# Component Part No. 7-1 of the "Sites of Japan's Meiji Industrial Revolution" Conservation, Restoration, Presentation and Public Utilization Plan for Miike Coal Mine included in "Miike Coal Mine and Miike Port" (Area 7 Miike) (Abstract)

Omuta City and Arao City drew up a Conservation, Restoration, Presentation and Public Utilization Plan for Miike Coal Mine which is included in the Component part of "Miike Coal Mine and Miike Port (Component Part 7-1)" (hereinafter referred to as "Plan") in FY 2016 and 2017, which became a source of "Conservation Work Programme" pursuant to Recommendation b) in Decision: 39 COM 8B. 14 as adopted



Figure 1: Location maps of Omuta City and Arao City

by the World Heritage Committee at its 39<sup>th</sup> session in 2015. The Plan comprises detailed measures for the conservation, restoration, presentation and public utilization of the component part of the "Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining" (hereinafter referred to as "Sites of Japan's Meiji Industrial Revolution"). This document provides an abstract of the Plan.

The Fukuoka Prefectural Government drew up a separate Conservation, Restoration, Presentation and Public Utilization Plan for Miike Port, for which an abstract is provided separately.

# 1. Vision

Conserve for future generations the system and role of coal mining and transportation in Miike Coal Mine as an energy producer for the industrial revolution during the Meiji Era, as well as the scale of the histories overlapping with the spread of the coal industrial landscape, and promote public utilization of this historic asset so as to develop the cities.

The Sites of Japan's Meiji Industrial Revolution, comprising 23 component parts in Iron and Steel, Shipbuilding and Coal Mining, testify to the first successful transfer of Western industrialization to a non-Western nation and offer Outstanding Universal Value. Area 7 Miike comprises two component parts engaged in the coal industry. They are Miike Coal Mine and Miike Port (7-1) and Misumi West Port (7-2).

Of the three stages reflecting the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution, the Misumi West Port is

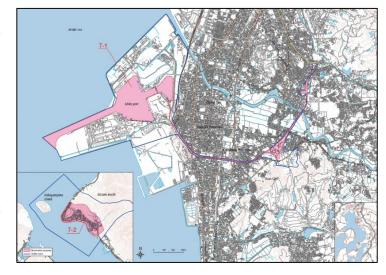


Figure 2: Scope of Area 7 Milke component parts and the buffer zone

the component part showcasing the second phase of the introduction of Western technology. The Meiji government built the port in 1887 to stockpile coal as production at the Miike Coal Mine increased and load coal onto large ships. Coal had been mainly shipped from Miike in small vessels, so there was a need for greater transportation efficiency.

"Milke Coal Mine and Milke Port" is the single component part testifying to the third phase of the establishment of industrial infrastructure. Here was Japan's second location for modernized coal mining technology after the Takashima Coal Mine in Nagasaki, with mining efficiency being improved with the deployment of advanced machinery and a centrally managed mine drainage system. After acquisitions by Mitsui Mining & Smelting, Miyanohara Pit and Manda Pit were excavated in 1888 and 1898, respectively, further increasing coal output. There was further development of infrastructure and coal transportation through wholly electric Milke Coal Railway. This was a very early electric railway application in Japan. Leveraging modern civil engineering to build Milke Port in 1908 brought success through massive and efficient domestic and overseas shipments of Milke coal through large vessels that docked at the port.

The development of coal industry technology at Miike Coal Mine thereafter leaded Japan's coal industry, and continuously layered the history of industrial activities. Although the facility closed in 1997, evidence of efforts to streamline and systemize coal industry logistics has been still preserved.

To conserve the Miike Coal Mine, which contributes to the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution, it is vital to maintain buildings and remains that form evidence of coal mining and transportation systems from the pitheads to the railway and port by understanding the historical process of changes and developments of Miike Coal Mine from establishing the foundation of the coal industry to the mine shutdown while focusing on coal mining in the Meiji era. It is also important to provide explanations and information on their value to visitors. The cities will therefore undertake the required conservation, restoration, presentation and public utilization to materialize the ideal future form of the Miike Coal Mine from the following two perspectives.

#### (1) Preserve the mine as it was upon shutdown

The Miike Coal Mine has been maintained as it was when it closed in 1997. Primarily with the physical evidence of the establishment phase for the nation's coal industry, which is one aspect of the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution, the site holistically showcases coal mine's functional and technological progress in line with changing industrial activities and social landscape from the end of the 19th century. Proper maintenance of the site as it was when it closed will preserve constituent elements of the Outstanding Universal Value for the future. Properly preserve the mine as it was shutdown can ensure to deliver the component parts contributing to the Outstanding Universal Value to the future. While pushing ahead with ongoing maintenance and managements, the cities will thus comprehensively and systematically assess the preservation of the Miike Coal Mine through regular monitoring, undertaking planned conservation and restoration to reinforce and stabilize them in terms of material, substance and structure of buildings and remains based on findings from periodical monitoring.

# (2) Present and Utilize the Miike Coal Mine conveying the historical process of changes and developments and spatial spread of industrial landscape in the Area

The following two elements of Miike Coal Mine's historical features are to be preserved and conveyed.

- (i) The historical process of changes and developments of the coal industry continuously layered from the establishment of the industrial infrastructure in the Meiji era (late 19th century) through the end of the 20th century, when the mine closed
- (ii) Spatial spread of the coal mining industrial landscape, including the chemical complex and corporate housing, centered on modernized coal mining and transportation system covering the pithead, railway, and port

The cities will accordingly emphasize the conveyance of these two historical features to visitors in

making the sites available to the public.

As well as guiding by guidance and explanatory boards and providing information at guidance facilities, the cities will convey the Outstanding Universal Value of the World Heritage property as an entity by publishing survey and research results, holding open and public lectures, conducting public events, and training more guides to foster understanding among local residents and visitors. By positioning the World Heritage component part of the "Miike Coal Mine and Miike Port" as cultural resource and hubs for information dissemination in the Area, the cities will cooperate and interact with communities to enhance civic pride.

#### 2. Policy

The policies for conservation, restoration, presentation and public utilization of Miike Coal Mine are set based on six items below.

# (1) Conducting investigative studies

The cities will make the positioning of Miike Coal Mine in the Outstanding Universal Value apparent and improve its state of conservation, conducting field surveys (including excavations) of the Miike Coal Mine and studying historical documents and other materials on Mitsui Group, publicly sharing the results of research through displays and brochures.

Buildings and remains as constituent elements will be periodically monitored for permanent stabilization through maintenance and restoration.

The cities will evaluate visitor satisfaction through surveys of visitor behavior and employ findings in measures to improve safety and comfort. They will also study ways to make displays and explanations more understandable for visitors in the aim of enhancing understanding.

# (2) Preserving, strengthening, and stabilizing the buildings and remains in terms of material, substance, and structure

As well as monitoring buildings and remains, the cities will stabilize them through weeding, cleaning, and other daily maintenance.

The cities will scrutinize any instabilities that monitoring reveals by leveraging expert opinions and findings from studies, undertaking systematically restoration for reinforcement and stabilization.

# (3) Indicating and explaining the coal mining and transportation systems

The cities will set routes, install explanatory boards, update and set up guidance facilities, display relics, and install viewpoints. At the same time, they will explain the process of changes and developments of Area 7 Miike, comprising the two component parts of "Miike Coal Mine and Miike Port" and "Misumi West Port", including the fact that they constitute a series of coal industry systems. As there are many Miike Coal Mine-related assets around the Area other than component parts of the World Heritage property, the cities will link the component parts and other remains related to Miike Coal Mine to clearly present the historical process of changes and developments of Miike Coal Mine and the spatial spread of coal industrial landscape.

# (4) Arranging and improving landscape from the standpoint of scenic view

In the component parts, material and substance of bricks, iron, concrete, and others used in shafts underscore the nature of the coal industry at Miike, and the cities will restore scenery that makes the atmosphere and landscape distinctive.

Because component part as a whole can be seen from a distance, one can see distinctive landscape that links the constituent elements of the component part and the related sites. Appropriate viewpoints include locations where railway site and Miyanohara Pit and Manda Pit can be seen, where railway pipelines are visible, and where brick structures for infrastructure can be seen. To preserve the industrial landscapes from such viewpoints, building heights, materials, and colors will be controlled.

# (5) Presenting and Utilizing the component part as cultural resource and providing information in the Area

While providing opportunities to deepen understanding of the Outstanding Universal Value of the World Heritage property and positioning of the component part in it, including academic reports on excavation surveys and restoration, the cities will deepen care for these sites by holding events highlighting regional themes and features for arts, foods and items as part of measures that contribute to community revitalization and planning.

The cities will undertake educational initiatives to present World Heritage property and its component parts in the Area for future generations, collaborating with local elementary and junior high schools, resident's associations, and former coal mining communities.

Centered around the Coal Industry and Science Museum (Figure 3), guidance facilities would be set up at Miyanohara Pit, Manda Pit, and Miike Port for information dissemination and activities to comprehensively cultivate understanding of the component part. Visitors would be encouraged to tour the relevant remains, buildings and facilities to learn the historical process of changes and developments of Miike Coal Mine and the spatial spread of the coal industry landscape.

Omuta City and Arao City, in collaboration with Fukuoka Prefectural Government, Kumamoto Prefectural Government, and Uki City, would make it possible to harness the component parts for Area 7 Miike as a whole



Figure 3.Miike Coal Mine-related assets location map

#### (6) Implementing projects

Required spending would be allocated in order of priority to undertake scheduled tasks under the project implementation. The cities would confirm work progress and review Plan at the right timing to move the project ahead.

# 3. Methods

#### (1) Investigative studies

# (a) Excavation and field surveys

At Miyanohara Pit and Manda Pit, excavation surveys would compare the old drawings with the current conditions of buildings and remains, confirm and interpret coal mining and transportation

systems, and further enhance communications to deepen visitor understanding.

The following excavation work at Miyanohara Pit would be prioritized to check on conditions of remains. The work would encompass the Davey pump room site, which was crucial for water drainage, the adjacent masonry water drainage area, the steam engine boiler stack and auxiliary, and the Miike State Prison.

At Manda pit, test excavations at the following facilities to a minimum to avoid harm for preservation would confirm the extent of underground remains. They would include the boiler house, the No. 1 shaft facilities, and the Davey pump room.

For the coal railway site, there would be excavation surveys of the railway bed, filling and cutting locations and other areas to confirm and analyze the basic structure of the railway.

# (b) Surveys of building restoration

Periodic monitoring would assess the progress of deterioration with each constituent element. Techniques for seismically reinforcing the brick winch chamber of Miyanohara Pit would be scrutinized.

# (c) Historical documents and other materials surveys

There would be ongoing study and research of historical documents and other materials (historical documents, photographs, and maps) owned by relevant organizations and research institutes of Mitsui Group, as well as citizens and other parties. The results of studies would be widely publicized through reports to be used as basic materials for conservation, restoration, presentation and public utilization of the component part.

# (d) Surveys of visitor numbers and behavior

Changes in visitor traffic would be assessed to evaluate negative impacts on the component parts, with the results being employed in countermeasures. A visitor dynamics survey would confirm the impacts of conservation, restoration, presentation and public utilization project by assessing visitor understanding of the World Heritage and its component part and gauging visitor satisfaction.

# (e) Monitoring

Monitoring charts would be produced, with follow-up monitoring to comprehensively understand the deterioration of buildings and remains and landscape transformations with the component part and the buffer zone. If negative impacts are identified, steps would be taken to eliminate causes or reduce impacts, followed by verification of the effectiveness of measures taken.

Findings from follow-up monitoring would be compiled in an annual report. The Miike Conservation Council setup under the World Heritage management structure would discuss measures. Reports would be submitted to the National Committee of Conservation and Management for Sites of Japan's Meiji Industrial Revolution.

# (2) Conservation and Restoration of buildings and remains

Observation of the current situation revealed that unstable buildings are (1) Number 2 Shaft winding-engine house, (2) Number 2 Shaft headframe, and (3) other buildings and structures in this order of priority. Reinforcements mainly for seismic strengthening of the buildings for (1), steel corrosion prevention for (2), and restacking fallen masonry structures for (3) would be undertaken.

# (a) Conservation and restoration of constituent elements in the component Pprt that contribute to the Outstanding Universal Value

# Miyanohara Pit

Observation of the current situation revealed that unstable structures are (1) Number 2 Shaft winding-engine house, (2) Number 2 Shaft headframe, and (3) other buildings and structures. Reinforcements would be mainly for (1) seismic strengthening for the structure, (2) steel corrosion prevention, and (3) restacking fallen stones.

# • Number 2 Shaft winding-engine house

The brick structure would be seismically reinforced in view of a preliminary survey that highlighted seismic issues. Improvements would encompass (1) vertical steel reinforcement, (2) brick joint repairs and reinforcement, and (3) horizontal steel reinforcements of the upper structure.

#### Number 2 Shaft headframe

The tower's steel material would be restored as corrosion in visible. The steps would be to (1) assess materials to identify where they were produced, (2) repair and reinforce the corroded materials, and (3) paint and rustproof.

# Other buildings and structures

There would be seismic reinforcements and other restoration in view of seismic strength issues with the brick wall of Davey pump room. The steps would be to (1) undertake vertical repairs with steel materials, and (2) repair and strengthen brick joints. Masonry drainage parts that have collapsed would be restacked. Existing materials would be reused as far as possible, with replacements with similar new materials as necessary. Where ongoing monitoring identifies other areas at risk of collapse, the deterioration would first be scrutinized, followed by restoration after decisions on techniques that may include reinforcing masonry and strengthening back-filling.

# Underground archeological remains and relics

Conservation to stably maintain underground archaeological remains and relics after the excavation survey would include putting sand or other cushioning materials right above remains and relics when filling in. There would then be regular monitoring to check for unevenness and depressions from the ground surface to identify and resolve causes of instability in the underground remains and relics.

Regular monitoring from the ground surface of unexcavated areas would identify and resolve causes of instability in underground remains and relics.

# > Manda Pit

For the brick buildings of Manda Pit, a constituent element that contributes to the Outstanding Universal Value, the steps would be to restore (1) Storage & pump house, (2) Safety lamp house & bathing house, and (3) the office. As earthquake vulnerabilities have been identified for all of these areas, restoration would include seismic reinforcements.

# Storage & pump house (former fan house)

Cracks are evident in the exhaust tower of the brick structure, which would very likely collapse. The structure would thus be restored and seismically reinforced. It was originally built as a fan room, but later renovated as a Storage & pump house. A new explanatory board and other visuals would help visitors understand that this was once a fan house.

#### Safety lamp house & bathing house (former fan house)

This brick building comprises a lamp room, bathroom, dressing room, and drying room. As parts of the roofs have deteriorated over the years, there will be repairs and seismic reinforcements. This area was originally a fan and machine room but was later renovated as a lamp room and bathroom. A new explanatory board and other visuals would help visitors understand that this was once a fan house.

#### Office (former fan house)

This brick building consists of an office, restroom, an administrative room, a changing room, toilets, kitchen, and staircase. Given visible cracks and other damage on parts of the outer wall and interior wall plaster peeling and falling off, the structure would be restored and seismically reinforced. It was originally built as a fan room, but was later renovated. Provide information to

help visitors to understand that it was once a fan house.

#### Number 2 Shaft headframe

Restoration of the steel shaft tower of Manda Pit was completed in 2010. The focus now is primarily on daily maintenance. After assessing deterioration found through regular monitoring, deteriorated areas would be partially repaired.

#### Other buildings

In principle, there would be ongoing maintenance, with partial restoration of deteriorated areas identified through regular monitoring. Restoration would use existing bricks as much as possible.

# Underground archeological remains and relics

Conservation to stably maintain underground remains and relics after the excavation survey would include putting sand layer for cushioning right above remains and relics when filling in. There would then be regular monitoring to check for unevenness and depressions from the ground surface to identify and resolve causes of instability in the remains and relics.

Regular monitoring from the ground surface of unexcavated areas would identify and resolve causes of instability in underground remains and relics.

#### Coal Railway

The cities regularly monitor the Coal Railway remains, and have identified no unstable locations requiring immediate steps. That said, the remains are soil structure constructed more than a century ago and seems inherently likely to destabilize. The cities have therefore determined the following policy for the future.

Regular monitoring will reveal deterioration of the railway bed. If some instability is identified, the structure would be stabilized after the causes are identified. There would be measures to enhance understanding of the railway remains by restoring them to the original condition, including by exposing buried remains.

It will be a priority to keep railway embankments and cuttings configuring slopes in good shape. If monitoring reveals instabilities they would be remediated for structural stability. Specific steps will include weeding, cleaning and maintaining and repairing rainwater drainage facilities on a daily basis. Restoration techniques would be based on findings from monitoring and excavation surveys. Efforts would be taken to keep true to existing materials, material qualities and construction techniques as far as possible to retain the character of the railway.

Brick railway bridges at interchanges they intersect with roads would basically maintain their looks and be repaired and structurally reinforced where instable in view of deterioration identified through regular monitoring.

# (b) Repair of elements closely related to constituent elements of the component part that contribute to Outstanding Universal Value

Previous surveys confirmed the structural soundness of underground sections of pithead of the second shaft at Miyanohara Pit. In view of some concrete cracks in some parts, however, there would be necessary repairs over the medium term schedule in view of the extent of deterioration found through monitoring.

# (3) Presentation and public utilization to foster overall understanding of the coal mining and transportation system

#### (a) Zoning

To promote presentation and public utilization that fosters a consistent and comprehensive understanding of the coal mining and transportation system extending broadly from the pitheads (Miyanohara Pit and Manda Pit) and the railway (Miike Coal Railway) to the port (Miike Port), each component part would be zoned, with clearly indicated methods of presentation and public utilization

commensurate with outline and characteristics of each constituent element.

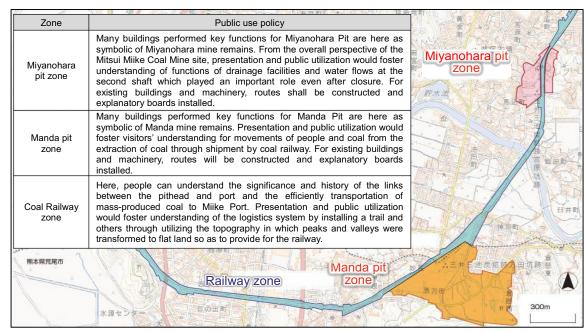


Figure 4: Zoning and presentation and public utilization policies by zone

# (b) Tour route planning

# > Miyanohara Pit

To streamline visitor entry management and improving understanding of the coal mining and transportation systems at the pithead, the cities will set up routes along the component parts and surroundings as follows.

(1) Guidance facility  $\rightarrow$  (2) Davey pump room and boiler facility  $\rightarrow$  (3) Pithead facility  $\rightarrow$ 



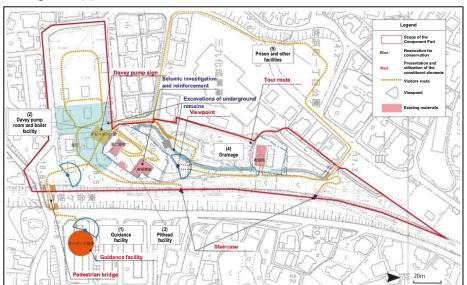


Figure 5: Miyanohara Pit presentation and public utilization plan

#### > Manda Pit

The cities will enable allow visitors to sense conditions in around 1939, the heyday of coal mining, by setting up two routes. One would be for understanding flows of employees and miners at Manda Pit. The other would be for following the flow of coal. People flows are as follows.

(1) Yamanokami shrine  $\rightarrow$  (2) Storage & pump house (former fan house) $\rightarrow$  (3) Office (former fan

house)  $\rightarrow$  (4) Safety lamp house & bathing house (former fan house)  $\rightarrow$  (5) Number 2 Shaft headframe  $\rightarrow$  (6) Number 2 Shaft winding-engine house  $\rightarrow$  Flow of coal: (7) Number 1 Shaft headframe foundations  $\rightarrow$  (8) Remains of the coal dressing plant (coal railway)  $\rightarrow$  (9) Remains of the Davey pump house  $\rightarrow$  (10) Power substation (electrical power substation)  $\rightarrow$  (11) Remains of the boiler house

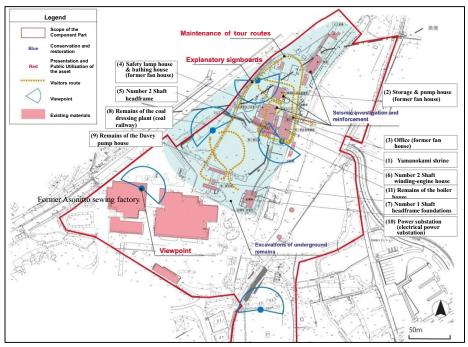


Figure 6. Manda Pit presentation and public utilization plan

# Miike coal railway

The cities established the following route for the component part and surroundings. This is both to foster visitor understanding of the railway role in logistics system but also to show the continuity of functions between the Miyanohara and Manda pitheads and railway.

(From north) (1) Northern district of Miyanohara Pit  $\rightarrow$  (2) Adjacent district to Miyanohara Pit $\rightarrow$  (3) Area around Suwa River Bridge $\rightarrow$  (4) Northern district of Manda Pit  $\rightarrow$  (5) Adjacent district to Manda Pit

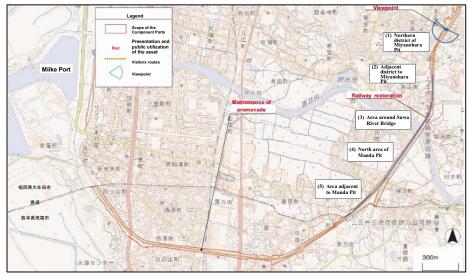


Figure 7: Railroad site Pit public use plan

### (c) Topography and environmental improvements

The current topography and environment would be maintained, except for minimal changes needed for restorations, presentation and public utilization.

A trail would be constructed so visitors can sense the coal railway site continuity. A walkway between the railways and the pitheads (Miyanohara Pit and Manda Pit) would also be set up to foster understanding of continuity and connections between them.

#### (d) Arrangement of landscape and planting vegetation

In principle, there will be no new tree planting. Trees that impede understanding the coal mining and transportation system within the component parts will be cut down. Trees that provide shade at viewpoints and rest sites will be retained.

The scenic nature of Miike's coal industry in materials and material qualities of bricks, irons, and concrete used in shafts would be identified and reflected in the materials and material qualities of new fences and walkways.

# (e) Guidance and explanatory facilities

The cities will install information and guidance boards along routes. The designs and presentations of the boards would be consistent, and the boards will be few and compact so they are not distracting during tours.

At Miyanohara Pit, a new guidance facility in the buffer zone south of the component part would outline the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution and the pit's positioning therein. Archaeological remains and relics recently discovered through the excavation surveys would be displayed and clearly explained to visitors, with the remains and relics being securely maintained underground.

On the eastern end of Manda Pit are factory buildings of Asonit that were constructed to employ families of victims of a coal dust explosion accident in 1963 (Figure 6). Prior to that, there were facilities related to the first shaft. While explaining the history and significance to visitors, the cities will set out to open factory buildings roofs as viewpoints and use indoor spaces to house materials for restoration of Manda Pit.

# (f) Administrative and convenience facilities

In providing essential convenience facilities for visitors, locations and designs will be chosen that do not spoil the landscape. Existing facilities would be used for toilets, and new ones would not be built. Facilities from when coal mining was ongoing would be used as much as possible, with railway platform sites being harnessed for resting and other convenience facilities.

#### (g) Exhibition, presentation and public utilization facilities

The Coal Industry and Science Museum (Figure 3), which serves as the visitor center for Area 7 Miike, would spearhead the provision of information and undertake public awareness activities for Miike Coal Mine in cooperation with Miyanohara and Manda pit guidance facilities.

# (4) Arrangement and improvement of landscape in the buffer zone

Buffer zone around Miyanohara and Manda pits are designated as landscape development areas under the Ordinance on Landscape of Omuta City and Arao City, requiring positive landscapes through regulations of structural heights and colors.

For lookout on railway sites and Miyanohara and Manda pits, observation points for railway pipelines, observation points for brick structures intersecting with roads and other infrastructure, and viewpoints for each component part, building heights and materials and colors will be controlled so visitors can better apprise themselves of the scenic natures of Miike's coal industry.

# (5) Public utilizing the component part as cultural resource and providing information hub in the Area

# (a) Utilization methods of guidance facilities

The Coal Industry and Science Museum (Figure 3) provides explanations of the Sites of Japan's Meiji Industrial Revolution as a whole and of Area 7 Miike. Guidance facilities at Miyanohara and Manda pits will explain their respective constituent elements of the component part. Videos and exhibits, guided tours, and tours to other component parts will promote overall understanding of the World Heritage property.

At Miyanohara and Manda pits, former employee housing buildings and the Former Asonitto sewing factory buildings (for families of explosion victims) will show how coal miners lived and foster understanding from the perspectives of the historical process of changes and developments of Miike Coal Mine.

# (b) Approaches to engagement with local community

Operations of the Miike Coal Mine involved many people, so that the mining and related facilities remained as cultural properties after closure because of a great love that the community has for them. In regard to future preservation and utilization of the Area, awareness among and involvement by residents would be fostered. There will be initiatives to develop the skills of guides, including through training and seminars and cultivation of organizations.

# 4. Projects implementation

### (1) Priority of implementation projects

Omuta City and Arao City will prepare a schedule for projects implemented over 20 years from 2018. The schedule will comprise three six-year phases, Phase I is 2018 to 2023. Phase II is 2024 to 2029. Phase III is 2030 to 2035. Projects will be in accordance with priorities. Conservation, restoration, presentation and public utilization for Miyanohara and Manda pits, which have function as pithead and many brick buildings remains, are deemed a prime priority, and they will be covered in Phase I. Thereafter, the work for the Coal Railway will be in Phase II.

Projects assigned the highest priorities in Phase I are as follows:

- Restoration of Number 2 Shaft winding-engine house of Miyanohara Pit
- Installation of Miyanohara Pit's guidance facility
- Pithead experience at Miyanohara Pit
- Restoration of such Manda Pit buildings as the fan house
- Number 2 Shaft headframe pithead experience at Manda Pit
- Utilization of Number 1 and 2 Shaft headframe tunnels at Manda Pit

# (2) Revision of implementation schedule

The schedule was based on a prevailing view of the ideal outlook for the component part ant the buffer zone. After the Phase II is complete, the cities will review the schedule based on progress and contemporary social situation.

Zone	Project item	Phase I 2018 to 2023	Phase II 2024 to 2029	Phase III 2030 to 2035
Miyanohara Pit	Excavation survey and study     Preservation and restoration of winding-engine house and other			
	Install routes and explanatory boards to foster visitor understanding			
Manda Pit	Excavation survey and study			
	2. Preservation and restoration of fan house and other structures			
	Install routes and explanatory boards to foster visitor understanding			
Coal Railway remains	1. Excavation survey and study			
	Install routes and explanatory boards to foster visitor understanding			

Table 1: Projects implementation schedule

# (3) Others

Omuta city and Arao city has carried out conservation and restoration work, etc. for the Miike Coal Mine by securing necessary funds\* making use of various subsidy programs available in FY2016 and FY2017, the first two years following inscription of the property on the World Heritage List. To ensure the smooth implementation of the project, it plans to continue such efforts to secure necessary funds in partnership with relevant institutions.

\* Approximately 14 million yen was spent in FY2016 and 25 million yen has been budgeted for FY2017 (including the amount earmarked for plan making, presentation and public utilization of the component part), both excluding the cost for day-to-day maintenance.



Figure 8: Conceptional drawing of Miyanohara Pit at Miike Coal Mine once restored and open to the public



Figure 9: Conceptional drawing of Manda Pit at Miike Coal mine once restored and open to the public