Infrastructure Corridor IAs: County-Wide in AlUla (Kingdom of Saudi Arabia)

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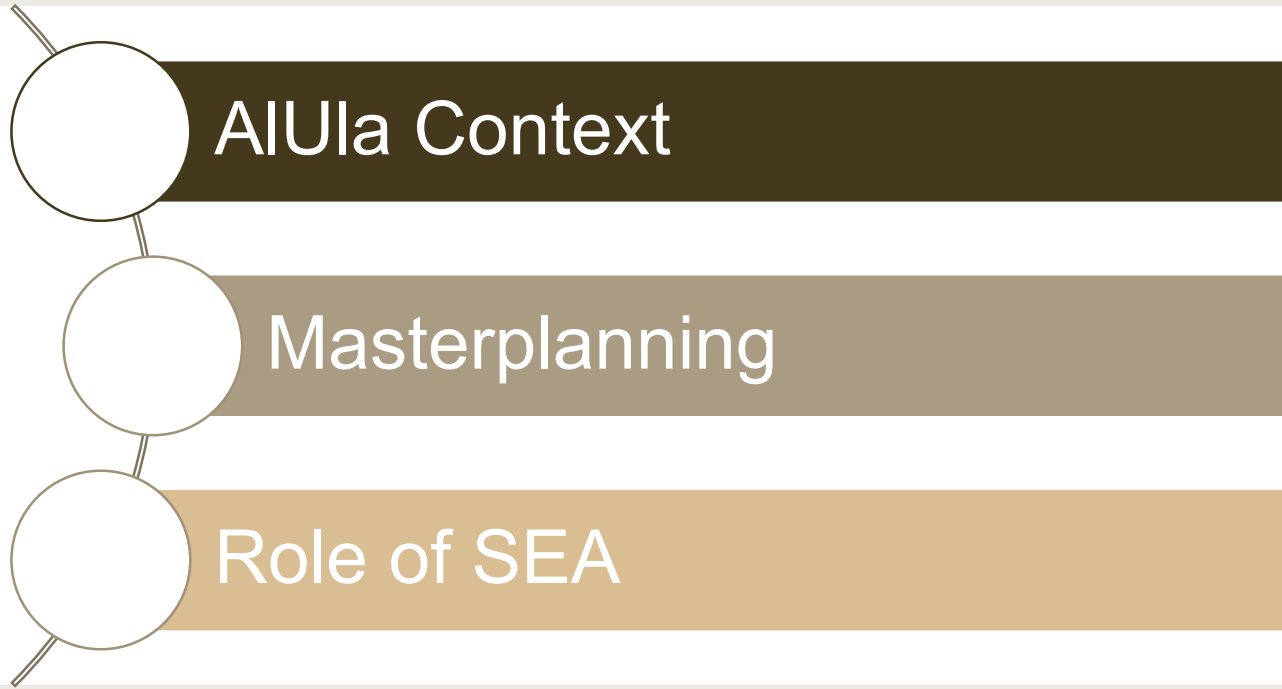
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Royal Commission for AlUla

Infrastructure Corridor IAs:
County-Wide in AlUla
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Agenda

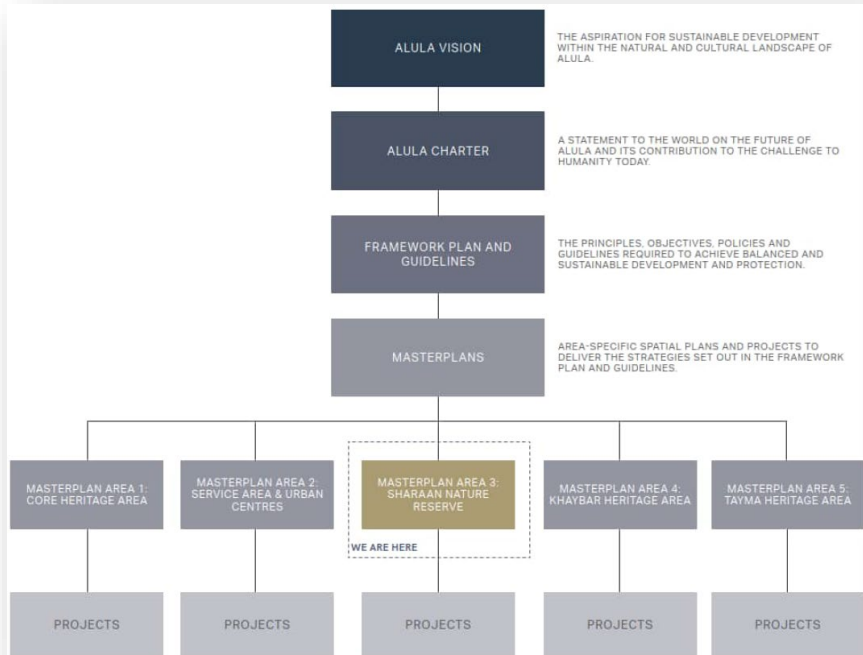AlUla Context

Masterplanning

Role of SEA

AlUla Context

AlUla Context: Geographic Location

FIGURE 6 **Location of AlUla**

KINGDOM OF SAUDI ARABIA · ALMADINAH ALMUNAWARAH REGION · ALULA COUNTY · ALULA CORE AND WIDER CORE AREAS
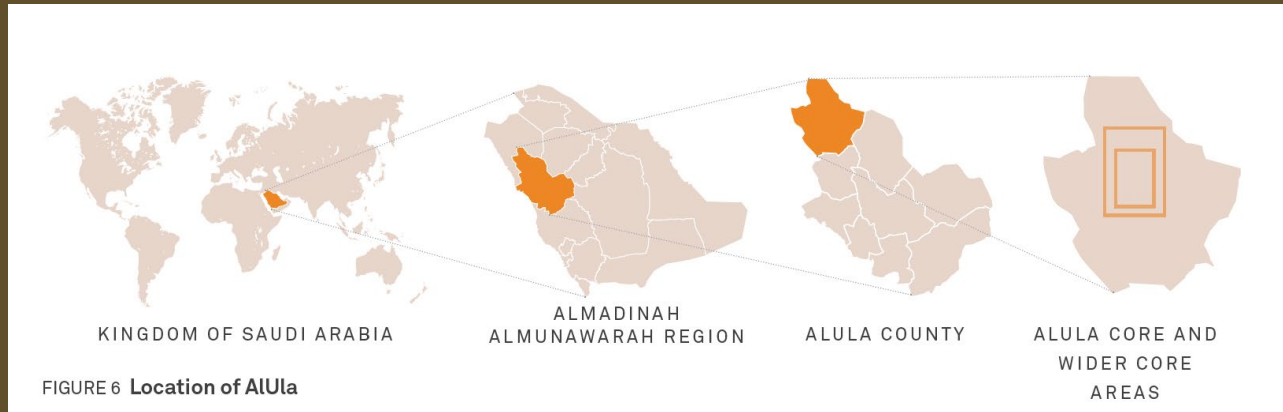
AlUla Context: Plans and Policies

ALULA VISION — THE ASPIRATION FOR SUSTAINABLE DEVELOPMENT WITHIN THE NATURAL AND CULTURAL LANDSCAPE OF ALULA.

ALULA CHARTER — A STATEMENT TO THE WORLD ON THE FUTURE OF ALULA AND ITS CONTRIBUTION TO THE CHALLENGE TO HUMANITY TODAY.

FRAMEWORK PLAN AND GUIDELINES — THE PRINCIPLES, OBJECTIVES, POLICIES AND GUIDELINES REQUIRED TO ACHIEVE BALANCED AND SUSTAINABLE DEVELOPMENT AND PROTECTION.

MASTERPLANS — AREA-SPECIFIC SPATIAL PLANS AND PROJECTS TO DELIVER THE STRATEGIES SET OUT IN THE FRAMEWORK PLAN AND GUIDELINES.

MASTERPLAN AREA 1: CORE HERITAGE AREA

MASTERPLAN AREA 2: SERVICE AREA & URBAN CENTRES

MASTERPLAN AREA 3: SHARAAN NATURE RESERVE
WE ARE HERE

MASTERPLAN AREA 4: KHAYBAR HERITAGE AREA

MASTERPLAN AREA 5: TAYMA HERITAGE AREA

PROJECTS — PROJECTS — PROJECTS — PROJECTS — PROJECTS

RCU was established by Royal Decree in July 2017 as an autonomous organization of the Saudi Arabian Government with the aim of preserving and developing AlUla County – a region of outstanding natural and cultural significance.

Founded on the National Law, the RCU has developed and adopted regulations, standards and guidelines that emphasize its own requirements for developing AlUla County in line with its vision and to enable its role as the Consent Authority (CA).

AlUla Context: Key Documents

RCU Vision

"We will turn AlUla into a living museum, creating memories that visitors will share with the world. Heritage is the main asset of AlUla. We have to use this asset to offer visitors a unique journey through time where they can enjoy a living museum."

...with a robust value proposition:

- A LIVING MUSEUM THE SIZE OF A COUNTRY
- EACH ROCK IS A TESTIMONY
- EACH PLACE IS A GALLERY
- EACH JOURNEY IS AN EXHIBITION

Sustainability Charter and Strategic Roadmap

Statement to the world on the future of Saudi Arabia and its contribution to the challenge to humanity today

ALULA
SUSTAINABILITY CHARTER

Framework Plan

Lists Sustainability-related goals and KPIs

ALULA
FRAMEWORK PLAN

February 2020

الهيئة الملكية لمحافظة العلا
Royal Commission for AlUla

AlUla Strategic Masterplanning Framework

A County the size of Belgium undergoing Masterplanning at all levels.

AlUla Context: FWP Strategic Principles

FRAMEWORK PRINCIPLES

01 SAFEGUARD THE NATURAL AND CULTURAL LANDS
RCU will protect and celebrate the cultural and natural assets of AlUla to ensure the vision and values embedded within the Charter of AlUla are realized.

02 CELEBRATE HERITAGE, CULTURAL, AND ARTS AS A GLOBAL DESTINATION
RCU will highlight AlUla's history, inviting visitors to experience, celebrate and engage with our cultural heritage and its expression through the arts. We will develop programs and activities that enrich both visitors and local communities.

03 SUSTAIN ECOSYSTEMS AND WILDLIFE
AlUla's diverse ecological assets will be restored to healthy and vibrant systems. They will be safeguarded from further harm and deterioration for the benefit of current and future generations.

04 MAINTAIN BALANCED AGRICULTURE
RCU will facilitate the development of agriculture in the historic oasis and across AlUla in-line with best practices of sustainable land and resource management.

05 DEVELOP LIGHT TOUCH TOURISM
RCU will warmly welcome visitors eager to experience AlUla's cultural and natural heritage, yet remain ever mindful of our duty to protect and conserve the unique qualities of our heritage and resources that make AlUla an exceptional global destination.

06 ENSURE SUBTLE CONNECTIVITY AND ACCESSIBILITY
A multi-modal network of light-touch mobility options will facilitate travel across AlUla, providing comfortable accessibility and connectivity to our numerous cultural, natural, and civic sites.

07 REVITALIZE, RESTORE, AND REGENERATE THE BUILT ENVIRONMENT
As AlUla undergoes new developments that support expanded cultural and commercial activities, we will ensure that the historic urban environment and the traditions manifested in the existing buildings and places are honoured and respected.

08 ENABLE THE LOCAL COMMUNITY
AlUla's people are central to its long-term success. We will work closely with all AlUla's communities to develop opportunities to participate in this transformation.

09 INCORPORATE IMAGINATIVE INFRASTRUCTURE IN ALL SYSTEMS
Innovative infrastructure networks within the region will expand to keep pace with AlUla's own growth. These networks will be designed to allow continuous adaptation to emerging technologies that will improve functionality and environmental performance.

10 INTEGRATE INVISIBLE SECURITY
As the guardians of AlUla, RCU is committed to creating a safe and secure environment for all visitors, citizens, and stakeholders while also protecting the exceptional heritage treasures.

11 DESIGN SAFE & HEALTHY ENVIRONMENTS WITHIN THE CIRCULAR ECONOMY
RCU will pursue Cradle to Cradle inspired solutions in the development of places, products, and systems in AlUla. This will ensure that safe and healthy materials flow through the circular economy, in continuous process of use, recovery, and reuse.

12 EMBED RESILIENCE
RCU will develop strategies to anticipate changes, future proofing AlUla to minimize stresses and challenges from an unknown and unpredictable future.

Framework Plan: Enable the Local Community

8.1 CREATING OPPORTUNITIES FOR EDUCATION AND CAPACITY BUILDING
AlUla's people will benefit from training and capacity building to increase employability and ensure local AlUla residents can compete for jobs that will be generated in the county. Facilitating the inclusion of local population within tourism development and value chain will be a core aspect of this objective.

8.2 DIVERSIFYING THE ECONOMY
AlUla's economy will be diversified through developing non-tourism sectors (such as agriculture, handicrafts, equestrian etc.) that can be linked with the county's core tourism and heritage offering. All agriculture products (dates, moringa and the others that will be selected) will be top quality and will be branded as Made in AlUla for tourism and high-end consumption. Collective farming practices will be developed and supported to diminish/dismantle the role of intermediaries in the agriculture supply chain.

8.3 CREATING A NEW TOWN NEAR HEGRA
A new town near Hegra will be built around historic techniques and form that allow different artists to bring their insight and sculpt the town around their visions.

8.4 REHABILITATE THE OLD TOWN WITH RETAIL AND CAFES
Additional anchors of retail and cafes will be accommodated within the Old Town to encourage exchange and interaction of visitors and locals.

8.5 ENSURING EQUITABLE DEVELOPMENT
Development within AlUla will ensure all social and economic interventions trickle down to underprivileged groups of AlUla community. Access to infrastructure and social services for all population will be improved.

8.6 INVOLVING THE LOCAL COMMUNITY
A Stakeholder Engagement Strategy will be developed that seeks to engage local people and organisations in a meaningful way. The RCU will recognise the importance of delivering on its commitments and the role of organisational effectiveness and efficiency in building community trust. A non-profit ecosystem will be strengthened and increase volunteering opportunities to facilitate residents' continued involvement in AlUla's development.

OBJECTIVE 8.5
ENSURING EQUITABLE DEVELOPMENT
Development within AlUla will ensure all social and economic interventions trickle down to underprivileged groups of AlUla community. Access to infrastructure and social services for all population will be improved.

The AlUla Framework will provide:
- AlUla Community Services standards. Current standards will be reviewed, and a revised set confirmed that build on work currently indicated in the AlUla Financial Model. This review may identify and include additional requirements such as religious and co-located community use buildings.

Priority Masterplans and Projects will:
- Prepare detailed infrastructure delivery plans that assess both existing capacity and future demand of services to ensure the right facilities and services are planned and delivered in advance of occupation.

Framework Plan: Imaginative Infrastructure

OBJECTIVE 9.1
ENSURING ACCESS TO ESSENTIAL UTILITIES

Ensure all AlUla residents have access to essential utilities such as sewer, power, water, telecommunication fibre optic network.
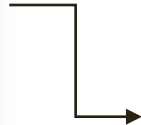
The AlUla Framework will provide:
- AlUla Infrastructure Delivery Plan. A study will model the phased growth of population, visitors and associated development to ensure the appropriate and forward-funded provision of infrastructure. This will provide an efficient sequencing of the 'must have' infrastructure components that create a resource-efficient critical 'platform' for growth.

Priority Masterplans and Projects will:
- Ensure connections and capacity to mains services with utility providers involved in discussions for network enhancement where necessary.

Framework Plan: Imaginative Infrastructure

9.1 ENSURING ACCESS TO ESSENTIAL UTILITIES
Ensure all AlUla residents have access to essential utilities such as sewer, power, water, telecommunication fibre optic network.

9.2 DEVELOPING A SUSTAINABLE AND GREEN UTILITIES NETWORK
A multi-functional network will connect and integrate utility and transport networks with the aim of developing a more natural approach to infrastructure management and ecological networks. Technology should be deployed in order to develop an enhanced, resource efficient infrastructure network, with digital and SMART systems used to monitor urban systems across the area. Provision of sustainable and utilities that support green environment and reduced carbon emission will complement the environment and nature.

9.3 CREATING A WIRELESS TELECOMMUNICATIONS NETWORK
The telecoms network will be provided using GSM towers and buried telecoms corridors, providing a seamless network offering full coverage of the region. A seamless, interactive and personalized customer experience, supported by technology and high speed communication networks will be central to the visitor experience.

9.4 PROMOTING CLEAN ENERGY AND POWER NETWORKS
Energy and power supply will be provided through clean energy sources. AlUla will aim to be Energy Positive with renewable energy and SMART technologies at the heart of achieving this outcome.

9.5 MANAGING AND MINIMIZING WASTE
Sustainable waste management policies and solutions are crucial to respect the nature and landscape characteristics. Domestic and industrial waste management practices will promote sustainable practices, regulating waste recycling and management in line with the objectives of NTP 2020 and Vision 2030. A formalised recycling regime providing recycling facilities strategically located within the County will be established.

9.6 ACCESSIBLE SOCIAL INFRASTRUCTURE
Social infrastructure will be developed on a basis that provides equal accessible facilities to the core area as well as peripheral areas. Consideration needs to be given as to how isolated settlements are integrated into the proposed network of public infrastructure.

OBJECTIVE 9.6
ACCESSIBLE SOCIAL INFRASTRUCTURE

Social infrastructure will be developed on a basis that provides equal accessible facilities to the core area as well as peripheral areas. Consideration needs to be given as to how isolated settlements are integrated into the proposed network of public infrastructure of AlUla, such as hospitals, schools, community facilities.

The AlUla Framework will:
- Prepare a social infrastructure assessment that assess current demand and capacity against future demands in line with population and visitor growth. AlUla Social Infrastructure standards will be set.

Priority Masterplans and Projects will:
- Ensure the provision of social infrastructure in accordance with the Planning Framework Standards.
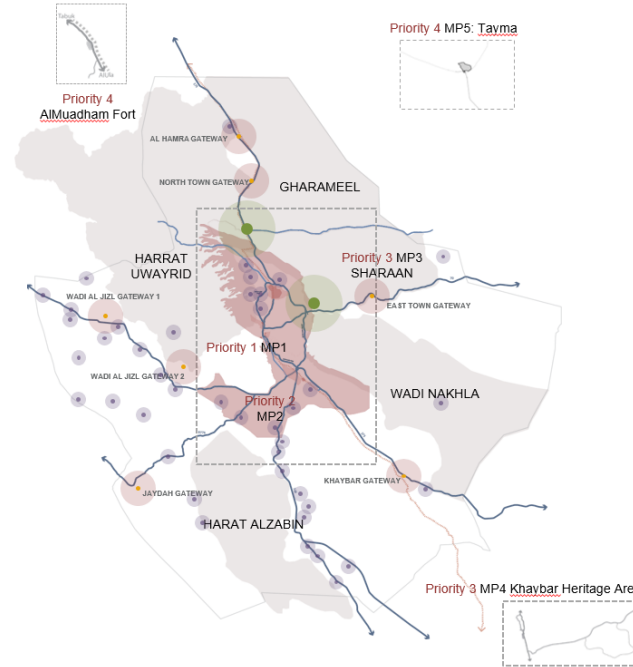
Masterplanning

Masterplanning: Priority Areas

AlUla sits at a nexus
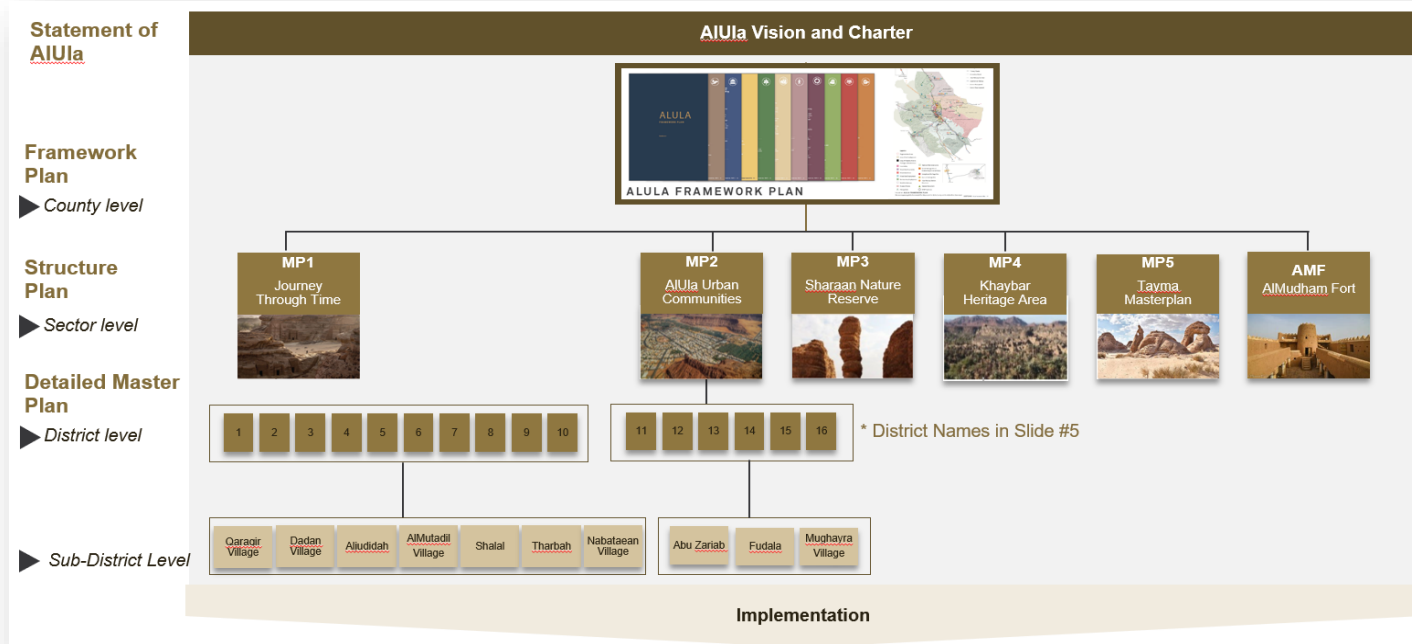of time and topography

As we develop AlUla, we are also shaped by

its existing forms – just as our predecessors were.

LEGEND

- Framework Gateways
- Nature Reserves
- Core Area
- New Settlements
- Rural Settlements
- Main Roads
- Hijaz Railway

Priority 4 MP5: Tayma

Priority 4
AlMuadham Fort

AL HAMRA GATEWAY

NORTH TOWN GATEWAY

GHARAMEEL

HARRAT
UWAYRID

WADI AL JIZL GATEWAY 1

Priority 3 MP3
SHARAAN

EAST TOWN GATEWAY

Priority 1 MP1

WADI AL JIZL GATEWAY 2

WADI NAKHLA

Priority 2
MP2

JAYDAH GATEWAY

KHAYBAR GATEWAY

HARAT ALZABIN

Priority 3 MP4 Khaybar Heritage Area

Masterplanning Toolkit

Statement of AlUla

Framework Plan
▶ *County level*

Structure Plan
▶ *Sector level*

Detailed Master Plan
▶ *District level*

▶ *Sub-District Level*

AlUla Vision and Charter

ALULA FRAMEWORK PLAN

MP1	MP2	MP3	MP4	MP5	AMF
Journey Through Time	AlUla Urban Communities	Sharaan Nature Reserve	Khaybar Heritage Area	Tayma Masterplan	AlMudham Fort

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16

* District Names in Slide #5

| Qaragir Village | Dadan Village | Aliudidah | AlMutadil Village | Shalal | Tharbah | Nabataean Village |

| Abu Zariab | Fudala | Mughayra Village |

Implementation

Masterplanning: Infrastructure Structure Plans

INFRASTRUCTURE

Supply the development with state of the art, innovative networks

MOBILITY - Road & Public Transport
MOBILITY - SOFT MOBILITY
UTILITIES - Dry
UTILITIES - Wet
SECURITY & SAFETY INTERFACE

Infrastructure Planning includes:
- **Stage 1:** AlUla Infrastructure Master Plan Concept of Operation (IMP COO)
- **Stage 2:** Infrastructure Structure Plan with key deliverables:
  - Mobility Strategy
  - Infrastructure Strategy
  - Safety & Security
  - Demolition Strategy
  - Structure Plan(s) (like road and network hierarchies, zoning, public transport, infra primary networks)

Must include the Implementation Strategy as part of Stage 2

Masterplanning: Detailed Infrastructure Master Plan

A Detailed Infrastructure Master Plan includes:
- Utilities and Solid Waste Management
- Mobility and Highways including transport, mobility and logistics (vehicles, pedestrian, bus, etc.)
- Flood Risk Management and SWM Drainage
- Development Briefs
- Infrastructure Phasing

This, like other Masterplans, requires Stakeholder Engagement, identification of key infrastructure requirements for each option along with their Infrastructure Strategy which includes Access and Movement, along with Mobility and Accessibility Plans and a Final Utilities and Infrastructure Master Plan at the DMP level

Role of SEA

What is SEA
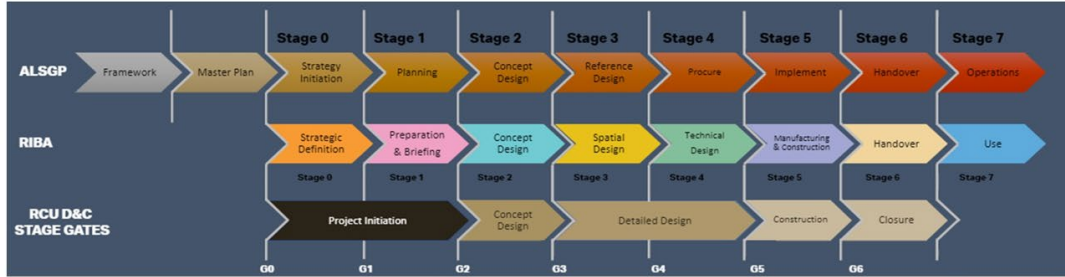
SEA is a systematic process for **evaluating the environmental impacts** of proposed **plans / policies / programs** to ensure that environmental considerations are *fully integrated and addressed at the earliest appropriate stage of decision-making,* in view of promoting sustainable development at the outset of planning processes.
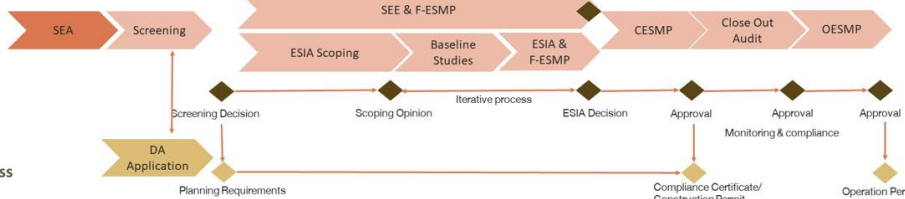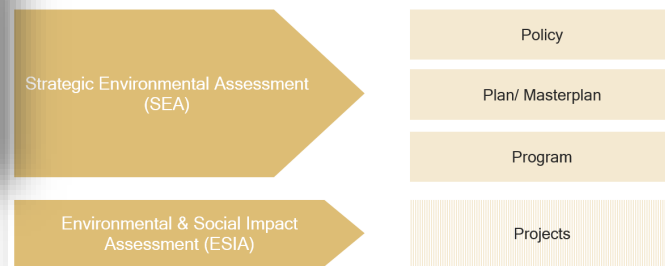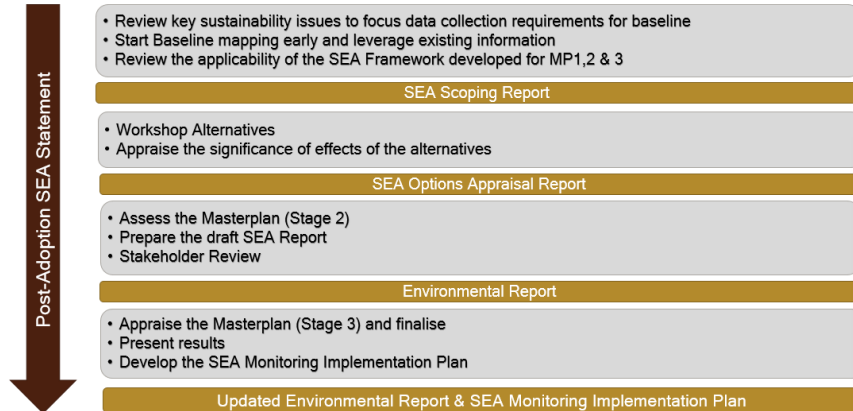
SEA: RCU Tailored Process

FULL SEA FOR CONCEPT NEW MASTERPLANS

Post-Adoption SEA Statement

- Review key sustainability issues to focus data collection requirements for baseline
- Start Baseline mapping early and leverage existing information
- Review the applicability of the SEA Framework developed for MP1,2 & 3

SEA Scoping Report

- Workshop Alternatives
- Appraise the significance of effects of the alternatives

SEA Options Appraisal Report

- Assess the Masterplan (Stage 2)
- Prepare the draft SEA Report
- Stakeholder Review

Environmental Report

- Appraise the Masterplan (Stage 3) and finalise
- Present results
- Develop the SEA Monitoring Implementation Plan

Updated Environmental Report & SEA Monitoring Implementation Plan

CHANGE ASSESSMENT FOR DETAILED MASTERPLANS

Post-Adoption SEA Statement

- Review inception & Review of Existing Baseline Information
- Change Assessment Tool Output

SEA Screening Decision

Change with Limited or No Significant Effects

SEA Implementation Plan for sub-area supplementing the overarching MP SEA Implementation Plan

SEA Monitoring Implementation Plan

The monitoring results will be communicated via the Annual Sustainability Reporting

Change Leading to Potential Significant Effects

- Assess the significance of the change in isolation per theme
- Assess the significance of the change in relation to the wider plan
- Develop change mitigation
- Specific Stakeholder Workshop & Wider Stakeholder Review

SEA Addendum Report - Final for release to public

SEA Implementation Plan for sub area supplementing the overarching MP SEA Implementation Plan

SEA Monitoring Implementation Plan

The monitoring results will be communicated via the Annual Sustainability Reporting

SEA: FWP and the SEA Themes

SEA: Scoping the Key Issues

SEA theme	Key issues and opportunities	SEA objectives	SEA assessment questions (will the option/proposal help to…)
Transport	• Transport infrastructure across AlUla County consists largely of an extensive road network, comprising paved and unpaved routes, that connects local and regional areas to other regions in Saudi Arabia. • Existing highway capacity is higher than current demand, with the road network experiencing no more than 20% maximum capacity at peak times. There are however concerns that the only route through central AlUla is Highway 375, leading to potential problems in the event of a restriction of traffic flow. • Prince Abdul Majeed Bin Abdulaziz Airport is approximately 30km from central AlUla and links AlUla to domestic and international locations. • There is currently no operational rail network in AlUla County (only the derelict Hijaz railway that closed in 1920) and the only form of public transport consists of bus services from AlUla to Tabuk, Madinah, Riyadh and Jeddah. • Pedestrian infrastructure in the area is limited and not user-friendly, while cycle infrastructure is not present in the county.	Promote sustainable transport use, support accessibility by non-car modes, and reduce the need to travel	• Minimise the impact from transport on the flora and fauna in the area? • Promote the use of active travel modes and public transport use? • Reduce the number of journeys made and the need to travel? • Reduce the impact on residents and the built environment from the road network?

Why assess options through the SEA process?

1 Assessment of 'reasonable alternatives' is a central requirement of SEA processes: key requirement of draft AlUla SEA Regulation

2 Enables the relative sustainability merits and trade-offs required of different approaches for the masterplan to be clearly visualised

3 Helps clarify the different approaches that can be take to key aspects of the masterplan, and their likely implications

4 Enables stakeholders to understand the environmental implications of different approaches to the masterplan

5 Helps to inform decision makers as to the environmental implications of the key decisions being made associated with the masterplan

6 Provides assurance that the decisions made are appropriate, or that mitigation and avoidance measures can be implemented

Options relating to approaches to strategic transport

Recommendations relating to these options could consider things like:
• An appropriate balance between promoting sustainable transport use whilst facilitating uses for those reliant on the private car (including taxi) would do most to ensure accessibility is maximised through the masterplans. However, opportunities for modal shift from the private car should be realised where possible.
• New roads should be designed to be permeable by active travel modes, with appropriate crossing points, traffic calming and other measures to support road safety for vulnerable road uses such as pedestrians, cyclists and/or horse riders.
• Densities of new development should be considered in terms of access to new and improved public transport linkages.
• Movements of biodiversity should be facilitated by new road corridors. In this respect the barrier effects of new road corridors should be minimised.
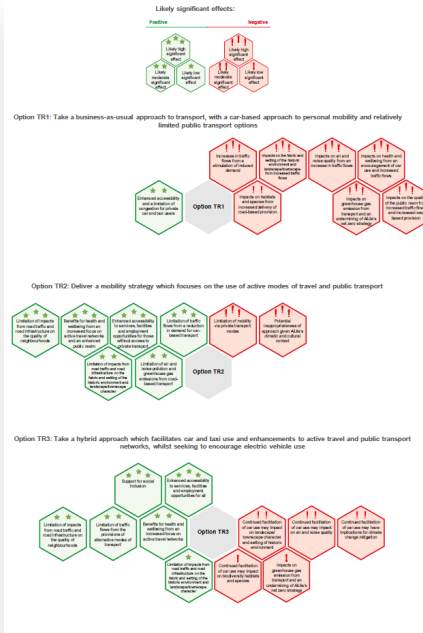
SEA: Options Appraisal

SEA: Monitoring Program

Significant effect/ environmental change to be monitored	SEA themes(s)	Indicator	Data source	Frequency of monitoring	Trigger for intervention
Sustainable transport use	🚴	Percentage of employees in MP1 travelling to work by public transport or active travel modes.	RCU	Annual	Where percentage decreases year on year.
Electric vehicle use	🚴 🌍	Percentage of vehicles fuelled by fossil fuels.	RCU	Annual	Where percentage of fossil fuelled vehicles decreases.

Conclusion

- Ongoing planning

- Ongoing engagement

- Monitoring in the future

Let's continue the conversation!

Post questions and comments in the IAIA24 app.

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