Southern East Road and Environmental Assessment

～ Environmental Initiatives During the Project Period ～

Southern East Road Construction Site Office

November 14, 2025

1．Southern East Road

1）Overall Overview

- This is **a motorway** (**four lanes when completed**) that will connect and work together with the Naha Airport Expressway to **promote industry and tourism in the southern part of the main island.**
- The length of the road from **the Naha Airport Expressway to Tsukishiro** is approximately **7.4 km**, and the project (**two lanes provisionally**) is being carried out in **four construction sections** as shown below.
- Construction began in fiscal 2011, and section 4 provisionally opened with two lanes in March 2021.
- Construction is currently proceeding mainly on sections 3 and 5, while environmental assessments are being carried out.

2．What is Environmental Assessment?

1）Purpose

- For large-scale projects that may have a significant impact on the environment, operators must investigate, predict,
- and assess the environmental impact before implementing the project.
- The purpose is to publish the results and other information, solicit opinions from residents, the governor, municipal
- mayors, and others, and develop a better project plan from an environmental conservation perspective.

2）System

- Depending on the scale of the project, environmental assessment procedures will be conducted based on either the national Environmental Impact Assessment Law or the Okinawa Prefecture Environmental Impact Assessment Ordinance.
- Furthermore, the Okinawa Prefecture Environmental Impact Assessment Ordinance incorporates distinctive provisions tailored to local circumstances compared to the Environmental Impact Assessment Law.

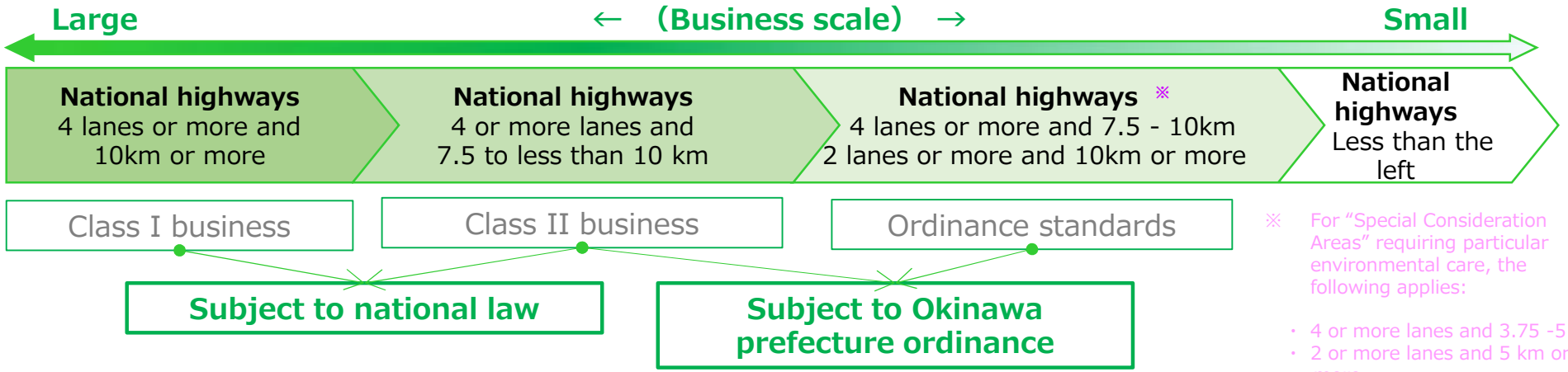
3）Main target businesses

Environmental Impact Assessment Law		Okinawa Prefecture Environmental Impact Assessment Ordinance	
1．Roads	11. New urban infrastructure development project	1．Roads	11. Golf course construction
2．Rivers	12. Distribution business park development project	2．Railroads/railroad tracks	12. Sports and recreation facilities
3．Railways	13. Land development project	3．Dams, embankments, and spillways	13. Waste treatment facilities
4．Airports		4．Power plant construction	14. Sewage treatment plant
5．Power plants		5．Airport construction	15. Factories and workplaces
6．Waste disposal sites		6．Landfills and reclamations	16. Construction of livestock farming facilities
7．Landfills and reclamations		7．Land readjustment project	17. Collecting soil, stones or gravel
8．Land readjustment project		8．Agricultural land development	18. Mineral mining business
9．New residential urban development project		9．Industrial park development	19. Construction or improvement of breakwaters
10. Industrial park development project		10. Housing development	20. Fish farm construction

2．What is Environmental Assessment?

3）Relationship between laws and ordinances (in the case of national highways, etc.)

- Subject to the Environmental Impact Assessment Law: Large-scale Class I or Class II projects
- Subject to the Environmental Impact Assessment Ordinance: Projects subject to the ordinance or Type 2 projects that do not require legal procedures

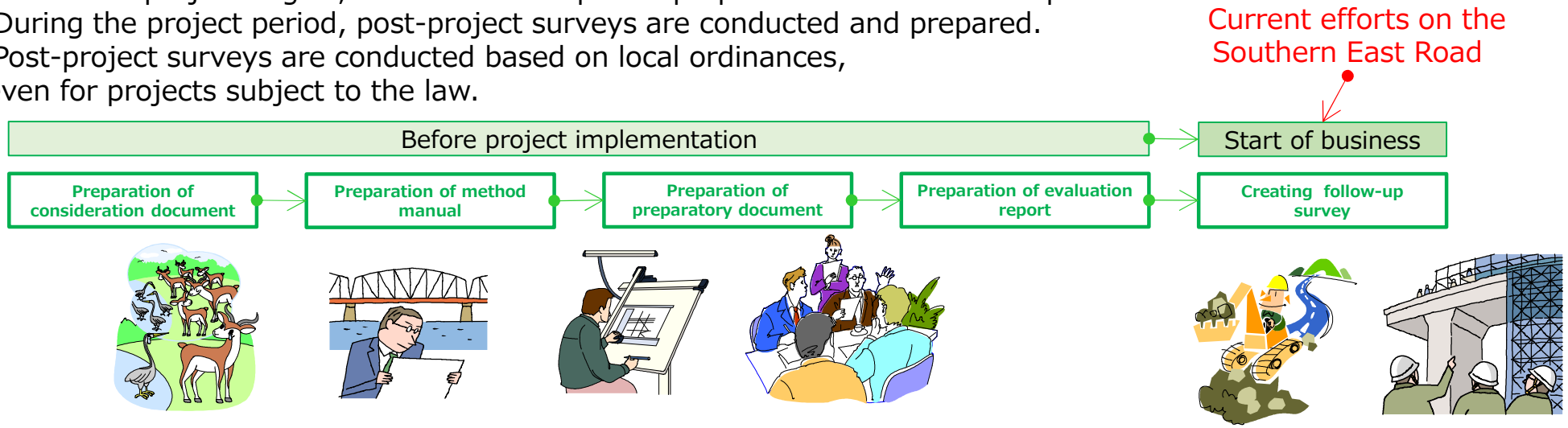


※ For “Special Consideration Areas” requiring particular environmental care, the following applies:

- 4 or more lanes and 3.75 -5 km
- 2 or more lanes and 5 km or more

4）Main flow

- Before the project begins, an evaluation report is prepared based on various procedures.
- During the project period, post-project surveys are conducted and prepared.
- Post-project surveys are conducted based on local ordinances, even for projects subject to the law.



3．Environmental Impact Assessment for Southern East Road

1）Assessment content

- The “assessment items,” “conservation measures required as a result of the predictions,” and “follow-up surveys” listed in the assessment report are as follows.
- For the Southern East Road Project, based on assessment report, post-construction surveys are conducted annually in parallel with construction work.
- In the fiscal year following the survey, a post-construction survey report is compiled, made available for public inspection, and submitted to the relevant prefectural authorities.

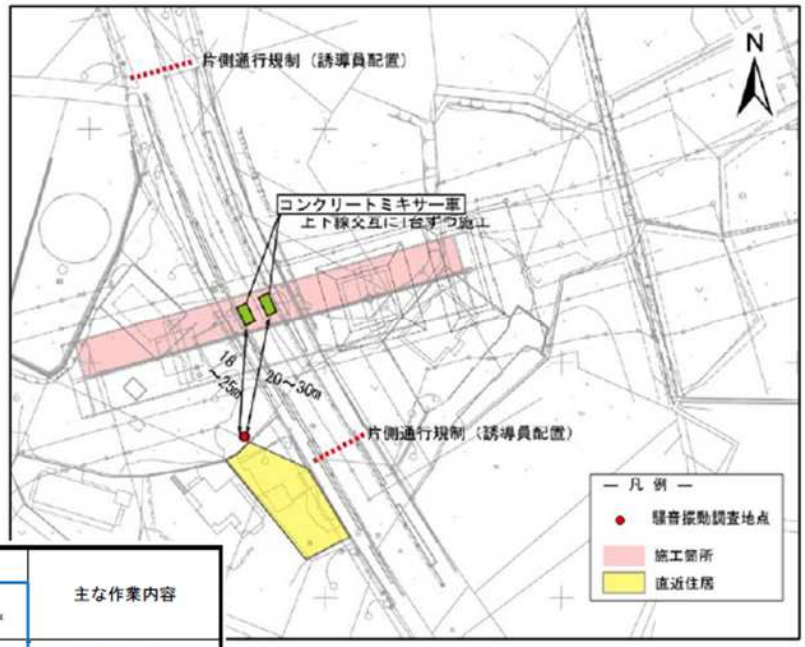
Evaluation items		Main conservation measures	Main follow-up investigations
1．Air quality		• None	• Noise and vibration (construction noise, road traffic during operation)
2．Water environment		• Treatment of turbid water resulting from construction work (Discharge when suspended solids (SS) are below 25 mg/L)	• SS survey of the river where the water is discharged • Survey of surrounding groundwater and springs
3. Soil-related environment		• None	• None
4. Other environments		• None	• None
5．Terrestrial organisms	**Plant**	• Transplant important species within the modified area. • Distribute materials to construction workers to raise awareness.	• Re-examination of transplanted individuals • If the impact is significant, consultation with experts is held.
	Animals	• Relocation of important species • Install fences to prevent re-entry of relocated animals. • Considerations for small bats • Distribute materials to construction workers to raise awareness.	• Breeding status of important bird species • Monitoring of relocated animals
6．Ecosystem		• Same as terrestrial plants and animals	• Same as terrestrial plants and animals
7. Landscape, historical and cultural environment		• None	• None
8. Waste and greenhouse gases		• None	• None

4．Environmental Initiatives

1）Noise and vibration

- Noise and vibration will be measured on the property line of the nearest residence on the construction side to confirm the impact on the surrounding environment.

【振動調査地点及び状況】



振動調査地点

コンクリートミキサー車による
コンクリート打設作業

測定開始	測定終了	測定結果(dB)							主な作業内容
		L_5	L_{10}	L_{50}	L_{90}	L_{95}	L_{eq}	L_{max}	
23:00	23:10	28.8	27.4	21.8	17.1	16.1	24.1	38.0	コンクリート打設
23:10	23:20	32.8	30.4	22.4	18.5	17.3	26.6	39.6	コンクリート打設
23:20	23:30	28.6	27.2	21.9	16.6	15.7	23.9	35.8	コンクリート打設
23:30	23:40	29.2	27.3	21.4	14.8	13.6	23.9	35.4	コンクリート打設
23:40	23:50	28.8	27.2	21.2	18.6	18.3	23.9	36.9	コンクリート打設
23:50	0:00	28.3	25.7	20.2	17.1	16.3	24.6	44.8	コンクリート打設
0:00	0:10	26.7	24.9	19.8	15.8	15.0	22.0	36.0	コンクリート打設
0:10	0:20	26.7	24.8	18.9	14.1	12.9	24.5	45.9	コンクリート均し
0:20	0:30	26.9	24.9	17.6	10.0	8.8	21.1	36.5	コンクリート均し
0:30	0:40	24.7	21.0	12.4	8.2	7.6	19.9	39.2	コンクリート均し

4．Environmental Initiatives

2）Water environment (① Turbid water treatment)

- Any turbid water generated during construction will be treated and its turbidity checked before being released.

The construction area will be surrounded by an earthen embankment to prevent muddy water from flowing outside.

The muddy water is purified by a treatment machine.

The concentration of treated water is measured and then released.

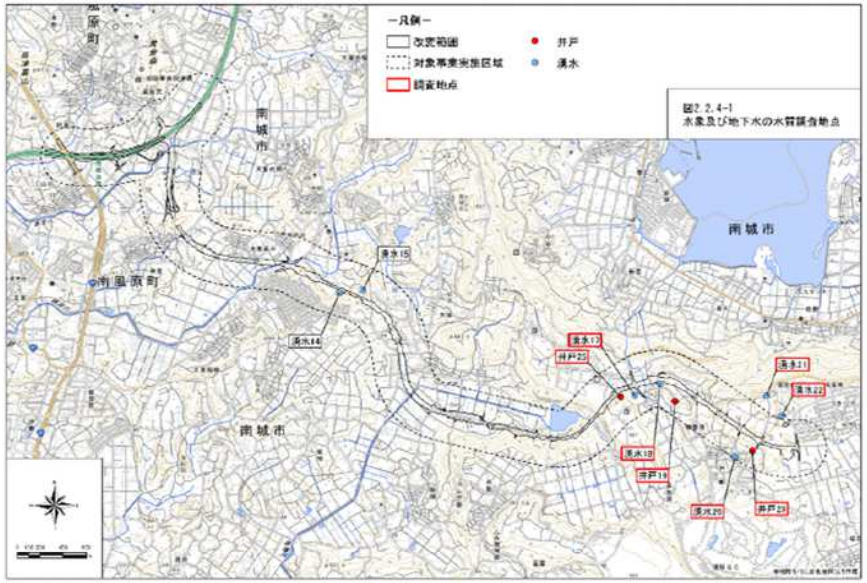
4．Environmental Initiatives

2）Water environment (② Groundwater around the project site)

- We are monitoring the long-term changes in the water level of the spring water around the project site.

【調査地域】

調査状況



No. 17(湧水)

No. 18(湧水)

No. 19(井戸)

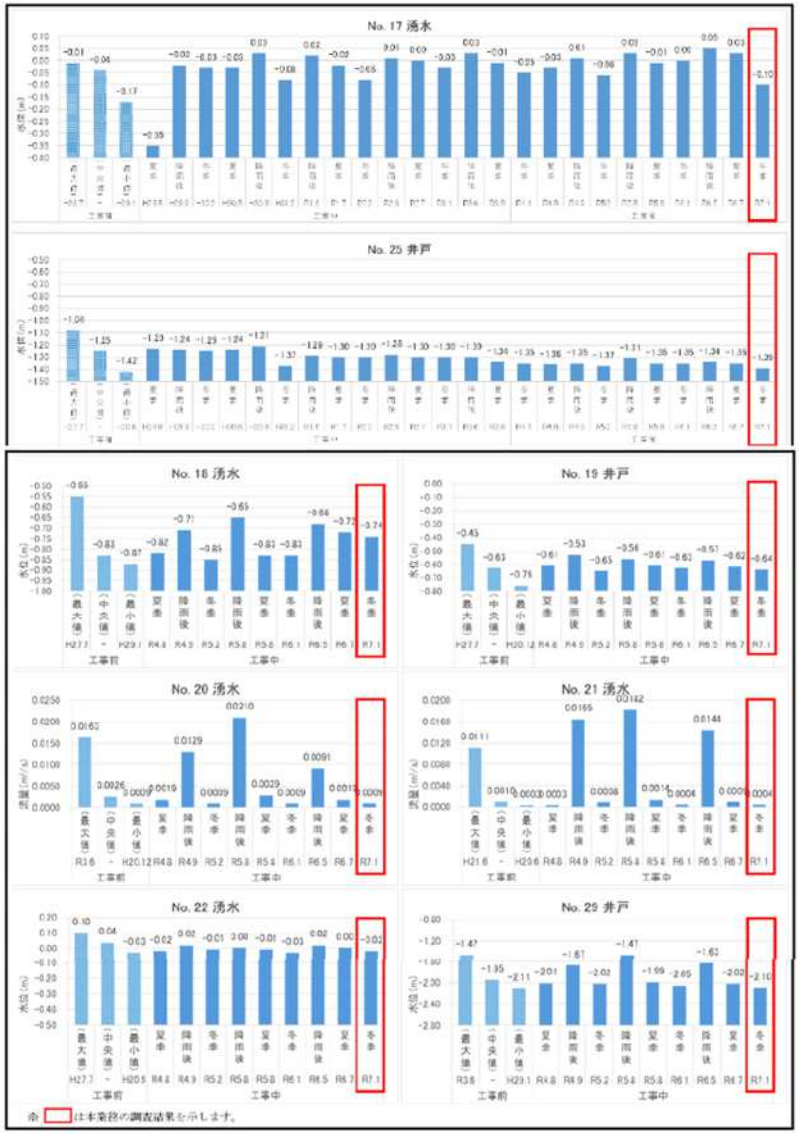
No. 20(湧水)

No. 21(湧水)

No. 22(湧水)

No. 25(井戸)

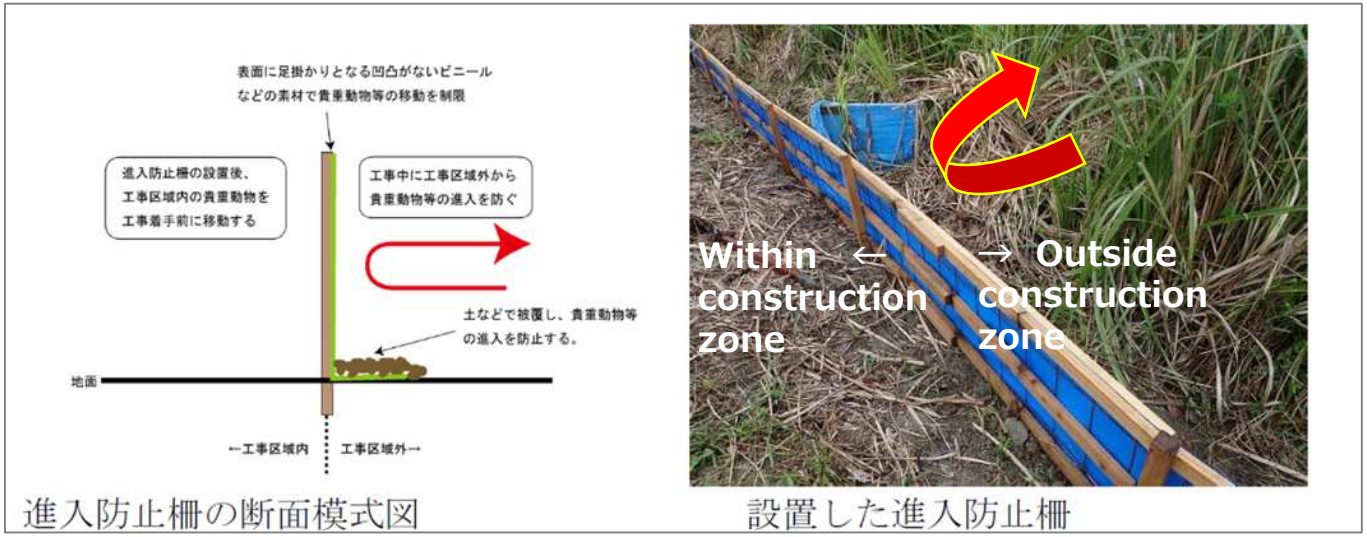
No. 29(井戸)



4. Environmental Initiatives

3）Terrestrial animals

- **Installation of entry prevention fences:** Fences will be installed to prevent wandering animals from entering the site.

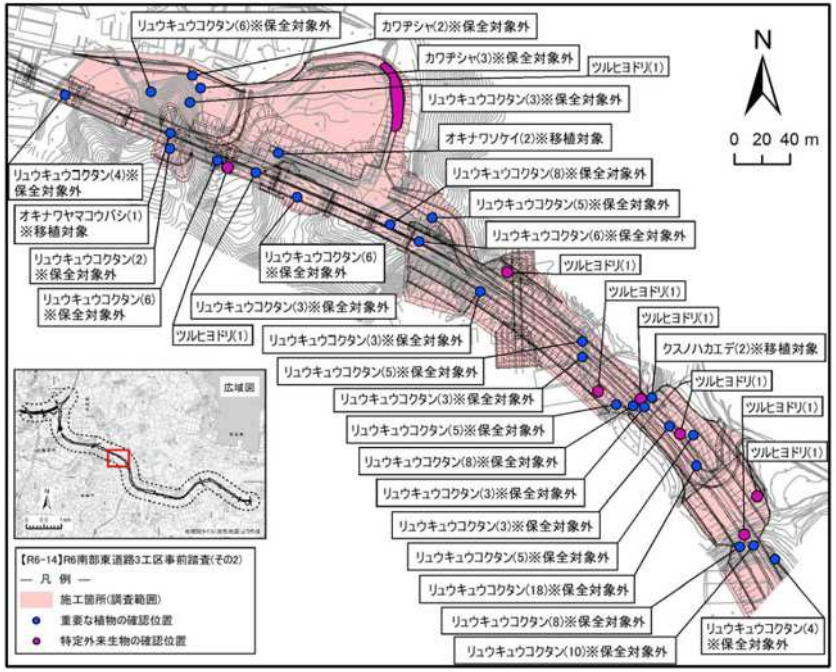


- **Capture of rare species:** Rare species within the altered area will be captured and moved to suitable habitats.

4. Environmental Initiatives

4）Terrestrial plants (① before modification)

- **Plant survey before alteration:** Valuable plants will be identified before alteration and transplanted before construction begins.

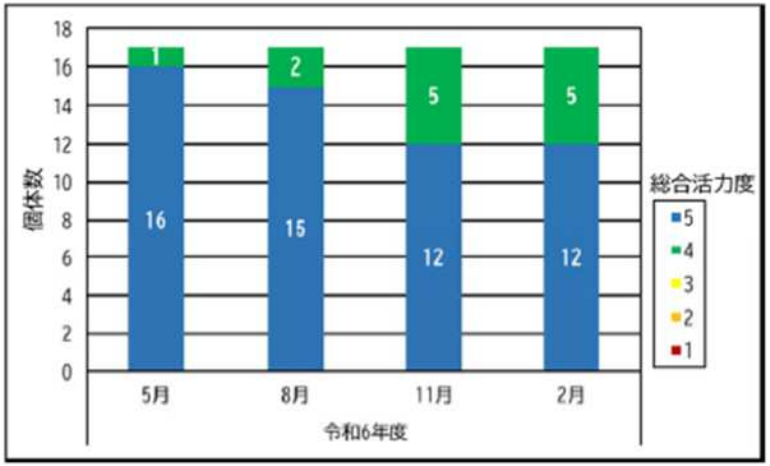


Eradication of designated invasive species
Any designated invasive species discovered during the survey will be eradicated.

4. Environmental Initiatives

4）Terrestrial plants (② after transplantation)

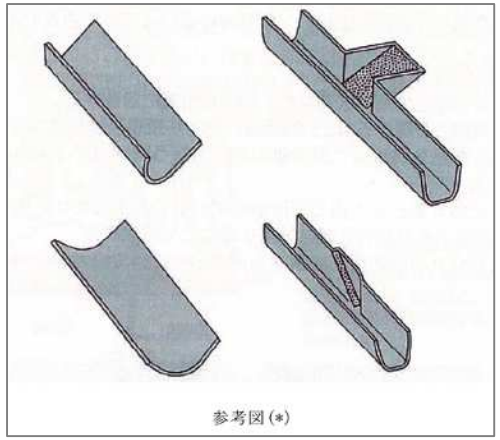
- **Post-transplant Plant Survey**: We will assess the growth status after relocation.



4. Environmental Initiatives

5）Others

- **Gutter shape**: We have designed the gutters so that small animals that fall into them can crawl out.



- **Road culverts:** Small bats use them as foraging migration routes.

5. The End

Thank you for your kind attention.
<(_ _)>

I hope today's presentation will be useful in your countries as well.