

PROCESSION CELEBRATING CHANGE
A community of people fighting towards the cause of change for the greater benefit of child development

DRAGON
A device constructed by the community to symbolize the end of era of vehicles on roads within the ULEZ. Remotely controlled by children.

PLAY EQUIPMENT
The children will be allowed to play on the dragon when it comes to a stand still.

DEMOLITION PROPS
Dragon will be armed with different tools which will demolish the roads.

DESTRUCTION TRIAL
The aftermath of the dragon passing will consist of a road which is dug up with sub-materials turned over onto the surface.

NEW PLAY AREA
Children will be able to explore and play in the new spaces offered by the dragon.

GROWING COMMUNITY
The neutralization of the demolished road becomes a point where communities and people gather to reclaim the spaces for their own events.

VARIOUS LOCATIONS OF UNDERGROUND SERVICES

UPROOTED ROAD
Exposed sub-ground level materials where service points will be damaged (Dragonman being made safe)

GEOLOGICAL SOIL PROFILE
Based on the bore hole assessment obtained from the national geological archive.

Furthering the proposal plan, the view highlights the depth of damage implemented to the ground surface. This is to allow weeds and pile of rubble to become a potential adventure playground which children will be allowed to move and adapt to their surroundings with tools and skills being provided.

CHILDREN'S
DRAGON

RISE UP THE GROUND

Country / City **UK / London**

University / School **University of Greenwich / School of Design**

Academic year **2020**

Title of the project **Children's Dragon: Disrupting Air Pollution, Creating Playgrounds**

Authors **Kris Cullum-Fernandez**



TECHNICAL DOSSIER

Title of the project	Children's Dragon: Disrupting Air Pollution, Creating Playgrounds
Authors	Kris Cullum-Fernandez
Title of the course	MLA Landscape Architecture
Academic year	2020
Teaching Staff	Honore Van Rijswijk, Emma Colthurst, Ed Wall
Department/Section/Program of belonging	Landscape Architecture and Urbanism [Greenwich]
University/School	University of Greenwich / School of Design



Written statement, short description of the project in English, no more than 250 words

The Children's Dragon is designed to disrupt air pollution caused by cars in London. According to the London Atmospheric Emission Inventory, 2 million Londoners are living in areas with toxic air, including 400,000 children. In face of government inaction, this proposal aims to give young people a 'manual and plan' to reclaim clean air by taking back their streets from motor vehicles. **The proposal is a landscape machine in the form of a dragon** - salvaged from construction equipment, logistical transport and old cars across London - along with instructions on how to reuse the materials to make playgrounds. **The machine moves along the streets breaking up the ground to create adventure playgrounds.** Children are the core of the project. The landscape architecture project includes instructions on how to build the landscape machine, how to operate it and how to remake the streets for people. Using smartphone applications children direct the dragon along the streets, moving, grinding, impacting, churning, ripping, and unmaking the vehicular street and producing a playground of debris, mounds, puddles, ponds and trees. As the dragon is worn-out, broken through its own destructive process, it finally becomes part of the new playscape.

< The studio brief was focused on designing for direct action to advance ecological justice and urban equity >

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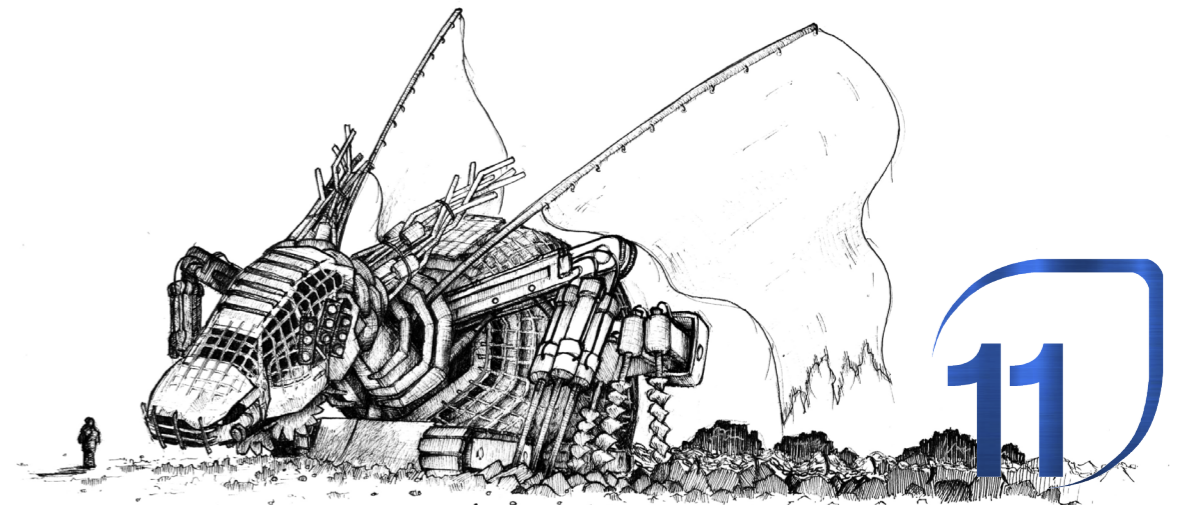
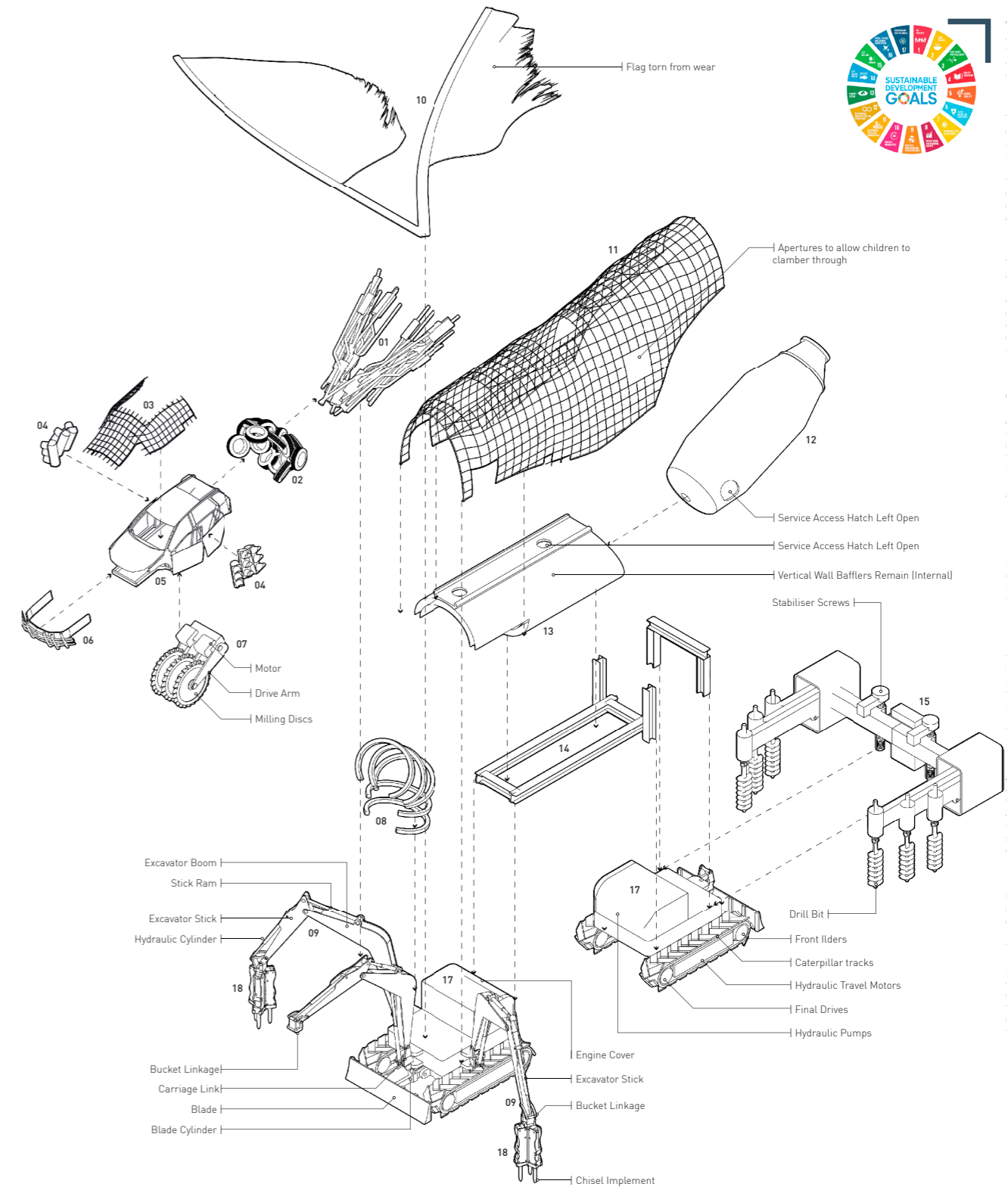
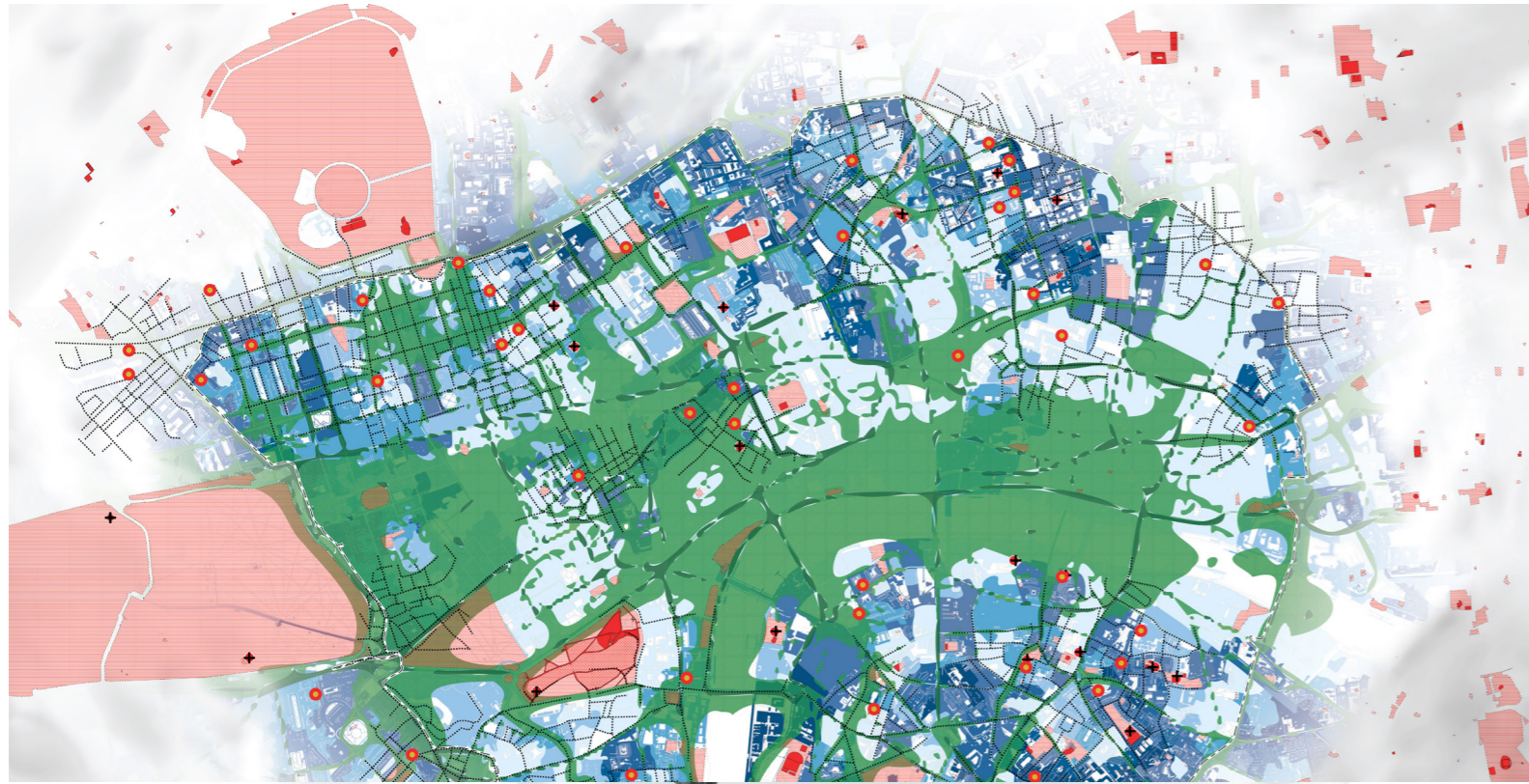
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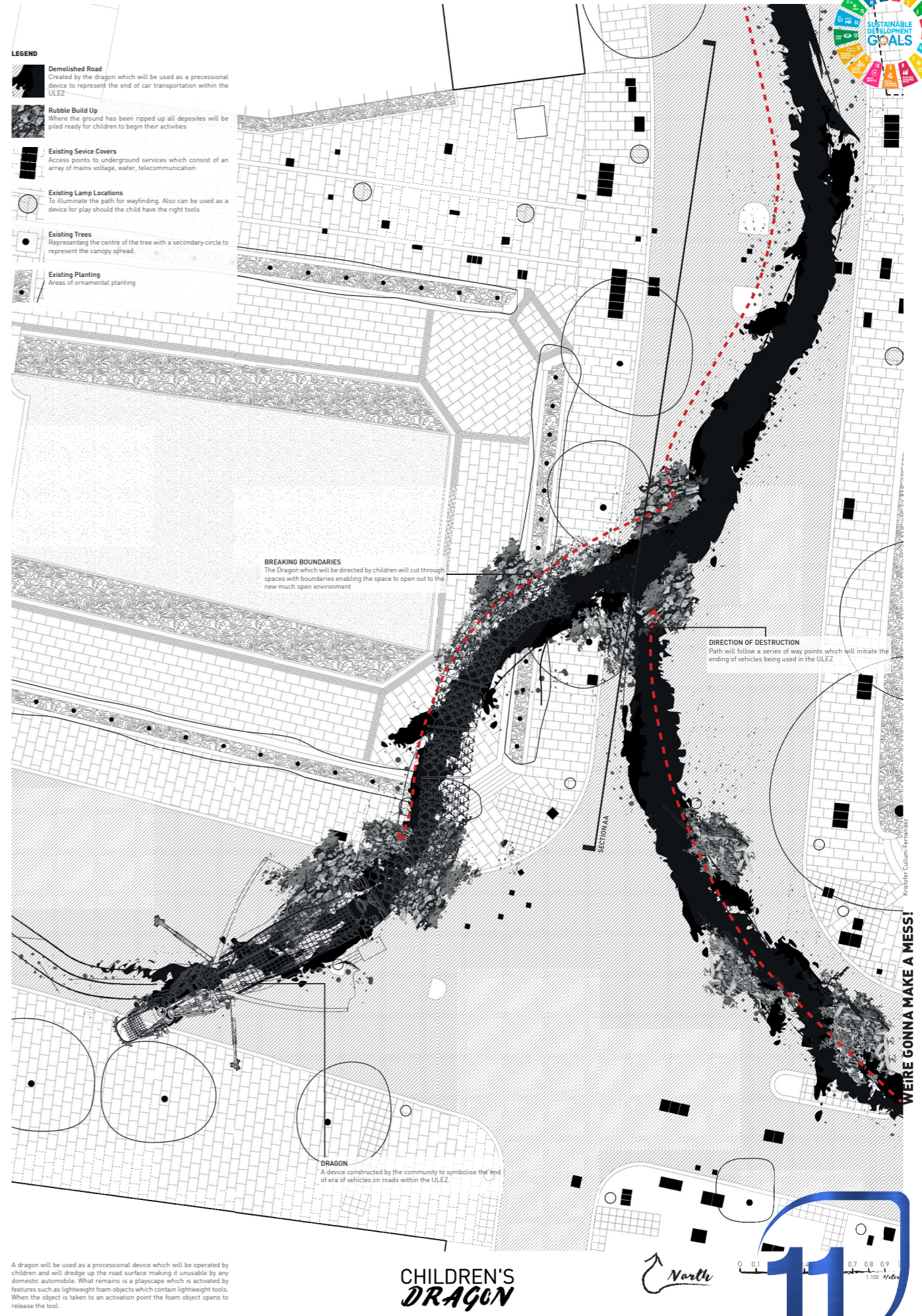


CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020
SCHOOL PRIZE

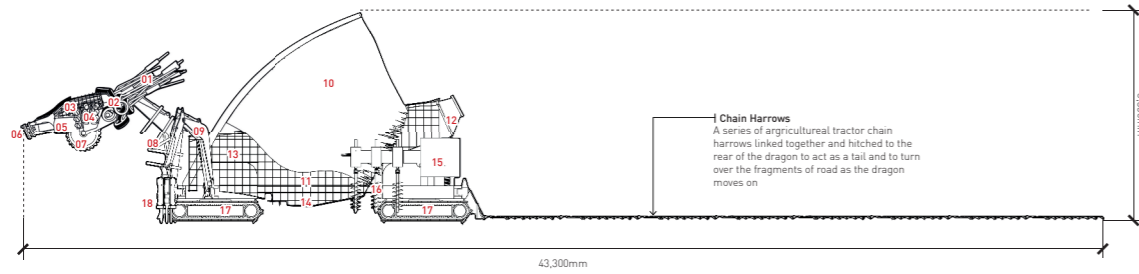




A dragon will be used as a processional device which will be operated by children and will dredge up the road surface making it unusable by any domestic automobile. What remains is a playscape which is activated by features such as lightweight foam objects which contain lightweight tools. When the object is taken to an activation point the foam object opens to release the tool.

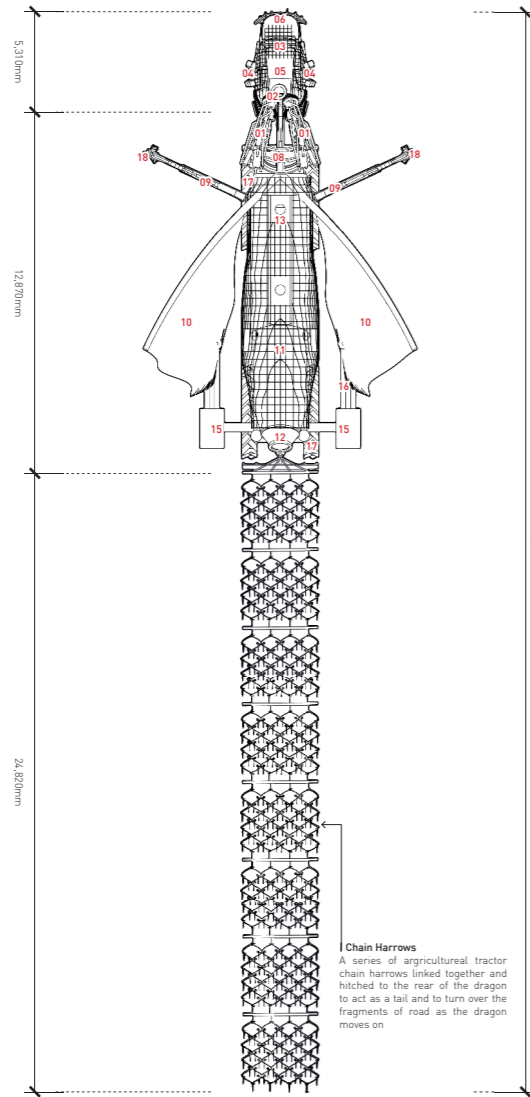


| ELEVATION VIEW |



Chain Harrows
A series of agricultural tractor chain harrows linked together and hitched to the rear of the dragon to act as a tail and to turn over the fragments of road as the dragon moves on

| PLAN VIEW |



Chain Harrows
A series of agricultural tractor chain harrows linked together and hitched to the rear of the dragon to act as a tail and to turn over the fragments of road as the dragon moves on

01 | EXHAUST PIPE HORNS
To represent all the bad emissions which cars pollute into the streets of London. Instead this would emit plumes of steam which gives the impression that the dragon is cleaning the air

02 | TYRE FORMING JOINT
The term forming joint refers to the anatomy of the membrane where a dragon skull and horns grow from. In this instance created from salvaged car tyres

03 | REINFORCEMENT MESH
This works as two measures, to reduce the chance of large projectiles being fired from milling or grinding the road. Also to stop children falling into the discs when the machine has come to a stop

04 | TRAFFIC LIGHT EYES
In relation to road and traffic, the pelican lights will be used to represent the activation of the dragon.

'Red'
Do not approach as dragon is now destroying the road and is activated.

'Amber (Solid)'
Please step away as dragon is starting up demolition equipment

'Amber (Flashing)'
Dragon is shutting down please be aware of equipment winding down and will need to cool down.

'Green'
Dragon is safe to approach and play on and with all areas and aspects of its equipment as demolition equipment is deactivated

05 | SHELL OF POPULAR I.C.E. CAR
A small family sized car will be chosen from the streets and stripped apart to its chassis, which will then be mounted onto the excavator stick and be used as a skull for mounting parts onto. This will be the first car that ends all cars in the ULEZ

06 | ENGINE PIPE WORK BUMPER
From the salvaged car and engine parts a barrier will be constructed which will assist with the pushing over of street furniture such as lamp posts, traffic lights and street bollards

07 | OVERSIZED MILLING DISC TEETH
Much like what are used on road planers when repairing strips of road surfaces, this will similarly grind away the surface and commence the initial stages of demolition.

08 | NECK RINGS
Constructed from the remains of a fuel tanker trailer these will be welded to the boom arm of the excavator providing the illusion of a neck

09 | ADDITIONAL HYDRAULIC ARMS
Salvaged from other excavators, the arm of excavators including carriage will be cut and welded to the base excavator, with hydraulics spliced to the motor. Two arms will be added to act as front dragon legs

10 | FLAG WINGS
With artwork designed by local community centres. The flag will fly the colours of the district which created this dragon to inspire other communities to create theirs

11 | REINFORCEMENT MESH
There are many construction sites in development in and around the ULEZ such as road bridges. This will be reclaimed reinforcement steel mesh bent around the dragon to create the dragon's abdomen. The aperture of the mesh will be large enough for children to use as a climbing frame and explore.

12 | CEMENT MIXER DRUM
To represent the high amount of concrete used in the creation of road elements. A barrel from a HGV cement mixer will be salvaged, safely cleared of large debris and harmful contaminants, where children can explore the interiors of this drum safely.

13 | DISMANTLED FUEL TANKER CONTAINER
High volumes of fossil fuels liquids are delivered via the tanker. One unsuspecting tanker will be safely cleaned, decontaminated and cut into the a shape to allow the cement mixer barrel and support frame to link. Internal baffles will remain to provide an element of play for children.

14 | STEEL SUPPORT FRAME
Using rolled steel joists as a robust method of connecting the two excavator tractor units together, including the bearing the weight of features fixed above.

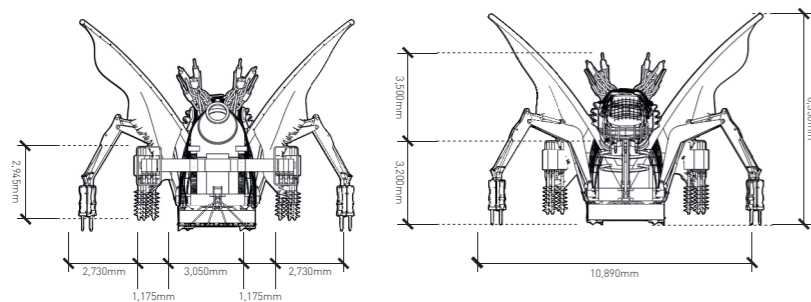
15 | REAR LEGS
Using hydraulic stabiliser arms from larger lorries (used when a lorry is using its hiab facility to stop it from tipping over.) The ends of the stabiliser arm will have auger motors and connectors retro fitted to represent the rear legs and claws of the dragon.

16 | AUGER IMPLEMENTS
Auger screws will be detachable and interchangeable which will allow the dragon to continue from wear and tear. These will allow any drilling up to a depth of 1.2m churning up the sub-ground materials and potentially damaging services.

17 | CABIN REMOVED EXCAVATOR
Commonly used on construction sites for the excavation of soil. The excavator acts as a tractor unit for many implements which can replace the bucket attachment originally recognised on this plant. The cabin will be removed from this excavator with controls being converted to a radio controller facility. Drivers of these tractor units will be radio controlled only (giving children the opportunity to drive the dragon).

18 | BREAKER IMPLEMENTS
Implements which can be obtained individually will be welded to a triangular prism frame and hitched onto the bucket linkage on the excavator stick. These will break through hard surfaces and open up areas of high compaction such as road sub-base layers

REAR VIEW | FRONT VIEW



CHILDREN'S DRAGON



Kristler Cullen-Fernandez

FOUND SOMETHING ON TOP OF A CHURCH!

