### CONSULTANCY SERVICE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY OF VALLETTA

**EUROPEAN UNION** 









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- Accessibility Study of the City of Valletta
- The Itinerary and Categories of Sites
- Core Itinerary (White Route)
- Peripheral Itinerary (Yellow Route)
- Drawings
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#### <u>Scope</u>

The scope of this study in the City of Valletta was to identify the needs and obligations required for members of the public who have different needs, including obstacles, that may impact accessibility to different sites, as well as accessibility to information.

# Accessibility Study of the City of Valletta

As a Contractor, the responsibilities for this Study were:

- To inspect on-site the level of physical accessibility and information accessibility for each building, feature or monument included in the itineraries defined by the University of Malta Project Partner (Refer to Annex A).
- Took on-site photos and had to note down the features and characteristics influencing the level of accessibility of the same itineraries defined.
- For each itinerary defined, the Information Capture Form (provided by the Project's Scientific Committee) have been filled up with accessibility information required for this study.
- Also, during this study, plan and elevation drawings, documenting the accessibility, and obstacles to accessibility of the itineraries defined have been drawn to highlight critical issues that may be obstructing accessibility. All drawings have been delivered in digital ACAD format.

# The Itinerary and Categories of the Sites

For the purpose of the mentioned deliverables in this Study, there are two Itineraries – Core Itinerary (White route) and the Peripheral Itinerary (Yellow route).

Both itineraries have different Sites, for which are being categorized into 3 Categories:

- Category 1 Sites that are to a large extent open to the general public.
- Category 2 Sites that are partially open to the general public, with some restrictions.
- Category 3 Sites that are not normally open to the general public.

### Core Itinerary (White Route)

Number	Site	Category
01	Upper Barrakka Gardens	1
02	Castille Square	1
03	Auberge of Castille	2
04	Auberge of Italy (MUŻA)	1
05	Palazzo Parisio	2
06	Church of Saint Catherine of Italy	1
07	Our Lady of Victory Church	1
08	Piazza de Vallette	1
09	Royal Opera House ruins	2
10	Saint John's Co-Cathedral (formerly the Conventual Church of the Order of Saint John)	1
11	Castellania	2
12	The former Monte della Redenzione	2
13	The former Municipal Palace	2
14	Valletta Covered Market	1
15	Palace of the President (formerly the Grand Masters' Palace)	1 (for palace armoury & state rooms only)
16	National Library	1 (to main reading room only)
17	Queen Victoria's monument	1
18	Pjazza San Ġorġ (including former fountain)	1
19	'Hotel de Verdelin' palace	3
20	Main Guard	2

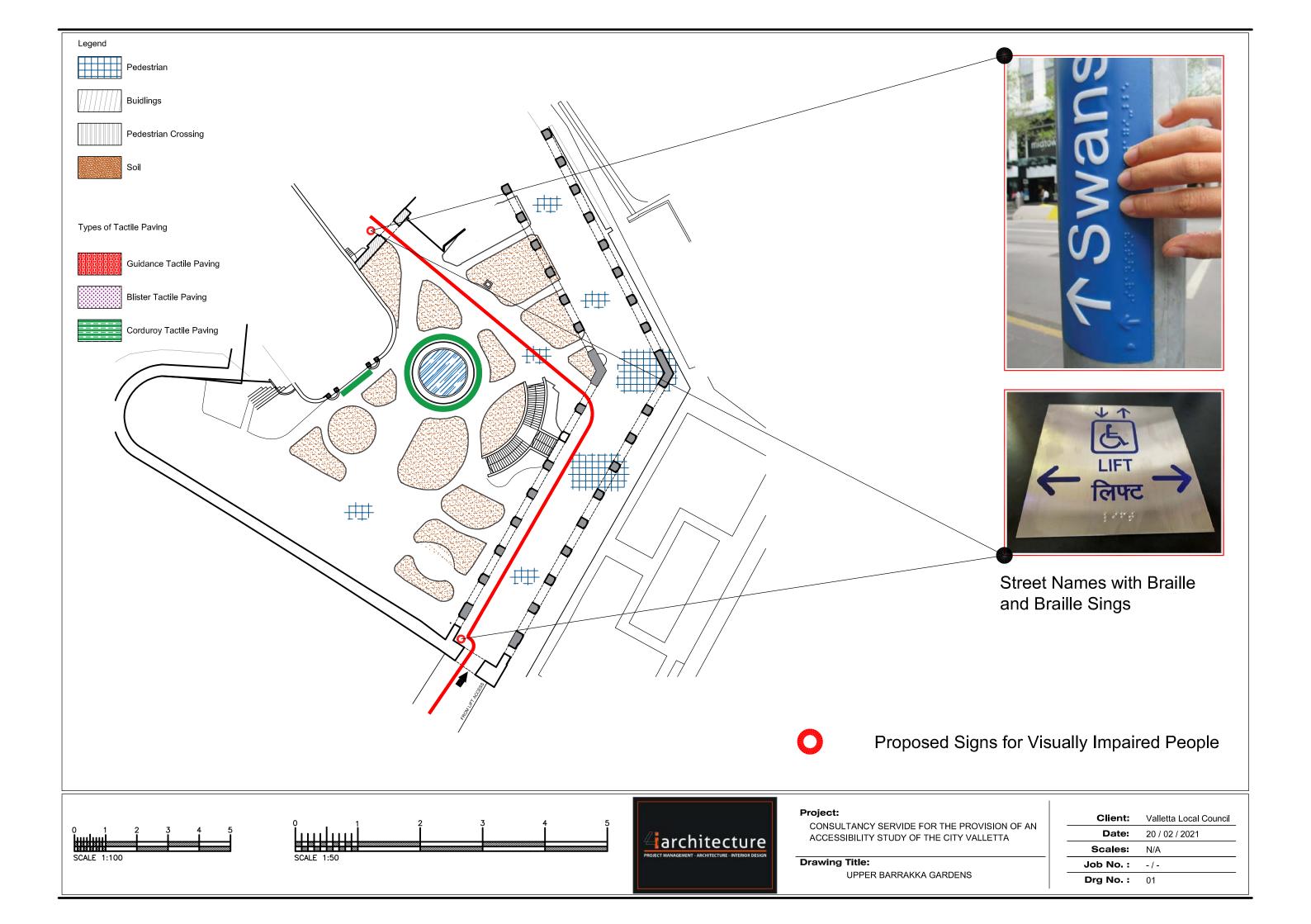
### Route 1

### Barrakka Gardens

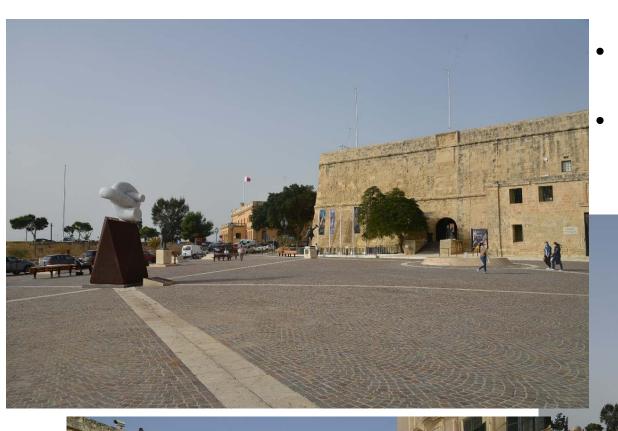


- Tactile paving from the entrance to lift and vice versa.
- Brailed rail to indicate the direction to the lift.
- Put up Lift Signage.
- Generate and decode QR Codes on existing signs on iOS devices.



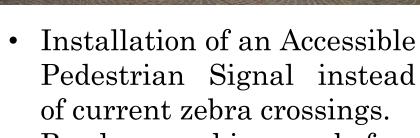


### Castille Square



Tactile paving around Castille Square's perimeter.

Tactile paving where there is current zebra crossings or monuments.



• Road markings before crossing roads.







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#### Drawing Title:

CASTILLE SQUARE

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:500
Job No. :	-/-
Drg No. :	02

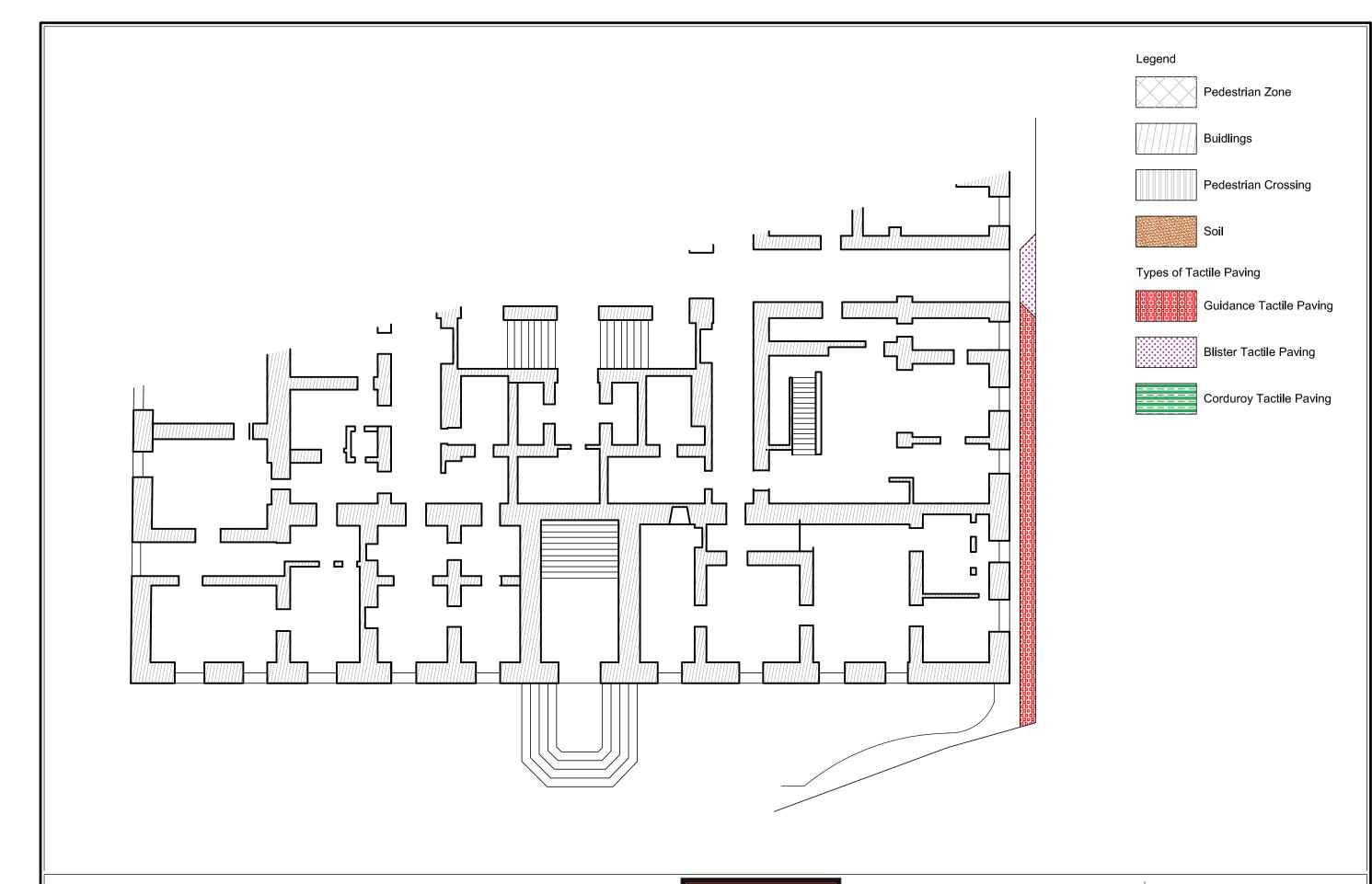
## Auberge of Castille

- Tactile paving for direction to and into the building and also to Reception Area and lift access.
- Wheelchair accessible signs from Secondary Entrance.
- Put up Lift Signage.











#### Project:

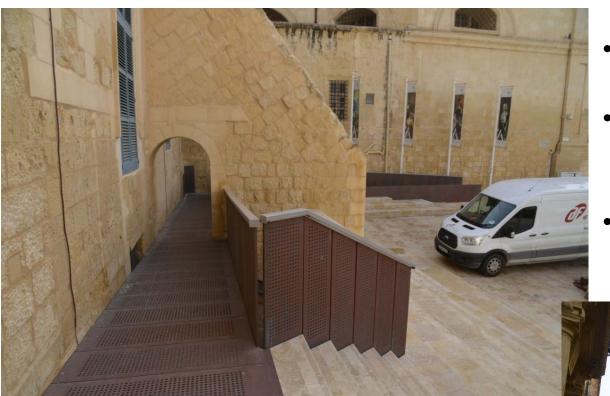
CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

AUBERGE OF CASTILLE

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	N/A _A3
Job No. :	-/-
Drg No. :	03

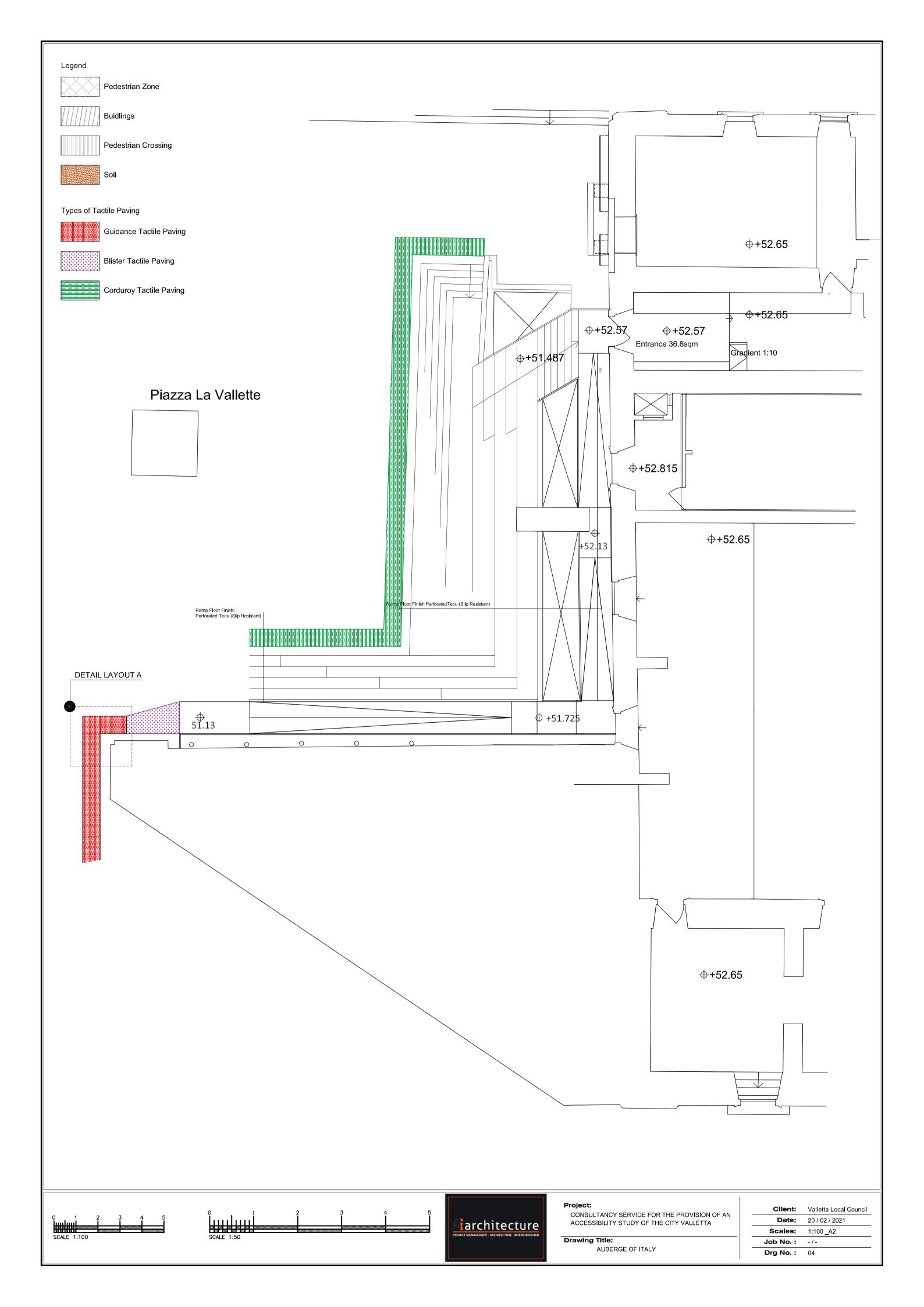
## Auberge of Italy



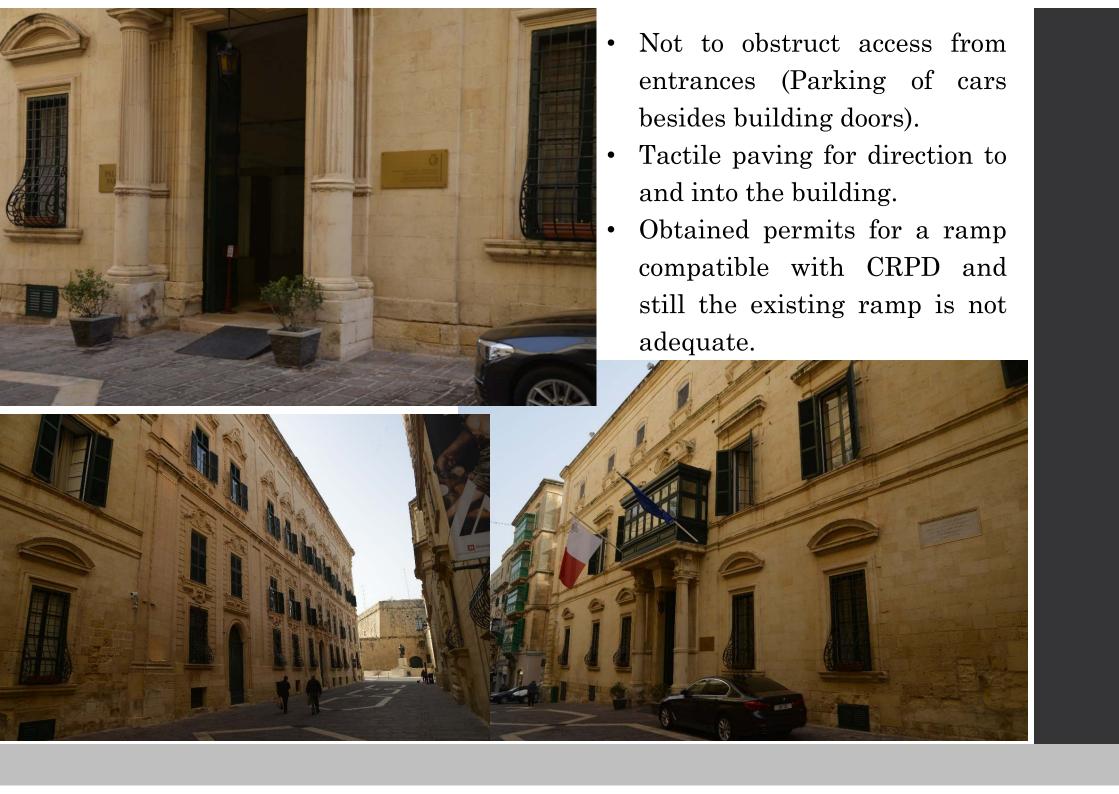
- Tactile paving for Entrance from both directions.
- Tactile paving at the top and bottom of a flight of stairs.
- Wheelchair accessible signs from both Entrances.

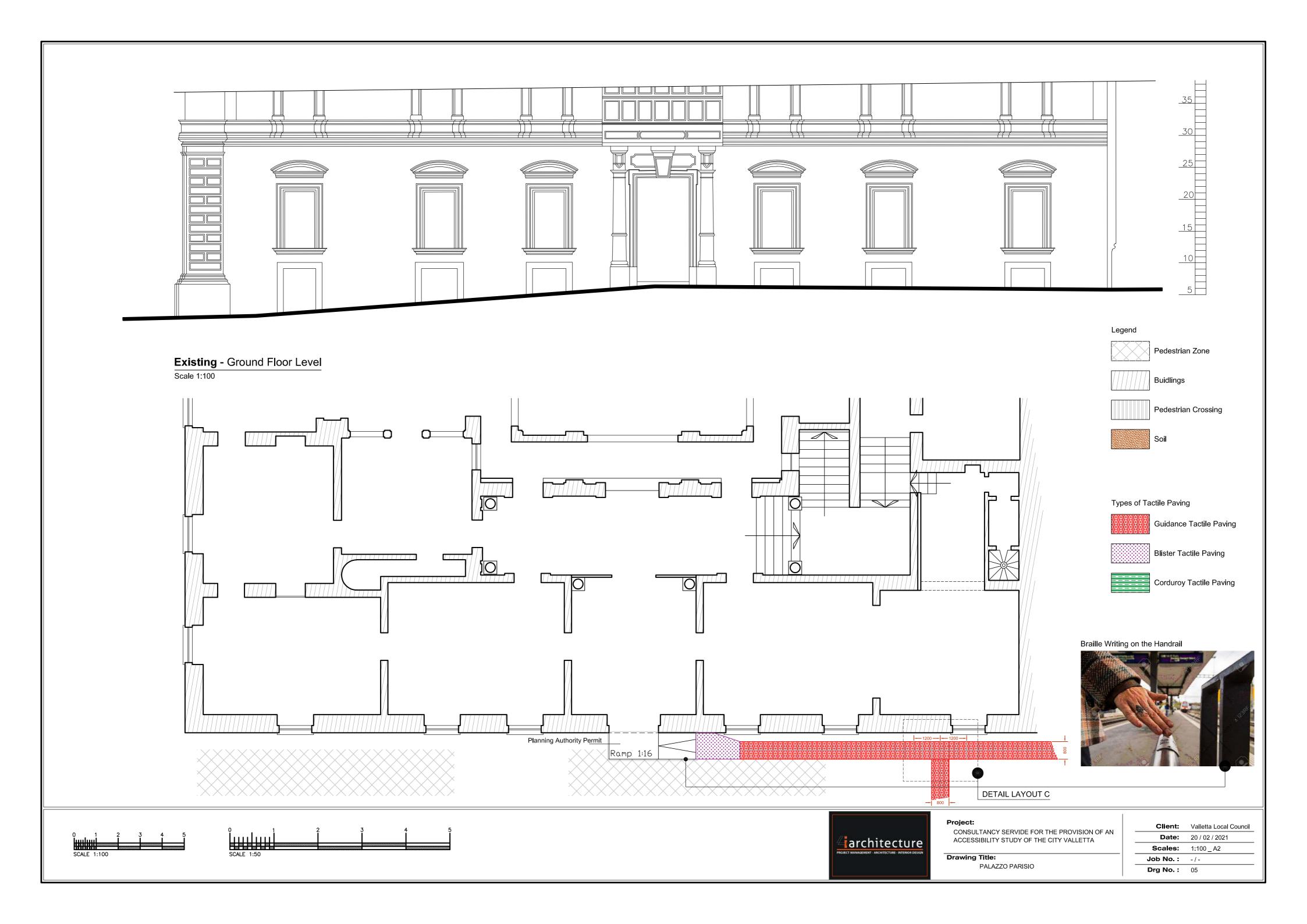


- Braille with existing rail.
- Put up Lift Signage.



## Palazzo Parisio





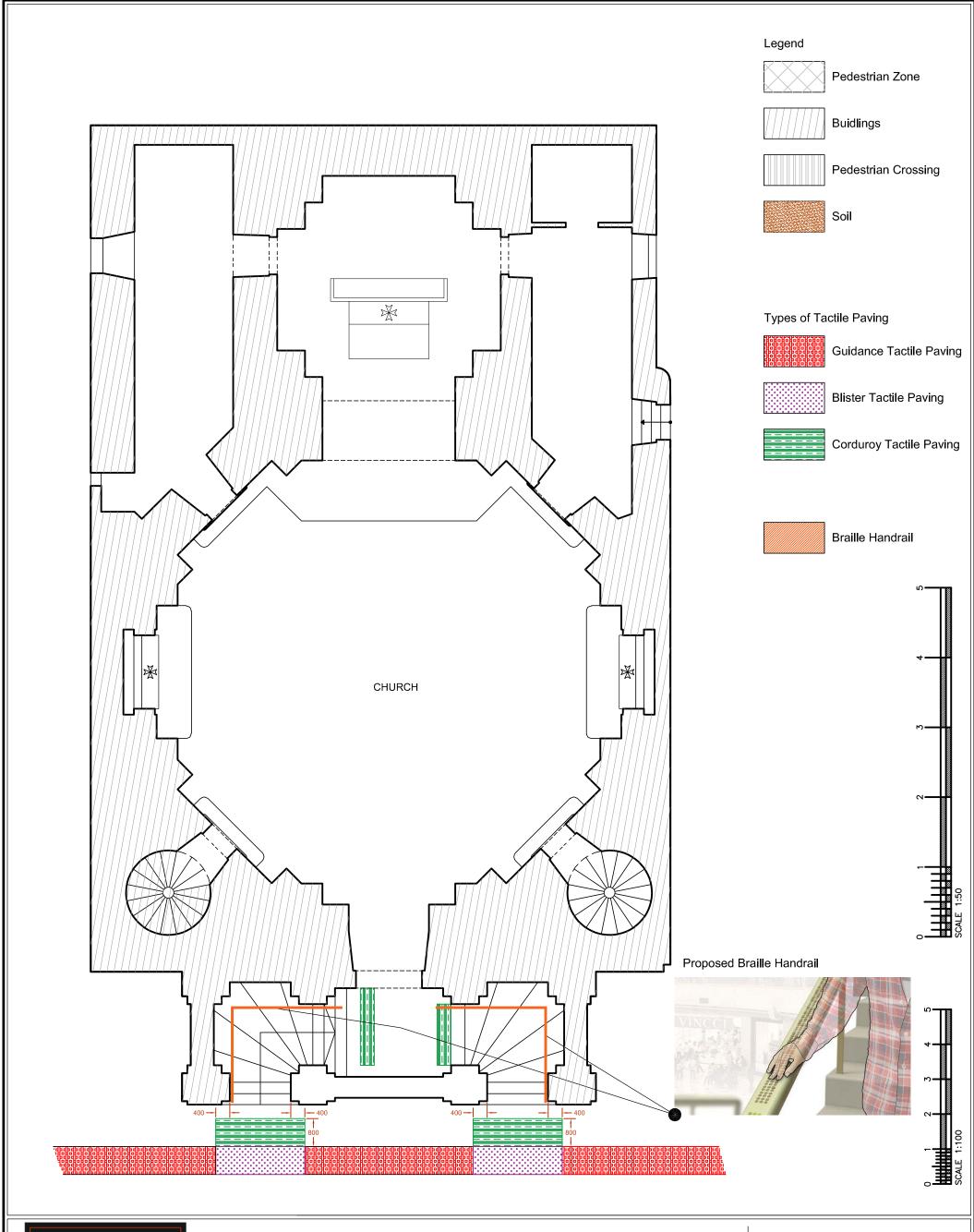
# Church of St. Catherine of Italy

 Proposal for a brailed railing to assist visually impaired persons.





- Tactile paving for direction to and into the building.
- The building is inaccessible for physically impaired persons.





#### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

CHURCH OF ST. CATERINA OF ITALY

Cllent:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100 _ A3
Job No. :	-/-
Drg No. :	06

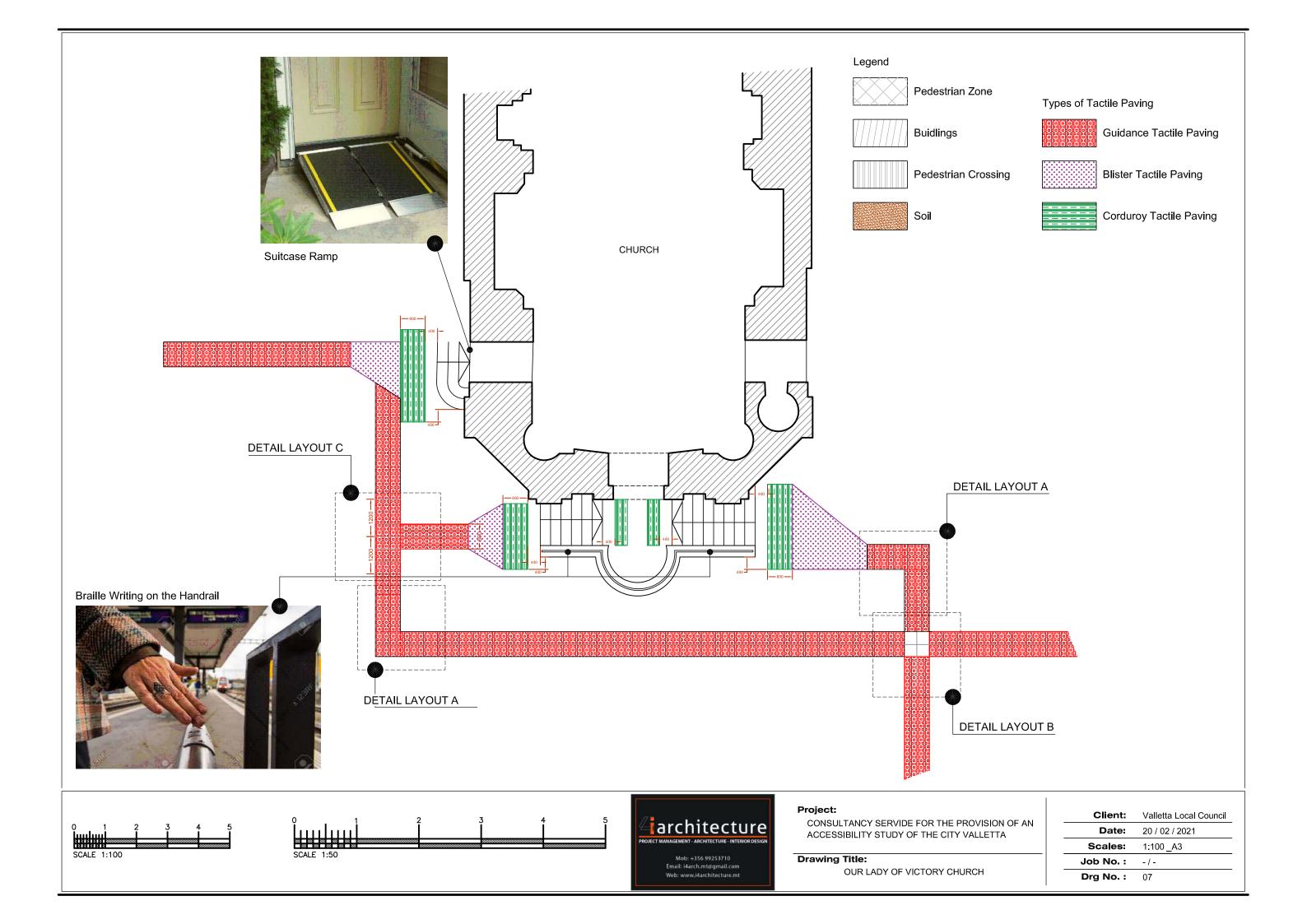
# Our Lady of Victory Church



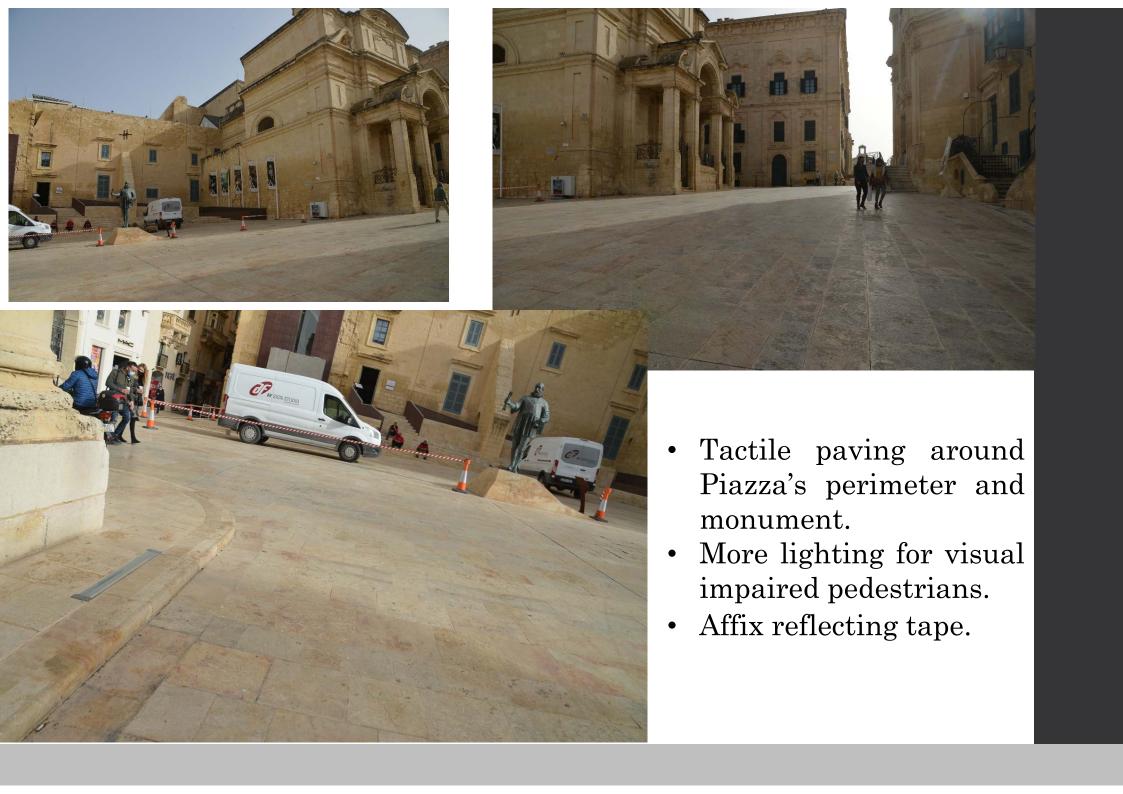


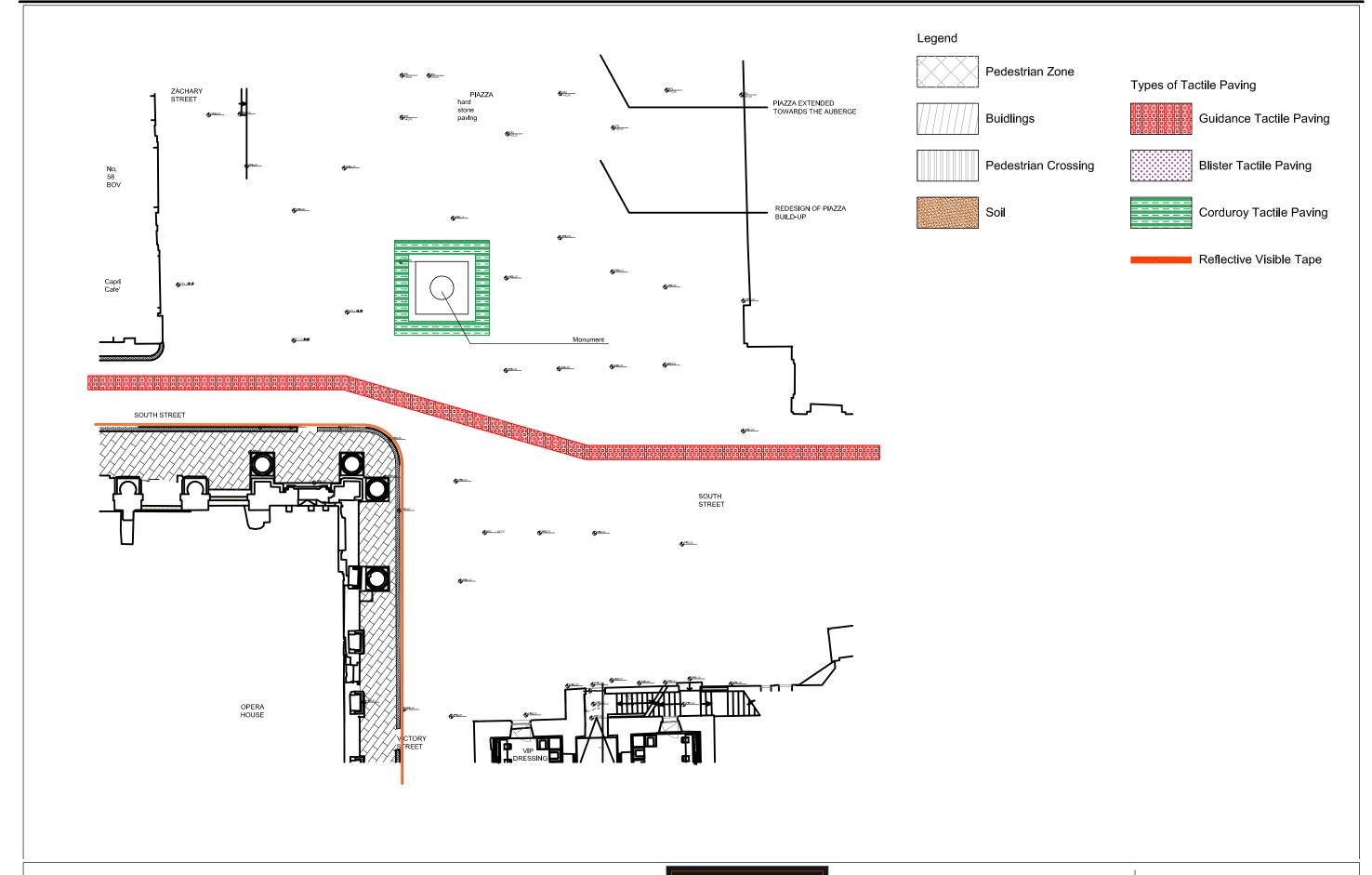
- Braille with existing rail to assist visually impaired persons.
- Tactile paving for direction to and into the building.
- Install suitcase ramp in secondary entrance.

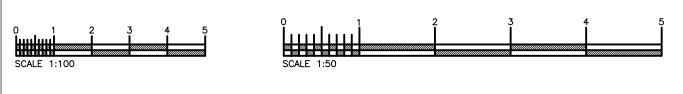




### Piazza de Vallette









#### Project

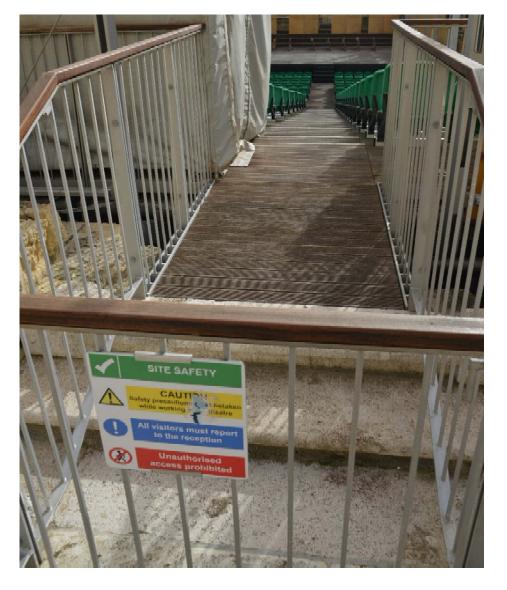
CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

PIAZZA DE VALLETTE

Client:	Valletta Local Council	
Date:	20 / 02 / 2021	
Scales:	1:100 _A3	
Job No. :	-/-	
Drg No. :	08	

# Royal Opera House Ruins





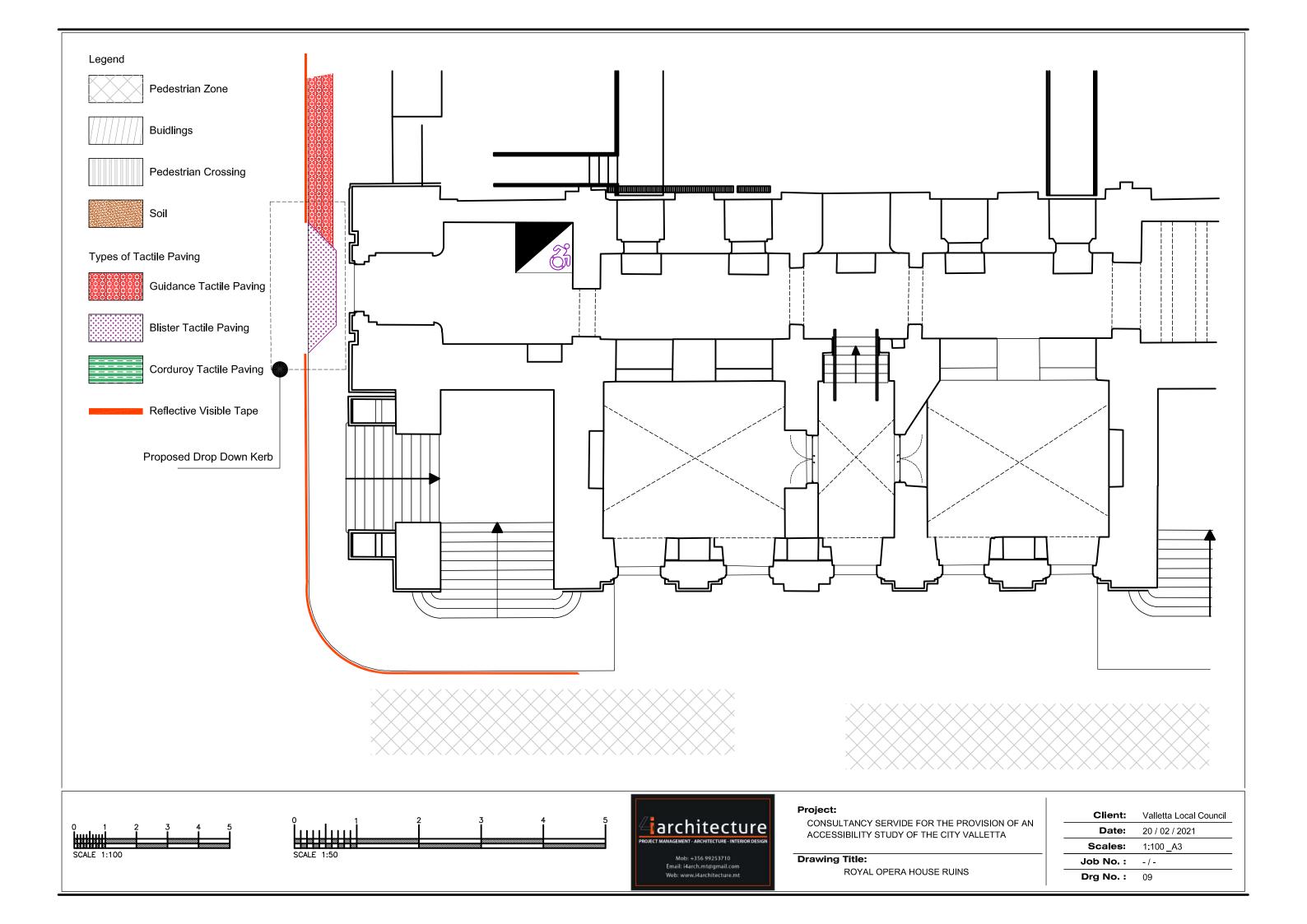




- Braille with existing rail to assist visually impaired persons.
- Tactile paving for direction to and into the building.
- Tactile paving at the top and bottom of a flight of stairs.

- Drop kerb with tactile paving.
- Make access directions for lifts for visual impaired people.
- Place signage of wheelchair accessibilities.
- Affix reflecting tape.

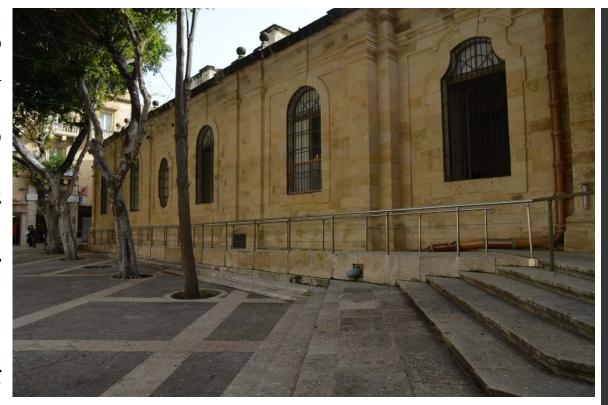




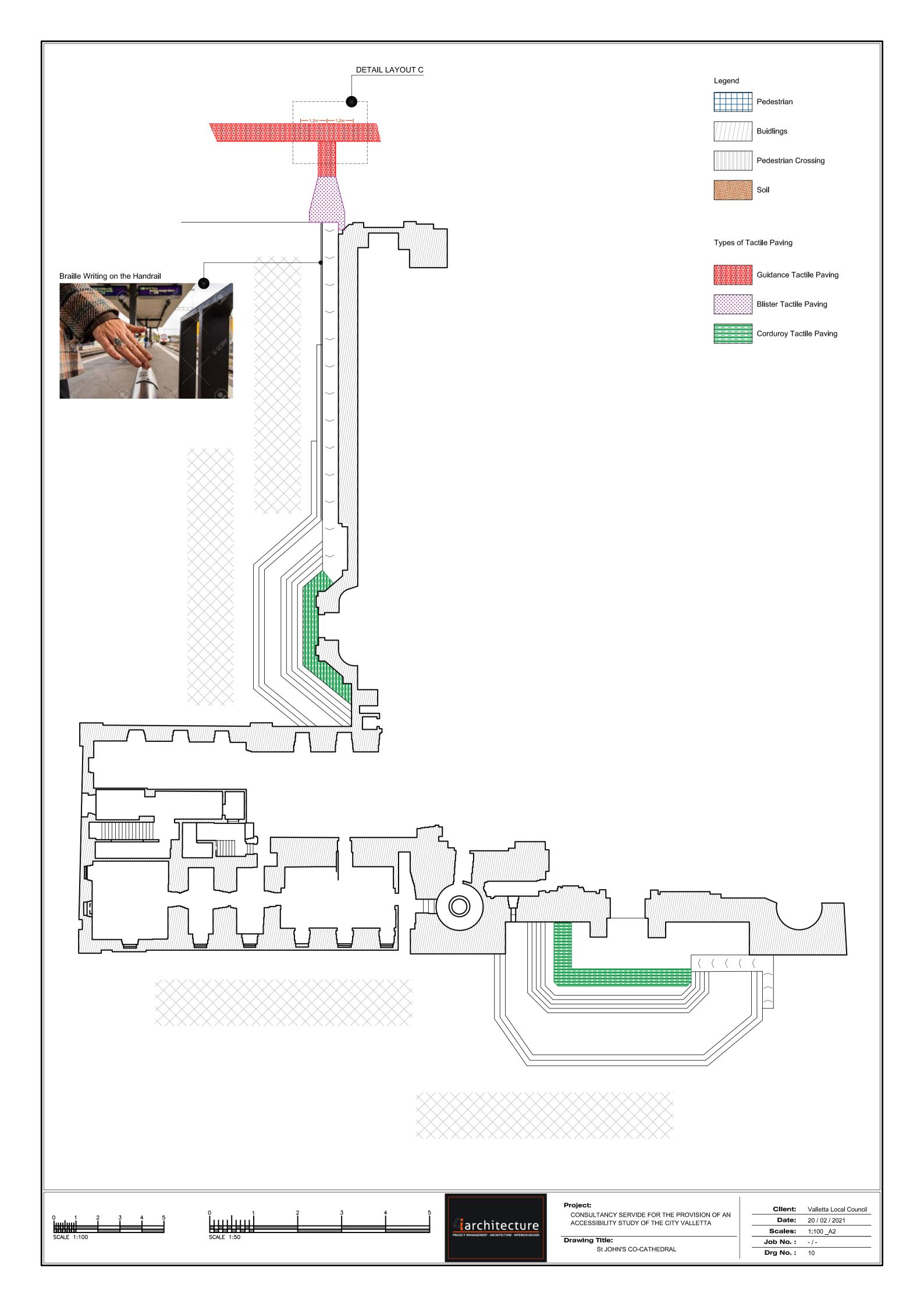
### St John's Co-Cathedral

- Braille with existing rail to assist visually impaired persons.
- Tactile paving for direction to and into the building and also, at the top and bottom of a flight of stairs.
- Place signage of wheelchair accessibilities.
- Affix reflecting tape.
- Install adequate lighting fittings where accessible by physical impaired pedestrian.



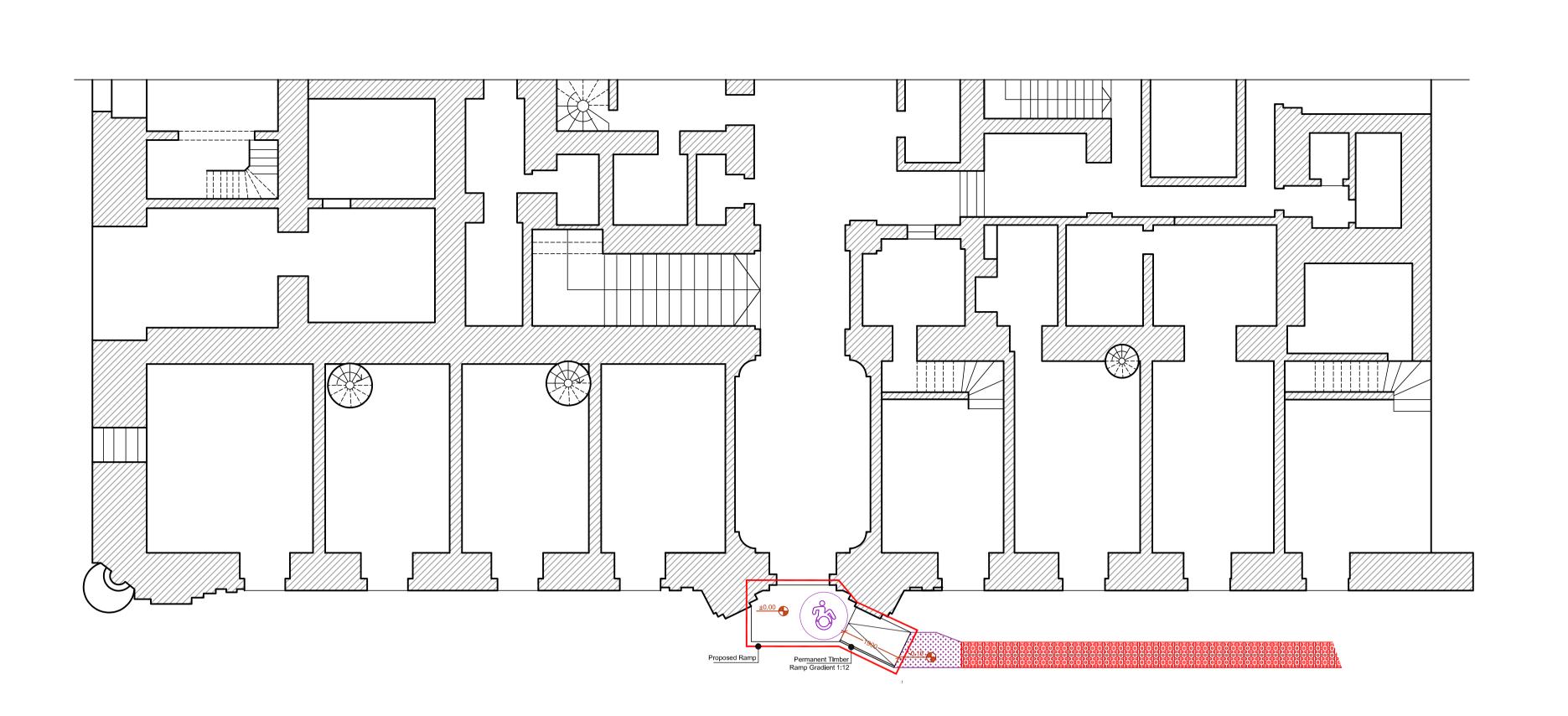


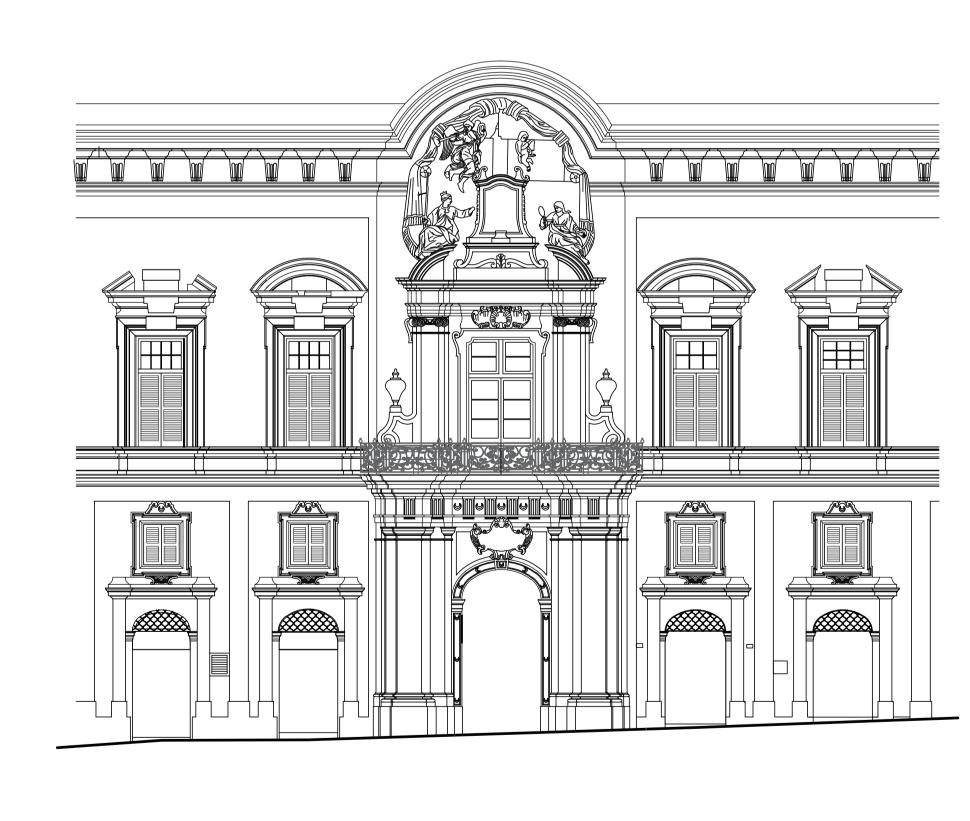




## Castellania











Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

Drawing Title: CASTELLANIA

Cllent:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100 _A1

Job No. : -/Drg No. : 11

Pedestrian Crossing

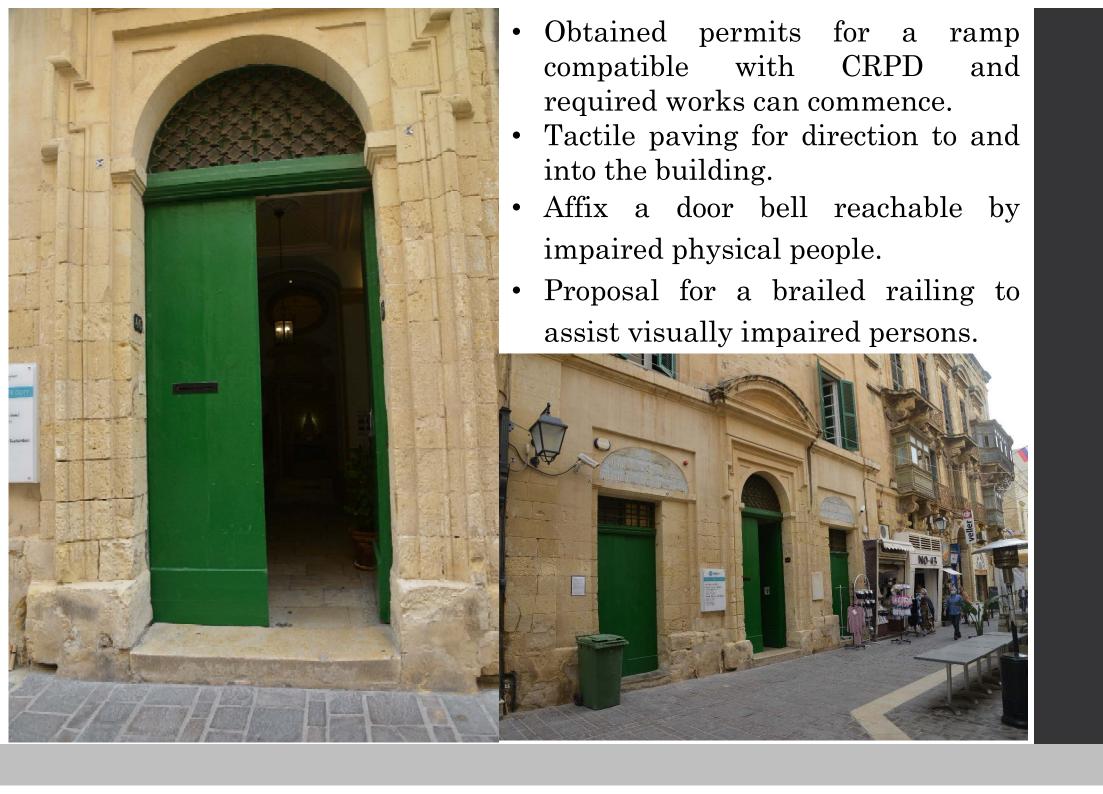
Guidance Tactile Paving

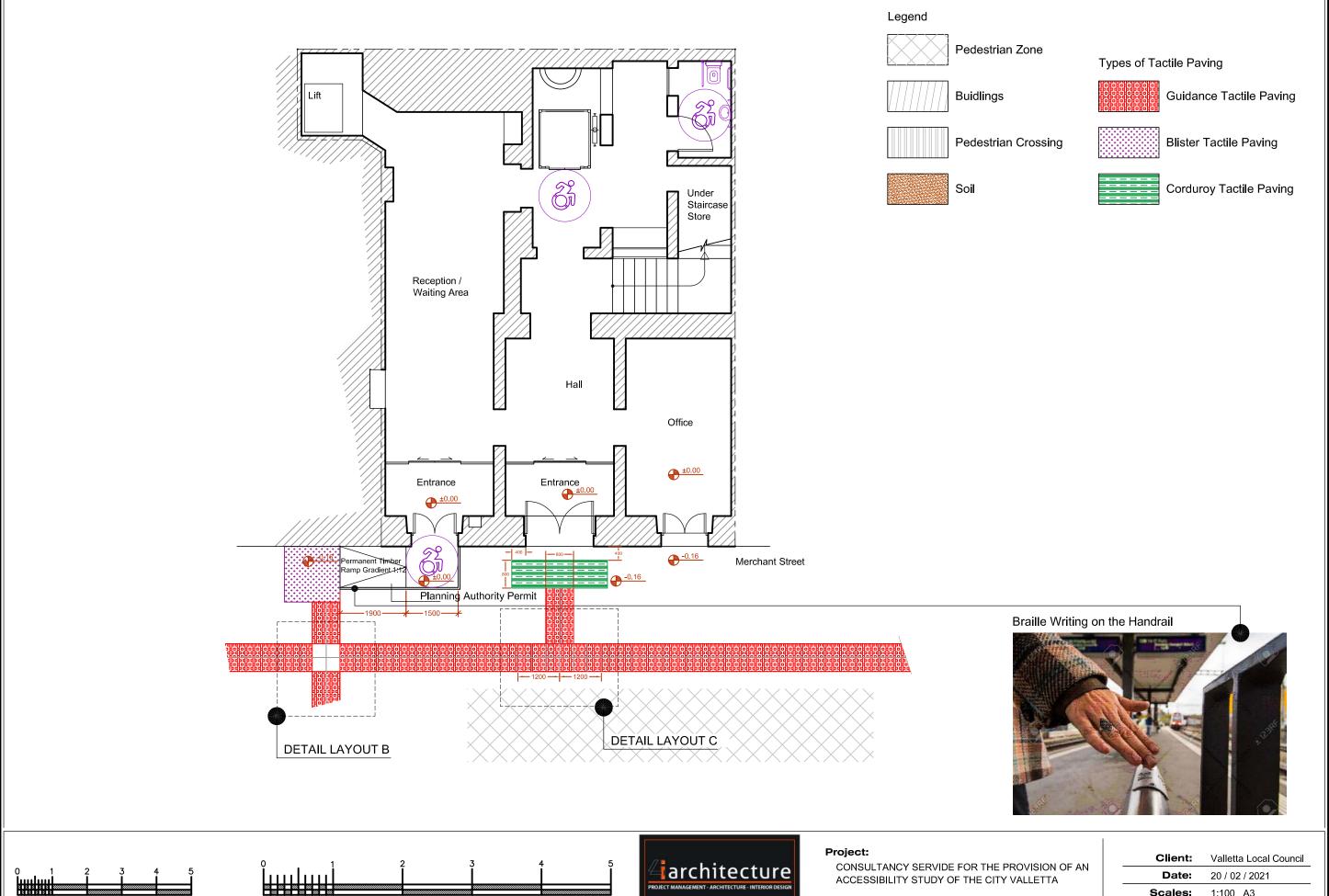
Blister Tactile Paving

Corduroy Tactile Paving

Types of Tactile Paving

# The Former Monte Della Redenzione







SCALE 1:50

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

FORMER MONTE DELLA REDENZIONE

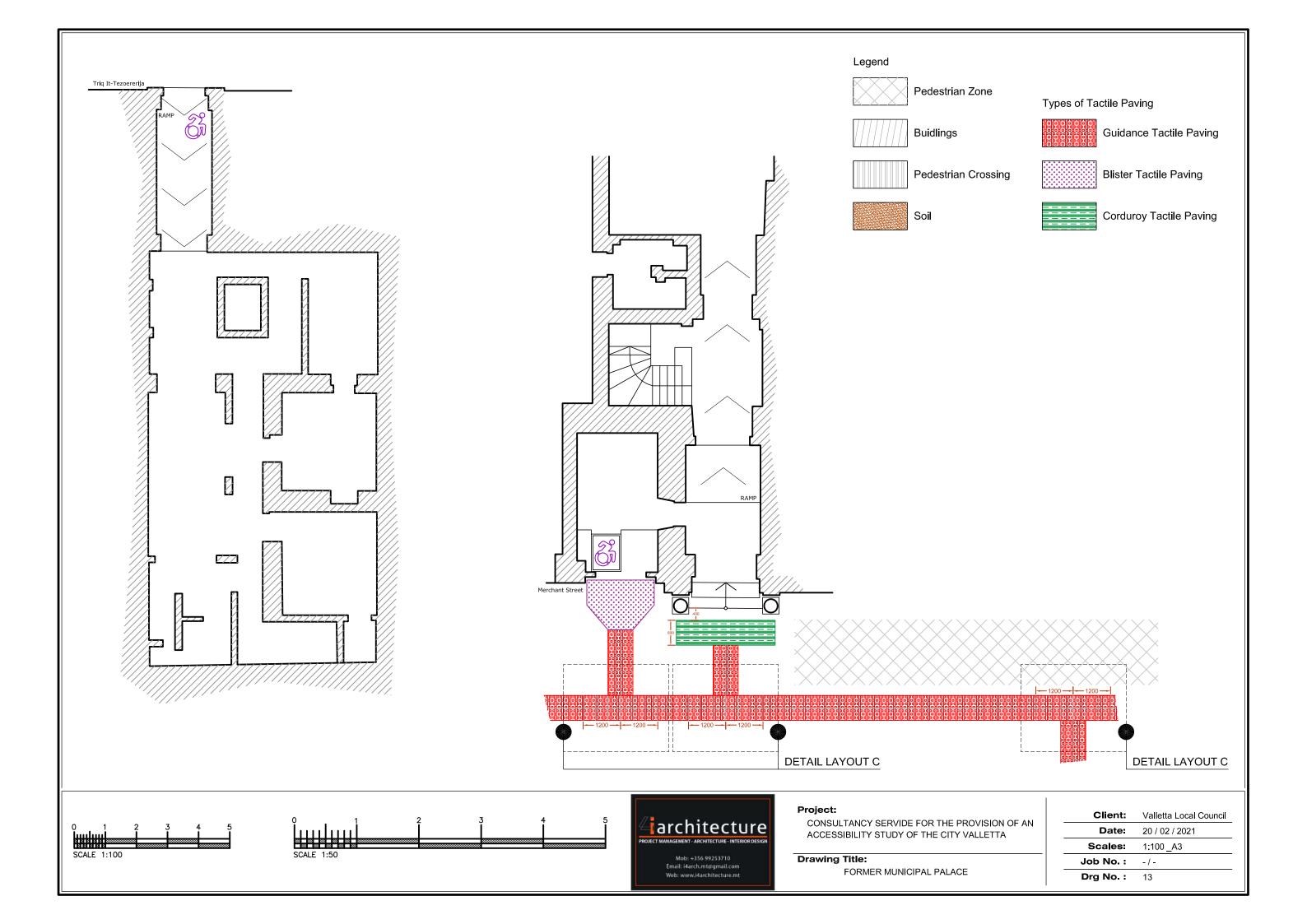
Client:	Valletta Local Council	
Date:	20 / 02 / 2021	
Scales:	1:100 _A3	
Job No. :	-/-	
Drg No. :	12	

# The Former Municipal Palace



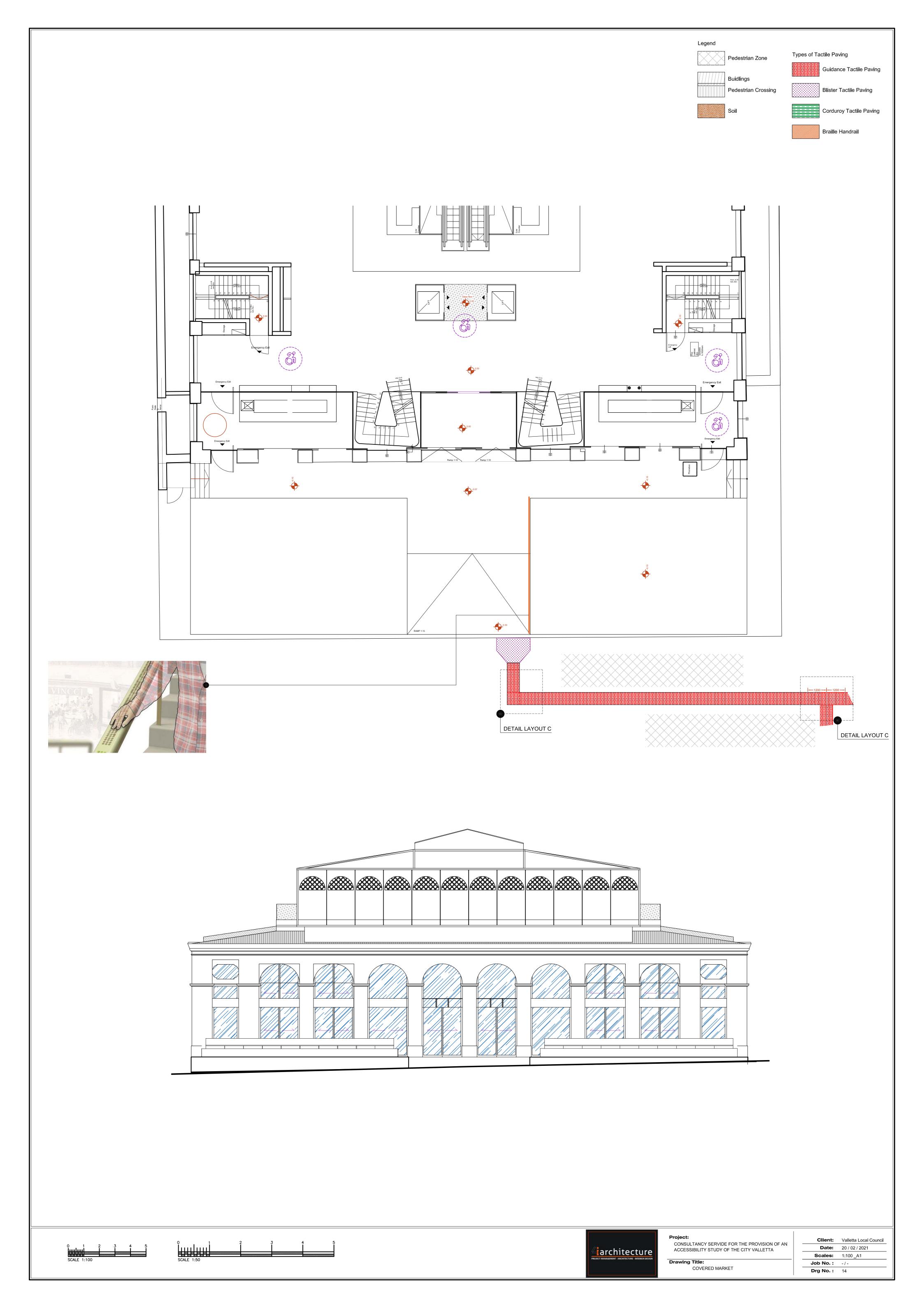
- Platform lift and ramps for both entrances have been proposed. Once done, put up accessibility signage for physically impaired persons and also, lift signage.
- Tactile paving for direction to and into the building.
- Proposal for a brailed railing to assist visually impaired persons.





## Valletta Covered Market



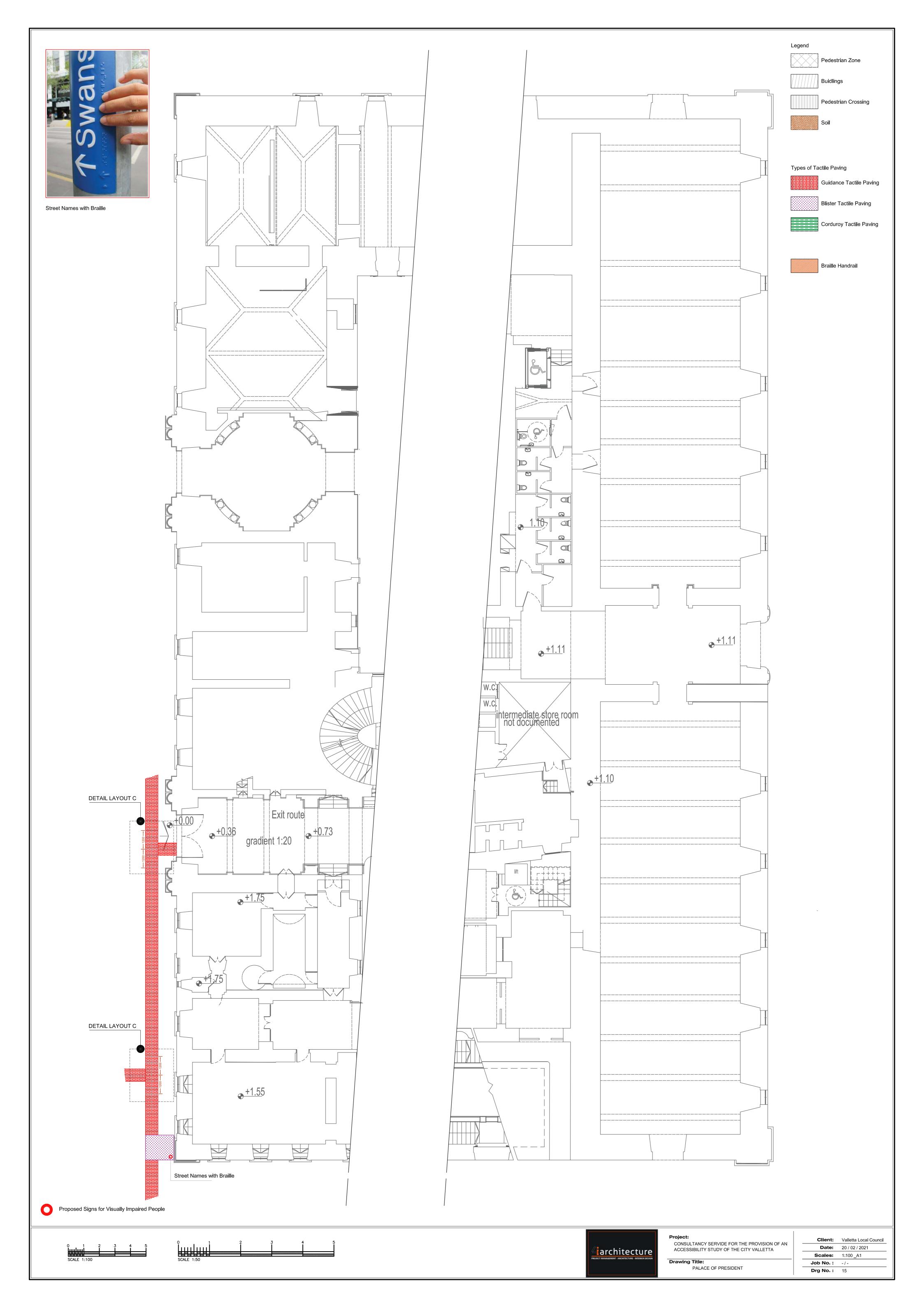


#### Palace of the President





- Main entrance not accessible due to current works. Existing proposals of interventions for accessibility.
- Tactile paving for direction to and into the building.
- Braille with existing rail to assist visually impaired persons.
- Brailed rail to indicate the direction to the lift.
- Put up accessibility signage for physically impaired persons and also, lift signage.

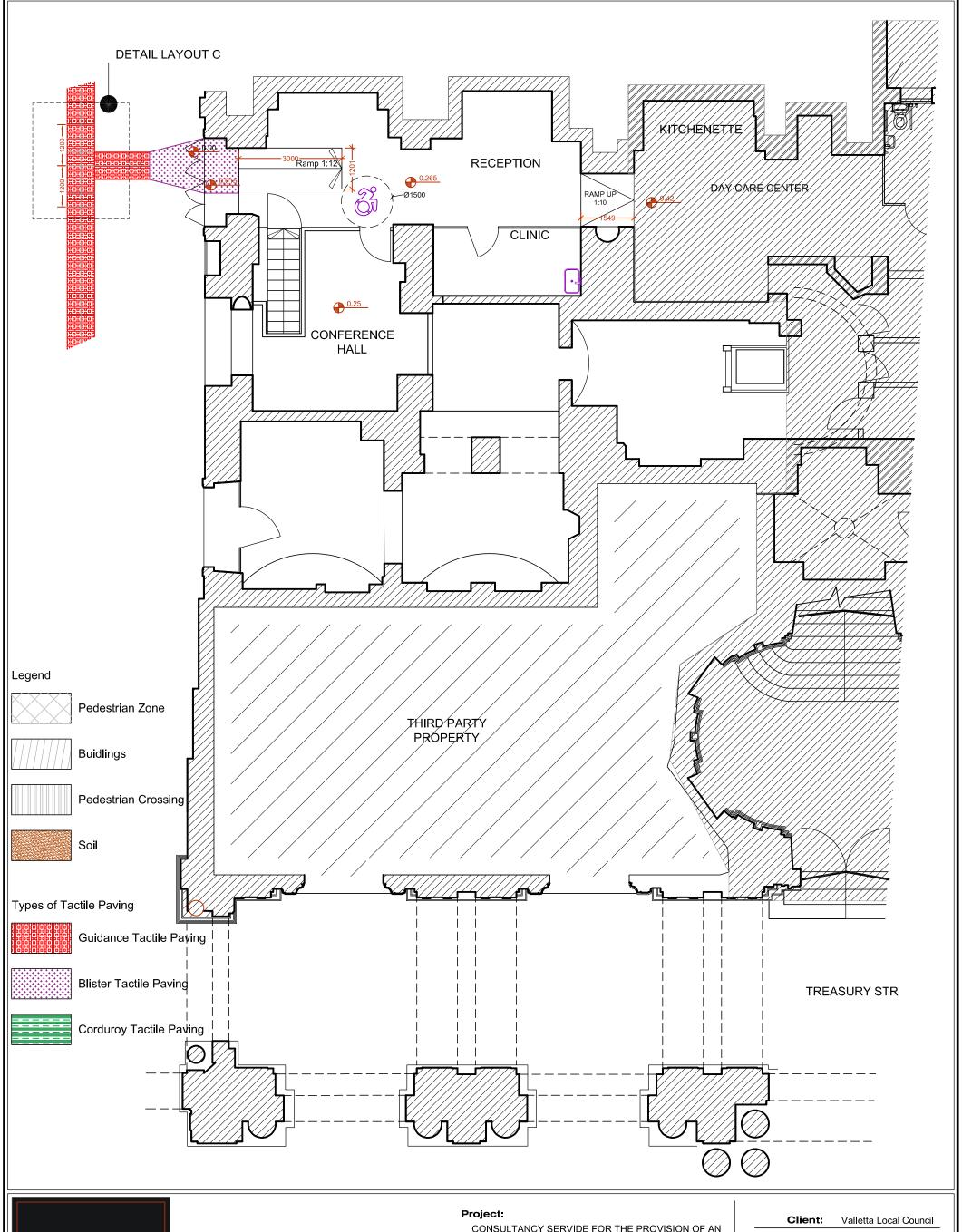


#### National Library



- Existing proposals of interventions for accessibility from secondary entrance.
- Tactile paving for direction to and into the building.
- Proposal for a brailed railing to assist visually impaired persons.
- Brailed rail to indicate the direction to access of lift.
- Put up accessibility signage for physically impaired persons and also, lift signage.







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#### Drawing Title:

NATIONAL LIBRARY

Client:	Valletta Local Council	
<b>Date:</b> 20 / 02 / 2021		
Scales:	N/A	
Job No. :	-/-	
Drg No. :	16	

# Queen Victoria's Monument

• Tactile paving for direction surrounding the monument.

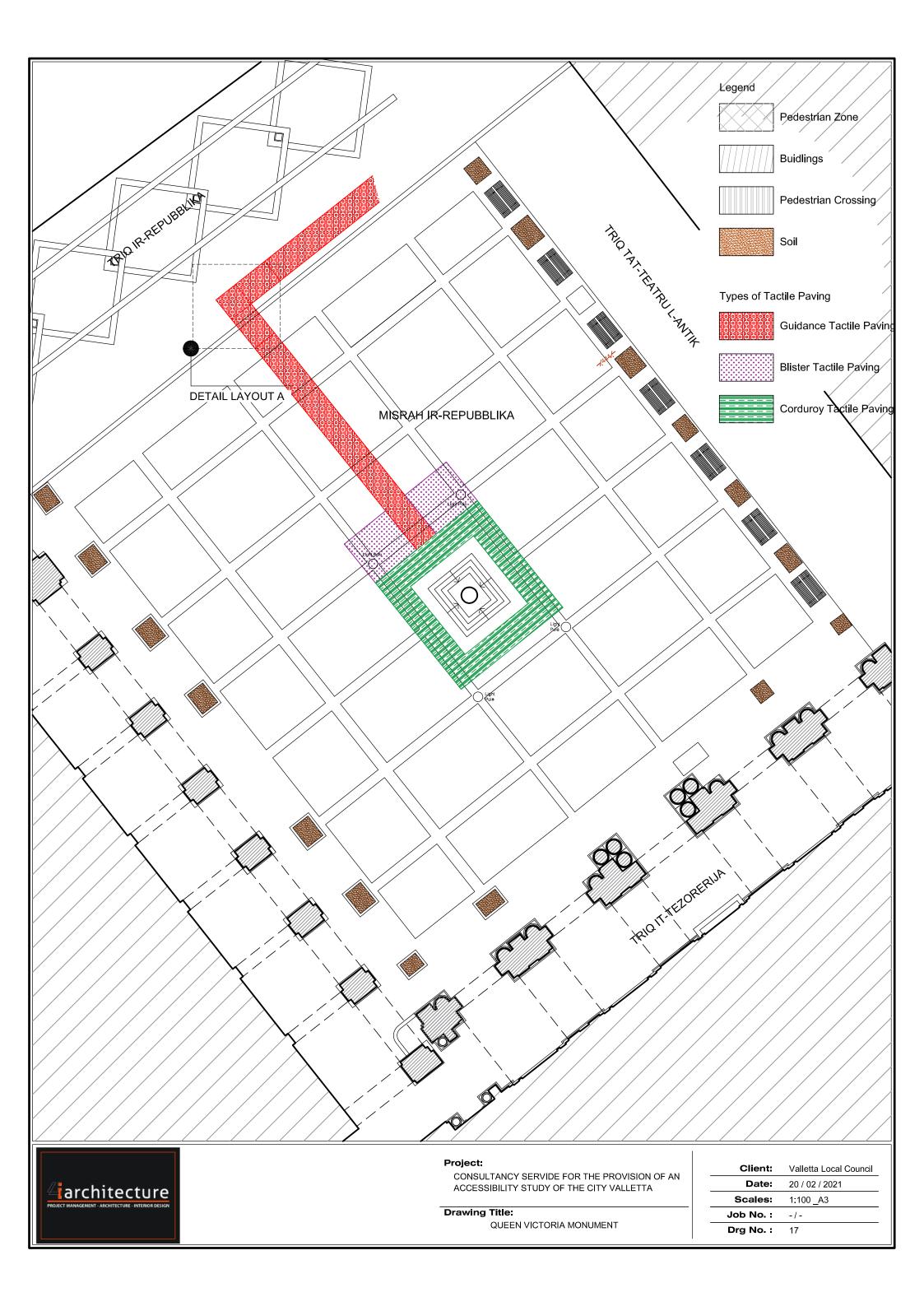
 Proposal for braille on existing Monument signage.

 Generate and decode QR
 Codes on existing signs on iOS devices.







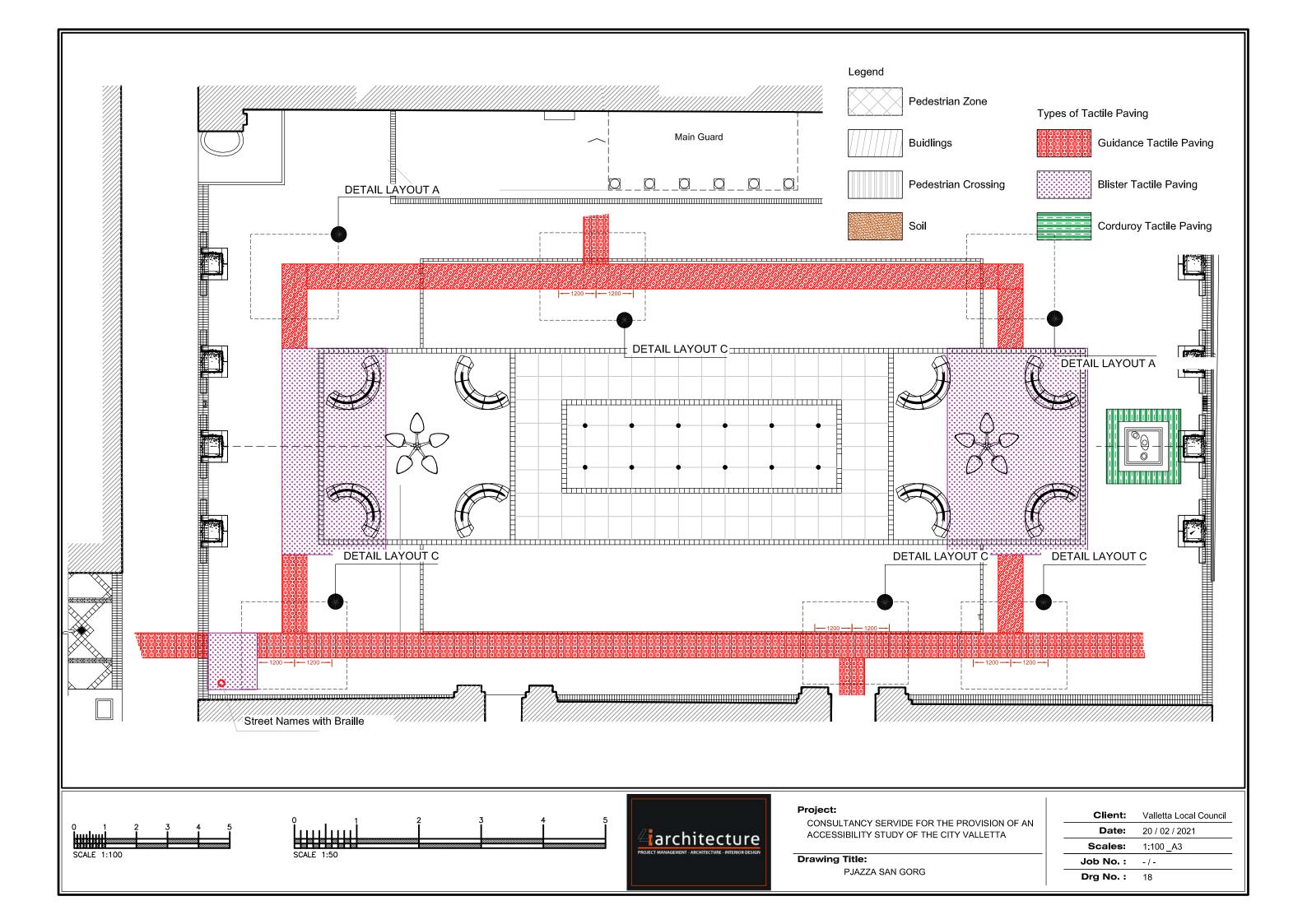


# Pjazza San Ġorġ

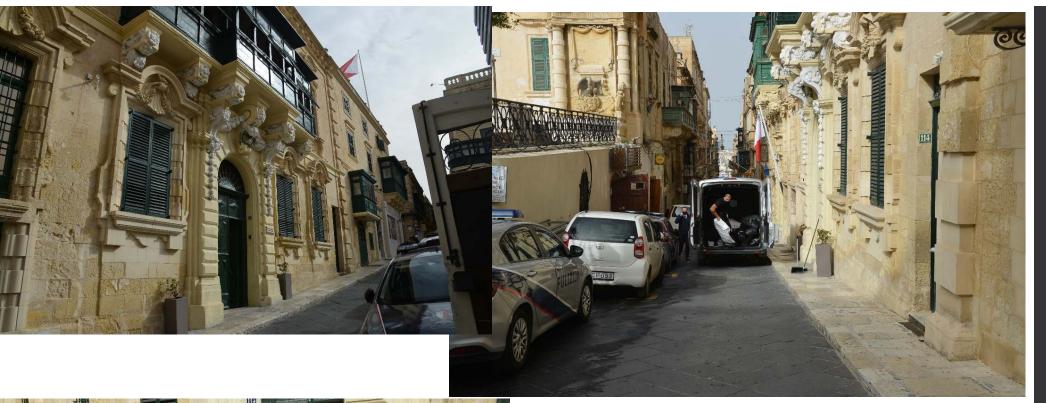


- Tactile paving around the perimeter of Pjazza San Ġorġ and also any other obstructions including light poles, benches, fountains, surrounding buildings.
- Proposal for braille on existing Monuments signage.
- Generate and decode QR Codes on existing signs on iOS devices.



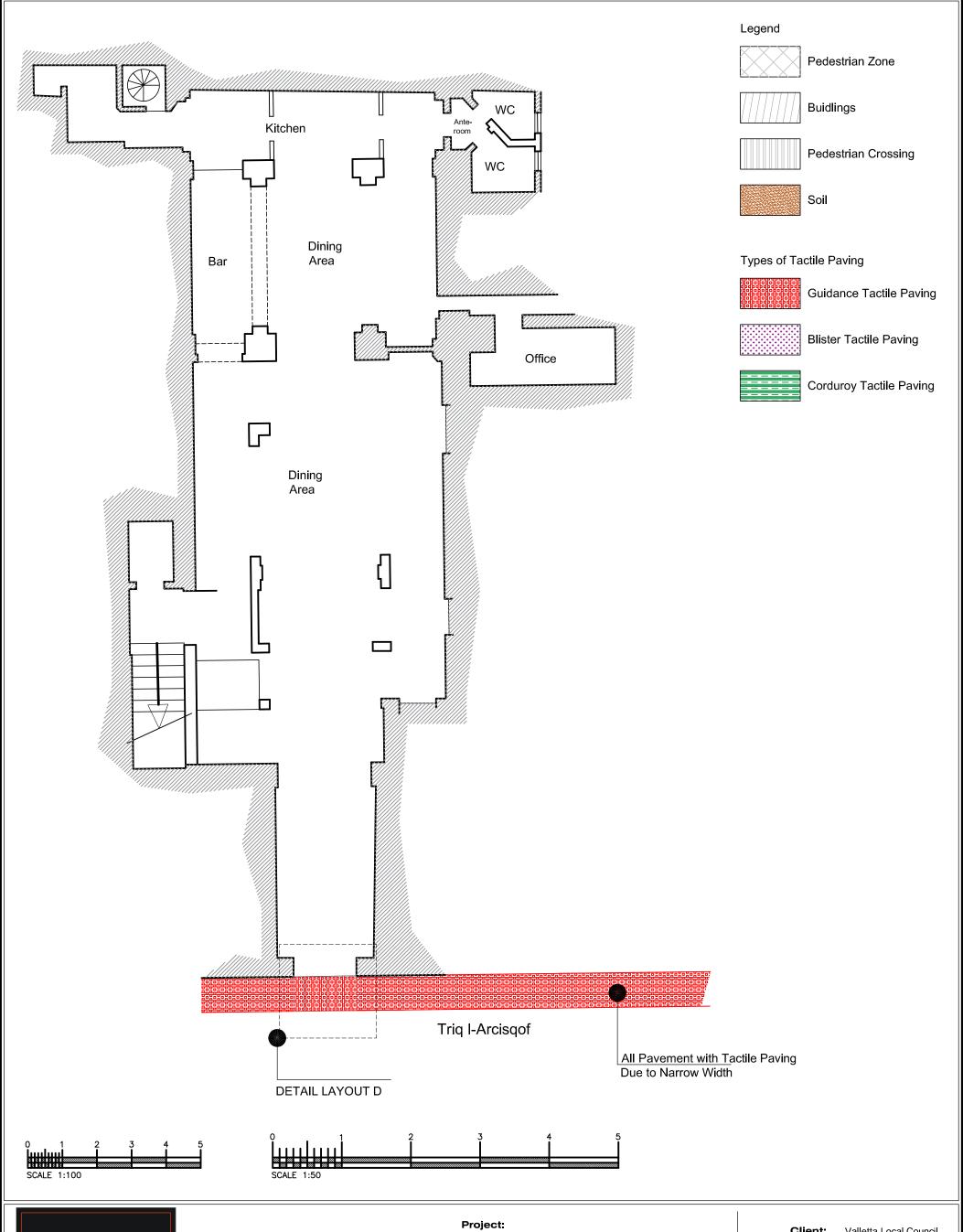


## 'Hotel De Verdelin' Palace





- Not accessible for both physical and visual impaired pedestrians.
- The street and pavement is too narrow to create tactile flooring since the measurement required for such flooring will not be up to standard.





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#### Drawing Title:

HOTEL DE VERDELIN PALACE

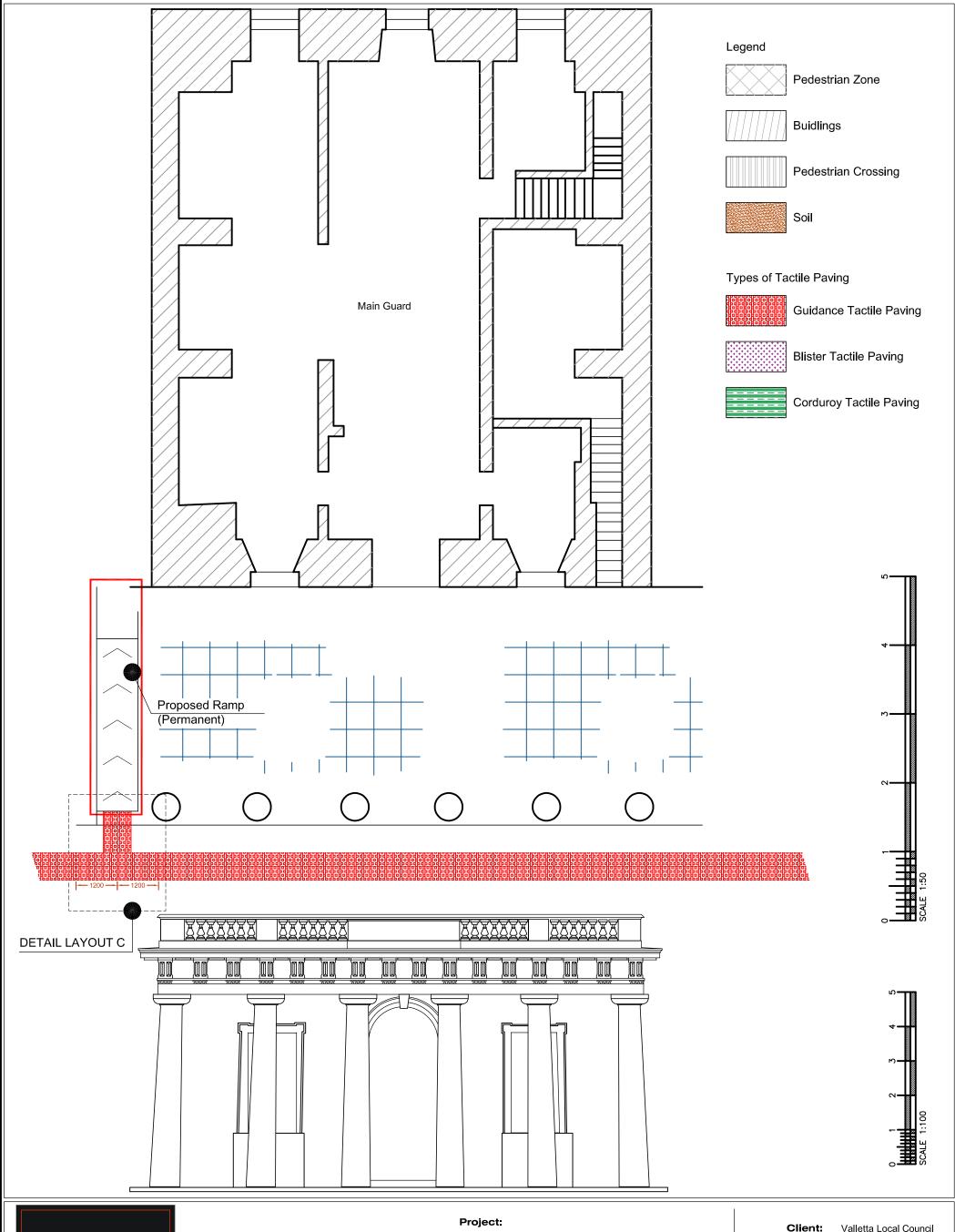
Client:	Valletta Local Council	
Date:	20 / 02 / 2021	
Scales:	1:100 _A3	
Job No. :	-/-	
Drg No. :	19	

## Main Guard



- Put up accessibility signage for physically impaired persons.
- Proposal for a brailed ramp equipped with appropriate lighting to assist impaired persons.
- Tactile paving for direction to and into the building.







CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

MAIN GUARD

Client:	Valletta Local Council	
Date:	20 / 02 / 2021	
Scales:	1:100 _A3	
Job No. :	-/-	
Drg No. :	20	

#### Peripheral Itinerary (Yellow Route)

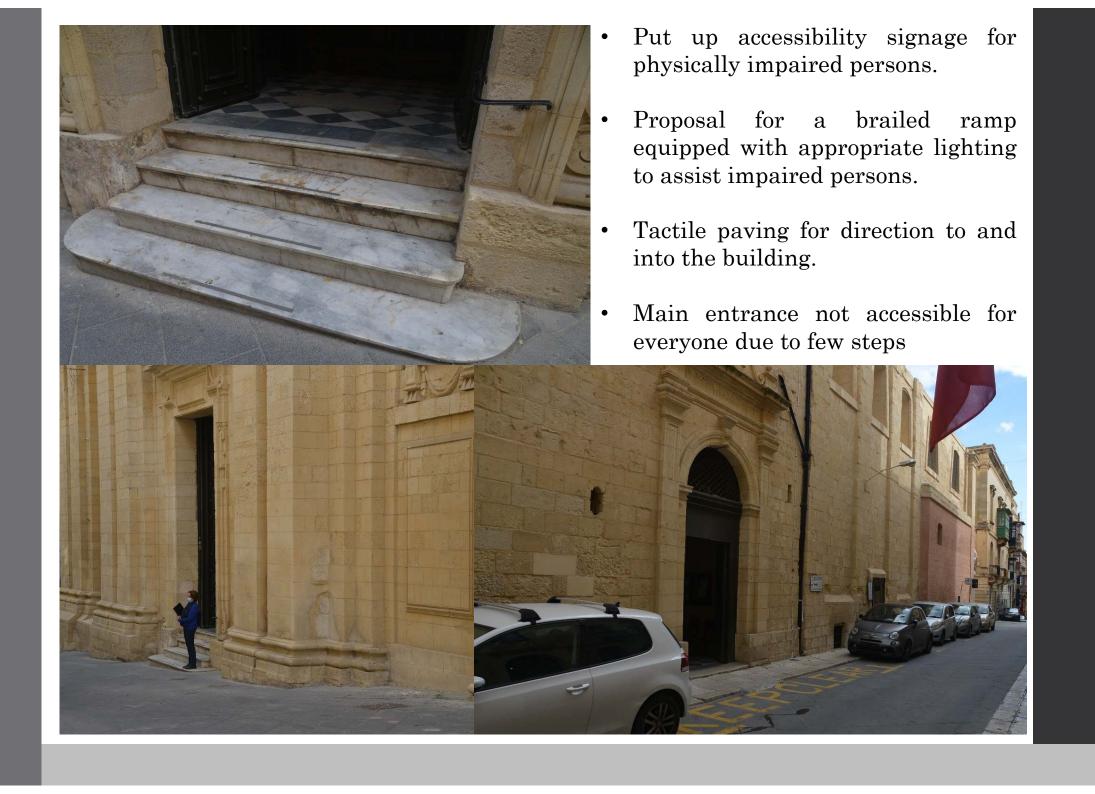
Number	Site	Category
21	Jesuit Church and College	1
22	Palazzo Rosselli-Massa	3
23	Cottoner Block	3
24	Palazzo Zarzana (Notarial Archives, 24 St Christopher Str.)	3
25	Niche and Church of St Roque	1
26	Shelley House	3
27	Site of Slave Prison	3
28	Lower Barrakka Gardens	1
29	Sacra Infermeria	1
30	Ruins of Nibbia Church	2
31	Fort Saint Elmo & Saint Elmo Place	1
32	St Mary Magdalene Church and Convent of the Repentite	1 (Church only)
33	Camarata	3
34	Church of St Nicholas	1
35	Dominican Priory and Parish Church of Porto Salvo	1 (Church) 3 (Priory)

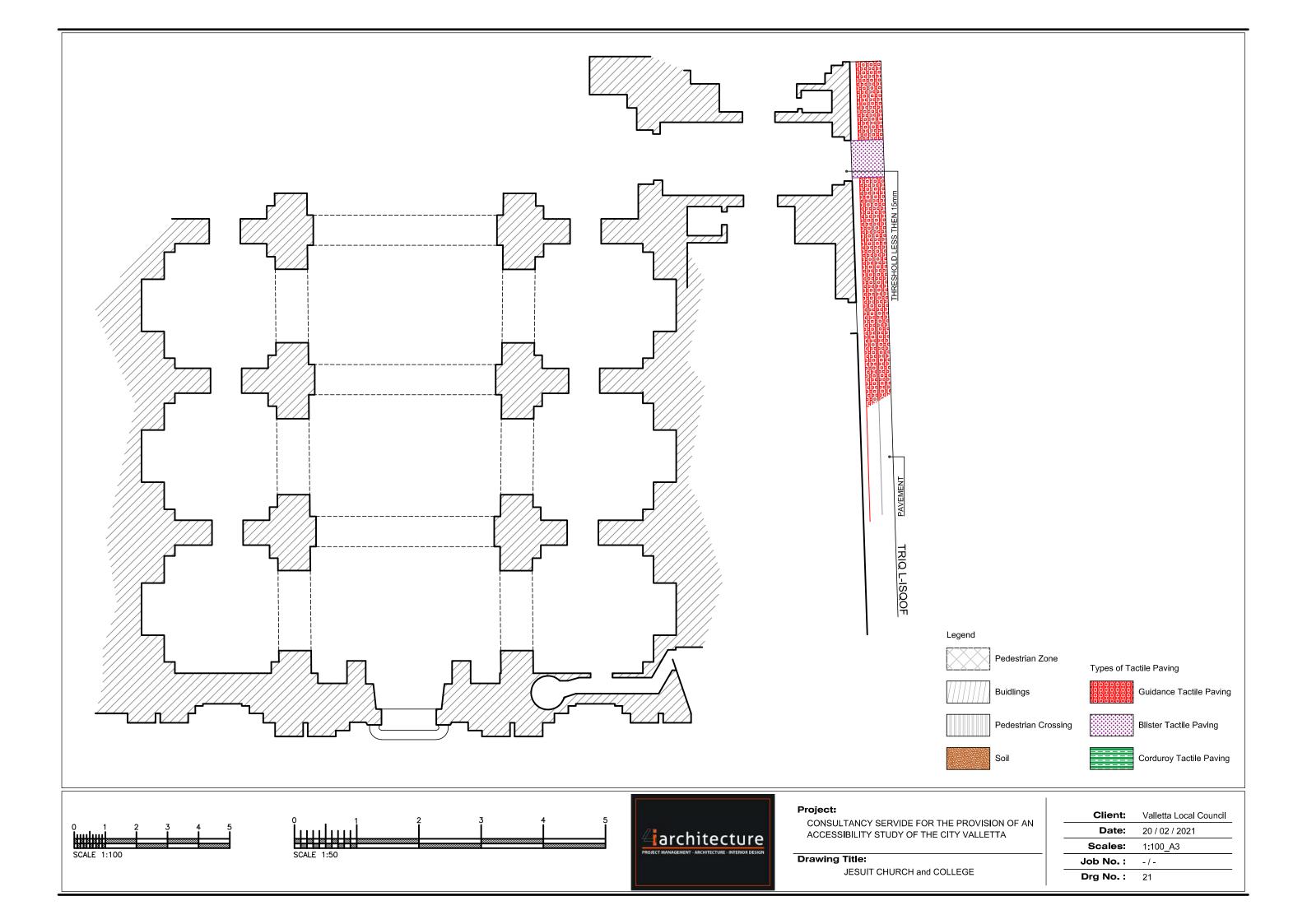
#### Peripheral Itinerary (Yellow Route)

Number	Site	Category
36	Casa Rocca Piccola & Casa Rocca Grande	1 (C. R. Piccola); 3 (C.R. Grande)
37	St Catherine Church and Monastery	1 (Church); 3 (Monastery)
38	Palazzo Spinola	3
39	Palazzo de la Salle	2
40	Biccerija (Valletta Design Cluster)	1
41	Auberge de Baviere	2
42	Church of Our Lady of Pilar	1
43	Auberge of Aragon	2
44	Saint Paul's Anglican Cathedral	1
45	Archbishop's Palace	2
46	Casa Gambalino (Old Mint c/w Archbishop Str; opposite Archbishop's Palace)	3
47	Priory of Navarre	3
48	Our Lady of Mount Carmel Basilica	1
49	Manoel Theatre	1

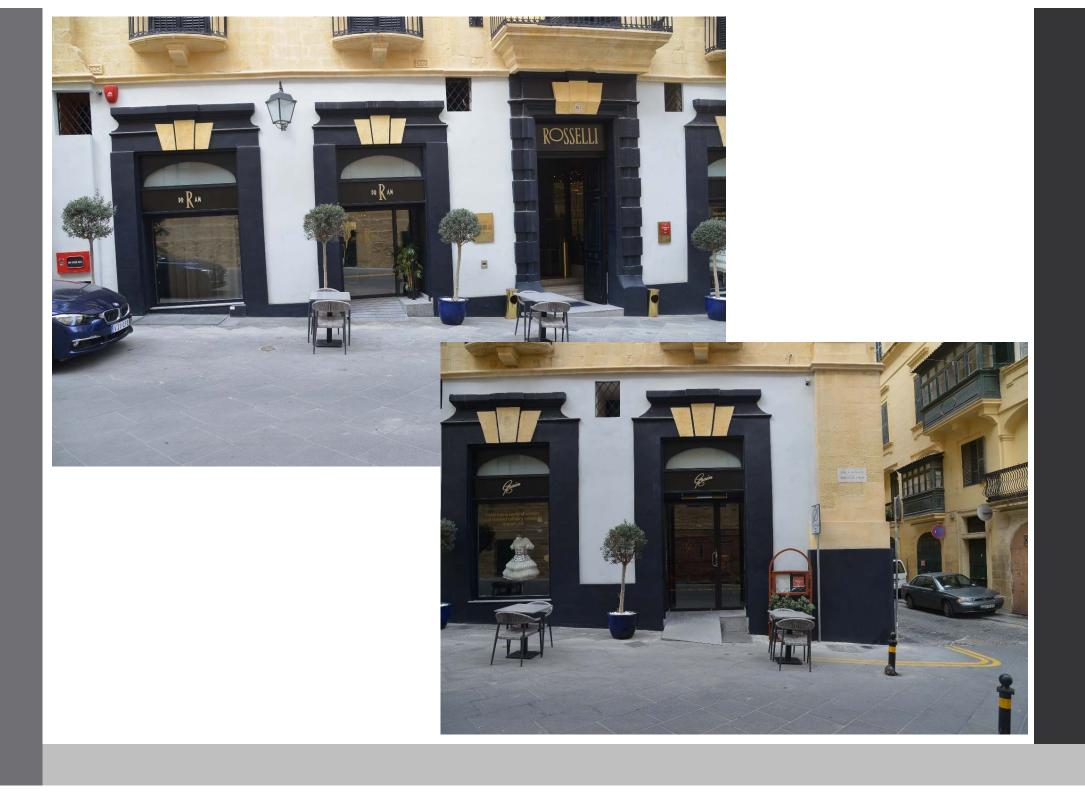
## Route 2

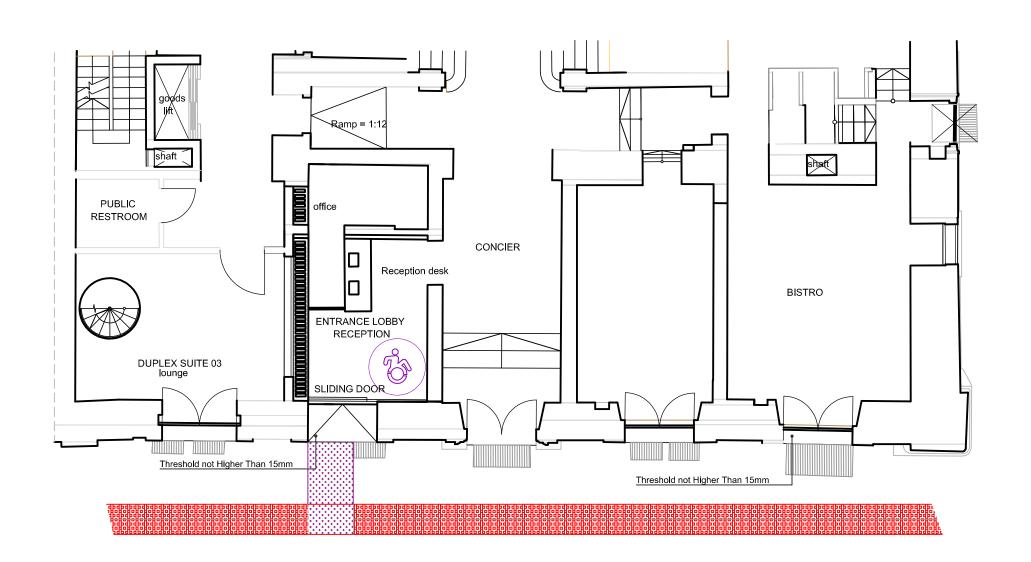
## Jesuit Church





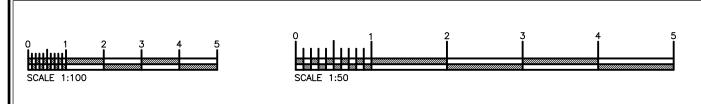
### Palazzo Rosselli - Massa





#### **Approved - Ground Floor Level**

Scale 1:100 PA 666/20





#### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

Palazzo Rosselli Massa

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100_A3
Job No. :	-/-
Drg No. :	22

Types of Tactile Paving

Guidance Tactile Paving

Blister Tactile Paving

Corduroy Tactile Paving

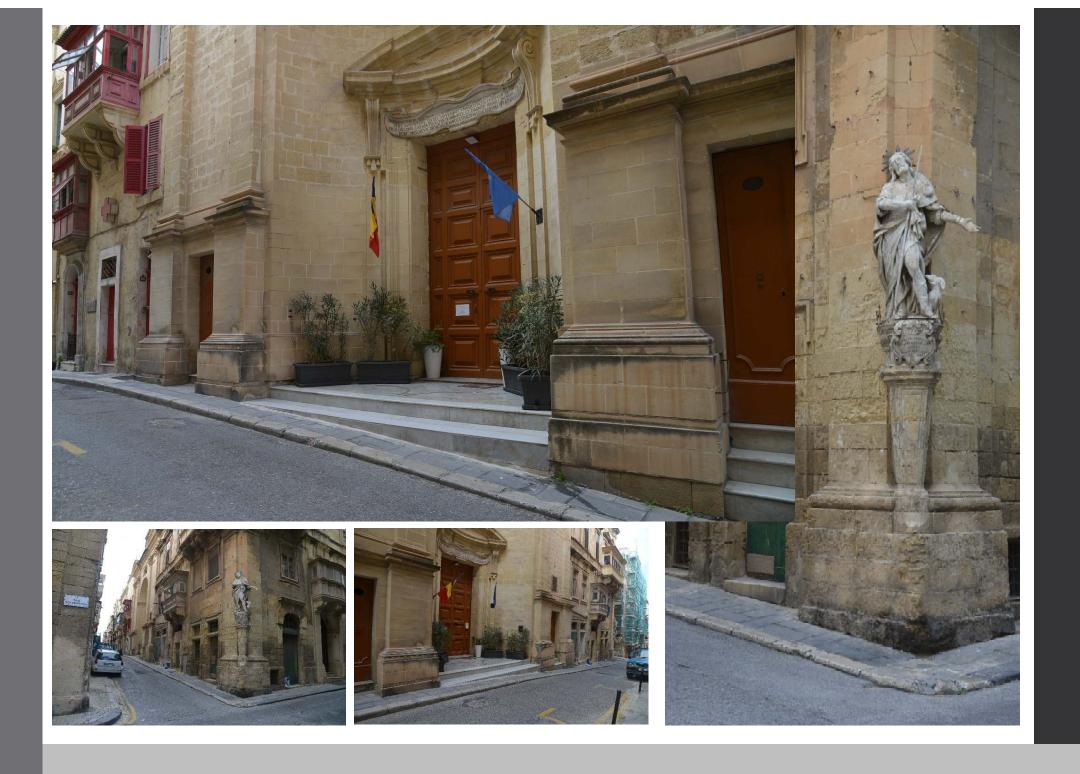
Legend

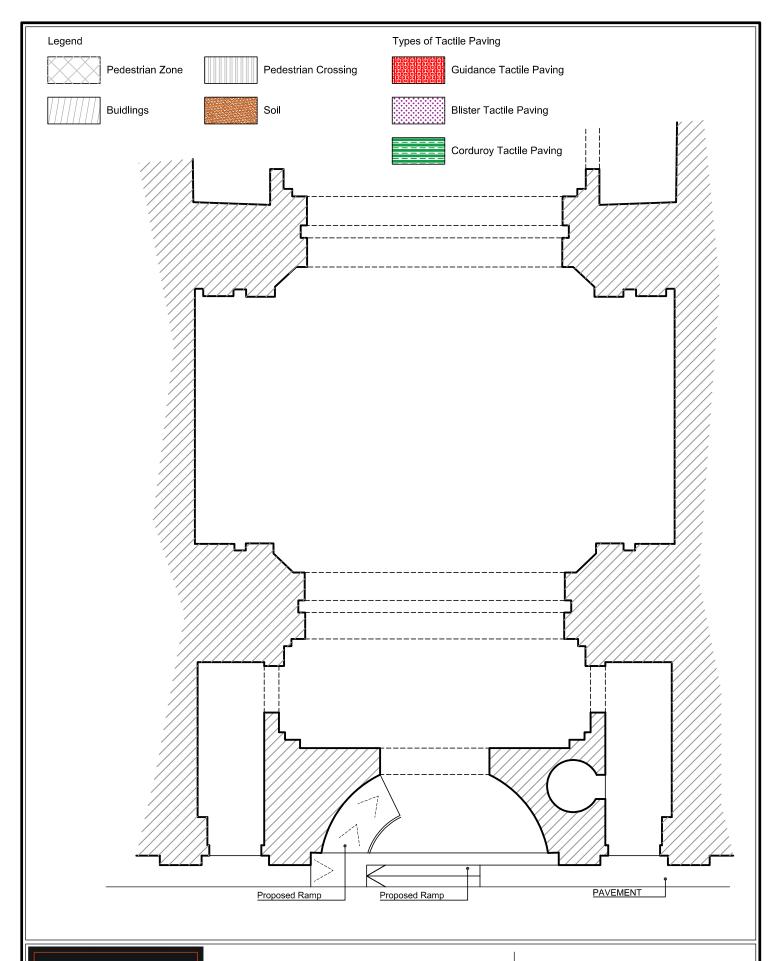
Pedestrian Zone

Pedestrian Crossing

Buidlings

# Niche and Church of St Roque







#### Project:

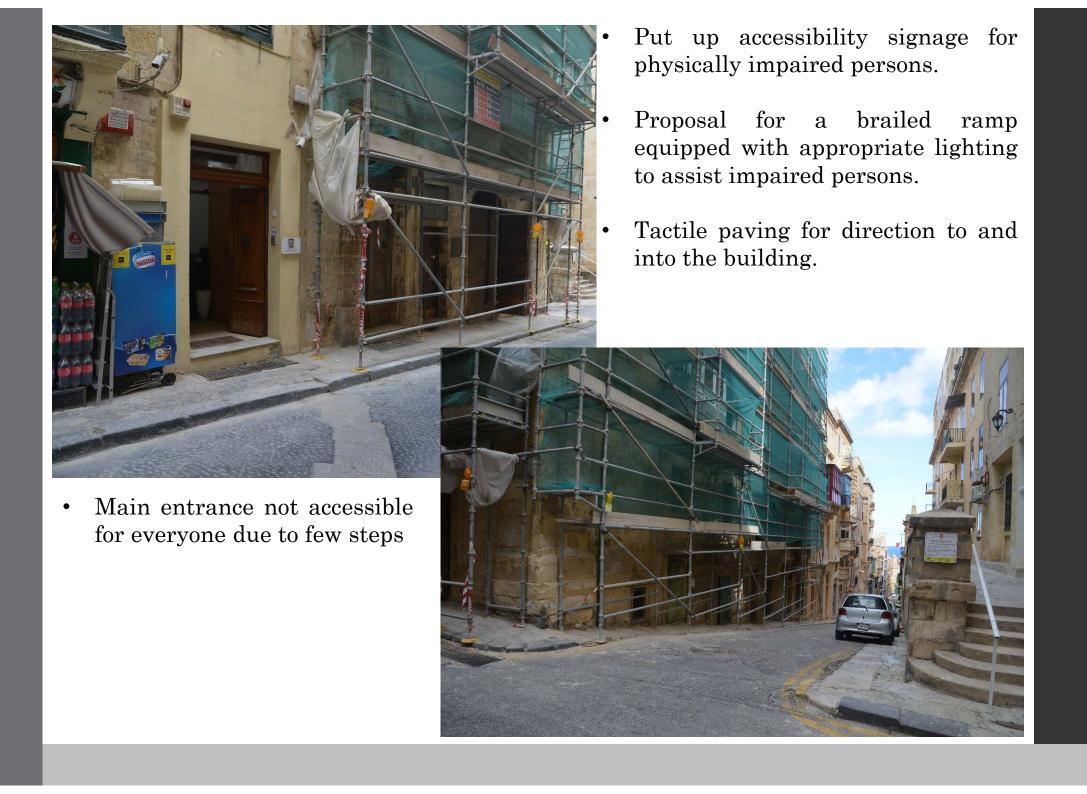
CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

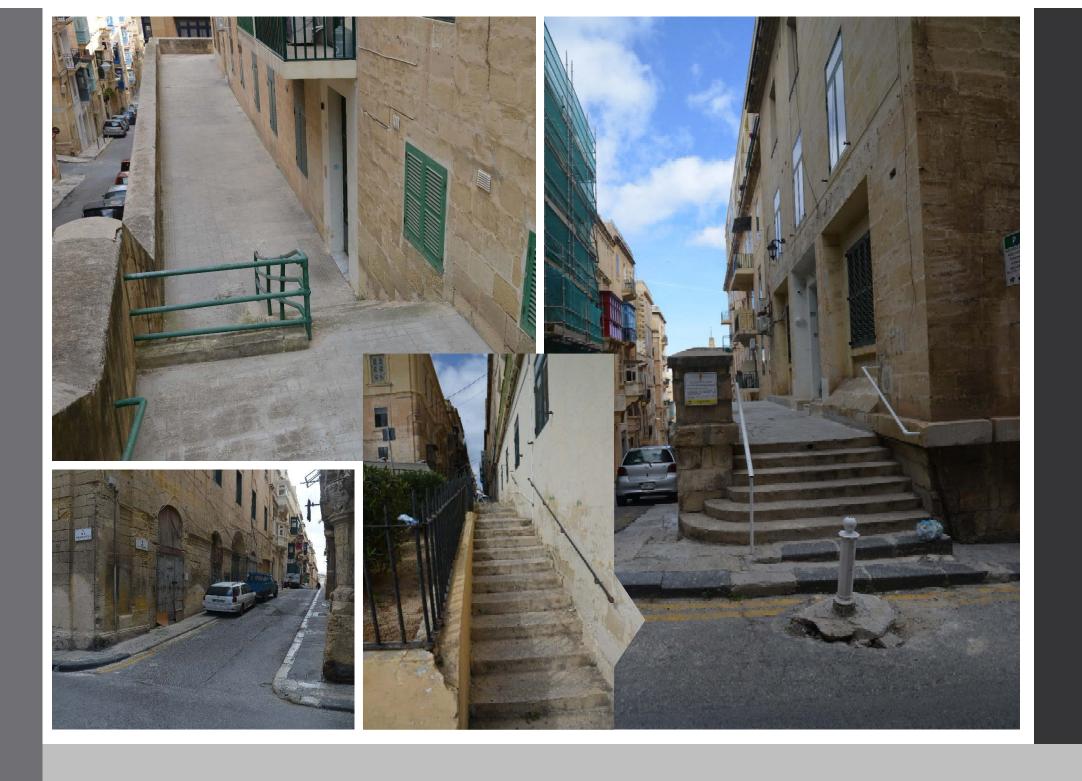
St' ROQUE CHURCH

Cllent:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100_A4
Job No. :	-/-
Drg No. :	25

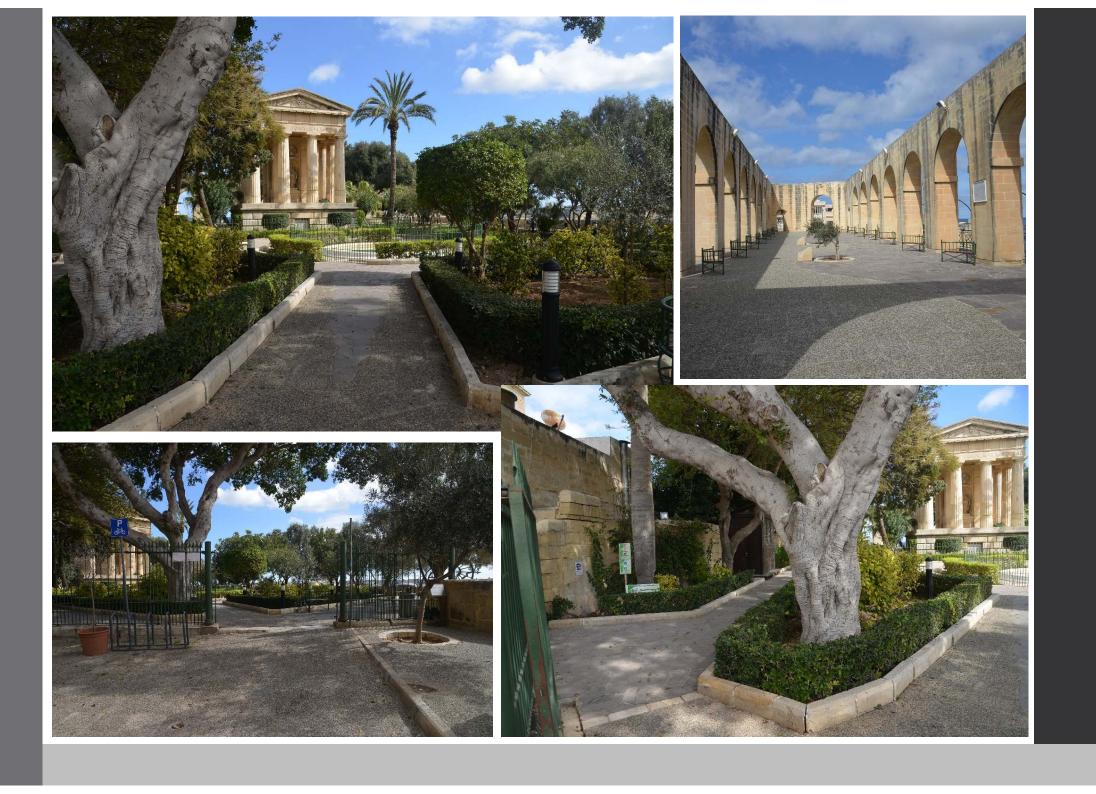
#### Shelley House

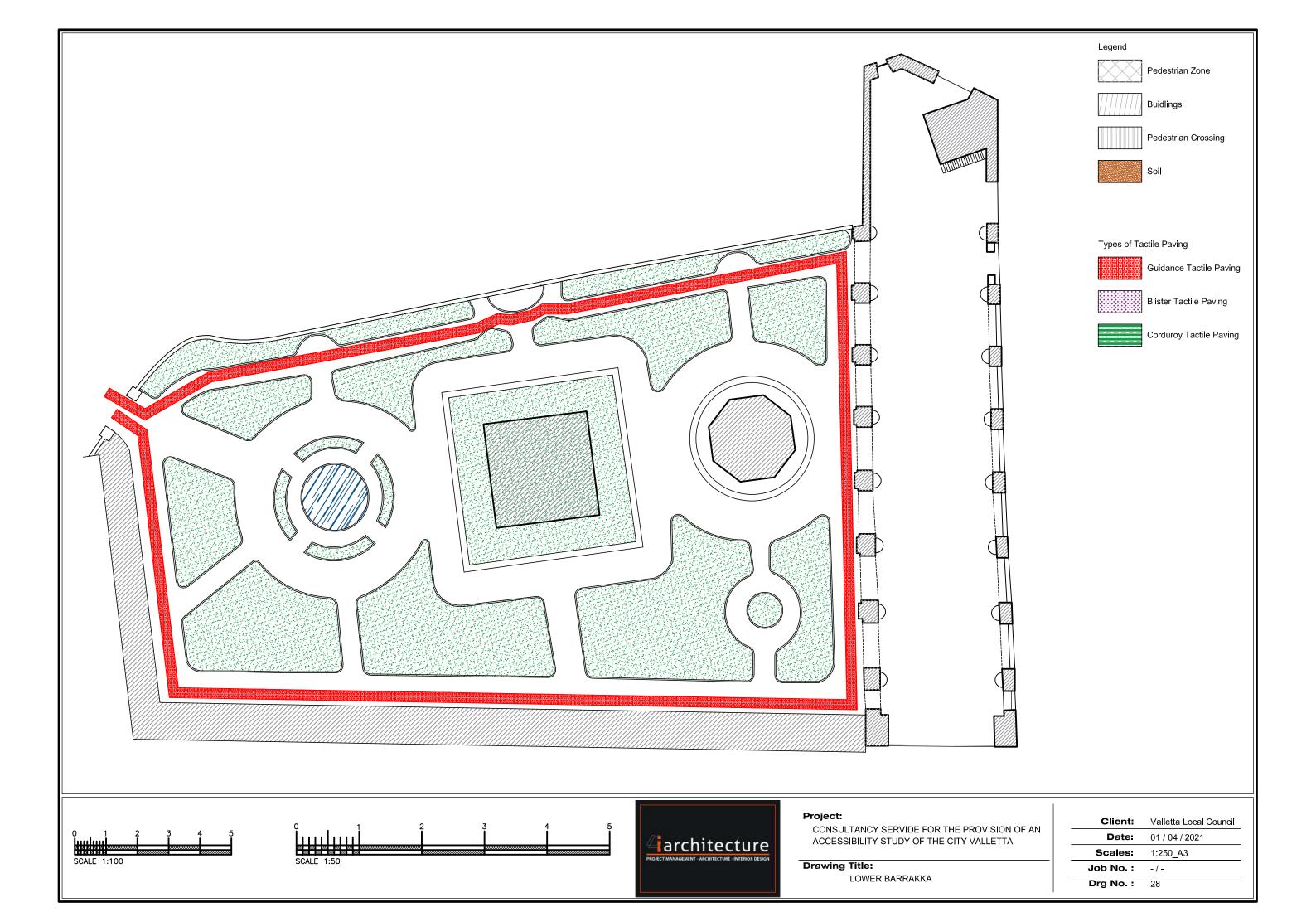


### Site of Slave Prison



#### Lower Barrakka Gardens





# Sacra Infermeria









### Ruins of Nibbia Church



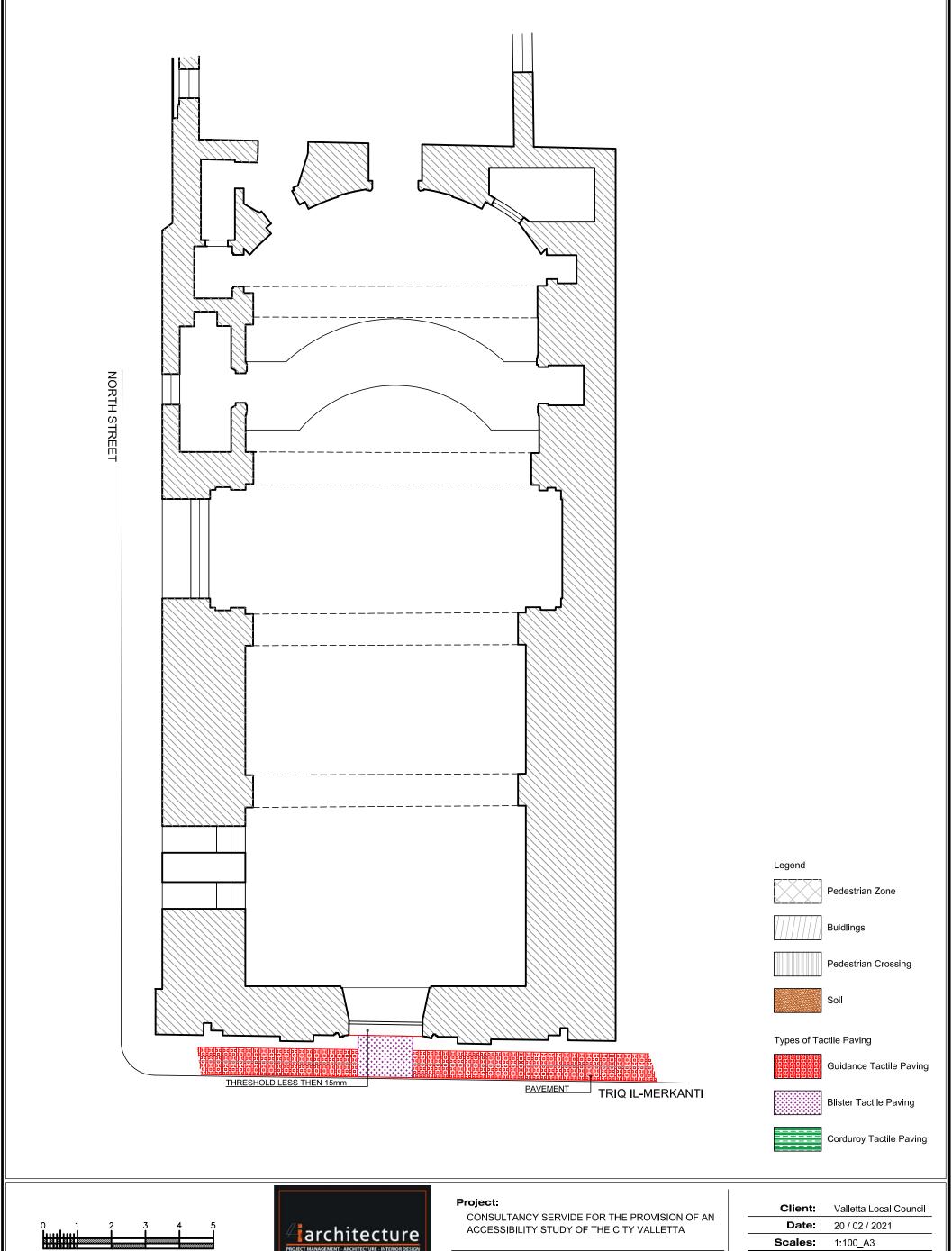
## Fort Saint Elmo

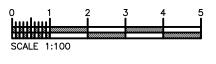


## St Mary Magdalene Church









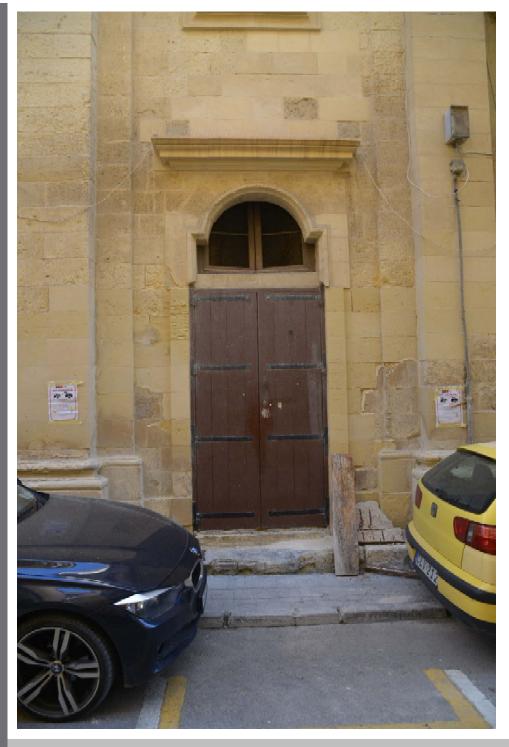


#### Drawing Title:

ST' MARY MAGDALENE CHURCH AND CONVENT

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100_A3
Job No. :	-/-
Drg No. :	32

## Church of St Nicholas





# Dominican Priory & Porto Salvo Church





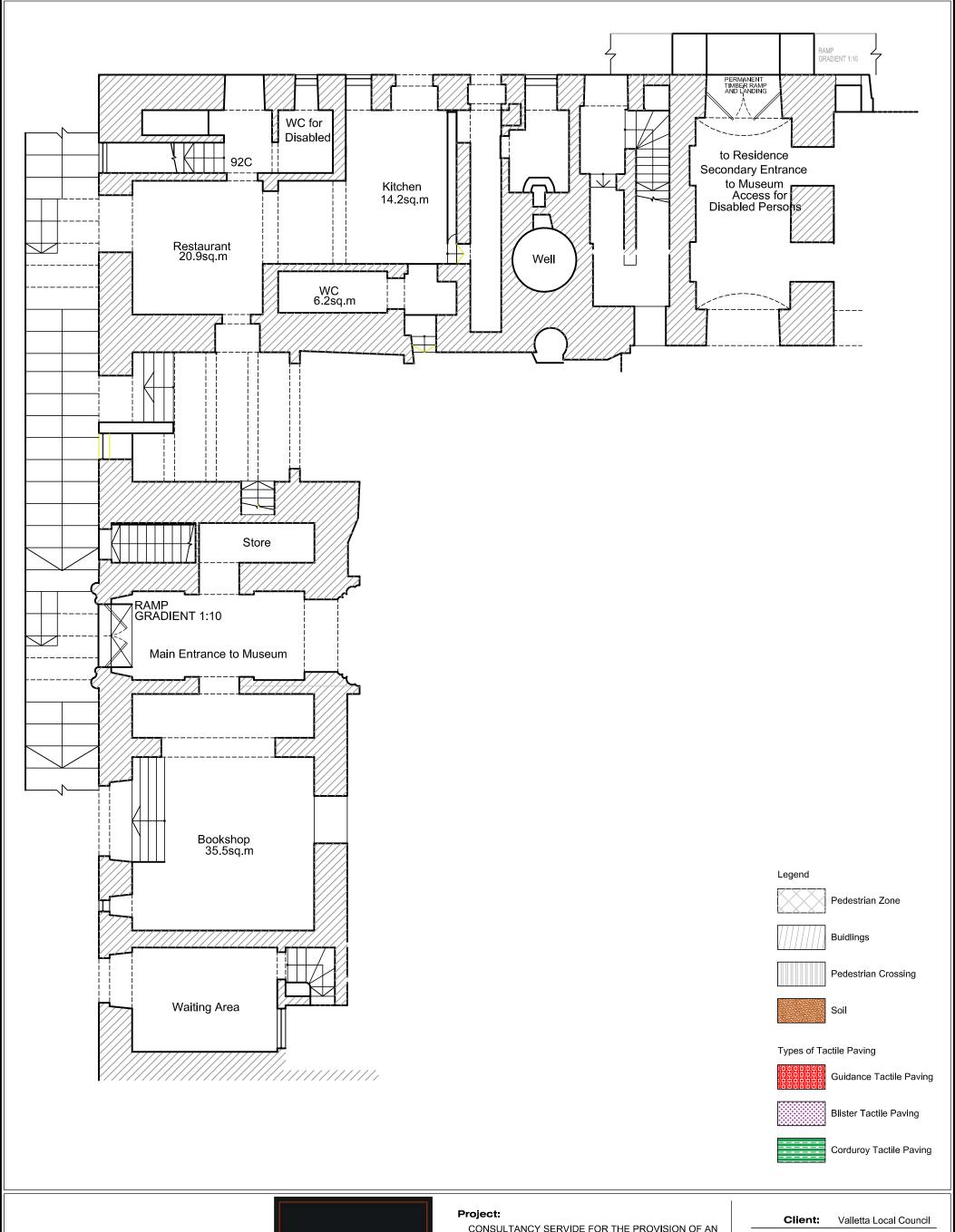


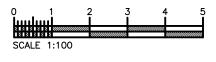
# Casa Rocca Piccola & Casa Rocca Grande













CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

Casa Rocca Piccola & Casa Rocca Grande

Valletta Local Council
20 / 02 / 2021
1:100_A3
-/-
36

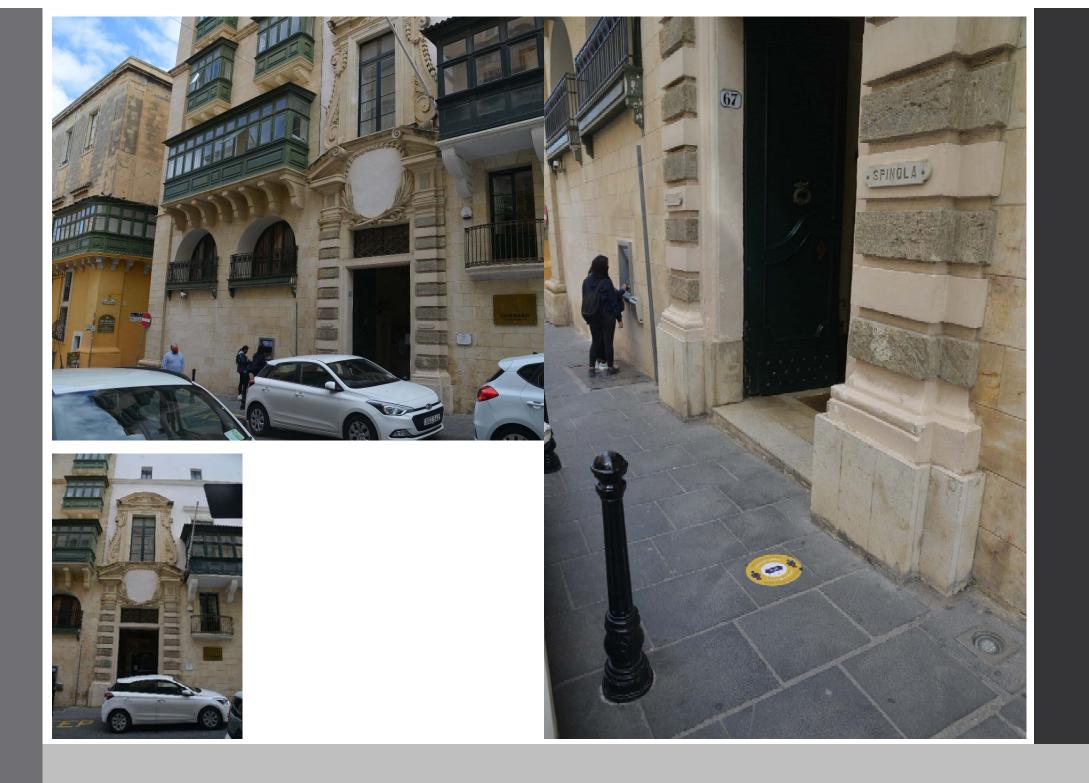
# St Catherine Church

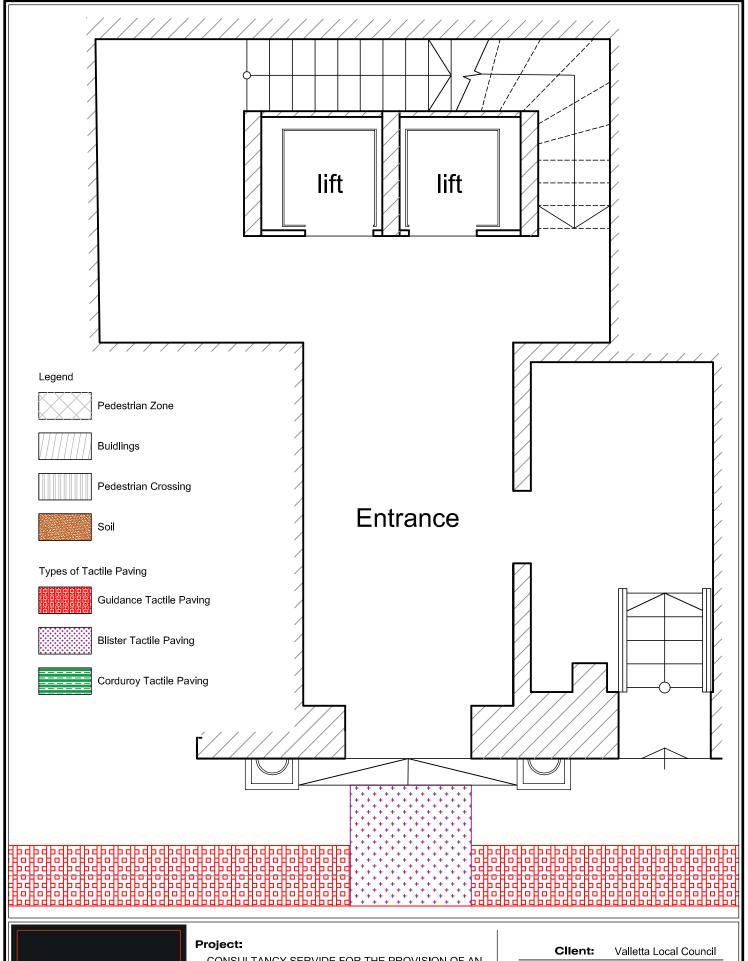






## Palazzo Spinola







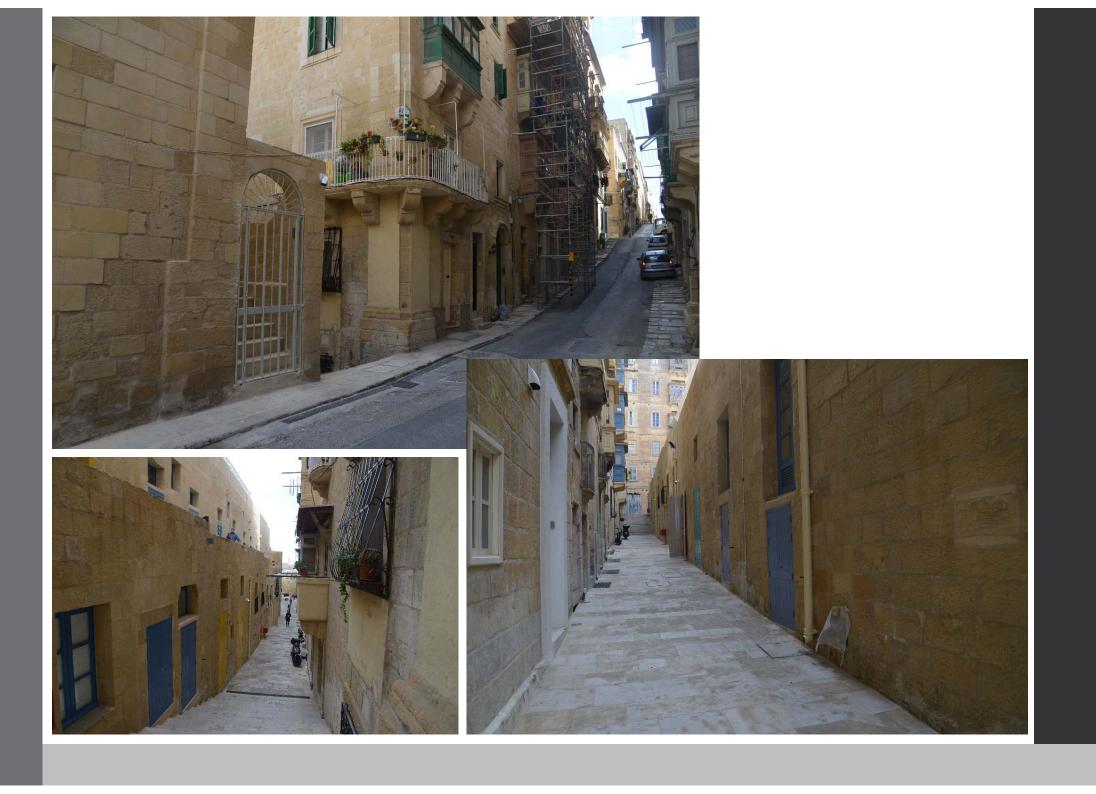
CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

#### Drawing Title:

PALAZZO SPINOLA

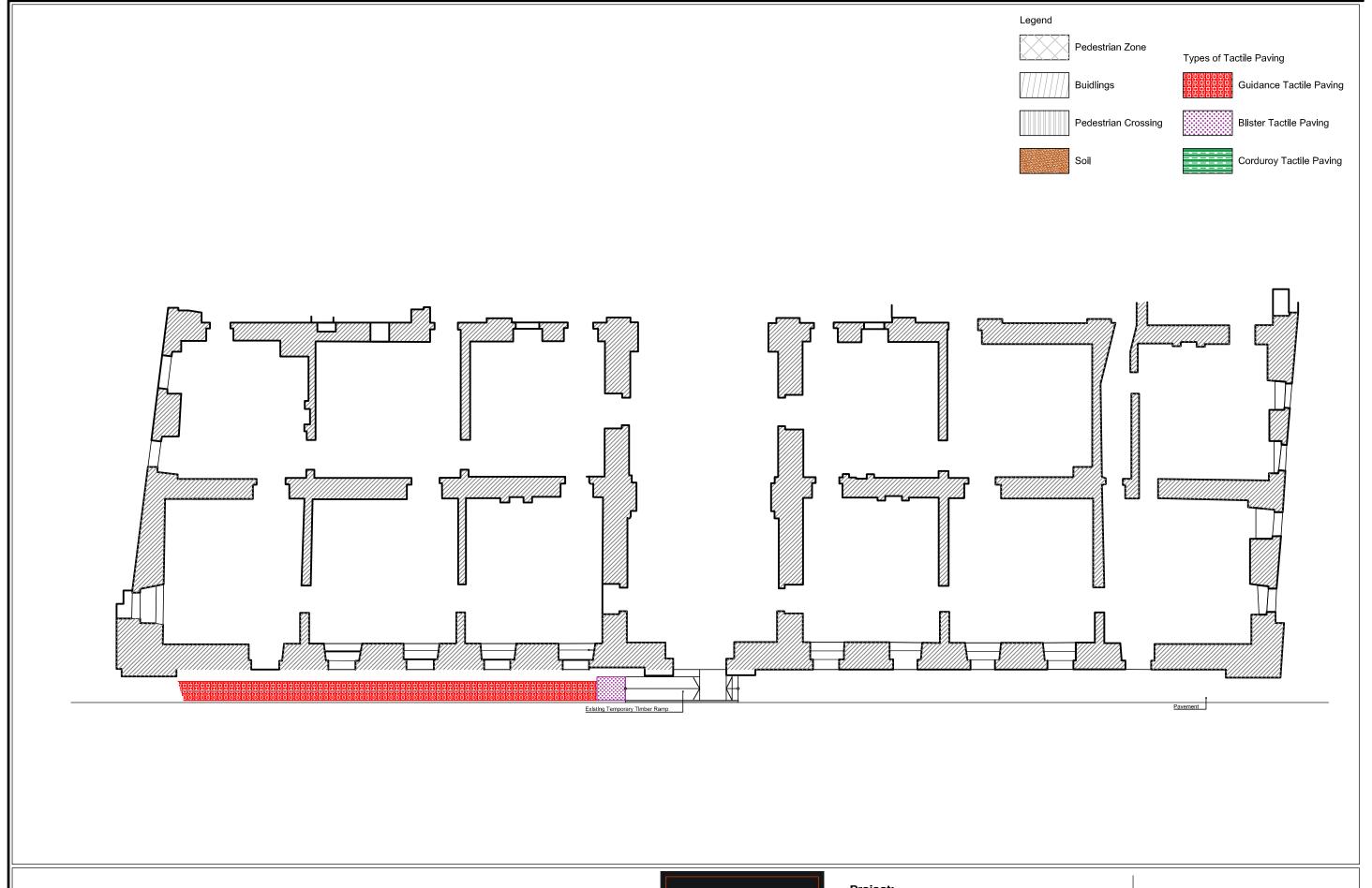
Cllent:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:50_A4
Job No. :	-/-
Drg No. :	38

# Biccerija



# Auberge de Baviere









#### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

### Drawing Title:

AUBERGE DE BAVIERE

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:150_A3
Job No. :	- / -
Drg No. :	41

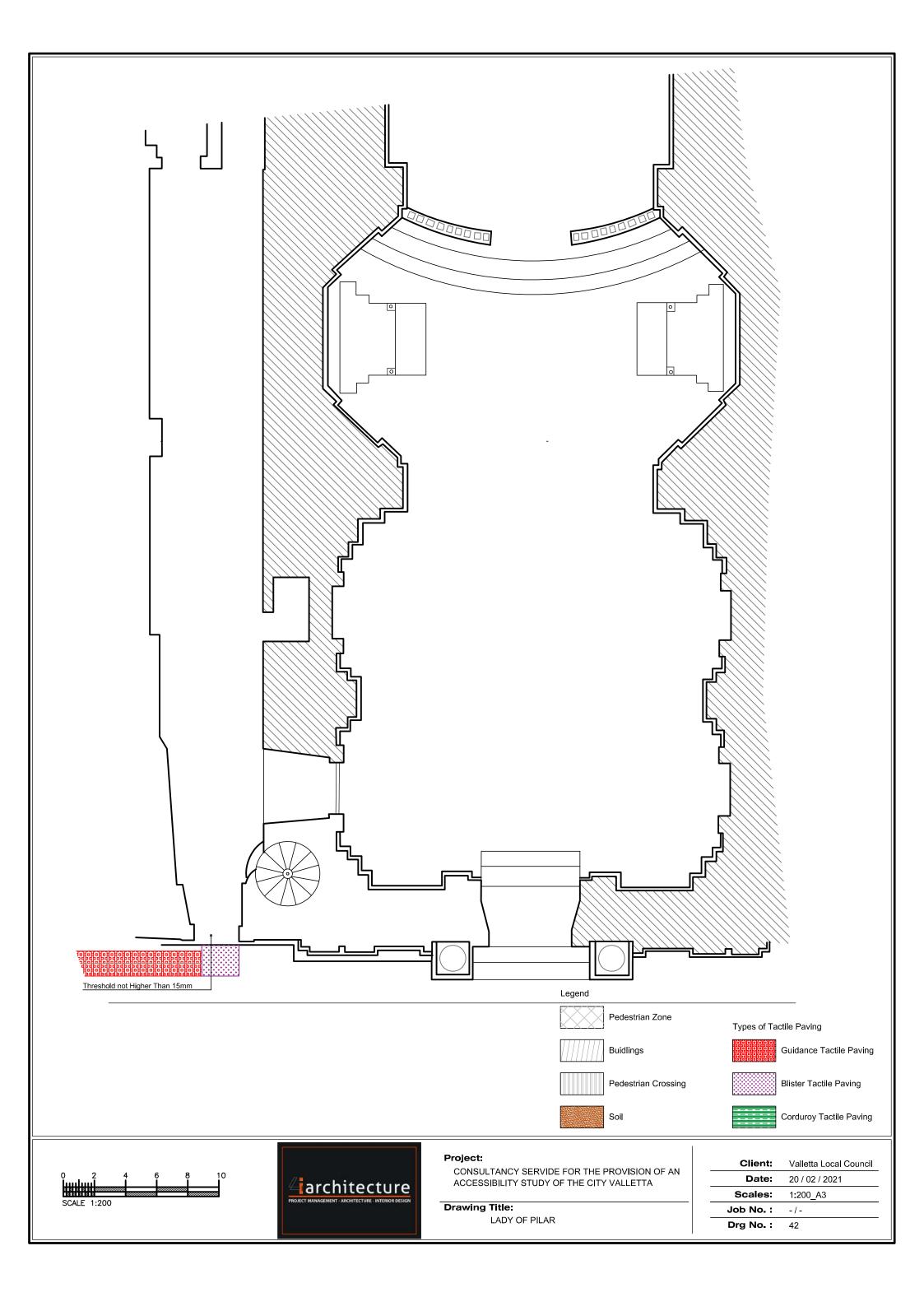
# Church of Our Lady of Pilar











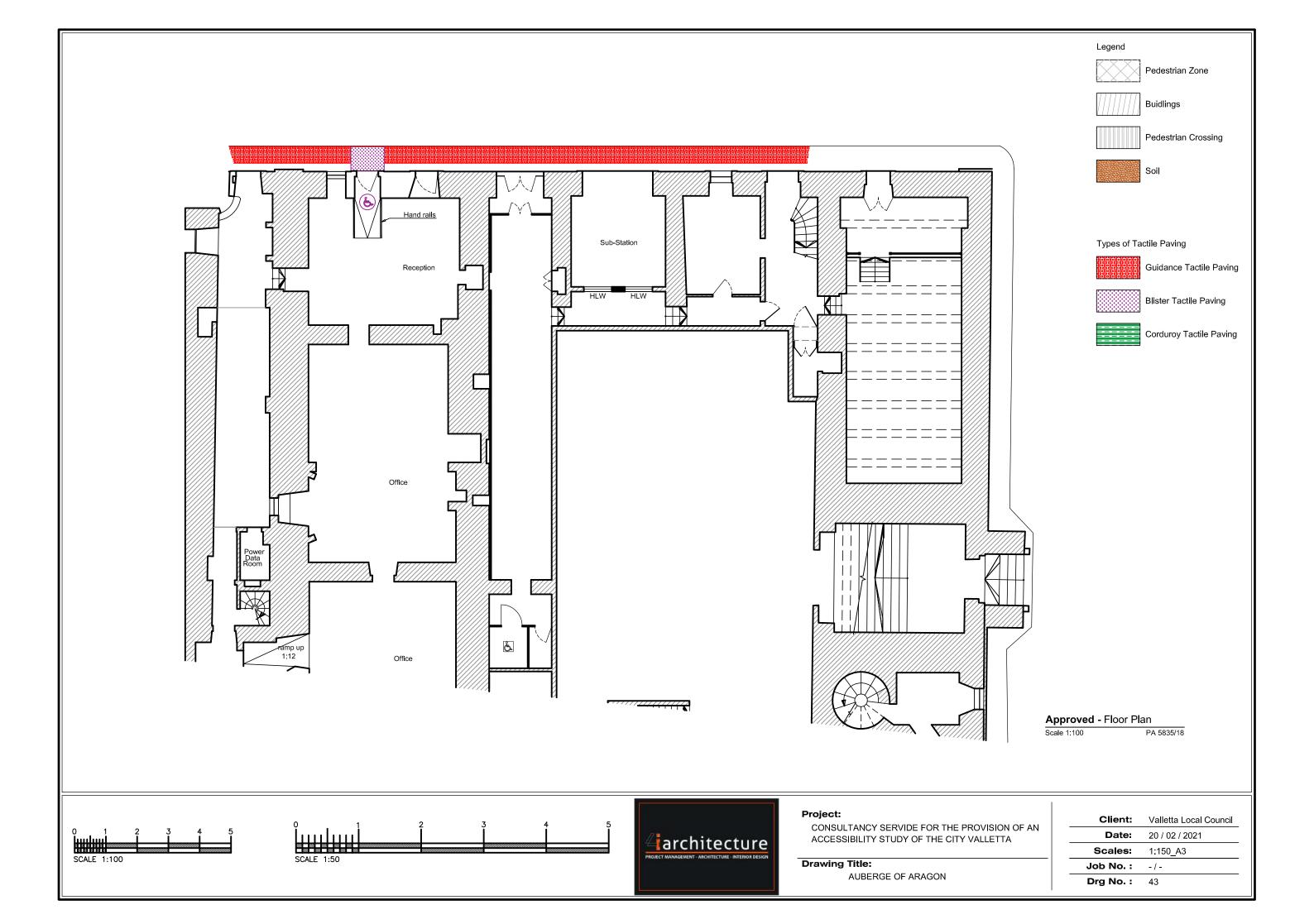
# Auberge of Aragon



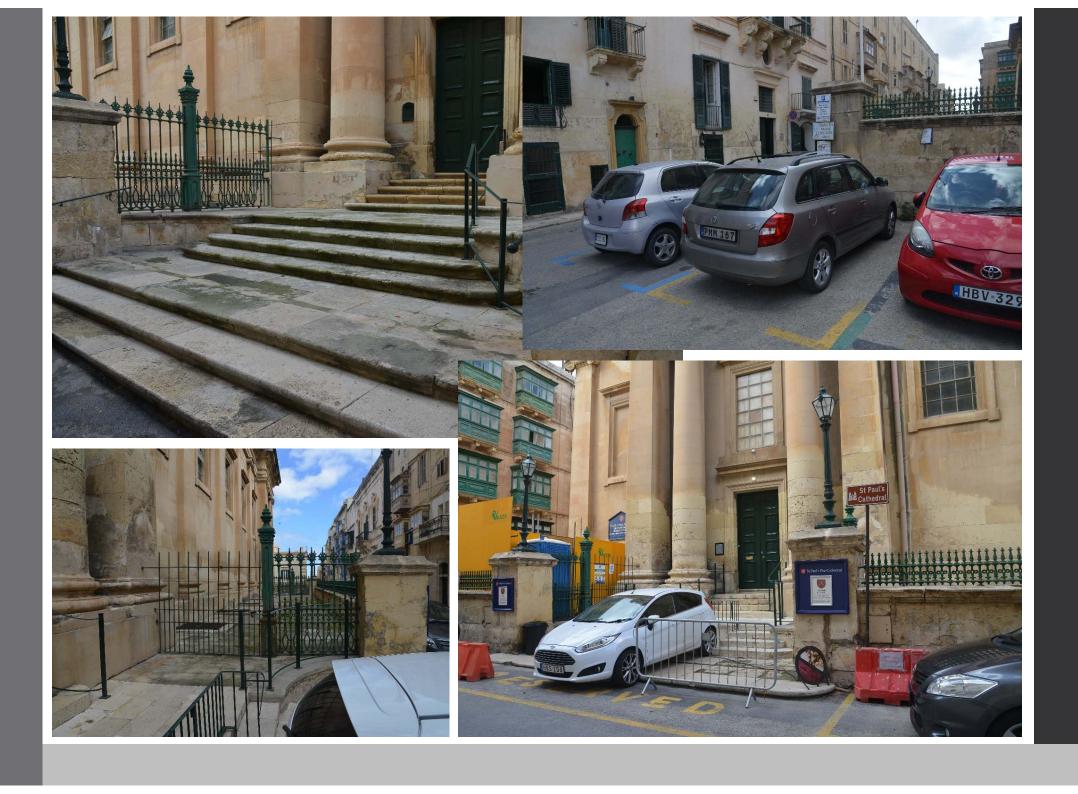


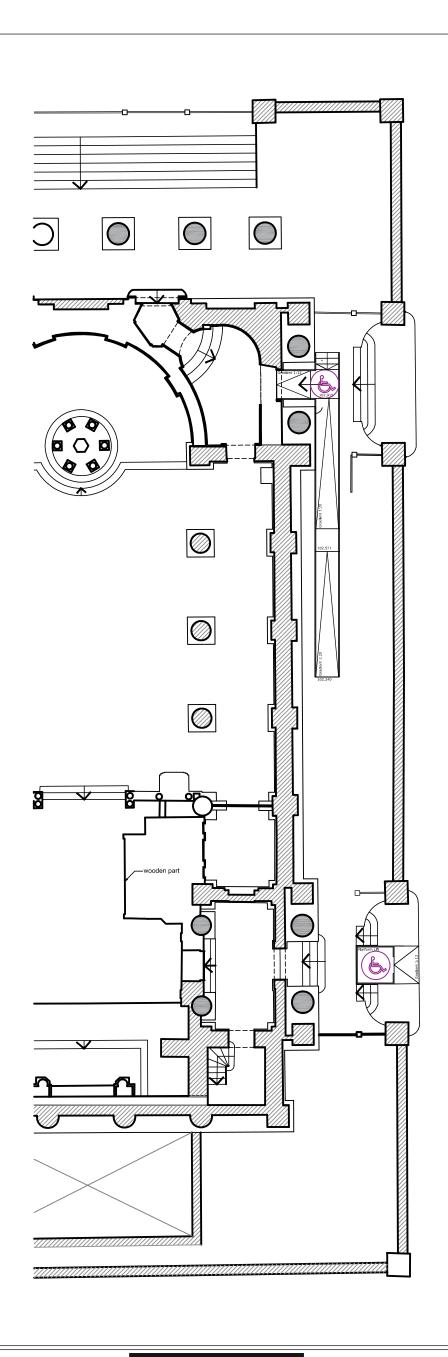






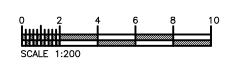
# St Paul's Anglican Cathedral





**Approved -** Floor Plan

Scale 1:200 PA 7441/17





### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

### Drawing Title:

ST PAUL'S ANGLICAN CHURCH

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:200_A3
Job No. :	-/-
Drg No. :	44

# Archbishop's Palace



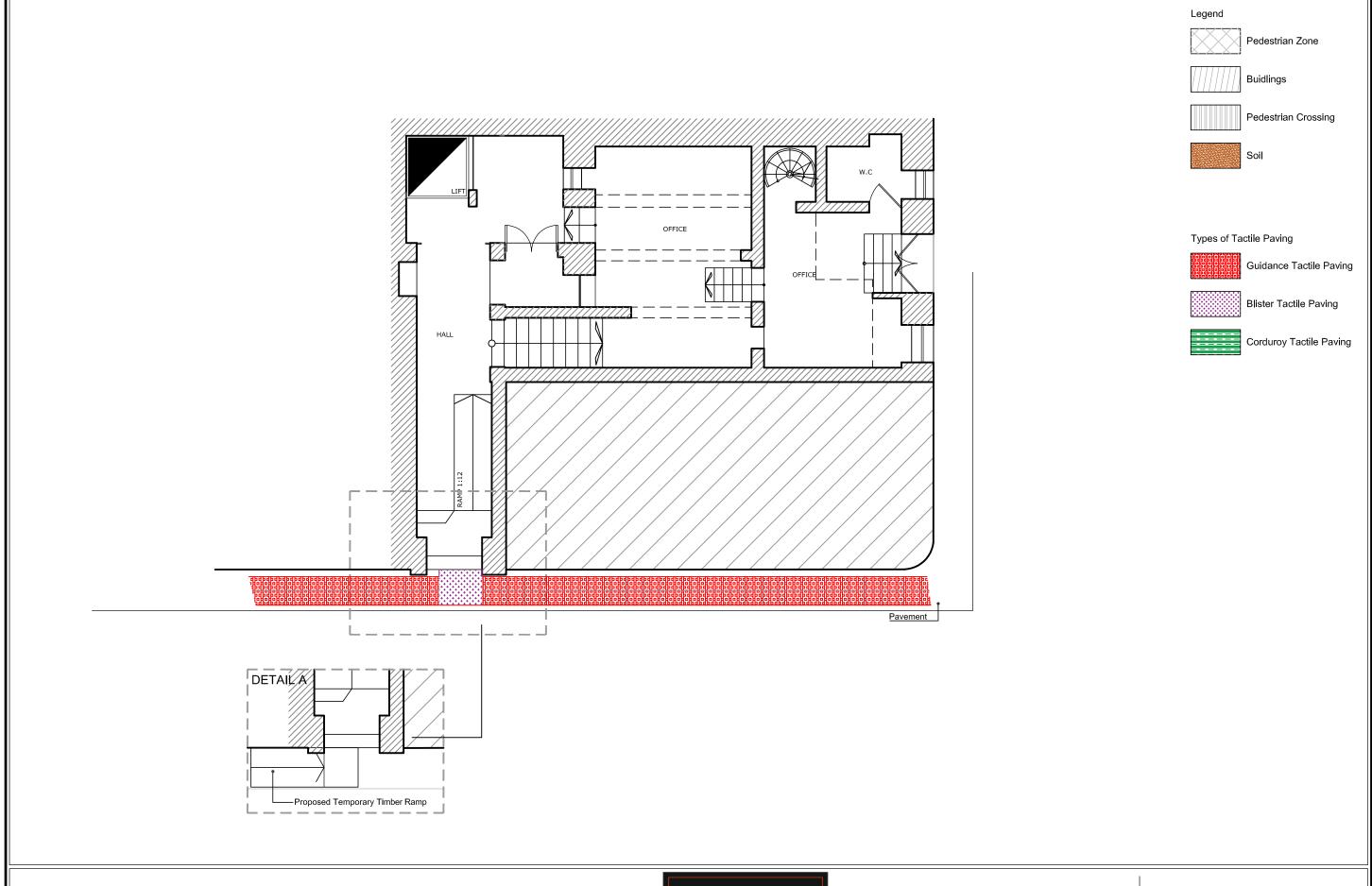


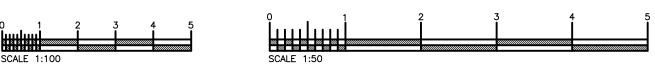


# Casa Gambalino











#### Project:

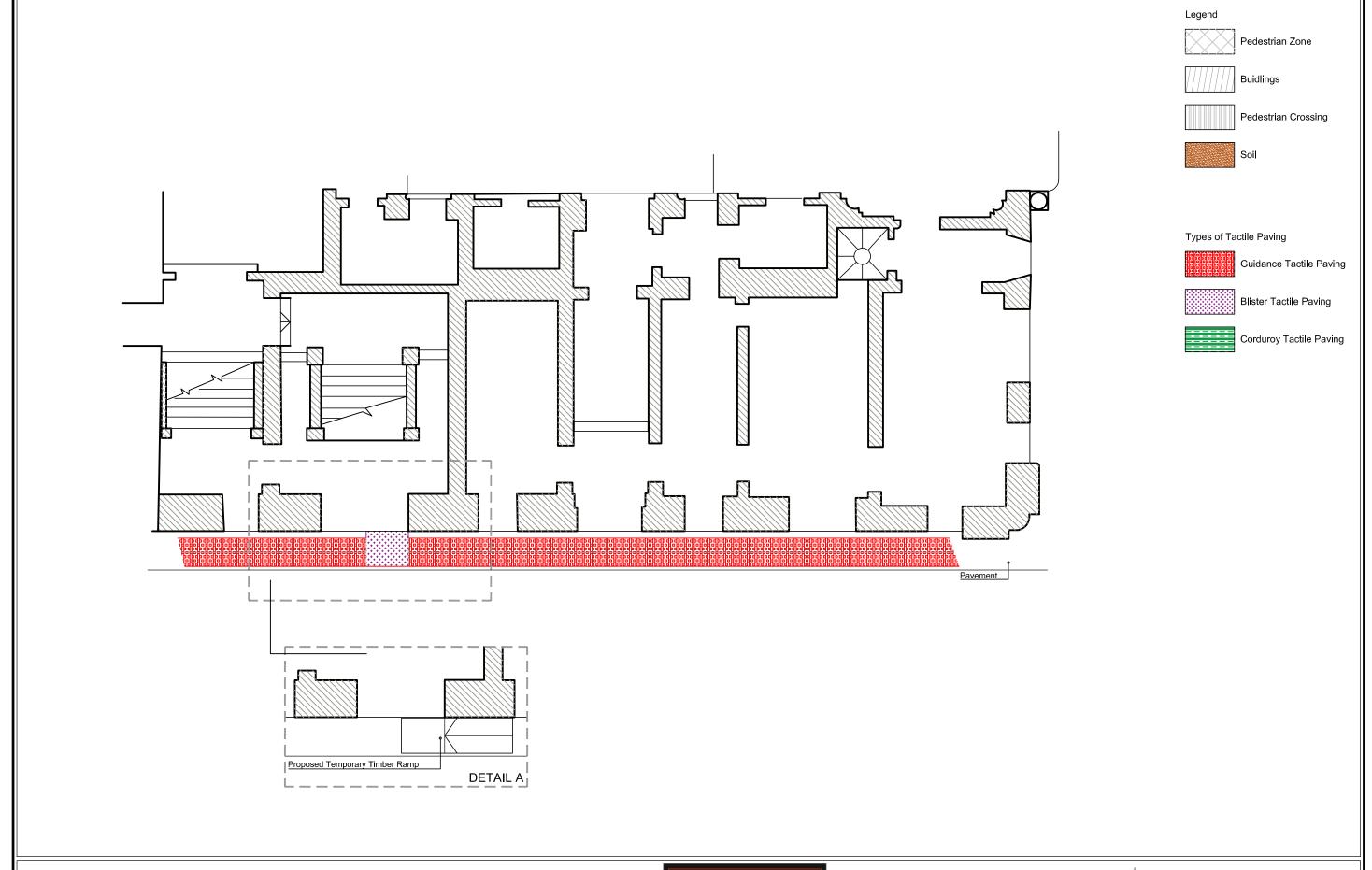
CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

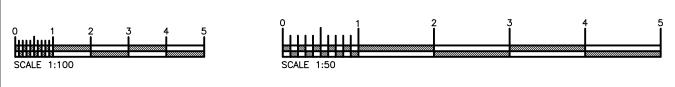
### Drawing Title:

CASA GAMBALINO

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100_A3
Job No. :	-/-
Drg No. :	46

# Priory of Navarre







#### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

### Drawing Title:

PRIORY OF NAVARRE

Client:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:100_A3
Job No. :	-/-
Drg No. :	47

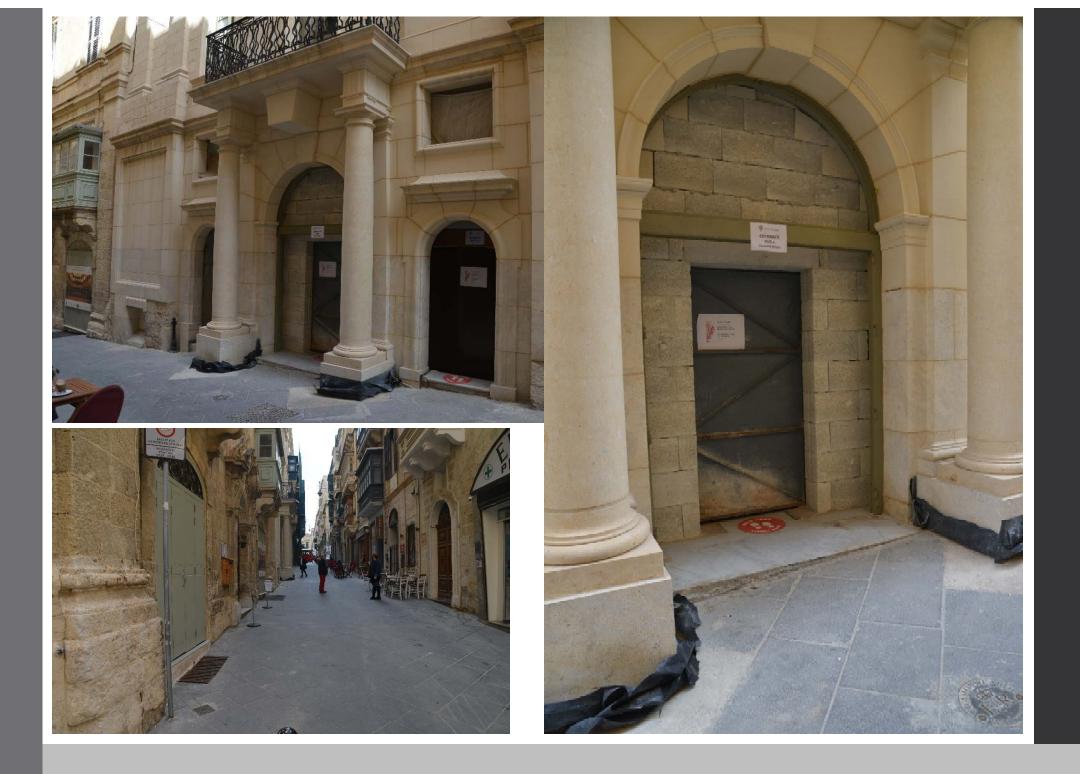
# Our Lady of Mount Carmel Basilica

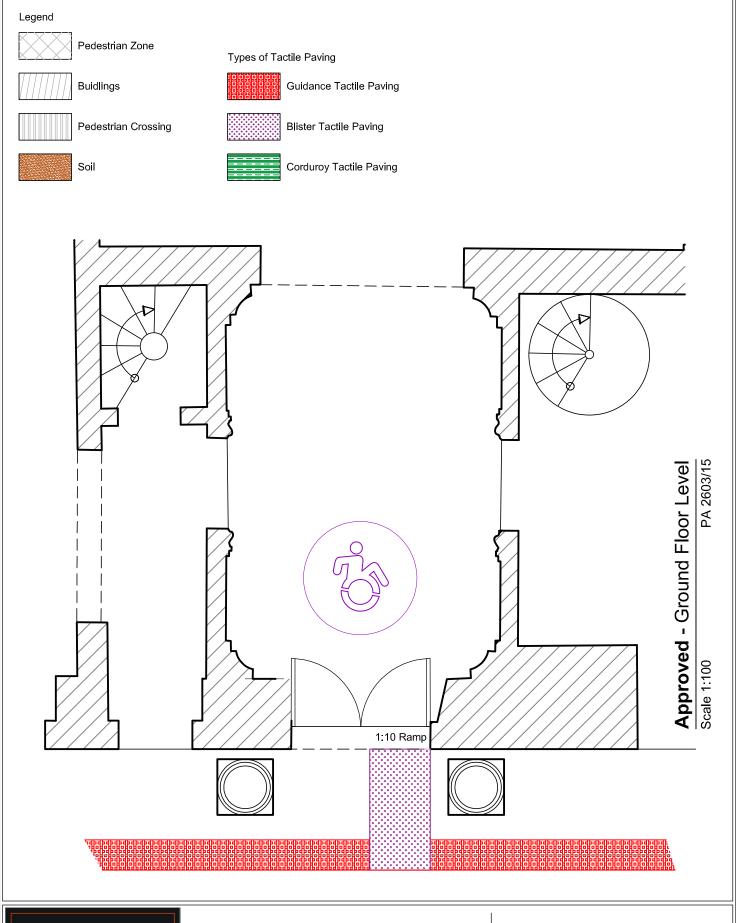






## Manoel Theatre







### Project:

CONSULTANCY SERVIDE FOR THE PROVISION OF AN ACCESSIBILITY STUDY OF THE CITY VALLETTA

### **Drawing Title:**

Manoel Theater

Cllent:	Valletta Local Council
Date:	20 / 02 / 2021
Scales:	1:50_A4
Job No.:	-/-
Drg No. :	49

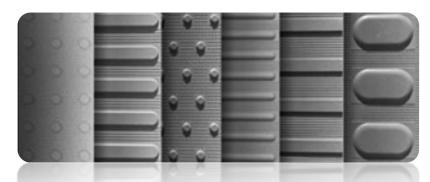
# Proposals

## List of Proposals

- Tactile Flooring
- Visually Impaired Railings
- Accessible Pedestrian Systems
- Street Markings
- Suitcase Ramps
- Braille and Tactile Sign
- Reflective Tape
- Applying QR Codes
- Accessing sites
- Adequate Lighting



## Tactile Flooring



- \* One of the proposals that has been proposed was Tactile Flooring.
- \* Tactile Flooring is a system of textured ground surface indicators found on footpaths, stairs and other forms of platforms to assist pedestrians who are vision impaired.
- \* Tactile pavers have bright yellow or red colours as standard colours everywhere across and bumpy surfaces in set patterns. Pedestrians on foot or wheelchairs can detect these bumps and their patterns easily and differentiate the sign or message behind it.

## Tactile Flooring - Preparation



To apply Tactile Paving on current sites, they will have to be cleaned by power-washing the areas prior to installation. The moisture-tolerant adhesive supplied by the manufacturer enables the tactile to be securely fitted to recently cleaned surfaces without having to wait for complete drying.

Once the site has been cleaned, next task is to lay out the tiles in the required formation to determine how they should be positioned and whether cutting pieces are required.



## <u>Tactile Flooring – Setting Out</u>



The tactiles are carefully positioned as required, starting at the kerb and working back. On tilted crossings, the tiles would be aligned to a base line and allowed to overhang the kerb prior to being cut to shape as required.





## <u>Tactile Flooring – Cutting to Fit</u>

Once the tactiles are in position, any cuts can be marked using a 'Pavers Marker' or a pencil. For right angled cuts, the grid patterning on Tactiles is a useful guide to mark a straight line. Whilst for skewed cuts, a straightedge as a guide is best to be used.



An angle grinder or cut-off saw fitted with a diamond blade should be used to cut this type of Tactile paving.

## Tactile Flooring – Masking Off



Next task is to mask off using Duck Tape or similar to cover the edges to prevent the adhesive resins spreading onto the nontactile surfacing. The cut units are replaced to aid accurate positioning of the

masking tape.

Once the masking is complete, the tactiles can be removed and placed a convenient distance from the working area.



The masking tape is checked to ensure it is firmly in place not to allow adhesive to flow beneath the tape. The surface is checked again for loose material and swept again to remove any dust that might have blown in.

### <u>Tactile Flooring – Mixing the Adhesive</u>





The adhesive used for this installation is a Moisture Tolerant resin system. This particular adhesive system is colour-matched to suit the tactiles being installed.



The activator is then poured into the container containing the base resin and thoroughly mixed using a mechanical paddle stirrer.



### Tactile Flooring – Laying the Tactiles

Lay the mixed adhesive from the container directly onto the underlying layer and spread it evenly over the surface using a notched trowel and ensuring the adhesive covers the whole area, right up to and slightly over the edge of the masking tape.



Once an area has been covered with adhesive, the individual tactiles can be placed. The first tile is lowered onto the adhesive and lightly pressed down to settle it into the adhesive without trapping any air beneath.

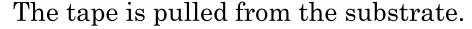
The laying continues with the operative carefully placing each tile and very gently settling it into the adhesive bed with it squeezing up between the joints.

## <u>Tactile Flooring – Finishing Off</u>



Once all of the tactiles have been laid, sprinkle dry sand over the entire surface to cover any exposed adhesive at joints and edges and helps create a non-glossy

surface.





The sand that had been sprinkled on the newly-installed tactile surface can now be swept away.



#### Tactile Flooring Type

There are different types of Tactile Flooring, though we suggest the following Flooring Types:

- Blister Tactile Paving
- Lozenge Tactile Paving
- Hazard Tactile Paving
- Directional Tactile Paving



### Blister Tactile Paving

- \* It is used for pedestrian crossings. This surface provides a warning to someone with a visual impairment that they are at a road crossing.
- \* The surface is an essential safety feature and consists of rows of flat topped blisters in a square pattern.



# Lozenge Tactile Paving

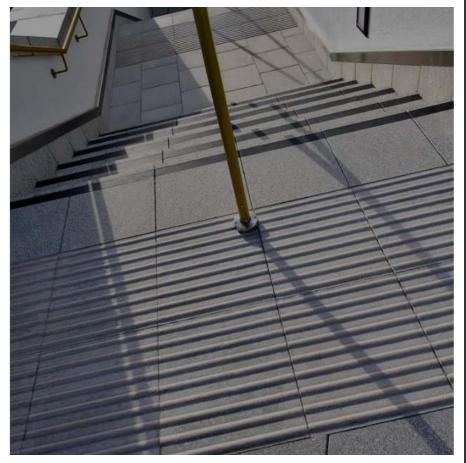
\* This type of tactile paving is used for onstreet platform edges, such as bus stops.



# Hazard Tactile Paving

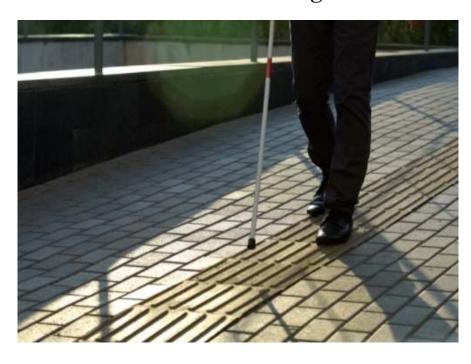
\* Designed to warn pedestrians of potential hazards in the immediate vicinity and to proceed with caution.





## Directional Tactile Paving

- \* This paving is used when there is a need to provide guidance to physical impaired pedestrians wishing to cross large open pedestrianized areas to specific points of access.
- \* Where a turn is encountered, the alignment of the paving should reflect the change of direction.





## QR Code in Tactile Flooring

\* One can also suggest that when planning for tactile flooring in public areas, one can also plan for a QR Code. This will assist visually impaired passengers with directions.

Visually impaired commuters can receive audio directions by

scanning the QR code on their smartphones.



### Visually Impaired Railings

- \* Another proposal that has been proposed was the Braille Handrail.
- \* Handrail should be installed continuously and with direction information on these handrails should be mounted in a way, so that visual impaired people can easily palpate and read it.
- \* Such information should be found always at certain positions, such as stair and ramp handrails, directly next to the handrail bend. Also, the handrail should include in braille the site's and arrow directions to access the site in.



## Accessible Pedestrian Systems

- \* An Accessible Pedestrian System is an audio and tactile system that gives Accessible crosswalks and helps to make the city pedestrian friendly.
- \* This APS provides much of the information already available to sighted pedestrians to vision impaired pedestrians.

\* It includes the facilities to full audio and tactile systems.









## Street Markings

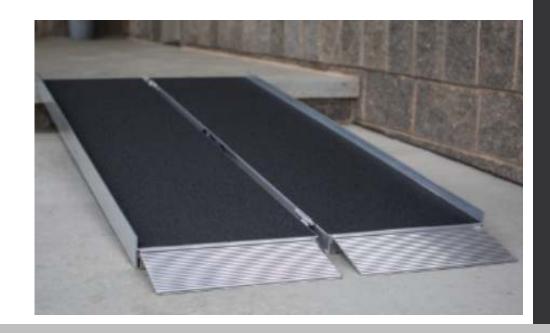
\* Street Markings can assist pedestrians to look either left or right prior crossing road.



## Suitcase Ramps

\* Suitcase ramps are ideal for situations where a permanent ramp is not feasible or possible.





#### Braille and Tactile Sign

\* Affixing braille and tactile signs on adjacent walls or stair handrail extensions will assist visual impaired pedestrians and assist other pedestrians to accessibilities and directions.

\* Signage should have no sharp edges, with tactile symbol or pictograph, raised tactile characters, braille locator and text.







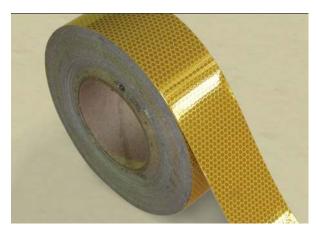
#### Reflective Tape



\* Reflective tape provides enhanced visibility in poor lighting conditions to assist detection between the pavement and the road and also detection of the bollards by the visually impaired.







# Applying QR Codes



\* Any type of pedestrian can access the QR Code by just scanning on any sign located in any public space one is interested in.

\* QR Codes can provide information and more guidance on the sites.

\* QR Codes can be delivered in many ways, for instance, MP3 QR Code or Video QR Code with sign language or with lyrics that will give an audio tour of the site.



# Accessing Sites

\* For some sites, should doors be closed, they had a door bell for whom it is not reachable by all pedestrians, especially physically impaired persons.





## Adequate Lighting

- \* Lighting is crucial to how long people feel safe occupying and moving through public places, and is especially a concern for visual impaired and hearing impaired pedestrians to use sign language.
- A consistently well-lit space makes discerning contrasting materials easier for which is a major concern for the blind and those with low vision when moving through spaces.



