



# The Bigger Picture II

**Designing Better Places**

EDAW | AECOM Design + Planning

Fay Sweet

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publishing



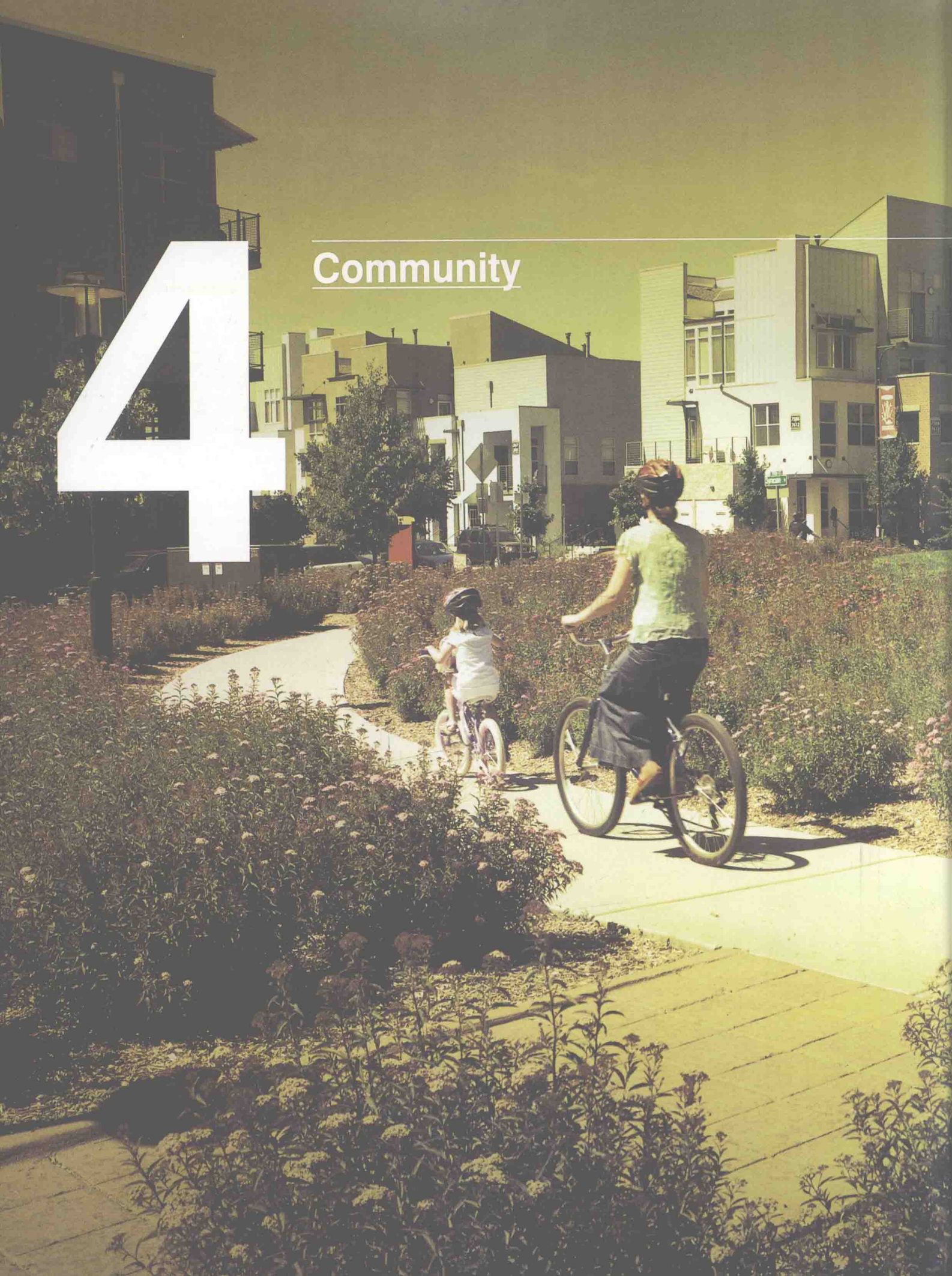
### *Quality of life*

By transforming the river banks into a new public space, the river has been given back to the people. To provide variety and interest along the stretch of promenade, the landscape is broken into open spaces of varying sizes, characters and uses inspired by the city's identity and cultural heritage. Local historical materials are juxtaposed with a bright colour palette for scale and texture that resonates with the city fabric while also creating a vibrant and cosmopolitan atmosphere.



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Community





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In this age of  
hasty urban  
expansion  
and trite,  
homogenising  
globalisation,  
planning new

# communities has become the real test- ing ground for sensitive design.

People react positively to comfortable homes, safe and friendly neighbourhoods with local shops and services, rich cultural life, and beautiful open spaces. Our design principles are thus simple but thoughtful and effective and include understanding lifestyle, heritage, and culture and respecting topography, ecology

and climate. This is how we create communities that we can be proud of and which will be enjoyed for generations to come.

**Professor Nasser Rabbat**  
*Aga Khan Professor of Islamic Architecture, MIT*

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**Concept**

Benchmark development in native bushland

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**Context**

Pacific coastal bushland/temperate

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## Murrays Beach, Wallarah Peninsula, Australia.

Finding the balance between environmental protection and development, Murrays Beach at Australia's Wallarah Peninsula sets new benchmarks in sensitive and sustainable community living.

*Opposite*  
Bushland community

The Murrays Beach development is integrated with its natural setting and its buildings sit lightly in the landscape. Studies of the site's natural qualities have included a survey of more than 100,000 trees.



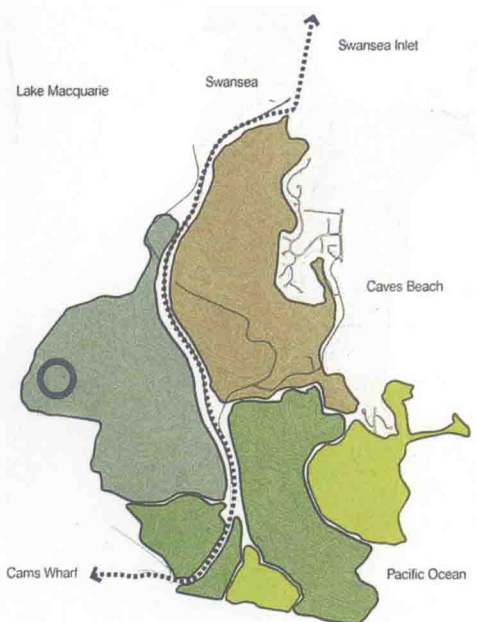


*Community*

**Murrays Beach,**

**Wallarah Peninsula,**

**Australia**



*Above*  
**Masterplan**

On the eastern shore of Lake Macquarie, Murrays Beach is within easy reach of the lakeside amenities, the Pacific coast and the ecologically rich Wallarah National Park.

-  Murray's Beach village centre
-  Murray's Beach (560 dwellings)
-  Pacific Highway
-  Wallarah National Park
-  Future coastal development (Pinny Beach)
-  Future development (Mawsons Ridge)

*Opposite*  
**Lightly in the landscape**

To preserve the character of the site, its undulating topography has been retained and residential building plots and building envelopes are planned around existing trees. Utilities are accommodated in shared trenches and service corridors to minimise the disturbance of vegetation root systems.

With its long stretches of beach, rocky outcrops, native forests and rich variety of wildlife, the 600 hectare Wallarah Peninsula forms a long and narrow stretch of land bounded by Lake Macquarie on the west and the Pacific Ocean on the east. Just over 100 kilometres north of Sydney, the area was the traditional land of the Awabakal people, and archaeological investigations indicate signs of habitation dating from 11,000 years ago. With its spectacular setting and impressive range of leisure amenities, the location is highly desirable and the brief for development was to ensure the site's natural assets and bushland character were protected and celebrated.

One of the first tasks undertaken by the developer was to dedicate 178 hectares of the peninsula to the state government to form Wallarah National Park. A masterplan, with supporting management plans, was then established to set an environmental and design framework for development of the remaining land.

Murrays Beach, on the eastern shore of Lake Macquarie, has been the focus of the first phase of development. Early work on the 200 hectare area included extensive surveying to understand the qualities of the site's topography, water courses, wildlife and vegetation, which culminated in a comprehensive survey of more than 100,000 trees. This information was then analysed and used to inform the evolution of the site plan by guiding the location of roads and other infrastructure, building plots and landscape design.

In terms of the natural environment, the development is designed to integrate with the landscape, with buildings sitting lightly on the land, avoiding sensitive areas along the foreshore, wildlife corridors, creeklines and critical flora and fauna habitats. All vegetation communities were mapped and more than six million seeds were collected within the site to ensure the supply of local plants; more than 250,000 plants were propagated in a dedicated offsite nursery. In addition, the site's undulating topography was retained and residential building plots and building envelopes were planned around existing trees. Utilities for homes were designed to be accommodated in shared trenches and service corridors to minimise the disturbance of vegetation root systems.



*Below*  
Learning landscape

Along with making the site easily accessible, boardwalks help to prevent sensitive areas from disturbance by large numbers of walkers. Information panels help residents and visitors understand and appreciate the qualities of the landscape.

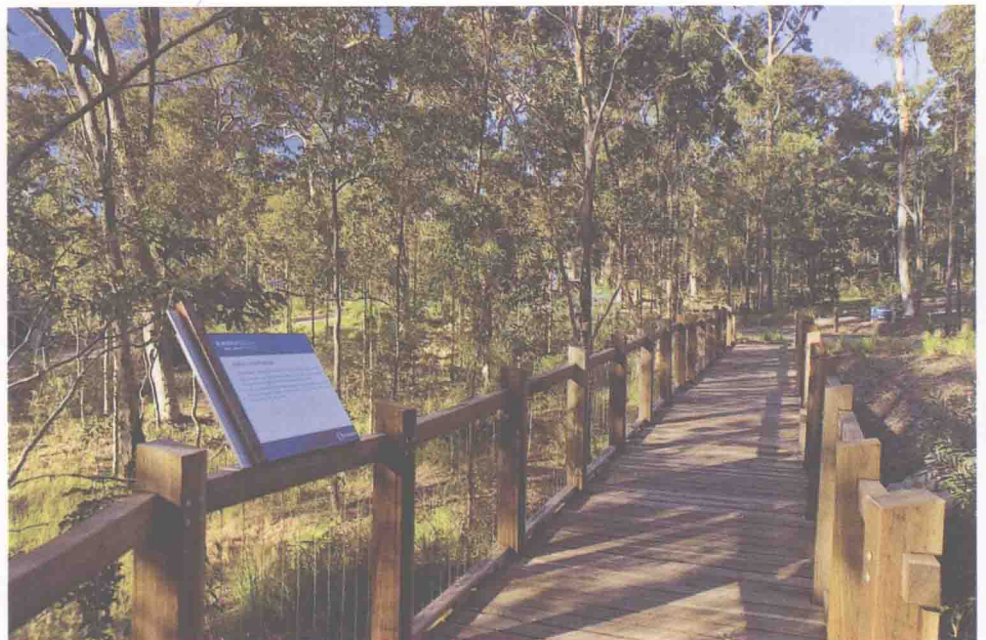
*Opposite*  
Retain, reuse and recycle

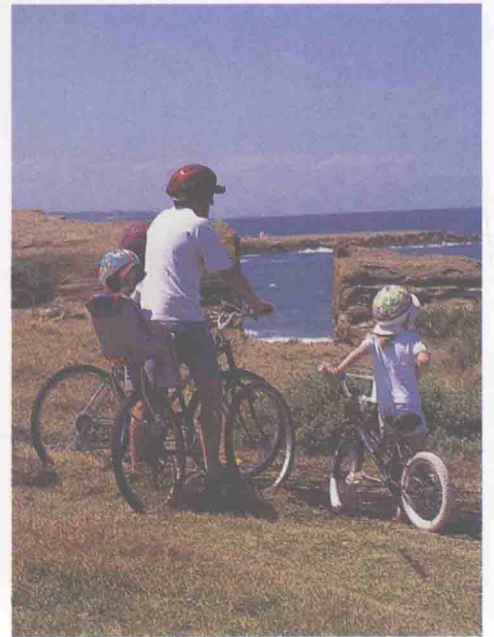
The distinctive character of this peninsula landscape has been carefully retained and new landscape features are carefully integrated. Rock recovered from the site is reused for retaining walls, driveways, paths and carparks; logs are reused for seating, fencing and steps where appropriate; hollow logs are relocated to wildlife corridors; and vegetation mulch is reused in landscaping.

Water management has been integrated from the outset. The site lies within the Sydney Basin Bioregion and is dominated by a temperate climate characterised by warm summers with no dry season. Rainfall occurs throughout the year, but varies across the bioregion depending on altitude and distance from the coast, with wetter areas being closer to the coast or in higher altitudes. The area's highest recorded rainfall is 246 millimetres in one day, so to manage sudden and extensive rainfall, the landscape design includes water detention basins, swales along the roadsides where appropriate and permeable paving materials. To promote water conservation, each home has its own rain collecting tank and the use of native planting and retention of natural vegetation has dispensed with the need for irrigation.

The sensitive reuse of materials has also been emphasised. Rock recovered from the site is reused for retaining walls, driveways, paths and carparks; logs are reused for seating, fencing and steps where appropriate; hollow logs are relocated to wildlife corridors; and vegetation mulch is reused in landscaping.

Social sustainability has been considered throughout, with homes grouped in small neighbourhoods around amenities such as a local village green, cafe, sports facilities, play areas and community centre. In addition, the networks of pathways and cycleways provide safe and easy movement around the site and help encourage exchanges between neighbours. The cycleways also form part of the site's economic sustainability, by providing easy routes to the local retail centre at nearby Swansea.





Concept  
From airport to community

Context  
Prairie/temperate



## Stapleton Central Park, Greenways and Community, Denver, USA.

When planes first flew from Denver in 1929, the new municipal airport, which would eventually become known as Stapleton Airport, was located on the city's far-flung north-eastern edge. In the intervening decades, a booming economy and rapid population growth have seen the city expand and gradually absorb the airport into its urban context.

*Opposite*  
*Hard top*

Hard and hostile, the former airport's site looked unpromising, but was in an ideal location within easy reach of the city centre.





*Echoes of the past*

Fragments of the old airport, including this control tower, have been retained as features of the new landscape which are evocative of the site's history. Occupying a vast swathe of land close to the centre of the expanding city, Stapleton Airport's scale echoed that of the surrounding landscape characterised by mountains and prairies.

By the 1990s, Denver's continuing economic growth drove demand for a new and bigger international airport that, once completed, would be the third largest in the world. With the new airport located east of the city, the vacated site of the abandoned airport presented a prime opportunity for redevelopment. The city's response to this opportunity was to create a new community called Stapleton.

The Stapleton vision was to create a modern, mixed-use and sustainable urban development for 30,000 people which would be just ten minutes from downtown Denver. The plan features the ideals of urban life—a network of walkable neighbourhoods, offices and retail areas with an integrated system of parks and open space, including a large central park. The largest urban infill project of its kind, Stapleton has become a national model for environmentally responsible urban redevelopment.

The development plan for Stapleton began to evolve shortly after the airport's closure in the mid-1990s. The site was large, having contained an airport with six runways and five terminals. Two years of extensive research and community consultation revealed that there was demand for a sustainable community based on traditional neighbourhoods with a mix of homes, shops and workplaces, walkable tree-lined streets, diverse and distinctive homes, schools, green spaces and environmental conservation. This vision was enshrined in the development plan called "The Green Book".

The Stapleton Central Park features prominently in the community's masterplan. This park has become a community centrepiece and a regional destination. With its links to the city's existing open spaces and with the creation of new trails, the Stapleton community will have access to the first greenway trail loop around a major US city. The design of the park also acknowledges Denver's Victorian city plan and ensures that Stapleton is integrated into the existing urban fabric by following the street, block, park and parkway pattern.

The goal of creating an environmentally responsible development was a prime consideration from the beginning of the development process. Along with promoting walking and cycling, other environmentally sustainable features including native and drought-tolerant planting, careful water management and construction methods that contribute to sustainability.

At a detailed level, homes are laid out in dense neighbourhoods of around 25 properties per hectare. Homes are mostly in traditional pitch-roof style with porches in the front and garages around the back. This design responds to the surrounding historic neighbourhood's architectural precedents. However, while they reflect the historical homes, they achieve modern performance standards by meeting the independently assessed Energy Star rating, which creates homes that are at least 15 per cent more energy efficient than regular properties. Meanwhile, the main shopping centre, Northfield Stapleton, was granted a LEED Silver certification in autumn 2006 making it one of the US's first retail complexes to achieve this high standard.



### Masterplan

Occupying the full footprint of the airport site, the development of a new community has been planned as a series of networked, walkable neighbourhoods, plus offices and retail destinations along with a system of parks and open spaces. One of the most prominent features is the grand Central Park.

The neighbourhoods are created for a variety of income levels and demographics and the parks and open-space systems are designed as an amenity for the new communities and for the wider region.



*Right*  
Building communities

As soon as the first residents moved in to this development, it was clear that the place was going to engender a strong sense of community. The provision of amenities and services is impressive including playschools, work clubs, car-share pools, children's after-school activities, centres for the older residents, sports clubs, cycle clubs, a popular neighbourhood newsletter and more. The landscape design encourages people to explore, take part in healthy activities and enjoy time with neighbours and friends. Many of the older residents say Stapleton has the feel of the places they grew up in where neighbourliness was the norm.

*Opposite*  
Recycling

One of the goals of the Stapleton redevelopment project was to enhance the sense of place by retaining and reusing some of the unique features of the old airport. Airplane hangars and outbuildings have been refurbished to accommodate a variety of businesses including Colorado Studios, a television and film complex. The former terminal's 5,000-car garage has become one of the busiest transit hubs in the Denver area and expanses of the terminal's carpet have found new life as carpet backing in commercial and residential installations. Even the runways have been recycled. Around 5.5 million tonnes of concrete and asphalt have found new uses as foundations, road and pathway aggregate while large, rugged blocks of concrete—nicknamed 'Staplestone'—have been used in walls, bridges and rough-paved areas.

