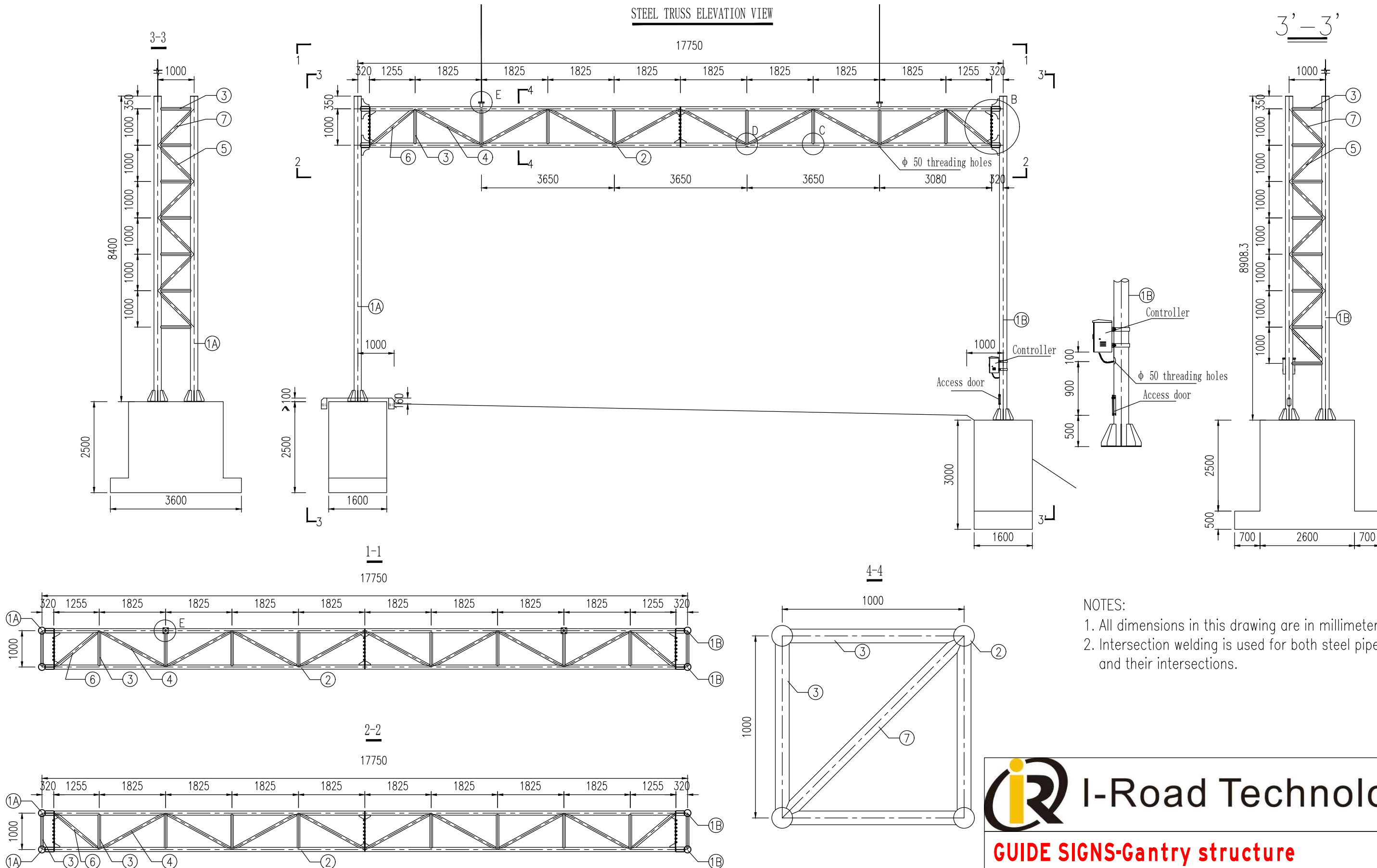


STEEL TRUSS ELEVATION VIEW



- NOTES:
1. All dimensions in this drawing are in millimeters.
  2. Intersection welding is used for both steel pipes and their intersections.

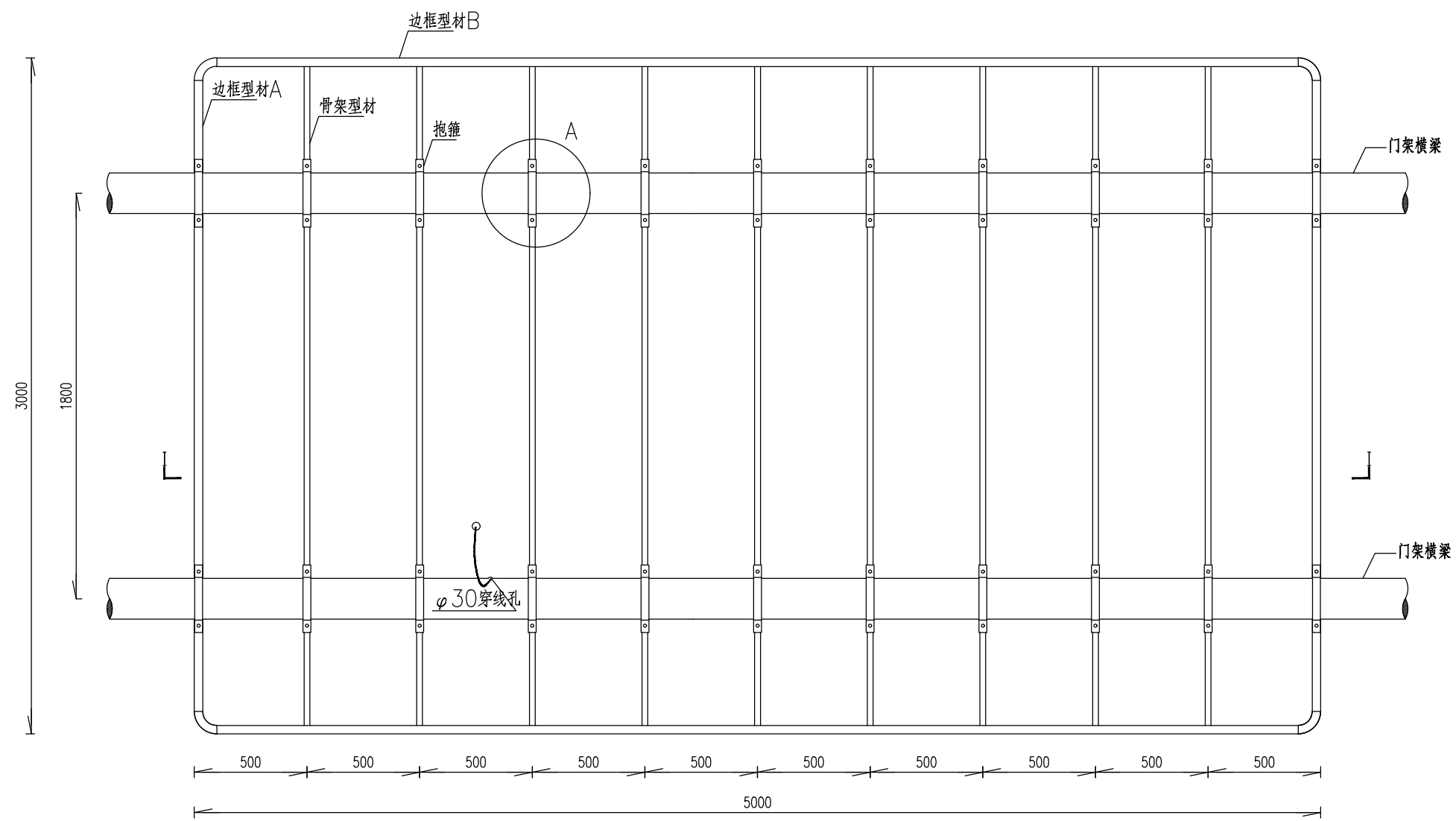


**GUIDE SIGNS-Gantry structure**

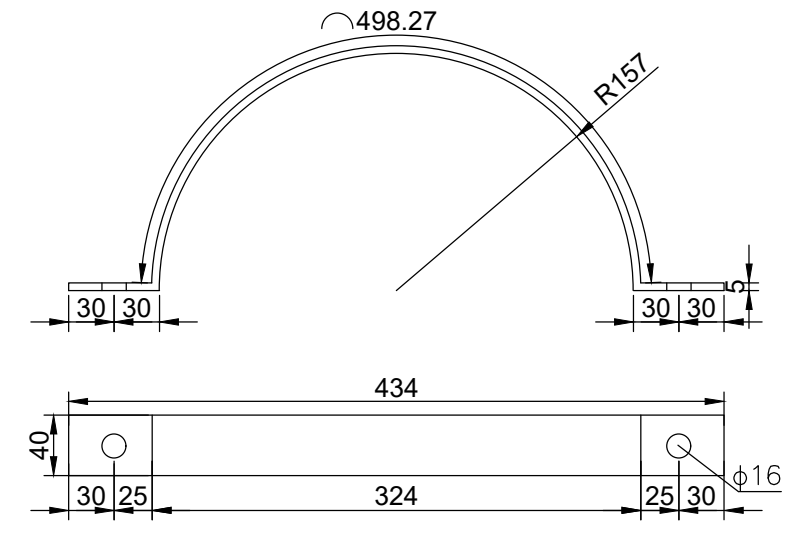
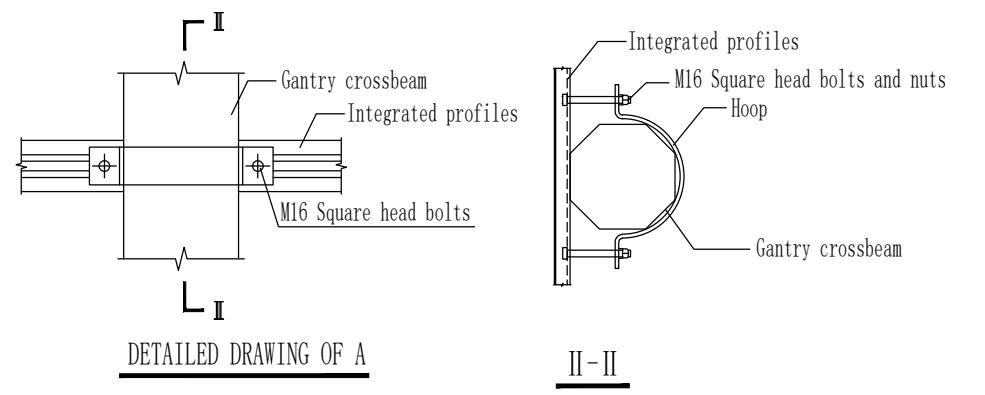
Active light-emitting traffic signs with panel display

Reflective sheeting: Nikkalite™ IV

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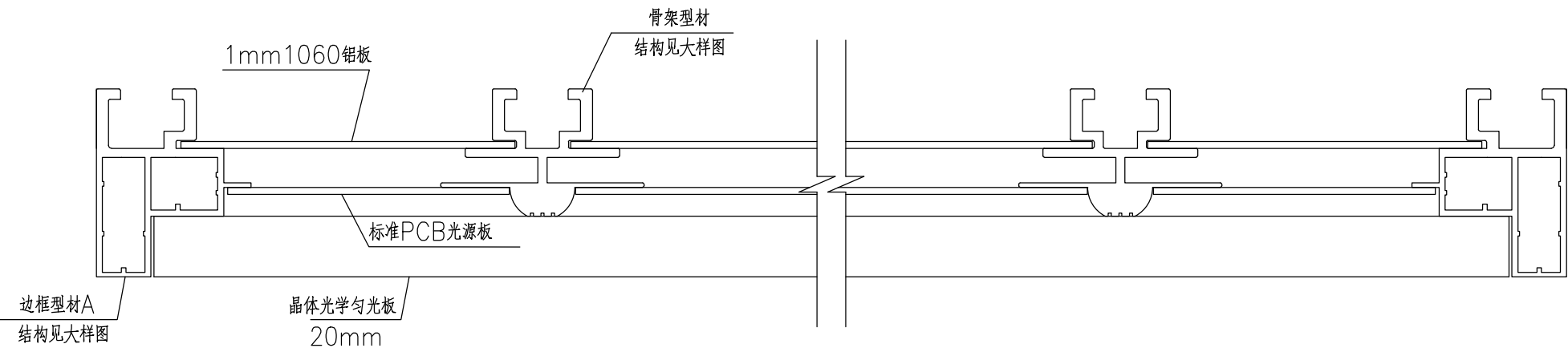


**SCHEMATIC DIAGRAM OF THE CONNECTION BETWEEN THE SIGNBOARD AND THE CROSSBEAM**  
SCALE: 1:125



**DETAILED DRAWING OF HOOP**  
SCALE: 1:5

- NOTES:
1. ALL DIMENSIONS IN THIS DRAWING ARE IN MILLIMETERS.
  2. THE SIZE OF THE SIGNBOARD IN THIS PICTURE IS FOR ILLUSTRATION ONLY, AND CUSTOM SIGNBOARD SIZES ARE ACCEPTED.



**SCHEMATIC DIAGRAM OF THE INTERNAL STRUCTURE SECTION OF THE SIGNBOARD**  
1-1

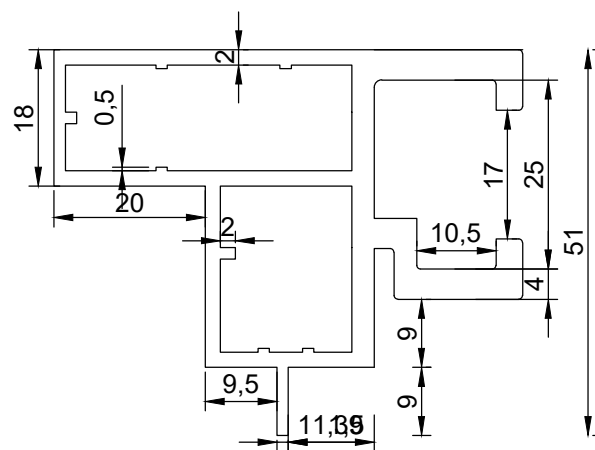


**GUIDE SIGNS-Gantry structure**

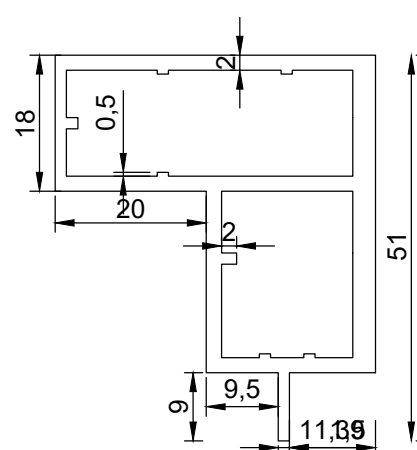
Active Illuminated traffic signs with panel display

Reflective sheeting: Nikkalite™ IV

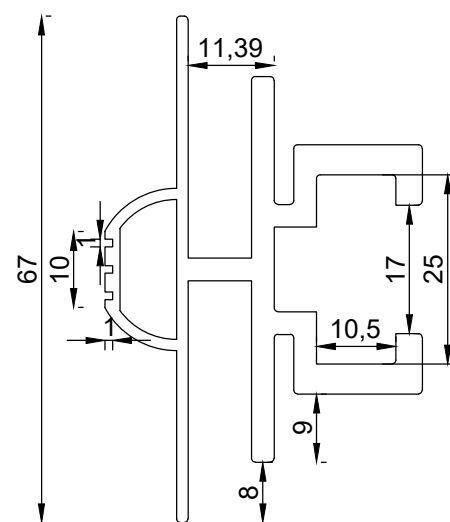
Accept customizations



Border profile A  
SCALE: 1:1



Border profile B  
SCALE: 1:1



Skeleton profiles  
SCALE: 1:1

QUANTITY TABLE OF SIGN MATERIALS

Material name	Number	Specifications(mm)	Piece	Single piece weight (kg)	Total weight (kg)
Active illuminated signage	1	5000×3000	1	159.58	159.58
Hoop	2	40×5×608.27	22	1.05	23.10
Square head bolt with nut	3	M16×200	44	0.42	18.48

**NOTES:**

1. All dimensions in this drawing are in millimeters.
2. The production of sign boards should comply with the technical requirements of the group standard T/CISA001–2018 "Panel display self luminescence traffic signs".  
Provide a type testing qualification report issued by a national level traffic safety facility or product testing and inspection agency. Using products that have obtained CCPC certification. The operation management software, cloud platform software, and dimming program software should all obtain a qualified testing report from the provincial software product testing center.
3. The average spacing between the vertical skeleton profiles of the illuminated signs shall not exceed 600mm, and the maximum spacing shall not exceed 800mm.  
The specific spacing can be adjusted according to the requirements of the manufacturer of the active illuminated signs.
4. The sign board should meet the following technical requirements:
  - (1). The reflective base plate of the logo is composed of a reflective film and a crystal optical uniform plate.
  - (2). The text and graphics on the surface of the sign board are made of high transparency micro prism reflective film, The white light transmittance is  $\geq 25\%$ , and the light transmittance uniformity is 1.2:1 to 1.3:1.
  - (3). Standard mixed light source board requirements: The PCB board should be made of epoxy resin material, with a thickness of  $\geq 1.1$  mm, and a spacing of 28 x 28mm cloth beads for SMT LED.
  - (4). Without damaging the retroreflective material on the surface of the sign board, the light source board is placed in the sign box, and the light source projects directionally towards the back of the retroreflective material, displaying high-definition information content; Fully lay standard light source boards within the area of the logo layout, and the remaining space can be spliced using small-sized light source boards.
  - (5). The brightness indicators for the transparent display of logo information: white  $\geq 300\text{cd}/\text{m}^2$ , yellow  $\geq 150\text{cd}/\text{m}^2$ , red  $\geq 45\text{cd}/\text{m}^2$ , green  $\geq 45\text{cd}/\text{m}^2$ , blue  $\geq 30\text{cd}/\text{m}^2$ , brown  $\geq 22\text{cd}/\text{m}^2$ ;  
The average brightness contrast between the blue and white (green and white) parts of the logo ranges from 1:5 to 1:18.
  - (6). The packaging around the luminous sign should be made of aluminum alloy profiles, which should be made of integrated aluminum alloy materials. The aluminum alloy should be 6063T5.  
The four corners are combined with aluminum alloy elbows made of molds, with an overall thickness of  $\leq 60\text{mm}$  (excluding support components).
  - (7). The overall weight of the sign is  $\leq 15\text{KG}/\text{m}^2$ , with a designed service life of 7–10 years and a free maintenance period of 2 years.
  - (8). The automatic photosensitive control adopts a solar circuit voltage drop analysis control module. The control unit can automatically turn on/off the sign emitting unit based on the light intensity around the sign.  
The sign emitting unit can automatically adjust the brightness according to the day and night light intensity, maintaining a relatively balanced luminous contrast
  - (9). The environmental illumination detection device should use polycrystalline silicon as the photosensitive element and adopt solar voltage drop photoelectric control technology.
  - (10). The normal effective dynamic visual recognition distance at night is  $\geq 210$  meters, and the static visual recognition distance is  $\geq 250$  meters.
  - (11). When using the power grid for power supply, the input voltage is 220V and the output voltage is 24V.
  - (12). The logo should be equipped with lightning protection, touch and leakage protection devices, and the wiring cables should not be exposed.
  - (13). Configure intelligent IoT terminal modules and status detection modules that can be connected to the road traffic safety facility operation management system software.
  - (14). The sign structure should have the ability to withstand wind load deformation, and should be able to withstand normal lighting under wind force of 16 levels, with no damage to the reflective film and no depression in the structure.



**GUIDE SIGNS-Gantry structure**

**Active Illuminated traffic signs with panel display**

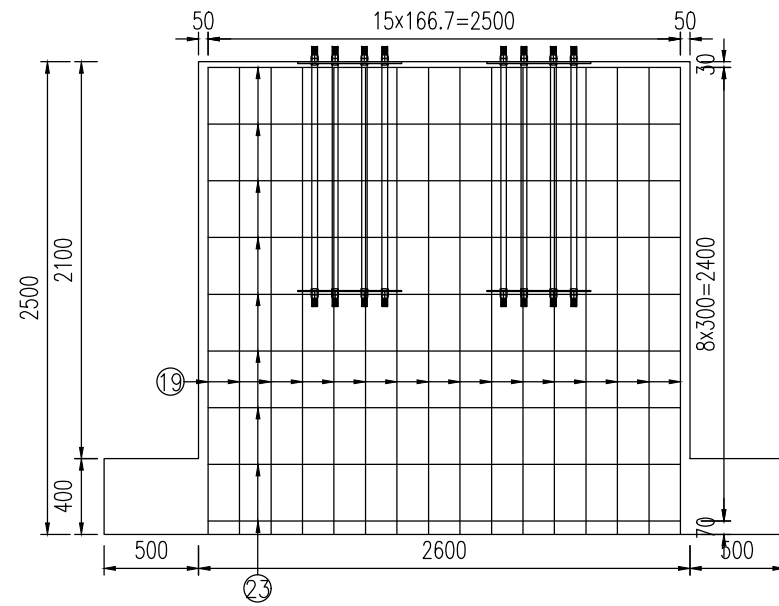
**Reflective sheeting: Nikkalite™ IV**

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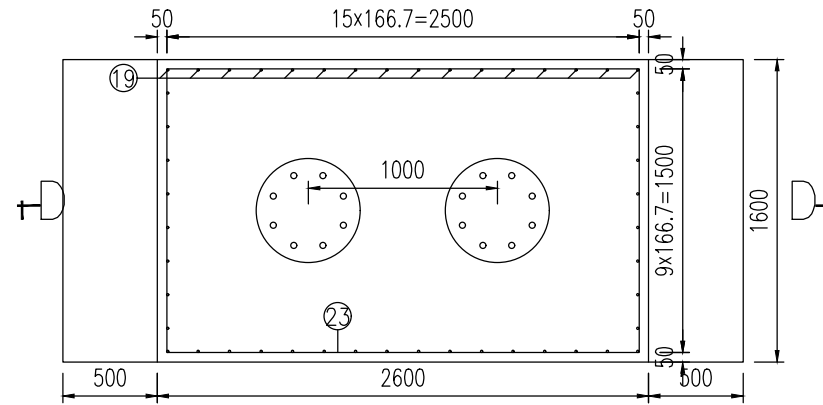
**LEFT FOUNDATION REINFORCEMENT ELEVATION**

SCALE: 1:40



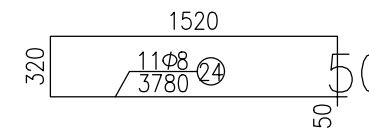
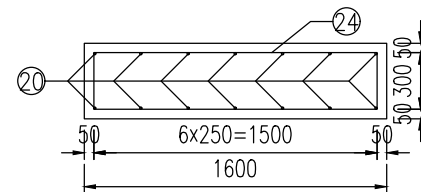
**LEFT FOUNDATION REINFORCEMENT PLAN**

SCALE: 1:40



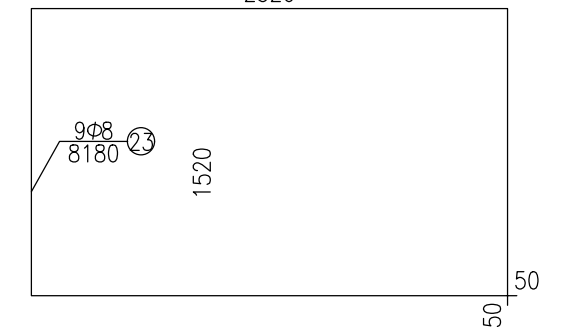
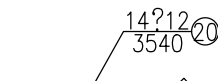
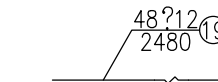
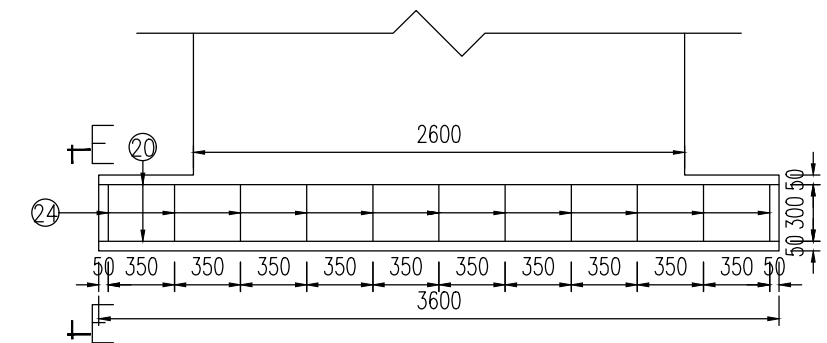
**E-E**

SCALE: 1:40

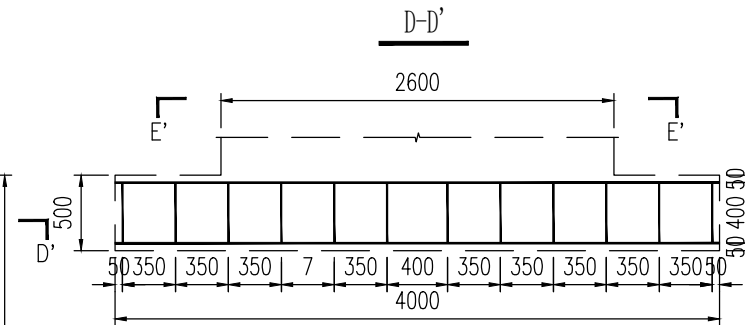
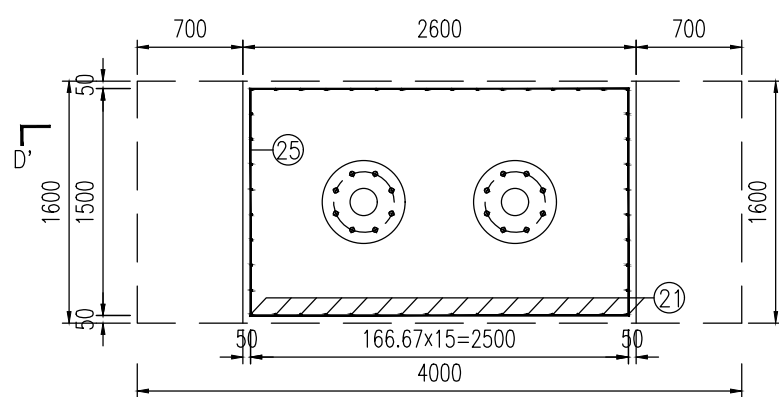


**D-D**

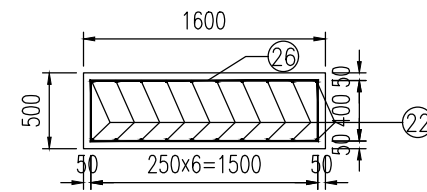
SCALE: 1:40



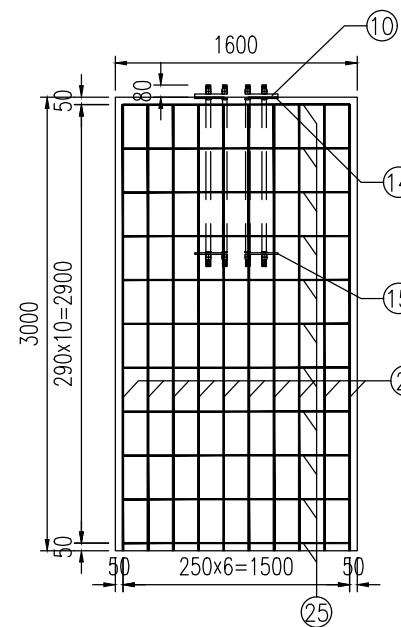
**RIGHT FOUNDATION REINFORCEMENT PLAN**



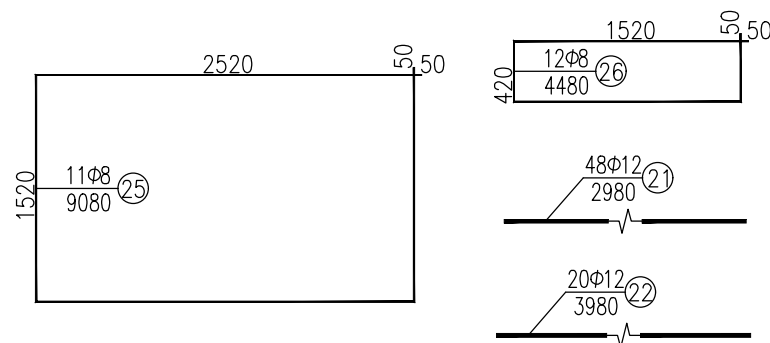
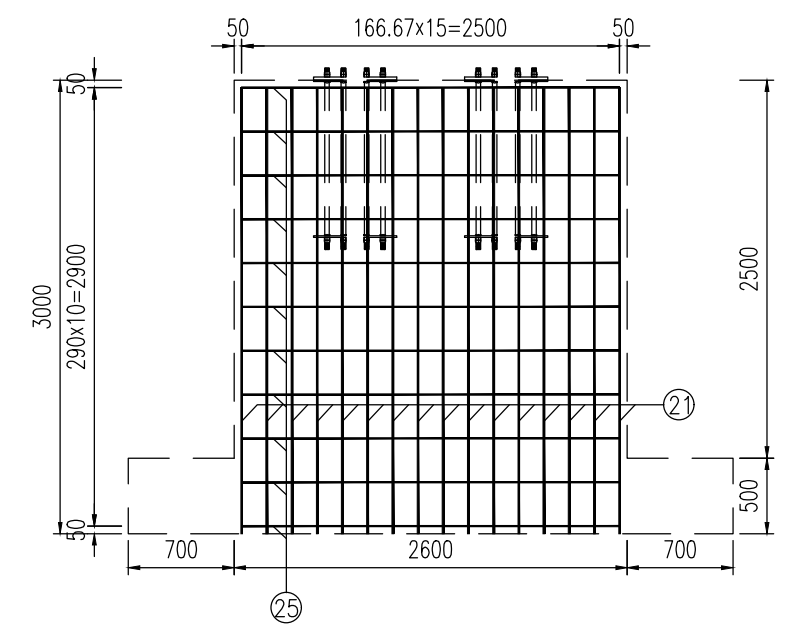
**E-E'**



**RIGHT FOUNDATION REINFORCEMENT FRONT**



**RIGHT FOUNDATION REINFORCEMENT SIDE**



**NOTES:**

1. All dimensions in this drawing are in millimeters.



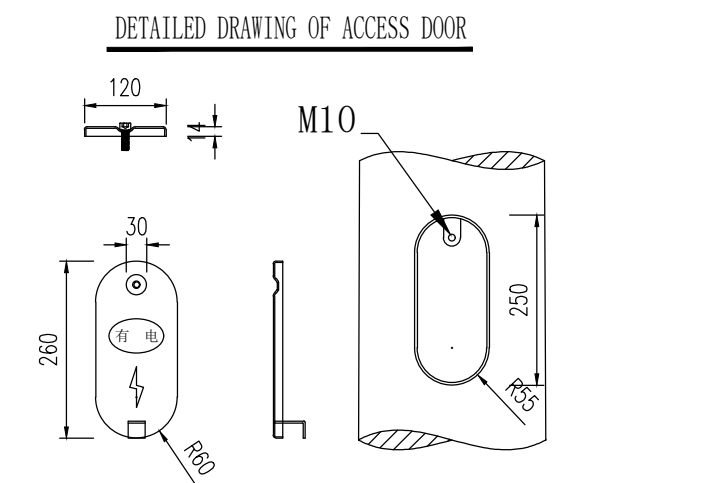
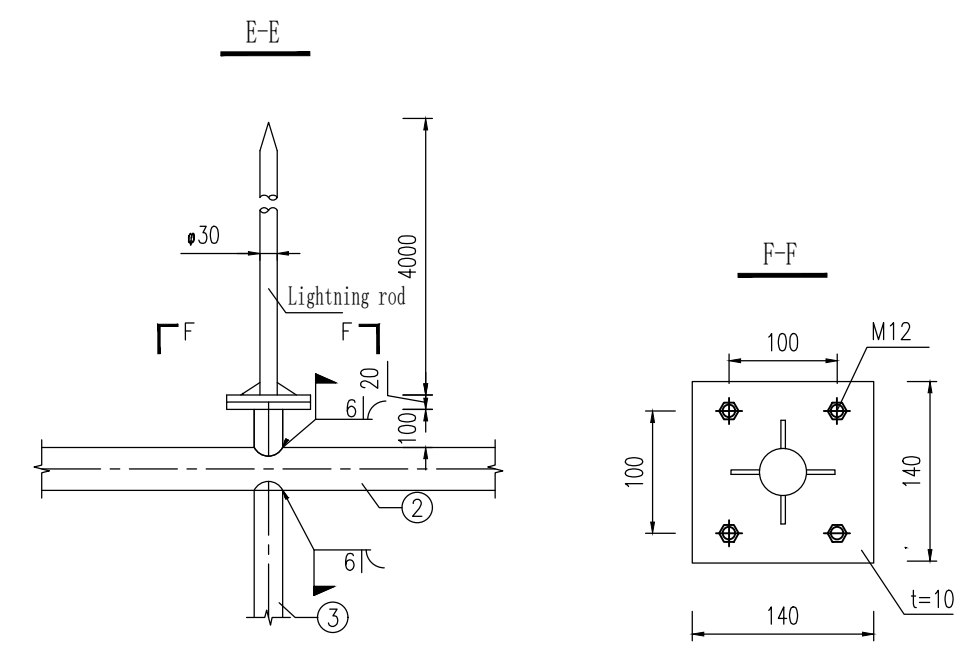
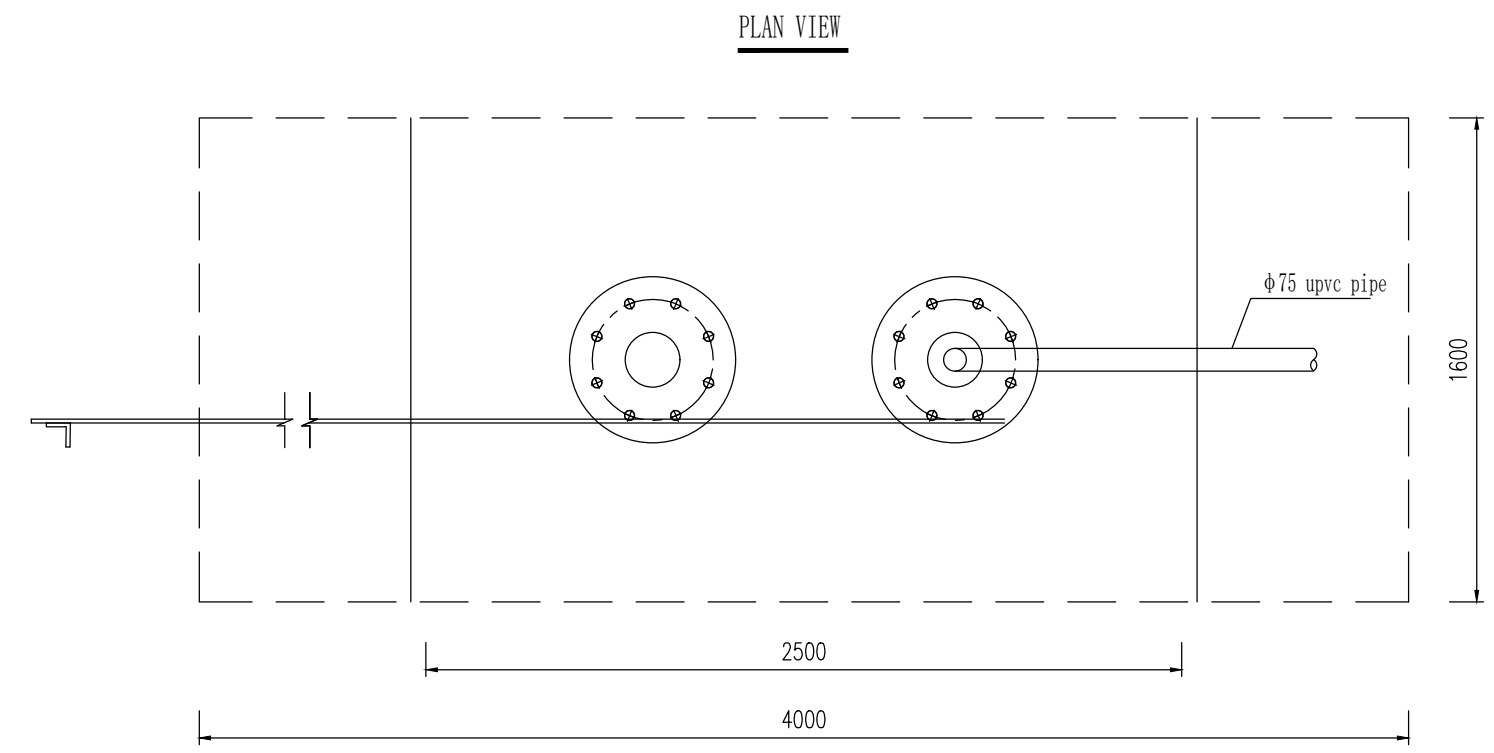
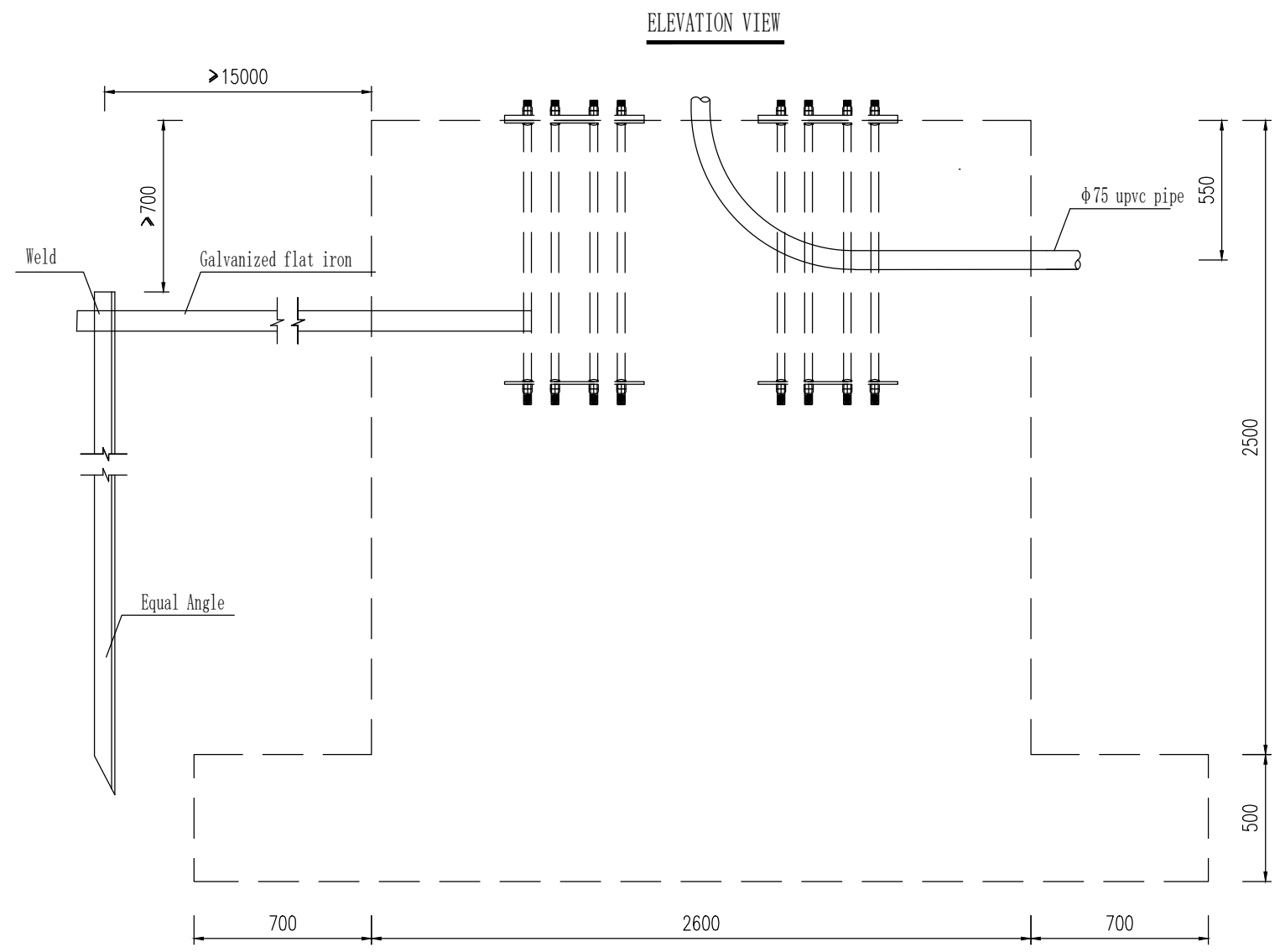
**GUIDE SIGNS-Gantry structure**

Active Illuminated traffic signs with panel display

Reflective sheeting: Nikk: liteTM IV

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PAGE: 5



- NOTES:
1. All dimensions in this drawing are in millimeters.
  2. The grounding electrode and grounding connection wire should be hot-dip galvanized, and anti-corrosion treatment should be carried out after welding.
  3. After the grounding construction is completed, the grounding resistance should be tested. The grounding resistance value should be less than 4 ohms. If it does not meet the requirements, an additional grounding electrode or resistance reducing agent should be added.

## I-Road Technology

**GUIDE SIGNS-Gantry structure**

Active Illuminated traffic signs with panel display

Reflective sheeting: Nikkalite™ IV

Accept customizations

PAGE: 6

QUANTITY TABLE OF SIGN MATERIALS

Number	Material name	Specifications(mm)	Piece	Single piece weight(Kg)	Weight(Kg)	Notes	
1A	Column	Φ203x10x8400	2	399.82	1647.62		
1B		Φ203x10x8908	2	423.99			
2A	Beam	Φ114x6x8555	8	136.71	1134.56		
2B		Φ114x6x320	8	5.11			
3	Steel pipe	Φ76x5x1000	47	8.76	1367.14		
4		Φ76x5x2081	32	18.22			
5		Φ76x5x1414	11	12.38			
6		Φ76x5x1605	8	14.05			
7		Φ76x5x1414	10	12.38			
8	Head plate	Φ203x6	4	1.85	1261.96		
9	Base stiffeners	300x173.5x10	32	4.11			
10	Column flange	Φ550x20	4	37.52			
11	Beam stiffeners	208.5x208.5x12	16	4.12			
12	Cross beam connection flange	1114x1114x20	6	114.80			
13	Beam flange stiffeners	150x100x12	48	1.42			
14	Embedded foundation flange	Φ550x10	4	18.76			
15	Anchor plate	Φ550x10	4	18.76			
16	Connecting tiles	Φ133x8x300	8	7.40	59.19		
17	Cross beam connecting bolts	M30x80	84	0.57	47.48	Including nuts	
18	Pre embedded anchor bolts	M30x1200	32	8.48	271.30	Including nuts	
19	Rebar	Φ12	L=2480	50	2.20	335.10	
20			L=1280	24	1.14		
21			L=2980	48	2.65		
22			L=3980	20	3.53		
23		Φ8	L=9180	9	3.63	115.36	
24			L=5580	10	2.20		
25			L=9080	11	3.59		
26			L=4480	12	1.77		
27	Hot dip galvanized angle steel	50x5x2500	3	9.42	59.76		
28	Galvanized flat iron	-40x4	25	1.26			
29	Lightning rod		1				
30	upvc pipe	Φ75UPVCpipe		4			
31	Concrete	C25		25.41			

NOTES:

1. This diagram is applicable to the structural diagram of the gantry in the roadbed section.
2. All steel pipes in this drawing are seamless steel pipes, and all steel materials are Q235-B steel unless otherwise specified.
3. Weld quality level: All groove welds on the main pole connected to the support are of level 2, while the remaining welds are of level 3 Level. Construction should comply with all requirements of the current steel structure welding regulations.
4. When the pipe must be extended, the chord connections should be staggered and lined with pipes, and full penetration groove butt welding should be used for welding.
5. All steel components in this design need to undergo anti-corrosion treatment.
6. When pouring concrete, attention should be paid to aligning the base flange with the foundation, and embedding it into the foundation. Its upper surface should be flush with the top surface of the foundation, while ensuring that its top surface is horizontal. The exposed part of the embedded anchor bolts should be perpendicular to the base flange.
7. After construction is completed, the exposed length of the anchor bolts should be controlled within 80-100mm, and the exposed threads should be checked. Properly protect some parts.



**GUIDE SIGNS-Gantry structure**

**Active Illuminated traffic signs with panel display**

**Reflective sheeting: Nikkalite™ IV**

**Accept customizations**