

# Ada Lovelace Cof E High School



Ada Lovelace C of E High School

# **Building Presentation Evening**



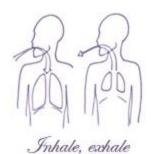
# Dame Alice Hudson

## **Executive Headteacher**

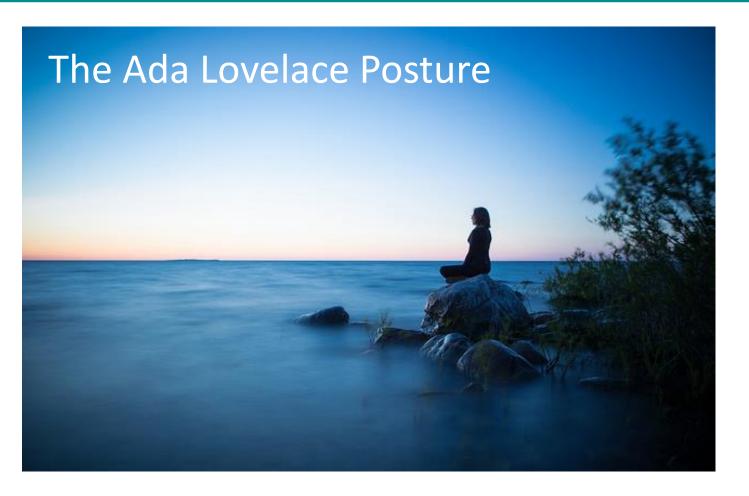
Twyford Church of England Academies Trust











"I have come that you may have life and live it to the full" - John 10 v 10

### **Responses:**

How good and pleasant it is when God's people live together in unity.

When we live in harmony God commands his gift.

When we live in unity, we discover God's blessing **Even life for evermore.** 



### Reading

<sup>24</sup> 'Everyone then who hears these words of mine and acts on them will be like a wise man who built his house on rock. 25 The rain fell, the floods came, and the winds blew and beat on that house, but it did not fall, because it had been founded on rock. <sup>26</sup> And everyone who hears these words of mine and does not act on them will be like a foolish man who built his house on sand. 27 The rain fell, and the floods came, and the winds blew and beat against that house, and it fell—and great was its fall!'



Matthew 7: 24-27

### Strong Foundations very necessary in the day-to-day





### **Underlying Support**



Twyford

Cof E

Academies Trust

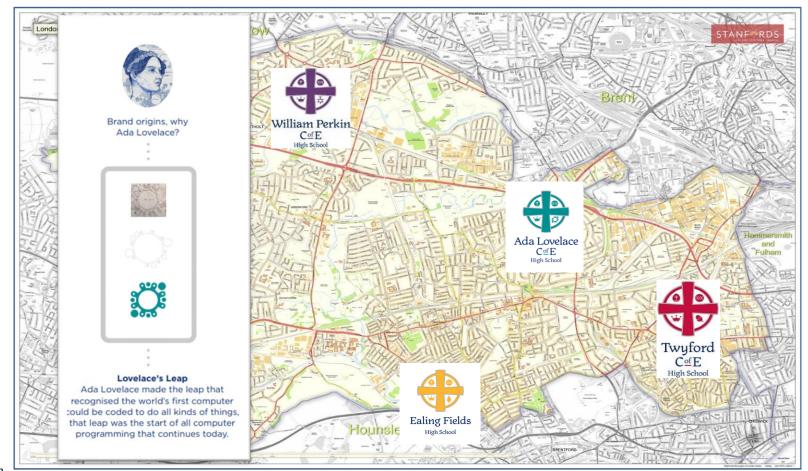














"Leaders have superbly developed a distinct Ada Lovelace ethos and identity for the pupils...who love the school and feel very secure."

DFE Monitoring Visit 2019



# Make the Leap

Establishing a distinctive learning culture







### ADA Senior Leadership Team

**Mr Smith** Headteacher











Miss Brewer
Assistant Headteacher



Mr Cowing Wider SLT



Miss Reif HOY 7



Miss Marr HOY 8

Ada Lovelace Assistant Headteacher Wider SLI

Cet E

Hith School "I have come that you may have life and live it to the full" – John 10 v 10



# **Building on Firm Foundations**

Development Planning Priorities 2020-23 Recruitment Planner

#### Building on Firm Foundations: Development Plan & Recruitment Overview

the Twyford Trust was formed in 2011 to offer more school places to meet increased demand locally. By September 2020 both Faling Fields and Ada Lovelace will have moved into their new school buildings and the Trust's toolkit of common systems and approaches will be established each. The priorities identified in 2016 as this expansion was planned are set out in the boxes below (Curriculum & Assessment / Post 16, Staff Training and Development and Resources). The areas for improvement on the back of this leaflet are agreed as steps within this plan and hould position all 4 schools strongly for the Trust's next 10 years as it launches its differentiated post-16 offer and grows to its full size with over 300 teaching staff by Sept 20281

#### Priority 1 Curriculum & Assessment:

Central to the success of all 4 the schools is our curriculum and sessment model which has been developed collaboratively and an now be refined with the support of Trust subject leads. This scludes the generic learning habits which are identified in the rning culture. We will aim to embed the first 4 of these (Literacy Memory skills) in phase 1 (2019-21) with a further focus on inking skills/computational thinking in 2021-23)

sements to the assessment system are appropriate at this e to ensure that it works as a diagnostic tool for teachers, in king minor adjustments to lesson delivery and for students oticing / addressing weaknesses in their learning habits.

#### rriculum (Intent/Implementation/Impact)

First A-Level

Ada Lovelace &

Ealing Fields

results

ure principles of curriculum and assessment are clear ditions for effective learning well-understood dents supported to become capable of self-direction

summarised

Trust conference on Metacognitive

of experienced members of staff

RF – Philosophical problem solving piloted

approaches to retention & retrieval)

#### Priority 2: Trust 6th Form

The 10: 10 ethic, common to all schools, aims to achieve responsible & reflective communities in which all individuals make aspirational choices from individual starting points. Our commitment to strong self review by students supports them to make better progress but also good decisions over progression. In 2021 and 2023 Faling Fields and Ada Lovelace, will take their first GCSEs. By 2023 the Trust will have launched a new and very different 6th form at Ada Lovelace, focussed on careers within the diffital economy. At this point students from all four schools will be able to make informed choices between these options providing that capacity planning is carefully undertaken

#### 2. Post-16 Strategy

- · Chart clear progression to FE/HE/training & employment . Capitalise on the strength of existing 6th form provision
- · Extension programmes developed post-16

- Curriculum / Assessment / Teaching & Learning Pastoral / Wider Learning/IAG · Copia Curriculum pages refined · IAG Copia set up . Trust 'Teaching Learning' strategies · SIMS W/L Capture works CPOMS in use Gatsby framework used
- EF Philosophical problem solving piloted Cluster groups piloted to share best practice · EF y10 IAG progression pathways planned . Entry grades for post-16 pathways within Coaching models developed at WP & Tax Trust agreed?
- · Post 16 A-Level resources refined & co- Self-review booklets refined & revised to ordinated in the light of Sept 2020 outcom include PSHE impact and learning culture Al. Computational thinking piloted · Plan A/Plan B system used in the light of · KS4 digital on-line courses piloted expected changes to Level 3 entry grades
- . Trust Target setting & assessment reviewed 8F y11 IAG progression pathways secure · AL Specialist KSS digital offer agreed Al. KS3/4 digital design curric piloted
- Integrated Approach to Computational Ada Lovelace post-16 offer included within students move to /phase ii thinking skills piloted Trust-wide Yr 10 options pathways in all schools industry partners for AL post-16 identified AL y20 IAG progression pathways planned Post-16 extension grog aligned WP & Tax. · Trust post-16 prospectus (2023) designed AL KSS digital courses planned & on-line Ada Lovelace post16 courses + career plat form established
  - AL y11 IAG progression pathways

progression opportunities launched

#### Priority 3: Staff Training and Development

3. Staff Training & Development

Achieving a consistent culture has made the Trust a very positive environment for teacher training. The interchange between schools has also allowed schools to refine their CPD programmes and experiment with new approaches in peer to peer support (gg. 15:15 coaching and open-door clusters). Feedback from staff has confirmed research that the coaching model is more effective and more motivational than lesson observations in bringing about improvement and all schools will therefore go over to this model from Sept 2020. Further steps will also be taken to align whole staff CPO between the schools including establishing a curriculum / pastoral development day in June

· Develop peer-to-peer support models (inc. subject leads)

· Establish the status & use of Advanced-level practitioners

· Make full use of William Perkin as Teaching School hub

#### Priority 4: Resources to improve access and usage

Collaborative approaches and shared central services have been cost effective and helped manage some issues of staff workload. Successful changes to the curriculum area of Copia can now be followed through with similar pruning of other areas of the VLE

A need for further support has also been identified in the area of Health & Safety / Whole school safeguarding practice. School level decisions will also be made on non-teaching roles to support Inclusion and IAS

All schools will continue to evaluate the impact of the length of school day and models for wider learning.

#### 4. Resources

- . Curric/Staffing models/Extended school day/WL viable . Copia used to full potential
- . Trust services developed to meet the needs of 4 schools

	RESOURCES Recruitment	RESOURCES Capital Priorities / IT / Services & Specialisms
2019-20	Trust Head of Sport & WP Subject Lead (CS3-5)  Top, & A.L. Worth Set Lead for English - Literacy  AL WSTI Head of Ris - MMS  A.L. & EF Head of You're B  A.L. Head of Statemen & J. W  A.L. Subject leads of History / Geography/Computing/Music  M.S. Subject leads of History / Geography/Computing/Music  Man. Leads tracking posts in English (AL/FF)/APP), Music (M/Type), Music  MIN STATEMENT (AL/FF) (AL/FF) (AL/FF)  MIN STATEMENT (AL/FF) (AL/FF) (AL/FF)  MIN STATEMENT (AL/FF) (AL/FF) (AL/FF)  WO. The Computer (AL/FF) (AL/FF) (AL/FF)  W. M. Increments IF x 2 (Decision & Sam Co. Ogg Al. Agal Head Assessment  W.S. Theorements IF x 2 (Decision & Sam Co. Ogg Al. Agal Head Assessment	WP 6 <sup>th</sup> Norm Cafe operational & plan in place for first floor extension     Re-location plan in place for Al. & EF     Sock landing marrangements made for Al. & EF
2020-21	A. WST. Competing + Industry Links     A. USA co-ordinators in English / Master /Sci     A. Had of Vig.     A. Had of Vig.     A. Logar-wase Pasteria     A. Logar-wase Pasteria     A. Touching staff in most ourniculum areas to meet need     EY SMSC T&L Lead	EF & At new building opened     WiP First floor café extension complete     EF & At Mod increase     Inter-trust post-16 admissions piloted
2021-22	Trust SEN review (log responsibility posts & costs)  AL Hox 8  AL Additional teaching /support staff to meet need  EF / AL 2" Deputy	
2022-23	Ai. Additional teaching /support staff to meet need At. KSS Lead (14-19 Digital pathways, IAG & Industry links)	Fully Co-ordinated post- 16 admissions in place



Ada Lovelace *1815-1852* 

Mathematician
Computing Pioneer

Courageous

Visionary

Innovative



Make the Leap

Logical

Creative and Applied Problem solvers

**Decision Makers** 



# Make the Leap

Establishing a distinctive learning culture

#### **Metacognition**

#### Why?

- Vital for students to thrive in life-long learning
- Builds autonomy and resilience
- Increased pupil progress
- High impact, low cost

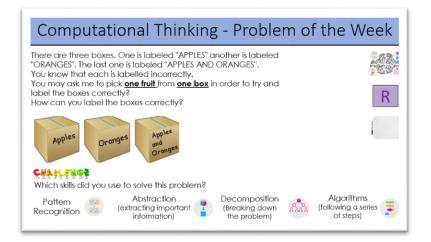
#### **Computational Thinking**

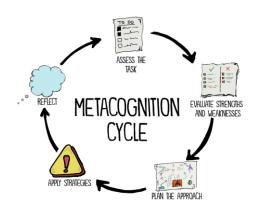
#### Why?

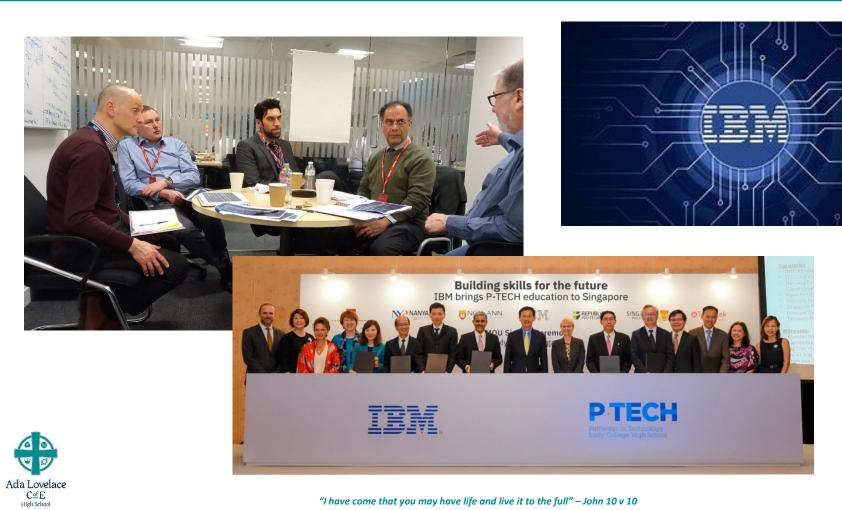
Ada Lovelace C⊈E

High School

- Applying skills in unfamiliar contexts
- Confidence in dealing with complexity
- Persistence in working with difficult problems
  - Ability to communicate to reach a common goal











Ada Lovelace Cef E High School

"I have come that you may have life and live it to the full" – John 10 v 10

# Mr Keir Smith

Headteacher

Ada Lovelace Church of England High School



# Aims of the Evening

- Bring together the AL parent/school community
- Provide an update on progress with building
- Share opportunities for aesthetic enhancements to the building...
   'Raising the spirits and supporting culture and ethos'....
- Share successes and brainstorm potential ideas for fund raising
- A message from the 'embryonic' PTFA



# Kier Construction

**Building Contractor** 



# **Ada Lovelace**

February 2019 – January 2020



# February 2019









### **March 2019**









**April 2019** 











# **May 2019**









## **June 2019**











# **July 2019**









# **August 2019**









# September 2019









### October 2019









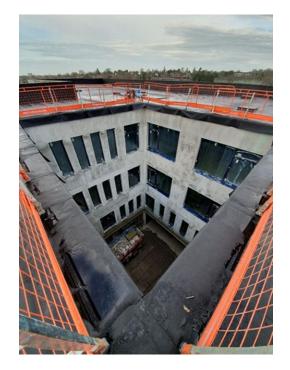
### **November 2019**



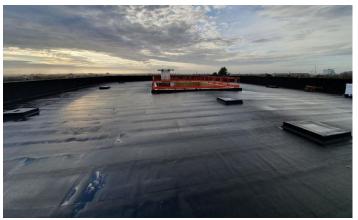




# **December 2019**









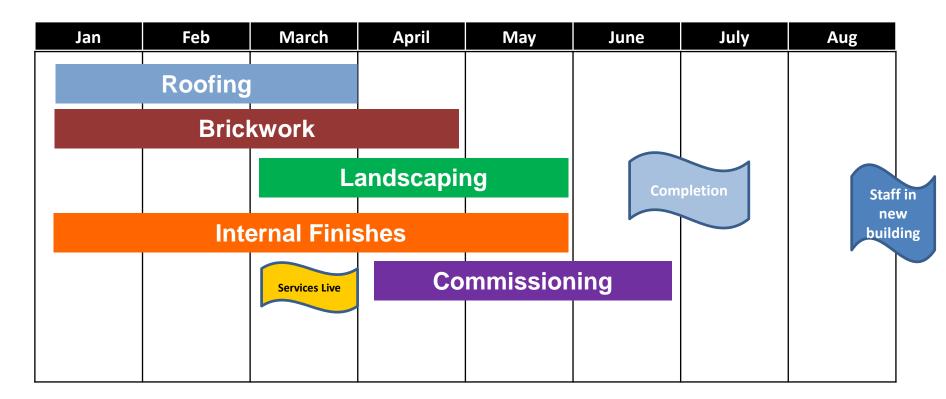
# January 2020













# RAW Brothers

**Creative Consultants** 





#### Contents

#### Introduction

#### 1. Wayfinding package

Perimeter sign
Driveway totems
External building signage
Internal wayfinding room names, toilets
Carpets colours
Toilet area colours
Glass manifestations

#### 2. Internal graphics environment

Wallpapers Glass manifestations Stairwell lollipops Vinyl quotes Silent system Room names

#### 3. Internal digital

Large screens in reception
Digital experience and content

#### 4. External furniture

Concrete seating

#### 5. External art / sculpture

Approach to building large wall facia Hard surface

#### 6. Internal art / sculpture

Main reception



#### The background

#### Work to date

So far RAW Brothers have run the brand workshop phase and produced a high level creative vision for the space. These documents are available on request.

#### Research and fact gathering for this report

Research consultancy looks at what options could be put together in a phased plan for Ada Lovelace brand environment and how that could be delivered over a period of time:

- · Standard school approach graphic elements e.g. wallpapers, quotes, wall graphics
- · Reception art installation and digital approach
- · Outside sculptural seating area
- · External courtyard calm area: explore sculptures, 3d elements

#### Vision - Make the leap

Reflect the digital, computing, tech, future focus of school and create elements that 'lift the spirits'

#### Cost approach

The costs included in this document are a draft indicator to help with budget/fundraising planning:

- · All costs are high level estimates
- Based on an initial survey and draft concepts
- · They are to show the art of the possible
- They are subject to post build design survey then revised designs and production costs
- · Costs do not include VAT and some costs do not include delivery and installation.

# Twyford Trust family

#### Parent



#### Children









"I have come that you might have life and have it to the full" "Intelligent engagement with the wider world" "Make the leap" "Leading with courage and compassion"

## Ada Lovelace's uniqueness









Music Languages Chaplaincy Science Science Sport Languages Music Chaplaincy Digital Technologies Music Languages Chaplaincy Science

Music Languages Chaplaincy Science



#### **Analytical Engine**

Ada Lovelace made the leap that recognised the world's first computer could be coded to do all kinds of things, that leap was the start of all computer programming that continues today – it is called 'Lovelaces Leap'.

## Twyford Trust 'connected' brand environment approach



Books don't make a home – they are one, in the sense that just as you do with a door, you open a book, and you go inside. Inside there is a different kind of time and a different kind of space.

Jeanette Winterson's 'Why be Happy when you could be Normal?' Born 1942
STEPHEN
HAWKING
Set forth a theory of cosmology explained by a union of the theory of relativity and quantum mechanics.

"To create you must quiet your mind. You need a quiet mind so that ideas will have a chance of connecting"



Eric Maisel



1 Sports Hall





# Wayfinding package



External building signage (design TBC)



External building signage (design TBC)



External building signage



Driveway totems



Internal wayfinding



Driveway totems



# Wayfinding package



Glass manifestations



Glass vinyl dots



Logos on entrance doors



## Unique concept for Ada Lovelace High School







# Giant leaps - powered by code

4 floors of stories - of leaps and problem solving made by mankind both as individuals and teams over the last 175 years (since Lovelace circa 1843) using code/algorithms.



Technology themed giant leaps







Creativity themed giant leaps



Welcome to our home of...

# Giant Leaps

Leaps = 2

Languages. Maths, Humanities

#### Powered by code since 1843 }

To match the 'giant leap' theme, each floor would tell stories and ask questions centred around how code has impacted different parts of our lives, all supported by visual cuse and physical virtual points of interactions for students.

Information themed giant leaps



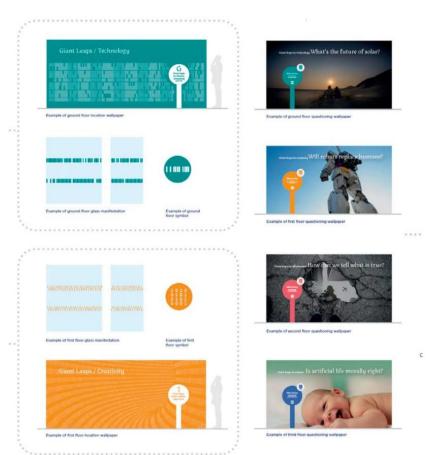
Giant leaps will form the basis for how we tell our story inside our physical environment.



Science themed giant leaps



# Giant leaps - tech icons, images, graphics



# Across wallpapers and wayfinding

















The physical environment does have long corridors and so further graphic exploration of the Giant Leaps could be created through use of floor symbols.















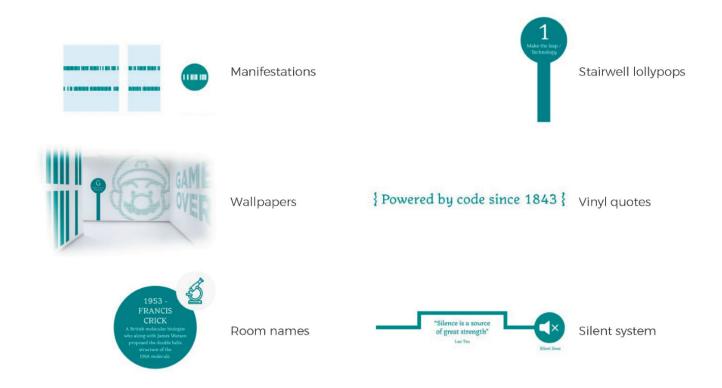








# Example of graphic elements to be used







## Internal graphics environment summary

Estimated approach allows for whole school and includes draft design, artwork, production (does not include installation cost, budget approx. £3000)

	Manifestations	Wallpapers	Room names	Stairwell lollypops	Vinyl quotes	Silent system	Total £'s
Ground	x 5	x 5	x 6	x 3	x 5	x 3	£9460
First floor	x 4	x 5	x 15	x 3	x 3	x 3	£10,240
Second floor	x 4	x 5	x 15	x 3	x 3	x 3	£10,240
Third floor	x 4	x 5	x 15	x 3	x 3	x 3	£10,240
Target total							£40,180





# How could digital be used?



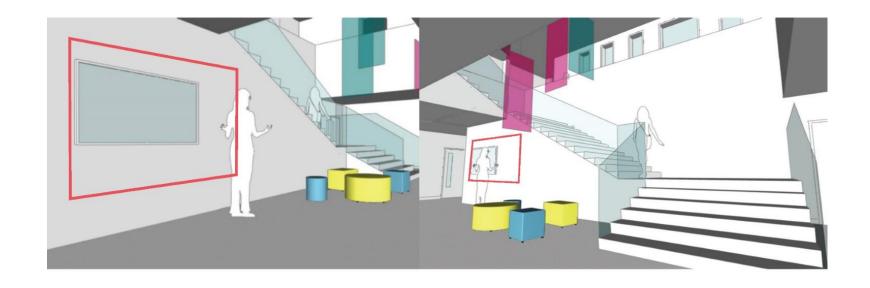








# Potential reception position for screens





# Internal digital summary part 1 - hardware/software

Estimated approach for production, consultancy, tech integration, onsite testing. Detailed cost will following further briefing

Reception	Each floor	Location player required	Target total (HW/SW)	
MediaWall reception monitor 98" (single monitor) dimensions apprx 2.2m x 1.2m + mount	Individual monitor 65" + mount, one on each floor	Brightscreen player, one for each screen		
1 x £20,500	4 x £3000 = £12,000	5 x £900 = £4500	£37,000	



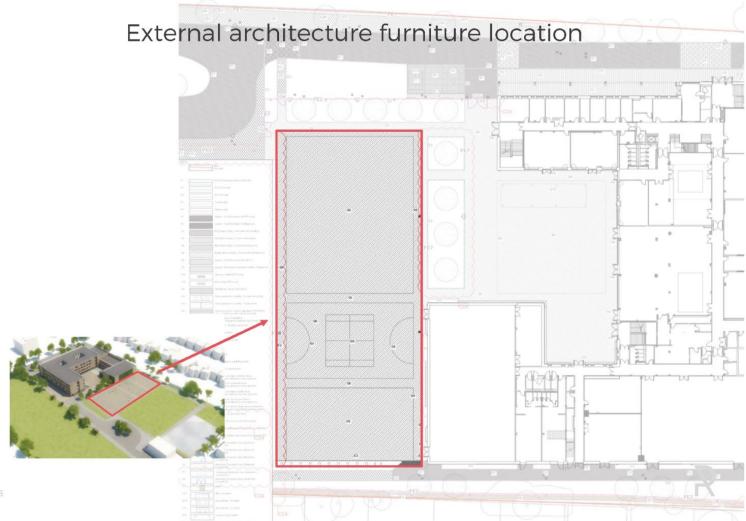
## Internal digital summary part 2 - content and software

Estimated approach for production, consultancy, tech integration, onsite testing. Detailed cost will following further briefing

	MediaWall pre-rendered animation, e.g. school logo	Small monitor (DSN) pre- rendered animation e.g. school logo	MediaWall templates	Small monitor templates	Appspace software	Target total (options)
Gold	3	3	9	9	Free up to 5 screens	£12,250
Silver	2	2	6	6	Free up to 5 screens	£8,750
Bronze	1	1	3	3	Free up to 5 screens	£5,250







# Architectural external furniture – options



Marshalls Twig



-6



Marshalls Arrow

Broxap Folio





# Architectural external furniture – options





#### External architecture furniture theme







## Architectural external furniture - themed





Marshalls Zigzag

## External furniture summary

# Estimated approach external hard surface area furniture \*does not include delivery, installation and VAT

	Marshalls Twig	Marshalls Arrow	Marshalls Garrone	Marshalls ZigZag	Broxap Folio	Broxal Sale
Quantity	£2,998 (per piece)	£1,750 (per piece)	Bordeaux £950 (per piece)	£1,150 (per piece)	£800 (per piece)	£1,328 (per piece)
			Toulouse £1,065 (per piece)			
			Aran £1,452 (per piece)			
	x 20	x 20	x 20	x 20	x 20	x 20
Target total (options)	£59,960	£35,000	£21,300	£23,000	£16,000	£26,560

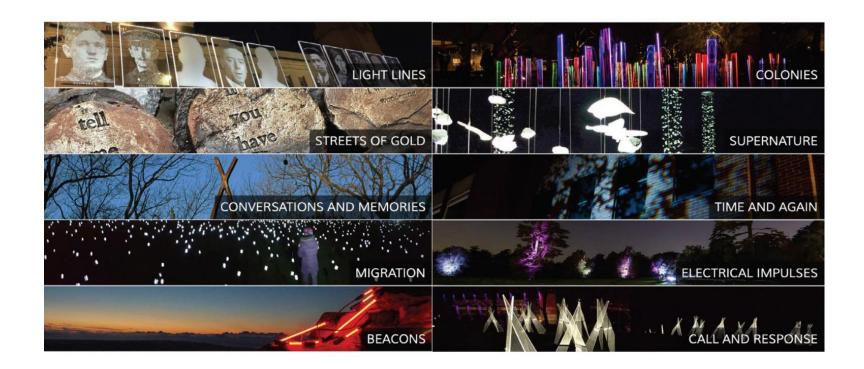




# Working with artists Musson + Retallick



# Responsible for William Perkins sculpture and...





#### The Lovelace Collection

This is one of three connected artworks inspired by the story of Ada Lovelace. They reveal her mindset and promote aspirational values for young people. They appear as a journey leading into the school and celebrate invention, imagination and collaboration. Sculptures outside the building tap into the creative history of computer programming. Inside the building a collaborative piece is shared with all of the pupils who can upload data which becomes abstracted content in the artwork.

Each sculptural element has been designed such that it can work at different scales dependent on budget.

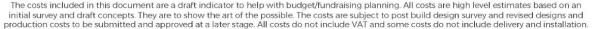


## Site 1 - Landscape (celebration invention)

## CORTEN STEEL SCULPTURE MEETING POINT

- Sculptural interpretation of punch cards
- Visible on the approach to the main entrance
- Filtering sunlight, providing shade, welcoming people
- Inspiring ambition based on the monumental global impact from the development of an apparently simple physical form
- Note: It is not possible to climb this sculpture because the holes have an internal structure.







# Site 1 - Landscape (celebration invention) 00000 The costs included in this document are a draft indicator to help with budget/fundraising planning. All costs are high level estimates based on an initial survey and draft concepts. They are to show the art of the possible. The costs are subject to post build design survey and revised designs and production costs to be submitted and approved at a later stage. All costs do not include VAT and some costs do not include delivery and installation.

#### Site 2 - Façade (celebrating imagination)

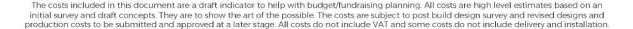
#### MIRRORS SYMBOLISING PUNCH CARD HOLES

- Installation angles mirrors to reflect different elements of the school, the students and the sky
- Looking up (physically and ambitiously)
- Reflecting the viewer; you are person with power to improve society
- Reflecting the sky; the sky is the limit
- Reflecting imaginative potential within the school











#### Site 2 - Façade (celebrating imagination)



The punch card artwork on the building uses high quality security mirrors which are designed to be as vandal proof as possible. They can be cleaned if necessary.

The costs included in this document are a draft indicator to help with budget/fundraising planning. All costs are high level estimates based on an initial survey and draft concepts. They are to show the art of the possible. The costs are subject to post build design survey and revised designs and production costs to be submitted and approved at a later stage. All costs do not include VAT and some costs do not include delivery and installation.

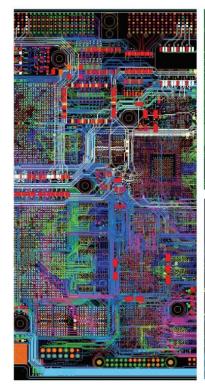




#### Site 3 - Interior (celebrating collaboration)

#### INTERACTIVE PROJECTIONS

- Multiple projections redirected by a satellite of mirrors through filters and onto sculptural screens
- Programmed by pupils installation 'owned' by different pupils as they upload their data
- Innovation through working with others
- Showcasing individuals ideas and abstracting imagery across architectural surface
- The culmination of the primitive punch cards







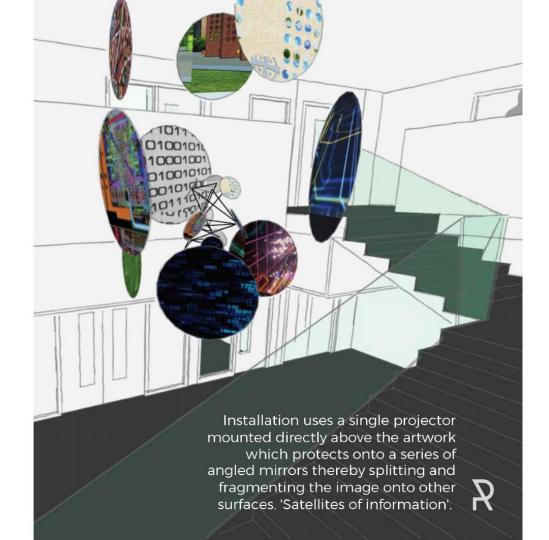


## Site 3 – Interior (celebrating collaboration)

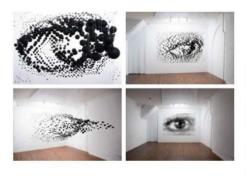




The costs included in this document are a draft indicator to help with budget/fundraising blanning. All costs are high level estimates based on an initial survey and draft concepts. They are to show the art of the possible. The costs are subject to post build design survey and revised designs and production costs to be submitted and approved at a later stage. All costs do not include VAT and some costs do not include delibers and installation.



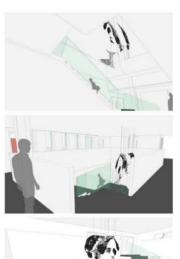
#### Additional atrium concept (not costed at present)















The costs included in this document are a draft indicator to help with budget/fundraising planning. All costs are high level estimates based on an initial survey and draft concepts. They are to show the art of the possible. The costs are subject to post build design survey and revised designs and production costs to be submitted and approved at a later stage. All costs do not include VAT and some costs do not include delivery and installation.



#### External and internal for Lovelace Collection

Estimated approach external and internal sculpture works \*does not include delivery, installation, ground works and VAT

Site 1, Landscape	Site 2. Façade	Site 3, Interior
£18,480 ex works	£17,500 ex works	£22,400 ex works



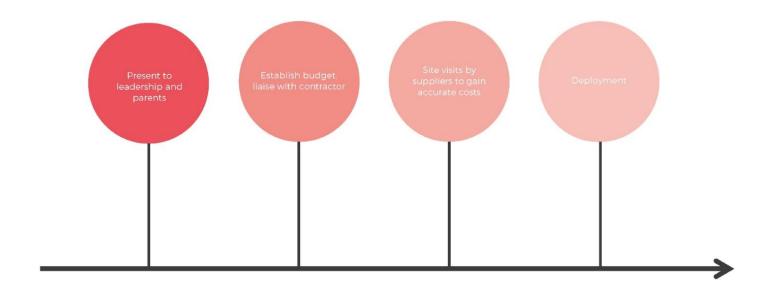


#### Over target cost summary

Possible phased approach	Target total
1 – Internal Graphics Environment	£40,180
2 - Internal digital (silver)	£45,750
3 - External furniture (Arrow + ZigZag 10 each)	£29,000
4 - External and internal art sculpture	£58,380
Overall project target total	£144,339



### Next steps...







## Ms Emma Harniman

(School Fund)
Chair of Governors

Ada Lovelace Church of England High School



### Thank You!



Share successes and brainstorm potential ideas for fund raising (Mrs Torbica)





# Share successes and brainstorm potential ideas for fund raising

#### Task:

On your tables please discuss ideas for fundraising to enable us to further develop our built environment

Please can one member of the group scribe ideas onto the spider diagram A3 sheet (to be collated)



Ada Lovelace

# A Message from the 'embryonic' PTFA Alison Young

A Parent Teachers and Friends Association for Ada Lovelace

Setting up a PTFA for Ada this term

- Comms to follow shortly
- Committee members needed
- Initial meeting [Tuesday 4<sup>th</sup> Feb]
- AGM end Feb/early March, to set up PTFA and elect committee setupAdaPTFA@gmail.com

Summer Festival, 4th July (Independence Day!)

- Jointly run by WP and Ada PTFAs
- Profits to be split between the two schools
  - Festival committee members needed!

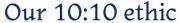
## Make the Leap

Establishing a distinctive learning culture

#### **Our vision:**

"Agile thinkers, effective problem-solvers, incisive decision-makers"
"Digital, computing specialism"









### **Closing Responses**

Be patterns, be examples in all countries, islands, nations

that your life might speak God's word. For then you will walk cheerfully,

Touching that of God in everyone and be blessing to all peoples.



after George Fox