOR BUILT ENVIRONMENT INDUSTRY

AMARAVATI CITY MASTER PLAN

November 2017
Amaravati, the people's capital of Andhra Pradesh is envisioned to be the pioneer smart city of India at par with world class standards with cutting-edge infrastructure and immense prosperity in an environmentally sustainable manner.

- Mr. Nara Chandrababu Naidu (Hon'ble Chief Minister of AP)

$5BN planned investment over 4 years

9 anchor sectors identified

Land Pooling Scheme
Amaravati will define new standards for urbanization in India, and secure its place in the globe – in terms of the liveability index, the Happiness Index and the Sustainability index.
CAPITAL REGION – PLANNED ECO SYSTEM

- Well connected – rail, road, air and water
- 7 Growth Corridors
- 7 Regional Centres
- 2 Ring Roads
- Port upcoming at Machilipatnam
- 13.5 mi Pop
- 5.6 mi Jobs
- 5 Queen Bee Projects

Key Industrial Sectors - Food and Beverages, Textile, Auto and Auto Components, Rubber and Plastic, Pharmaceutical, Electronics, Basic and Fabricated metals, aerospace, logistics, IT/ITes, aquaculture, non metallic minerals
AMARAVATI CITY MASTER PLAN

Vastu
4 Expressways, 1 Inner Ring Road
1 CBD, 3 RC’s, 27 Townships
9 Thematic Cities
29 Villages

Returnable Lands
Commercial and Residential

26,512 farmers as stakeholders 17,000 acres

Green Network – Integrated Flood Management System
MASTER PLAN IMPLEMENTATION STRATEGY

KEY AREAS
1. Government complex
2. Start-UP area
3. Land allotments
4. LPS Areas

DEVELOPMENT GOALS
A. Fully functional Government Complex
B. Infrastructure throughout the City
C. Economic development across 9 themes
D. Social and Community Infrastructure
### Infrastructure opportunities worth $14bn available in the next 4 years of development.

<table>
<thead>
<tr>
<th>Project</th>
<th>Investment Amount (Singapore $ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads Infrastructure</td>
<td>1,700</td>
</tr>
<tr>
<td>Water Supply Infrastructure</td>
<td>780</td>
</tr>
<tr>
<td>Sewerage Infrastructure</td>
<td>580</td>
</tr>
<tr>
<td>Power Transmission &amp; Distribution</td>
<td>3,600</td>
</tr>
<tr>
<td>Flood Management &amp; Urban Waterways</td>
<td>440</td>
</tr>
<tr>
<td>Blue Infrastructure (River Training and Island Dev.)</td>
<td>800</td>
</tr>
<tr>
<td>Solid Waste Management</td>
<td>310</td>
</tr>
<tr>
<td>Gas Infrastructure</td>
<td>700</td>
</tr>
<tr>
<td>Storm Water Infrastructure</td>
<td>290</td>
</tr>
<tr>
<td>ICT</td>
<td>2,200</td>
</tr>
<tr>
<td>Integrated LPS Infrastructure</td>
<td>2,900</td>
</tr>
<tr>
<td>Industrial Area Tier-2 Infra</td>
<td>130</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14,430</td>
</tr>
</tbody>
</table>

City Trunk Infrastructure

Utilities (water supply, sewerage, power, storm water) tendered out worth $870m

PPP opportunities in Gas Supply, ICT, Power Supply and Public Wi fi

Source - APCRDA
LPS AREAS

Residential and commercial land use layouts spanning 17,000 acres

3 of 13 zones have tendered out, worth $570m

Overall cost of infrastructure to be tendered out in the coming months, $2.9 bn

Opportunities exist for Contractors and private developers to undertake projects in EPC / HAM mode

Source - APCRDA
GOVERNMENT COMPLEX (2-4 year plan)

- **Govt. Complex**: 900 acres
- **Justice Complex**: 454 acres
- **Navigable & recreational canals**: 15kms
- **Riverfront area** as mixed used area for commercial and recreational activities
- **Sustainable Transport**
  - EPC mode
  - High standards of sustainability in line with LEED certification

### Infrastructure

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Court</td>
<td>S$265mn</td>
<td>1.5m sq.ft.</td>
</tr>
<tr>
<td>Legislative Assembly</td>
<td>S$180mn</td>
<td>1.1m sq.ft.</td>
</tr>
<tr>
<td>Secretariat &amp; HOD offices</td>
<td>S$520mn</td>
<td>5.2m sq.ft.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>S$350mn</td>
<td>roads, water supply etc</td>
</tr>
<tr>
<td>Apartment housing</td>
<td>S$420mn</td>
<td>4.4 million sq.ft (3800 units)</td>
</tr>
<tr>
<td>Bungalow housing</td>
<td>S$200mn</td>
<td>3 million sq.ft (200 units)</td>
</tr>
</tbody>
</table>
## Urban mobility

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Rapid Transit For 10km circuit within precinct</td>
<td>90</td>
</tr>
<tr>
<td>Transportation 50 Electric buses</td>
<td>15</td>
</tr>
<tr>
<td>Parking Multi-level car park with Smart parking and solar roof-top</td>
<td>10</td>
</tr>
<tr>
<td>NMT Cycle docks with smart cycles</td>
<td>0.5</td>
</tr>
</tbody>
</table>

## Urban design

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Street poles – Wifi, Solar charging and other facilities</td>
<td>40</td>
</tr>
<tr>
<td>Streetscaping Smart street infrastructure incl. pavement</td>
<td>10</td>
</tr>
</tbody>
</table>

## Blue-Green

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and development of a bio-park with local plant species and active recreational facilities</td>
<td>100</td>
</tr>
<tr>
<td>Canal front and river front development</td>
<td>20</td>
</tr>
<tr>
<td>50,000 sq.m of Bio-retention ponds</td>
<td>10</td>
</tr>
<tr>
<td>Design and development of Canals – over 16km of greenfield and brownfield water channels</td>
<td>3</td>
</tr>
</tbody>
</table>

## Utilities

<table>
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<tr>
<th>Description</th>
<th>Cost (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficient district cooling for approx. 6 million sq.ft. built-up area</td>
<td>30</td>
</tr>
<tr>
<td>Project</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mixed-use development</td>
<td>30-40 acre development of commercial, residential and retail use</td>
</tr>
<tr>
<td>Gateway towers</td>
<td>Iconic mixed-use twin towers by the River front, in the central spine</td>
</tr>
<tr>
<td>Convention centre</td>
<td>Approx. 80,000 sq.m. convention centre close to Riverfront</td>
</tr>
<tr>
<td>Sports Arena</td>
<td>Multi-functional multi-use stadium / arena</td>
</tr>
<tr>
<td>Crafts Center</td>
<td>Heritage and arts centre</td>
</tr>
<tr>
<td>City square</td>
<td>Public space around high density development, similar to Times square</td>
</tr>
</tbody>
</table>

Source - APCRDA
Hi-tech manufacturing
Food processing
Healthcare
Tourism
Higher education
High-end services
Electronics
Apparel

Source - APCRDA
Large developments:
- Government Complex (1350 acres)
- Start-up area (1684 acres)

Universities:
- VIT-AP Charitable Trust (200 acres)
- National Institute of Design (NID) (50 acres)
- Central Institute of Tool Design (CITD) (5 acres)
- SRM University (200 acres)
- Amrita University (200 acres)

Teaching Hospitals / Hospitals:
- Indo-UK Institute of Health (150 acres)
- BRS Medcity Healthcare & Research Pvt. Ltd. (100 acres)

Others
- HCL
- 5 star, 4 star and 3 star hotels
- International / National Schools
- Affordable Housing
- Media-related businesses
- 65,000 plus jobs
- 30 acres of media focused Integrated business park including
  - Media zone attracting variety of media companies e.g., post-production, digital service providers, studios etc.
  - Commercial / office zone
  - Retail, Entertainment and Dining zone
  - Residential zone
- Peak investment: S$8mn
- Project IRR: - 25%

Source - APCRDA
- Iconic riverine tourism destination offering a compelling mix of rejuvenation heritage, spirituality and nature amidst a vibrant & modern setting

- 25 mn tourist arrivals and host -120 large events

- 25 acres of tourism facility including
  - Themed Resort (Wellness / Leisure)
  - High-street retail cum F&B Corridor
  - Time Share / Premium Cottages / Villas / Club
  - Central Park, Water Sports, Walkways, Open Restaurants, Musical Fountains, Amphitheatre, Banqueting, Exhibition and festival space

- Peak investment: S$8 mn
- Project IRR: - 25%
Hosting the 2036 Olympics, making it a prime destination for global sporting events

- Making Amaravati the talent factory, training world class athletes, bringing in Olympic medals

- 20 acres of multipurpose stadium including
  - Multi-purpose convertible stadium with supporting Infrastructure (Outdoor to Indoor)
  - Multi-Sport Infra including football & hockey but excluding cricket
  - Outdoor capacity: 30,000 Seats
  - Convertible Indoor Capacity of: 5,000 to 6,000 PAX
  - Commercial Exploitation of annexed land with higher FAR

- Peak investment: S$7.8mn
- Project IRR: -23%

Source - APCRDA
Collaborative hub of innovation in support of the teaching, learning and research mission

“research hub of South Asia” by the year 2036

By 2036

- Home to the India campuses of at least four of the world’s top 100 universities and will publish around 70 research journals.

- AKC will feature 500 acres of developed land, over 15,000 jobs and an annual GDP per job of around US$12,000

- World class research cluster to attract Corporate R&D (across all industries) and University R&D

- Horizontal infrastructure within research cluster to be subsidized through Government funding

Source - APCRDA
One of the healthiest cities in the world preferred medical & wellness tourism destination anchored on excellence in health, research, innovation and education with

- 2 mn. medical tourists by 2036
- 82 years of life expectancy
- 30 medical drug discoveries per year (on par with current global best)

**PROPOSED PROJECTS**
- Health & wellness resorts
- Medical and Dental colleges, Multi-disciplinary super specialty hospitals
- Medical device manufacturers
- R&D and data analytics centers

Source - APCRDA
- Mega Project Status to projects with investment of S$50mn or projects creating more than 1000 jobs
- Mega Projects would be eligible for special dispensation
- Investment subsidy up to 20% of total investment
- 5% Interest subsidy up to S$0.3mn per year for a period of 7 years
- Power cost reimbursement at 25% for a period of 5 years limited to S$0.4mn

PROPOSED PROJECTS
- 2,000 acres of overall industrial land available with large parcels (50 – 500 acres each) to be allocated to anchors in electronics / Industrial park developers

Source - APCRDA
Amaravati aspires to have an integration of state's legal governance, world class universities and research institutions collaborating for the betterment of the legal landscape in India.

**PROPOSED PROJECTS**
- Law university
- Legal process outsourcing Unit
- Law Museum
- Legal Think tanks & Research

Source - APCRDA
• MICE Hub - Convention centre
  – 45 acre river-front property to be developed with a 5,000 pax convention centre
  – 5-star hotel also included in the development area
  – Approx project cost – S$200mn

• Hotels
  – Inviting top 5-star, 4-star and 3-star hotels
  – Allotment of land being provided on application basis
  – Prime properties identified

• Schools
  – Inviting top International residential and day-scholar schools
  – Extent of land provided – 4acres – 8 acres
  – Selection based on quality of applicant