# The Retrofitting of the intersection of Nyi Ageng Serang Monument as the Identity of Wates City

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#### ABSTRACT

The development of a city is inseparable from the city's identity, making the City of Wates need an identity to make it easier to recognize, remember, and to increase the interest of visitors to visit. City's identity can be formed through good regional arrangement and character. The intersection of Nyi Ageng Serang Monument is one of the strategic areas in Wates City which has quite busy traffic conditions and is a commercial area that is the center of the city's economic growth. As a strategic area that had the potential to be the identity of the City of Wates, this area must have good outdoor spatial planning and character. The research aims to develop guideline model based on retrofitting. Data collected through observation and walk-through analysis methods to reveal existing problems and local potential. The model to retrofit are applied based on outdoor spatial planning standards and local potential. Retrofitting of the intersection of Nyi Ageng Serang Monument as the identity of Wates City can be applied through: (1) the arrangement of the corridor spatial planning based on the standard (consisting of street zones, green zones, pedestrian zones, and development zones); and (2) the application of potential local elements in the area to create the character (the shape of building facades, street furniture, colors, and materials).

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Keywords: Retrofitting, commercial corridor, identity, Wates city

### 1. Introduction

The development of a city is inseparable from the city's identity which makes the city easily recognized and remembered by visitors and the wider community. The identity of a city plays a role in forming the image of a region [1]. City identity also plays a role in increasing the attractiveness of a city so that the interest of visitors to visit is increasing, as well as adding value to the city. The identity of a city can be realized through the design of objects that are different or do not yet exist in other areas, through the arrangement and design of areas with identical or distinctive characters. Along with the inauguration of the Yogyakarta International Airport in Kulon Progo Regency, the city and its surrounding areas have also developed, one of which is the City of Wates. As a growing city, Wates City, which is also the capital of Kulon Progo Regency, needs an identity that can make this city known and attractive to visit.

The intersection of Nyi Ageng Serang monument is one of the strategic areas in Wates monument is one of the strategic areas in Wates City, which has great potential to be developed into the identity of Wates City. A corridor can be defined as an elongated or linear space between buildings [2]. The intersection of Nyi Ageng Serang monument can be understood as a corridor of five streets that unite at an intersection in the middle of which there is the Nyi Ageng Serang monument. This area actively plays a role as a commercial corridor, namely a road corridor surrounded by shopping namely a road corridor surrounded by shopping functions buildings commercial or [3T. Commercial corridors are used for commercial activities, offices and work centers within the city [5]. The intersection of Nyi Ageng Serang monument area has an important role for the City of Wates because one of its corridors is included in the strategic area of economic growth [6]. Traffic conditions in the area are quite busy due to commercial activities and traffic activities that occur because one of the corridors acts as a national arterial road connecting g Yogyakarta and Purworejo. with the inauguration of the Coupled `

Yogyakarta International Airport, the area experienced an increase in crowds due to the access from the city of Yogyakarta to Yogyakarta International Airport.

Located in a strategic area, with busy traffic conditions and the spatial form of the intersection of five corridors with various activities, this corridor has the potential to increase the attractiveness of Wates City. However, in the existing conditions this corridor area is still like a commercial area in general. This makes the corridors less visually mpressive and appear to be ordinary shops. Meanwhile, in forming the identity of a city, the area must have a good and distinctive arrangement. Good governance refers to compliance with standards. Distinctive features or characters are formed from no two places are the same, one design cannot be applied in two different places, because the design must be firm and have character.

Retrofitting is an intervention to adapt new services or functions to existing areas that previously did not have these services or functions with the aim of completing them [7]. In the regional context, retrofitting is a revitalization approach based on local wisdom [8]. The emphasis on this revitalization approach is to reveal the potential of local wisdom (history, meaning, location uniqueness, and regional image) which is called genius loci or the essence/soul of the place [3].

In this study, to form an area so that it can become a city identity, the area must have a good arrangement and character. It is hoped that the retrofitting approach can be used to formulate directions for structuring corridors with a character through adjustments to the local wisdom potential of the areas found and adjustments to outdoor spatial planning standards. This research was conducted by identifying aspects of the outer space of the existing corridor to find out the local problems and potentials currently owned by the area. The results of the research are in the form of design strategies based on regional standards and local potential to form the area with character and can become the identity of the city of Wates.

#### 2. **Material and Methods**

### 2.1. Commercial Corridor

The commercial corridor (urban commercial corridor) has the following characteristics [5]:

It is the main route for vehicles in the city. 1. According to [17], one of the characteristics of commercial corridors is that cars that are allowed to pass through this corridor are cars with a minimum speed.

- The building on the commercial corridor 2. has no railings and no windows dominating the ground floor.
- 3. Signs or markers and displays are arranged
- to attract the visual attention of road users. Buildings have a variety of designs and sizes. However, they have similarities in scale, materials, and the basic style of the 4. building.

The character of a city can be strengthened through the arrangement of ornamental and through the arrangement of ornamental and decorative elements in urban areas [4]. The elements that can be considered in strengthening the character of the commercial corridor include: (a) city floor; (b) furniture; (c) circulation; (d) parking areas; (e) landscaping; (f) facades; (g) corners; (h) skylines; (i) color in the city; and (j) signage [4][9].

Table 1: Criteria for creating a great character of	
commercial corridor	

Aspect	General criteria
City floor	Consistent and continuous
2	hardscape material
Furniture	The street furniture design is
	consistent and in accordance
	with the regional theme
Circulation (pedestrian)	Safe and attractive pedestrian
	paths
Parking area	Easy to reach parking area and
	does not hinder other activity
	functions
Landscaping	Green zone/softscape as a buffer
	and balancer of hardscape
Façade	The façade of the commercial
	building is equipped with
	displays and pedestrian shade
Corner	Corner buildings have an
	identical and standout design
	Wider corner street equipped
	with a safe crossing area
Skyline	The height and shape of the roof
	of the harmony building
Color in the city	The color scheme of the
	building is in harmony with the
	environment but can be a point
	of interest
Signage	Consistent design of signage

Source: (Moughtin, 1999 dan Southeastern San Diego Commercial Corridor Urban Design Guide)

### 2.2. Corridor design standards

The quality and character of a corridor are formed through streetscape planning, which includes buildings, street surfaces, and amenities [10]. In forming the character of the

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corridor, aspects that need to be considered in its arrangement are aspects of the outer space of the corridor because it plays an important role in providing comfort to its users. Corridor outer space arrangement can be divided into 4 (four) main zones [11], namely:

- 1. Pedestrian zone, a comfortable public area
- for walking and interacting.
   Street zone, the vehicle circulation space which includes a parking lane and bike lane.
- 3. A green zone is a space for arranging vegetation and street furniture and also acts as a buffer between the pedestrian and vehicle zone.
- 4. Development zone, which is building area.

Table 2: Outer space corridor design standards

Aspects	Standard
Pedestrian zone	1.5-meter wide if adjacent to the
	green zone, and 1.8-meter wide
	if adjacent to the street zone.
Street zone	Parking lane, 1.8 – 2.4 meters;
	bicycle lane, 1.5 – 1.8 meters;
	vehicle lanes, 2.7 – 3.6 meters;
	mixed vehicle lane, 4.2 - 4.8
	meters
Green Zone	Green zone to separate
	pedestrian paths from vehicle
	lanes as space for trees, street
	furniture and utilities
Facilities and street	Can be reached within 400
furniture	meters, for bus stop can be
	reached within 300 meters
Crossing area	120 to 180-meter distance from
	each other in areas with high
	levels of pedestrians

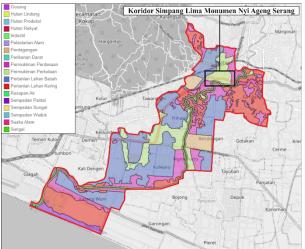
Source: (Milwaukie Transportation System Plan, 2007)

This research is descriptive qualitative research that has the aim of making a systematic, factual description of the facts and characteristics of certain areas. Data were collected through observation and documentation and analyzed through the walk-through analysis method [12] to identify and assess the suitability of the outer corridor space conditions with the referenced standards, find out the extent of problems that occur in the area, and see the local potential that can be developed to form the regional character. The main object in this research is the physical aspect of outer space which includes aspects of the pedestrian zone, road zone, green zone, and development zone [11].

#### 3. **Results and Discussions**

The research was conducted along the five corridors at the intersection of the Simpang Lima Monumen Nyi Ageng Serang. The

observation area is divided into six segments to ease the process of data collection, discussion, and analysis. The map of area location and segment division can be seen in Figure 1 and Figure 2.



Source: (Author, 2023) Figure 1: Research study location



Source: (Author, 2023) Figure 2: Segments division

## 3.1. Profile area

The observation area involves 5 (five) street corridors, Brigjen Katamso Street in the North corridor, with a 415-meter-long corridor. The East Corridor is Kolonel Sugiyono Street, with a 340-meter-long corridor. The south corridor is a dead-end alley, a 170-meter long. The Southwest Corridor is Pahlawan Street, 300 meters long, and Khudori Street is in the West Corridor, a 600-meter long.

These five corridors have different functions based on the classification of road functions. The north corridor is a primary local road that connects local activities and is often passed by local vehicles with a low average speed. Meanwhile, the southwest corridor is a collector road for medium-travel vehicles with a medium average speed, and the East and West corridors are arterial roads that are often passed

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by long-distance transportation with high average speeds. The South Corridor is a local road that connects local activities with residential and is often passed by local vehicles.

The function of the buildings in the north, east, southwest, and west corridors is dominated by commercial buildings, which makes the activities that occur in the four corridors tend to be the same, such as commercial activities and other supporting activities such as parking. At the same time, the function of the building on the south corridor is residential.

## 3.2. Walk-through analysis

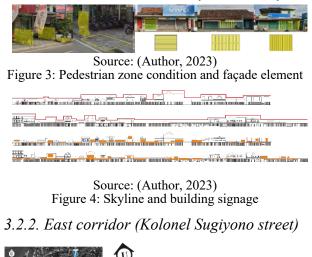
3.2.1. North corridor (Brigjen katamso street)



Outer space corridor	Standard
Pedestrian zone	- Width: 0.8-1.5 meters.
	- Condition: unorganized street
	furniture and vegetation,
	damaged paving conditions, and
	changes in lane dimensions to
	become narrow.
	- Paving type: Same.
Street zone	- Width: $\pm$ 10-meters.
	- Road lanes: 2 lanes.
	- Road marking: on street parking
	marks with a width of 1.8-meters
	on both sides of the road.
	- There are 3 crossing areas in the
	distance within 145-meter and
	180-meters.
Green zone	- No green zone as a buffer.
	- Vegetation types: trees, shrubs
	placed in pots with various
	shapes, and vines on the pergola.
	- Vegetation is unorganized.
	- Street furniture: street lamps,
	unorganized utility networks,
	signage, unmaintained pergolas,
	and planer box of various shapes.
	There is no trash can.
Development zone	- Building function: commercial
	and mixed-use commercial.
	- Building height: 1 floor, 2 floors,
	3 floors.
	- Shape of the roof: concrete roof,
	saddle, and pyramid.
	- Building colors: tend to be dark
	(dark brown, dark blue, dark

<ul> <li>gray), contrast colors on facade accents (yellow, red, green).</li> <li>Commercial facade elements: folding gate doors, rolling doors, and wooden folding doors.</li> <li>Building signage: located on the top of the building facade, various sizes, vertical and horizontal signage shapes.</li> </ul>
-

Based on the observation, the pedestrian path has low quality. Based on the Milwaukie Transportation System Plan of 2007, the width of the pedestrian lanes is not suitable for accommodating activities in commercial areas. At least the pedestrian path directly adjacent to the street zone has a width of 1.8 meters. Pedestrian paths have low continuity caused by obstacles from unorganized street furniture and damaged paving conditions. The pedestrian path is not disabled-friendly because no ramps or guidance blocks exist. The street zone is quite good because it is equipped with parking on street markings that support activities in commercial buildings. After all, not all commercial buildings in the corridor have sufficient parking space and setback width for parking. Vegetation and furniture in this corridor have not been organized in the green zone. A trash can, which is important furniture, is not available in this corridor. The application of the shape of street furniture needs to be more consistent. The harmony of the building, which is dominated by 1-2 floor buildings, and there is no building with more than three floors. While from the shape of the roof, signage, ornaments, and colors there is no similarity or harmony.





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Outer space corridor	Standard
Pedestrian zone	- Width: ±0.8-1.2 meters.
	- Condition: hindered by street
	furniture and vegetation, and
	damaged paving conditions.
	- Paving type: Same.
Street zone	- Width: $\pm$ 10-11meters.
	- Road lanes: 2 lanes.
	- Road marking: not available
	- There are 2 crossing areas in the
	distance within 280-meters.
Green zone	- No green zone as a buffer.
	- Vegetation types: trees, shrubs
	placed in pots (there is a
	repetition of the use of pot
	forms), and vines on the pergola.
	- Vegetation is unorganized.
	- Street furniture: street lamps,
	unorganized utility networks,
	signage, unmaintained pergolas,
	and planer box of various shapes.
	There is no trash can.
Development zone	- Building function: commercial
Development Zone	and mixed-use commercial.
	- Building height: 1 floor, 2 floors,
	3 floors.
	- Shape of the roof: concrete roof,
	saddle, and pyramid.
	- Building colors: various, dark
	colors (dark brown, dark blue,
	dark gray), light colors (gray,
	white, light blue, pink) contrast
	colors (yellow, green)
	- Commercial facade elements:
	folding doors, rolling doors,
	wooden folding doors, and
	wooden plank door (old style
	door) Building signage: legated on the
	- Building signage: located on the
	upper part of the building facade,
	various sizes, vertical and
	horizontal signage shapes.

Based on the observation, the condition of the east corridor pedestrian path has low quality caused by the width of the pedestrian path is not suitable to the standards of the Milwaukie Transportation System Plan, 2007. At least the dimension of a pedestrian path is 1.8 meters. The continuity of the path is hampered by furniture and damaged paving. The pedestrian path is not disabled-friendly because no ramps or guiding blocks exist. The street zone only has a 2-lane. Vegetation and furniture in the corridor have not been arranged in the green zone. The street furniture in this corridor still needs to be added. There is a repetition of Volume 07 Number 01 | June 2023

specific plant pots in the corridor, which creates unity. The harmony of the building can be seen from the height of the building, which is
dominated by 1-2 floor buildings, and the
repetition of the use of the roof shape. Meanwhile, from the building facade, there is
no harmony in the arrangement of signage, ornaments, and colors.
)

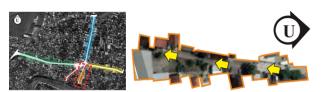


Source: (Author, 2023) Figure 5: Pedestrian zone condition and façade element



Source: (Author, 2023) Figure 6: Skyline and building signage

## 3.2.3. South corridor



Outer space corridor	Standard
Pedestrian zone	- No pedestrian way
Street zone	<ul> <li>Width: ± 4-6 -meters (narrowed on the south side)</li> <li>Shared street (pedestrian and vehicles)</li> <li>Material: cast concrete, from the middle to the south side the pavement is in damaged condition, the southern part is sandy soil.</li> </ul>
Green zone	<ul> <li>There is no vegetation arrangement.</li> <li>Vegetation types: shrubs in pots or planter box, and trees.</li> <li>Street furniture: not available.</li> </ul>
Development zone	<ul> <li>Building function: residential, mosque and bank office.</li> <li>Building height: 1 floor, 2 floors.</li> <li>Shape of the roof: saddle roof for the residential building, and tajuk roof for mosque and bank office.</li> </ul>

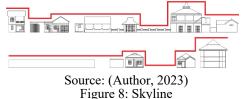
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- Building colors: tend to be light
(grey, white, cream).
- Building signage: not available.

Based on the observation, the south corridor has low quality. As a shared street, this street has yet to be arranged and equipped with furniture that supports safety for users, especially pedestrians. It shows from the street dimension (the northern part is  $\pm 6$ -meters wide and the southern part is  $\pm 4$  meters), which is used by 2way vehicles and parallel parking activities without any signs or barriers. No landscape arrangement helps the movement of various users safely, especially pedestrians. It shows that the street is mainly for vehicles, while shared streets should prioritize pedestrians, cyclists, and other non-motorized users. The condition buildings in this corridor have fences to barrier their private area. The harmony of the building can be seen from the height of 1-2 floors building and the use of a roof shape.



Source: (Author, 2023) Figure 7: Street and vegetation condition



3.2.4. Southwest corridor (Pahlawan street)



Outer space corridor	Standard
Pedestrian zone	- Width: $\pm 0.8$ -1.2 meters.
	- Condition: hindered by street
	furniture and vegetation,
	damaged paving conditions, and
	narrowed path.
	- Paving type: 2 types.
Street zone	- Width: $\pm$ 9-meters
	- Road lanes: 2 lanes.
	- Road marking: not available
	- There is 1 crossing area.
Green zone	- There is no vegetation
	arrangement as buffer.
	- Vegetation types: trees, shrubs in
	pots or planter box.

	- Vegetation is unorganized.
	- Street furniture: street lamps,
	unorganized utility networks,
	signage, bus stop, planer box.
Development zone	- Building function: commercial
	and mixed-use (residential and
	commercial).
	- Building height: 1 floor, 2 floors.
	- Shape of the roof: saddle roof,
	pyramid, and concrete roof.
	- Building colors: various, tend to
	be dark (brown, dark blue, dark
	grey), light color (cream, pink).
	- Building signage: folding doors,
	rolling doors, and wooden
	folding doors.
	- Building signage: located on the
	upper part of the building facade,
	the size is medium with the
	horizontal orientation.

Based on the observation, the southwest corridor has low quality, which is caused by the condition and arrangement of physical elements that still need to be put up to standard. The dimension of the pedestrian path is suitable to the standard based on the Milwaukie Transportation System Plan, 2007. The damaged pavement and the placement of furniture hampered the pedestrian path. There is no green zone arrangement as a buffer because the vegetation and furniture are on the pedestrian path. The vegetation's position in the corridor varies because it is arranged individually by the building owner. The harmony of each building is visible from the height of 1-2 floors building and the use of the roof shape. A potential building with a typical Javanese village house style is on this corridor. The facade is visible from the pyramid roof, walls, and wooden doors.



Figure 9: Pedestrian zone condition and façade element



Source: (Author, 2023) Figure 10: Vegetation and Javanese-village building Style

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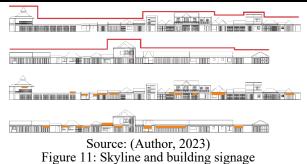


Figure 11. Skyline and building signag

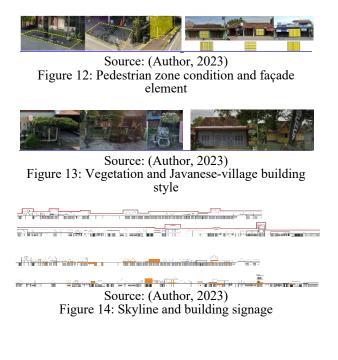
3.2.5. West corridor (Khudori street)



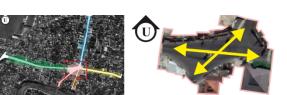
Outer space corridor	Standard
Pedestrian zone	- Width: ±1.5-2.5 meters.
	- Condition: hindered by street
	furniture and vegetation, and
	damaged paving conditions.
	- Paving type: Same but with the
	different colors.
Street zone	- Width: $\pm$ 10-11meters.
	- Road lanes: 4 lanes.
	- Road marking: lane border mark.
	- There are 2 crossing areas in the
	distance within 430-meters.
Green zone	- No green zone as a buffer.
	- Vegetation types: trees, shrubs
	placed in pots (there is a
	repetition of the use of pot
	forms), and vines on the pergola.
	- Vegetation is unorganized.
	- Street furniture: street lamps,
	unorganized utility networks,
	signage, pergolas, and planer
	box. There is no trash can.
Development zone	- Building function: commercial
	and mixed-use commercial,
	public facilities, and residential.
	- Building height: 1 floor, 2 floors,
	3 floors.
	- Shape of the roof: concrete roof,
	saddle, and pyramid.
	- Building colors: various, dark
	colors (dark brown, dark blue,
	dark gray), light colors (light
	gray and white)
	- Commercial facade elements:
	folding doors, rolling doors,
	wooden folding doors, and

	wooden plank door (old style
	door)
-	Building signage: located on the
	upper part of the building facade,
	various sizes, vertical and
	horizontal signage orientation.

Based on the observation, the quality of the west corridor is low. This corridor's pedestrian paths are wide and follow the standards (Milwaukie Transportation System Plan, 2007). However, the route is still disturbed by damaged pavement and vegetation. The street space for vehicles in this corridor consists of 4 lanes that are passed by local vehicles and travelers because of its function as a national arterial road. There is no green zone arrangement as a buffer because the vegetation and furniture are in the pedestrian path. The vegetation could be more organized. But there is a repetition of the use of plant pots shape. The harmony of the skyline is visible from the height of 1-2 floors of buildings and the use of roof shapes. Meanwhile, the building facade is not unity or harmony. There is a building with a Javanese village house style on this corridor.



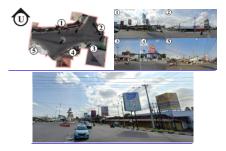
#### *3.2.6. Intersection area*



Outer space corridor	Standard
Pedestrian zone	- Width: $\pm 1.5$ -meters.
	- Street corner: ±2-3-meters.
	- Condition: hindered by street
	furniture and vegetation, and
	damaged paving conditions.
	- Paving type: 2 types (pedestrian
	way paving and street corner
	paving).
Street zone	- Width: $\pm 25-30$ meters.
	- Road marking: not available, but
	there is water barrier to separate
	the lane.
	- There are crossing areas with
	good condition.
Green zone	- No green zone as a buffer.
	- Vegetation types: shrubs placed
	in pots.
	- Vegetation is unorganized.
	- Street furniture: unorganized
	utility networks, signage, and
D 1 (-	planer box.
Development zone	- Building function: corner 1,
(Building corner)	commercial and unfunctional
	buildings. Corners 2 and 5, retail
	commercial. Corner 3, bank
	office. Corner 4, police posts,
	mosques and unfunctional building.
	- Building height: 1 floor building
	on the corner $1,2,5$ . 2 floors
	building on the corner 3. 1-2
	floors building on the corner 4.
	- Shape of the roof: Saddle and
	concrete roof on the corner 1 and
	5. Concrete roof on the corner 2.
	Tajuk roof on the corner 3.
	Saddle, tajuk, and concrete roof
	on the corner 4.
	- Building colors: light color (white) and contrast colors
	(yellow and green) on the corner
	1. Contrast colors (red and green)
	on the corner 2. Light colors
	(white, light gray, and cream) on
	the corner 3,4,5.

Commercial facade elements: folding doors, wooden folding doors, and wooden plank door (old style door).
Building signage: available on the building corner 2,4,5.

Based on the observation, the visual quality of the intersection area is low. The pedestrian path dimension shows that it is unsuitable for standard, and the street corner needs more furniture to support the activity. The pedestrian path is not disabled-friendly because no ramps or guidance blocks exist. Power lines and billboard causes visual pollution in the area. The building at the intersection also does not show continuity because of the different building styles, the types of facade elements, and heights. The building corner should provide unity and attractiveness. The arrangement of buildings and pedestrian zones in the intersection area of the city is important to create the area's character and attract visitors. The buildings and spatial arrangements at an intersection must be well-designed, decorative, and pleasing to the eye [4].



Source: (Author, 2023) Figure 15: Intersection area condition



Source: (Author, 2023) Figure 16: Pedestrian zone and street corner condition

*3.2.7. The comparison of walk-through analysis results and design strategies* 

Compliance with corridor design planning standards:

Pedest	rian zo	ne			
1.5-me	ter wide	e if adjace	ent to the green	n zone, a	and 1.8-meter
wide if	adjacer	nt to the s	treet zone.		
North	East	South	South-east	West	Intersection
Х		-	Х		Х
Street	zone				

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Parking	g lane, 1	.8 - 2.4  m	neters; bicycle	lane, 1.5	-1.8 meters;	
vehicle lanes, $2.7 - 3.6$ meters; mixed vehicle lane, $4.2 - 4.8$						
meters						
North	East	South	South-east	West	Intersection	
	Х	Х	Х	Х	Х	
Green	Zone					
Green	zone to	separate	pedestrian pat	hs from	vehicle lanes	
as spac	e for tre	ees, street	furniture and	utilities		
North	East	South	South-east	West	Intersection	
Х	Х	Х	Х	Х	Х	
Facilities and street furniture						
Can be	e reache	ed within	400 meters,	for bus	stop can be	
		ed within 300 mete		for bus	stop can be	
				for bus West	stop can be Intersection	
reached	l within	300 met	ers			
reached North X	l within	300  meto South	ers South-east	West	Intersection	
reached North X Crossin	l within East X ng area	300  meto South	ers South-east	West X	Intersection X	
reached North X Crossin 120 to	l within East X ng area	300  meto South  ter distance	ers South-east X	West X	Intersection X	
reached North X Crossin 120 to	l within East X ng area 180-me	300  meto South  ter distance	ers South-east X	West X	Intersection X	

 $\sqrt{}$  : Suitable

X : Not suitable

: Not available

Conformity with the general criteria for character formation:

oor				
ent and	continuo	us hardscape r	naterial	
East	South	South-east	West	Intersection
	Х	Х	Х	Х
ure				
eet furr	niture des	ign is consiste	nt and i	n accordance
e regior	nal theme			
East	South	South-east	West	Intersection
$\checkmark$	Х	Х		Х
ation (p	oedestria	n)		
d attrac	tive pede	strian paths		
East	South	South-east	West	Intersection
Х	Х	Х	Х	Х
reach p ns	arking ar	ea and does no	t hinder	other activity
East	South	South-east	West	Intersection
Х		Х	Х	Х
caping				
zone/soz	ftscape as	a buffer and b	alancer	of hardscape
zone/so: East	ftscape as South	a buffer and b South-east	alancer West	of hardscape Intersection
East	South	South-east	West	Intersection
East X	South X	South-east	West X	Intersection X
East X çade of	South X	South-east X mercial build	West X	Intersection X
East X çade of	South X	South-east X mercial build	West X	Intersection X
East X çade of s and po	South X the comedestrian	South-east X mercial build shade	West X	Intersection X quipped with
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	tent and East  eet furr e regior East  d attrac East X g area reach p ns East X	tent and continuoEastSouth $$ Xureeet furniture deseet furniture deseregional themeEastSouth $$ Xation (pedestriand attractive pedeEastSouth $X$ Xg areareach parking arnsEastSouth $X$ $$	tent and continuous hardscape rEastSouthSouth-east $$ XXureeet furniture design is consistedeet furniture design is consistedeet furniture design is consistedeet furniture design is consistedeet furniture design is consistedEastSouth<	tent and continuous hardscape materialEastSouthSouth-eastWest $$ XXXureeet furniture design is consistent and i e regional themeEastSouthSouth-eastWest $$ XX $$ Ation (pedestrian)d attractive pedestrian pathsEastSouthSouth-eastWestXXXXg areareach parking area and does not hinderIsatSouthSouth-eastWestX $$ XXX $$ XX

North	East	South	South-east	West	Intersection	
	Last	Journ		west	X	
Skylin	e -	-		-	Λ	
The he	ight and	l shape of	the roof of the	e harmor	ny building	
North	East	South	South-east	West	Intersection	
Х					Х	
Color i	in the c	ity				
The color scheme of the building is in harmony with the						
enviror	mont h	ut can be	a point of inter	rest		
CHIVITOI	iment o		1			
North	East	South	South-east	West	Intersection	
			-	West X	Intersection X	
North	East X	South	South-east			
North X Signag	East X	South	South-east X			
North X Signag	East X	South X	South-east X			

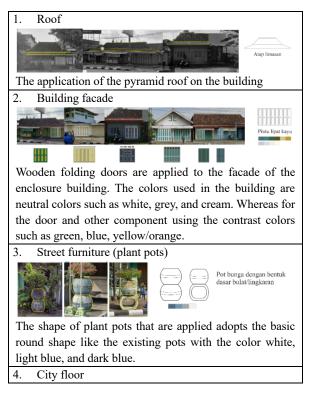
 $\sqrt{}$  : Suitable

X : Not suitable

: Not available

The suitability of the observed areas with the character-forming criteria is unsuitable primarily, so the conclusion is that the intersection of Nyi Ageng Serang Monument has a variety of characters. The character can be created through the application of a local potential to the aspects of the general criteria above.

The local potential and design guidelines based on standards and local potential found in the area:





Design guideline:

Pedestrian Zone,

Creating character through the consistent and irrational use of urban floor materials [4].

The north corridor; the east corridor; the southwest corridor; the west corridor; the intersection area:

- Pavement repairs using consistent paving materials with irrational colors; 1.
- 2. Free pedestrian paths from furniture and vegetation through rearrangement in separate zones;
- Provision of guidance blocks along pedestrian paths and ramps at the required 3.

- points, especially at crossing points.The Intersection area:Provision of wide corner spaces with consistent and irrational paying with pedestrian corridor path materials. Creating safe pedestrian circulation routes
- 2. setting up buffer through zones, implementing guidance blocks, and adding pedestrian lights.

The north; the east; the southwest corridor:

Widening the lane from 0.8 meters to a minimum of 1.5 meters [11]. 1.

Green Zone.

Provision of green zones that act as buffers and balances to the hardscape [15];

Creating character through the implementation of furniture designs that are consistently applied to all segments.

The north corridor; the east corridor; the

 Arrangement of vegetation and street furniture in the green zone which is located between the pedestrian zone and the road zone.

Intersection area:

Provision of furniture, pedestrian lights, benches, trash cans in corner areas.

The south corridor:

- Arrangement of attractive landscapes and support the safety of shared street. Procurement of street furniture, pedestrian 1.
- 2. lights, bollards and benches.
- Provision of vegetation that functions as 3. shade and shrubs to increase attractiveness.

Street Zone.

Create a safe vehicle lane.

The east corridor:

Add the lane to 4 lanes to accommodate 1. local/low-speed transportation and out-ofregion/high-speed vehicles.

The south corridor:

- Repair the pavement using textured paving 1. to show that the road is prioritized for pedestrians.
- Provision of speed humps so that vehicle 2. drivers slow down and pay more attention to their environment [16].
- The intersection area:
- Provision of road markings in the intersection area to help smooth the 1. mobility of vehicles towards the intended corridor through the specified lanes.

#### Development Zone.

Creating harmonious building facades [9] The North corridor, The east corridor, the southwest corridor, The west corridor:

- Use of the same commercial door.
- Use of the same roof shape.

The intersection area:

- Apply an attractive design, colors and 1. facade elements to the building corner.
- 2. Rearrange the building corner orientation to the faceted street corner buildings [4].

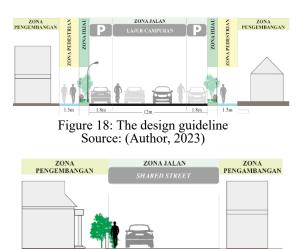
Creates character through applying wood elements and the roof shapes of the existing and new buildings.

The north corridor; the east corridor; the southwest corridor; the west corridor; the intersection area:

Commercial and mixed-use commercial 1-Ι. floor buildings use pyramid roofs, wooden folding door commercial openings, and colors (according to local potential found in buildings in the area).



Figure 17: The existing of north and southwest corridor Source: (Author, 2023)



6 m

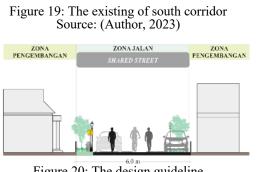


Figure 20: The design guideline Source: (Author, 2023)



Figure 21: The existing of east and west corridor Source: (Author, 2023)



Figure 22: The design guideline Source: (Author, 2023)



Figure 23: The design guideline for the intersection area Source: (Author, 2023)



Figure 24: The design guideline for building facade Source: (Author, 2023)

## 4. Conclusion

The design guideline applied in this study aims to make the area of the intersection of Nyi Ageng Serang monument become the identity of the City of Wates through a retrofitting approach based on standards and local potential. In the case of this study, the area can be an identity if the corridor arrangement is good (according to the standards) and has strong character (according to the local potential).

The intersection of Nyi Ageng Serang monument has become the identity of Wates City through:

(1) Corridor spatial planning based on outdoor spatial planning standards, including: provision of green zones equipped with street furniture; widening the pedestrian zone equipped with guiding block and ramp; additional lanes, onstreet parking lanes and bicycle lanes in the street zone. The strategies for the intersection area are widening the street corners and providing road markings to ease vehicle mobility. The strategies for the south corridor are shared street arrangements through the application of textured paving; application of speed humps; landscape arrangement that supports the safety of shared street.

(2) The strategies to form the character are through the application of local potential elements, such as the application of pyramid roof; wooden folding door for the commercial building; use of neutral colors for buildings and contrast colors such as blue, green, yelloworange on wooden folding door. Consistently using specific colors and types of paving with specific patterns; and applying plant pots with a round shape.

The design guideline is expected to be the guideline for the revitalization of the area based on retrofitting. So, Wates City can easier be recognized and increase visitor interest in visiting.

## References

[1] Lynch, K. M. (1960). *The image of the city* / Lynch Kevin.

[2] Rapoport, A. (1977). *Human Aspect of Urban Form*. New York: Pergamon Press.

[3] Norberg-Schulz, C. (1980). Genius Loci: Towards A Phenomenology of Architecture. Rizzoli.

[4] Moughtin, C., Oc, T., & Tiesdell, S. (1999). Urban Design: Ornament and Decoration.

[5] Bishop, K. R. (1989). Designing urban corridors.

[6] Pemerintah Kabupaten Kulon Progo Tahun 2017.(2017). Rencana Pembangunan Jangka Menengah Daerah Kabupaten Kulon Progo Tahun 2017-2022.

[7] Dixon, T., & Eames, M. (2013). Scaling up: The challenges of urban retrofit. Building Research and Information, 41.

[8] Dunham-Jones, E., & Williamson, J. (2009). Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs. Hoboken, NJ: John Wiley & Sons.
[9] Southeastern San Diego Commercial Corridor Urban Design Guide.

[10] C. Charlwood. (2004). Torbay *Streetscape Guidelines*. Torbay Council.

[11] Milwaukie Transportation System Plan. (2007).

[12] Urban Design Toolkit Third Edition (Third Edition). (2006). Ministry for the Environment.

[13] Pradaning, A. N. S. (2018). Penataan Visual untuk Memperkuat Ciri Khas Koridor Perdagangan Nonongan Kota Surakarta. Institut Teknologi Sepuluh Nopember.

[14] Hertanto, I. (2017). Penataan Ruang Luar Koridor Jalan K.H. Ahmad Dahlan Yogyakarta. Institut Teknologi Sepuluh Nopember.

[15] Rehan, R. M. (2012). *Sustainable Streetscape as An Effective Tool in Sustainable Urban Design*. Department of Architecture Helwan University.

[16] Engwicht, D. (2005). Mental Speed Bumps: *The Smarter Way to Tame Traflic*. Envirobook, Annandale, NSW.

[17] Jacob, A. B. (1995). The Great Streets. MIT Press.