

別添資料

別添資料 環境チェックリスト

Lista de Verificación (Checklist) sobre las Consideraciones Ambientales y Sociales

Categoría	Ítem	Principales Puntos de Verificación	Si: S No: N	Consideraciones Ambientales y Sociales Específicas (Razones y fundamentos para considerar Si/No, medidas de mitigación, etc.)
I. Permisos, Autorizaciones y Discusiones necesarias	(1) Evaluación Ambiental y permisos (licencias) Ambientales	(a) ¿Se ha elaborado el informe de la Evaluación del Impacto Ambiental (EIA)? (b) ¿El EIA y otros documentos, están escritos en el idioma oficial del país o en un idioma ampliamente utilizado dentro del país proponente de la asistencia? (c) ¿El informe de la EIA y otros documentos han sido aprobados por el gobierno proponente de asistencia? (En caso que aún no haya sido aprobado colocar en la columna de "Consideraciones Ambientales y Sociales Específicas" la fecha prevista. (d) ¿Existen condiciones adicionales asociadas a la aprobación de los informes de EIA y otros documentos? En caso que existan condiciones adicionales, ¿estas se cumplen? (e) Aparte de los permisos antes mencionados, ¿Se obtuvieron otras autorizaciones y permisos ambientales de los organismos e instituciones relevantes locales? (f) ¿Están cubiertos los elementos del Apéndice 2 de los Lineamientos JICA (el alcance y el nivel de detalle se pueden ajustar de acuerdo con el impacto potencial del proyecto)? (g) ¿Se ha confirmado las consideraciones ambientales y sociales para todo el alcance del proyecto, considerando los impactos acumulativos, los impactos secundarios derivados del proyecto y los proyectos asociados a éste?	(a) N (b) N (c) N (d) S (e) N (f) S (g) S	(a) Para realizar la elaboración del informe es necesario llevar a cabo la fase preliminar, en este momento los ingenieros encargados por parte de la cooperación japonesa, junto con el apoyo de técnicos de la UGA-SIT, y de la Unidad de Conservación Vial, entre otras unidades de la SIT, se encuentra en fase de recopilación de información necesaria para realizar lo concerniente al Estudio de Impacto Ambiental del Proyecto. (b) En este momento aún no se ha elaborado el Estudio de Impacto Ambiental del proyecto, pero si se tiene planeado su redacción con el idioma oficial del país (español) o según se requiera. (c) Una vez que se realizan y se presentan por parte de la UGA-SIT y la empresa constructora que llevará a cabo el proyecto todos los requisitos técnicos y legales ante la Secretaría de Recursos Naturales y Ambiente (SERN) del Licenciamiento Ambiental, la secretaria antes mencionada extiende en un tiempo aproximado de un mes la Licencia Operativa que sirve para iniciar las obras de supervisión y construcción del proyecto, y luego se extiende por dicha Secretaría en un tiempo aproximado de dos meses la Licencia Funcional por 5 años. (d) Suelen haber condiciones adicionales en base la categoría ambiental del proyecto y siempre se logra el cumplimiento de las mismas para llevar a cabo los proyectos de infraestructura vial del país. (e) Como primera fase se debe de realizar el trámite De Licenciamiento Ambiental ante la SERN antes de llevar a cabo el proceso de obtención de permisos de Corte de árboles que lo otorga el Instituto de Conservación Forestal (ICF), permiso de realizar el vaciado de desechos sólidos en los botaderos municipales con la ayuda de la Unidad Municipal Ambiental (UMA) de la zona del proyecto, solicitud de extracción de material de los bancos de préstamos en el Instituto Hondureño de Geología y Minas (INHGEOMIN) con el apoyo de la Unidad de Gestión Ambiental (UGA) de SIT, entre otros permisos. (f) El informe se encuentra en proceso de elaboración y se tiene contemplado cumplir con los lineamientos de la cooperación japonesa JICA (Apéndice 2). (g) Se ha confirmado que no existen grandes impactos sociales y ambientales en lo que concierne al alcance del proyecto esto debido a que es un proyecto de intervención puntual dentro de la carretera principal o secundaria CA-6 que conduce al oriente de Honduras.

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	(2) Explicación y discusión con los residentes locales.	(a) ¿Se analizaron e identificaron adecuadamente todas las partes interesadas locales? (b) ¿El contenido y el impacto del proyecto se explicaron adecuadamente a las partes interesadas locales para lograr su entendimiento a través de un proceso que garantiza una consulta significativa, incluida la divulgación (publicación) de información? (c) Respecto a las reuniones con las partes interesadas locales, ¿se crean registros de las reuniones, incluidos atributos como el género de los participantes? (d) ¿Se reflejaron debidamente las opiniones y observaciones recogidas de la población local en el contenido del proyecto?	(a) S (b) N (c) N (d) N	(a) Se ha identificado que la lista de pobladores que se verá afectada o beneficiada de manera directa por el proyecto pertenecen al municipio de San Antonio de Oriente, y una zona importante que es la Universidad de El Zamorano, así como la Aldea Hoya Grande. (b) En este momento solo se han realizado visitas de campo para conocer las personas y la infraestructura que será afectada por las obras de construcción, pero el proyecto será socializado en su totalidad. (c) En cada reunión se hará un listado de las personas donde estará incluido su nombre, número de celular, firma, institución y su correo electrónico. (c) La población expresará todo tipo de duda y dichas dudas serán respondidas por los técnicos y especialistas del proyecto, también podrán acercarse a las unidades de la SIT encargadas del proyecto por cualquier duda o consulta que la población de la zona posea.

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	(3) Análisis de alternativas	(a) ¿Es apropiado el alcance de las múltiples alternativas del proyecto? (b) ¿Se consideraron alternativas viables en términos de tecnología, finanzas y consideraciones ambientales y sociales para la reducción de las emisiones totales de gases de efecto invernadero según los requerimientos en los apartados de consideraciones ambientales y sociales? (c) ¿Se realizó una comparación de la alternativa sin y con implementación del proyecto?	(a) S (b) S (c) S	(a) Si son apropiadas las Alternativas consideradas para llevar a cabo la construcción del proyecto, a continuación, se describen dichas Alternativas: Alternativa 1: Curvatura Mínima, Minimizar el área afectada por la construcción usando la curvatura mínima, evitar área de deslizamiento moviendo la ruta al lado de la montaña, carretera (479m), Puente (120m), Longitud del puente menor a propuesta No.3 y más económico. El desvío es relativamente corto. Se puede reparar de la carretera actual, el radio de curva es mínimo disminuyendo la seguridad y facilidad de conducción, es requerida la consideración ambiental de la pendiente del talud de corte. No hay reubicación de ningún poblador, el pilar del puente se puede construir en el centro, se considera la entrada al hotel cercano al proyecto. Alternativa 2: Curvatura similar a carretera actual, se evita el área de deslizamiento moviendo ruta al lado de montaña, Carretera (476 m), Puente (120 m), Longitud del puente es menor a propuesta No.3, y más económico, El desvío es relativamente corto. Se puede separar de la Carretera actual, la seguridad de conducción y el gradiente longitudinal se mantienen en el nivel actual, es requerida la consideración ambiental de la pendiente de talud corte. No hay reubicación de la población, El pilar del puente puede ser construido en el centro, El acceso a entrada del hotel debe considerarse. Alternativa 3: Mejorar Alineamiento Usar una curvatura mayor a la actual, Cruzar área de deslizamiento usando un puente, Carretera (316 m), Puente (240 m), La Longitud del puente es más mayor que las otras dos propuestas y menos económico, Longitud de desvío es largo, Es necesario tomar en cuenta el deslizamiento del valle, La curvatura horizontal es mejorada, pero el gradiente vertical de 5.6% no es favorable, No hay preocupación sobre impacto al medio ambiente. No hay reubicación de residentes, Distancia del claro del puente es larga para evitar el área de deslizamiento, El impacto al acceso de entrada a hotel es mínimo, Se puede usar la carretera actual. (b) El proyecto indica que habrá una disminución en la contaminación de gases de efecto invernadero (CO2) debido a que los tiempos de recorrido serán menores por la construcción del puente, ya que en este momento el tramo se encuentra en muy mal estado. (c) En la zona se han realizado múltiples rellenos de material en las grietas que se forman producto del deslizamiento, unido a esto se han hecho grandes inversiones en la zona como por ejemplo construcción de un muro de gaviones y la construcción de pilotes para evitar el deslizamiento, por lo cual la construcción del puente luego de ser evaluado por especialistas en el área es la mejor solución e inversión que se puede realizar para solucionar el problema de transitabilidad.

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2. Medidas de Control de Contaminación	(1) Calidad del Aire	(a) ¿Los contaminantes atmosféricos emitidos por los automóviles u otros vehículos en circulación podrían impactar el entorno ambiental? ¿El Proyecto satisface las normas ambientales del país promotor? (b) En el caso de que la contaminación atmosférica de la zona donde atraviesa la carretera prevista exceda ya las normas ambientales, ¿es posible que el presente proyecto agrave la situación? (c) ¿Hay un impacto negativo debido a la construcción? ¿Se contempla alguna medida de mitigación del impacto?	(a) S (b) N (c) N	(a) La zona del proyecto se verá afectada principalmente por la producción de material particulado (polvo) resultante del movimiento de tierra y de la circulación del equipo de acarreo por la vía actual. Se va a controlar y mitigar realizando un riego de agua de manera periódica en el sitio para reducir el impacto del polvo en suspensión. La generación de ruido y vibraciones también se producirán por la contaminación sonora que produce el equipo de construcción, pero se tendrá y se cumplirá un protocolo ambiental para cumplir con los estándares establecidos por los entes gubernamentales del país. (b) La contaminación atmosférica como se mencionó anteriormente (polvo, ruido y vibraciones) tendrán un control en donde cumplan con todos los estándares de norma del país por lo cual no habrá un aumento excesivo de la contaminación que agrave la situación actual en donde se pretende realizar el proyecto. (c) No hay un impacto negativo debido al proyecto de gran escala, se contemplarán todas las medidas de mitigación para evitar contaminación del aire debido a emisiones dispersas como ser el humo, gases de combustión, polvo etc., así como la generación de ruido y vibraciones, también se utilizarán letinas portátiles para evitar la contaminación de las aguas servidas, se evitará la contaminación de las aguas residuales ya que se podrán almacenar en recipientes adecuados para su disposición en los sitios aprobados, se evitará la contaminación del suelo, del medio social y los riesgos laborales que puedan suscitarse en el proyecto.
	(2) Calidad del Agua	(a) ¿Hay alguna posibilidad de que la escorrentía de la tierra (suelo) producto de las actividades de movimiento de tierras, tales como corte y relleno provoque la degradación de la calidad de agua en la cuenca aguas abajo? (b) ¿El proyecto afectará las fuentes de agua circundantes, como los pozos? (c) ¿Los efluentes de diversas instalaciones, como los estacionamientos y áreas de servicio (incluidas las aguas residuales domésticas y pluviales) cumplen con las normas de efluentes del país promotor? (d) ¿Existe la posibilidad de que los efluentes formen cuerpos de agua que no cumplen con las normas ambientales de calidad del agua del país promotor? (e) ¿Habrá algún impacto negativo debido a los trabajos de construcción? Además, ¿se contemplaron medidas para la mitigación de este impacto?	(a) N (b) N (c) N/A (d) N (e) N	(a) Los factores que pueden contaminar el suelo es la compactación del suelo, cambios de usos de suelo, la alteración de la estabilidad de taludes y deslizamientos, el incremento de desechos sólidos y la activación de procesos erosivos y sedimentación, en este proyecto en particular no se provocará ninguna degradación de la calidad de agua en la cuenca aguas abajo. (b) Por el momento no, pero se realizarán estudios para verificar que los pozos circundantes al proyecto no se vean afectados por el mismo. (c) No aplica para este proyecto en específico (d) No existe la posibilidad de que los efluentes formen cuerpos de agua que afecten el ambiente en la zona del proyecto. (e) Durante los trabajos de construcción, el tramo respectivo, debe de mantenerse adecuadamente drenado, para evitar daños tanto en el entorno como en la propia construcción.

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	(3) Ruido y vibración	(a) ¿El ruido y las vibraciones producto del tránsito de vehículos y trenes cumplen con la normativa y demás disposiciones legales en materia medioambiental del país promueven? (b) ¿El sonido de baja frecuencia producto del tránsito de vehículos y trenes cumplen con la normativa y demás disposiciones legales en materia medioambiental del país promueven? (c) ¿Habrá algún impacto negativo debido a los trabajos de construcción? Además, ¿se contemplaron medidas para la mitigación de este impacto?	(a) S (b) S (c) S	(a) No hay paso de trenes en la zona del proyecto, pero sí na gran cantidad del paso de vehículos por ser una carretera principal donde conecta con la frontera denominada “Las Manos” entre Honduras y Nicaragua, este paso de vehículos ya se tiene previsto para que sean vehículos de carga pesada, de transporte de personas, motos, vehículos pequeños, etc., y con lo cual se consideró que el ruido y las vibraciones producto por dicho tránsito cumplen con los límites máximos en materia ambiental y legal. (b) Como se mencionó anteriormente por ser una carretera principal el sonido de baja frecuencia producto del tránsito de los vehículos cumplen con la normativa y demás disposiciones legales en materia medioambiental del país. (c) serán propios del proceso constructivo, pero socializará con las personas del entorno del proyecto y se considerarán los siguientes mecanismos para mitigar dicho impacto: • Instalar el plantel de trituración retirado de zonas pobladas o a una distancia prudencial a la que los niveles de ruido no rebasen los límites establecidos en el Reglamento General de Medidas Preventivas de Accidentes de Trabajo y Enfermedades Profesionales. • De igual manera si existen viviendas cercanas al plantel de trituradora, este deberá ubicarse de manera tal que el viento no transporte el ruido hacia las mismas. • Proveer el equipo de protección personal (protectores auditivos) a los trabajadores del plantel de trituración que estén expuestos a niveles de ruido por sobre los 80 dbA • Regular el horario de inicio de las actividades de construcción entre las 6:00 am y finalizarlo a las 6:00 pm en los tramos que cruzan centros poblados. • Garantizar el uso de silenciadores en los equipos en buen estado y dar mantenimiento periódico al equipo que se utilice; para tal fin, se debe llevar una bitácora de mantenimiento del equipo y maquinaria. • Retiro del equipo y maquinaria que genere ruidos en niveles no aceptables debido a la falta de mecanismos para la reducción del ruido (silenciadores).
3. Entorno Natural	(1) Áreas protegidas	(a) ¿El sitio del proyecto está ubicado dentro de un área protegida designada por las leyes del país o tratados internacionales? (b) ¿El proyecto afectará al área protegida? (c) ¿Habrá algún impacto negativo debido a los trabajos de construcción? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N (c) N	(a) El proyecto se encuentra ubicado a una distancia de 840 metros aproximadamente de la zona núcleo y a 960 metros de la zona de amortiguamiento de la Reserva Biológica de Uyuca que mide 1,650 metros de altura sobre el nivel del mar y que es corazón de un maravilloso bosque que refugia especies de aves, venados y mariposas entre otras especies de animales, pero el proyecto en sí no afectará en nada a dicha Reserva Biológica. (b) El proyecto no afectará el área protegida antes mencionada. (c) No habrá ningún impacto negativo en la zona protegida debido a la construcción del proyecto.

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	(2) Biodiversidad	(a) ¿El sitio del proyecto incluye bosques primarios, bosques tropicales naturales, hábitats ecológicamente importantes (arrecifes de coral, manglares, planicies de marea, etc.)? (b) ¿El sitio del proyecto incluye hábitats donde existen especies en peligro de extinción protegidas por la legislación interna o convenios internacionales? (c) ¿El proyecto implica una conversión o una degradación significativa de hábitats críticos o bosques críticos, con impactos significativos en la biodiversidad que sean motivo de preocupación? Si la respuesta es positiva, ¿se están contemplando las medidas apropiadas para abordar los impactos en la biodiversidad? (d) ¿Se tomarán medidas para evitar rutas migratorias de vida silvestre y animales domésticos, fragmentación de hábitats, accidentes de tráfico de causado por animales, etc.? (e) ¿La construcción de carreteras y puentes causará la deforestación, caza furtiva, desertificación, secado de humedales, etc. relacionados con el desarrollo? ¿Existe el riesgo de que especies exóticas (que no habitaban previamente en el área), plagas, etc. entren y perturben el ecosistema? (Si existe tal posibilidad, las contramedidas deben ser descritas en la columna de "Consideraciones Ambientales y Sociales Específicas") (f) ¿Se evitará la tala ilegal de bosques asociada con el proyecto, o los proponentes del proyecto (unidad ejecutora) obtendrán la certificación forestal? (g) En caso existiesen otros impactos graves sobre la diversidad biológica, ¿se toman medidas para reducir los impactos sobre la diversidad biológica? (h) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) S (b) N (c) N (d) S (e) N (f) S (g) S (h) N	(a) Se ha trazado un área de influencia del proyecto con un área aproximada de 0.27 km² en donde se ubican Bosques Mixtos, Pastos y Cultivos, Bosque de Conífera Denso, y Bosque de Conífera Ralo. (b) En el sitio del proyecto no existen especies en peligros de extinción protegidas por la legislación interna o convenios internacionales. (c) El proyecto no implica ninguna degradación o conversión significativa de hábitats o bosques que impacten la biodiversidad o que sean motivos de preocupación (d) Los proyectos de este tipo están enfocados a contribuir a evitar la pérdida de biodiversidad, la conservación de los hábitats naturales y revalorizar la importancia de la fauna y flora silvestre, por lo tanto, se tomarán todas las medidas necesarias para evitar rutas migratorias de vida silvestre, animales domésticos y accidentes de tránsito. (e) El proyecto no causará la deforestación, caza furtiva, desertificación, secado de humedales, etc. relacionados con el desarrollo, tampoco existen o se ponen en riesgo especies exóticas que perturben el ecosistema existente a causa de llevar a cabo este proyecto. (f) Si se evitará la tala ilegal de bosque asociada con el proyecto, ya ha habido reuniones con el Instituto de Conservación Forestal (ICF) quien es el ente encargado de emitir todos los permisos asociados con la tala de árboles del proyecto, y la Unidad de Gestión Ambiental (UGA) de la SIT será la encargada de solicitar dichos permisos. (g) Se tomarán todas las medidas necesarias para reducir los impactos que puedan afectar la biodiversidad biológica cercana al proyecto. (h) No Existe la posibilidad de que las actividades de construcción tengan un impacto negativo, en cualquier caso, si se contemplan las medidas de mitigación ambiental necesarias para llevar a cabo la construcción del proyecto.

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	(3) Hidrología	(a) ¿Existe la posibilidad de que los cambios en los sistemas de acuíferos afecten adversamente el flujo de agua superficial y subterránea debido a la implementación de las estructuras? (b) ¿Existe la posibilidad de que el volumen de la escorrentía cambie debido a la tala masiva de árboles, la construcción de caminos forestales, etc., y afectará esto a la hidrología circundante? (c) ¿Existe la posibilidad de que la deforestación resulte en la pérdida de las funciones de recarga de la cuenca, afectando toda la cuenca que usa el bosque como fuente de agua? (d) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N (c) N (d) S	(a) No se realizarán cambios de acuíferos debido a la construcción de la obra. (b) No existe esa posibilidad. (c) No existe esa posibilidad. (d) Se contemplarán todas las medidas pertinentes para llevar a cabo todas las obras de construcción.
	(4) Topografía y geología	(a) ¿Hay lugares con malas condiciones geológicas sobre el alineamiento o la ruta del proyecto donde sea probable que ocurran derrumbes y/o deslizamientos de tierra? (b) ¿Los trabajos de movimiento de tierras tales como el corte y relleno causarán derrumbes o deslizamiento de taludes? (Si existe la posibilidad de que ocurra, las medidas para prevenir derrumbes y deslizamientos de tierra deben ser descritas en la columna "Consideraciones ambientales y sociales específicas"). (c) ¿Existe la posibilidad de que se produzca una escorrentía de sedimentos desde el terraplén de relleno y/o corte, sitio de eliminación de tierras excedentes y recolección de arena (cantera de agregado fino y grueso)? (Si existe la posibilidad de que ocurra, las medidas para evitar la escorrentía de sedimentos deben ser descritas en la columna "Consideraciones ambientales y sociales específicas"). (d) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) S (b) N (c) N (d) N	(a) Existe un deslizamiento que se activa producto de las fuertes precipitaciones que ocurren en la zona, es por eso la implementación de este proyecto. (b) No existe esa posibilidad. (c) No existe esa posibilidad. (d) No existe esa posibilidad, en todos los casos de la obra se implementarán todas las medidas ambientales adecuadas para el proyecto.

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4. Entorno Social	(1) Reasentamiento y adquisición de terrenos	(a) ¿Se requerirá la adquisición de terrenos acompañada del reasentamiento involuntario para la implementación del proyecto? De ser así, describa la escala de adquisición de tierras y reasentamiento. (b) ¿Se contemplan realizar esfuerzos para minimizar el impacto del reasentamiento? ¿Habrán alguna otra adquisición adicional de terrenos o la pérdida de medios de subsistencia? (c) ¿Se realizarán reuniones explicativas sobre la compensación y las medidas de reconstrucción de medios de vida antes de ser reasentados? (d) ¿Se realizará una investigación para determinar la necesidad de reasentamiento de los residentes y se elaborará un plan de reubicación que incluya una compensación basada en el precio de readquisición y la restauración de los medios de subsistencia después de su reasentamiento? (e) ¿Se pagará una compensación antes del reasentamiento? (f) ¿La política de compensación será establecida por escrito? (g) ¿El plan de reasentamiento contempla las debidas consideraciones para los grupos socialmente vulnerables como las mujeres, niños, ancianos, personas con escasos recursos económicos, personas con habilidades especiales, refugiados externos e internos y las minorías? (h) ¿Se explicará por escrito a los residentes el detalle de la compensación acordada y se obtendrá su consentimiento antes del reasentamiento? (i) ¿Existe un adecuado sistema (procedimiento) para implementar el reasentamiento? ¿Se asignarán los recursos presupuestarios y se dispone de suficiente capacidad de ejecución? (j) ¿Se prepararán planes de monitoreo de los impactos del reasentamiento? (k) ¿Existe un mecanismo de gestión de reclamos?	(a) S (b) S (c) S (d) S (e) S (f) S (g) N (h) S (i) S (j) S (k) S	(a) Reubicación de accesos a 2 viviendas aledañas a la zona. Y adquisición de terreno únicamente de acuerdo a las inspecciones realizadas al sitio se determinó que no se necesita la indemnización por mejoras, ni reasentamiento. (b) Se ha considerado reducir el área de derecho de vía (tentativamente y como resultados de las negociaciones que se realicen con las personas más afectadas por el proyecto. (c) Se realizarán reuniones para socializar el proyecto y realizar entrevistas para recolección de datos y aclarar dudas respecto al proyecto. (d) De acuerdo a los lineamientos y cronograma de adquisición de tierras se realizará un proceso de indemnización regido por la Ley Especial para la Simplificación de los Procedimientos de Inversión en Infraestructura Pública (Decreto 58-2011) de Honduras (Ley Fast Track). (e) No se realizará un reasentamiento, únicamente se realizará la indemnización por terreno y mejoras afectadas. (f) De acuerdo a las leyes pertinentes al proceso y diferentes tipos de negociaciones donde se firman promesas de compraventa donde se pacte el compromiso por parte del afectado y el Gobierno de Honduras. (g) No será necesario el reasentamiento en la zona. (h) Se les brindará un plano mostrando área que se necesita para el proyecto y mediante negociaciones previamente realizadas se firmará la promesa de venta, donde se especifican los costos por terreno y costos por mejora (basados en el Informe de Parámetro de Precios realizado por el Ingeniero Evaluador certificado por la Comisión Nacional de Bancos y Seguros). (i) En el cronograma se adjuntan las actividades a implementar para la adquisición de tierras. Se elaborará la Guía metodológica para priorizar y asignar fondos al proyecto. (j) Si continuamente se realizarán informes de avance a JICA y a los coordinadores del Proyecto en la SIT.

Categoría	Ítem	Principales Puntos de Verificación	Si: S No: N	Consideraciones Ambientales y Sociales Específicas (Razones y fundamentos para considerar Si/No, medidas de mitigación, etc.)
	(2) Condiciones de vida y sustento económico	(a) Si se construyen puentes y caminos de acceso como resultado de un nuevo proyecto, ¿habrá algún impacto en los medios de transporte existentes y en la vida de los residentes que los utilizan? Además, ¿habrá cambios importantes en el uso de la tierra/los medios de subsistencia, el desempleo, etc.? Si se esperan tales impactos, las medidas de mitigación deben describirse en la columna de "Consideraciones ambientales y sociales específicas". (b) ¿Tendrá el proyecto un impacto negativo en la vida de residentes que no se relacionan directamente con él? (c) ¿Tendrá el proyecto un impacto vial negativo en el tránsito de los alrededores (congestión, aumento de los accidentes de tráfico, etc.)? (d) ¿Se generarán impedimentos en el traslado de los residentes a causa del proyecto? (e) ¿Existe la posibilidad de que los pasos elevados, viaductos, etc. bloqueen la luz solar o interfieran con las ondas de radiales? (f) ¿El proyecto afectará negativamente servicios ecosistémicos de provisión (suministro y regulación), afectando la salud y la seguridad de las comunidades, especialmente de los pueblos indígenas que dependen de dichos servicios? (g) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N (c) N (d) N (e) N (f) N (g) N	(a) No habrá ningún impacto negativo por la construcción del puente más bien mejorará la transitabilidad en la zona del proyecto. (b) El proyecto no tendrá ningún impacto negativo con la vida de la población cercana al proyecto. (c) El proyecto no tendrá ningún impacto vial negativo en el tránsito de los vehículos que recorren el tramo donde se realizará el proyecto. (d) No se generará ningún impedimento con el traslado de los residentes cercanos al proyecto. (e) No existe esa posibilidad (f) El proyecto no afectará servicios ecosistémicos de provisión afectando la salud y la seguridad de las comunidades. (g) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto.
	(3) Vulnerabilidad Social	(a) ¿Se dará la debida consideración a los grupos socialmente vulnerables, como las mujeres, los niños, los ancianos, las personas de escasos recursos, personas con capacidades especiales, los refugiados externos e internos y a las minorías? (b) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) S (b) N	(a) Desde el inicio del estudio de este proyecto se están considerando todas las personas vulnerables que se encuentren ligadas al proyecto. (b) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto.

Categoría	Ítem	Principales Puntos de Verificación	Si: S No: N	Consideraciones Ambientales y Sociales Específicas (Razones y fundamentos para considerar Si/No, medidas de mitigación, etc.)
	(4) Patrimonio Cultural	(a) ¿Existe el riesgo de que el proyecto dañe patrimonio cultural valiosos desde el punto de vista arqueológico, cultural o religioso o sitios históricos? Además, ¿se tienen en cuenta las medidas estipuladas por las leyes internas del país promotor? (b) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N	(a) No existe el riesgo. (b) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto.
	(5) Paisajismo	(a) En caso de existir un paisajismo con una consideración especial, ¿existe un impacto negativo sobre ella? (b) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N	(a) No existe impacto negativo (b) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto.
	(6) Etnias minoritarias y pueblos indígenas	(a) ¿Se tienen en cuenta las consideraciones para reducir los impactos en las culturas y estilos de vida de las minorías étnicas y los pueblos indígenas del país? (b) ¿Se respetan los derechos sobre la tierra y los recursos naturales de las minorías y los pueblos indígenas? (c) ¿Se elaborarán y publican planes para los pueblos indígenas según corresponda? (d) ¿Se realizan esfuerzos para obtener el libre consentimiento previo de las minorías étnicas y los pueblos indígenas después de haber proporcionado suficiente información? (e) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N (c) N/A (d) N/A (e) N	(a) No existen etnias cercanas al proyecto. (b) No existen pueblos indígenas cercanos al proyecto. (c) No aplica (d) No aplica (e) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto

Categoría	Ítem	Principales Puntos de Verificación	Si: S No: N	Consideraciones Ambientales y Sociales Específicas (Razones y fundamentos para considerar Si/No, medidas de mitigación, etc.)
	(7) Entorno laboral	(a) ¿Se cumplirán a las leyes de seguridad y salud en el entorno laboral del país promotor del proyecto? (b) ¿Se implementarán “medidas duras” de seguridad para los trabajadores del proyecto, tales como la instalación de equipos de seguridad para prevenir lesiones y accidentes laborales; gestión de sustancias peligrosas; etc.? (c) ¿Se planificarán e implementarán “medidas blandas” para los involucrados en el proyecto, como la formulación de un plan de seguridad y salud; las capacitaciones de seguridad (incluida la seguridad vial y la salud pública) para los trabajadores; etc.?	(a) S (b) S (c) S	(a) Siempre se cumplirán las leyes de seguridad y salud en el entorno laboral. (b) Si se implementarán “medidas duras” de seguridad para los trabajadores del proyecto, deberán con todas las normas establecidas en base a la ley, y en base a las normas de seguridad de la empresa constructora y supervisora. (c) Si se implementaran planes de seguridad y salud así como las capacitaciones de seguridad vial y personal desde el inicio hasta el final del proyecto.
	(8) Salud, seguridad y su preservación en las comunidades	(a) ¿Tendrá la afluencia de trabajadores asociados al proyecto algún impacto negativo en la salud e higiene, como brotes de enfermedades (incluidas enfermedades infecciosas como el VIH)? Además, ¿se contemplarán medidas de mitigación del impacto? (b) ¿Tendrá la afluencia de trabajadores asociados al proyecto algún impacto negativo en la seguridad de la comunidad local, como el deterioro de la seguridad ciudadana? (c) En el caso de que el país promotor u otra entidad relacionada, contrate personal de seguridad u otro personal para garantizar la seguridad durante la formulación o implementación del proyecto, ¿Se están considerando las medidas apropiadas para garantizar que las capacidades de seguridad se ejerzan únicamente con fines preventivos y de autodefensa? (d) ¿Existe la posibilidad de que las actividades de construcción tengan un impacto negativo? Además, ¿se contemplarán medidas de mitigación del impacto?	(a) N (b) N (c) S (d) N	(a) Por el momento no se está contratando personal para realizar la obra, en el proceso se tomarán las medidas necesarias de contratación. (b) No se generará ningún impacto negativo por la construcción del proyecto. (c) Se considerarán todas las medidas apropiadas para garantizar que las capacidades de seguridad se ejerzan únicamente con fines preventivos y de autodefensa una vez que inicie el proyecto. (d) No existe esa posibilidad siempre se tomarán todas las medidas adecuadas para llevar a cabo el proyecto

Categoría	Ítem	Principales Puntos de Verificación	Si: S No: N	Consideraciones Ambientales y Sociales Específicas (Razones y fundamentos para considerar Si/No, medidas de mitigación, etc.)
5. Otros	(1) Monitoreo	(a) ¿El proponente planificará e implementará el plan de monitoreo de los elementos ambientales y sociales antes mencionados que puedan tener un impacto? (b) ¿Cómo se establecerán los ítems, método, frecuencia, etc. del plan? (c) ¿El sistema de monitoreo de los proveedores de servicios está establecido (Organización, personal, equipamiento, presupuesto, etc. y su continuidad)? (d) ¿Están establecidos el método y la frecuencia de notificación de los resultados del control ambiental de los operadores comerciales a las autoridades competentes y entidades relacionadas? (e) ¿Se desarrollará un mecanismo de gestión de reclamos por consideraciones ambientales y sociales?	(a) S (b) N/A (c) N (d) N (e) S	(a) Desde antes del inicio de la obra la UGA será el ente encargado de hacer todos los procesos administrativos para la obtención de la licencia ambiental. (b) Una vez que se realice el estudio final del proyecto se establecerán todos los ítems y métodos que correspondan para llevar a cabalidad todos los métodos y cumplimiento de las medidas ambientales. (c) Se establecerán métodos para notificar todos los resultados del control ambiental del proyecto. (d) Se establecerá el método y la frecuencia de notificación de resultados de control ambiental de los operadores comerciales a las autoridades competentes y entidades relacionadas (e) Si se generará el mecanismo de gestión de reclamos ambientales y sociales en la institución.

Datos del Encuestado

Categoría 1, 2, 3, 5

Nombre : GERARDO ALFREDO PINEDA GUERRA

Institución : SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE

Cargo : ESPECIALISTA AMBIENTAL

Fecha : 24/03/2023

Firma



Categoría 4

Nombre : Marcela Tatiana Rodríguez

Institución : Secretaría de Infraestructura y Servicios Públicos

Cargo : Coordinadora de Proyectos

Fecha : 15 de marzo de 2023

Firma



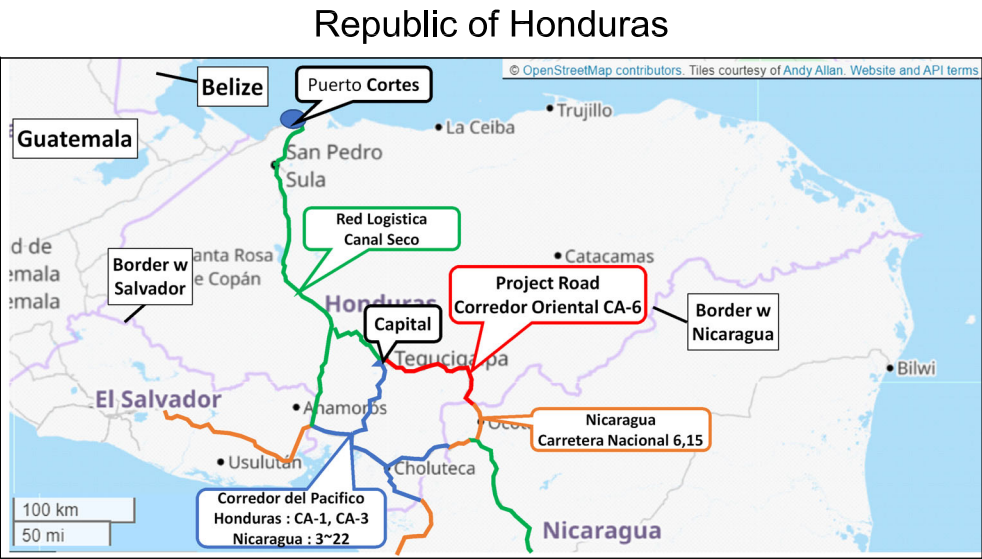
別添資料 概略設計図

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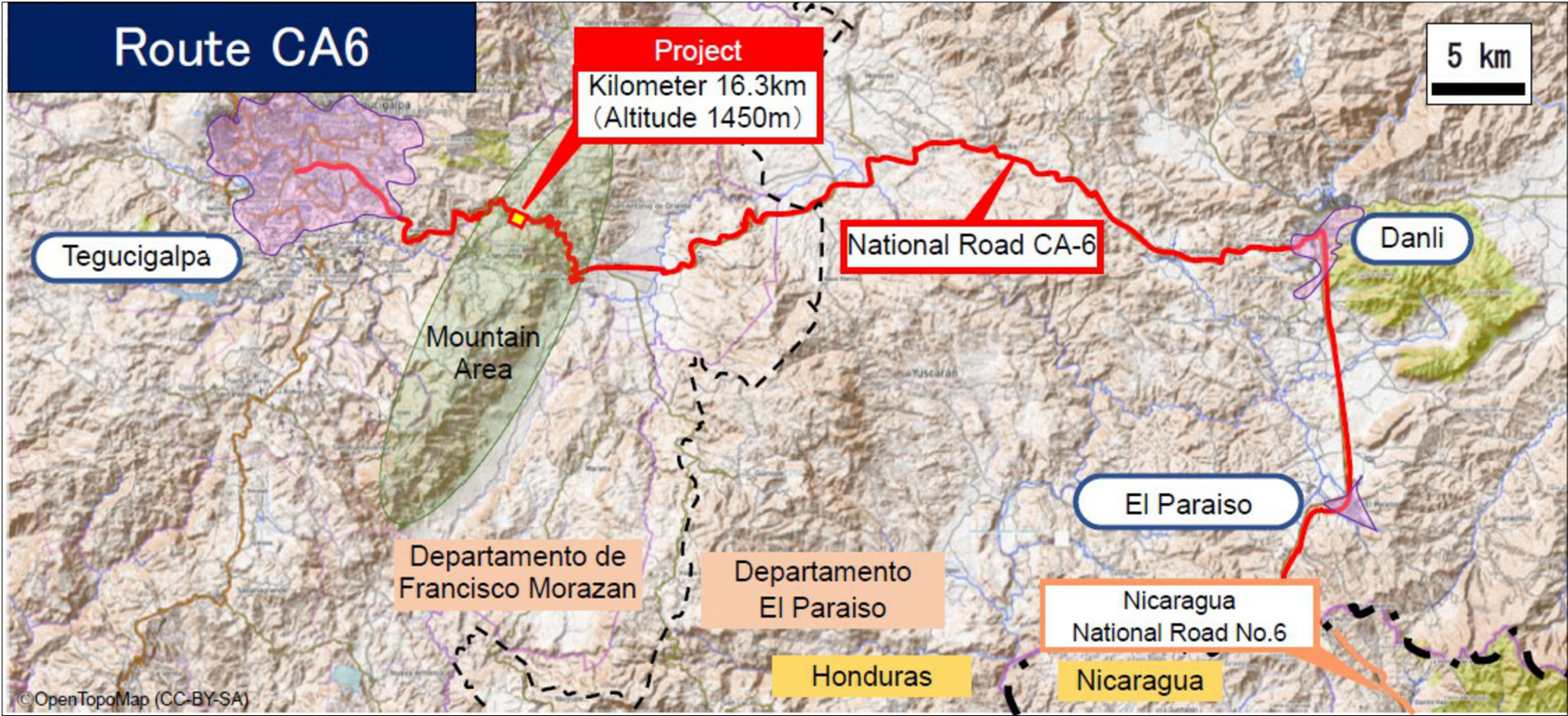
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 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -		REVISION RECORD		
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 JAPAN INTERNATIONAL COOPERATION AGENCY	 NIPPON KOEI CO.,LTD.	STATUS: -	SCALE -				
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PROJECT LOCATION



National Highway CA-6



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
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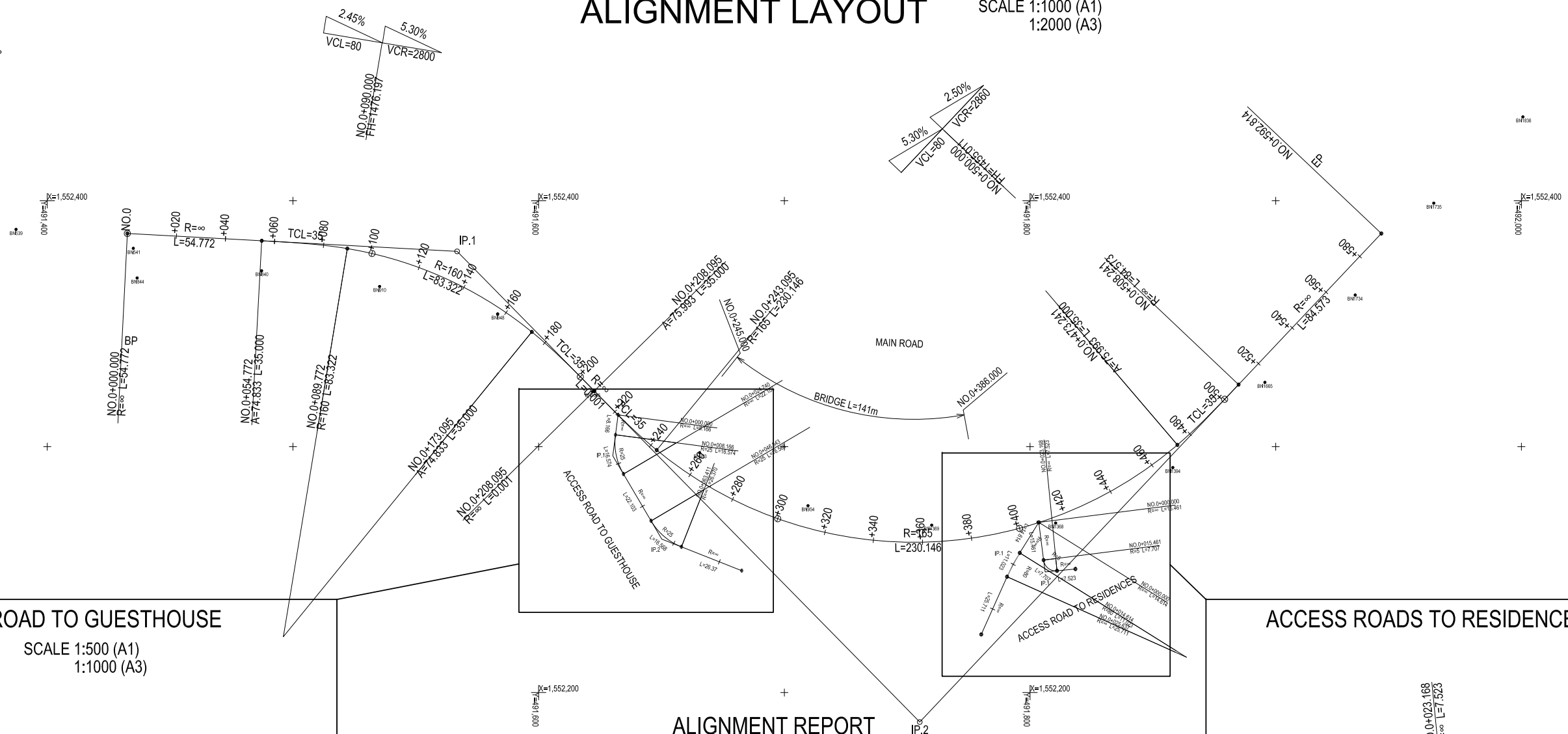
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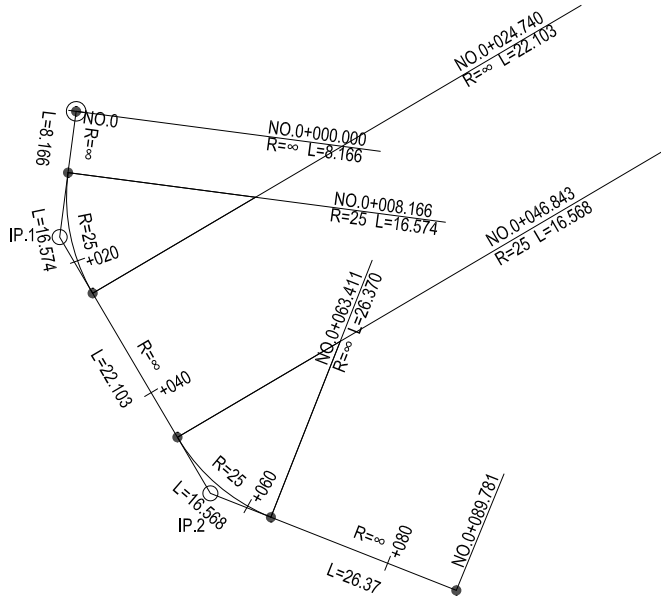
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						DATE - -				

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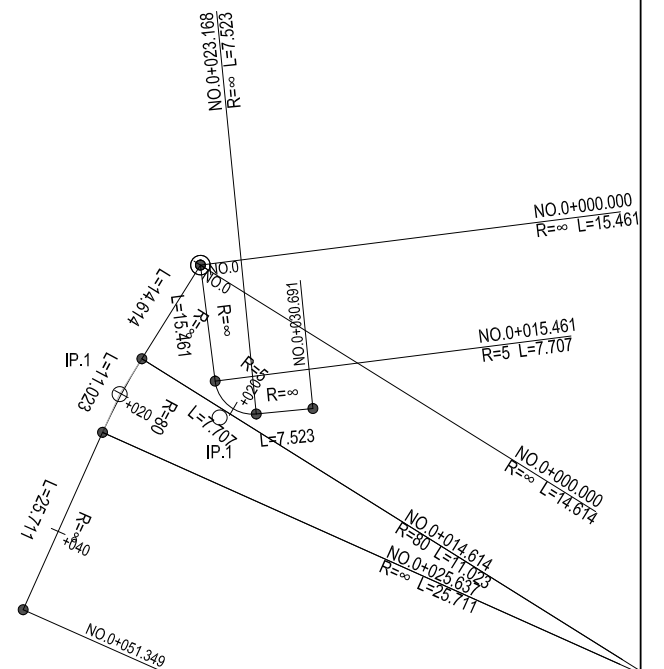


SCALE 1:500 (A1)
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CA 6									
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2		0+054.772166	1,552,383.744484	491,487.290534	0	35	160	35.000	93-05-51.874
3		0+089.772166	1,552,380.582275	491,522.128709	160		160	83.322	99-21-52.087
4	SP 1	0+131.433349	1,552,368.558285	491,561.894192					114-16-59.811
5		0+173.094533	1,552,346.701978	491,597.233668	160	35	0	35.000	129-12-07.535
6		0+208.094533	1,552,322.675518	491,622.646518			0	0.001	135-28-07.748
7		0+208.095264	1,552,322.674997	491,622.649113	0		-165	35.000	135-28-07.748
8	SP 2	0+243.095264	1,552,298.619707	491,648.048300	-165		-165	230.146	129-23-31.778
9		0+358.168145	1,552,261.143451	491,754.393073					89-25-59.750
10		0+473.241026	1,552,300.716036	491,859.975020	-165	35	0	35.000	49-28-28.323
11		0+508.241026	1,552,325.269053	491,884.894066	0		0	84.573	43-23-51.753
12		0+592.813947	1,552,386.719919	491,943.000670					43-23-51.753
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1		0+000.000000	1,552,312.924223	491,632.347501	0		0	8.166	187-29-14.051
2		0+008.165844	1,552,304.828002	491,631.283448	-25		-25	16.574	187-29-14.051
3	SP 1	0+016.453001	1,552,296.583806	491,631.572659					168-29-40.095
4		0+024.740159	1,552,288.882550	491,634.529189	0		0	22.103	149-30-06.138
5		0+046.842973	1,552,269.837787	491,645.746649			-25	16.568	149-30-06.138
6		0+055.127004	1,552,263.520021	491,651.046211	0				130-30-57.982
7		0+063.411034	1,552,259.270048	491,658.112841	0		0	26.370	111-31-49.826
8		0+089.780571	1,552,249.592518	491,682.642372					111-31-49.826
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No.	Name	No.	X	Y	BC RADIUS	CLOTHOID LENGTH	EC RADIUS	LENGTH	DIRECTION
1		0+000.000000	1,552,269.211520	491,803.593522	0		0	14.614	212-02-03.984
2		0+014.614358	1,552,256.822499	491,795.841644	-80		-80	11.023	212-02-03.984
3	SP 1	0+020.125916	1,552,252.053218	491,793.081351					208-05-13.480
4		0+025.637473	1,552,247.105234	491,790.655923	0		0	25.711	204-08-22.977
5		0+051.348614	1,552,223.642508	491,780.141015					204-08-22.977
ACCESS ROADS TO RESIDENCE 2									
No.	Name	No.	X	Y	BC RADIUS	CLOTHOID LENGTH	EC RADIUS	LENGTH	DIRECTION
1		0+000.000000	1,552,269.211520	491,803.593522	0		0	15.481	172-46-42.144
2		0+015.460648	1,552,253.873516	491,805.537045	-5		-5	7.707	172-46-42.144
3	SP 1	0+019.314354	1,552,250.595441	491,807.376745					128-37-05.372
4		0+023.168059	1,552,249.525427	491,810.980283	0		0	7.523	84-2

SCALE 1:500 (A1)
1:1000 (A3)



SCALE 1:500 (A1)
1:1000 (A3)



Deslizamiento

SCALE 1:500 (A1)
1:1000 (A3)



 **NIPPON KOEI CO.,LTD.**

TITLE: ROAD PLAN (2)

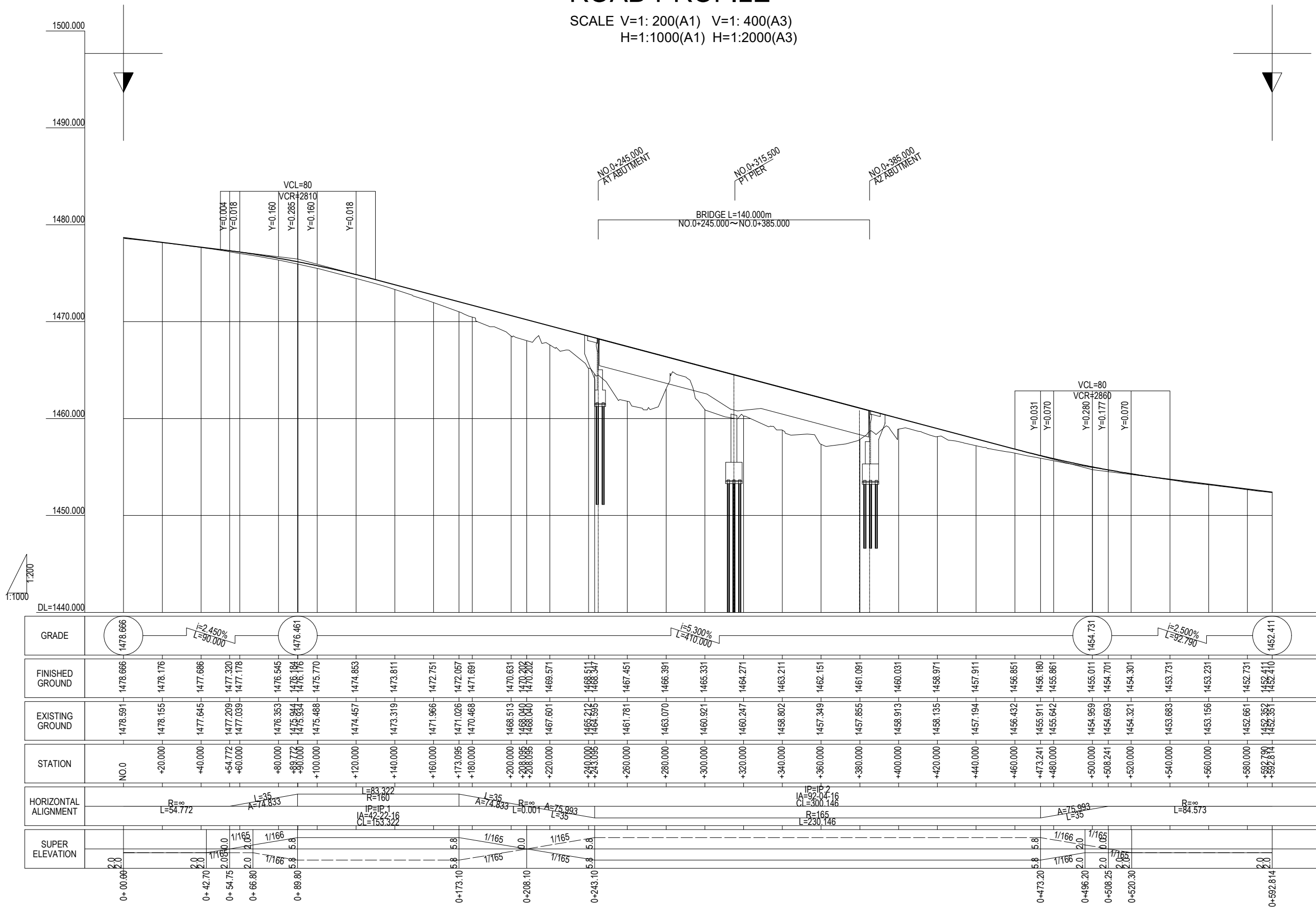
 JAPAN INTERNATIONAL COOPERATION AGENCY

DATE - -

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ROAD PROFILE

SCALE V=1: 200(A1) V=1: 400(A3)
H=1:1000(A1) H=1:2000(A3)



GRADE	1478.666		1478.666		1478.176		1477.686		1477.320		1477.178		1476.545		1476.184		1475.770		1474.853		1473.811		1472.751		1472.057		1471.691		1470.631		1470.202		1469.571		1468.511		1467.451		1466.391		1465.331		1464.271		1463.211		1462.151		1461.091		1460.031		1458.971		1457.911		1456.851		1455.791		1454.731		1453.671		1452.611		1452.411																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
FINISHED GROUND	1478.666		1478.666		1478.176		1477.686		1477.320		1477.178		1476.545		1476.184		1475.770		1474.853		1473.811		1472.751		1472.057		1471.691		1470.631		1470.202		1469.571		1468.511		1467.451		1466.391		1465.331		1464.271		1463.211		1462.151		1461.091		1460.031		1458.971		1457.911		1456.851		1455.791		1454.731		1453.671		1452.611		1452.411																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
EXISTING GROUND	1478.591		1478.155		1477.645		1477.209		1477.039		1476.353		1475.944		1475.488		1474.457		1473.319		1471.966		1471.026		1470.468		1468.513		1468.040		1467.601		1465.212		1464.595		1461.781		1463.070		1460.921		1460.247		1458.802		1457.349		1457.855		1458.913		1458.135		1457.194		1456.432		1455.911		1455.642		1455.011		1454.693		1454.321		1453.683		1453.156		1452.382		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351		1452.351	



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT



NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: ROAD PROFILE

PROJECT NO. - -

DRAWING NO. PR - 01

SCALE V=1: 200(A1) V=1: 400(A3)
H=1:1000(A1) H=1:2000(A3)

DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION
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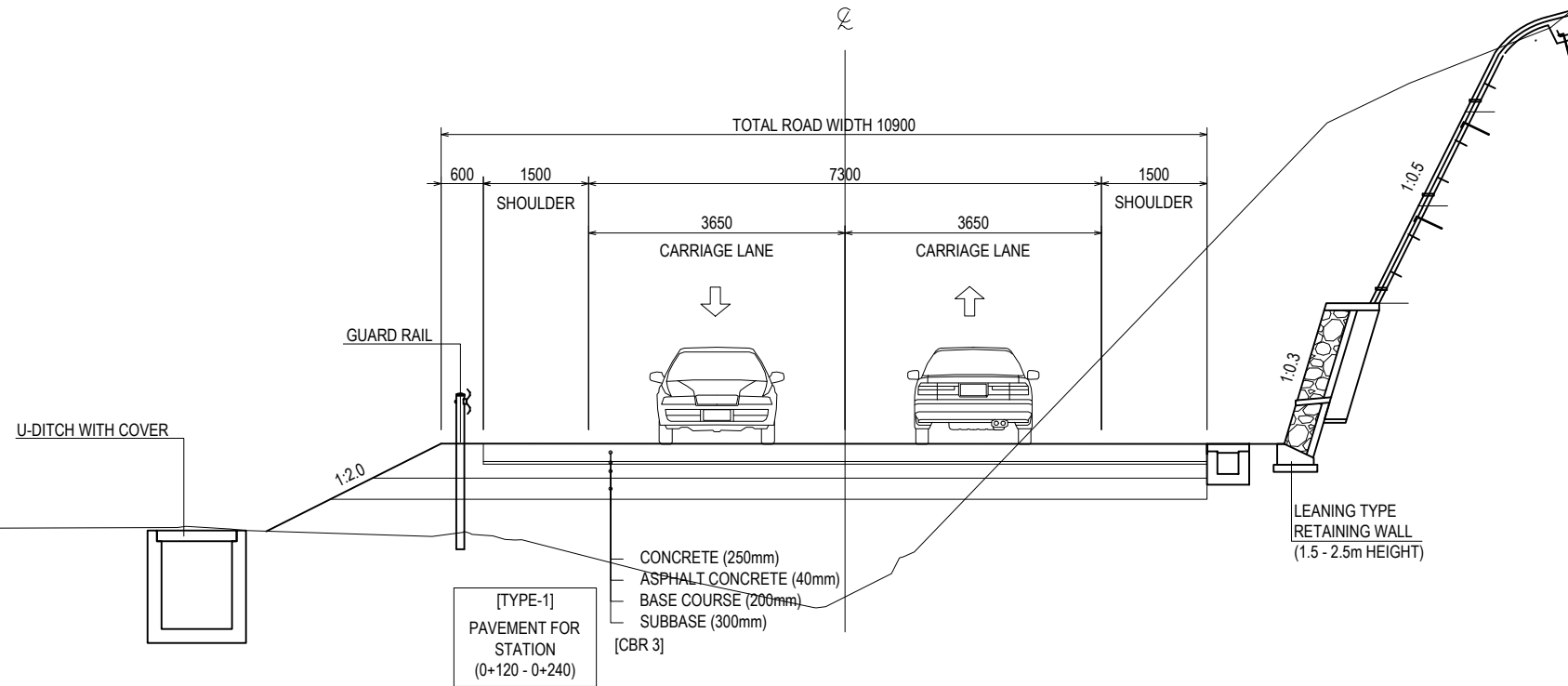


JAPAN INTERNATIONAL COOPERATION AGENCY

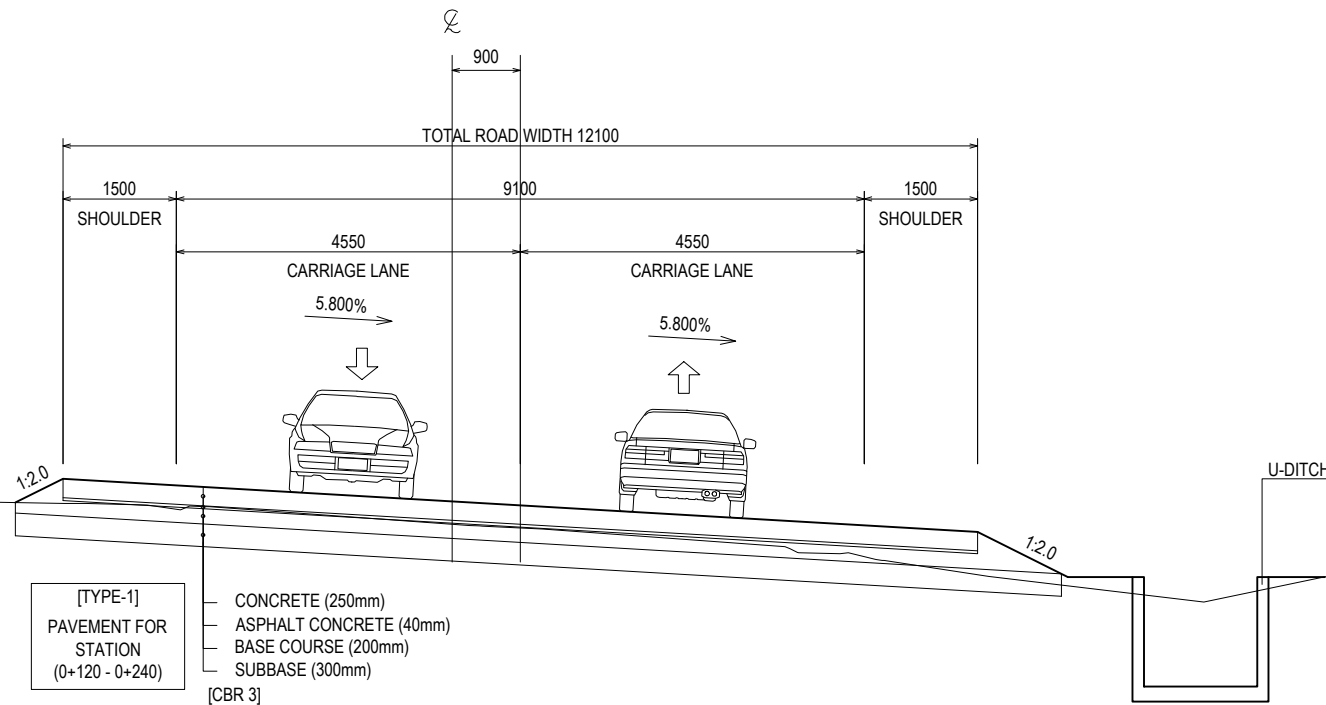
TYPICAL CROSS SECTION (1)

SCALE 1:50 (A1)
1:100 (A3)

ROAD SECTION ON A1 SIDE (WITH SHOTCRETE WORKS)



ROAD SECTION ON B.P. SIDE (WITH CURVE WIDENING)

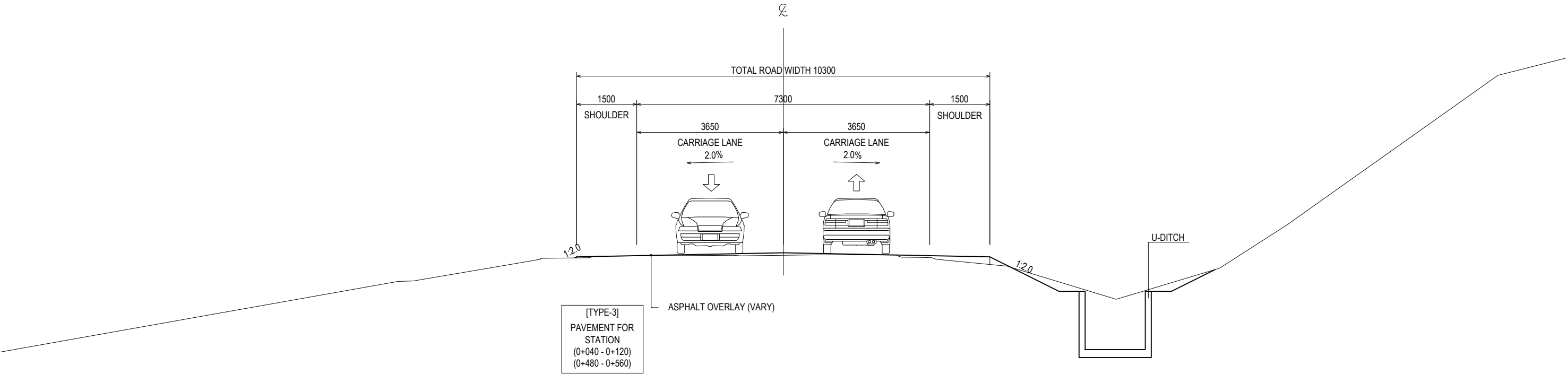


B.P. : BEGINNING POINT

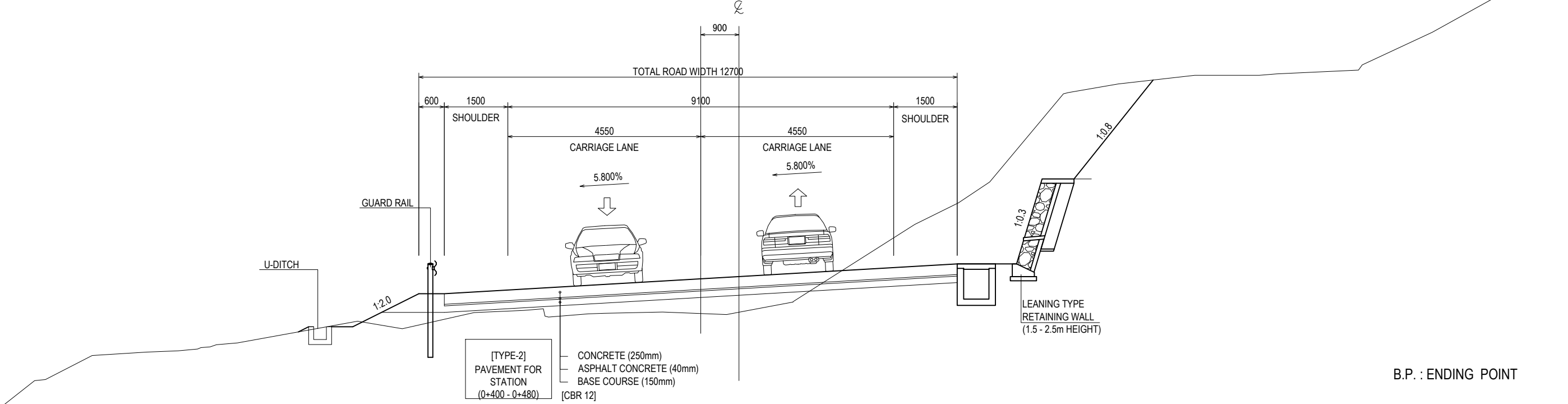
TYPICAL CROSS SECTION (2)

SCALE 1:50 (A1)
1:100 (A3)

ROAD SECTIONS CONNECTING TO EXISTING ROAD



ROAD SECTION ON E.P. SIDE
(WITH CURVE WIDENING)



B.P. : ENDING POINT



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT



NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: TYPICAL CROSS SECTION (2)

PROJECT NO. - -

DRAWING NO. TC - 02

SCALE 1:50 (A1) / 1:100 (A3)

DATE - -

REVISION RECORD

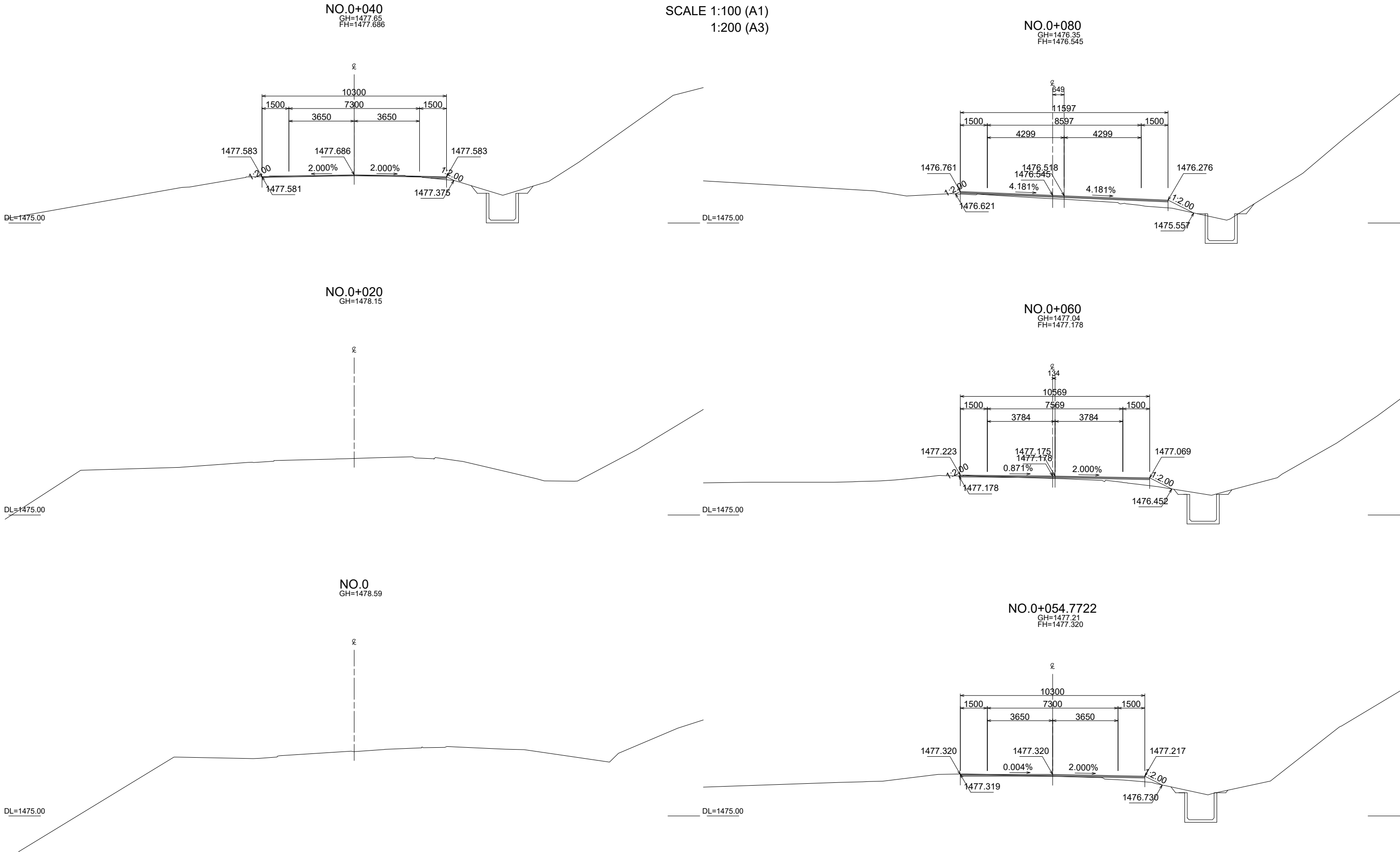
REV	DATE	DESCRIPTION



JAPAN INTERNATIONAL COOPERATION AGENCY

CROSS SECTION (1)

SCALE 1:100 (A1)
1:200 (A3)

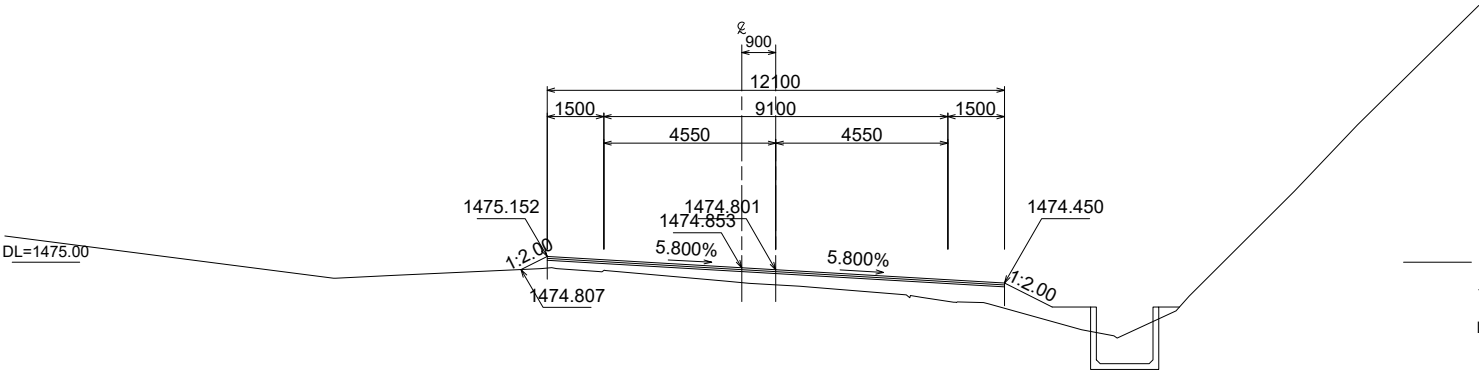


 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD			
	 NIPPON KOEI CO.,LTD.		DRAWING NO. CS - 01	REV	DATE	DESCRIPTION	
 JAPAN INTERNATIONAL COOPERATION AGENCY			SCALE 1:100 (A1) /1:200 (A3)				
			DATE - -				
		STATUS: -					
		TITLE: CROSS SECTION (1)					

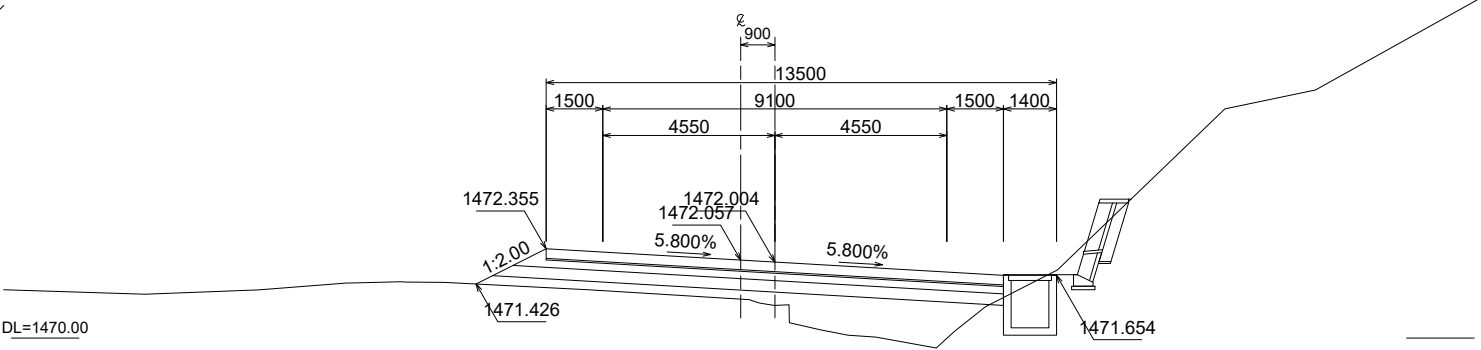
CROSS SECTION (2)

SCALE 1:100 (A1)
1:200 (A3)

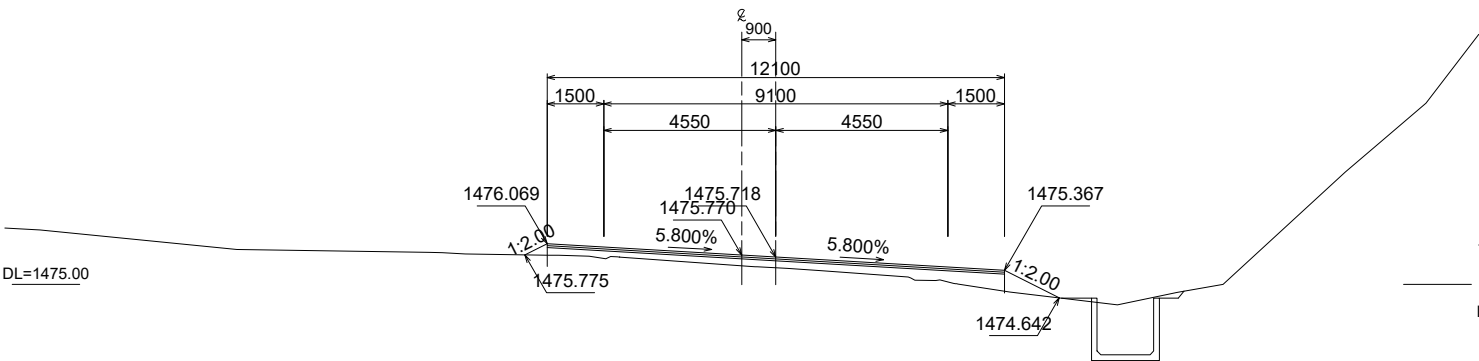
NO.0+120
GH=1474.46
FH=1474.853



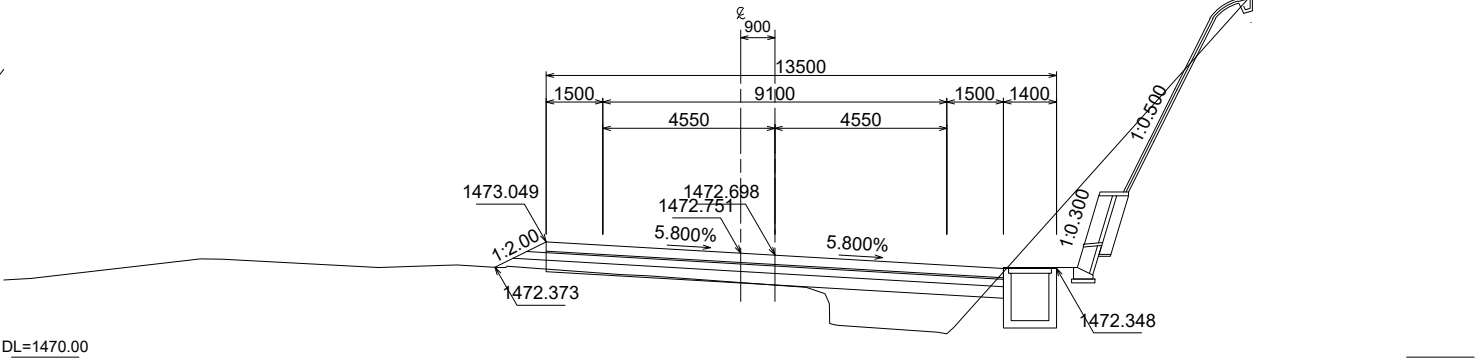
NO.0+173.0945
GH=1471.03
FH=1472.057



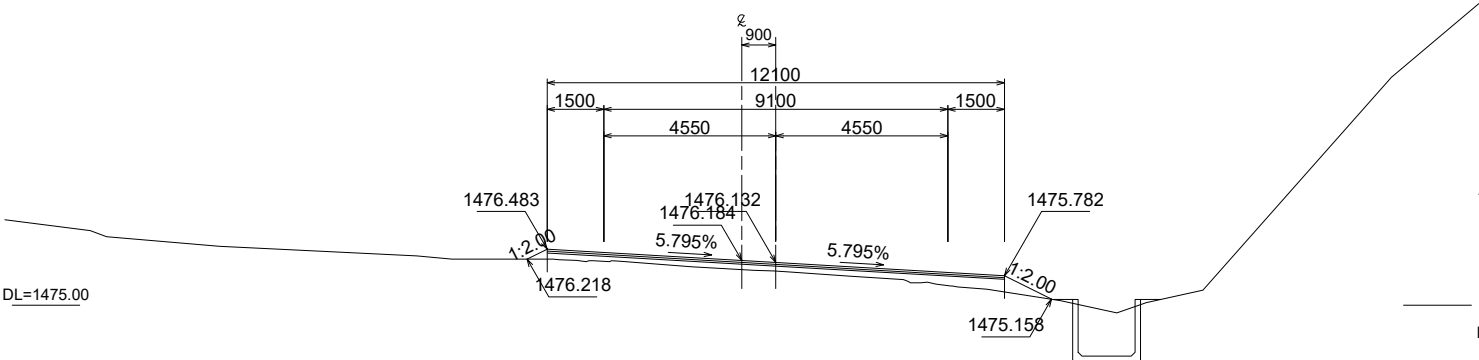
NO.0+100
GH=1475.49
FH=1475.770



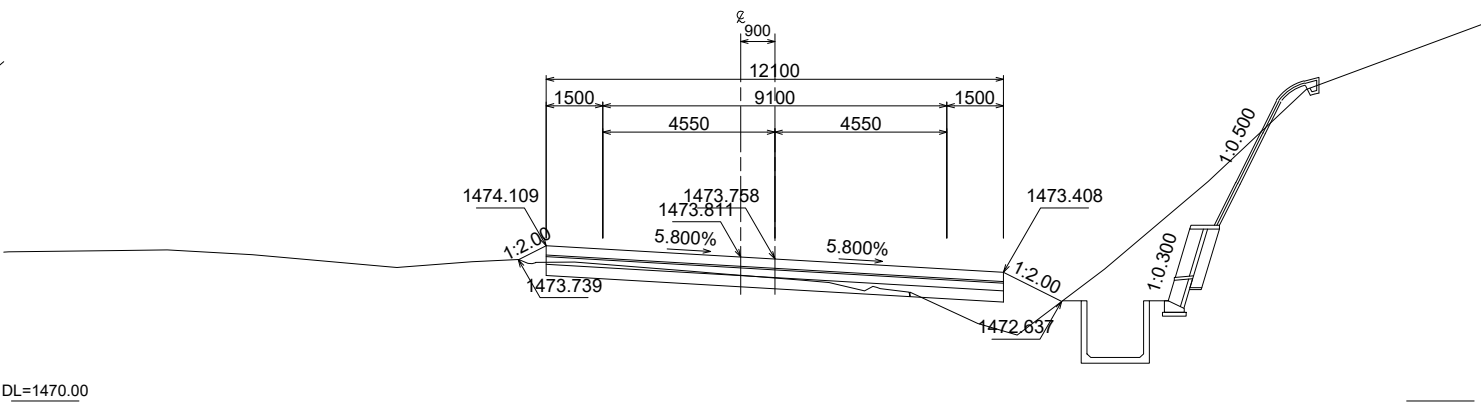
NO.0+160
GH=1471.97
FH=1472.751



NO.0+089.7722
GH=1475.94
FH=1476.184



NO.0+140
GH=1473.32
FH=1473.811

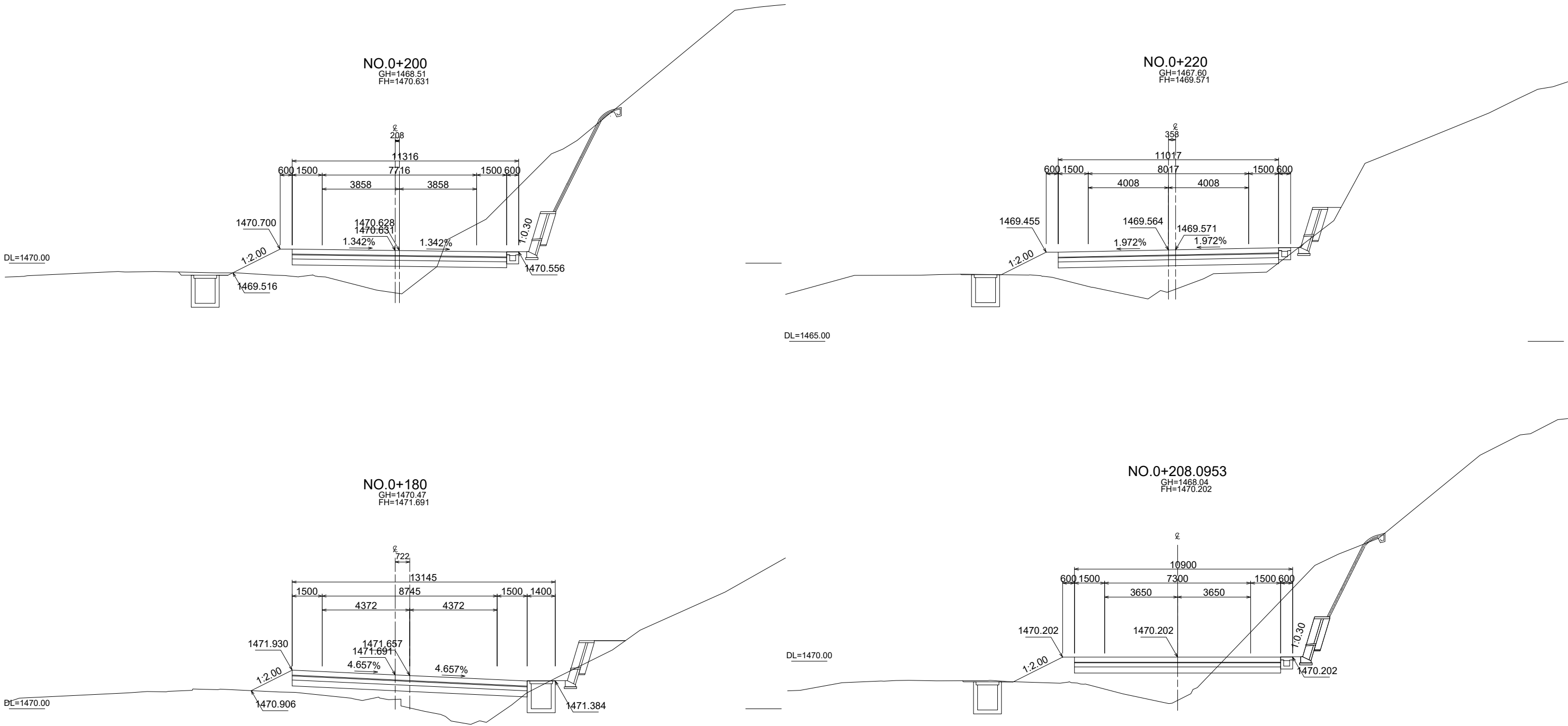


	SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT		THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6		PROJECT NO. - -		REVISION RECORD		
				STATUS: -		DRAWING NO. CS - 02		REV	DATE	DESCRIPTION
				TITLE: CROSS SECTION (2)		SCALE 1:100 (A1) / 1:200 (A3)				
						DATE - -				

CROSS SECTION (3)

SCALE 1:100 (A1)
1:200 (A3)

A2 - 12



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO. CS - 03	REV	DATE	DESCRIPTION
SCALE 1:100 (A1) /1:200 (A3)						
DATE - -						
 JAPAN INTERNATIONAL COOPERATION AGENCY		TITLE: CROSS SECTION (3)				

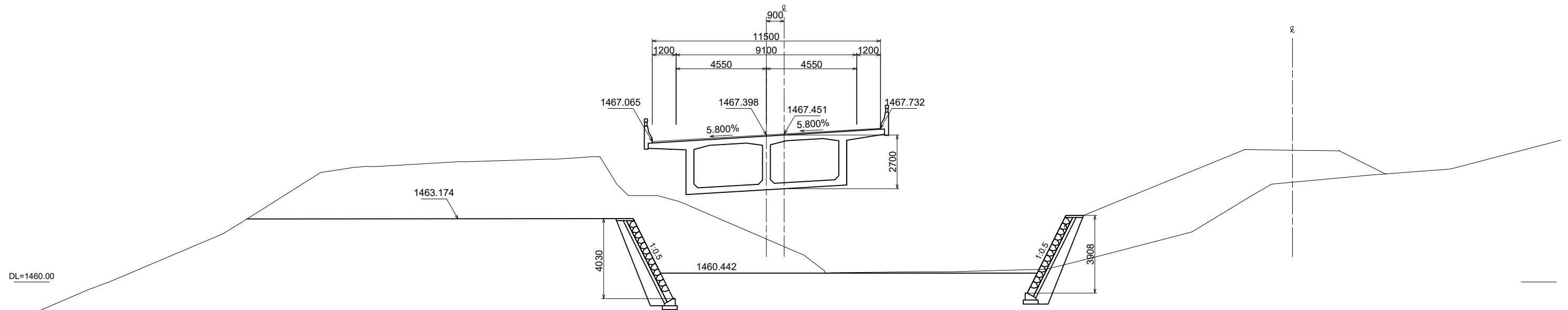
SCALE 1:100 (A1)
1:200 (A3)

Technical drawing of a bridge cross-section. The drawing shows a bridge deck with a total width of 11500mm and a clear width of 9100mm. The side widths are 1200mm on each side. The bridge is supported by four piers. The drawing includes elevation points: 1467.961, 1468.294, 1468.347, 1468.628, 1465.207, and 1461.546. A slope of 5.799% is indicated. The centerline is marked with 'Z'.

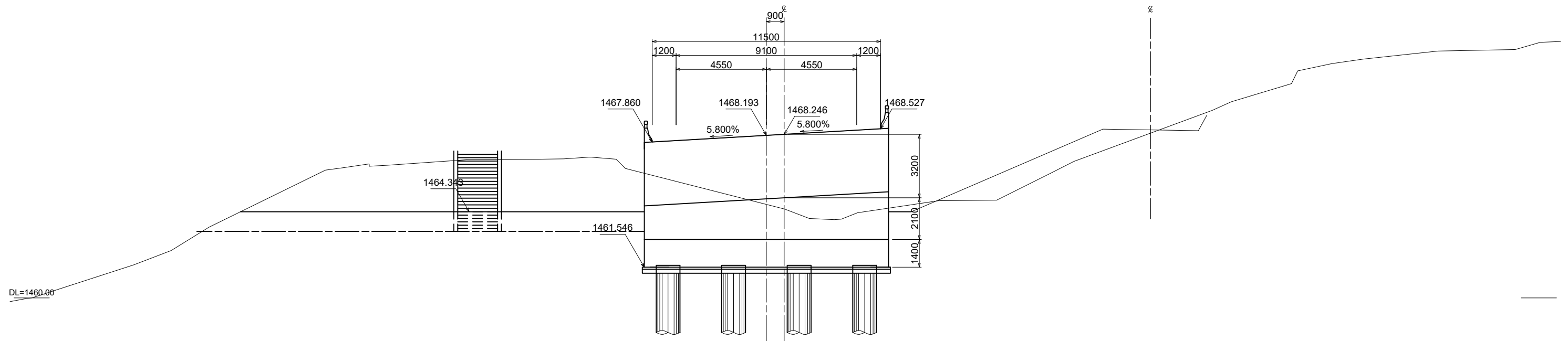
Technical drawing of a bridge cross-section. The drawing shows a 10m wide deck with 4 lanes, 5.286% cross-slopes, and a 11394mm total width. The centerline is marked with a dashed line. The base level is indicated as DL=1460.00. The drawing includes a centerline, lane markings, and a base level of DL=1460.00. The drawing also shows a cross-section of the bridge structure, including the deck, piers, and abutments. The drawing is a technical drawing of a bridge cross-section, showing the layout and dimensions of the bridge structure. The drawing includes a centerline, lane markings, and a base level of DL=1460.00. The drawing also shows a cross-section of the bridge structure, including the deck, piers, and abutments. The drawing is a technical drawing of a bridge cross-section, showing the layout and dimensions of the bridge structure.

SCALE 1:100 (A1)
1:200 (A3)

NO.0+260
GH=1461.78
FH=1467.451

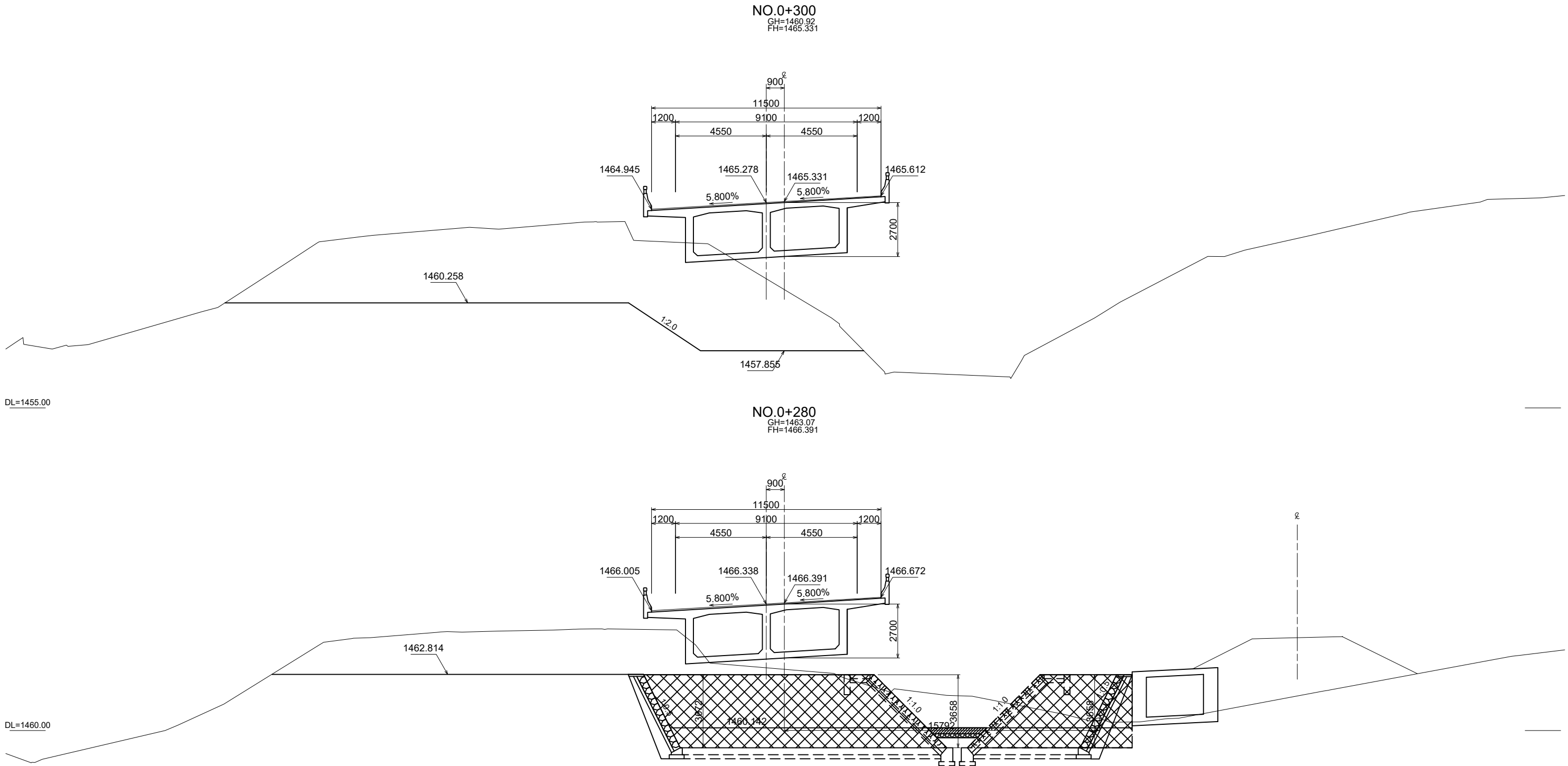


NO.0+245
GH=1464.48
FH=1468.246



CROSS SECTION (6)

SCALE 1:100 (A1)
1:200 (A3)



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		DRAWING NO. CS - 06	REV	DATE	DESCRIPTION
 JAPAN INTERNATIONAL COOPERATION AGENCY		STATUS: -	SCALE 1:100 (A1) /1:200 (A3)			
		TITLE: CROSS SECTION (6)	DATE - -			

SCALE 1:100 (A1)
1:200 (A3)

Technical drawing of a bridge cross-section showing dimensions and deflection values. The drawing includes the following data:

- Top width: 900
- Overall width: 11500
- Side overhangs: 1200 (each side)
- Internal width segments: 4550 (each side)
- Internal width segments: 9100 (total)
- Height: 3394
- Deflection values at the top corners: 1463.885 (left), 1464.218 (center-left), 1464.271 (center-right), 1464.552 (right)
- Deflection percentage: 5.800% (indicated on two segments)

1:2.0

1457.038

1:2.0

DL=1455.00

1:2.0

1457.294

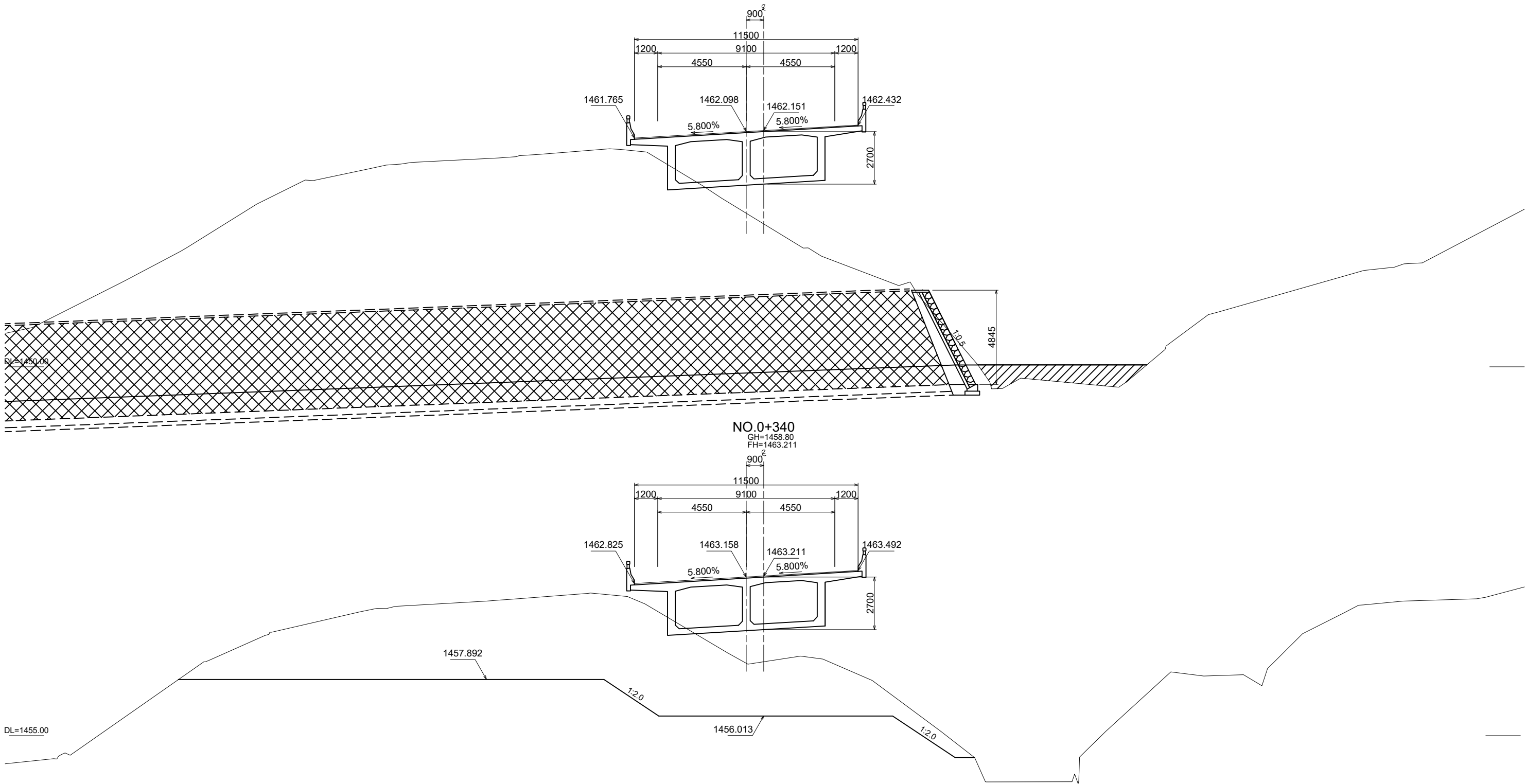
DL=1455.00

 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO. CS - 07	REV	DATE	DESCRIPTION
		TITLE: CROSS SECTION (7)	SCALE 1:100 (A1) / 1:200 (A3)			
			DATE - -			
 JAPAN INTERNATIONAL COOPERATION AGENCY						

CROSS SECTION (8)

SCALE 1:100 (A1)
1:200 (A3)

NO.0+360
GH=1457.35
FH=1462.151



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANT

NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: CROSS SECTION (8)

PROJECT NO. - -

DRAWING NO. CS - 08

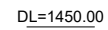
SCALE 1:100 (A1) /1:200 (A3)

DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION

SCALE 1:100 (A1)
1:200 (A3)
NO.0+385
GH=1458.65
FH=1460.826



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO. CS - 09	REV	DATE	DESCRIPTION
		TITLE: CROSS SECTION (9)	SCALE 1:100 (A1) / 1:200 (A3)			
			DATE - -			
 JAPAN INTERNATIONAL COOPERATION AGENCY						

SCALE 1:100 (A1)
1:200 (A3)

Technical drawing of a bridge section. The drawing shows a cross-section of a bridge with a central span and side spans. Key dimensions and elevations are labeled:

- Dimensions:**
 - Top horizontal dimensions: 900, 12'00, 9100, 1500.
 - Bottom horizontal dimensions: 600, 1500, 4550, 4550, 1500.
- Elevations:**
 - Left side: 1458.568, 1457.902.
 - Center: 1458.918.
 - Right side: 1458.971, 1459.269.
- Grades:**
 - Left side: 1:2.00.
 - Center: 5.800%.
 - Right side: 5.800%.
- Other features:**
 - A vertical dashed line labeled $\varnothing$ at the top.
 - A slope of 1:0.8 on the far right.

NO.0+420
 GH=1458.14
 FH=1458.971

900
 12100
 600 1500 9100 1500
 4550 4550
 1458.568 1458.918 1458.971 1459.269
 1457.902
 1:2.00 5.800% 5.800% 1:0.8

Technical drawing of a road cross-section. The drawing shows a road profile with a 5.800% grade. Key dimensions and elevations are labeled:

- Top horizontal dimensions: 600, 1500, 9100, 4550, 4550, 1500.
- Top vertical dimension: 900.
- Elevations: 1459.628, 1459.978, 1460.031, 1460.280, 1460.247, 1458.628.
- Grade: 5.800% (indicated twice).
- Vertical curve length: 1:2.00.

NO.0+400
GH=1458.91
FH=1460.031

900

12100

600 1500 9100 1500

4550 4550

1459.628 1459.978 1460.031 1460.247 1460.280

5.800% 5.800%

1.200

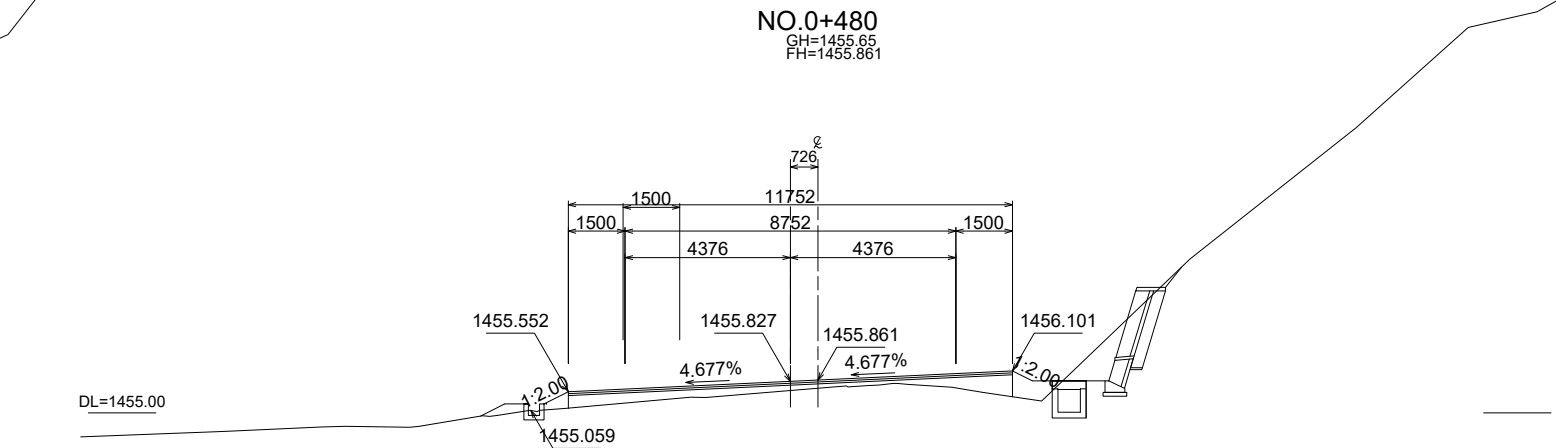
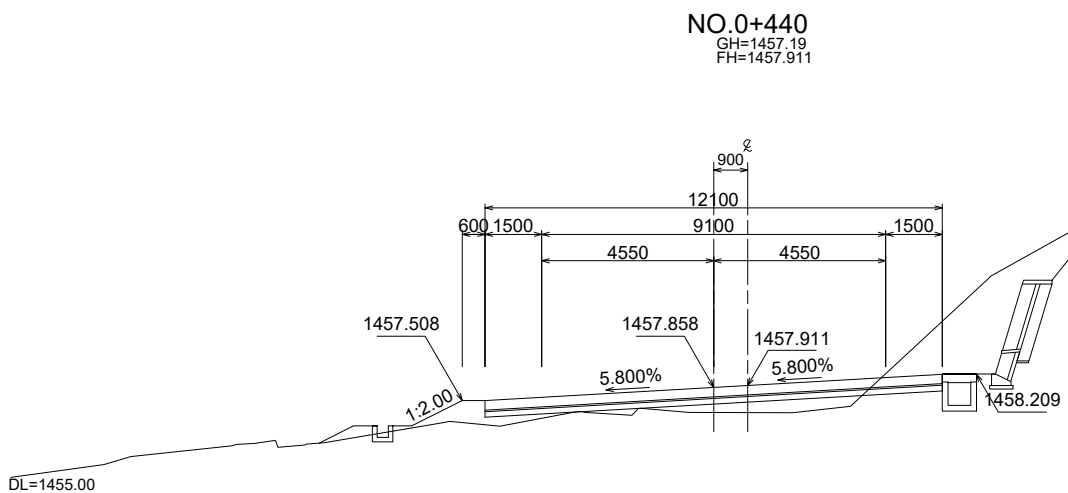
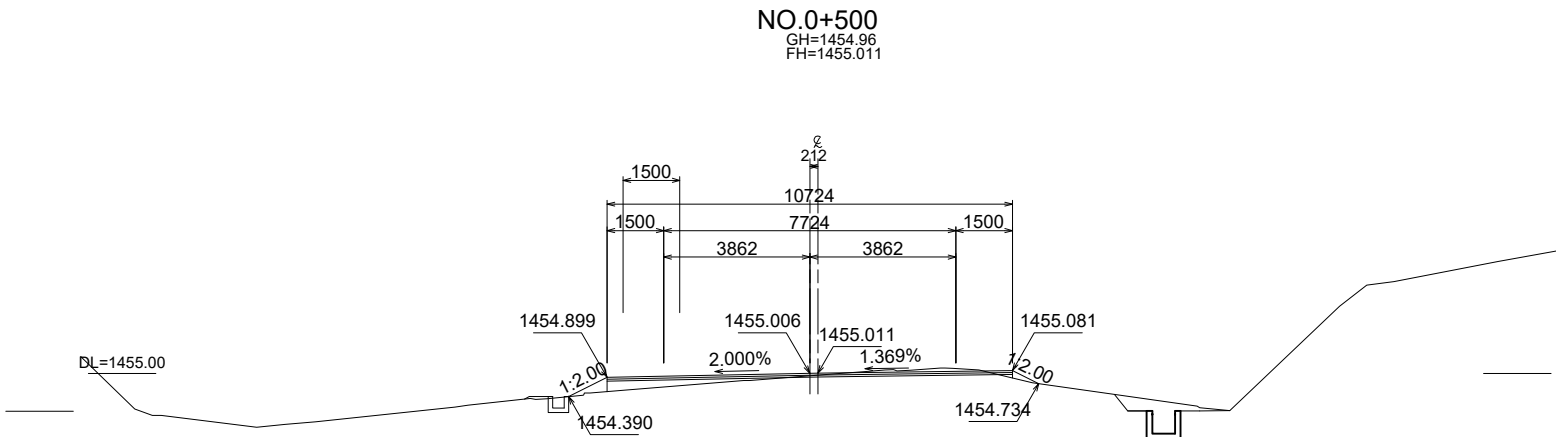
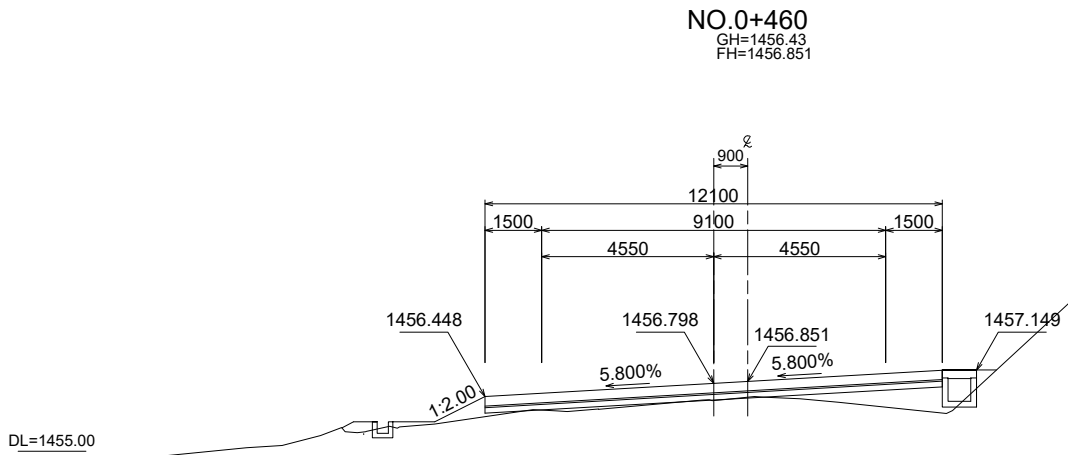
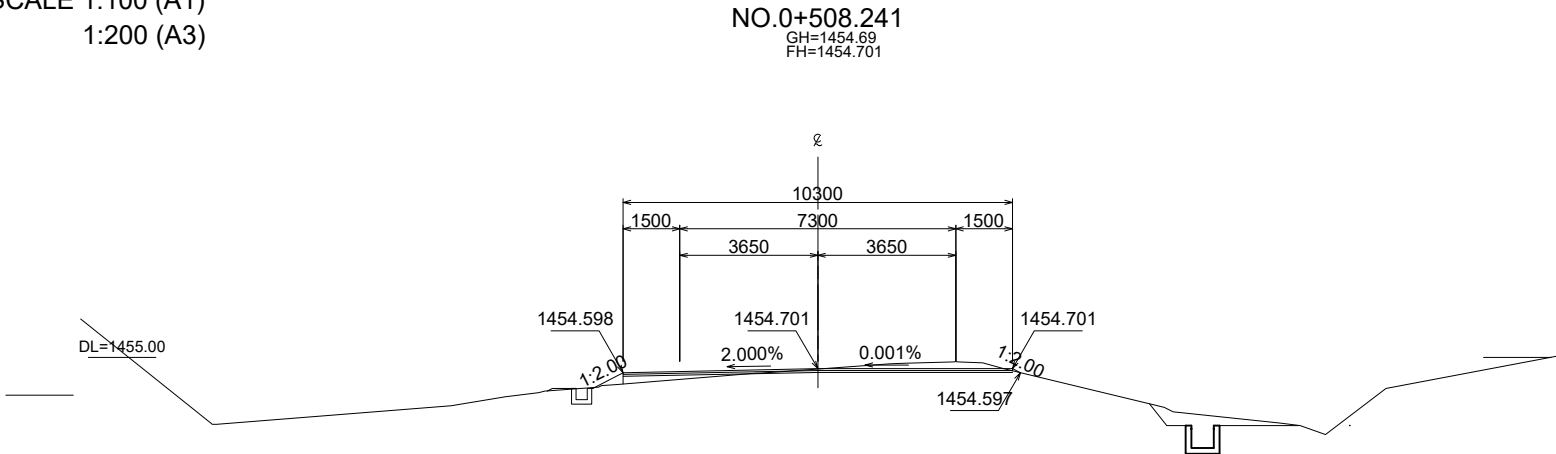
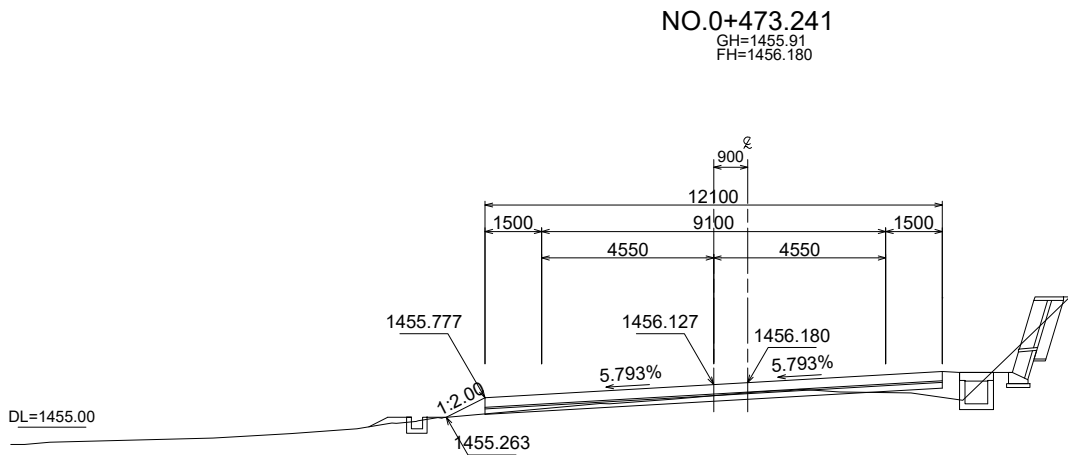
1458.628

ACCESS ROAD TO RESIDENCE

URBANA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD

CROSS SECTION (11)

SCALE 1:100 (A1)
1:200 (A3)



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO.,LTD.

STATUS: -

TITLE: CROSS SECTION (11)

DRAWING NO. CS - 11

SCALE 1:100 (A1) /1:200 (A3)

DATE - -

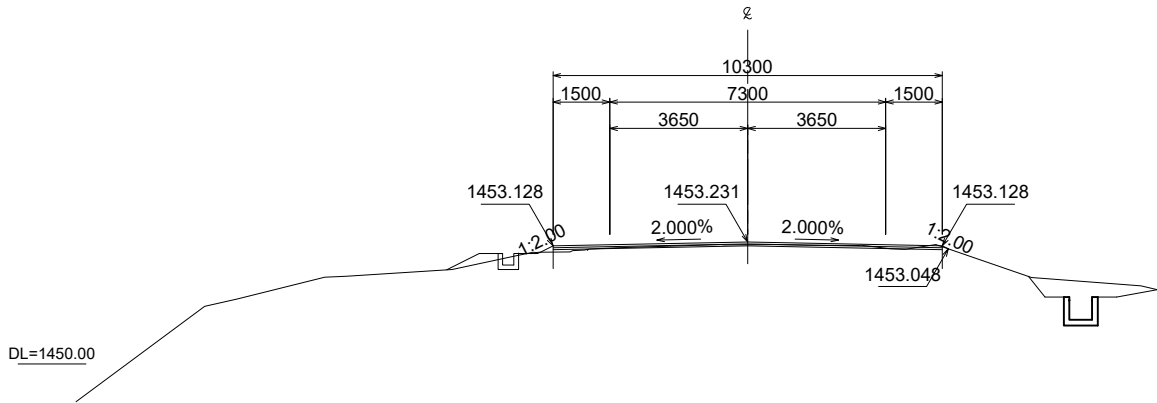
REV DATE DESCRIPTION

CROSS SECTION (12)

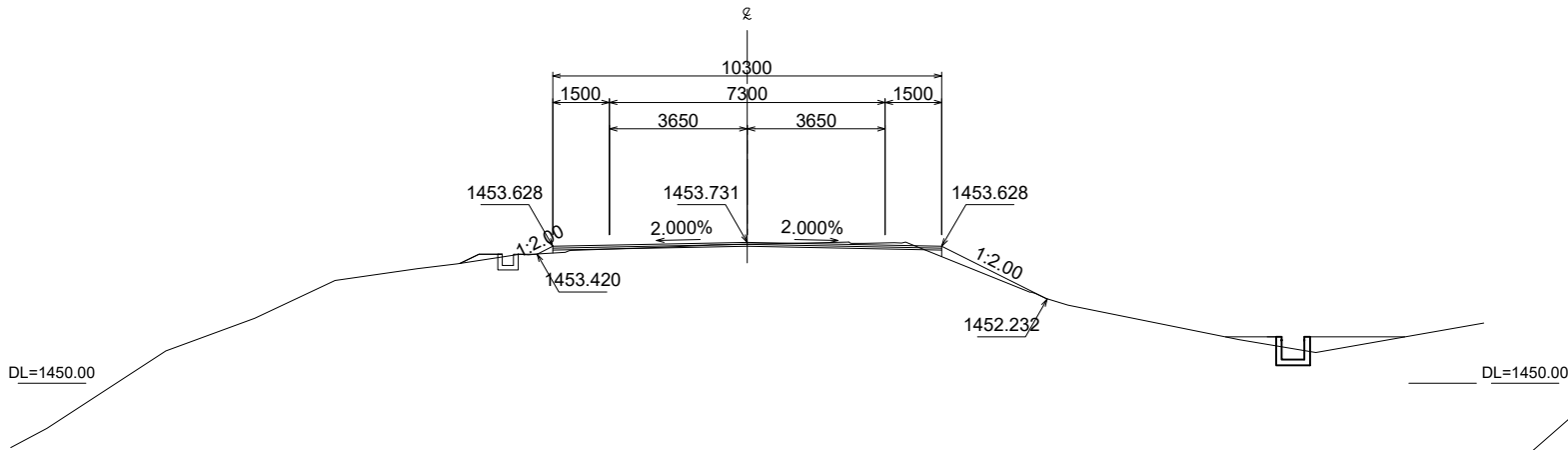
SCALE 1:100 (A1)
1:200 (A3)

A2 - 21

NO.0+560
GH=1453.16
FH=1453.231



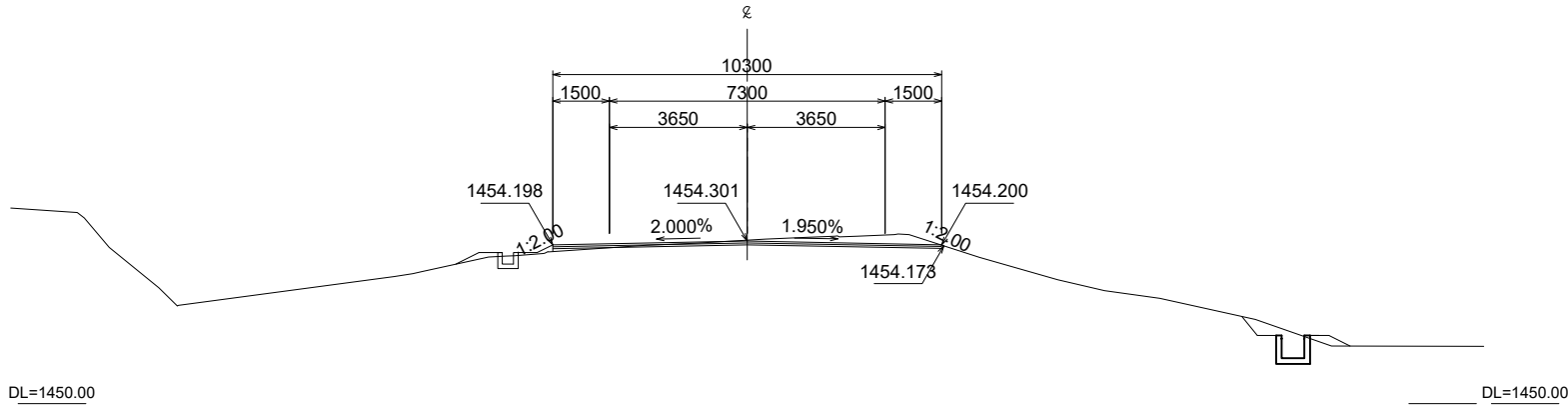
NO.0+540
GH=1453.68
FH=1453.731



NO.0+592.8139
GH=1452.35

Z

NO.0+520
GH=1454.32
FH=1454.301



NO.0+580
GH=1452.66

Z

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

DRAWING NO. CS - 12

REV DATE DESCRIPTION

SCALE 1:100 (A1) / 1:200 (A3)

DATE - -

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

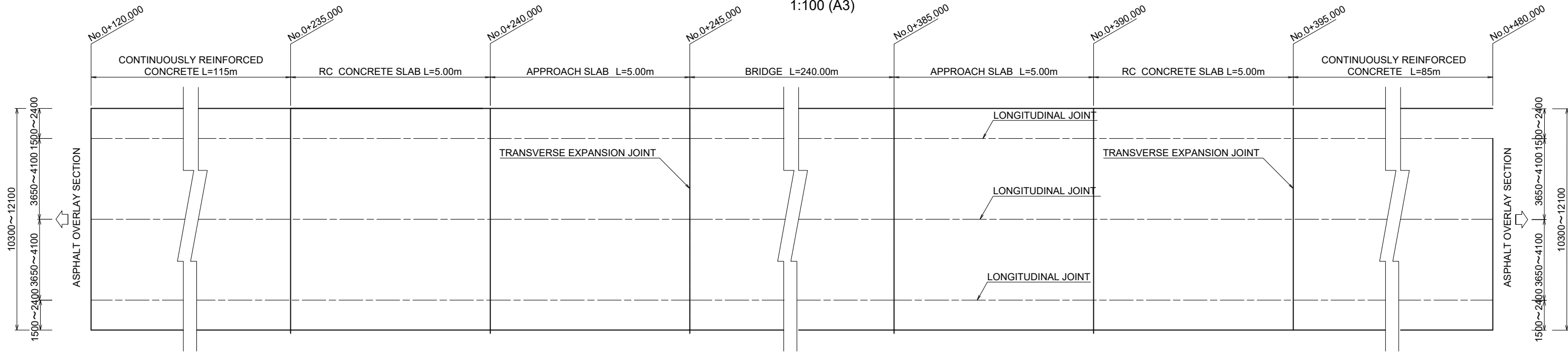
NIPPON KOEI CO.,LTD.

STATUS: -

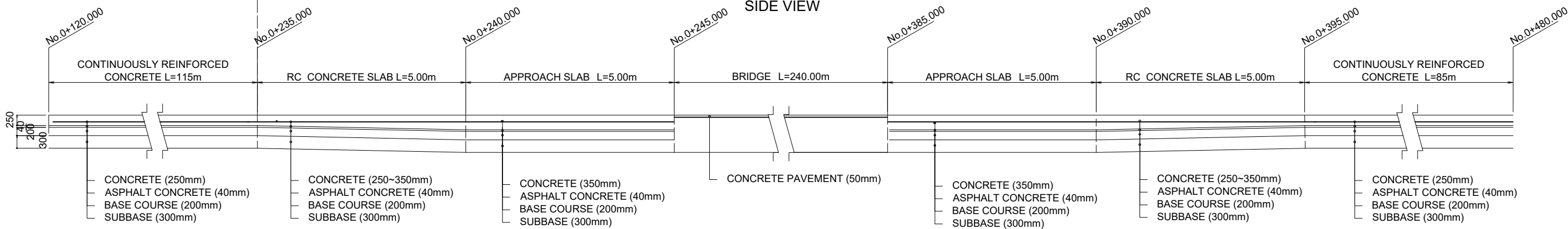
TITLE: CROSS SECTION (12)

DETAIL OF CONCRETE PAVEMENT

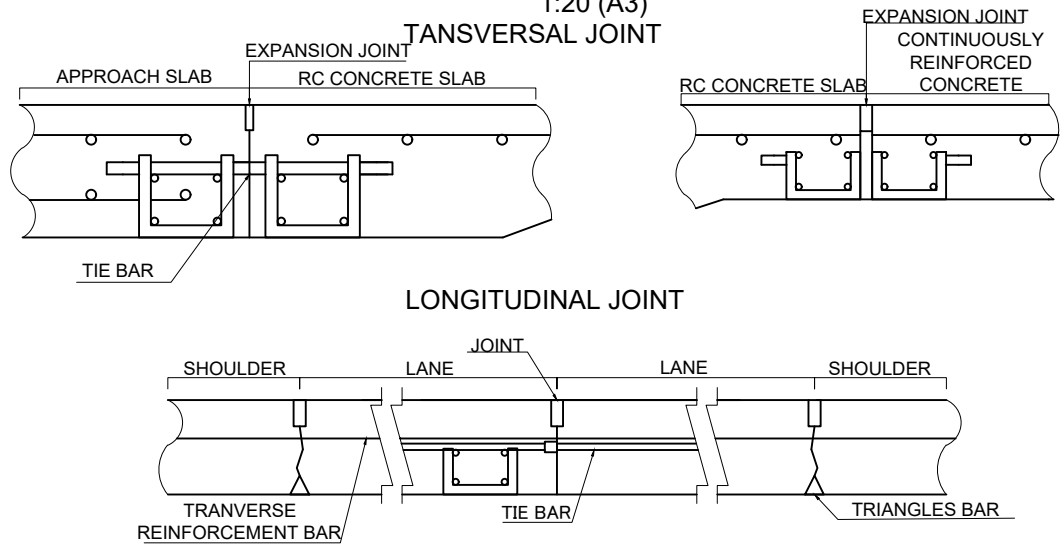
PLAN
SCALE 1:50 (A1)
1:100 (A3)



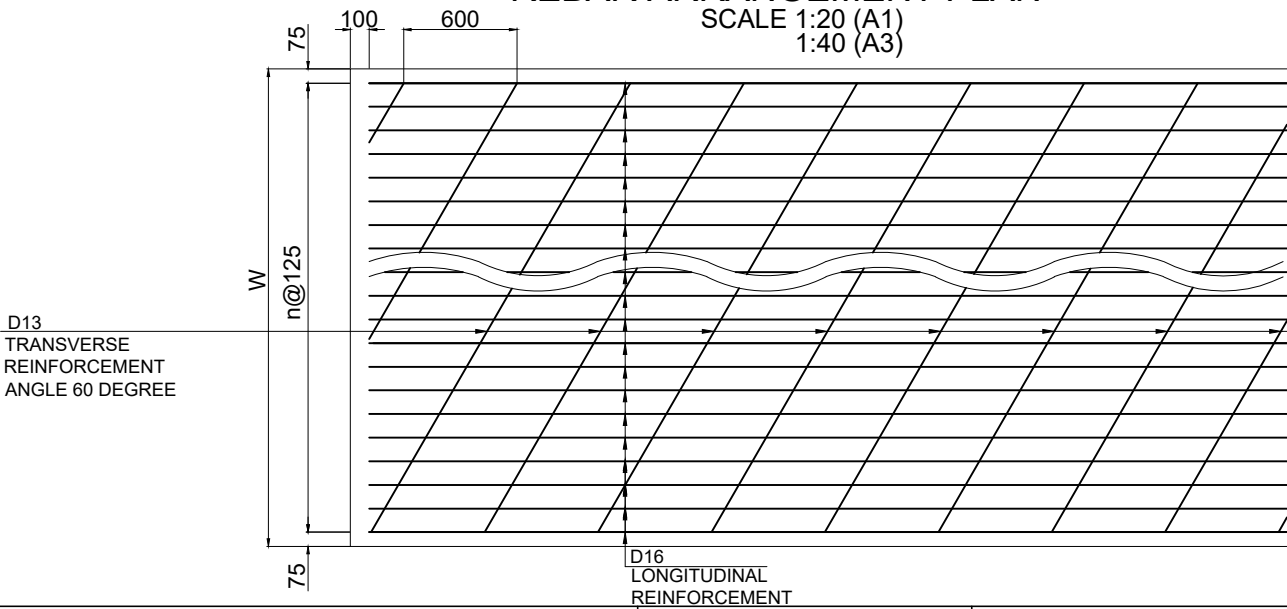
SIDE VIEW



DETAIL OF JOINT
SCALE 1:10 (A1)
1:20 (A3)



REBAR ARRANGEMENT PLAN
SCALE 1:20 (A1)
1:40 (A3)



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

DRAWING NO.

REV DATE DESCRIPTION

SCALE

DATE - -

STATUS: -

TITLE: DETAIL OF CONCRETE PAVEMENT



JAPAN INTERNATIONAL COOPERATION AGENCY

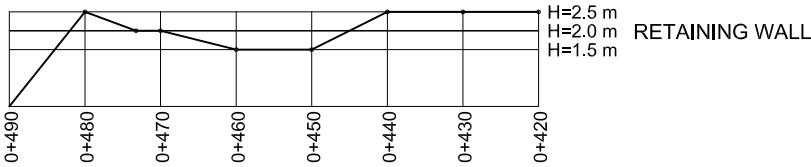
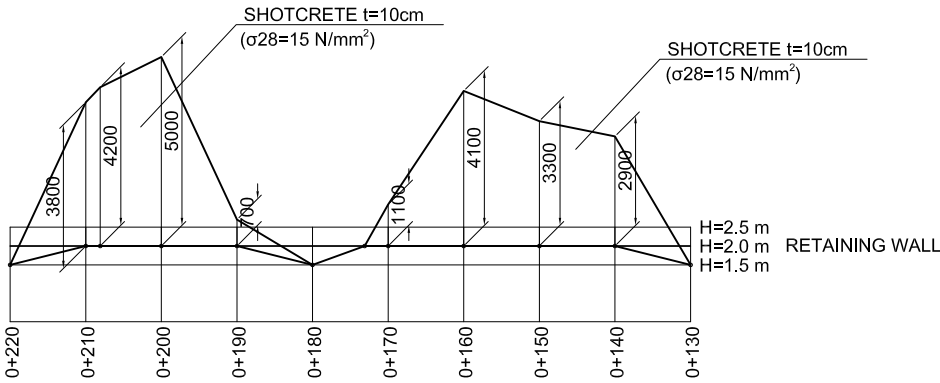


NIPPON KOEI CO.,LTD.

DETAILS OF SLOPE PROTECTION WORKS

DEVELOPMENT OF SLOPE PROTECTION WORKS

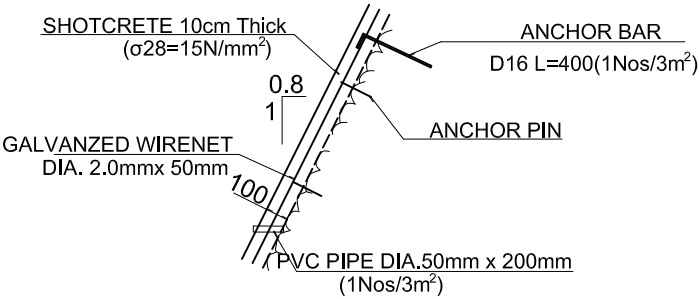
SCALE V=1: 200(A1) V=1: 400(A3)
H=1:1000(A1) H=1:2000(A3)



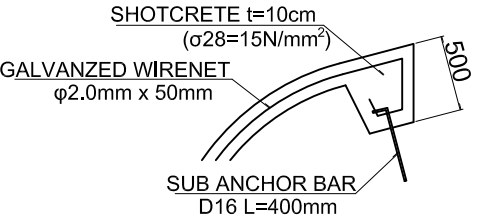
SHOTCRETE WORKS

SCALE 1: 25 (A1)
1: 50 (A3)

DETAIL OF SHOTCRETE

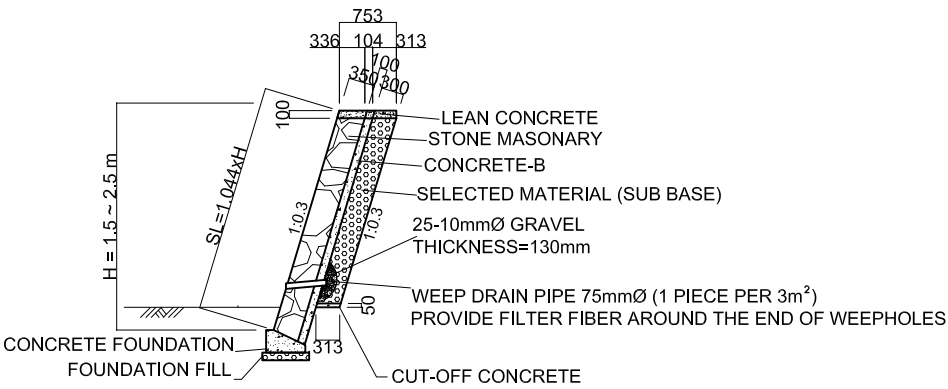


DETAIL OF TOP END OF SLOPE

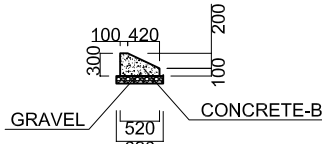


RETAINING WALL WORKS

SCALE 1: 50 (A1)
1: 100(A3)



LEANING TYPE RETAINING WALL (STONE MASONRY)

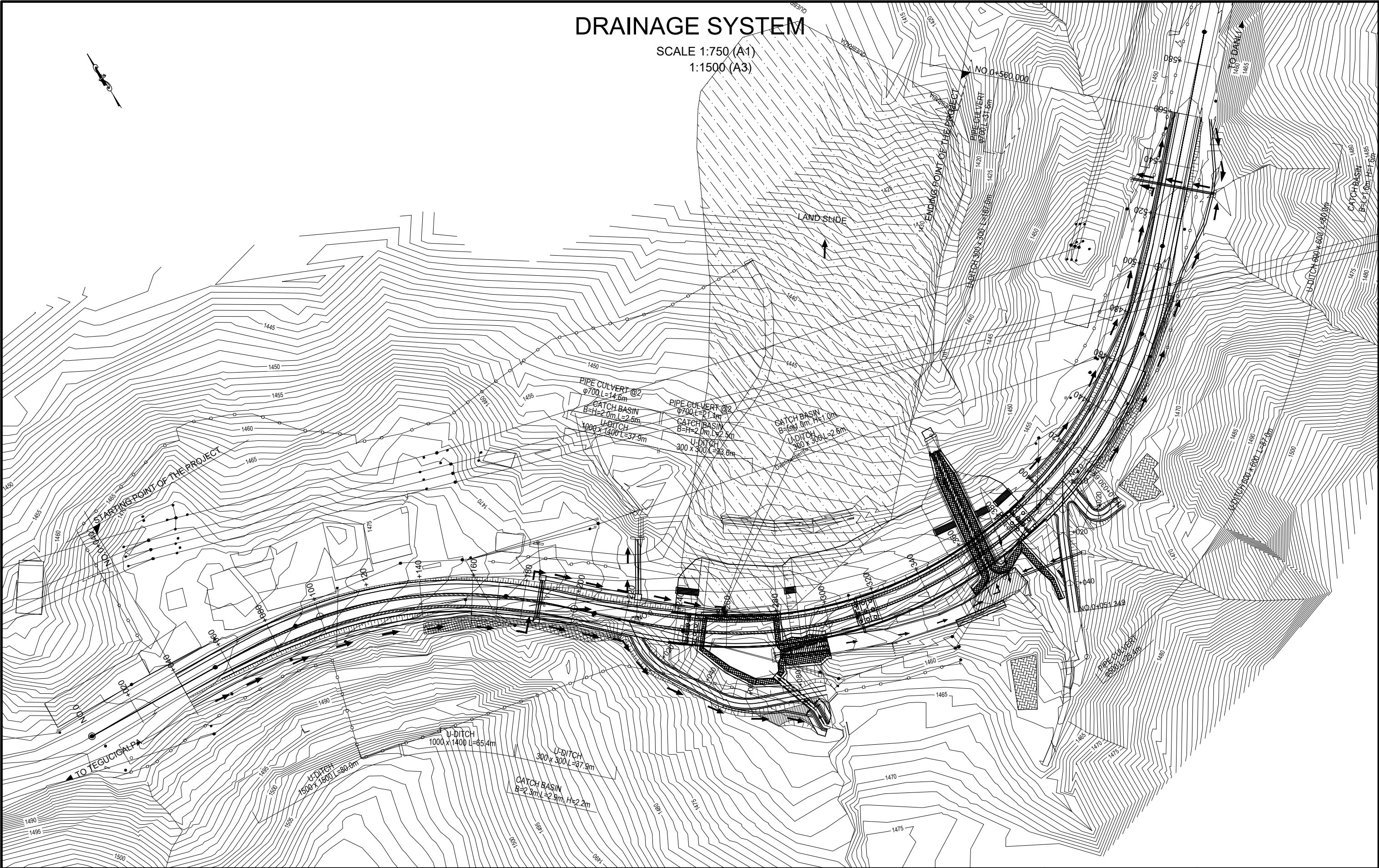


FOUNDATION OF WET MASONRY WALL

 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO. SP- 01	REV	DATE	DESCRIPTION
SCALE V=1: 200(A1) V=1: 400(A3) H=1:1000(A1) H=1:2000(A3)						
DATE - -						
 JAPAN INTERNATIONAL COOPERATION AGENCY		TITLE: DETAIL OF SLOPE PROTECTION WORKS				

DRAINAGE SYSTEM

SCALE 1:750 (A1)
1:1500 (A3)



A2 - 24

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT) JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT NIPPON KOEI CO.,LTD.	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6		PROJECT NO. - -		REVISION RECORD		
		STATUS: -		DRAWING NO.: DS -01		REV	DATE	DESCRIPTION
		TITLE: DRAINAGE SYSTEM		SCALE: 1:750 (A1) / 1:1500 (A3)				
				DATE - -				

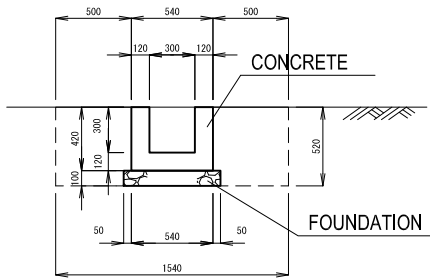
DRAINAGE DETAILS (1)

DETAIL OF SIDE DITCH

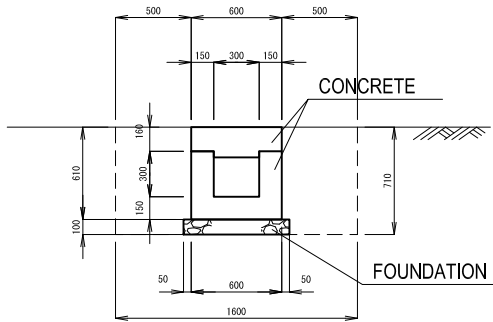
SCALE 1:25 (A1)

1:50 (A3)

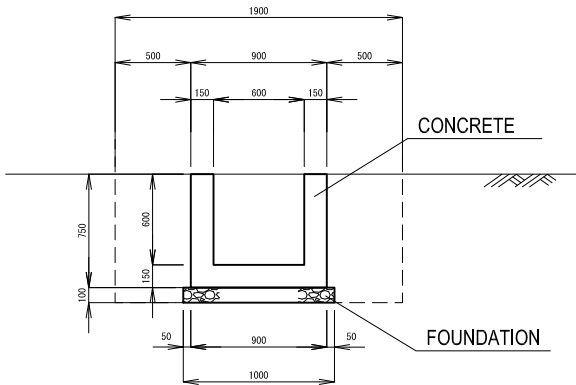
U-300×300



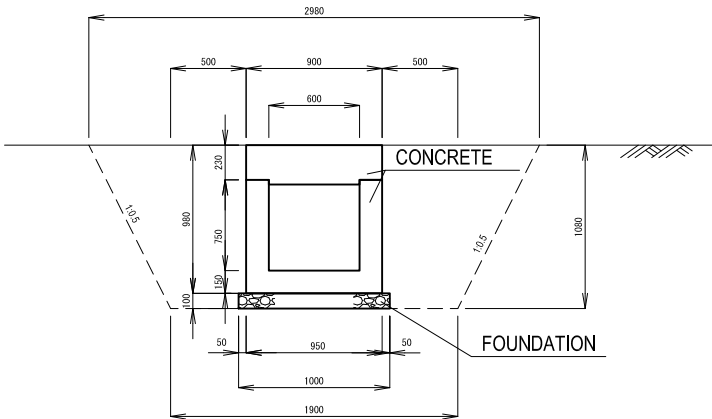
U-300×300 WITH COVER



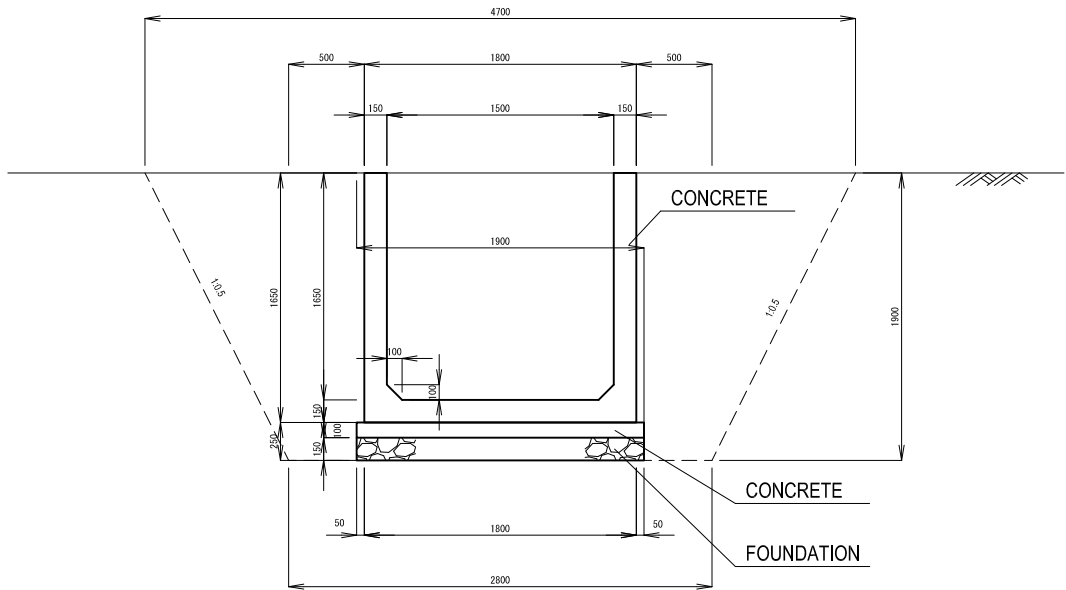
U-600×600



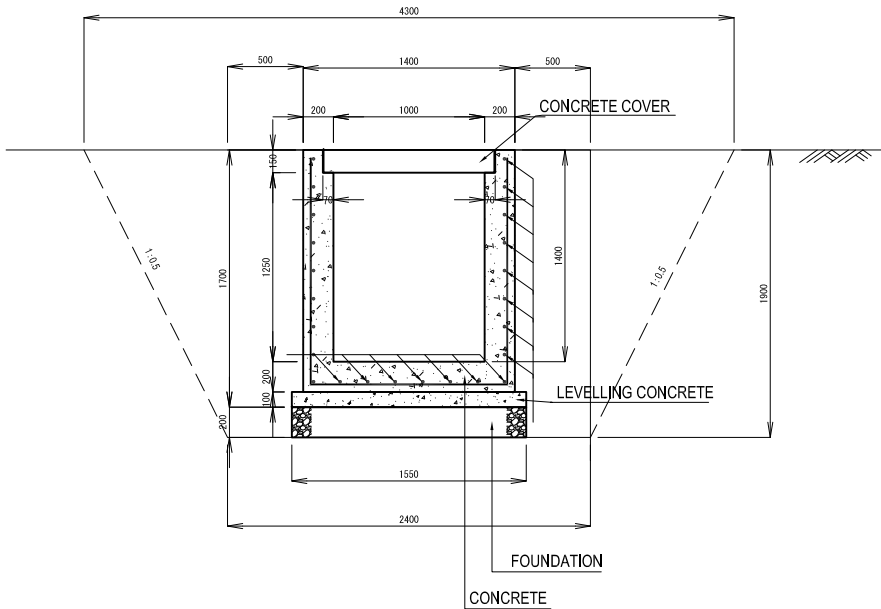
U-600×600 WITH COVER



U-1500×1500



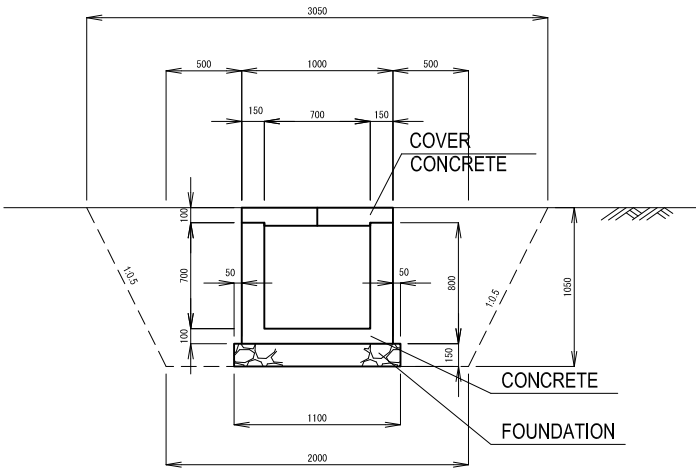
U-1000×1400 WITH COVER



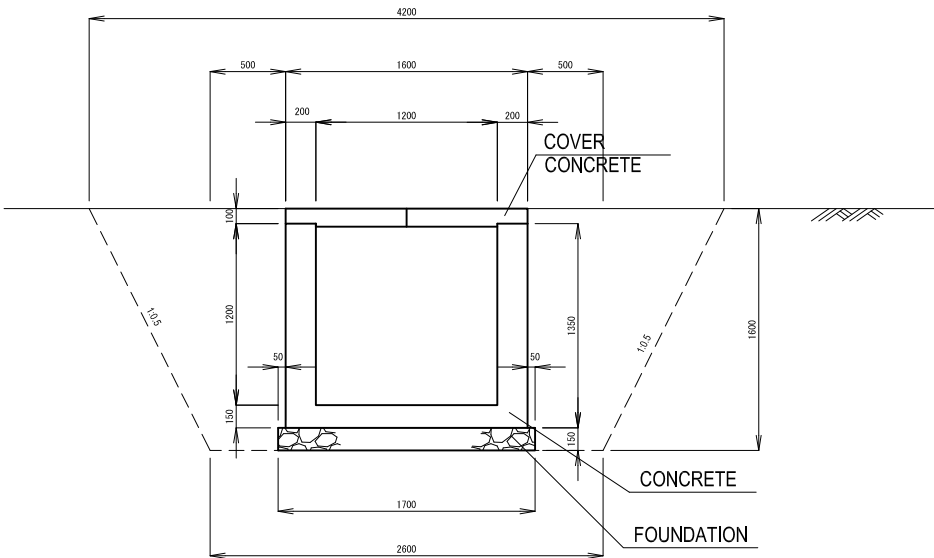
DRAINAGE DETAILS (2)
DETAIL OF CATCH BASIN

SCALE 1:25 (A1)
1:50 (A3)

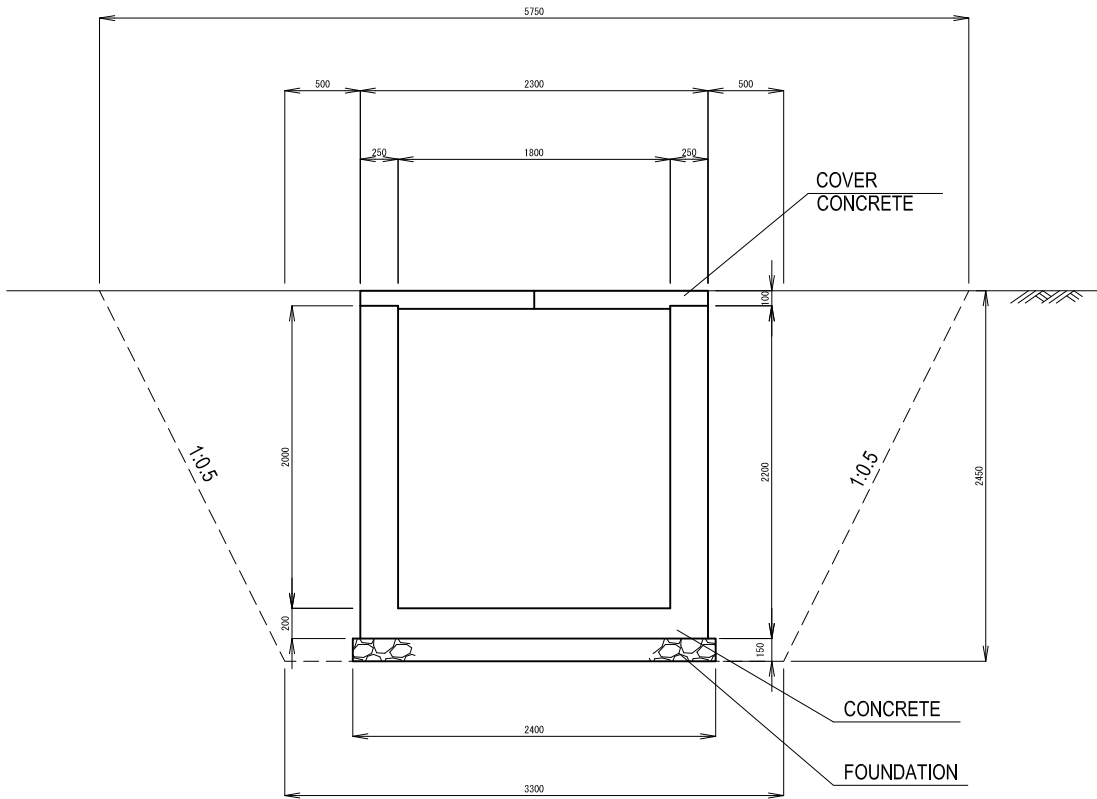
1000×1000, H=0.8m



1600×1600, H=1.35m



2300×2900, H=2.2m



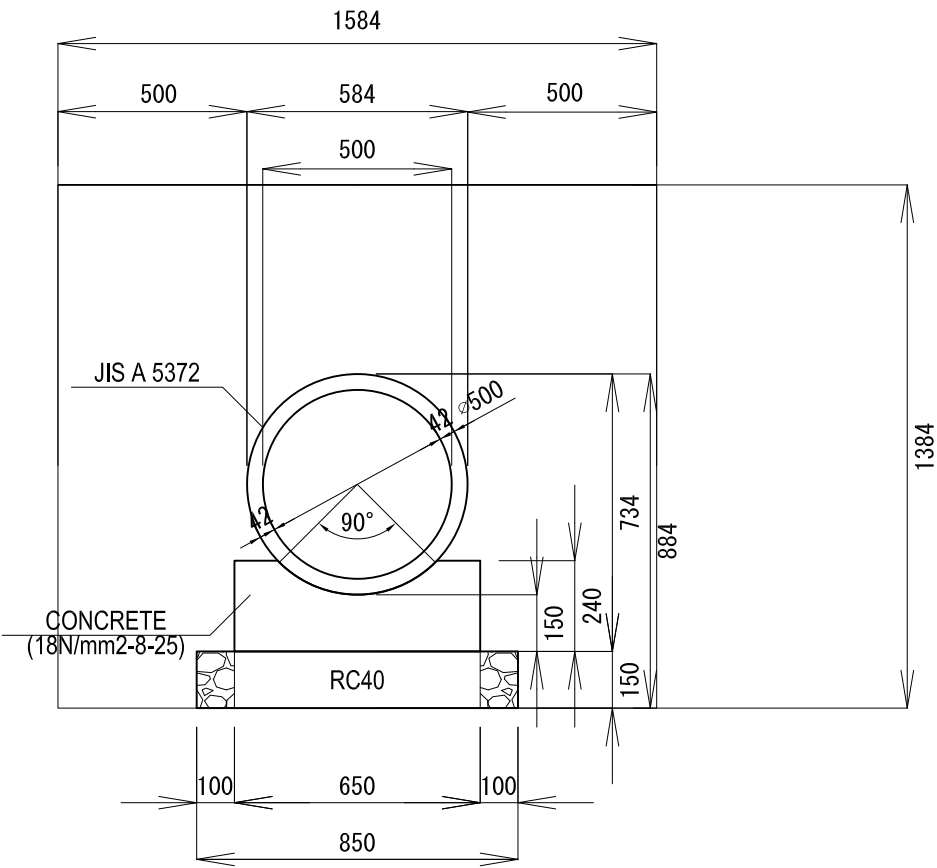
A2 - 26

 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT		THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6		PROJECT NO. - -		REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		STATUS: -		DRAWING NO. DR -02		REV	DATE	DESCRIPTION
TITLE: DRAINAGE DETAILS (2)			SCALE 1:25 (A1) / 1:50 (A3)						
			DATE - -						
 JAPAN INTERNATIONAL COOPERATION AGENCY									

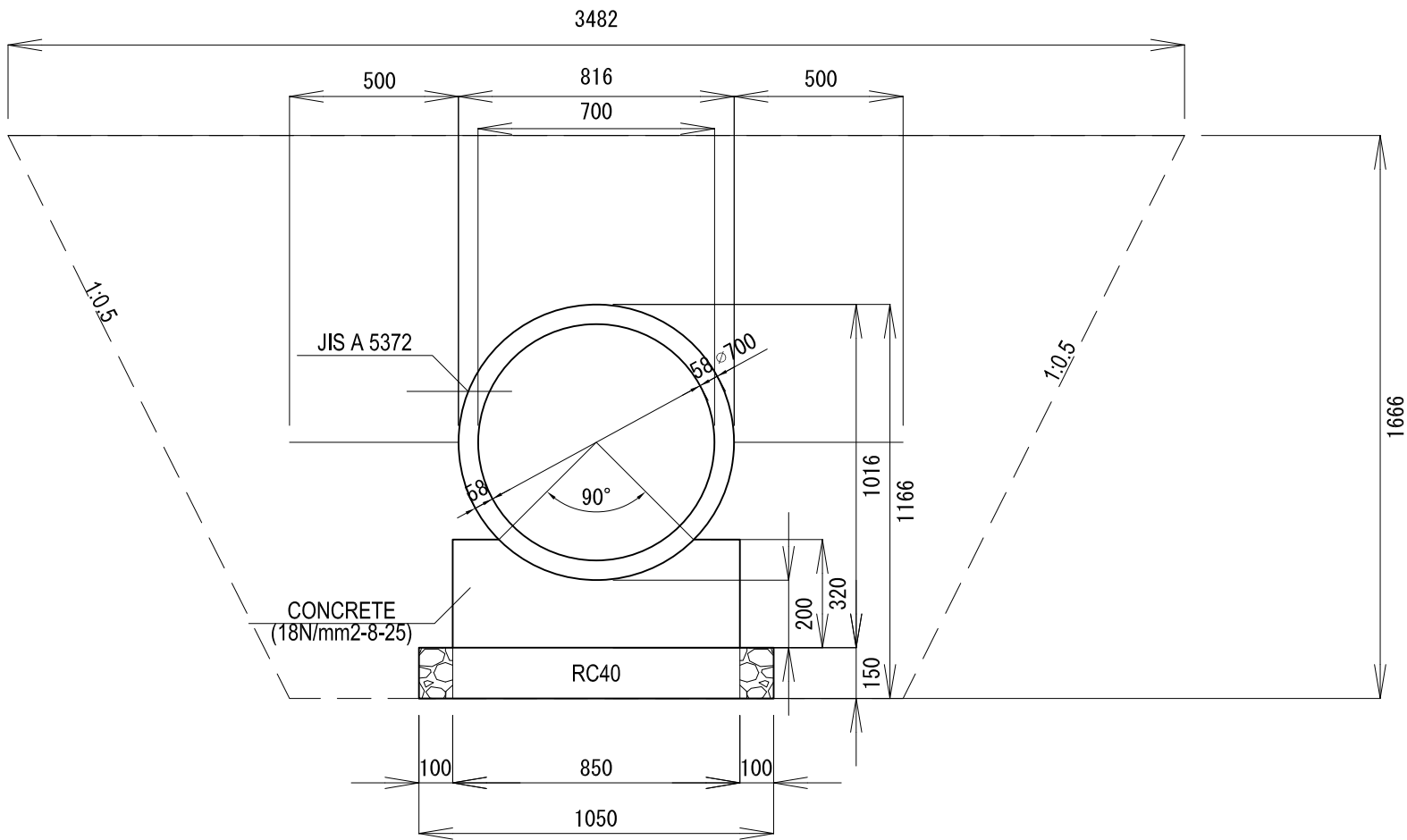
DRAINAGE DETAILS (3)
DETAIL OF PIPE CULVERT

SCALE 1:10 (A1)
1:20 (A3)

Φ500



Φ700

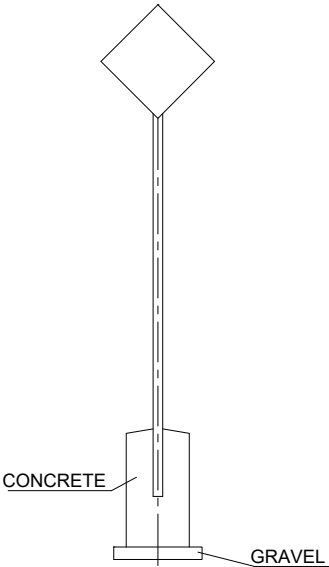


A2 - 27

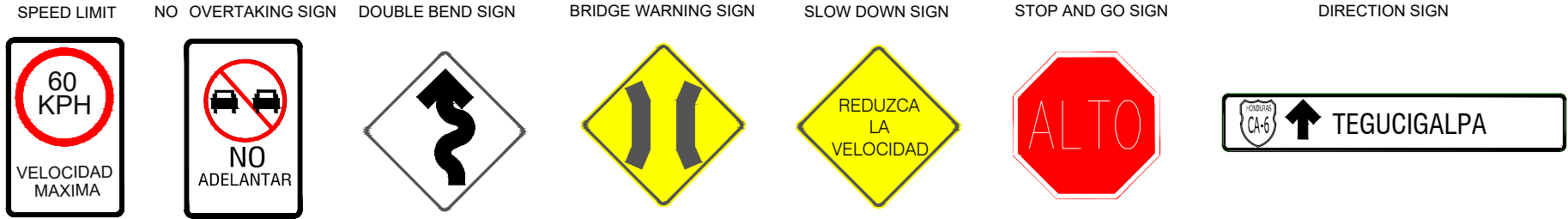
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO. DR -03	REV	DATE	DESCRIPTION
SCALE 1:10 (A1) / 1:20 (A3)						
DATE - -						
 JAPAN INTERNATIONAL COOPERATION AGENCY		TITLE: DRAINAGE DETAILS (3)				

DETAIL OF TRAFFIC SAFETY FACILITIES (1)

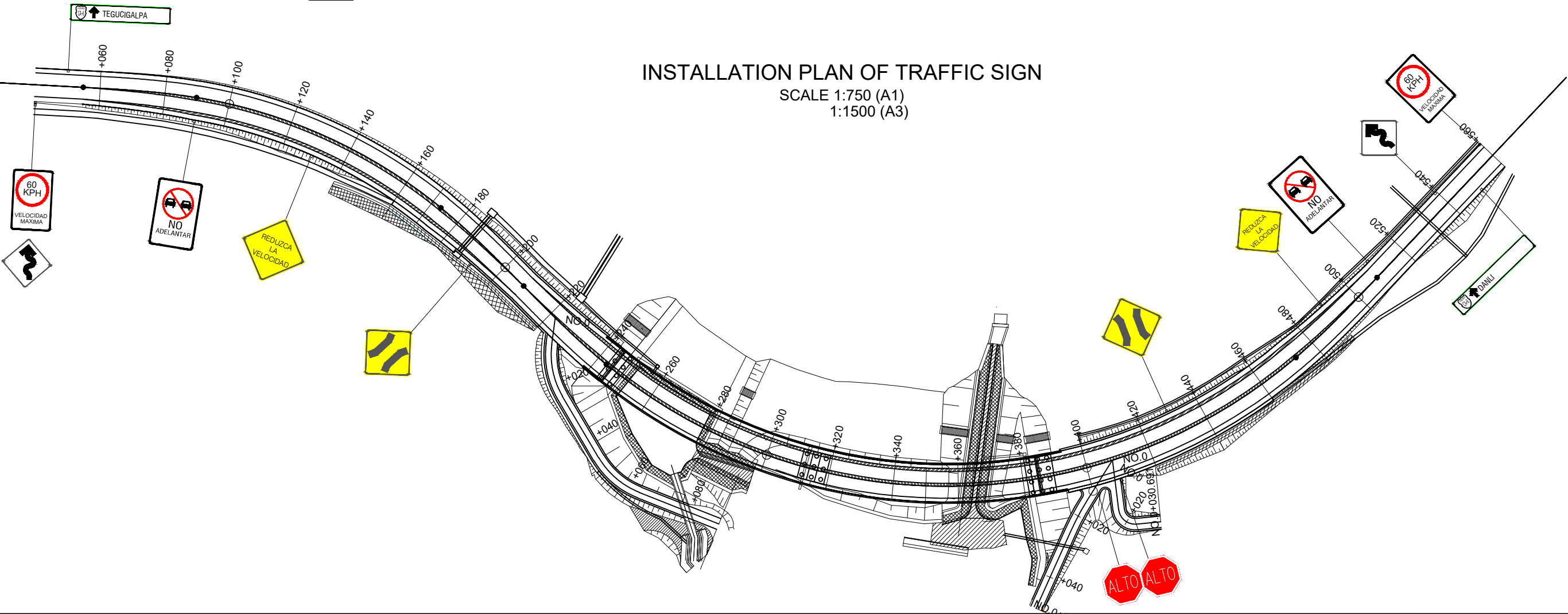
TYPICAL ELEVATION
SCALE 1:30 (A1)
1:60 (A3)



TRAFFIC SIGN
SCALE 1:20 (A1)
1:40 (A3)



INSTALLATION PLAN OF TRAFFIC SIGN
SCALE 1:750 (A1)
1:1500 (A3)

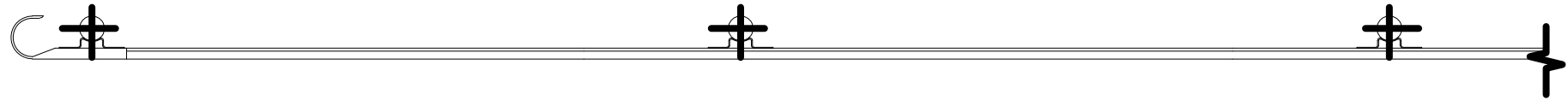


PROJECT NO. - -	REVISION RECORD		
	REV	DATE	DESCRIPTION
DRAWING NO. -TS -01			
SCALE 1:15 (A1) / 1:30 (A3)			
DATE - -			

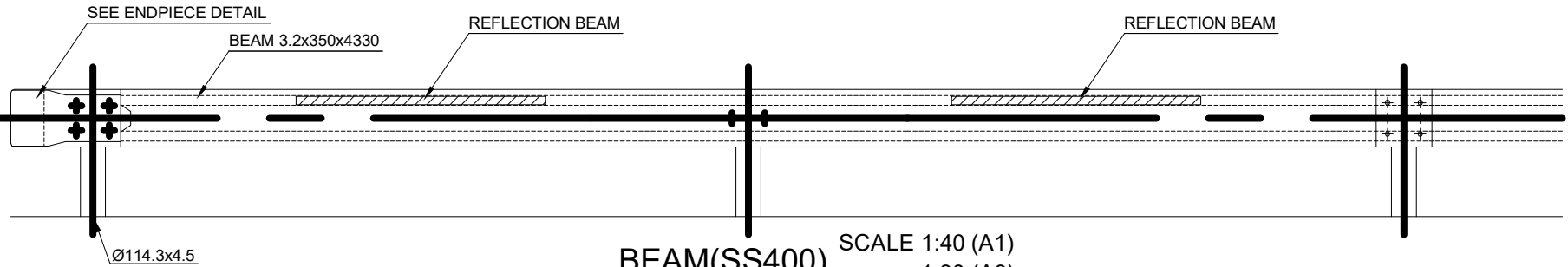
DETAIL OF TRAFFIC SAFETY FACILITIES (2)

GUARD RAIL

SCALE 1:20 (A1)
1:40 (A3)

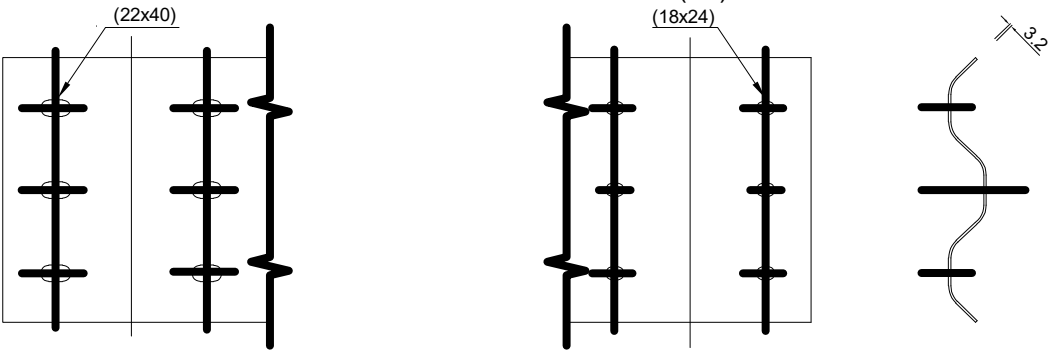


END PIECE

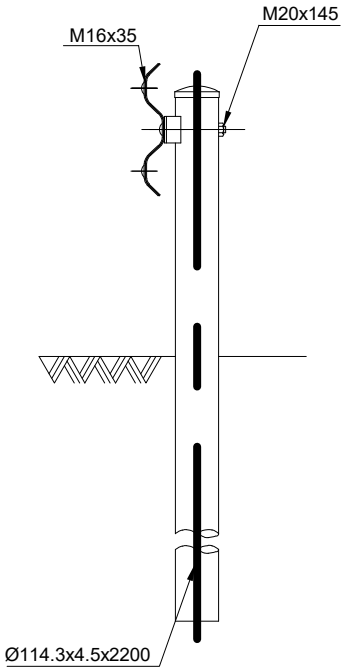


BEAM(SS400)

SCALE 1:40 (A1)
1:80 (A3)

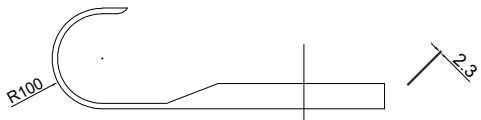


SECTION SCALE 1:20 (A1)
1:40 (A3)



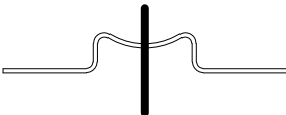
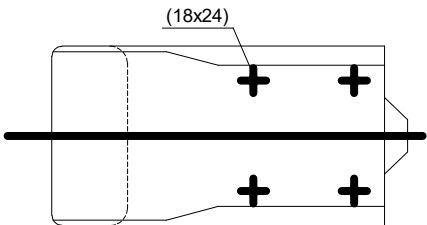
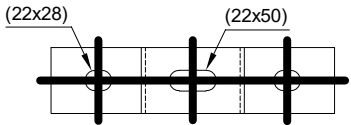
ENDPIECE DETAIL

SCALE 1:15 (A1)
1:30 (A3)



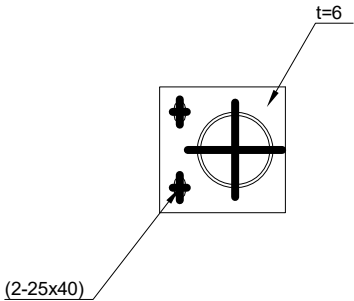
BRACKET(SS400)

SCALE 1:8 (A1)
1:16 (A3)

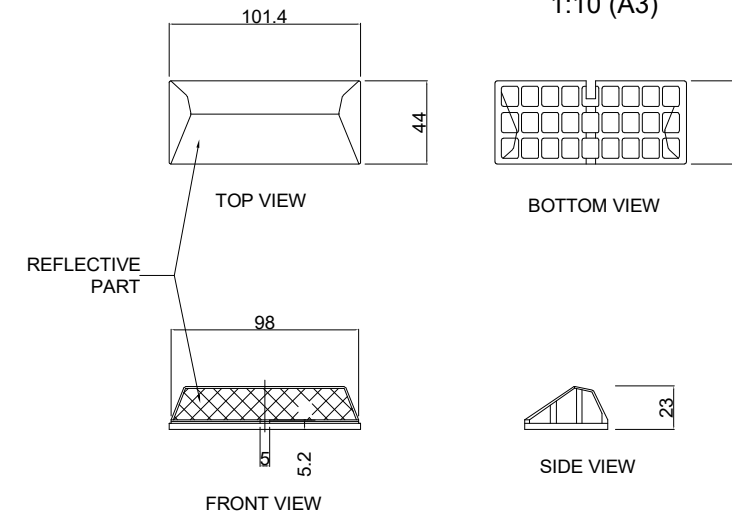
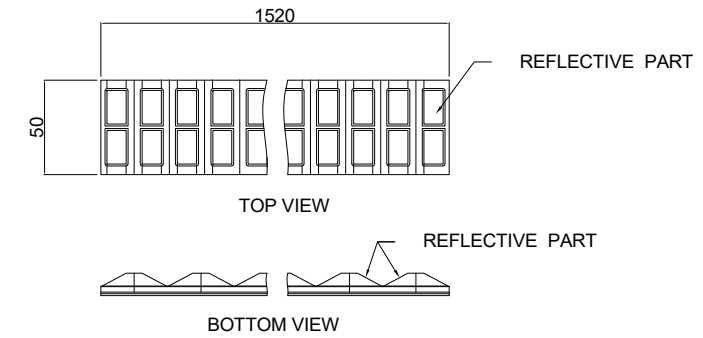
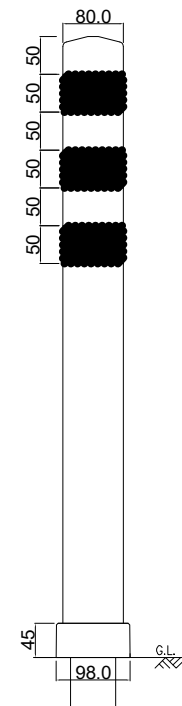
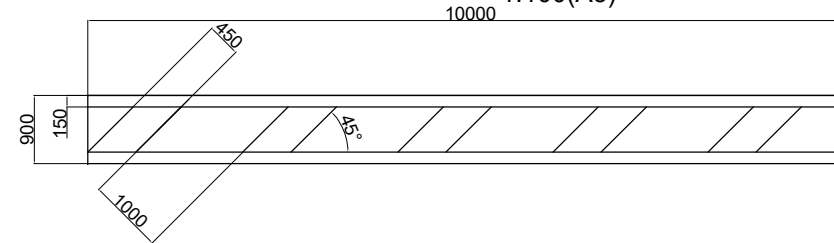


ANCHOR PLATE

SCALE 1:15 (A1)
1:30 (A3)



A2 - 30

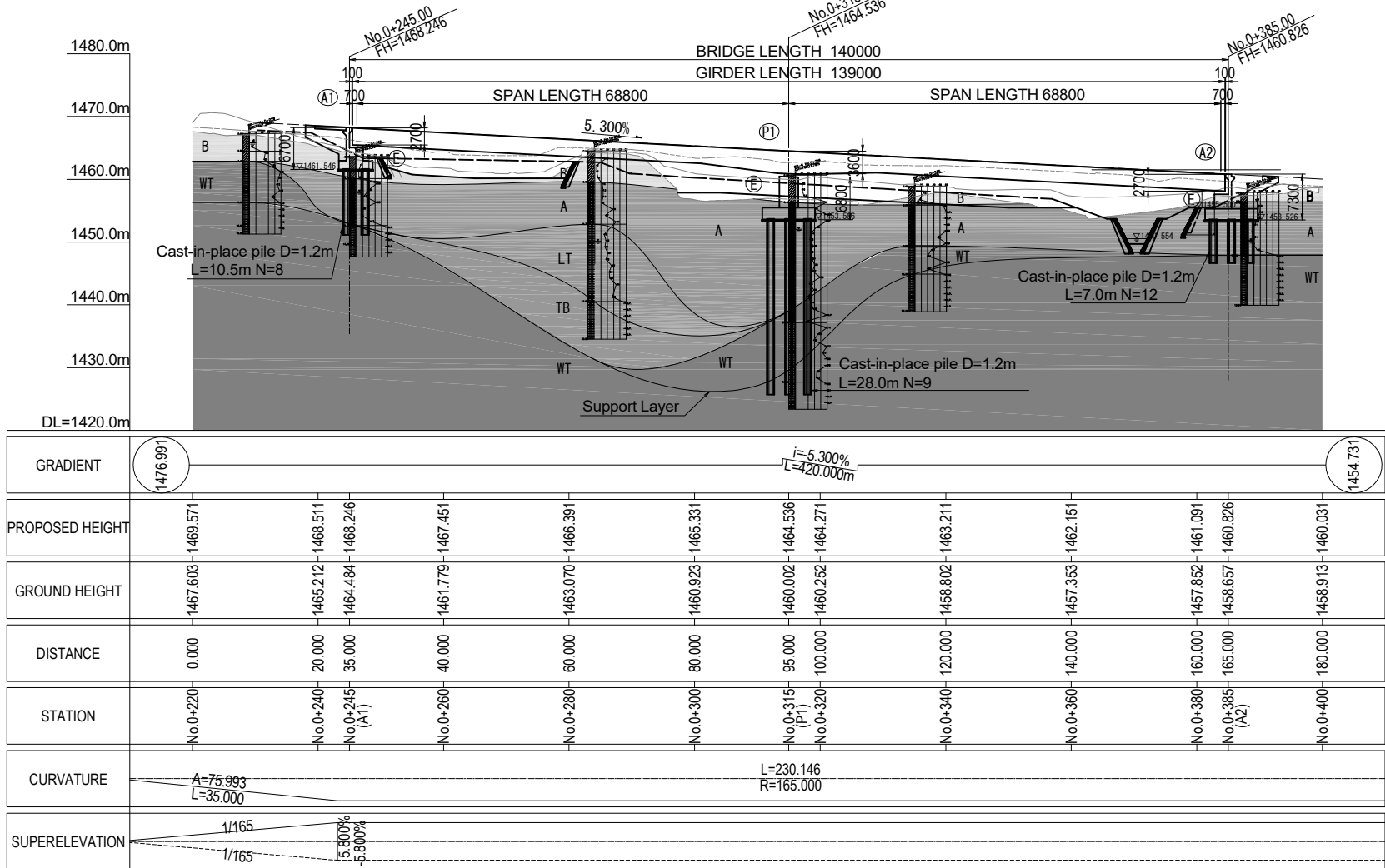


 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		DRAWING NO. TS -03	REV	DATE	DESCRIPTION
			STATUS: -			
			TITLE: DETAIL OF TRAFFIC SAFETY FACILITIES (3)			
 JAPAN INTERNATIONAL COOPERATION AGENCY						

GENERAL VIEW OF BRIDGE

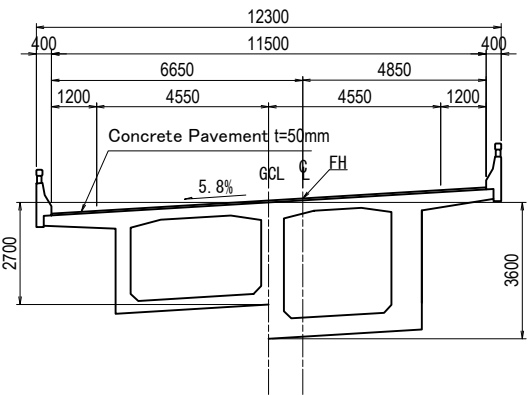
SCALE 1:500 (A1)
1:1000 (A3)

PROFILE



SUPERSTRUCTURE

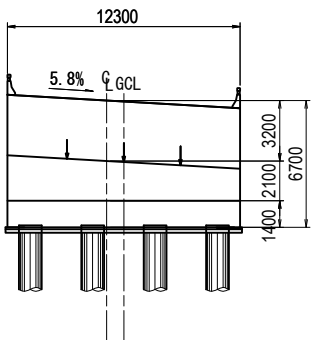
SCALE 1:100 (A1)
1:200 (A3)



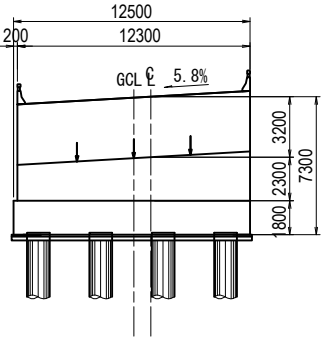
SUBSTRUCTURE

SCALE 1:200 (A1)
1:400 (A3)

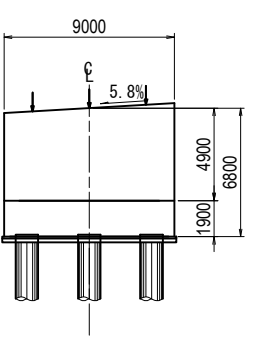
ABUTMENT A1



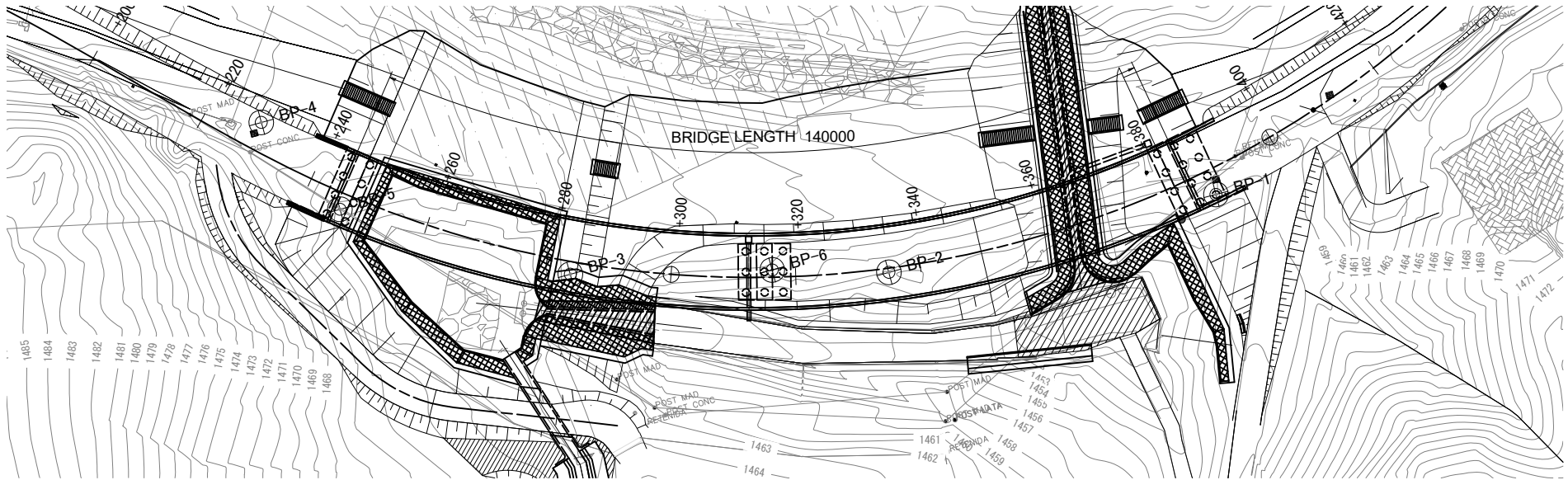
ABUTMENT A2



PIER P1



PLAN



DESIGN CRITERIA

Basic Condition	Design Speed	V=60km/h
	Bridge Length	L=140.000m
	Curvature	R=165m
	Gradient	5.300% (A1 → A2)
	Bevel	θ= 90°
	Width	1.20+4.55+4.55+1.20m
	Live Load	AASHTO LRFD HL-93
Superstructure	Pavement	Concrete
	Seismic Coefficient	kh=0.25
	Bridge Type	2-Span Continuous PC Box Girder
	Span Length	68.80+68.80m
Substructure	Mat.	Concrete Steel
	Substructure	T-shaped Abutment, Wall type pier
	Foundation	Cast-in-place Pile
	Support Layer	Sand and Gravel, Tuff
Design Standards	Mat.	Concrete Steel
	Design Standards	Specifications for Highway Bridges 2017 AASHTO LRFD Bridge Design Specification, SI Units 4th Edition 2007

CONSULTANT

NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: GENERAL VIEW OF BRIDGE

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

JAPAN INTERNATIONAL COOPERATION AGENCY

PROJECT NO. - -

DRAWING NO. - BR -01

SCALE - 1:500(A1) / 1:1000 (A3)

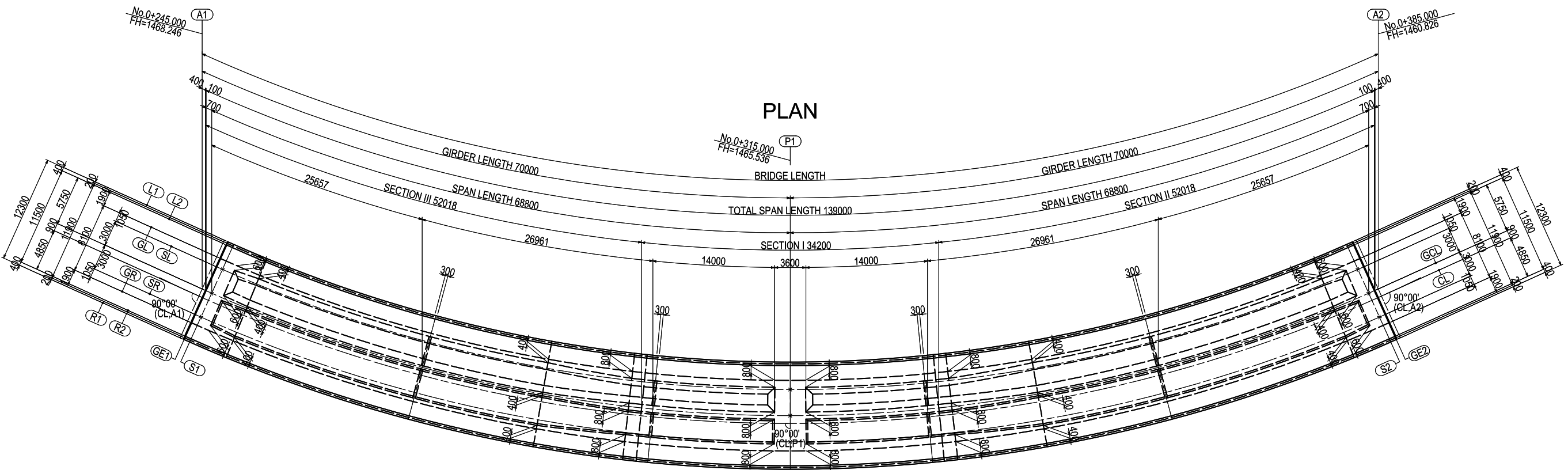
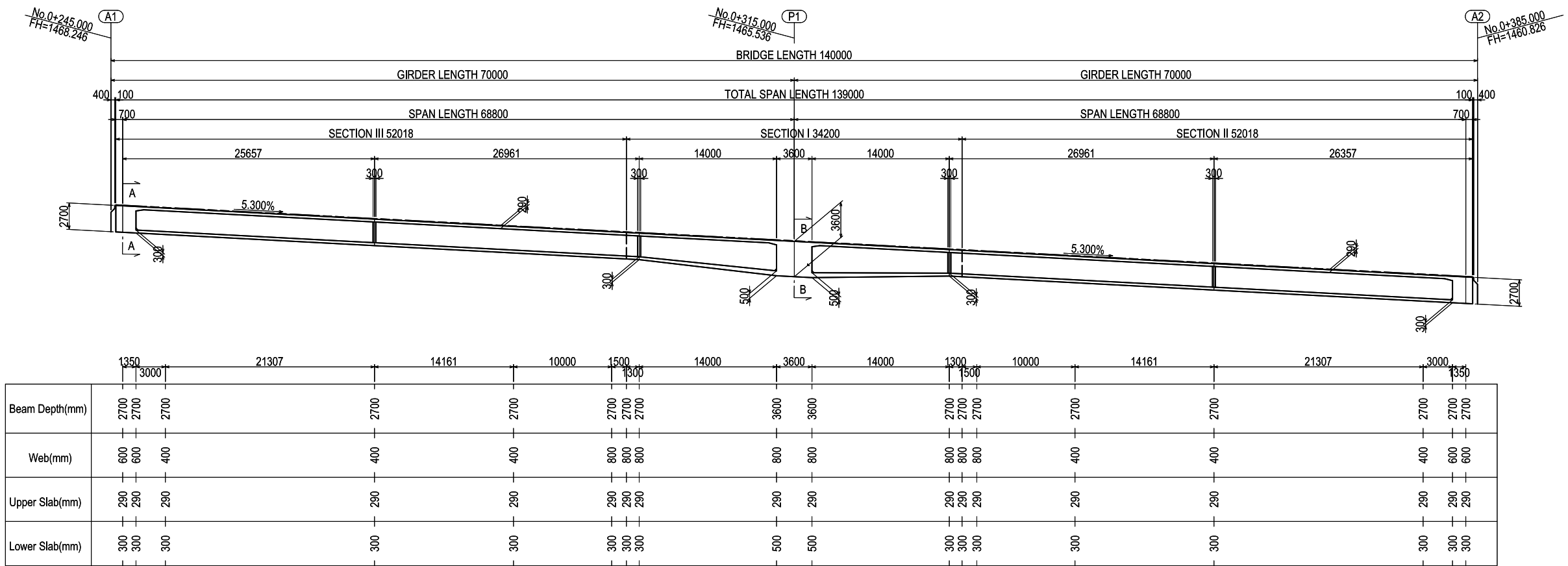
DATE - -

REVISION RECORD

REV DATE DESCRIPTION

GENERAL DIMENSIONS OF SUPERSTRUCTURE (1/2) SCALE 1:250 (A1) 1:500 (A3)

PROFILE



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO.,LTD.

STATUS: -

TITLE: GENERAL DIMENSIONS OF SUPERSTRUCTURE (1/2)

DRAWING NO.: BR - 01

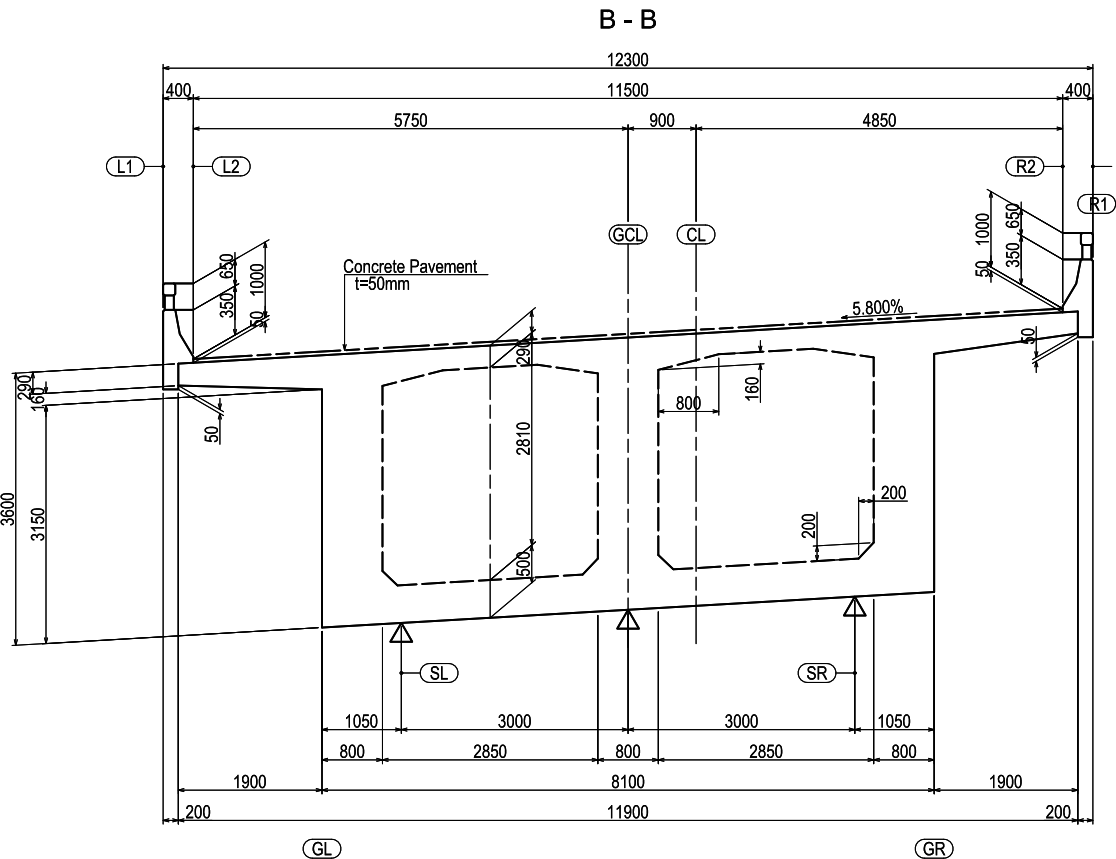
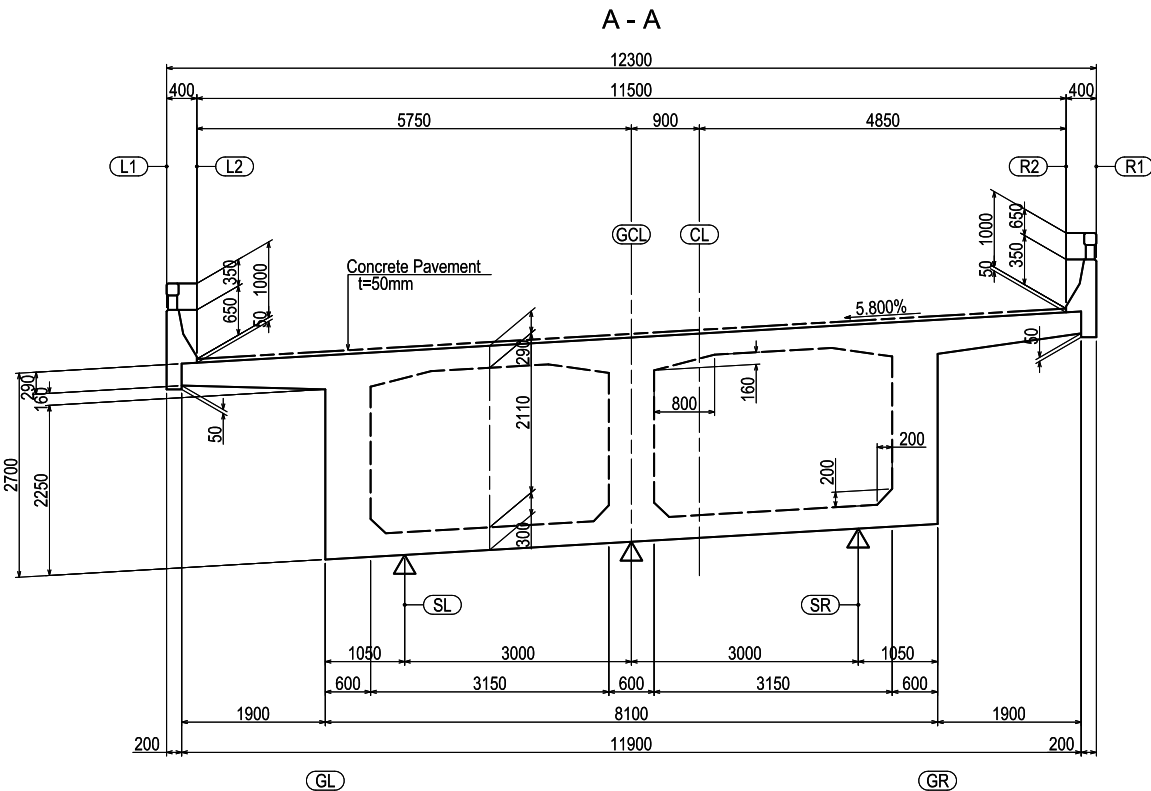
SCALE: 1:250 (A1) / 1:500 (A3)

DATE - -

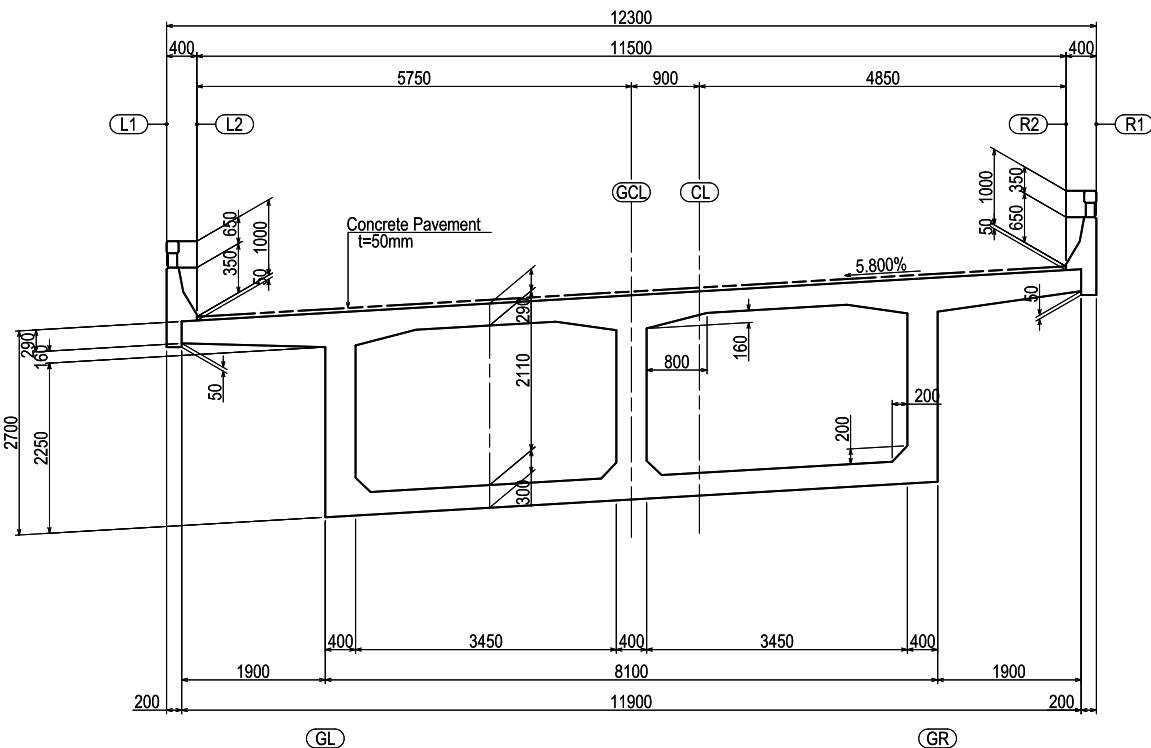
REV DATE DESCRIPTION

SCALE 1:50 (A1)
1:100 (A3)

CROSS SECTION



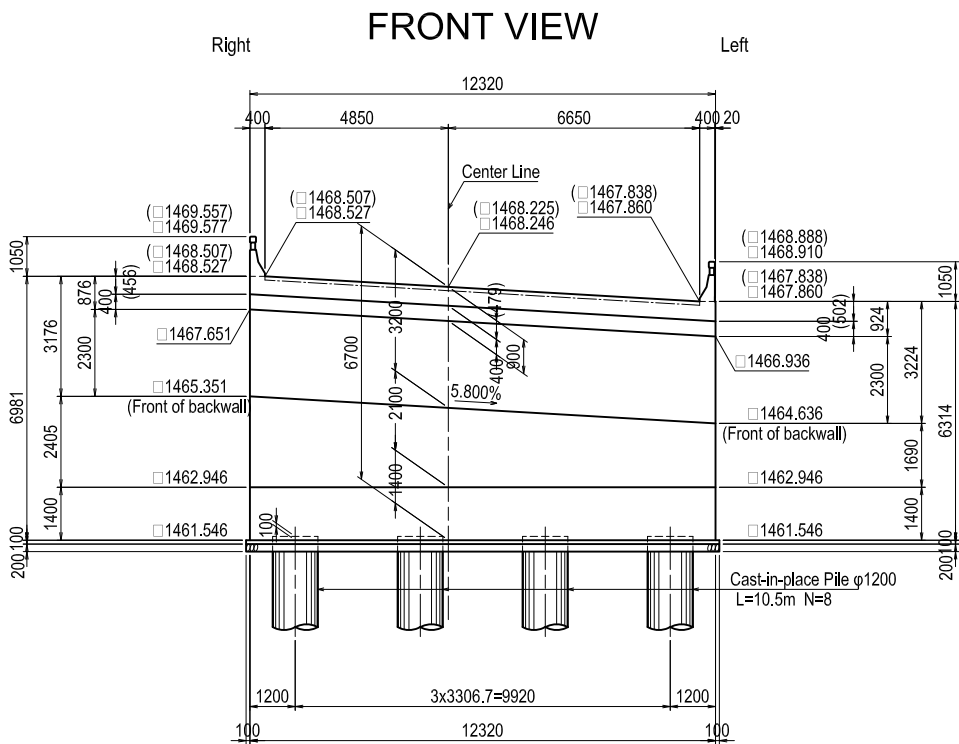
TYPICAL SECTION



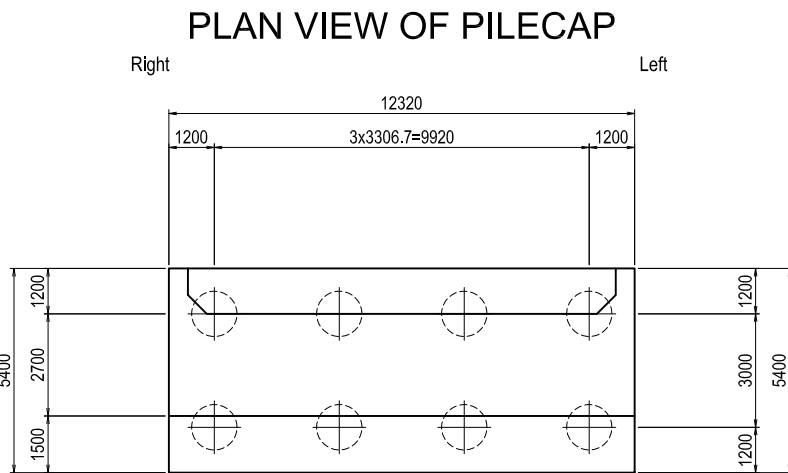
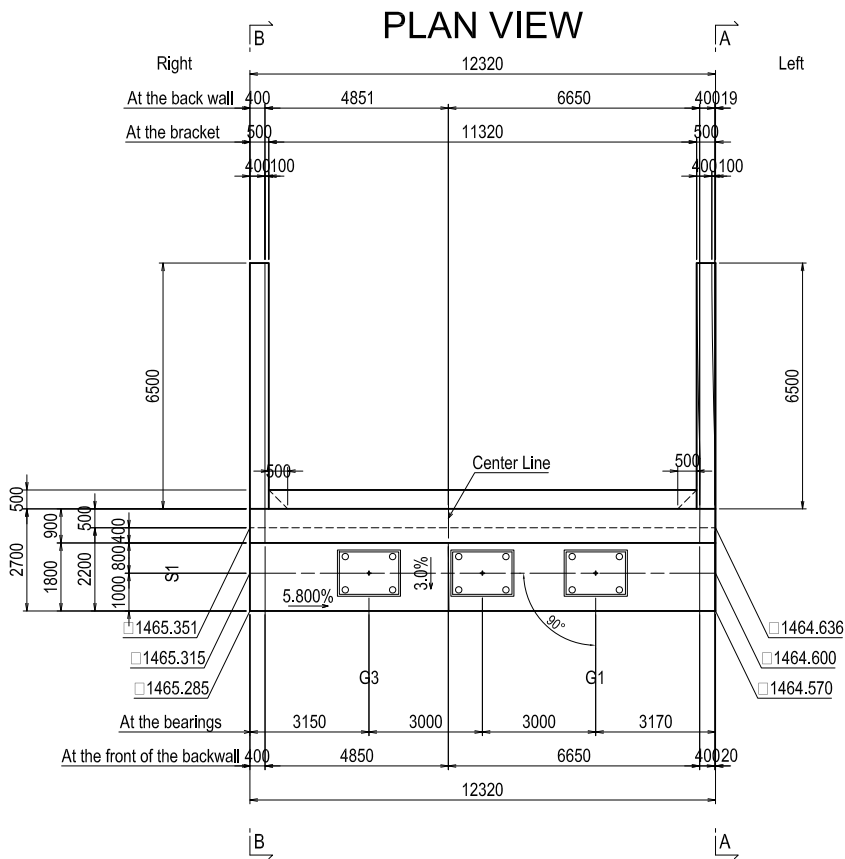
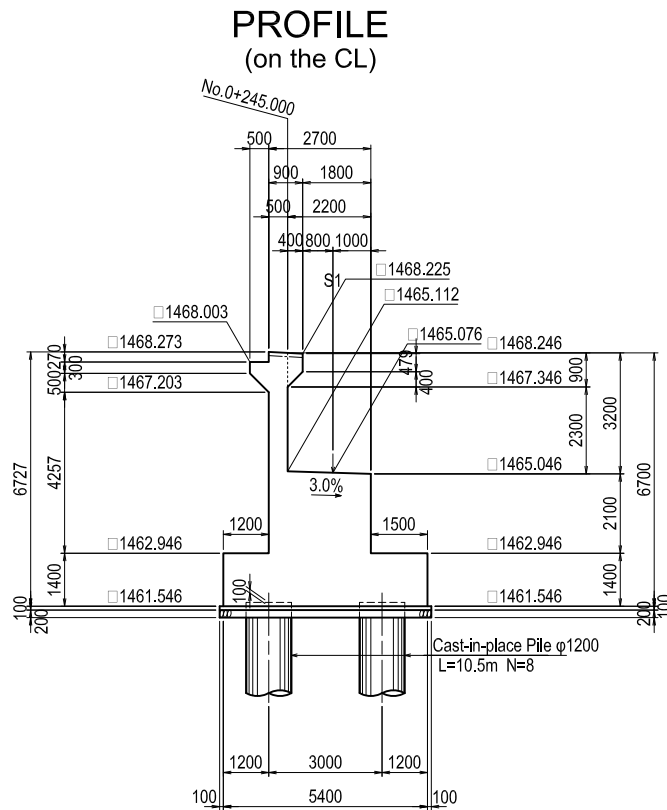
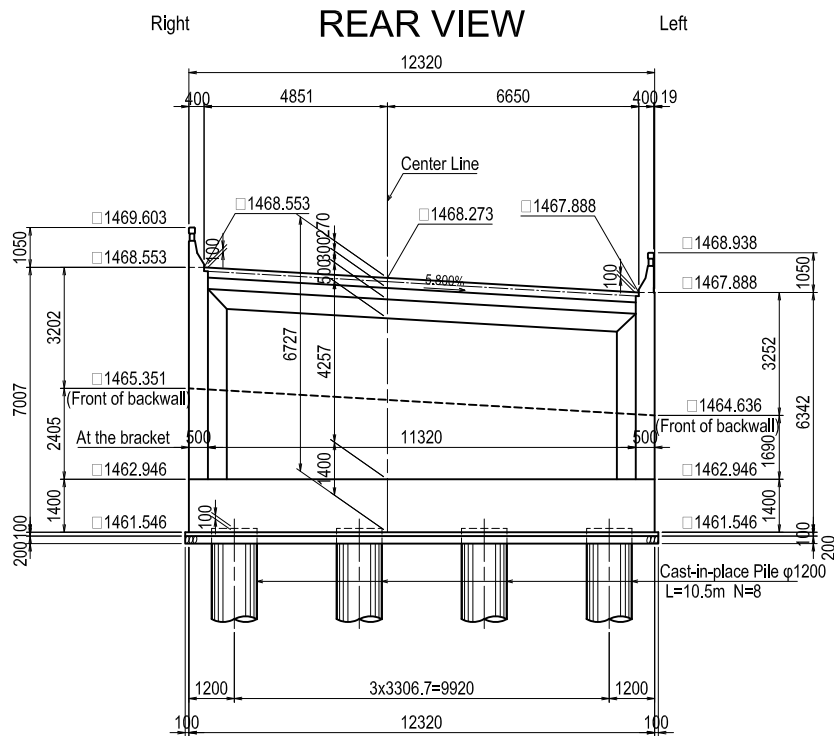
MATERIAL PROPERTIES (Unit: N/mm²)

[Concrete]			Main Girder
Design Strength			40.0
Bending Compressive Stress Limit	During Construction		19.00
	After Construction		15.00
	Permanent load is dominant		14.00
	Transient load is dominant		21.00
	Durability (Fatigue)		14.00
Bending Tensile Stress Limit	During Construction		-1.60
	After Construction		-1.79
	Permanent load is dominant		0.00
	Transient load is dominant		-2.70
	Durability (Fatigue), Upper Edge		0.00
	Durability (Fatigue), Lower Edge		-1.50
Diagonal Tensile Stress Limit	Permanent load is dominant		1.00
	Transient load is dominant		2.20
	Durability (Fatigue)		2.00
Largest Average Shear Stress			5.30
[PC Steel]		Main Girder Inside Cable	Main Girder Lateral Post-tensioning Cables
		SWPR7B 12S15.2	SWPR19 1S28.6
Tensile Strength		1880	1780
Yield Stress		1600	1510
Tensile Stress Limit	During Prestressing	1440	1359
	Immediately After Prestressing	1316	1246
	Durability (Fatigue)	1128	1068
[Rebar]			SD345
Yield Stress			345
Tensile Stress Limit		Durability (Fatigue)	180
		Others	210

GENERAL DIMENSIONS OF ABUTMENT A1 (1/2) SCALE 1:100 (A1)
1:200 (A3)



* () value indicates elevation at the front of the backwall



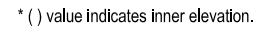
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT		THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6		PROJECT NO. - -		REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		STATUS: -		DRAWING NO. BR- 04		REV	DATE	DESCRIPTION
			TITLE: GENERAL DIMENSIONS OF ABUTMENT A1 (1/2)		SCALE 1:100 (A1) / 1:200 (A3)				
					DATE - -				

SCALE 1:100 (A1)
1:200 (A3)

WING PROFILE (LEFT)
(A - A)

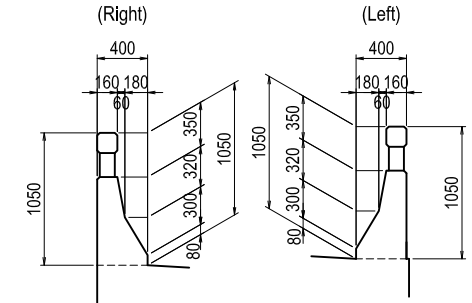


WING PROFILE (RIGHT)
(B - B)

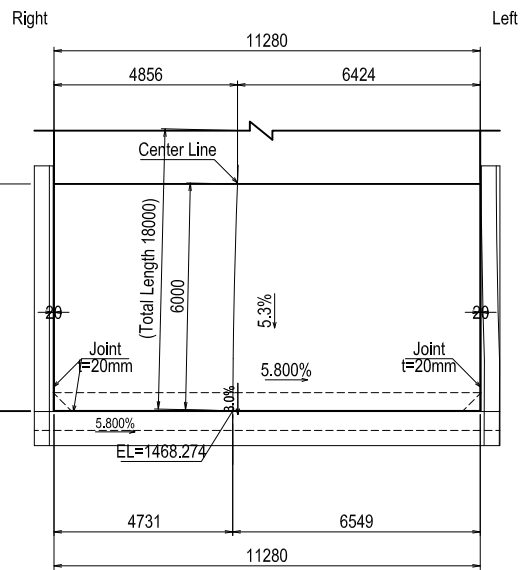


PARAPETS DETAIL

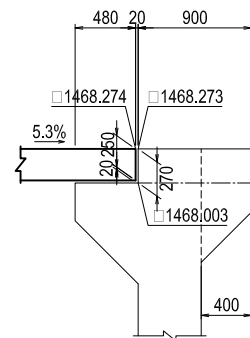
SCALE 1:30 (A1)
1:60 (A3)



APPROACH SLAB DETAIL
(thickness=250)



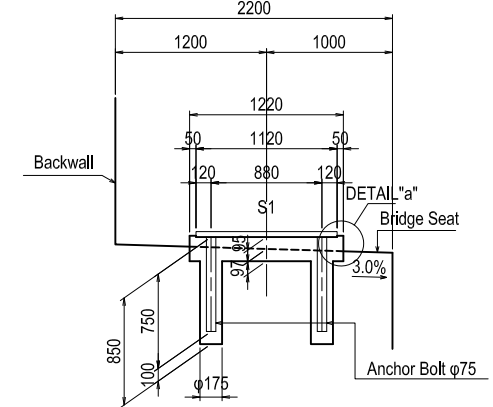
BRACKET DETAIL
(on the CL)



BEARING DETAIL

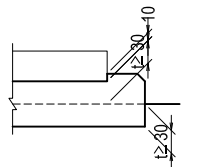
SCALE 1:30 (A1)
1:60 (A3)

C - C
Longitudinal



DETAIL "a"

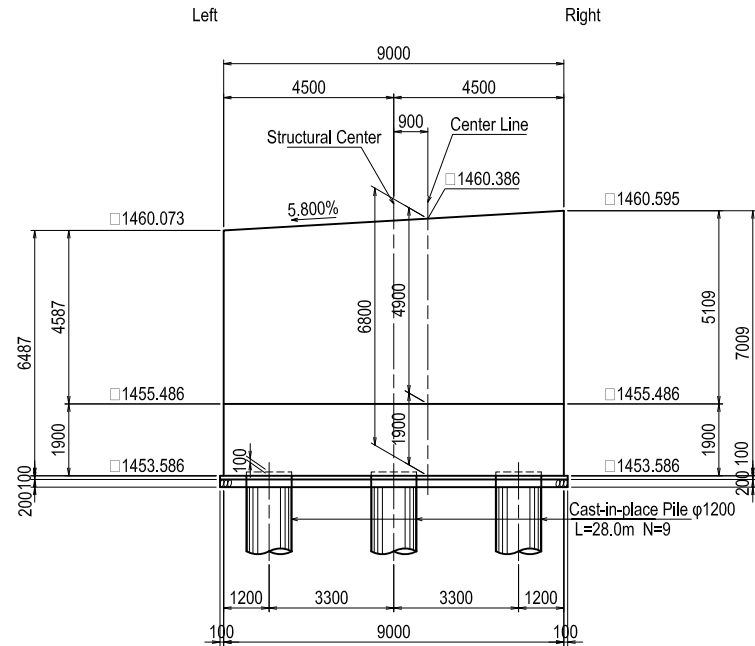
SCALE 1:5 (A1)
1:10 (A3)



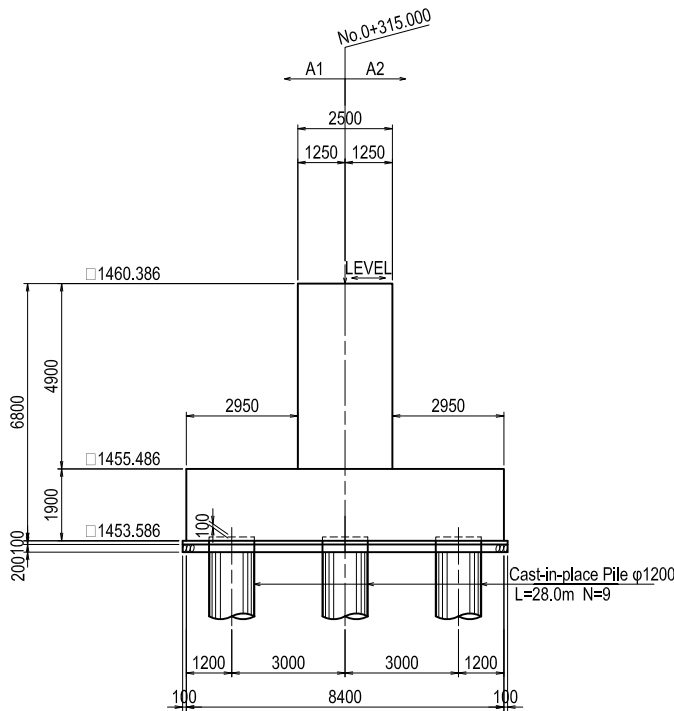
GENERAL DIMENSIONS OF PIER P1

SCALE 1:100 (A1)
1:200 (A3)

FRONT VIEW

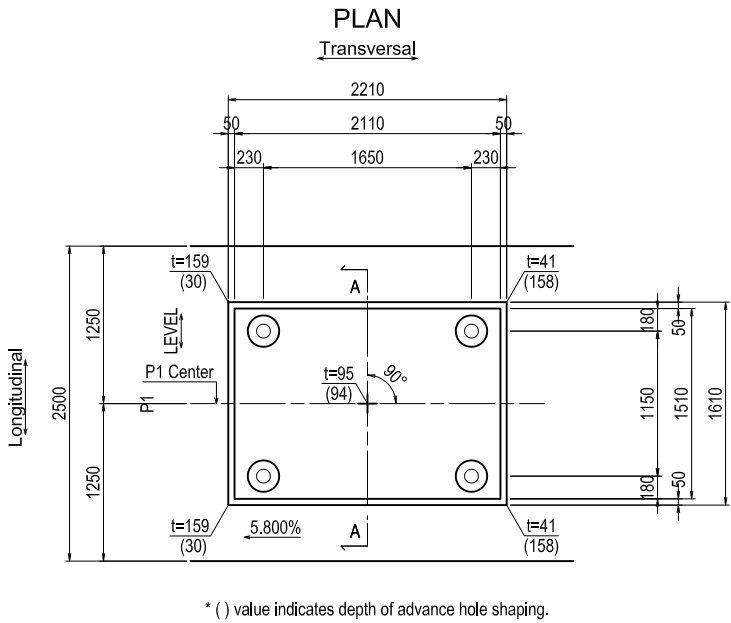


PROFILE
(on the CL)



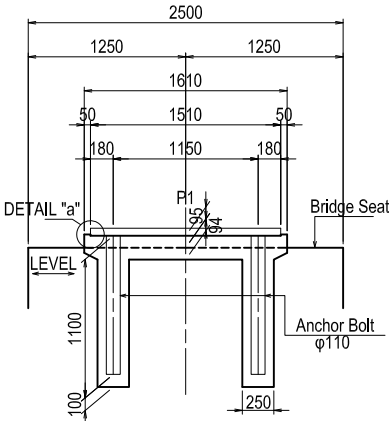
BEARING DETAIL

SCALE 1:30 (A1)
1:60 (A3)



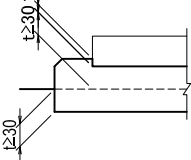
A - A

Longitudinal

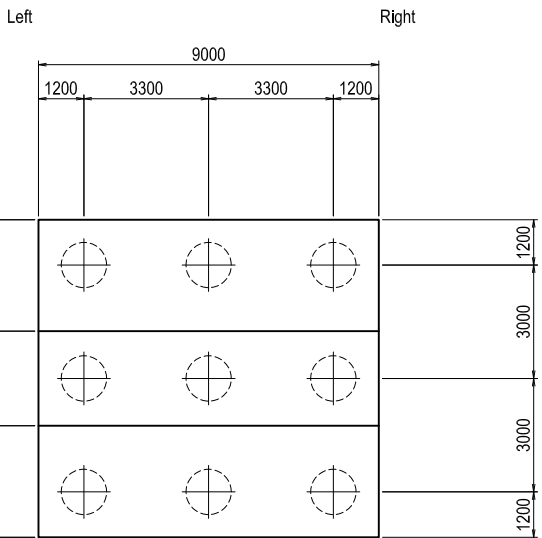


DETAIL "a"

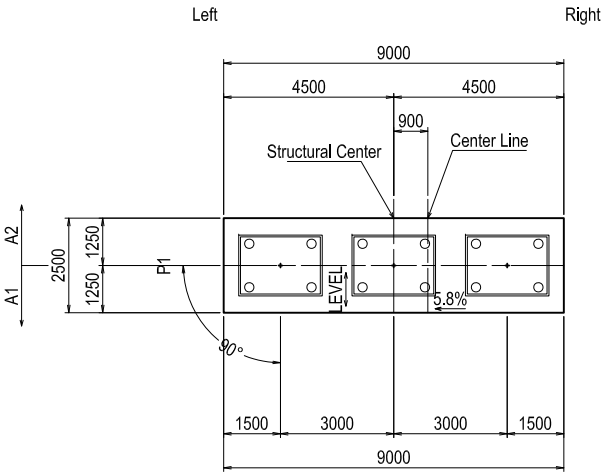
SCALE 1:5 (A1)
1:10 (A3)



PLAN VIEW OF PILECAP



PLAN



CONSULTANT

NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: GENERAL DIMENSIONS OF ABUTMENT P1

PROJECT NO. - -

DRAWING NO. BR-06

SCALE 1:100 (A1) / 1:200 (A3)

DATE - -

REVISION RECORD

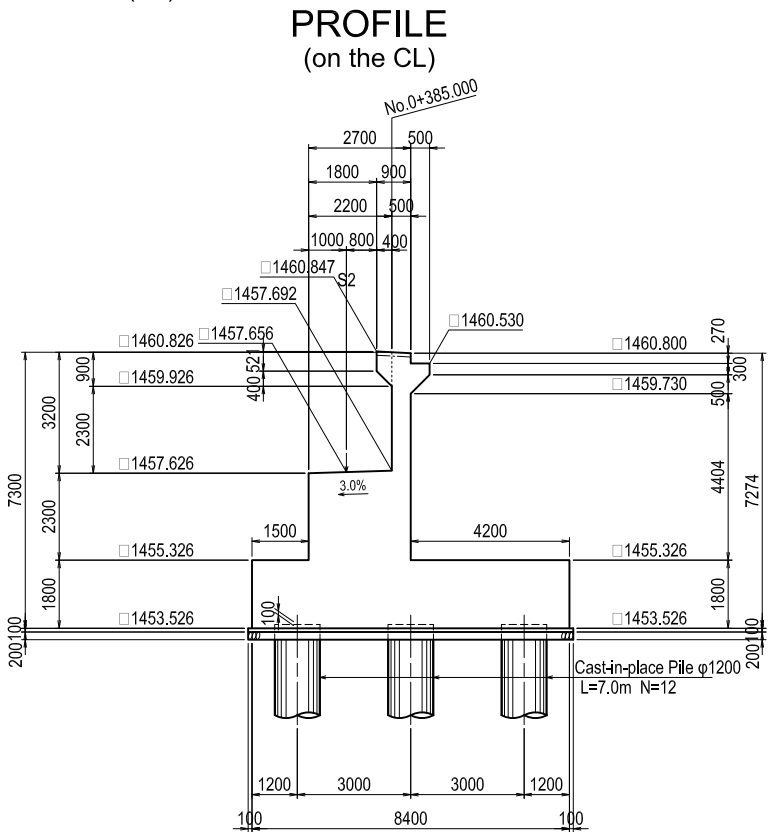
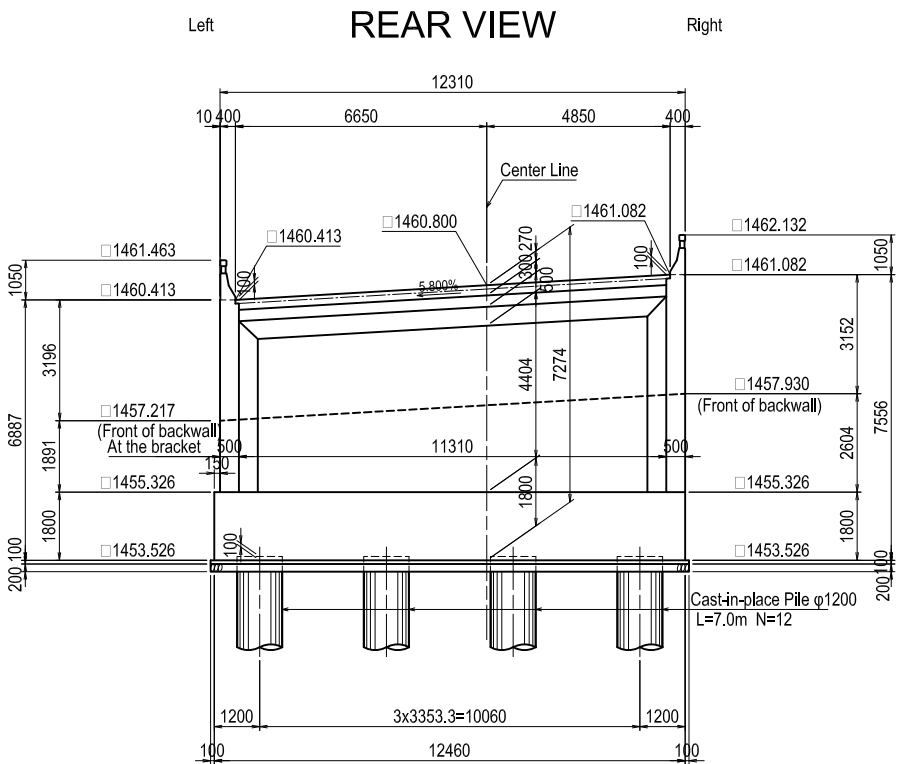
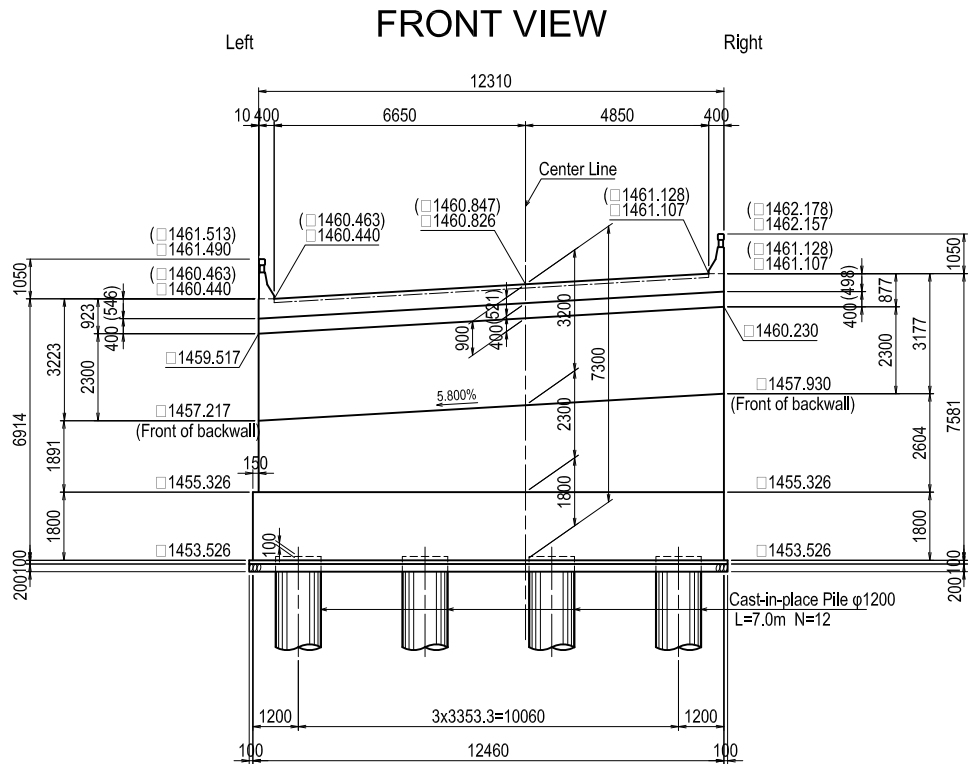
REV DATE DESCRIPTION

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

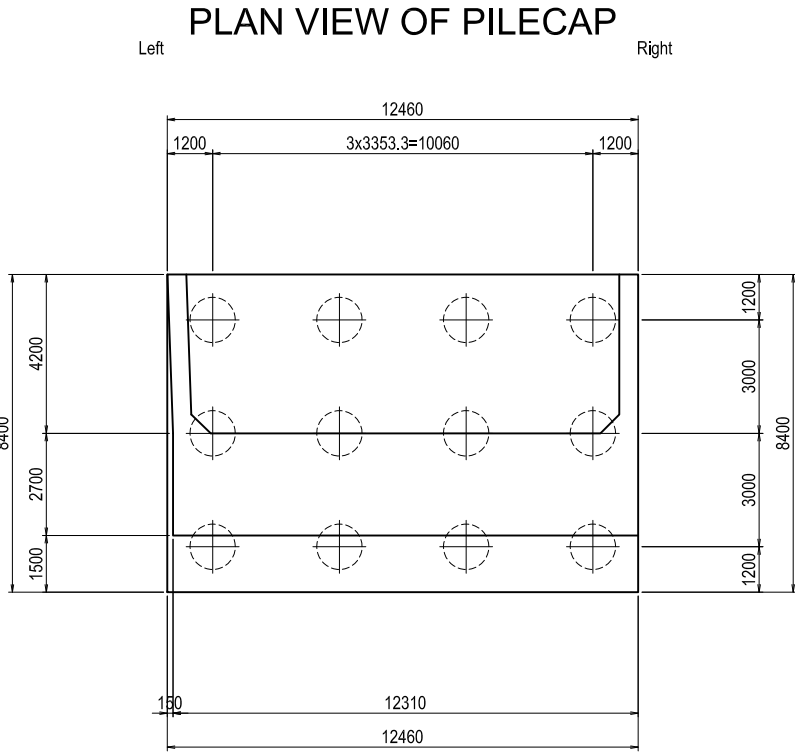
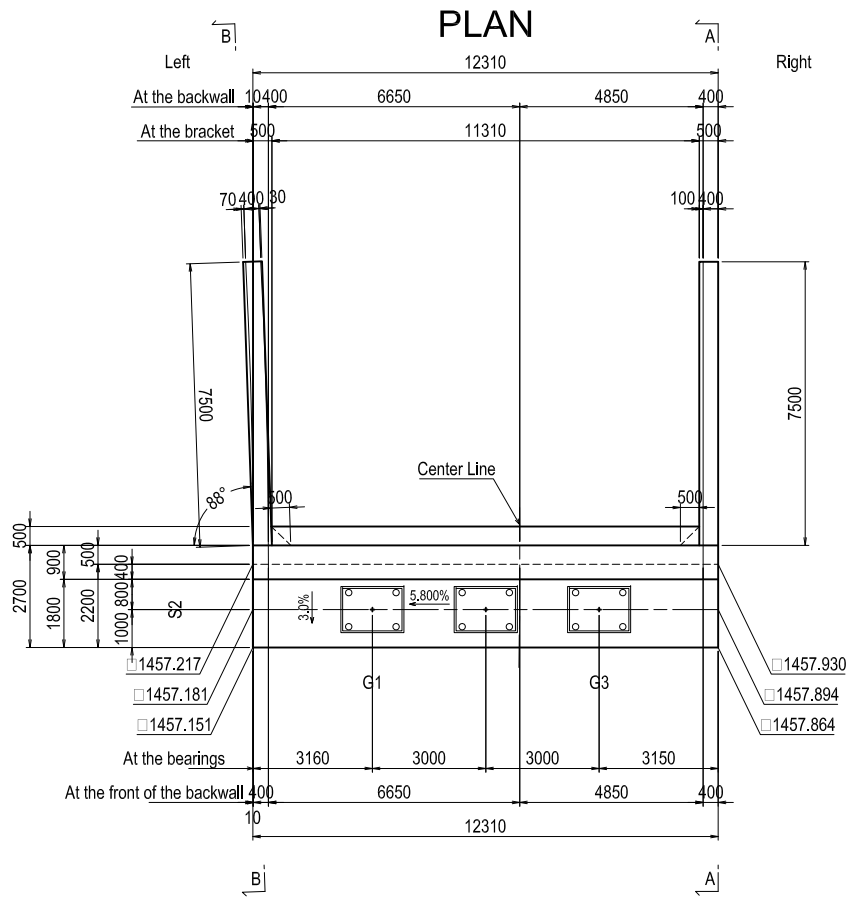
JAPAN INTERNATIONAL COOPERATION AGENCY

GENERAL DIMENSIONS OF ABUTMENT A2 (1/2)

SCALE 1:100 (A1)
1:200 (A3)



* () value indicates elevation at the front of the backwall



A2 - 37

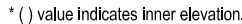
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -			REVISION RECORD		
			DRAWING NO. BR-07			REV	DATE	DESCRIPTION
			SCALE 1:100 (A1) / 1:200 (A3)					
			DATE - -					
 JAPAN INTERNATIONAL COOPERATION AGENCY	 NIPPON KOEI CO.,LTD.	STATUS: -						
		TITLE: GENERAL DIMENSIONS OF ABUTMENT A2 (1/2)						

SCALE 1:100 (A1)
1:200 (A3)

WING PROFILE (RIGHT)
(A - A)

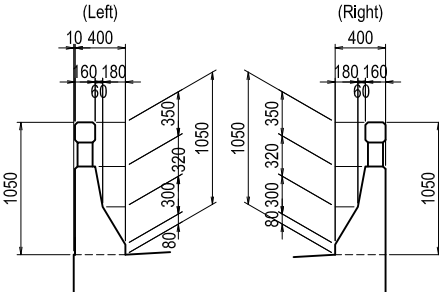


WING PROFILE (LEFT)
(B - B)



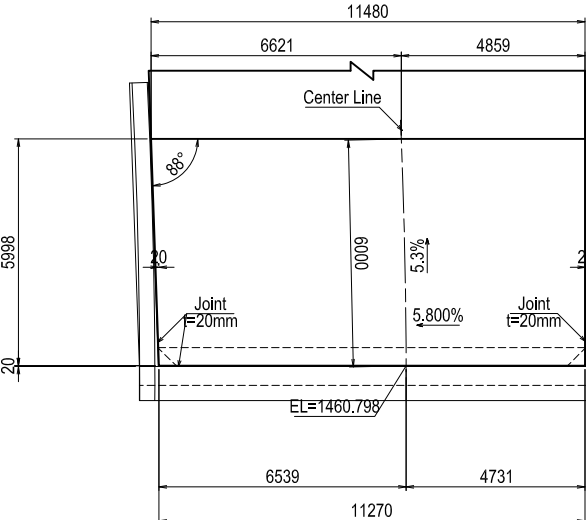
PARAPETS DETAIL

SCALE 1:30 (A1)
1:60 (A3)



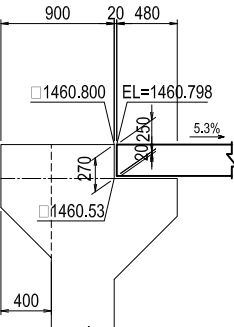
APPROACH SLAB DETAIL
(thickness=250)

Left Right



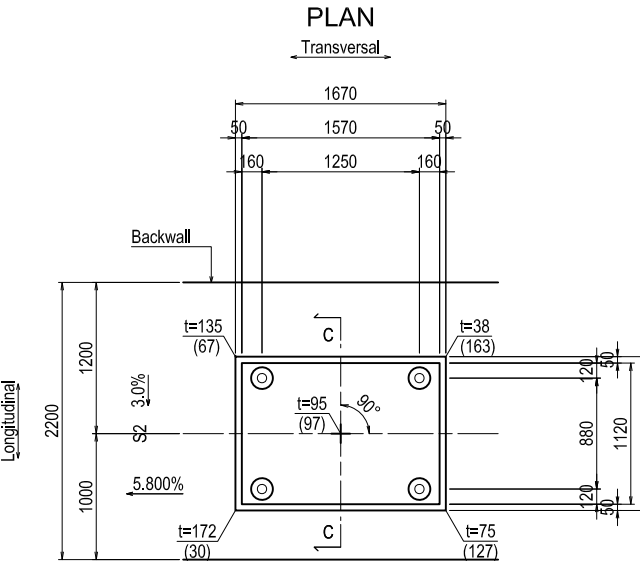
BRACKET DETAIL

(on the CL)



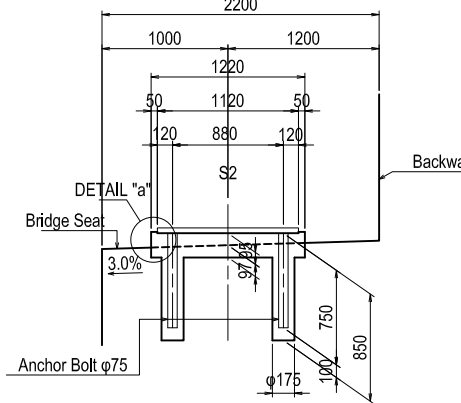
BEARING DETAIL

SCALE 1:30 (A1)
1:60 (A3)

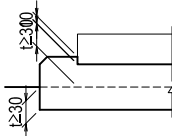


* () value indicates depth of advance hole shaping

C - C
Longitudinal



DETAIL "a"
SCALE 1:5 (A1)
1:10 (A3)



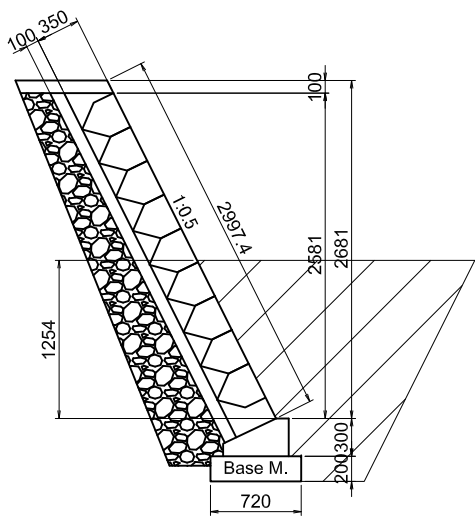
SCALE 1:300 (A1)
1:600 (A3)



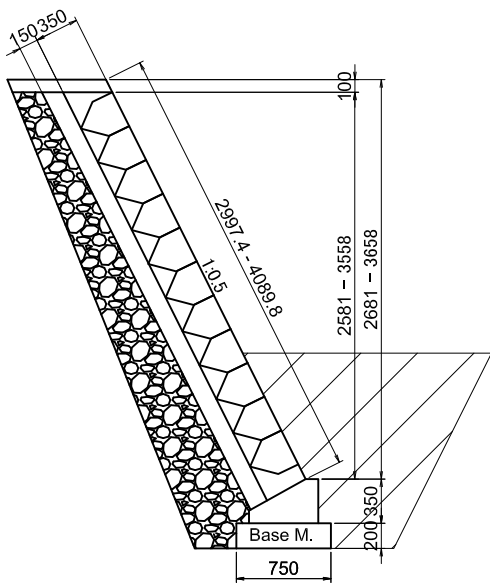
MISCELLANEOUS WORKS STONE MASONRY (1)

STONE MASONRY SCALE 1:30 (A1)
1:60 (A3)

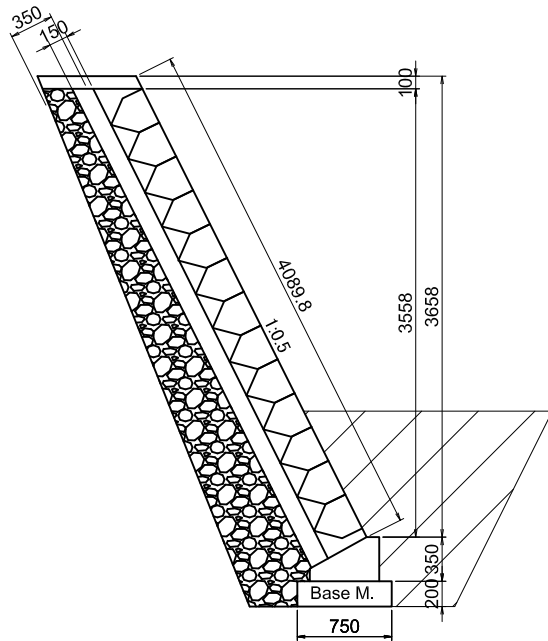
Type A



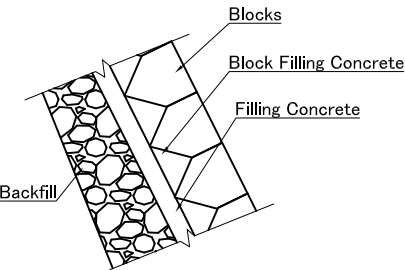
Type B



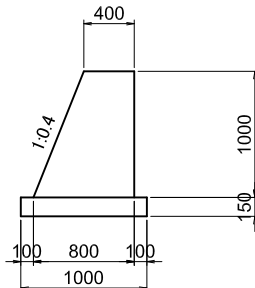
Type C



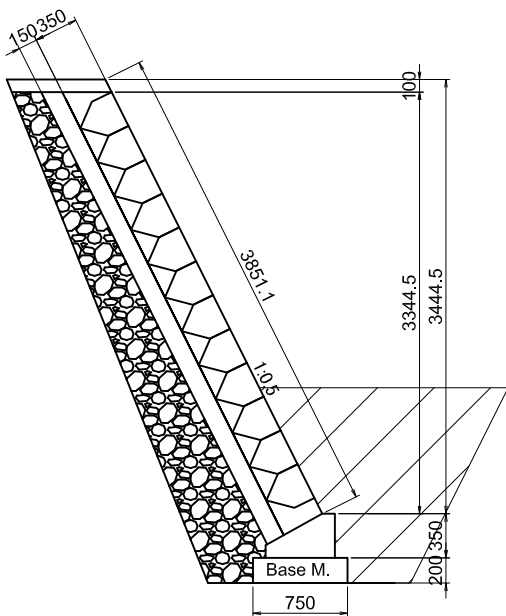
BLOCK DETAILS SCALE 1:20 (A1)
1:40 (A3)



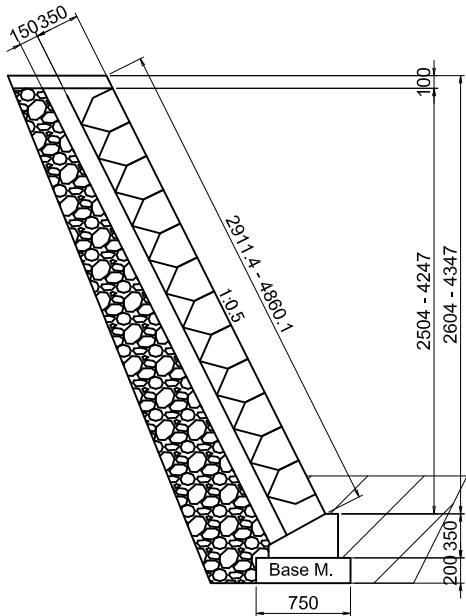
GRAVITY WALL SCALE 1:30 (A1)
1:60 (A3)



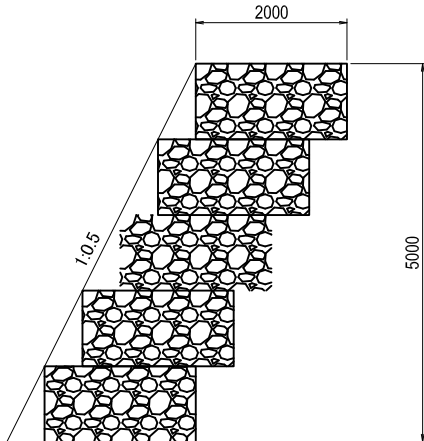
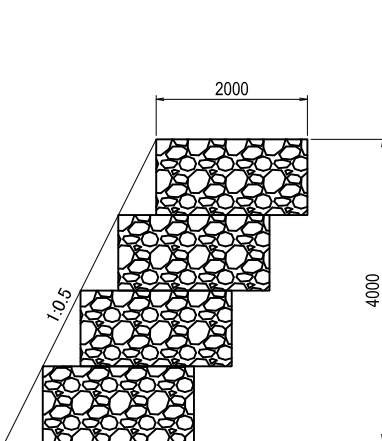
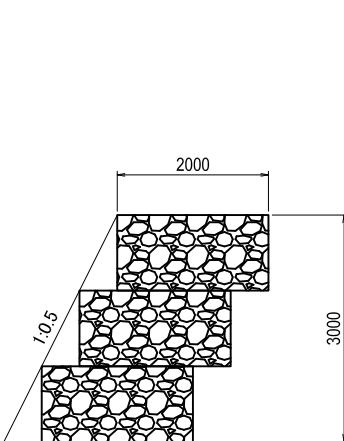
Type D



Type E



GABIONS SCALE 1:50 (A1)
1:100 (A3)



CONSULTANT

 NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: MISCELLANEOUS WORKS STONE MASONRY (1)

PROJECT NO. - -

DRAWING NO.: MC - 02

SCALE: 1:30 (A1) / 1:60 (A3)

DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION

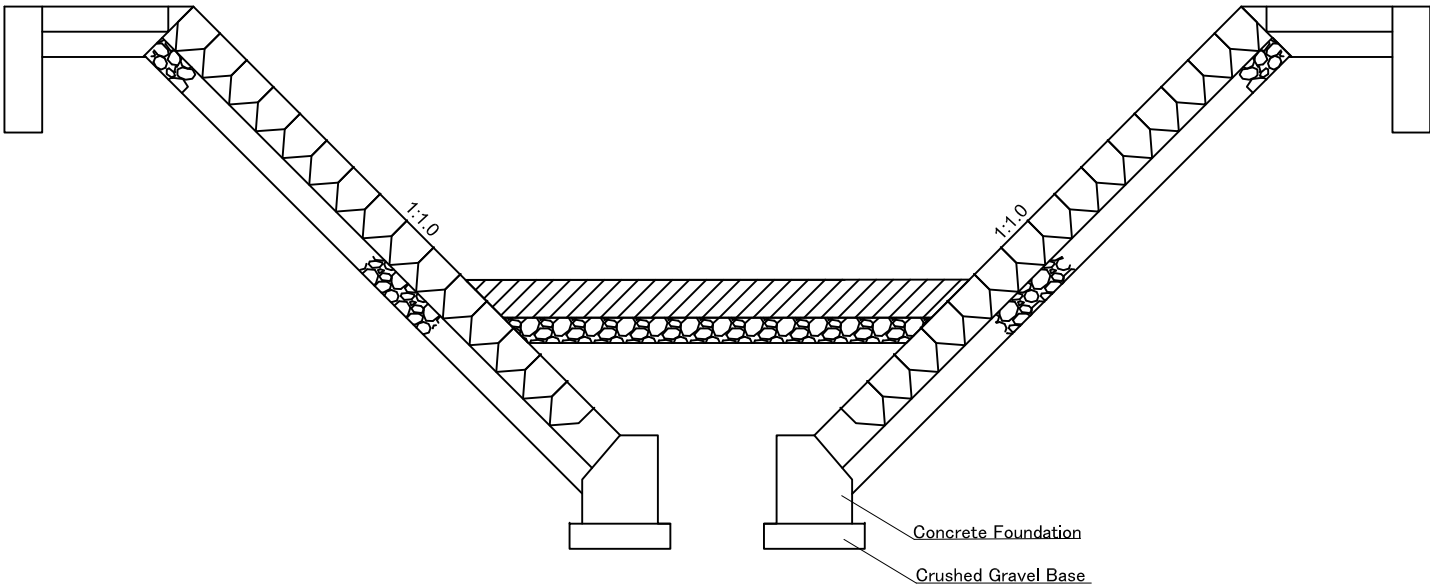
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

 JAPAN INTERNATIONAL COOPERATION AGENCY

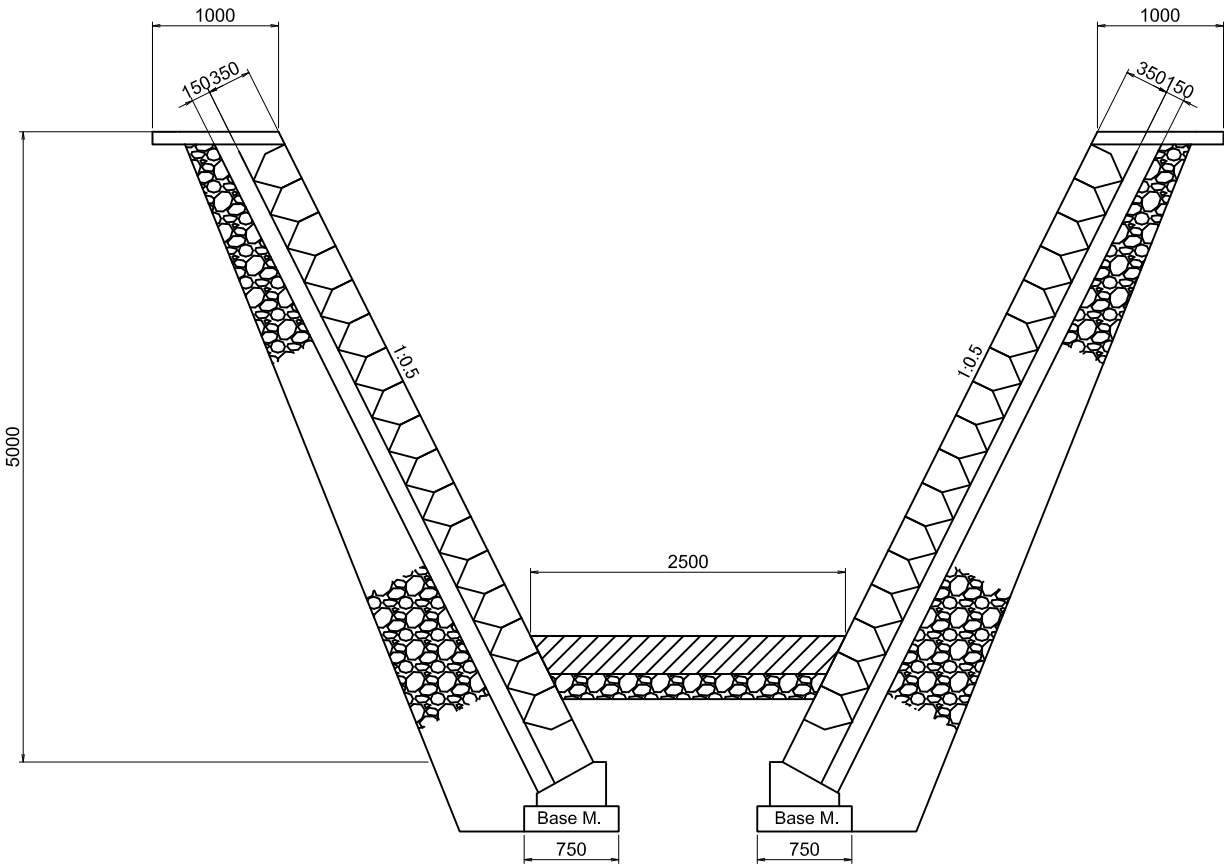
MISCELLANEOUS WORKS STONE MASONRY (2)

SCALE 1:30 (A1)
1:60 (A3)

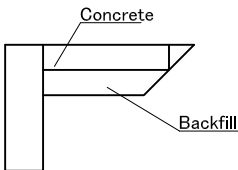
STONE MASONRY



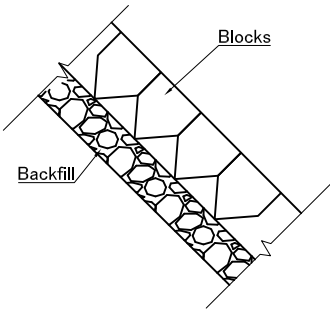
STONE MASONRY



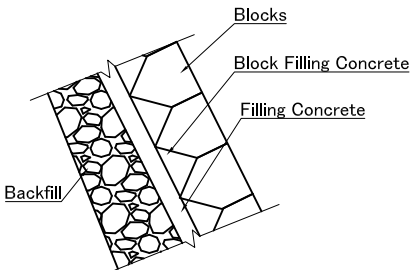
CONCRETE CAP SCALE 1:30 (A1)
1:60 (A3)



BLOCK DETAILS SCALE 1:20 (A1)
1:40 (A3)



BLOCK DETAILS SCALE 1:20 (A1)
1:40 (A3)



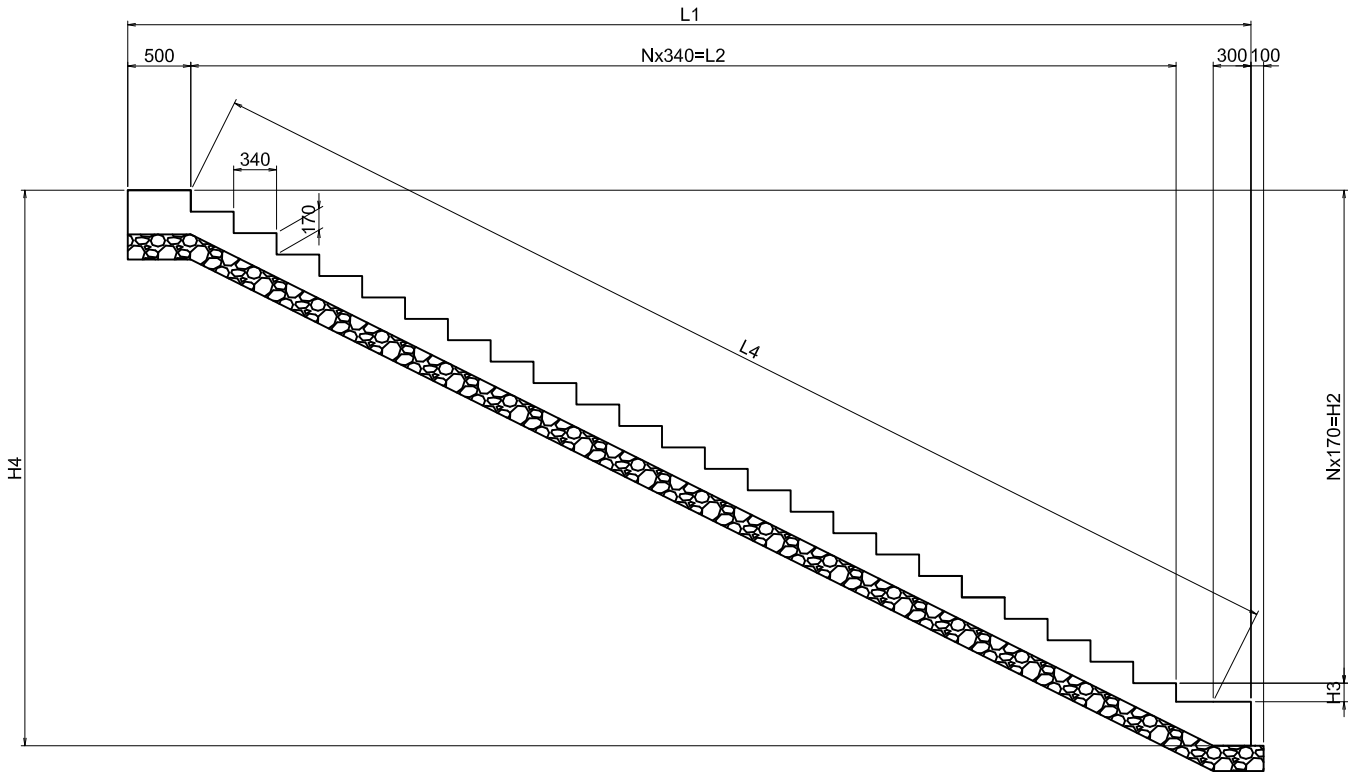
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)  JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
		STATUS: -	DRAWING NO.: MC - 03	REV	DATE	DESCRIPTION
		TITLE: MISCELLANEOUS WORKS STONE MASONRY (2)	SCALE: 1:30 (A1) / 1:60 (A3)			
			DATE - -			

MISCELLANEOUS WORKS STAIRS

SCALE 1:30 (A1)
1:60 (A3)

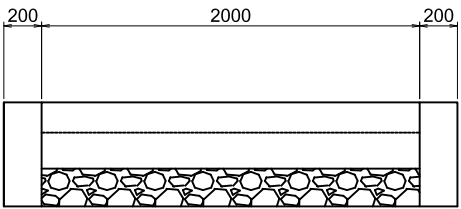
STAIRS

SCALE 1:30 (A1)
1:60 (A3)



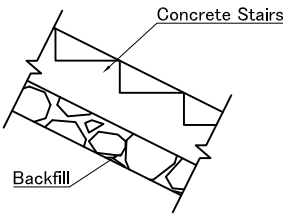
STAIRS WIDTH

SCALE 1:20 (A1)
1:40 (A3)



STAIRS DETAILS

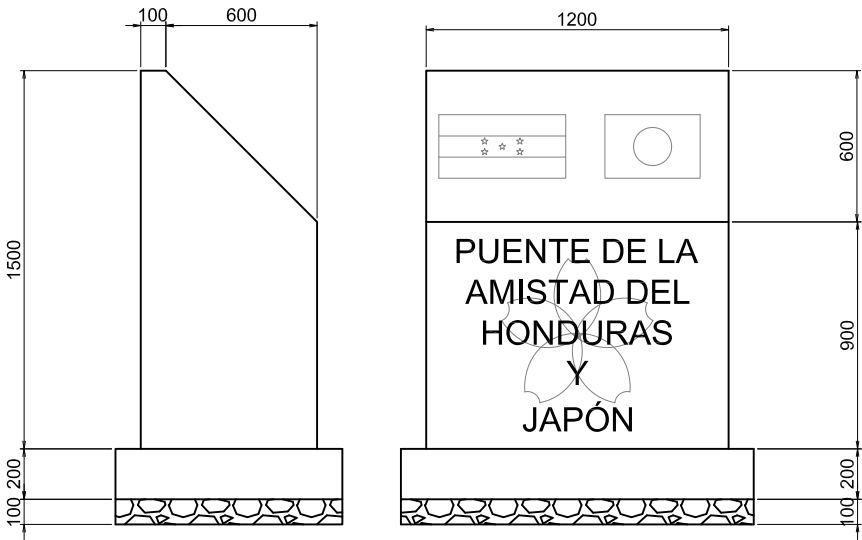
SCALE 1:20 (A1)
1:40 (A3)



寸法表	H (mm)	N	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)
Stairs 1	4057	23	4057	3910	147	4407	8914	7820	294	9071.7
Stairs 2	1824	10	1824	1700	124	2174	4448	3400	248	4078.6
Stairs 3	3965	23	3965	3910	55	4315	8730	7820	110	8866.0
Stairs 4	2402	14	2402	2380	22	2752	5604	4760	44	5371.0
Stairs 5	3572	21	3572	3570	2	3922	7944	7140	4	7987.2

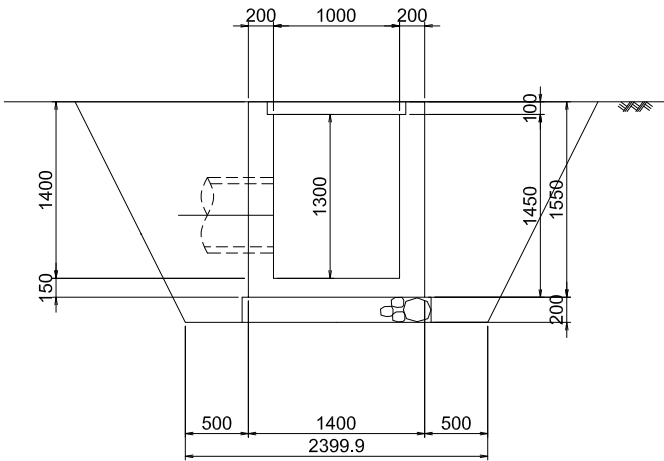
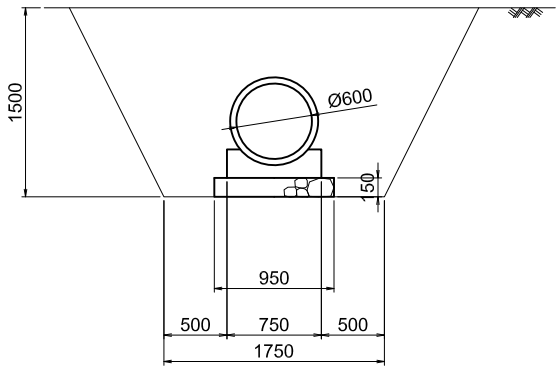
PARTNERSHIP MONUMENT

SCALE 1:15 (A1)
1:30 (A3)



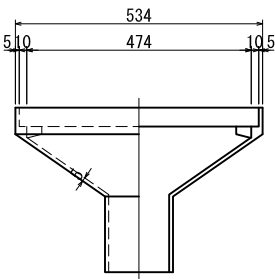
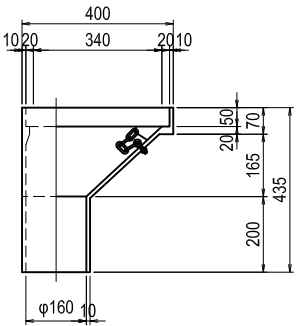
DRAINAGE

SCALE 1:30 (A1)
1:60 (A3)



CATCH PIT

SCALE 1:10 (A1)
1:20 (A3)



CONSULTANT

 NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: MISCELLANEOUS WORKS STAIRS

PROJECT NO. - -

DRAWING NO.: MC - 04

SCALE: 1:30 (A1) / 1:60 (A3)

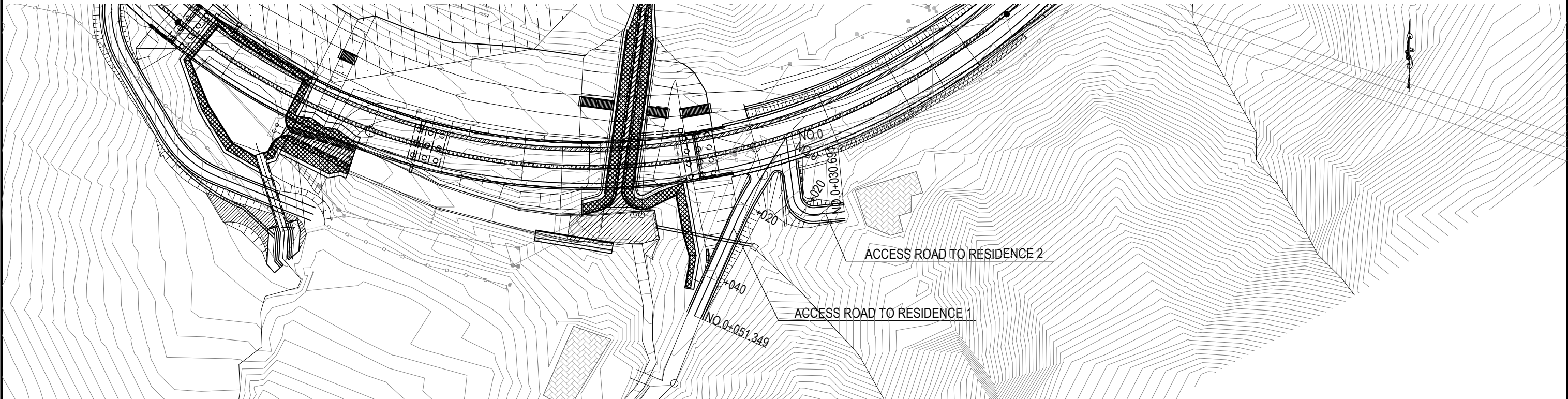
DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION

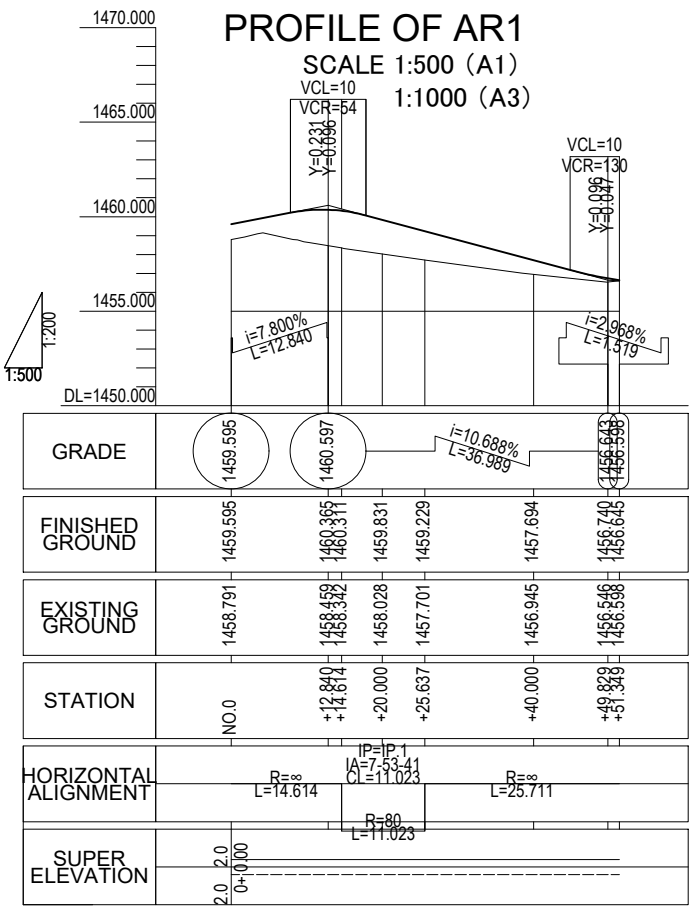
GENERAL PLAN OF ACCESS ROAD TO RESIDENCE

SCALE 1:500 (A1)
1:1000 (A3)



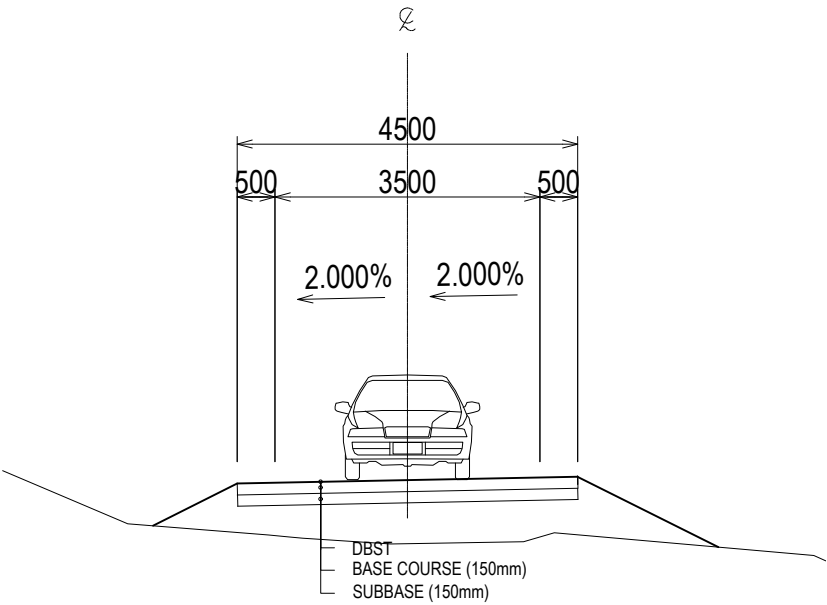
PROFILE OF AR1

SCALE 1:500 (A1)
1:1000 (A3)



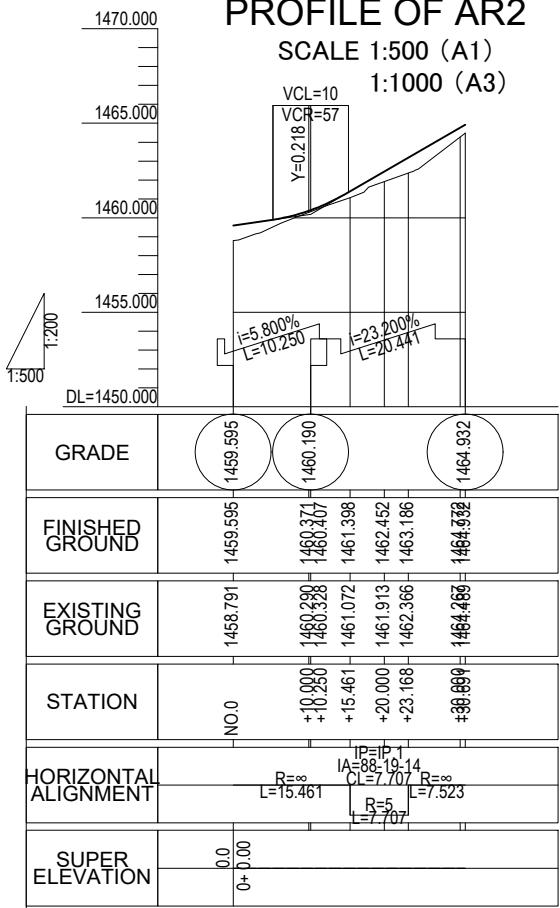
TYPICAL CROSS SECTION

SCALE 1:50 (A1)
1:100 (A3)



PROFILE OF AR2

SCALE 1:500 (A1)
1:1000 (A3)



CONSULTANT

 NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: GENERAL PLAN OF ACCESS ROAD/ A2 SIDE

PROJECT NO. - -

DRAWING NO.: MC - 06

SCALE: 1:500 (A1) / 1:1000 (A3)

DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION

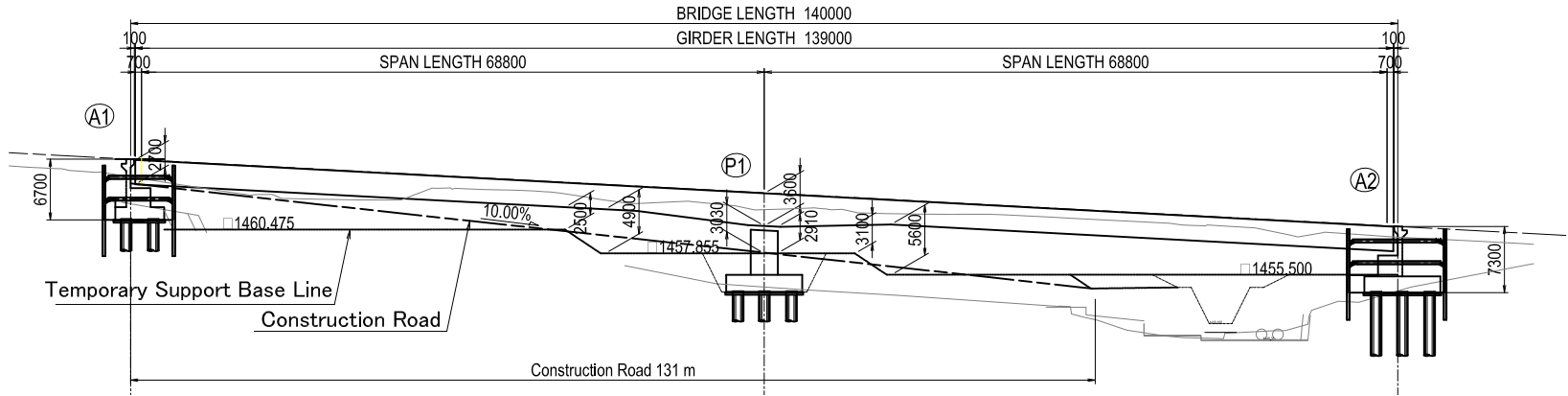
 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

 JAPAN INTERNATIONAL COOPERATION AGENCY

CONSTRUCTION PLAN(1)

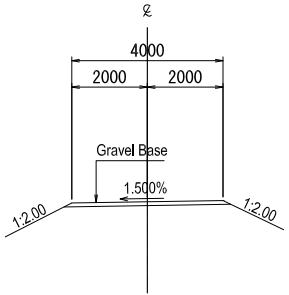
SCALE 1:400 (A1)
1:800 (A3)

PROFILE

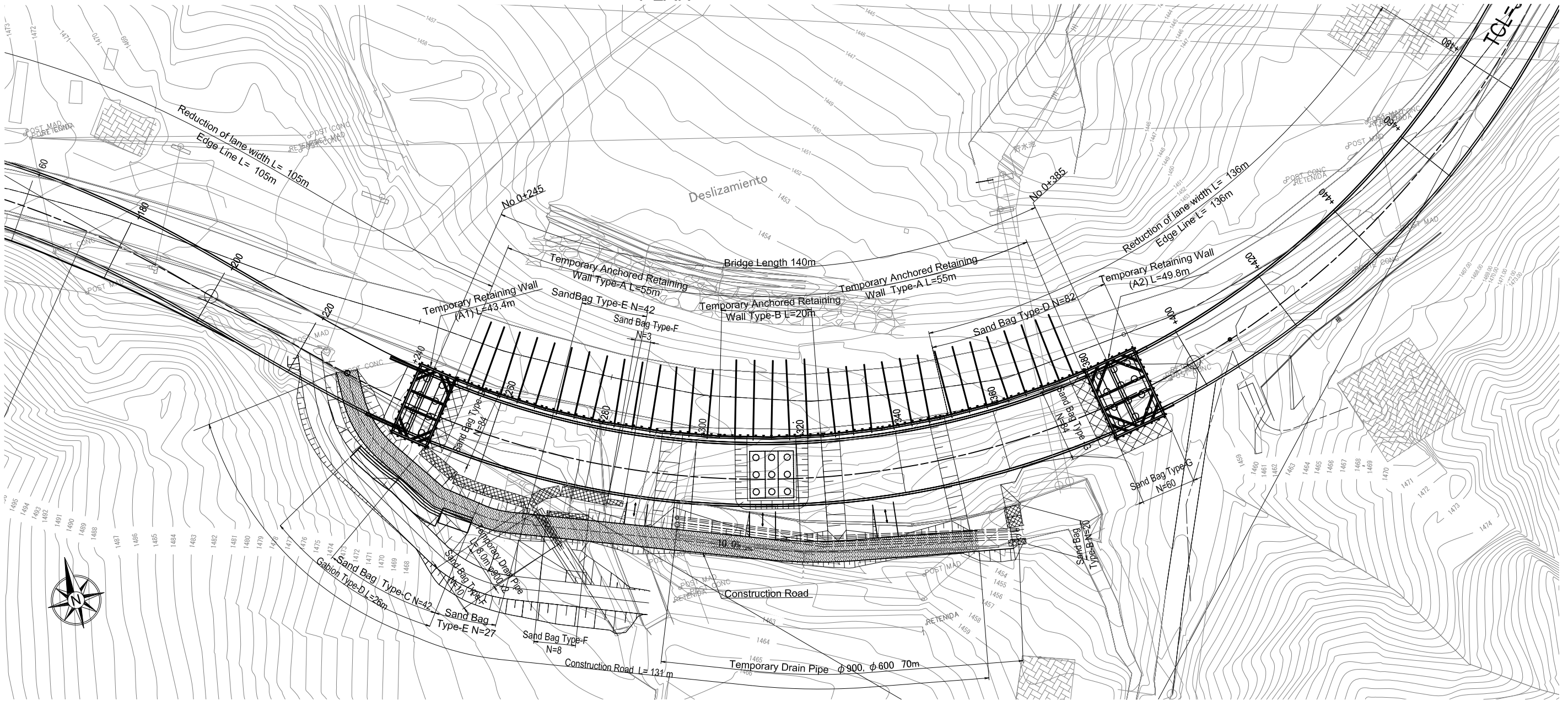


TYPICAL CROSS SECTION

SCALE 1:100 (A1)
1:200 (A3)



PLAN



A2 - 44

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

DRAWING NO. TM - 01

REV DATE DESCRIPTION

SCALE 1:400 (A1) / 1:800 (A3)

DATE - -

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

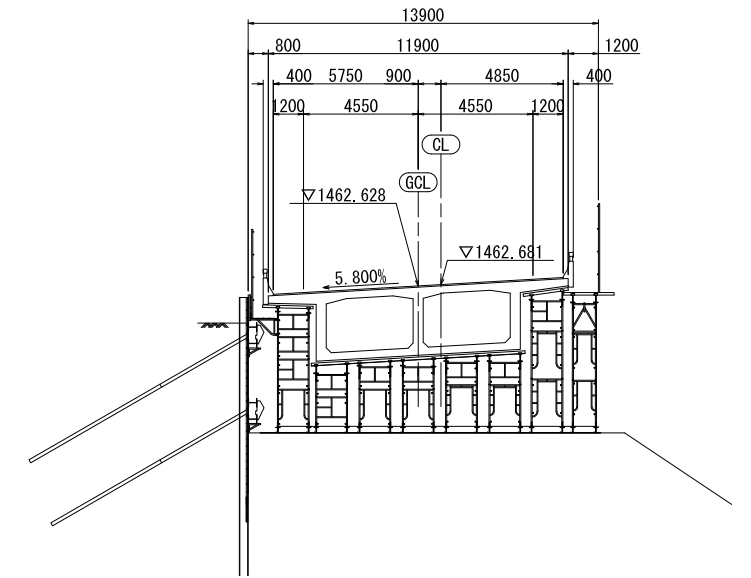
NIPPON KOEI CO.,LTD.

STATUS: -

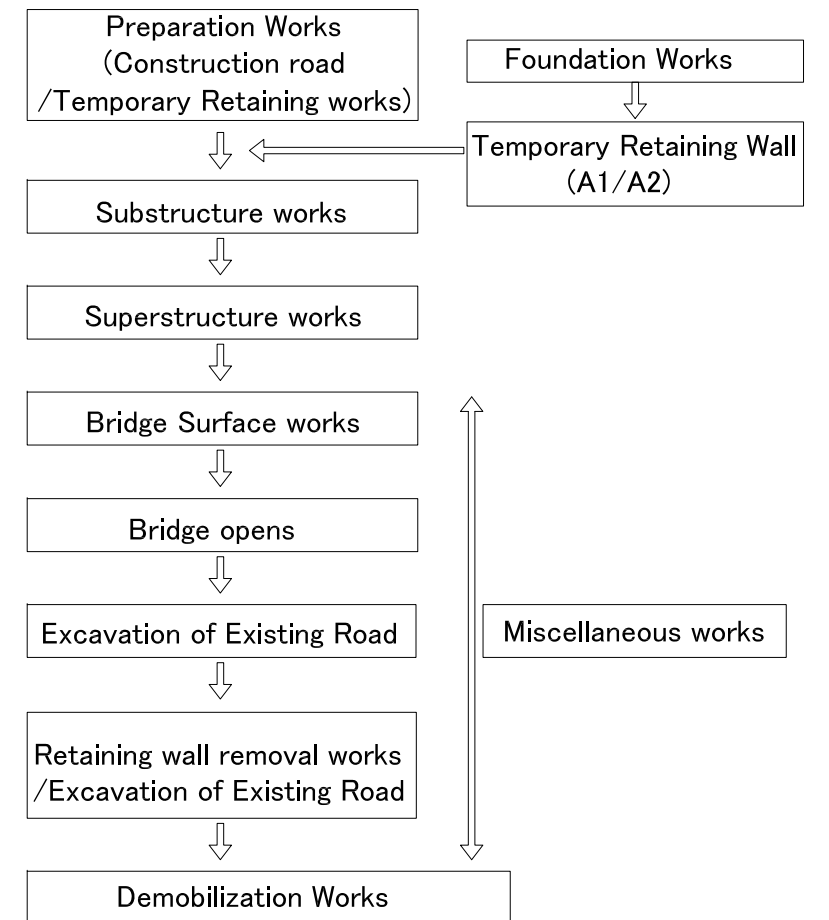
TITLE: CONSTRUCTION PLAN (1)

SCALE 1:400 (A1)
1:800 (A3)

TYPICAL CROSS SECTION SCALE 1:150 (A1)
1:300 (A3)



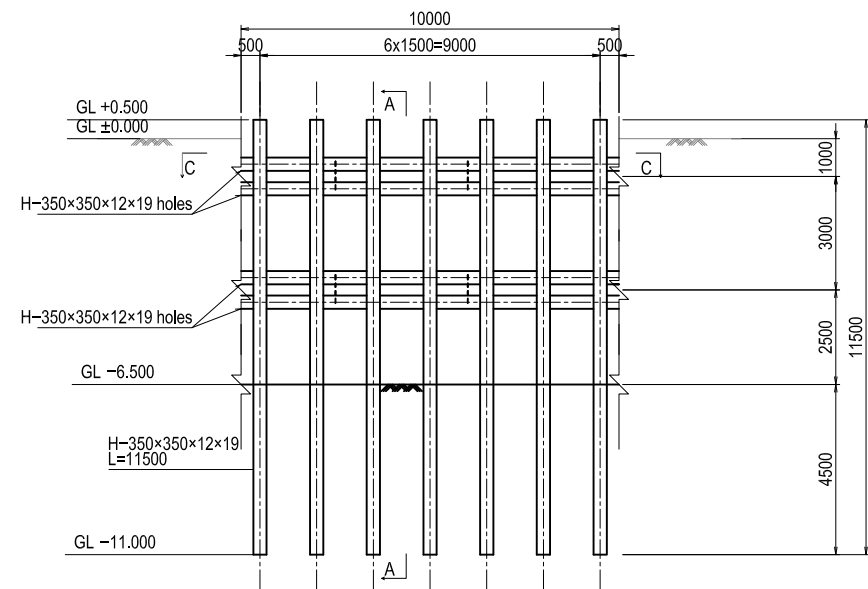
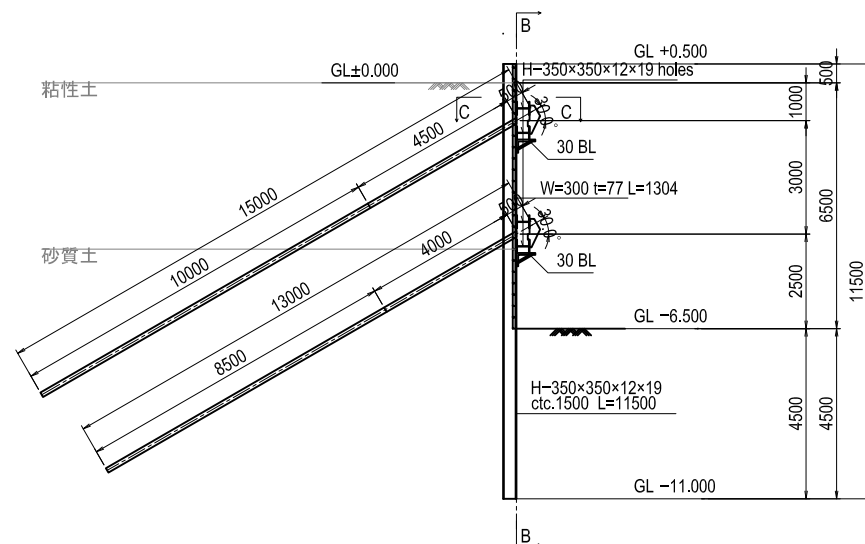
CONSTRUCTION STEP



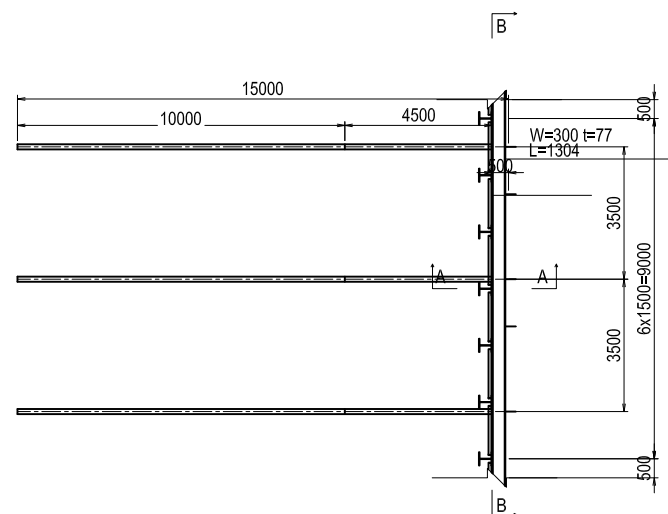
A2 - 45

1:200 (A3)

SECTION B-B



SECTION C-C



(Per 10m)

	Dimension	Unit	Amount	Unit Weight	Weight
Pile	H-350×350×12×19	m	80.500	135.0kg/m	10.868t
Wale	H-350×350×12×19 holes	m	40.000	150.0kg/m	6.000t
Total					16.868t
Lagging Panels	W=300 t=57	m²	70.000	-	-
Total			70.000 m²		

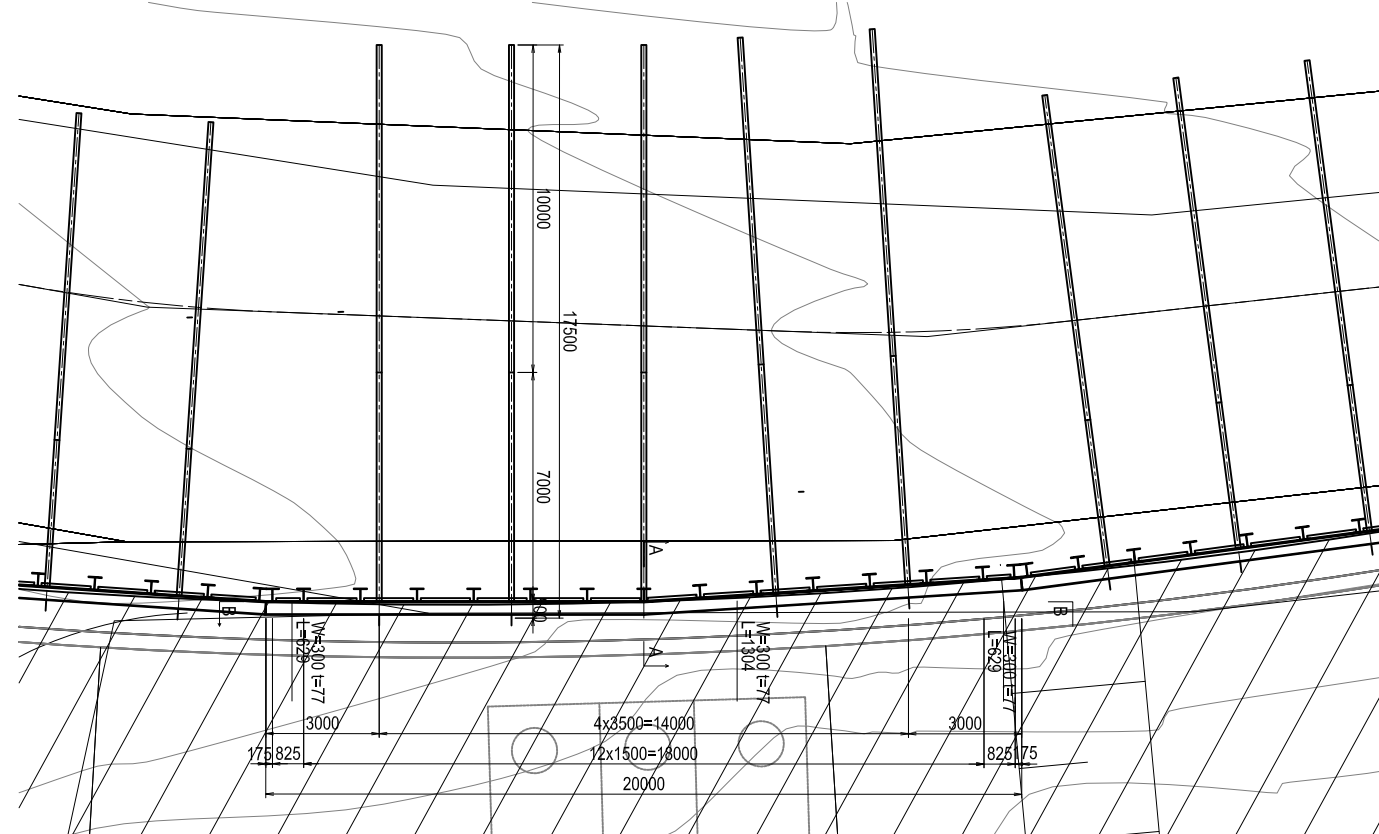
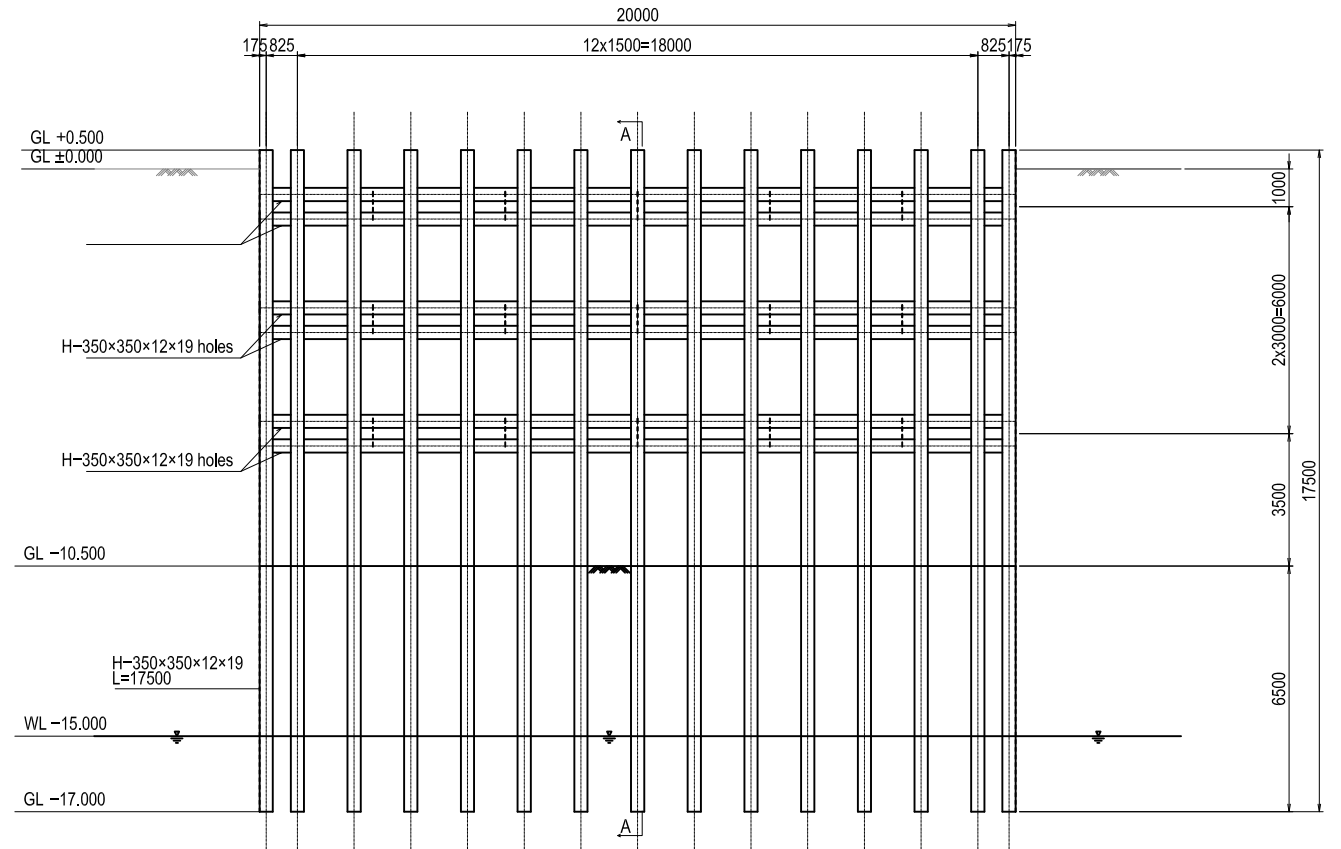
(Per 10m)

	Dimension	Unit	Amount	Anchor Length	Length
1	10×φ12.7mm	m	3.857	15.000	57.857
2	10×φ12.7mm	m	3.857	13.000	50.143
Total		m			108.000

1:200 (A3)

TYPE-B

SECTION B-B

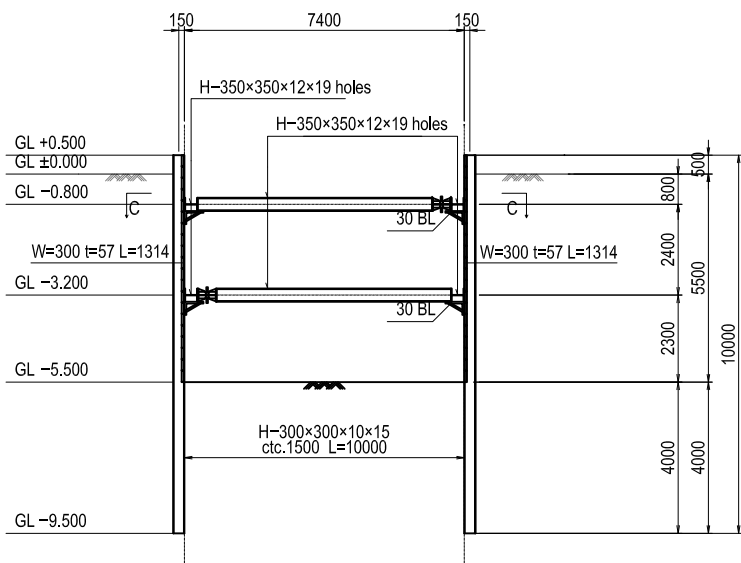


	Dimension	Unit	Amount	Unit Weight	Weight
Pile	H-350×350×12×19	m	262.500	135.0kg/m	35.438t
Wale	H-350×350×12×19 holes	m	120.000	150.0kg/m	18.000t
	Total				53.438t
Lagging Panels	W=300 t=57	m²	220.000	-	-
	Total		220.000 m²		

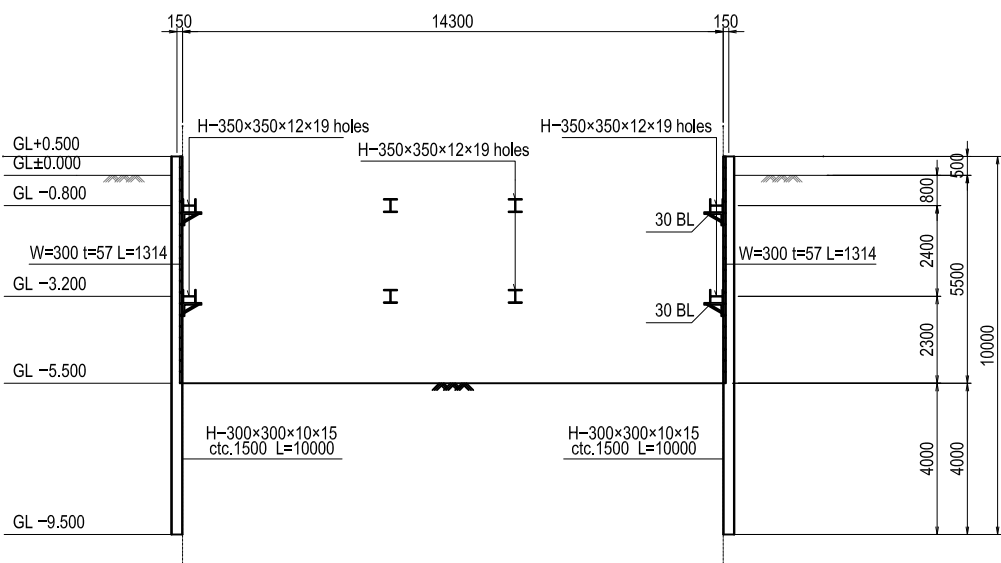
	Dimension	Unit	Amount	Anchor Length	Length
1	10×φ12.7mm	m	5	17.500	87.500
2	10×φ12.7mm	m	5	13.000	65.000
3	10×φ12.7mm	m	5	10.500	52.500
Total					205.000

TEMPORARY RETAINING WALL (A1) SCALE 1:100 (A1)
1:200 (A3)

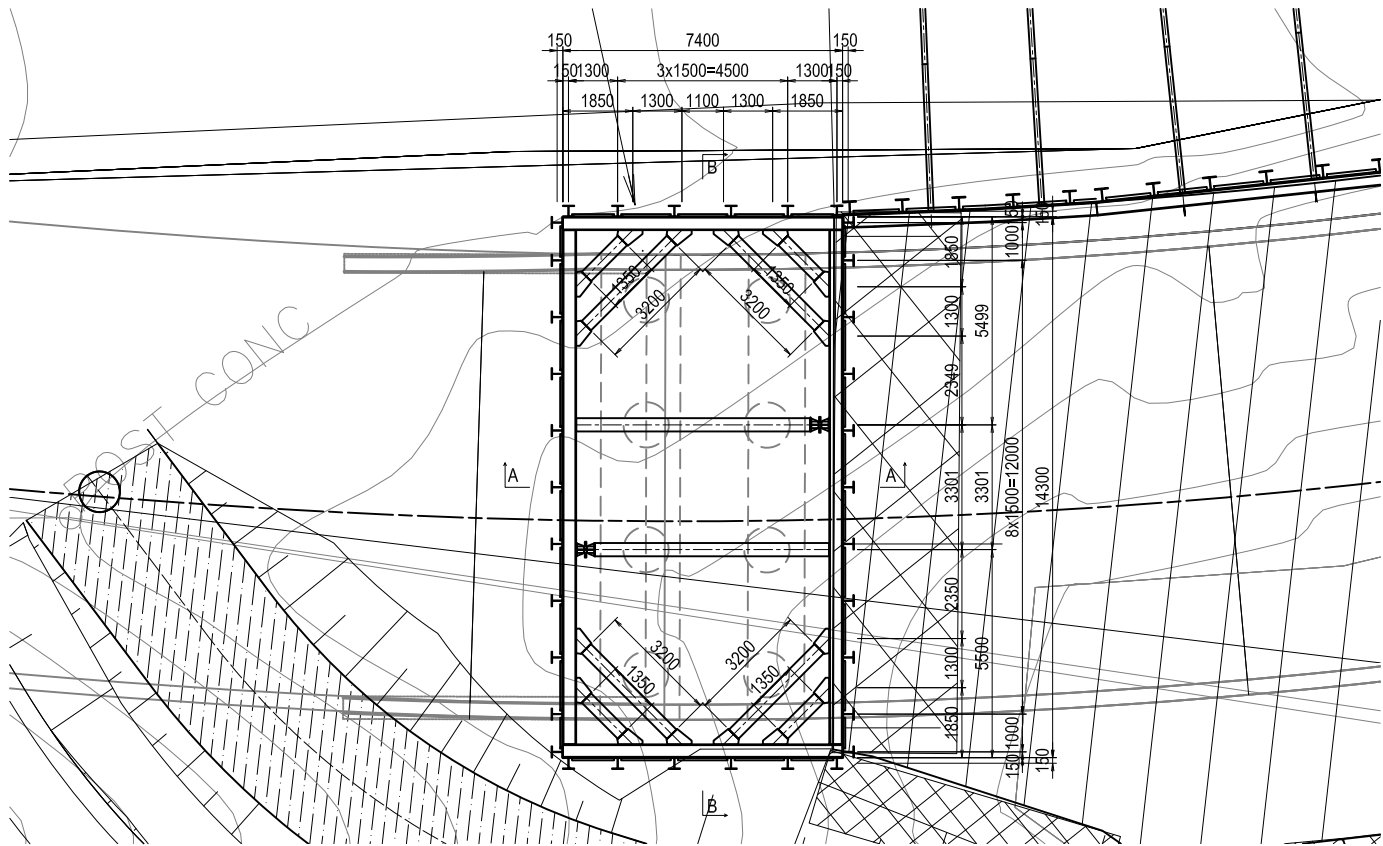
SECTION A-A



SECTION B-B



PLAN



QUANTITY

	Dimension	Unit	Amount	Unit Weight	Weight
Pile	H-350×350×10×15	m	340.000	93.0kg/m	31.620t
Wale	H-350×350×12×19 holes	m	84.000	150.0kg/m	12.600t
Strut	H-350×350×12×19 holes	m	24.800	150.0kg/m	3.720t
Angle Brace	H-350×350×12×19 holes	m	32.648	150.0kg/m	4.898t
Total					52.838t
Lagging Panels	W=300 t=57	m ²	260.400	-	-
Total			260.400 m ²		

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. - -

REVISION RECORD

DRAWING NO.: TM - 03

REV DATE DESCRIPTION

SCALE: 1:100 (A1) / 1:200(A2)

DATE - -

STATUS: -

TITLE: TEMPORARY RETAINING WALL (A1)

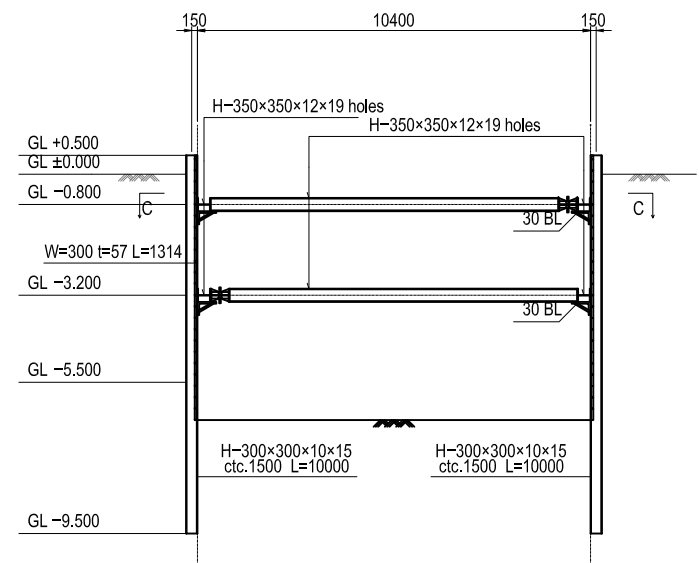
SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

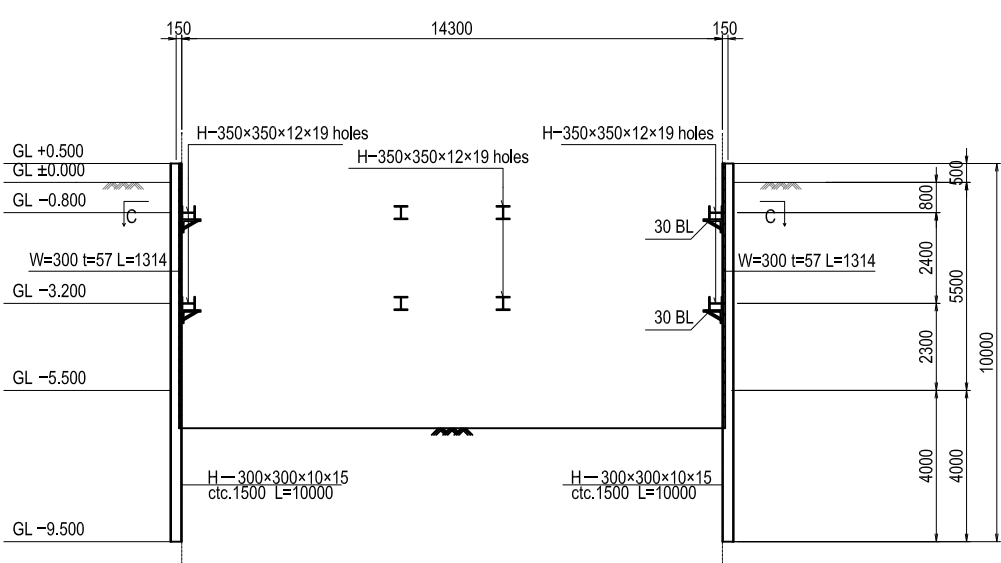
NIPPON KOEI CO.,LTD.

TEMPORARY RETAINING WALL (A2) SCALE 1:100 (A1)
1:200 (A3)

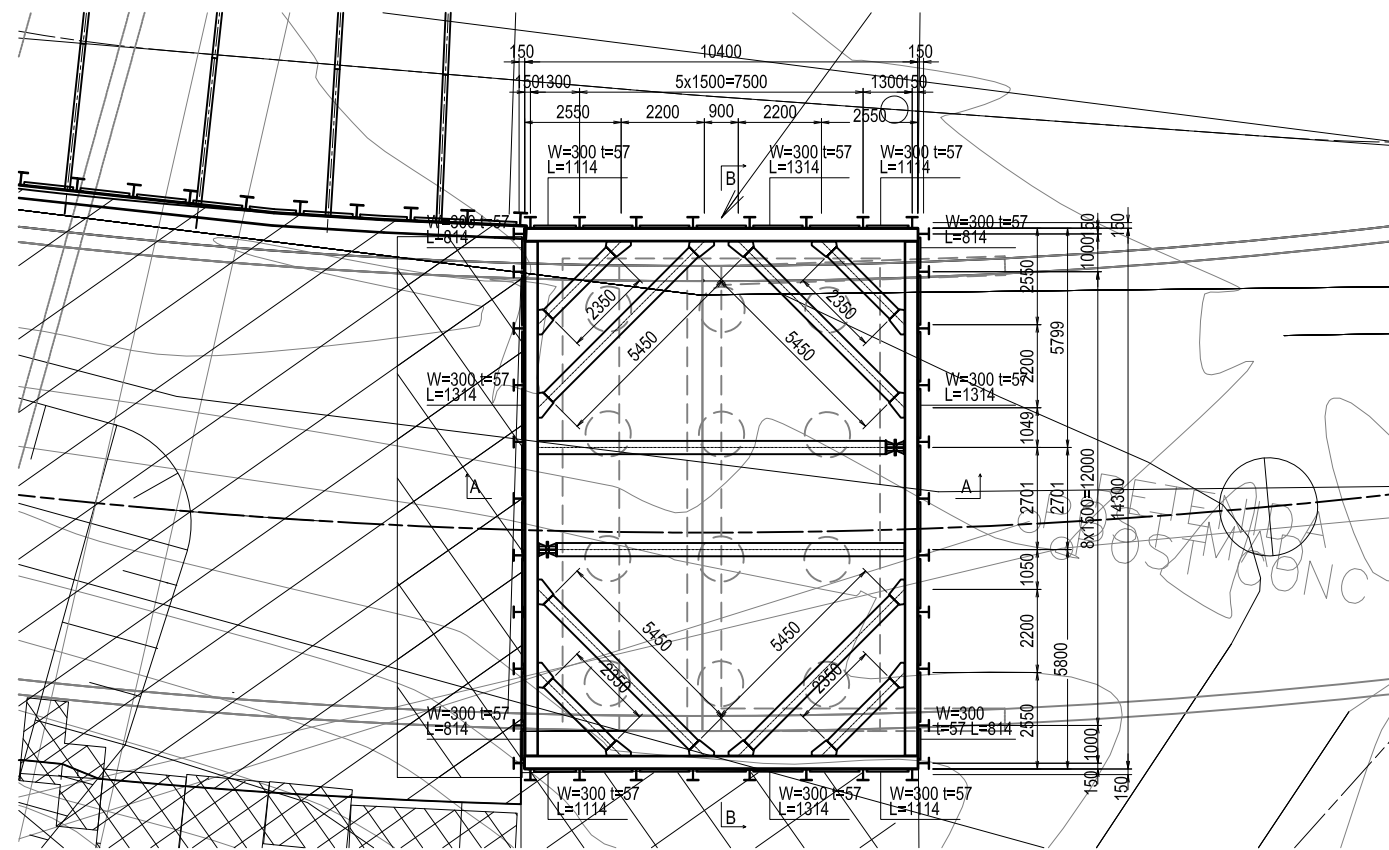
SECTION A-A



SECTION B-B



PLAN



QUANTITY

	Dimension	Unit	Amount	Unit Weight	Weight
Pile	H-350×350×10×15	m	340.000	93.0kg/m	31.620t
Wale	H-350×350×12×19 holes	m	84.000	150.0kg/m	12.600t
Strut	H-350×350×12×19 holes	m	24.800	150.0kg/m	3.720t
Angle Brace	H-350×350×12×19 holes	m	32.648	150.0kg/m	4.898t
Total					52.838t
Lagging Panels	W=300 t=57	m ²	260.400	-	-
Total			260.400 m ²		

CONSULTANT



NIPPON KOEI CO.,LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: TEMPORARY RETAINING WALL (A2)

PROJECT NO. - -

DRAWING NO.: TM - 04

SCALE: 1:100 (A1) / 1:200(A2)

DATE - -

REVISION RECORD

REV	DATE	DESCRIPTION
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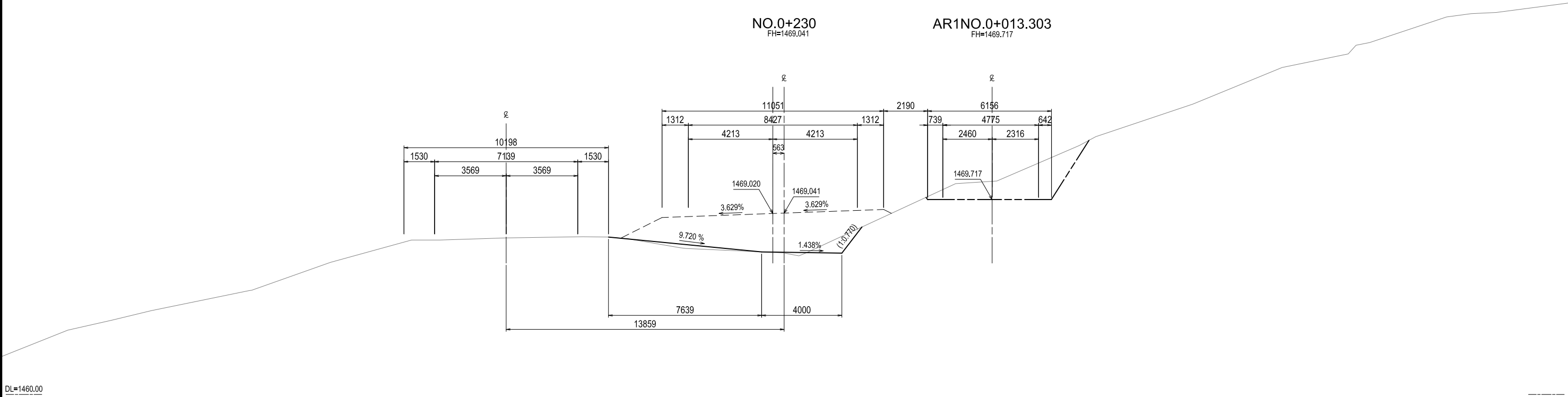
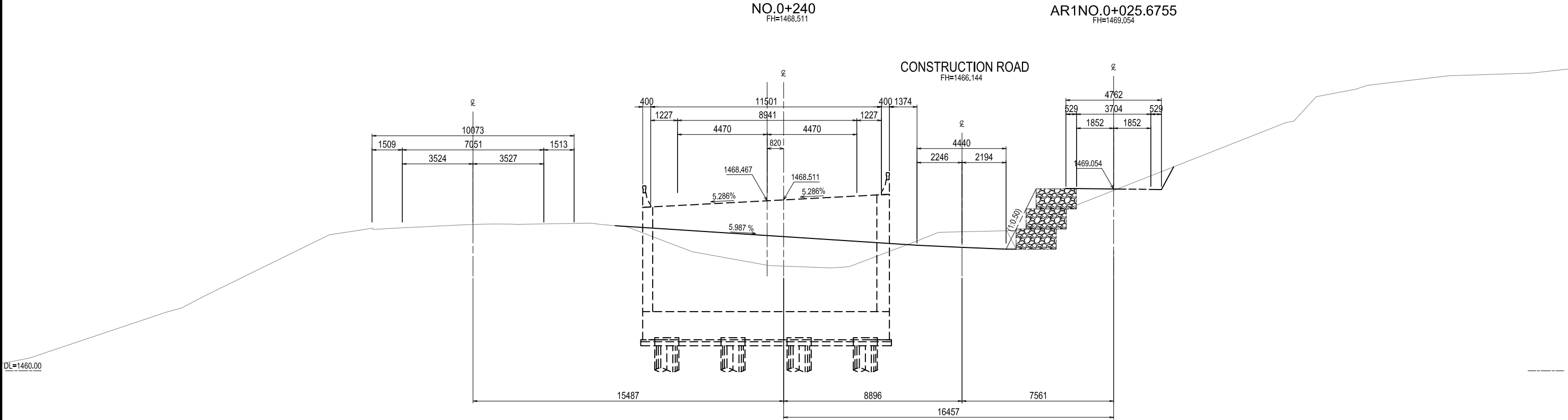


SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)



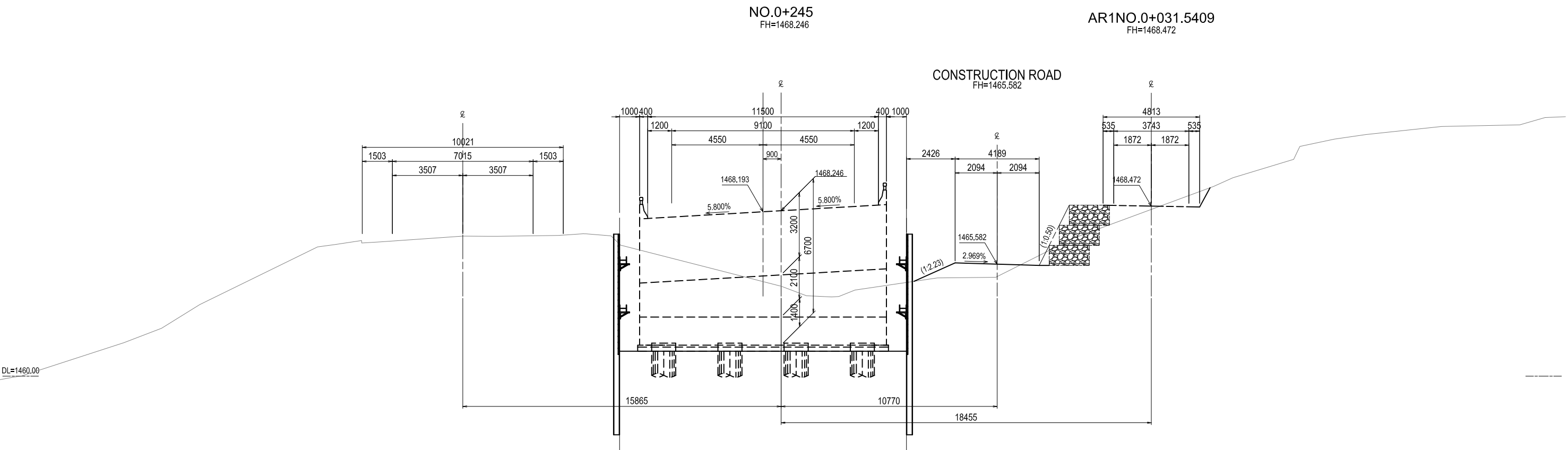
JAPAN INTERNATIONAL COOPERATION AGENCY

CROSS SECTION DURING CONSTRUCTION (1) SCALE 1:100 (A1)
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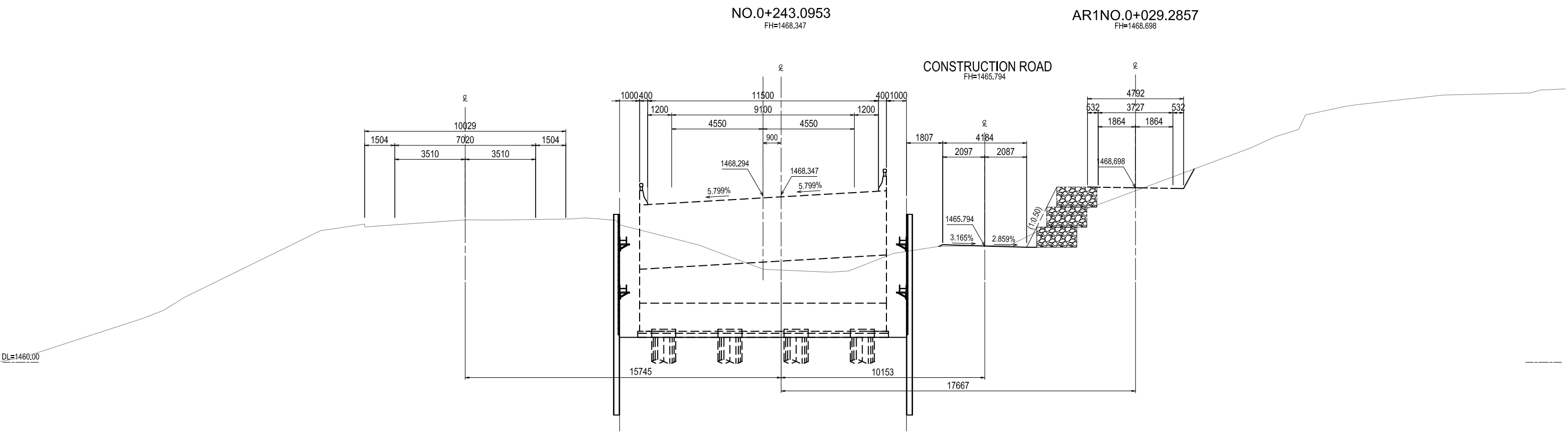


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 JAPAN INTERNATIONAL COOPERATION AGENCY									

CROSS SECTION DURING CONSTRUCTION (2) SCALE 1:100 (A1)
1:200 (A3)



A2 - 51



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
	 NIPPON KOEI CO.,LTD.	STATUS: -	DRAWING NO.: TM - 08	REV	DATE	DESCRIPTION
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DATE - -						
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 JAPAN INTERNATIONAL COOPERATION AGENCY						

SCALE 1:100 (A1)
1:200 (A3)

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FH=1466.628

FH=1463.900



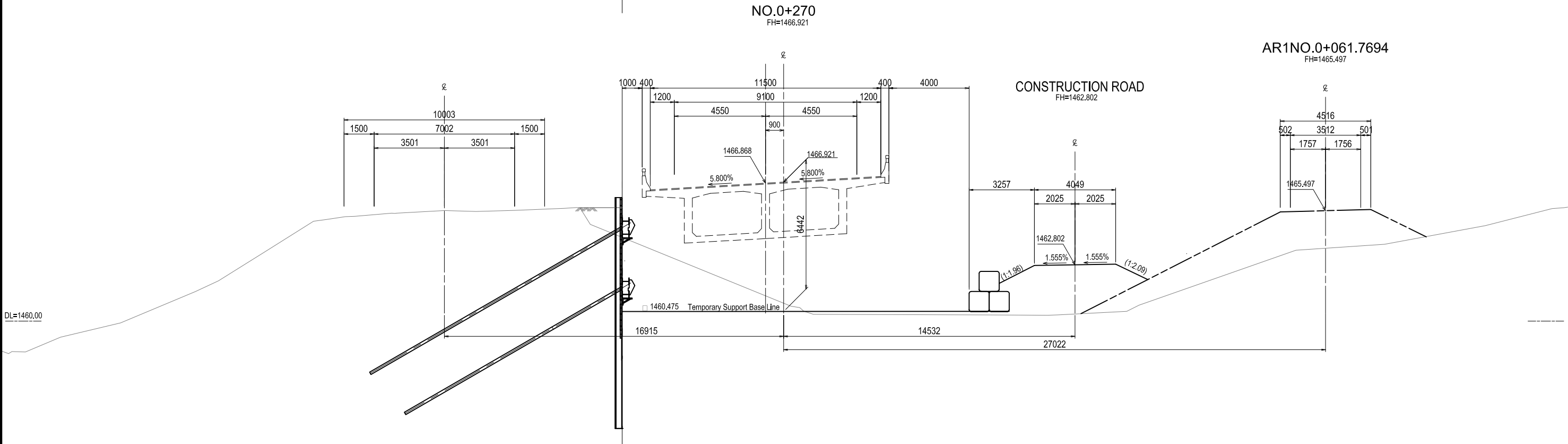
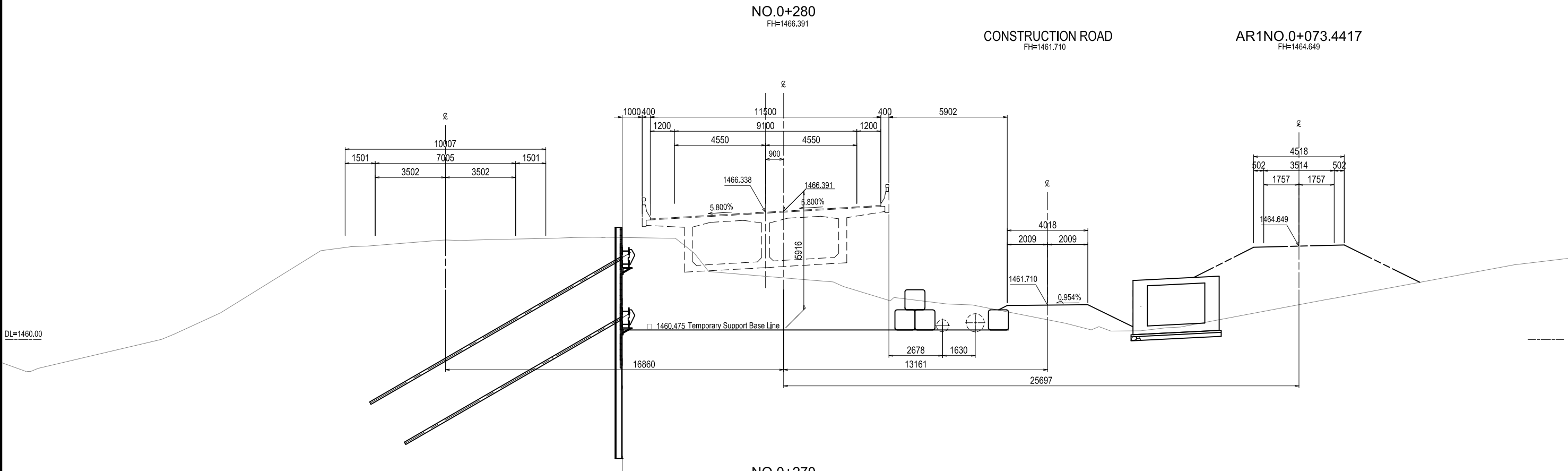
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 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT		PROJECT NO. - -		REVISION RECORD		
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 JAPAN INTERNATIONAL COOPERATION AGENCY							

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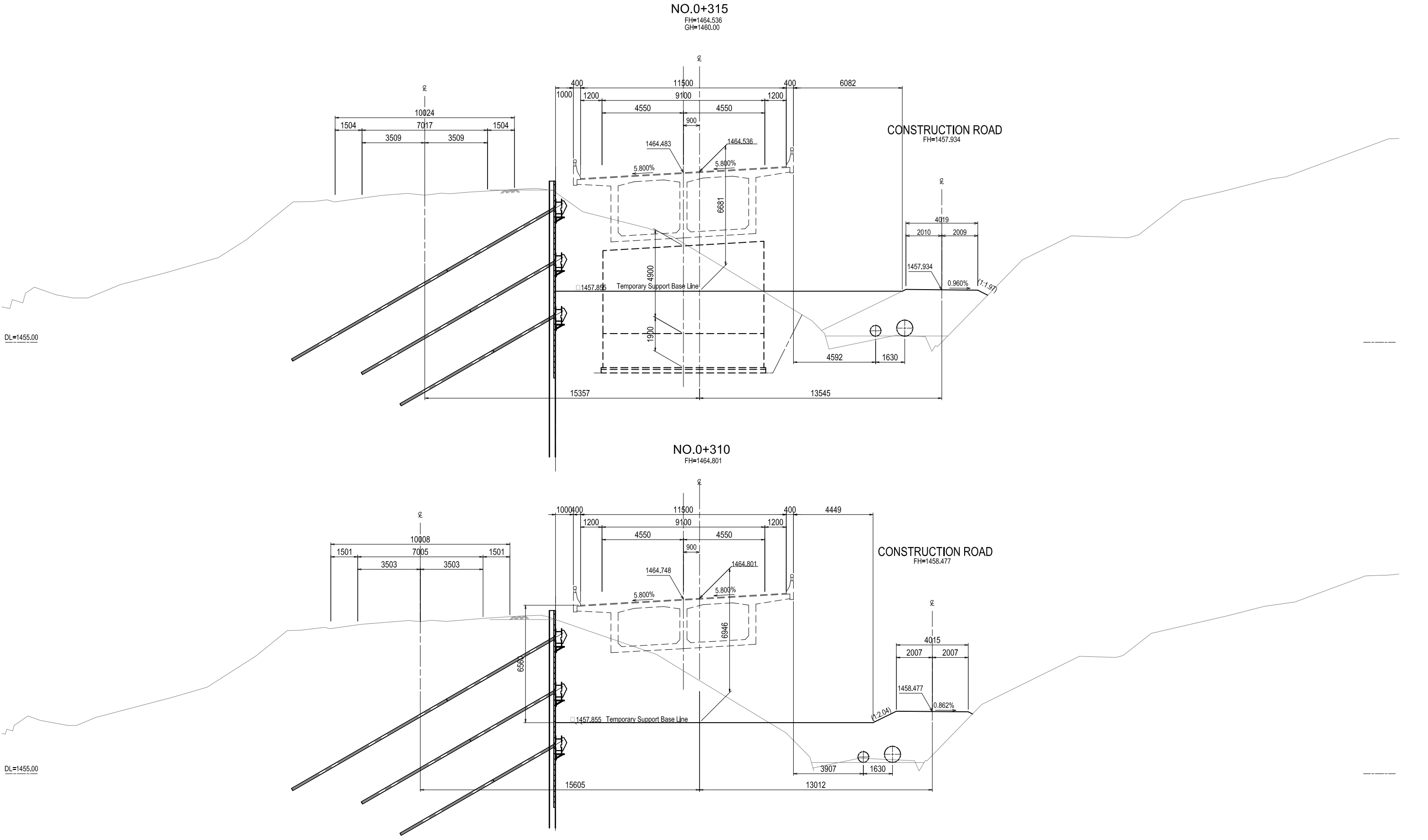
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SCALE 1:100 (A1)
1:200 (A3)



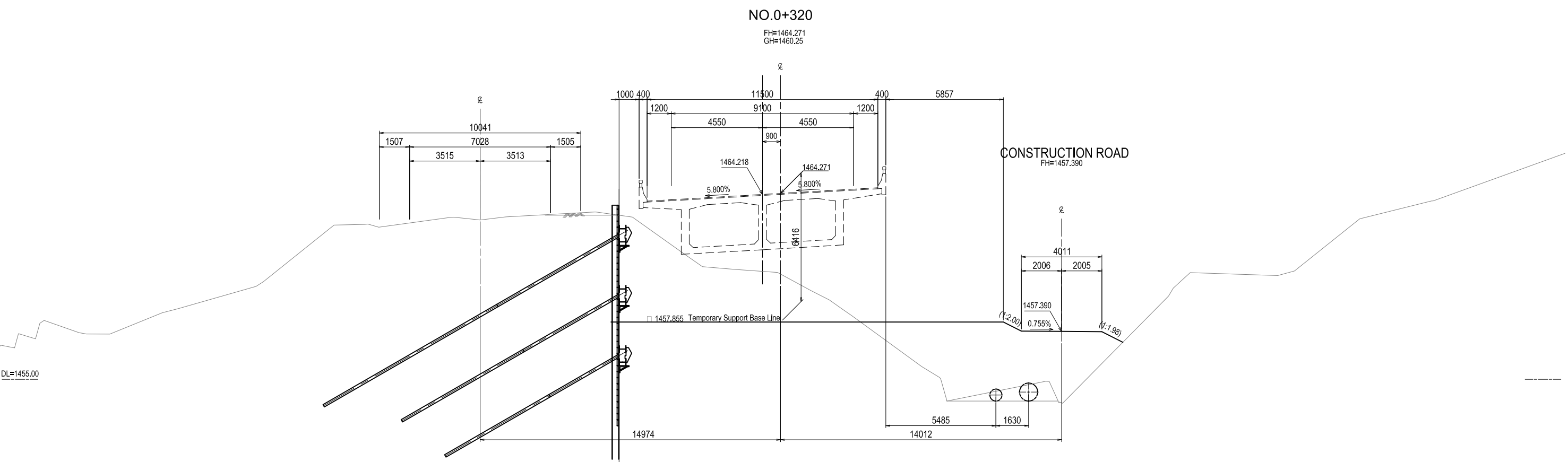
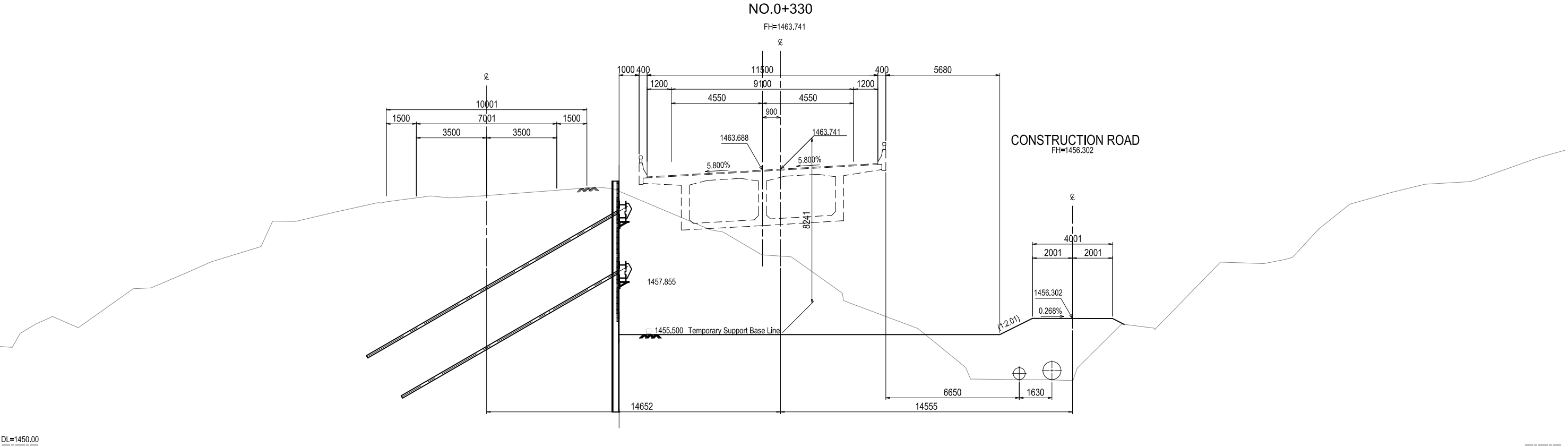
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CROSS SECTION DURING CONSTRUCTION (6) SCALE 1:100 (A1)
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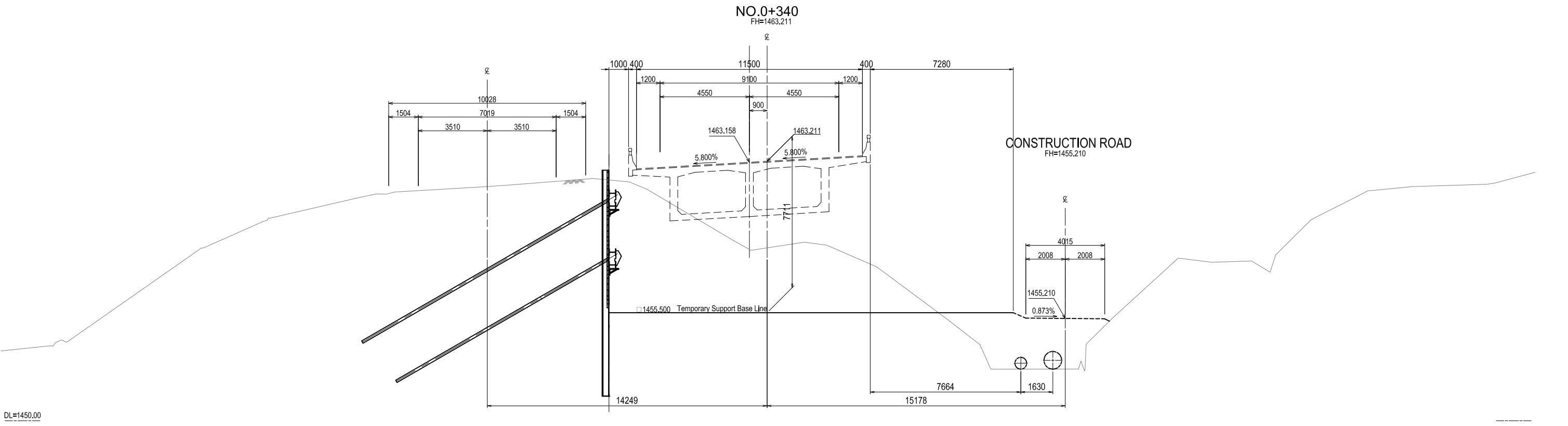
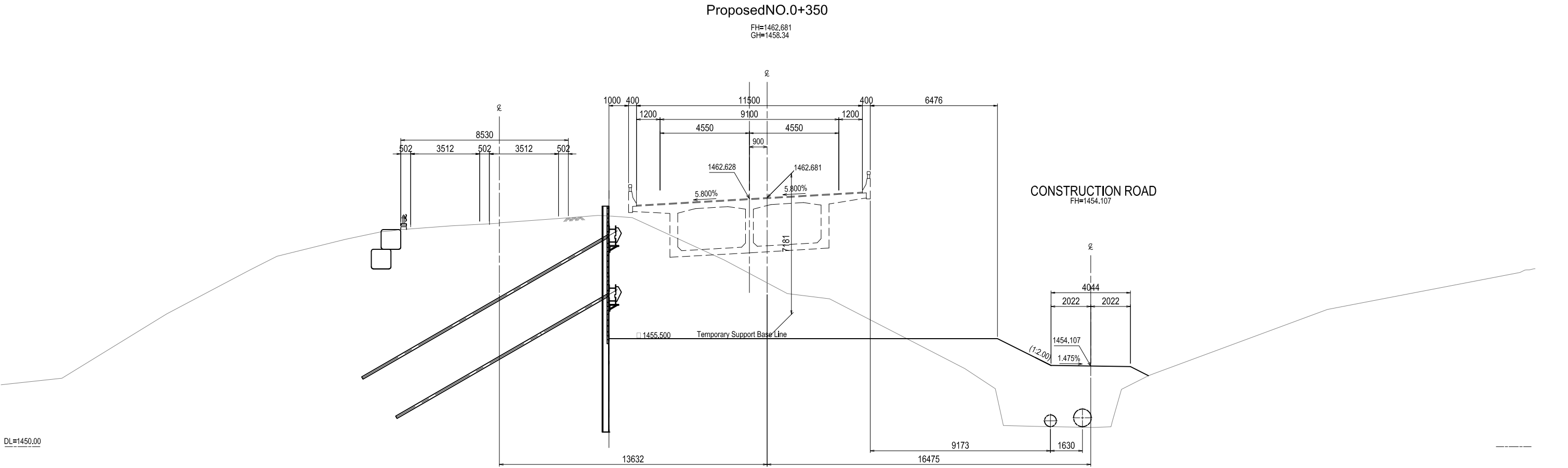
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1:200 (A3)



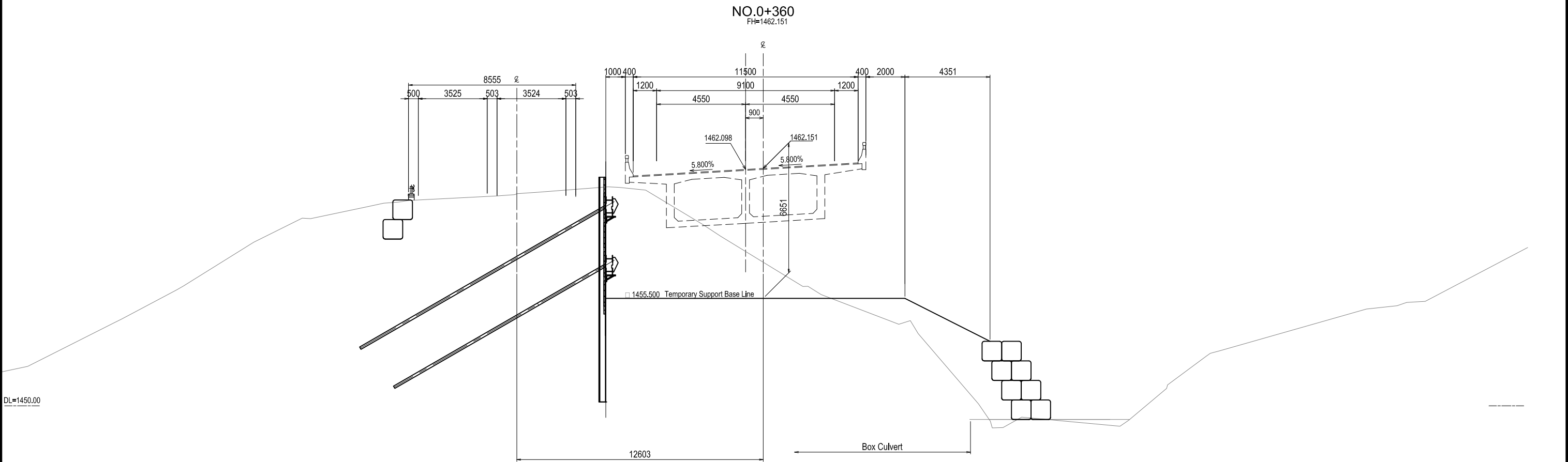
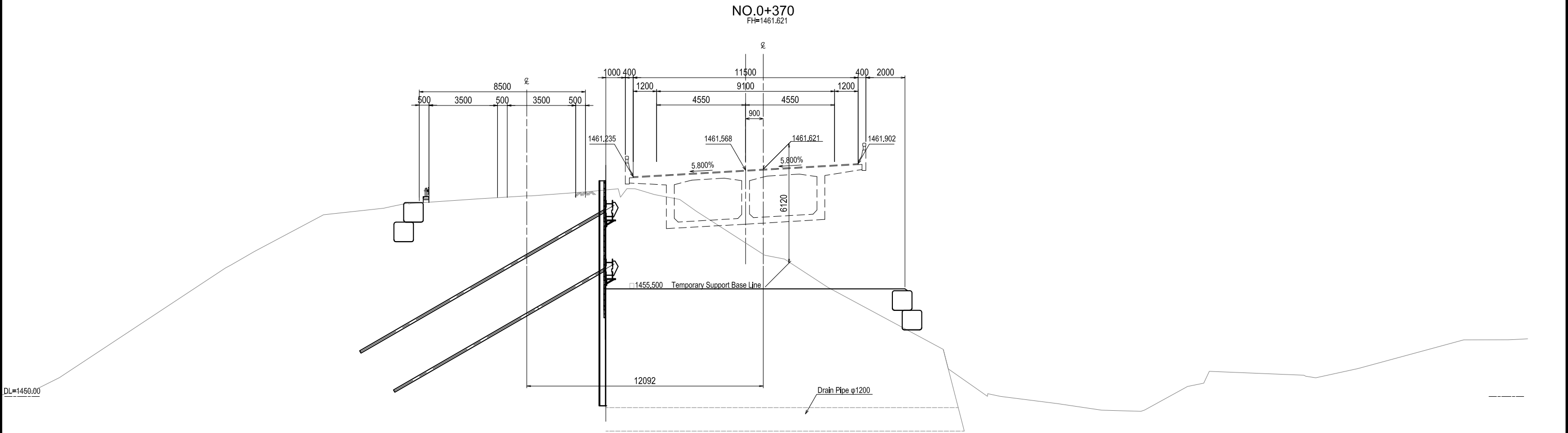
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 JAPAN INTERNATIONAL COOPERATION AGENCY										

CROSS SECTION DURING CONSTRUCTION (8) SCALE 1:100 (A1)
1:200 (A3)



 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT		THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6		PROJECT NO. - -		REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		STATUS: -		DRAWING NO.: TM - 14		REV	DATE	DESCRIPTION
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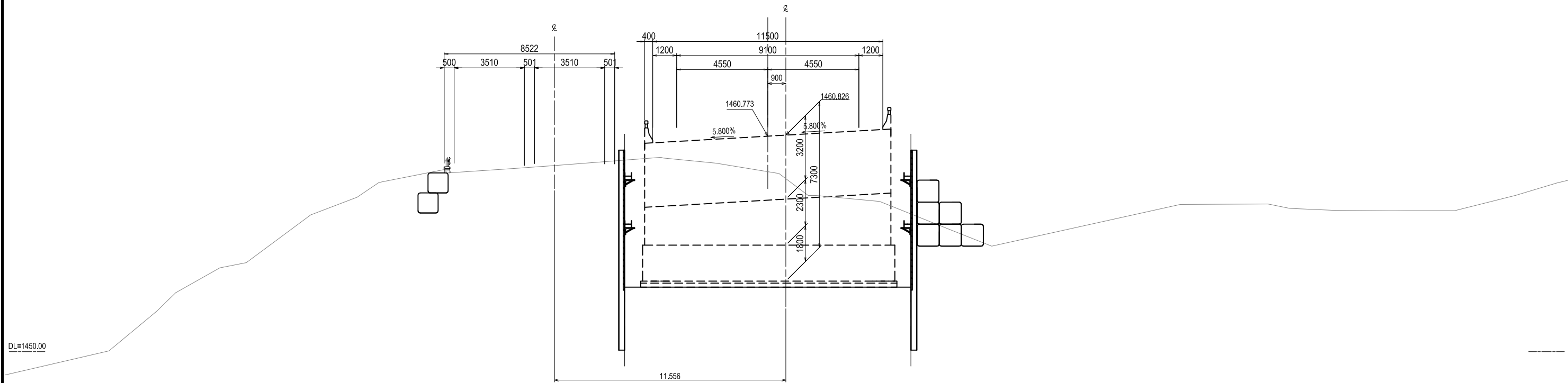
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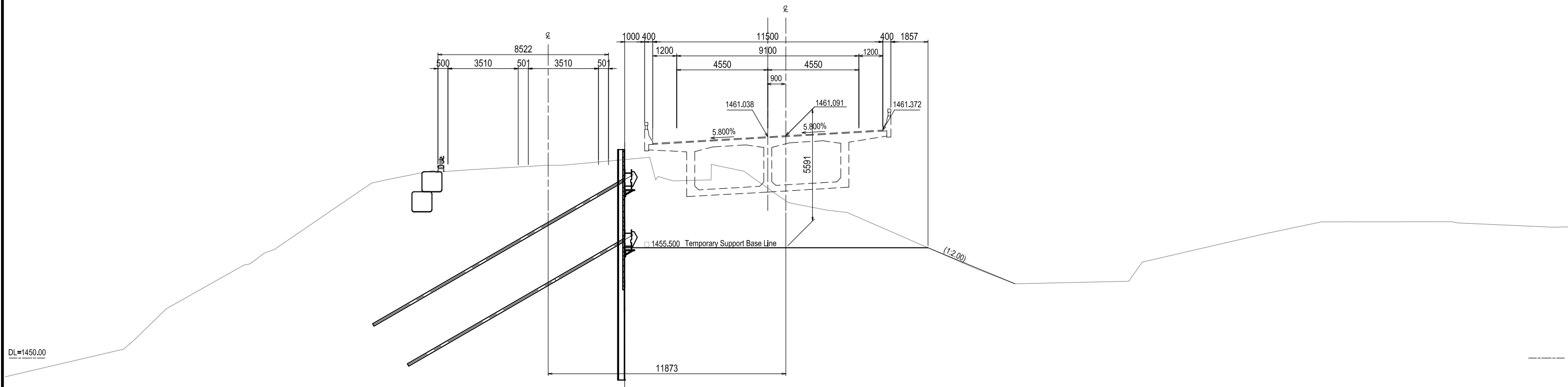
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CROSS SECTION DURING CONSTRUCTION (10) SCALE 1:100 (A1)
1:200 (A3)

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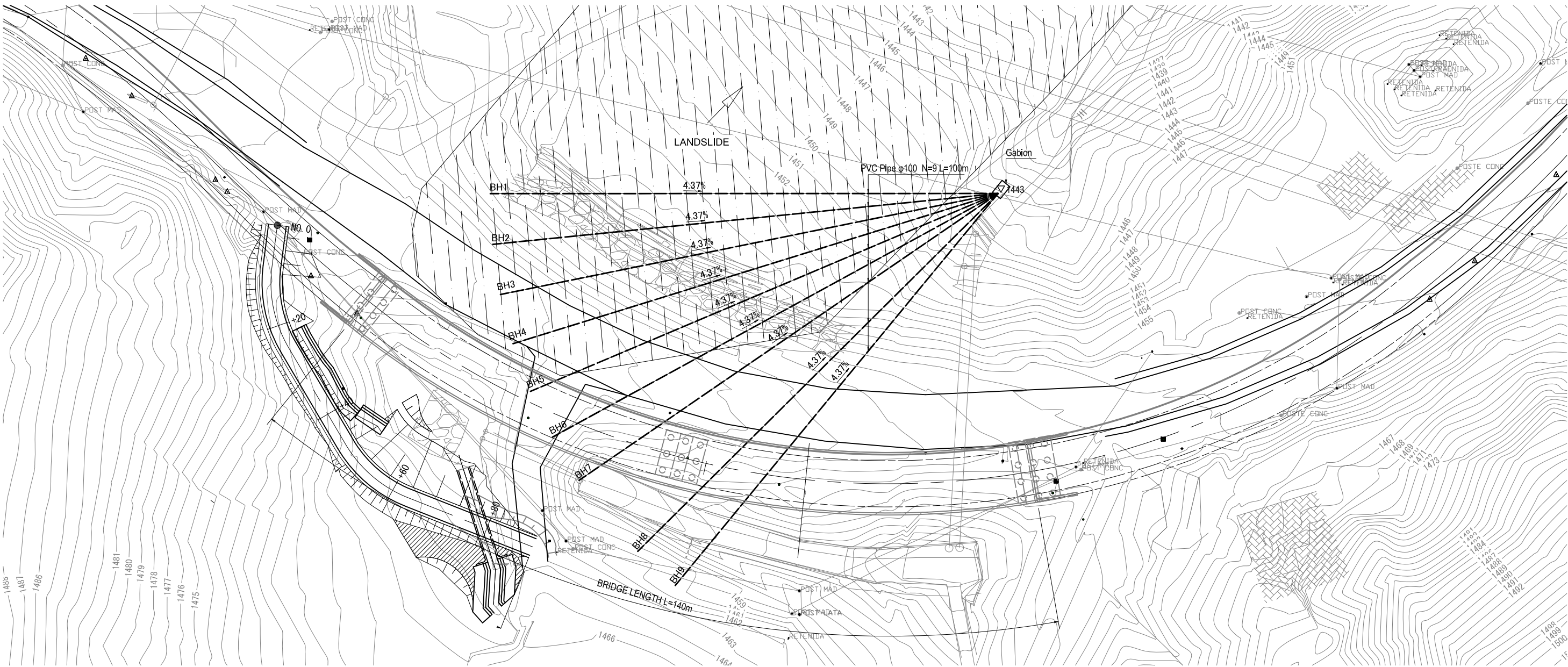
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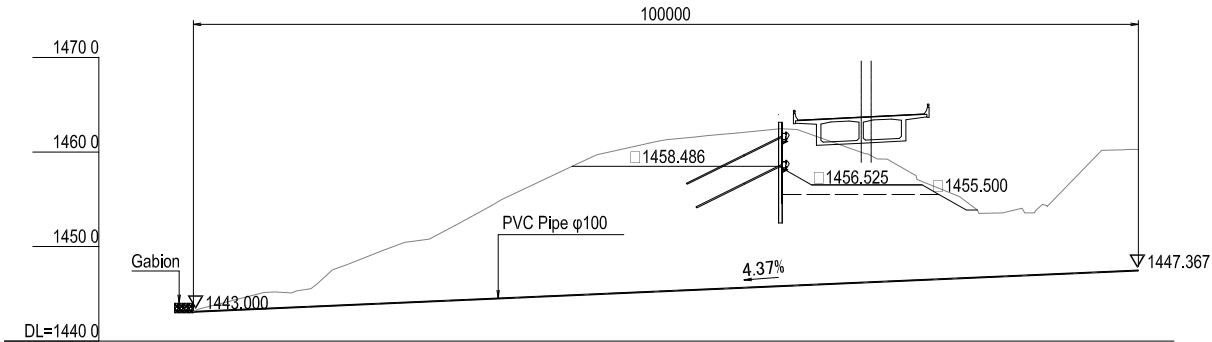
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LANDSLIDE PREVENTION WORKS
PLAN

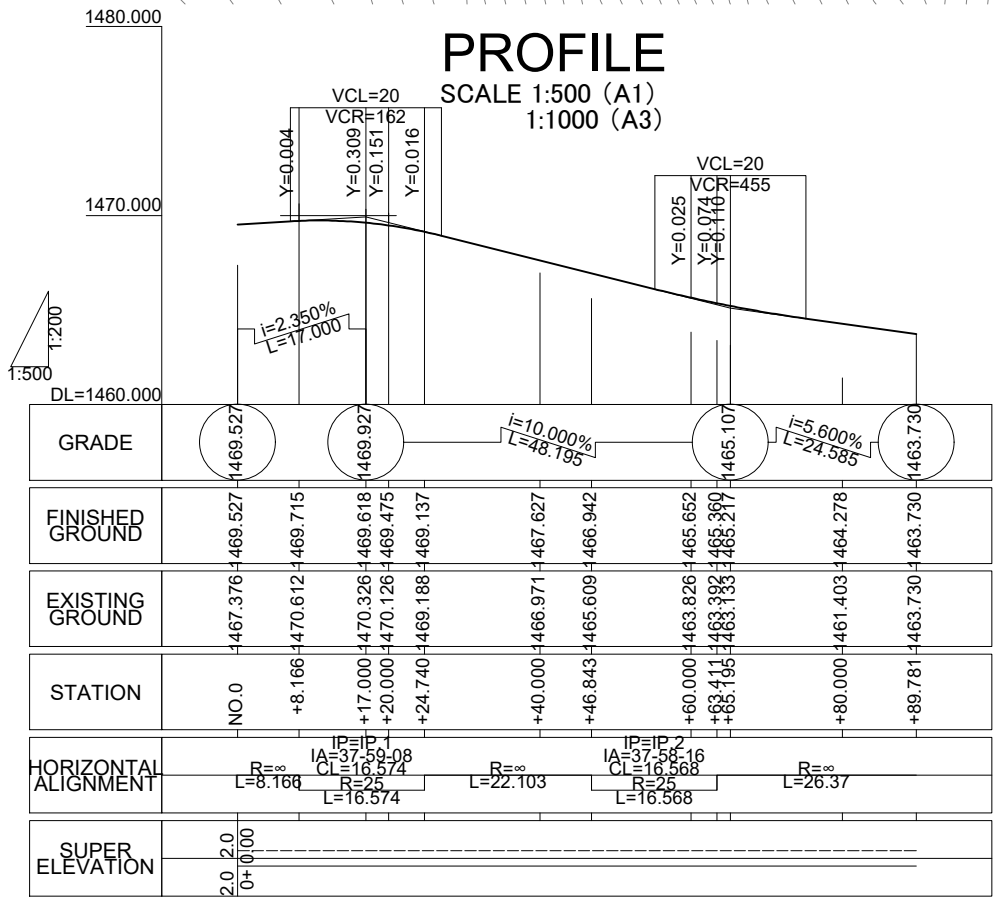
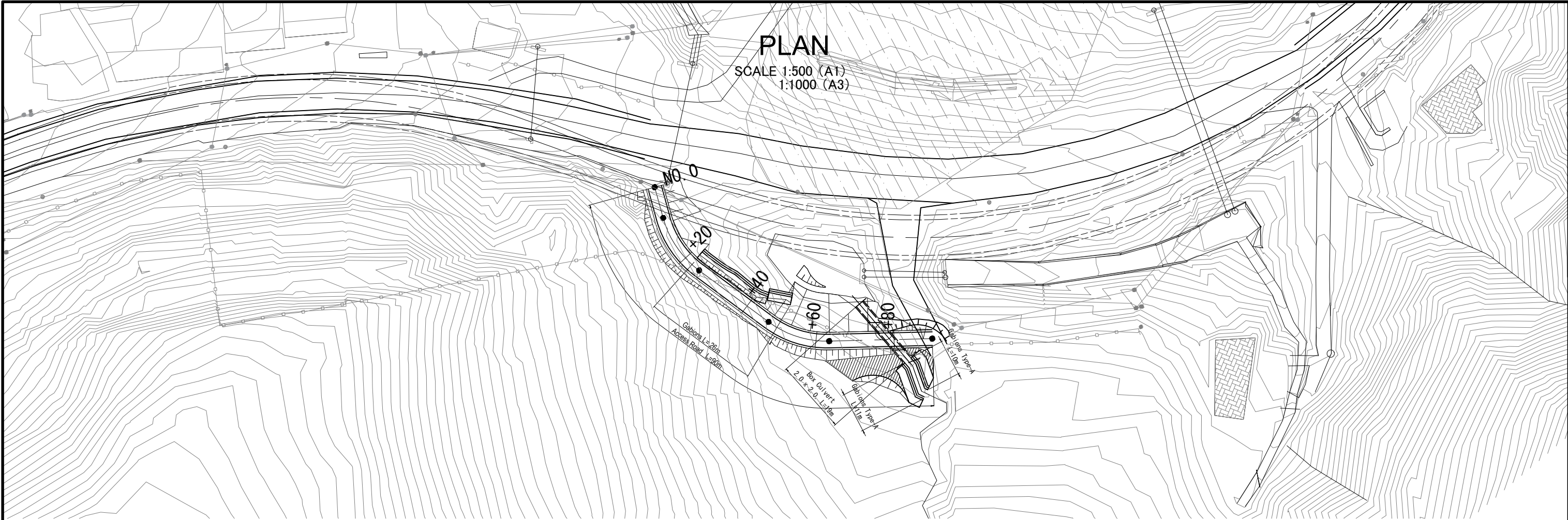
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PROFILE OF BH9

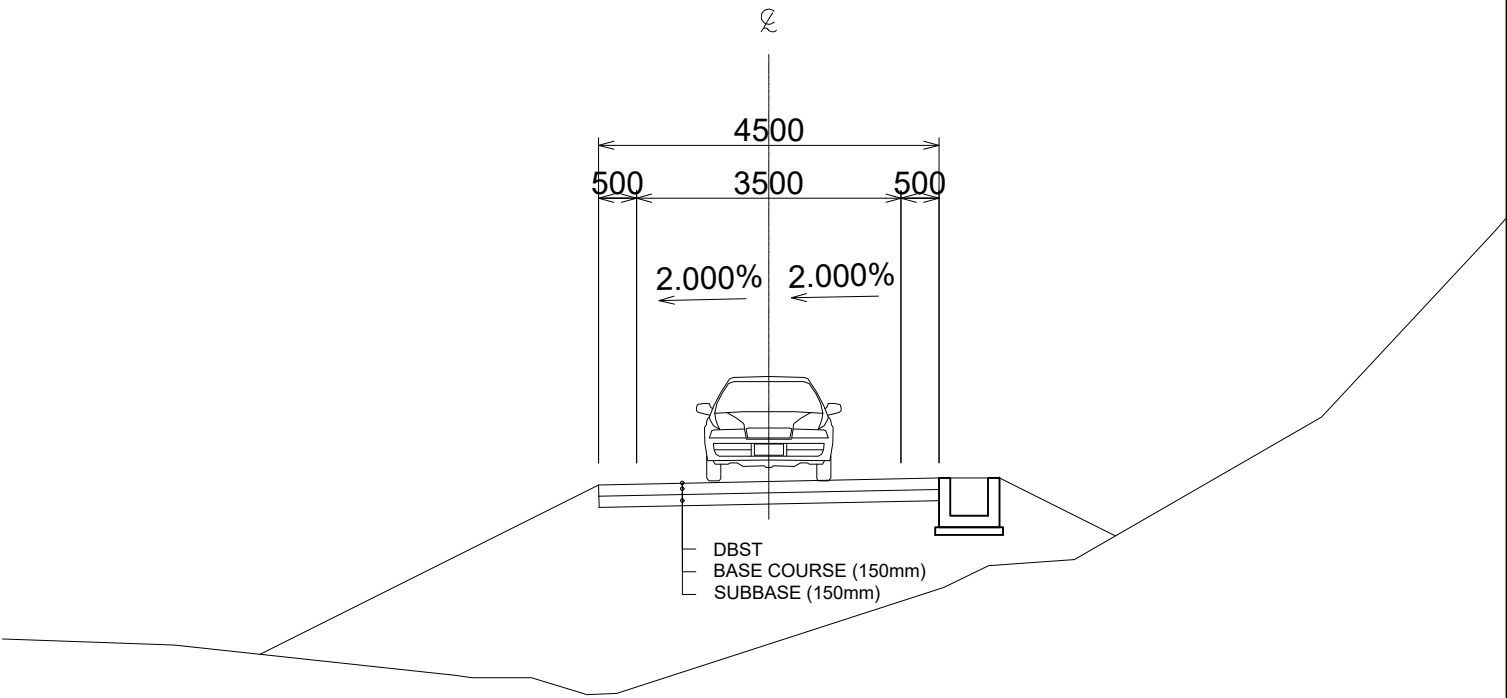


SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT) JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -	REVISION RECORD		
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			DATE - -			



TYPICAL CROSS SECTION

SCALE 1:50 (A1)
1:100 (A3)



CONSULTANT

 NIPPON KOEI CO., LTD.

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

STATUS: -

TITLE: GENERAL OF ACCESS ROAD

PROJECT NO. - -

DRAWING NO.: GL - 01

SCALE: 1:500 (A1) / 1:1000 (A3)

DATE - -

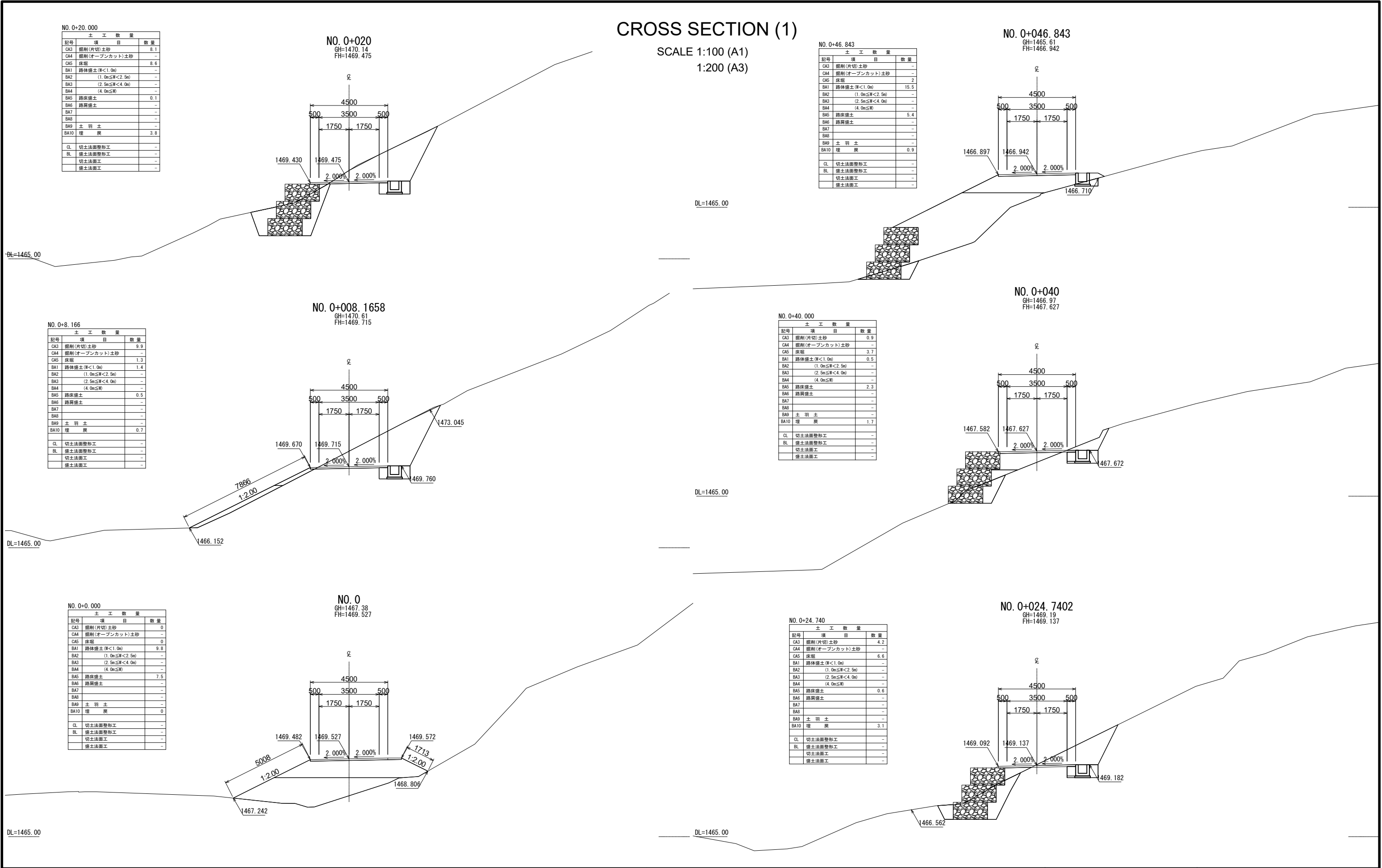
REVISION RECORD

REV	DATE	DESCRIPTION
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 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

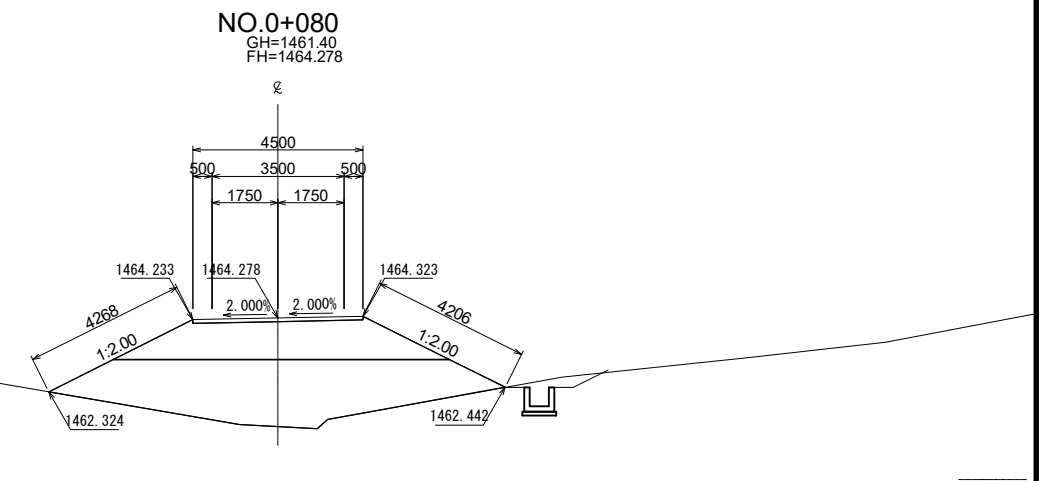
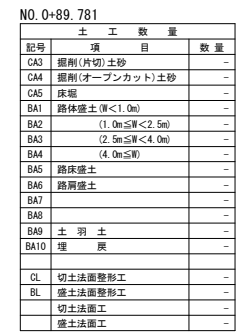
 JICA

JAPAN INTERNATIONAL COOPERATION AGENCY



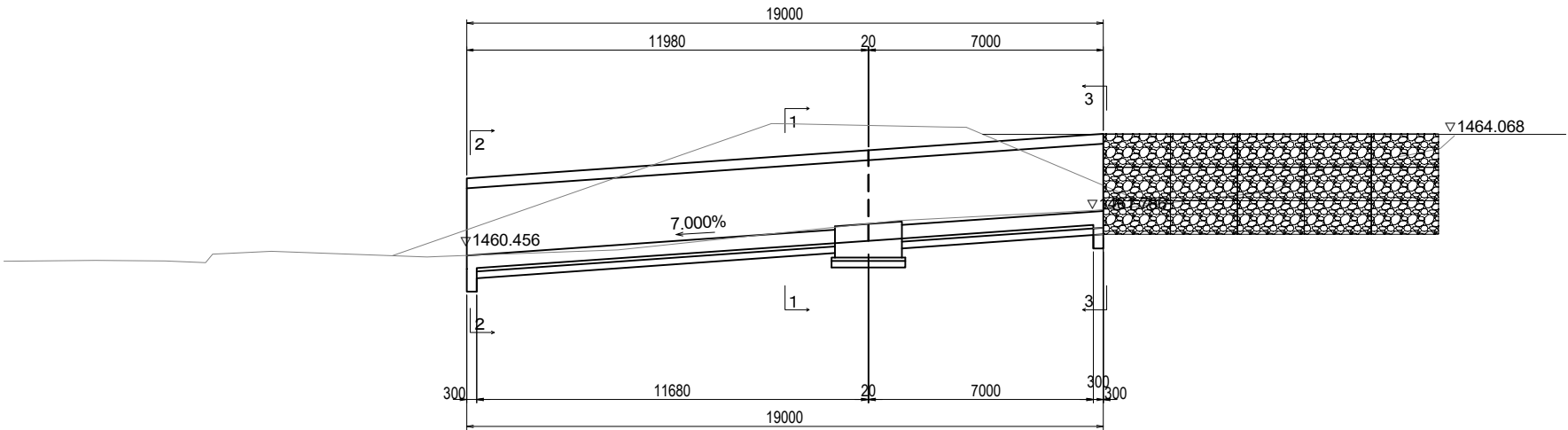
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				DATE - -				

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1:200 (A3)

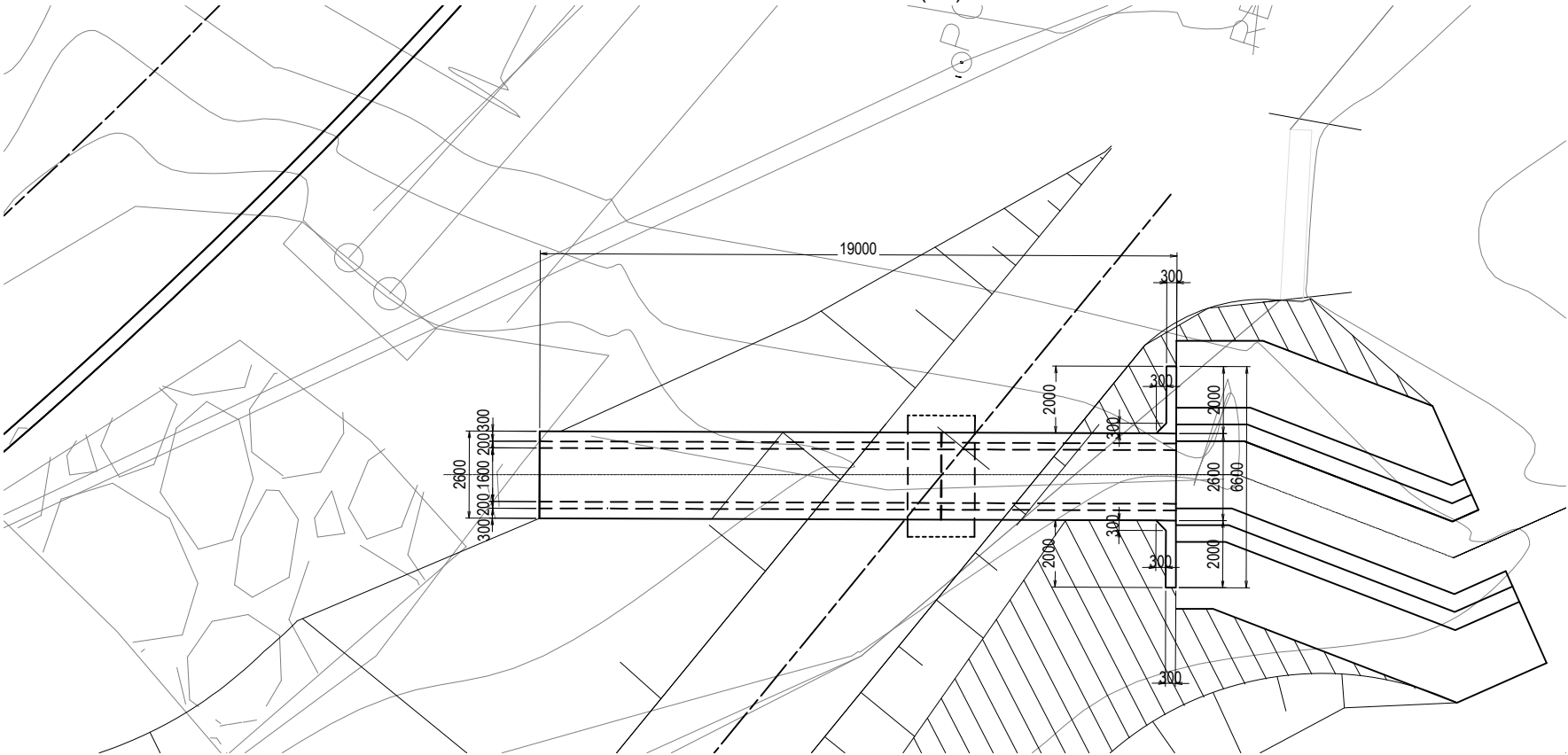


BOX CULVERT (ACCESS ROAD)

PROFILE SCALE 1:100 (A1)
1:200 (A3)

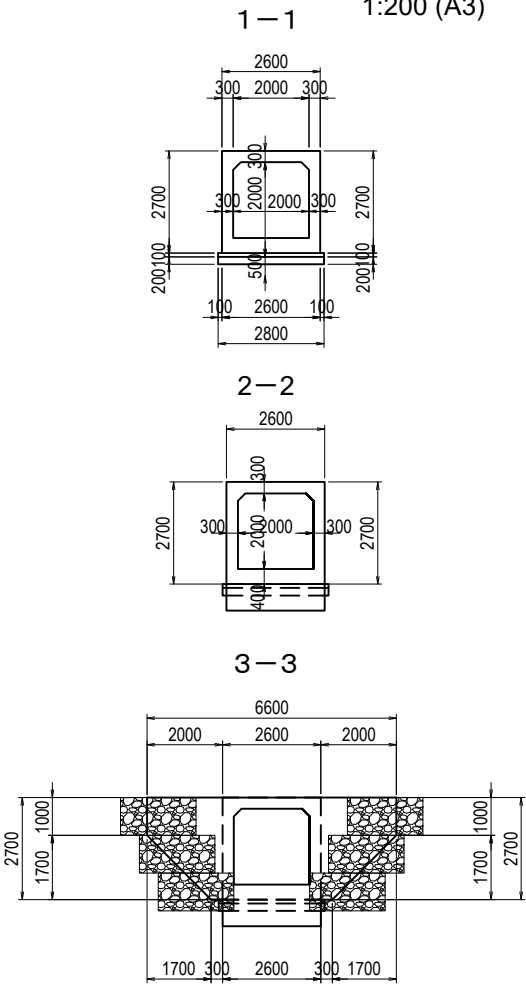


PLAN SCALE 1:100 (A1)
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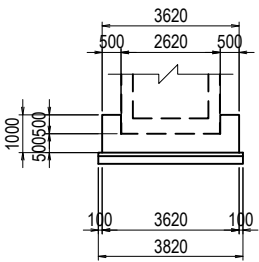


CROSSSECTION

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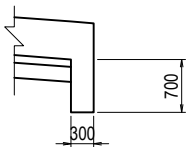


BEDDING BEAM



CUT OFF WALL

SCALE 1:50 (A1)
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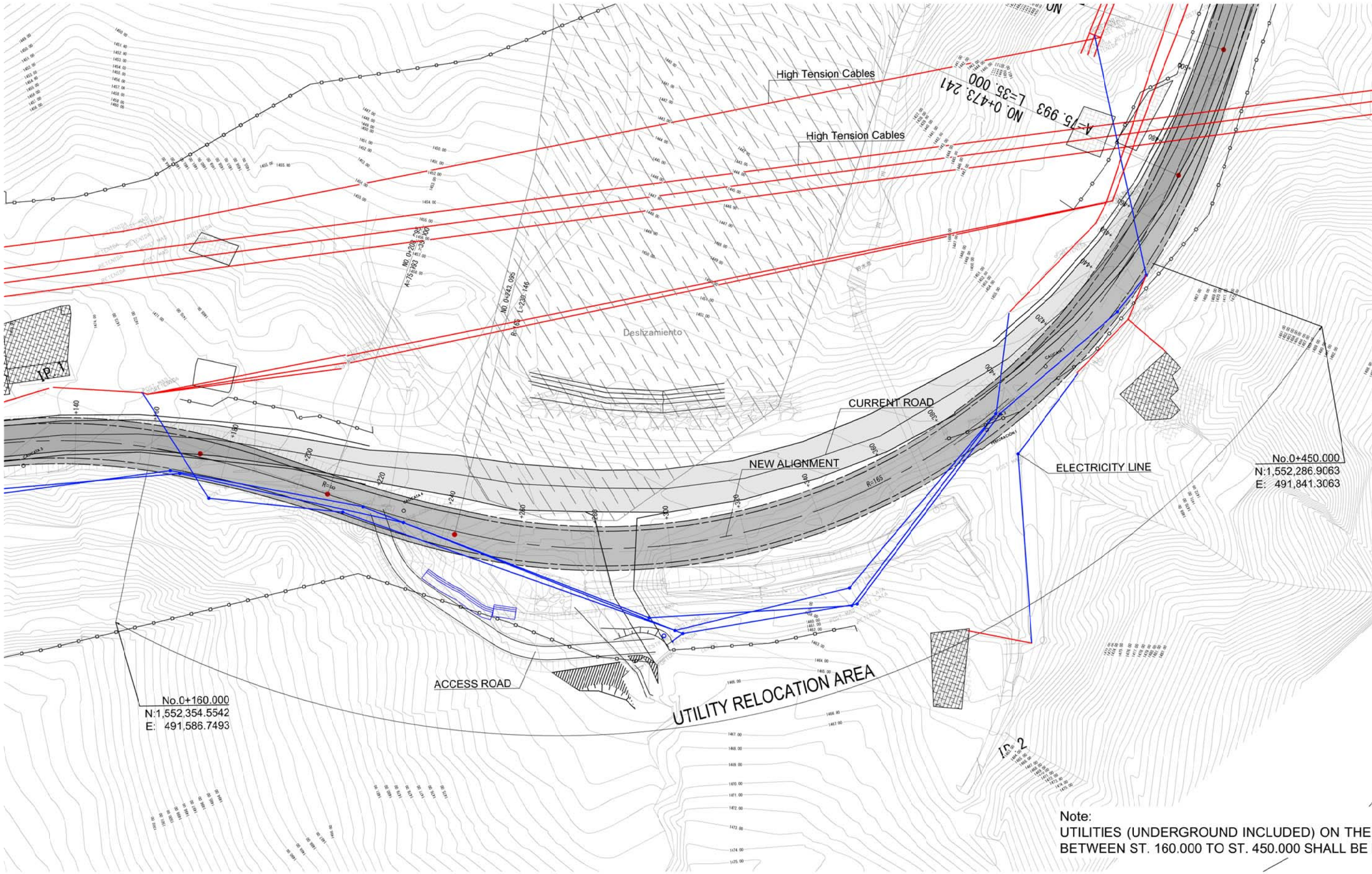


A2 - 64

 SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -		REVISION RECORD		
	 NIPPON KOEI CO.,LTD.		DRAWING NO. - -	REV	DATE	DESCRIPTION	
SCALE - -							
DATE - -							
 JAPAN INTERNATIONAL COOPERATION AGENCY		STATUS: -					
		TITLE:					

UTILITY RELOCATION PLAN (REFERENCE)

SCALE 1:500 (A1)
1:1000 (A3)



	LABEL
	STEEL SIGN
	SUPPORTER
	WOOD POST
	CONCRETE POST
	STEEL POST
	RELOCATION POST
	UTILITIES
	RELOCATION UTILITIES
	FENCE
	STREET
	CORRIDOR
	DRAINAGE FLOOR
	GABIONS
	CHANNEL
	CENTRAL LINE OF DESIGN
	INVERTIDA DE ALCANTARILLAS
	BN
	CALICATA
	CASA

Note:
UTILITIES (UNDERGROUND INCLUDED) ON THE MOUNTAIN SIDE
BETWEEN ST. 160.000 TO ST. 450.000 SHALL BE REMOVED.

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6	PROJECT NO. - -				REVISION RECORD		
			DRAWING NO. - -				REV	DATE	DESCRIPTION
JAPAN INTERNATIONAL COOPERATION AGENCY	NIPPON KOEI CO.,LTD.	STATUS: - -	SCALE - -						
			DATE - -						

別添資料 協議議事録(M/D)

Minutes of Discussions
on the Preparatory Survey for
The Project for Bridge Construction on National Road CA-6

Based on the several preliminary discussions between the Government of the Republic of Honduras (hereinafter referred to as “Honduras”) and Japan International Cooperation Agency (hereinafter referred to as “JICA”) dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as “the Team”) for the Project for Bridge Construction on National Road CA-6 (hereinafter referred to as “the Project”) to Honduras. The Team held a series of discussions with the officials of the Government of Honduras and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

This document is elaborated and duplicated in both Spanish and English, and both documents are equally authentic. In case of any divergence of interpretation, the English text will prevail.

Tegucigalpa, 14th February, 2023

木全 俊雄

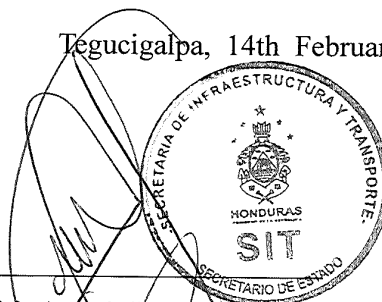
KIMATA Toshio

Leader

Preparatory Survey Team

Japan International Cooperation Agency

JICA



Mauricio Antonio Ramos Suazo

Secretario de Estado en los Despachos de
Infraestructura y Transporte (SIT)

Republic of Honduras

ATTACHMENT

1. Objective of the Project

The objective of the Project is to develop a safe and smooth road network by reducing vulnerability to natural disasters through the construction of a bridge at the landslide site on National Road No.6, thereby contributing to the revitalization of Honduras's economy.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for Bridge Construction on National Road No.6".

3. Project site

Both sides confirmed that the site of the Project is in the municipality of San Antonio de Oriente, Department of Francisco Morazan, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

The Secretaría de Estado en el Despacho de Infraestructura y Transporte (SIT) will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization chart is shown in Annex 2.

5. Items requested by the Government of Honduras

5-1. As a result of discussions, both sides confirmed that the items requested by the Government of Honduras are as follows:

- Design and Supervision
- Landslide countermeasures

The construction of a bridge is proposed at the moment; however, the most appropriate solution will be decided in the survey result.

- 5-2. JICA will assess the feasibility of the above requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.
- 5-3. The Government of Honduras shall submit an official request to the Government of Japan through the diplomatic channel by the end of October 2023.
6. Procedures and Basic Principles of Japanese Grant
- 6-1. The Honduras side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as “the Grant”) as described in Annex 3 shall be applied to the Project.
- As for the monitoring of the implementation of the Project, JICA requires the Honduras side to submit the Project Monitoring Report, the form of which is attached as Annex 4.
- 6-2. The Honduras side agreed to take the necessary measures, as described in Annex 5, for smooth implementation of the Project. The contents of the Annex 5 will be elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report, scheduled for August 2023.
- The contents of Annex 5 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.
7. Schedule of the Survey
- 7-1. The Team will proceed with its field survey in Honduras until 1st April 2023.
- 7-2. JICA will prepare a draft Preparatory Survey Report in Spanish and dispatch a mission to the Honduras in order to explain its contents around August 2023.
- 7-3. An official request from the Government of Honduras to the Government of Japan will be submitted before October 2023.
- 7-4. If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the Honduras side, JICA will finalize the Preparatory Survey Report and send it to the Honduras side around November 2023.
- 7-5. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

8-1. The Honduras side confirmed to give due environmental and social considerations during implementation and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (January 2022).

8-2. The Project is categorized as “B” from the following considerations:

The Project is not likely to have significant adverse impact on the environment under the JICA Guidelines for Environmental and Social Considerations (January 2022) in terms of its sectors, characteristics and areas.

The Honduras side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Environmental Impact Assessment (EIA) / Initial Environmental Examination (IEE) and information disclosure, etc.) and make EIA/IEE report of the Project. The EIA/IEE approval shall be received from Environmental Protection Agency and submitted to JICA at the latest before the conclusion of Grant Agreement (G/A) of the Project schedule in November 2023.

8-3. For the Project that land acquisition and involuntary resettlement cannot be avoided, the Honduras side confirmed to prepare a Resettlement Action Plan (RAP)/Abbreviated Resettlement Action Plan (ARAP) in accordance with the JICA Guidelines for Environmental and Social Considerations and make it available to the public. In addition, the Honduras side confirmed that compensation for such land acquisition and resettlement shall be implemented adequately based on the RAP/ARAP.

9. Safety Measures

To avoid accidents on sites during the implementation of the Project, the Honduras side agreed to enforce the consultant and the contractor to apply safety measures such as setting safety assurance to the site, providing information for safety control measures to the public, and deploying adequate security personnel, based on “The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects” which has been published on JICA’s URL below.

https://www.jica.go.jp/activities/schemes/oda_safety/ku57pq00001nz4eu-att/guidance_en.pdf

The Team recommended to the Honduras side to explain to the residents about the Project (necessity and significance, construction period, sites, impact etc.), so that consensus support can be obtained from them for the smooth implementation of the Project.

10. Other Relevant Issues

10-1 Assistance to the Preparatory survey

The Honduras side shall, at its own expense, provide the Team with the following items:

- (a) Necessary data, information and coordination with relevant agencies for the Preparatory Survey,
- (b) Assignment of Counterpart personnel,
- (c) Security related information as well as measures to ensure the safety of the Team,
- (d) Permissions of conducting field activities, such as topographic survey, geotechnical investigations, a traffic volume survey, etc. by local consulting firms entrusted by the Team and issuing identification cards for members of the said firms, and
- (e) Sourcing traffic safety through the field survey in cooperation with relevant authorities (e.g. traffic police, etc.)

10-2 Undertakings by the Honduras side

In the case that the Project is approved by the Government of Japan, the Honduras side agreed that the undertakings shown in Annex 5 will be taken by the Honduras side. The Japanese side explained that the Honduras side should take the following issues at its own expense under the Project if implementation of the Project is approved by the Government of Japan:

- (a) To provide tax exemption for construction materials, and equipment for the Project;
- (b) To provide tax exemption for all services related to the implementation of the Project including tax for Japanese and third country nationals and work permits required to obtain long-term visas;
- (c) To secure the lots of land necessary for the implementation of the Project including land for site office, plant yards, material storing yard, motor pool, temporary construction yard, and waste disposal site;
- (d) To relocate existing utilities (electric lines, etc.) within the Project site;

- (e) To relocate the local access road that will be affected, which is located on the mountain side of the Project;
- (f) If the Honduras side experiences delays to complete the procedures for the acquisition of land, the Honduras side shall inform the JICA Honduras Office for smooth implementation of the Project;

10-3 Necessary security measures

Both sides confirmed that the Executing Agency shall take necessary measures to ensure and maintain the security of the Project site and the people related to the implementation of the Project, in cooperation with relevant authorities during the Project period. Such security measures shall reasonably reflect needs of the Consultant/the Contractor engaging in the Project, as shown in Annex 5.

Both sides agreed that in case the additional security cost would be necessary for the implementation of the Project, such cost shall be assumed by the Executing agency without using the Grant.

10-4 Gender Mainstreaming

Both sides confirmed that following gender elements shall be duly reflected in the 47scope of Preparatory Survey.

- (a) Collection of information and gender break down data for assessment of gender needs.
- (b) Examination of gender-responsive measures based on the assessment, such as:
 - ✓ Collection of information and gender disaggregated data for assessment of gender needs.
 - ✓ Encouragement of the participation of female engineers and workers throughout the project lifecycle.
 - ✓ Implementation of soft-component activities that promote women's empowerment.

10-5 The Team explained the method of Preparatory Survey based on an Inception Report submitted by the Team. The Honduras side understood the contents and accepted the method.

10-6. Misconduct

The Team explained and the Honduras side understood the preventative measures about fraudulent practices which would be stipulated in JICA's Grant Agreement.

10-7. Divergence of interpretation

The Minutes of Discussions are made in duplicate in the languages of English and Spanish, both equally authentic. In case of divergence of interpretation, English text shall prevail.

Annex 1 Project Site

Annex 2 Organization Chart

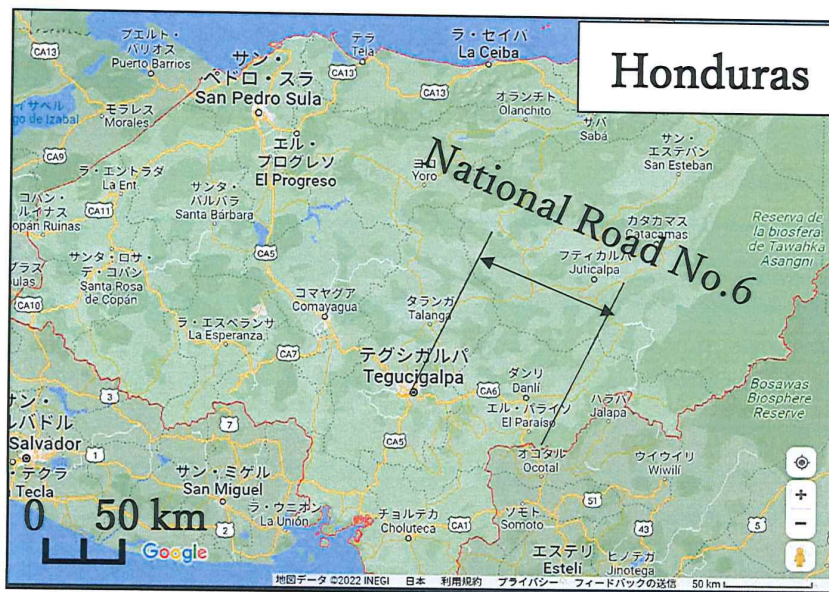
Annex 3 Japanese Grant

Annex 4 Project Monitoring Report (template)

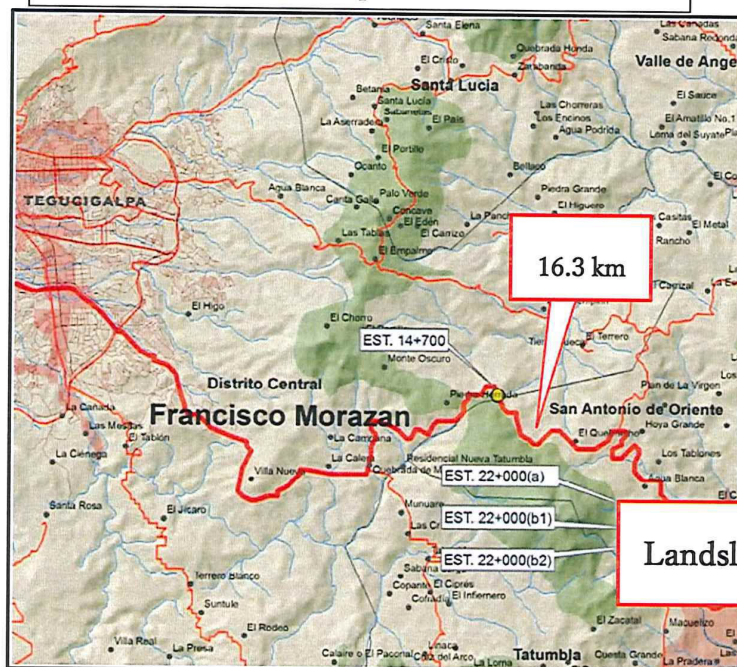
Annex 5 Major Undertakings to be taken by the Government of Honduras



PROJECT SITE



Detailed map of the 16.3km point on National Road No.6

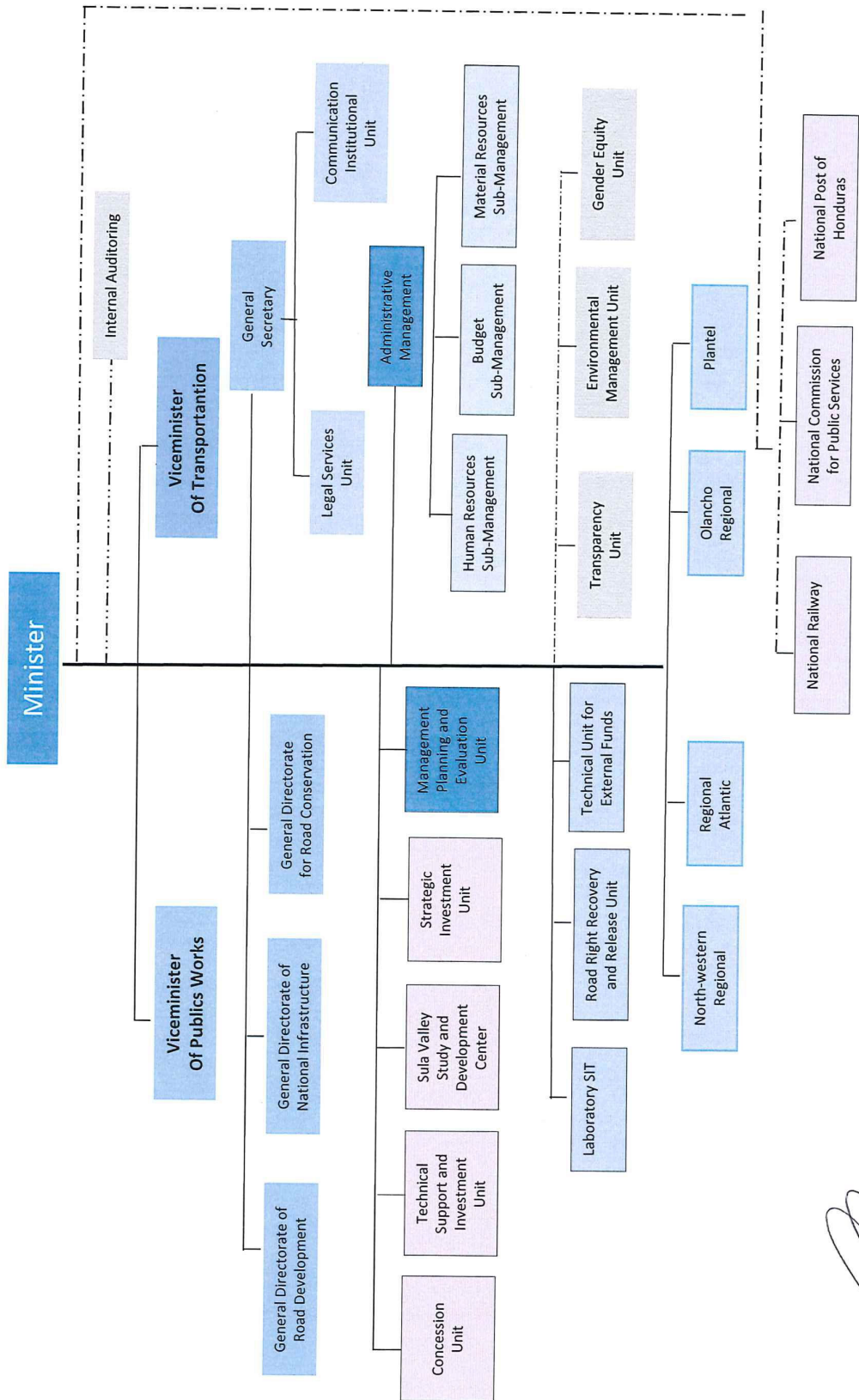


Landslide area

A bridge construction point

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Secretariat for Infrastructure and Transport **Preliminary** Organizational Chart, January 2023



JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as “the G/A”)

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as “the B/A”)

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as “the Project”) on the basis of the G/A

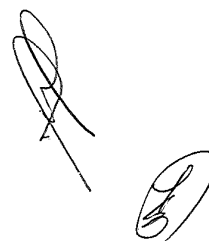
(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:



- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as “the E/N”) will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the “General Terms and Conditions for Japanese Grant (January 2016).”

2) Banking Arrangements (B/A) (See “Financial Flow of Japanese Grant (A/P Type)” for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

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9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the “Meeting”) will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client’s obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

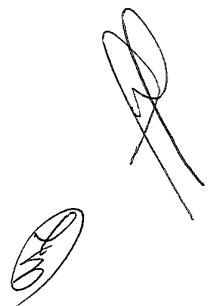
(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

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3) Measures to ensure more efficient implementation of the Grant

i) In the event that the E/N and the G/A concerning a project cannot be signed by the end of the following Japanese fiscal year of the cabinet decision concerned by the GOJ, the authorities concerned of the two Governments will discuss the cancellation of the project.

ii) In the event that the period, specified in the G/A, during which the grant is available expires before the completion of the disbursement, the authorities concerned of the GOJ will thoroughly review the status, situation and perspective of the implementation of the project concerned before extending the said period. The authorities concerned of the two Governments will discuss the termination of the project including a refund, unless there are concrete prospects for its completion.

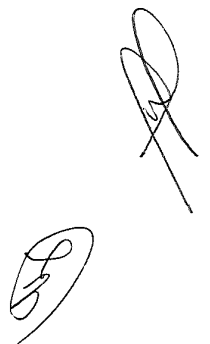
iii) Regardless of the period mentioned in 2) above, the authorities concerned of the two Governments will, in the event that five years have passed since the cabinet decision concerned by the GOJ before the completion of the disbursement, except as otherwise confirmed between them, discuss the termination of a project including a refund, unless there are concrete prospects for its completion.

4) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

5) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.



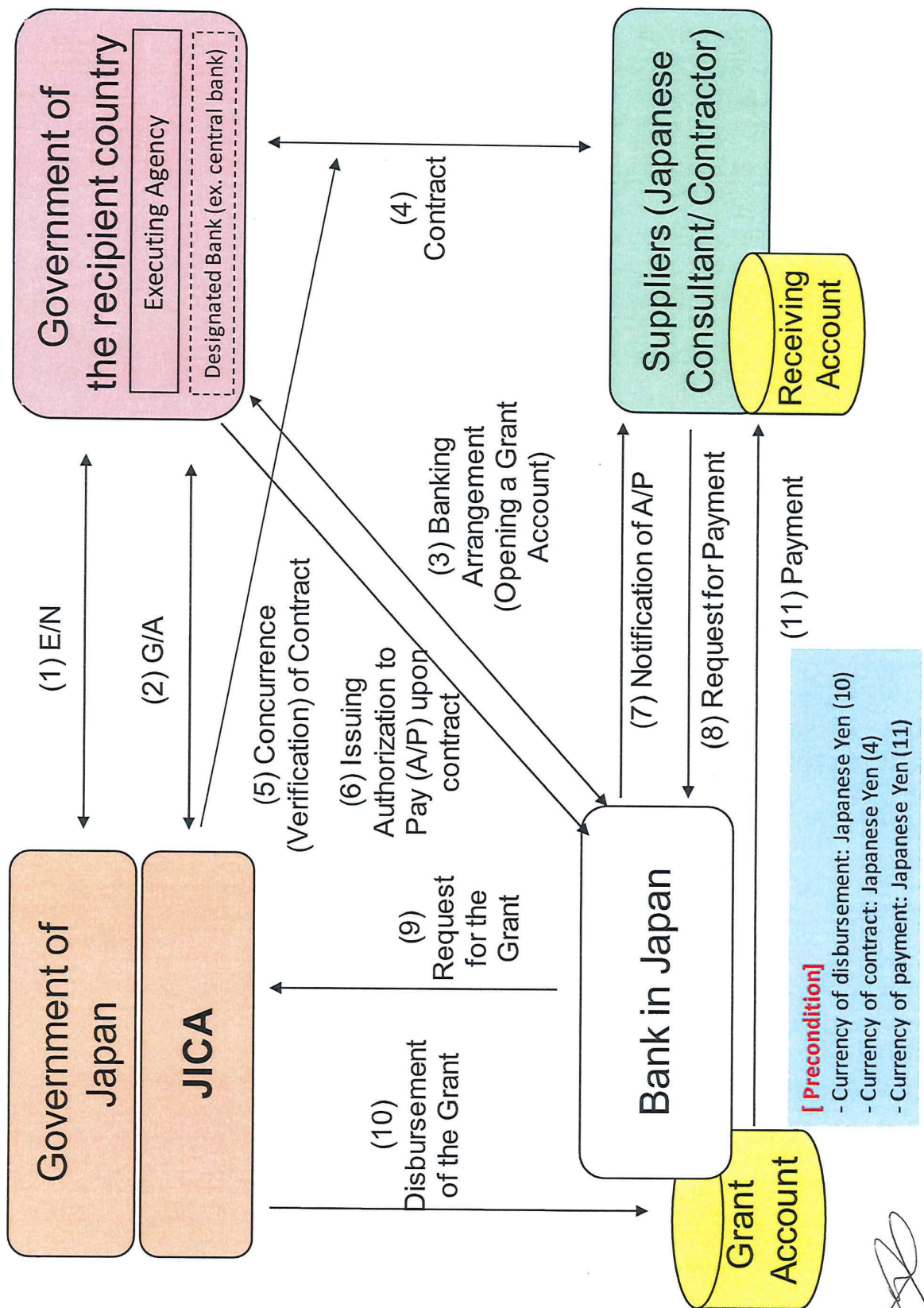
PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
2. Appraisal	(2) Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
	(5) Exchange of Notes (E/N)		x	x				
3. Implementation	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x				x	x
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate		x			x	x	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Grant (A/P Type)



<u>Project Monitoring Report</u> on <u>Project Name</u> <u>Grant Agreement No. XXXXXXXX</u> 20XX, Month
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Organizational Information

Signer of the G/A (Recipient)	Person in Charge	<u>(Designation)</u>
	Contacts	<u>Address:</u>
		<u>Phone/FAX:</u>
		<u>Email:</u>
Executing Agency	Person in Charge	<u>(Designation)</u>
	Contacts	<u>Address:</u>
		<u>Phone/FAX:</u>
		<u>Email:</u>
Line Ministry	Person in Charge	<u>(Designation)</u>
	Contacts	<u>Address:</u>
		<u>Phone/FAX:</u>
		<u>Email:</u>

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

1: Project Description	
-------------------------------	--

1-1 Project Objective

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1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

--

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original (proposed in the outline design)	Actual
1.		

2-2 Scope of the work

Components	Original* (proposed in the outline design)	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant(Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
	1.			
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
	1.			

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

	Contingency Plan (if applicable):
Actual Situation and Countermeasures (PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

--

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

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5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
 - Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)
12. Report on the Management of Safety for Construction Works

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Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials		Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment Price (Decreased) E=C-D Price (Increased) F=C+D	
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials		1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
1	Item 1	●	●	●			
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

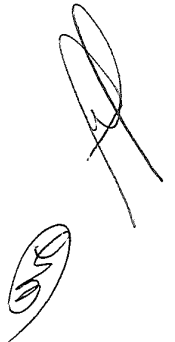
Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	




Report on the Management of Safety for Construction Works

Month/Year 2022 年 × 月	Cumulative number of labor 労働延人数	Cumulative number of public accident 公衆災害件数	Cumulative hours worked 延べ実労働時 間数	Number of deaths and injuries due to industrial accidents 労働災害による死傷者				Frequency rate 度数率	Severity rate 強度率
					Death and injuries 死傷者数	Aggregated number of calendar days absent 延べ休業日数	Aggregated number of work- days lost 延べ労働損失日数		
This Month 当月				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
				Total 計					
Total including this month 当月迄累計				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
				Total 計					
1. Frequency rate is the frequency of occurrence of industrial accidents. 度数率 = (Number of deaths and injuries due to industrial accidents ÷ Cumulative hours worked) × 1,000,000 度数率 = (労働災害による死傷者数 ÷ 延べ実労働時間数) × 100 万時間 2. Severity rate is degree of seriousness of the industrial accident. Severity rate = (Aggregated number of work-days lost ÷ Cumulative hours worked) × 1,000 強度率 = (延べ労働損失日数 ÷ 延べ実労働時間数) 1000 時間 3. Aggregated number of work-days lost = Aggregated number of calendar days absent × (300 ÷ 365) Death (7,500 days) : death as a result of an industrial accident includes not only instantaneous death but also death as a result of occupational injury or disease. 延べ労働損失日数 = 延べ休業日数 × (300 ÷ 365) . . . 死亡 7500 日 (即死のほか負傷が原因で死亡したものを含む) 4. Frequency rate and severity rate are rounding off the third decimal place. 度数率・強度率は小数点第 3 位以下四捨五入									



Major Undertakings to be taken by the Government of Honduras

1. Specific obligations of the Government of Honduras which will not be funded with the Grant**(1) Before the Tender**

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To obtain environmental license	Before Signing of the G/A	SIT		
2	To secure budget for the necessary commissions related to the Banking Arrangement	Within 1 month after signing of the G/A	SIT		
3	To sign the Banking Arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	Within 1 month after the signing of the G/A	BCH		
4	To issue the Authorization to Pay (A/P) to a bank in Japan (the Agent Bank) for the payment to the consultant	Within 1 month after the signing of the contract	BCH		
5	To bear the following commissions to the Agent Bank for the banking services based upon B/A		BCH		
	1) Advising the commission of A/P	within 1 month after the signing of the contract(s)			
	2) Payment of commission for A/P	every payment			
6	To obtain approval of the EIA	Within 1 month after the signing of the G/A	SIT		
7	To approve IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMOF (and fulfilling conditions of approval, if any)	Within 1 month after the signing of the G/A	SIT		
8	To secure the necessary budget and implement land acquisition and resettlement, including preparation of resettlement sites, and compensation with full replacement cost in accordance with the Resettlement Action Plan (RAP)	Before notice of the bidding documents	SIT		
9	To compensate with full replacement cost in accordance with RAP	Before notice of the bidding documents	SIT		
10	To clear, level and reclaim the following 1) removing public services (electric poles and wires) 2) existing facilities	Before notice of the bidding documents	SIT		
11	To replace the local road located on the mountain side	Before notice of the bidding documents	SIT		
12	To secure and clear the following lands 1) the project site 2) right of way 3) temporary construction yard and stock yard near the project area 4) borrow pit and disposal site near the project area	Before notice of the bidding document	SIT		
13	To obtain the planning, zoning, building permit	Before notice of the bidding document	SIT		
14	To submit Project Monitoring Report (with the result of Detail Design)	Before presentation of bidding documents	SIT		

15	To approve IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMOp (and fulfilling conditions of approval, if any)	Within 1 month after the signing of the G/A	SIT		
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(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

Note: BCH – Banco Central de Honduras, SIT- Secretaría de Estado en el Despacho de Infraestructura y Transporte

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the bank in Japan (the Agent Bank) for the payment to the Supplier(s)	Within 1 month after the signing of the contract(s)	BCH		
2	To bear the following commissions to a bank in Japan for the banking services based upon the B/A		BCH		
	1) Advising commission of A/P	Within 1 month after the signing of the contract(s)			
	2) Payment commission for A/P	Every payment			
3	To ensure prompt customs clearance and to assist the Supplier(s) with internal transportation Honduras	During the Project	SIT		
4	To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	During the Project	SIT		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted or be borne by its designated authority without using the Grant;	During the Project	SIT		
6	To bear all the expenses necessary for the implementation of the Project, other than those covered by the Grant	During the Project	SIT		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	Within one month after completion of each work	SIT		
8	1) To submit Project Monitoring Report	Every month	SIT		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	Within one month after signing of Certificate of Completion for the works under the contract(s)	SIT		
9	To submit a report concerning completion of the Project	Within six months after completion of the Project	SIT		
10	To secure the following lands - temporary construction yard and stock yard near the Project area borrow pit and disposal site at the proper location	During the construction	SIT		

11	To take measure necessary for security and safety of persons engaged in the Project. In case emergency transportation is required at the construction site, appropriate support will be proved. - traffic control around the site and on transportation routes of construction materials - public notifications	During the construction	SIT		
12	To implement Environmental Management Plan(EMP) and Environmental Monitoring Plan(EMoP)	During the construction	SIT		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	During the construction	SIT		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	SIT		
2	To implement EMP and EMoP	For a period based on EMP and EMoP	SIT		
3	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between SIT and JICA.	For three years after the Project	SIT		



2. Other obligations of the Government of Honduras funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To construct facilities and provide equipments 1) To conduct the following transportation a) Marin (Air) transportation of the products from Japan to the recipient country		
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
	Total		

* The Amount is provisional. This is subject to the approval of the Government of Japan.



別添資料

テクニカルミーティング議事録

Minute of Meeting

Meeting: Technical Meeting with SIT

Date: Friday, March 24th, 2023

Place: Vice Minister's Office

Attendees:

SIT

Eng. Marco Antonio Velasquez, Vice minister of SIT
Eng. Juan Carlos Pineda, Director of Road Development
Eng. Marcela Rodriguez, Project Coordinator
Atty. Seyda Garcia, Legal Advisor
BA. Sindy Pinzon, Assistant of Vice Minister

JICA Survey Team (Nippon Koei)

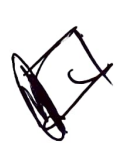
Eng. Takeshi Yoshida, Leader of the JICA Survey Team
Eng. Shinichi Nii, Deputy Leader of the JICA Survey Team
Eng. Tomokuni Hayakawa, Design Revision of the JICA Survey Team
Eng. Takuma Oue, Environmental Engineer of the JICA Survey Team
Eng. Yusuke Okano, Traffic Study of the JICA Survey Team
Eng. Carlos Gilberto Barba Puente, Translator of the JICA Survey Team

Documents presented at the meeting:

Attachment 1: Technical Meeting with SIT (Anexo 1)
Attachment 2: Environmental License Procedure Chart (Anexo 2)

The following points were discussed and agreed upon by both parties.

- JST explained the progress of the road conditions survey, geological survey, underground water survey, traffic survey, and acquisition of materials and machinery survey.
SIT understood the progress report and mentioned that the traffic signs and lights can be procured locally by Honduran companies.
- JST explicó el progreso del estudio de las condiciones de las carreteras, el estudio geológico, el estudio de aguas subterráneas, el estudio de tráfico y el estudio de la adquisición de materiales y maquinaria.
SIT entendió el informe de progreso y mencionó que las señalizaciones viales pueden ser adquiridos localmente por empresas hondureñas.
- JST explained the road and bridge design conditions for this project, and that design calculations and design revision will be performed by Japanese Specifications.
JST confirmed the following points to SIT.
The bridge section will have a widening section of 1.8 m due to the horizontal curved section.
The pavement mixture would be designed following Japanese design standards.
JST notified that they received from SIT information about Honduras's particular live load.
SIT agreed with the design conditions.

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- JST explicó las condiciones de diseño de carreteras y puentes para este proyecto, y menciono que los cálculos de diseño y revisión del diseño serán realizados usando especificaciones japonesas. JST confirmó los siguientes puntos a SIT.
 - El tramo del puente tendrá un tramo de ampliación de 1.8 m debido al a la curva horizontal.
 - La mezcla del pavimento se diseñaría siguiendo las especificaciones de diseño japonesas.
 - JST confirmo que recibió información de SIT sobre las cargas vivas particular de Honduras.SIT estuvo de acuerdo con las condiciones de diseño.
- JST proposed a relocation plan for the access road to Uyuca Guest House. A reference drawing of the relocation access road will be submitted to SIT by the end of the present study. SIT has understood and agreed to relocate the access road for the Uyuca guest house as proposed before the bidding phase of bridge construction.
- JST propuso un plan de reubicación del camino de acceso a Uyuca Guest House. JST entregara un plano de referencia de la reubicación del camino de acceso a SIT al final del presente estudio. SIT entendió y acordó reubicar el camino de acceso a Uyuca Guest House como propuesto por JST antes de la fase de licitación de la construcción del puente.
- JST requested the relocation of utility poles in the mountainside, inside the project section. JST proposed the relocation of utility poles to the valley side of the road. SIT understood and agreed to arrange the procedures for the relocation of utility poles to the valley side before the bidding phase of bridge construction. SIT mentioned ENEE (Empresa Nacional de Energía Eléctrica) would be responsible for relocating the utilities, and SIT would arrange the procedures for the captioned relocation.
- JST solicitó la reubicación de postes de utilidades en el lado de la montaña, dentro de la sección del proyecto. JST propuso la reubicación de los postes de utilidades al lado del valle de la carretera. SIT entendió y acordó organizar los procedimientos para la reubicación de postes al lado del valle antes de la fase de licitación de la construcción del puente. SIT mencionó que la ENEE (Empresa Nacional de Energía Eléctrica) sería responsable de la reubicación de los postes y SIT se encargaría de los trámites para la reubicación mencionada.
- JST informed that they received the cadastral maps of the project area and have identified the private property. All land on the mountainside of the current road, where the bridge will pass, is identified as private property. JST requested SIT to acquire the private land necessary for the bridge structure and its construction before the bidding phase of bridge construction. SIT agreed to acquire private land for bridge construction before the bidding phase of bridge construction.
- JST informó que recibieron los mapas catastrales del área del proyecto y han identificado las propiedades privadas. Todos los terrenos en la ladera de la montaña de la carretera actual, por donde pasará el puente, se identifican como propiedad privada. JST solicitó a SIT la adquisición de los terrenos necesarios para el área del puente y carretera, y área necesaria para la construcción, antes de la fase de licitación de la construcción del puente. SIT acordó adquirir terrenos privados para la construcción del puente antes de la fase de licitación de la construcción del puente.
- SIT confirmed the project category as "Bridges for roads or railways, Category 2". JST mentioned that in discussion with SIT/UGA it was concluded that the previous license (Period: 2015-2019) cannot be used since it was for "Road rehabilitation, Category 1", so it is requested to SIT to apply for a new license. SIT agreed to obtain a new environmental license before the bidding phase of bridge construction.



- SIT confirmó la categoría de proyecto como “Puentes para carreteras o vías férreas, Categoría 2”. JST mencionó que en discusión con SIT/UGA se concluyó que la licencia anterior (Período: 2015-2019) no se puede utilizar en este proyecto ya que era para “Rehabilitación de carreteras, Categoría 1”, por lo que se solicita a SIT tramitar una nueva licencia. SIT acordó obtener una nueva licencia ambiental antes de la etapa de licitación de la construcción del puente.
- SIT confirmed that for environmental category selection, it is not necessary to consider approach road length, and the corresponding category is “Category 2 (>50-200 m)”.
- SIT confirmó dentro de la selección de la categoría ambiental, no es necesario considerar la longitud de la carretera de aproximación, y la categoría correspondiente es “Categoría 2 (>50-200 m)”.
- SIT has confirmed the involved institutions and their responsible functions as follows:
 - Directorate of Road Development: Project Formulation Unit
 - Directorate of Road Conservation: Project Executing Unit
 - Environmental Management Unit: In charge of EIA and obtaining environmental licensing
- La SIT ha confirmado las instituciones involucradas y sus funciones responsables en este proyecto.
 - Dirección de Desarrollo Vial: Unidad de Formulación del Proyecto
 - Dirección de Conservación de Carreteras: Unidad Ejecutora del Proyecto
 - Unidad de Gestión Ambiental: A cargo del EIA y obtención de licencias ambientales
- JST explained the counterpart undertaking items before the tender stage, during the construction stage, and after the construction stage.
SIT has understood and agreed with the undertaking items.
- JST explicó los puntos responsables por la contraparte antes de la etapa de licitación, durante la etapa de construcción y después de la etapa de construcción. SIT ha entendido y está de acuerdo con los puntos responsables.
- JST requested SIT to acquire the environmental license and tree-cutting permit according to the captioned procedures before the bidding phase of bridge construction. Additionally, JST requested SIT to set the location of soil material borrow pit, construction yard, construction & domestic waste disposal space as necessary and get the correspondent permissions with the municipality of San Antonio de Oriente.
- JST solicitó a SIT la adquisición de la licencia ambiental y el permiso de tala de árboles de acuerdo con los procedimientos mencionados, antes de la fase de licitación de la construcción del puente. Además, JST solicitó a SIT que establezca la ubicación de la ubicación del préstamo de material de suelo, el espacio de construcción y los botaderos según sea necesario y la obtención de los permisos correspondientes con el municipio de San Antonio de Oriente.

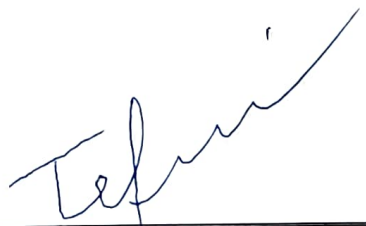


Comments

- SIT inquired if the traffic survey would categorize the vehicle type.
JST replied that the traffic volume is counted by car type (Heavy vehicles, Normal vehicles, Motorcycles, etc.).
- SIT preguntó si el estudio de tráfico categorizaría el tipo de vehículo.
JST respondió que el volumen de tráfico se cuenta por tipo de automóvil (vehículos pesados, vehículos normales, motocicletas, etc.).
- JST inquired about the status of tax exemption verification.
SIT replied the tax exemption sheet is being verified by SAR (Secretariat of Revenue Administration). It is expected SAR to answer by next week.
- JST preguntó sobre el estado de la verificación de exención de impuestos.
SIT respondió que la hoja de exención de impuestos está siendo verificada por la SAR (Secretaría de Administración Tributaria). Se espera que SAR responda la próxima semana.
- SIT inquired if the Topography survey would include stakes set at the site to use for SIT topography.
JST replied that topography data would be submitted to SIT and the topography survey benchmarks could be used as a reference by SIT for future topography surveys.
- SIT preguntó si el levantamiento topográfico incluiría estacas colocadas en el sitio para usarlas en la topografía por parte de SIT.
JST respondió que los datos topográficos se enviarían a SIT y que SIT podría utilizar los bancos de nivel del levantamiento topográfico como referencia para futuros levantamientos topográficos.
- JST inquired if the workflow schedule stated on page 26 of attachment 1 is enough time for SIT to complete the undertaking items. JST also mentioned this schedule is tentative and would be updated at the end of the preparatory survey.
SIT replied that the current workflow schedule is enough for completing the undertaking items.
- JST preguntó si el cronograma de flujo de trabajo indicado en la página 26 del anexo 1 es suficiente tiempo para cumplir con los puntos responsables por SIT. JST también mencionó que este cronograma es tentativo y se actualizará al final del estudio preparativo.
SIT respondió que el cronograma de flujo de trabajo actual es suficiente para cumplir con los puntos responsables por SIT.


Eng. Marco Antonio Velasquez
Vice Minister
Secretary of Infrastructure and
Transportation




Eng. Yoshida Takeshi
Team Leader, JICA Survey Team

別添資料

ソフトコンポーネント計画書

ホンジュラス国
国道六号線橋梁建設計画準備調査

ソフトコンポーネント計画書

2023 年 7 月

日本工営 株式会社

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1. ソフトコンポーネントを計画する背景

ホンジュラス共和国（以下、「ホ」国）国道六号線橋梁建設計画は、中米物流マスタープラン（Regional Master Plan on Mobility and Logistics 2035）でも位置付けられている域内主要 11 回廊の一つで、域内南北縦貫回廊の二重化を図る上で重要な路線である国道六号線の地すべり箇所において橋梁を建設することにより、自然災害への脆弱性の低減による安全かつ円滑な物流網の整備を図ることを目的とする。本橋は、地すべり地を回避する橋長 140m の PC2 径間連続箱桁橋として計画されている。

本橋竣工後の橋梁維持管理は、インフラ・運輸交通省（SIT）が実施することになるが、現在 SIT の維持管理能力は予算や体制の点で不十分である。また、SIT は 2022 年の政権交代後に発足して間もない組織であり、前組織の INSEP からの点検記録も引継ぎが不十分で一元的に管理されていない。加えて、道路排水構造物の管理が行き届いておらず、排水不良に悩む周辺住民が自己負担で清掃している現状も確認された。さらに下表に示す通り、架橋地点を通過する大型車の約 2 割が過積載車両であるなど過積載車両の対策が不十分であり、舗装や構造物の早期劣化が懸念される。地すべり対策の観点では、応急対策として地すべり頭部に盛土して結果的に地すべりを拡大させるなど、地すべり対策の知識に欠ける現状であり、橋梁建設中の地すべり対策工の保守や変状発生時の対処について懸念がある。したがって、本橋の維持管理技術および過積載車両対策、地すべり対策に関する指導等に係る支援をソフトコンポーネントにより実施し、橋梁建設による成果の持続性を確保する。



出典：調査団

写真 土砂の流入・堆積により閉塞した水路

表 軸重調査結果

車種	許容積載量 (ポンド)	計測された 最大積載量 (ポンド)	超過 %	計測台数	超過台数	超過台数割合 %
C2	15000	21990	46.60%	34	7	20.59%
C3	21500	20960	0%	7	0	0%
C4	25000	27380	9.52%	1	1	100.00%
C5 (T3S2)	37000	41940	13.35%	64	9	14.06%
+C5 (T3S3)	41000	47350	15.49%	8	3	37.50%
TOTAL				114	20	17.54%

出典：調査団

2. ソフトコンポーネントの目標

上記の背景を踏まえ、プロジェクトの効果発現と持続可能性の観点から以下の目標を設定する。

目標-1

竣工した橋梁の維持管理に係る技術指導を通じて、付帯工・排水構造物を含む本橋全体が適切かつ効率的な維持管理のもとに置かれ、健全な状態を保っている。

目標-2

地すべり対策に係る技術指導によって、本橋建設中の地すべり範囲および地すべり対策工に対して適切な処置が施されている状態になる。

3. ソフトコンポーネントの成果

本橋を含む国道六号線の維持管理を担当する SIT 職員に技術指導を行うことで、以下に示す直接的成果の達成を図る。

成果-1

維持管理担当者並びに責任者が、日常点検・定期点検の重要性を認識し、点検における着目点や具体的な方法を理解し、点検結果の蓄積に基づく効率的な維持管理・補修計画に反映できるようになる。また、過積載車両が舗装や構造物に及ぼす影響を理解し、取締りの必要性を認識できるようになる。

成果-2

維持管理担当者並びに責任者が、地すべりの特性を認識し、適切な地すべり応急対策ができるようになる。また、より中長期的な地すべり対策工について理解できるようになる。

4. 成果達成度の確認方法

本計画によるソフトコンポーネントの成果達成度を確認するため、成果毎の確認項目を以下の通り設定する。指導は主に講義主体となるため、セミナー中の質疑応答と完了後のアンケートによって、その理解度を確認する。

分野	成果	達成度の確認項目
橋梁維持管理	成果 1: 維持管理担当者並びに責任者が、日常点検・定期点検の重要性を認識し、点検における着目点や具体的な方法を理解し、点検結果の蓄積に基づく効率的な維持管理・補修計画に反映できるようになる。また、過積載車両が舗装や構造物に及ぼす影響を理解し、取締りの必要性を認識できるようになる。	1. 日常・定期点検の重要性を理解し、点検における着目点や具体的な方法を理解しているかどうか。
		2. 点検データを橋梁点検管理ツールで管理し、維持管理・補修計画に反映できるかどうか。
		3. 過積載車両が舗装や構造物に及ぼす影響を理解しているか。
		4. 過積載車両取締りの必要性を認識しており、関係機関に働きかけているか。
地すべり対策	成果 2: 維持管理担当者並びに責任者が、地すべりの特性を認識し、適切な地すべり応急対策ができるようになる。また、より中長期的な地すべり対策工について理解できるようになる。	1. 地すべりの特性を理解しているか。
		2. 万が一地すべりが発生した際の応急対策について理解しているか。
		3. 地すべり応急対策について、適切な運用・管理ができるか。
		4. 地すべり対策工の具体的な方法について理解しているか。

5. ソフトコンポーネントの活動（投入計画）

本ソフトコンポーネントにおける活動内容を以下に示す。

活動項目	実施機関の対象組織	該当する成果
(1) 橋梁維持管理能力の向上	SIT・道路保全部	成果 1
(2) 地すべり対策技術の向上	SIT・道路保全部	成果 2

(1) 成果 1 に対する活動【活動 1】

(a) 必要な技術・業種

橋梁維持管理技術を有する橋梁技術者

(b) 技術基準

現状の技術基準	必要とされる技術基準
橋梁の定期点検は 4 年に一度行われているが、人員不足のため網羅できておらず、体系的なデータ管理体制が構築されていない。また、道路排水構造物の清掃等の日常管理もされていない。加えて、過積載車両の認識が不十分であり、通行する大型車の約 2 割が過積載など、本橋竣工後の早期劣化にもつながる可能性がある。	橋梁点検記録をスプレッドシート上で一覧化する橋梁点検管理ツールを作成・運用することで、点検時期や健全度で優先順位を設定し、限られた予算・人員でも効率的な橋梁の維持管理ができる。また、過積載車両が構造物に及ぼす影響を理解し、関係機関と連携して過積載車両を取締ることができる。

(c) 対象者

SIT・道路保全部

(d) 実施方法

実施場所	SIT 事務所 本橋計画地点周辺（国道六号線 16.3km 地点）
実施期間	国内作業：0.5 ヶ月（活動日 10 日） 現地作業：1 ヶ月（活動日 21 日、移動日 5 日、休日 4 日）
活用教材	・橋梁点検マニュアル ・橋梁点検管理ツール（スプレッドシート）
活動内容	国内作業 ・橋梁点検管理ツールの作成準備 現地作業 ・橋梁点検マニュアルの説明 ・橋梁日常点検の頻度、方法、着目点、留意事項に関する説明 ・橋梁定期点検の点検項目、方法、健全度評価に関する説明 ・過積載車両が構造物に及ぼす影響の説明 ・過積載取締りの必要性に関する会議（陸運研究所（IHIT）と合同） ・橋梁点検管理ツールの作成 ・橋梁点検管理ツールの過去点検データ入力 ・点検時の安全対策の説明 ・日常管理の指導 ・本橋の橋梁点検をケーススタディとした実践訓練 ・上記活動を対象者自らが実施するためのフォローアップ ・達成度の確認・評価

(2) 成果2に対する活動【活動2】

(a) 必要な技術・業種

地すべりの素因と誘因、対策に対し指導できる技術者

(b) 技術基準

現状の技術基準	必要とされる技術基準
現在行われている、地すべりで沈下した道路部に盛土を行う応急対策は、地すべり頭部の荷重となり、地すべりの滑動力を高め安定性を損なう結果となっている。今後橋梁建設中に地すべりが活性化した場合にも適切な対処ができない懸念がある。	地すべりの特性を理解し、地すべりが発生した場合の適切な応急対策ができる。施工した応急対策工について運用・管理ができる。具体的な地すべり対策工を理解できるようになる。

(c) 対象者

SIT・道路保全部

(d) 実施方法

実施場所	本橋計画地点周辺（国道六号線 16.3km 地点）
実施期間	現地作業（第1回目）：1ヶ月（活動日21日、移動日5日、休日4日） 現地作業（第2回目）：0.5ヶ月（活動日9日、移動日5日、休日1日）
活用教材	・SIECA/JICA/COMITRAN 中米道路リスク管理・地震工学マニュアル（斜面編 2019年初版） ・ホンジュラス国道六号線地すべり防止計画、地すべり対策工維持管理マニュアル 2019年12月 ・上記の補足教材
使用機材等	・サモラノ・ウユカ生態系保全センター内の気象計 ・ボーリング孔内パイプ歪計測定器 ・ドロン空撮図化 2m 標高コンタ地形図（国道六号線 15km~17km、ウユカ山頂を含む北麓斜面～道路谷側）
活動内容	現地作業（第1回目） ・SIECA/JICA/COMITRAN 中米道路リスク管理・地震工学マニュアル（斜面編 2019年の地すべり部分とホンジュラス国道六号線地すべり防止計画、地すべり対策工維持管理マニュアル 2019年12月とその補足教材による講習 ・地すべりの性質に関する講義 ・机上の地すべり地形判読演習 ・現地での地すべり現象の観察と評価演習 ・地すべり応急対策の企画演習 ・地すべり対策工・落石対策工に関する講義 ・地すべり対策工・落石対策工の事例紹介 ・水抜きボーリング孔施工見学 現地作業（第2回目） ・地すべり状況及び地すべり応急対策の運用状況の確認 ・上記活動を対象者自らが実施するためのフォローアップ ・達成度の確認・評価

(3) 日本側実施リソース

担当分野	人数	期間(M/M)	主な活動内容
活動1に対する従事者			
橋梁維持管理	1名	国内：0.50M/M 現地：1.00M/M 合計：1.50M/M	・橋梁点検管理ツールの作成・運用指導 ・日常点検、管理の指導 ・過積載が構造物に及ぼす影響の啓発活動
活動2に対する従事者			
地すべり対策	1名	1回目：1.00M/M 2回目：0.50M/M 合計：1.50M/M	・地すべりの応急対策に係る指導 ・地すべり応急対策工の運用・管理に係る指導 ・地すべり対策工に関する講義

また、現地傭人として通訳（西語）を以下の通り備上する。

担当分野	人数	期間(M/M)	主な活動内容
通訳-1	1名	1.00 M/M	橋梁維持管理（日本人技術者）の通訳 ・研修時の英西通訳 ・教材等の翻訳
通訳-2	1名	1.50 M/M	地すべり対策（日本人技術者）の通訳 ・研修時の英西通訳 ・教材等の翻訳

(4) 「ホ」国側実施リソース

ソフトコンポーネントを実施するために「ホ」国側が投入すべき人材を以下に記す。

担当分野	人数	期間
活動1に対する投入		
維持管理担当者	20名程度	1.0 カ月
活動2に対する投入		
地すべり対策担当者	20名程度	1.5 カ月

6. ソフトコンポーネントの実施リソースの調達方法

本ソフトコンポーネントにおける各活動においては、以下に示す理由によりローカルリソースではなく日本人技術者が相応しいと考えられる。

活動項目	日本人技術者による実施の理由
(1) 橋梁維持管理技術の強化	「ホ」国では橋梁点検記録が体系的に管理されていないことに加え、橋梁の維持管理に十分な知識を有していることが求められるため。
(2) 地すべり対策技術の強化	「ホ」国での地すべり対策に関する無償資金協力事業に従事した経験のある技術者による実施が適しているため。

以上の理由により、本ソフトコンポーネントにおいては、受注コンサルタントが直接実施することが適切である。

7. ソフトコンポーネントの実施工程

本ソフトコンポーネントの実施工程を以下に示す。

暦年		2025年												2026年												2027年																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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項 目		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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8. ソフトコンポーネントの成果品

ソフトコンポーネントの成果品は以下に示すとおりである。

- 橋梁点検管理ツール
- 地すべり対策研修の活用教材
- ソフトコンポーネント完了報告書

完了報告書は以下の成果品を含む。

- 写真等の活動記録
- 実施期間職員へのアンケート結果
- 施主に提出した Final Report

9. ソフトコンポーネントの概略事業費

ソフトコンポーネントの実施に要する概略事業費は下表に示すとおりである。

費目		日本円 (千円)	レンピラ (HNL)	米ドル (USD)	総額 (千円)
(1)	直接人件費	3,312	0.00	0	3,312
(2)	直接経費	3,600	301,854.00	0	5,239
(3)	間接費	6,888	0.00	0	6,888
合計		13,800	301,854.00	0	15,439

※交換レート: 1 レンピラ=5.4292 円

10. 相手国側の責務

ソフトコンポーネントの目標が達成されるためには、ソフトコンポーネントの実施による成果に加え、相手国実施機関が果たすべき責務として以下のような項目が挙げられる。

- 橋梁点検管理ツールを、本橋だけでなく今後他橋梁の日常・定期点検についても適用できるように組織内で水平展開する。
- 付帯工・排水構造物の清掃などの日常点検実施に必要な人員・予算を確保する。
- 過積載車両の取締りを強化するよう陸運局（IHTT）・警察等の関係機関と連携する。
- 地すべり対策工について習得した内容を組織内で水平展開する。

添付資料:概略事業費内訳

(交換レート : 1 レンピラ = 5.4292 円)

[illegible]

規格：

14

[illegible]

規格：		名称	規格	数量	単位	単価			金額			備考
						現地貨 (HNL)	外貨 (USD)	日本円 (円)	現地貨 (HNL)	外貨 (USD)	日本円 (円)	
日当			格付									
		専門家1 (道路橋梁維持管理)	3	30.0	人/日			4,500			135,000	日本-12 日当 3級 100%
		専門家2 (地すべり対策)	3	30.0	人/日			4,500			135,000	日本-12 日当 3級 100%
		専門家2 (地すべり対策)	3	15.0	人/日			4,500			67,500	日本-12 日当 3級 100%
宿泊費			格付									
		専門家1 (道路橋梁維持管理)	3	28.00	人/日			13,500			378,000	日本-21 宿泊 3級 100%
		専門家2 (地すべり対策)	3	28.00	人/日			13,500			378,000	日本-21 宿泊 3級 100%
		専門家2 (地すべり対策)	3	13.00	人/日			13,500			175,500	日本-21 宿泊 3級 100%
		合計		1	式						1,269,000	
		単位当たり単価		1	式						1,269,000	

別添資料

ミニッツ署名(DOD)

Minutes of Discussions
on the Preparatory Survey for the Project for
The Project for Bridge Construction on National Road No.6
(Explanation on Draft Preparatory Survey Report)

With reference to the Minutes of Discussions signed between the Government of the Republic of Honduras (hereinafter referred to as "Honduras") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 14th February, 2023 and in response to the request from the Government of Honduras (hereinafter referred to as "Honduras") dated October 10th, 2015, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Bridge Construction on National Road No.6 (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

This document is elaborated and duplicated in both Spanish and English, and both documents are equally authentic. In case of any divergence of interpretation, the English version will prevail.

Tegucigalpa, September 1st, 2023

須原 靖博

SUHARA Yasuhiro

Leader

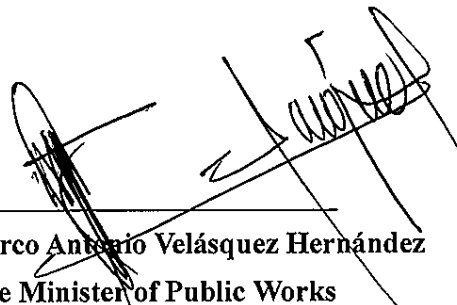
Team 1, Transportation Group,

Infrastructure Management

Department

Japan International Cooperation Agency (JICA)

Japan



Marco Antonio Velásquez Hernández

Vice Minister of Public Works

Secretariat of State in the Office of

Infrastructure and Transportation (SIT)

Republic of Honduras

ATTACHEMENT

1. Objective of the Project

The objective of the Project is to develop a safe and smooth road network by reducing vulnerability to natural disasters through the construction of a bridge at the landslide site on National Road No.6, thereby contributing to the revitalization of Honduras's economy.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for Bridge Construction on National Road No.6".

3. Project site

Both sides confirmed that the site of the Project is in the municipality of San Antonio de Oriente, Department of Francisco Morazan, which is shown in Annex 1. The middle section of the planned road is as follows.

- Station No: 0+300.000
- Degree System: N 14.04107834 W 87.07689685
- UTM System: 1552270.726824, 491697.324740

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1 The Secretaría de Estado en el Despacho de Infraestructura y Transporte (hereinafter referred to as "SIT") will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care of by relevant authorities properly and on time. The organization charts are shown in Annex 2

4-2 SIT is responsible for maintenance and operation of the bridge after the opening.

4-3 The General Directorate of National Infrastructure (hereinafter referred to as "NGIN") is mainly in charge department of the Project, or in its absence, whoever Minister shall designate.



5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Honduras side agreed to its contents. JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Honduras side around Late November, 2023.

6. Cost estimate

Both sides confirmed that the cost estimate including the contingency explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost in case of natural disasters, unexpected natural conditions, etc., under the review and concurrence of JICA.

7. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

8. Timeline for the project implementation

The Team explained to the Honduras side that the expected timeline for the project implementation is as attached in Annex 3.



9. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows. The Honduras side will be responsible for the achievement of agreed key indicators targeted in year 2030 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Item	Base Data (Year 2020)	Target Data (Year 2030: 3year after completion)
Annual average daily traffic volume(units/day)	9,183	12,559
Passenger volume(Thousands of persons /year)	8,517	10,833
Cargi volume(Thoudands/year)	5,909	8,105
Average vehicle speed (km/h)	20.5	44.4
Benefit of eliminating loss of traffic obstruction due to landslide (USD/Year)	0	671,000
Benefit of eliminating detour loss due to landslide (USD/Year)	0	992,000

[Qualitative indicators]

Improving road safety against landslides, improving flatness and drivability by improving pavement surfaces, enhancing international logistics by improving access to the Nicaraguan border, and revitalizing local economies and reducing vulnerability to natural disasters.

10. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to six evaluation criteria (Relevance, Coherence, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Honduras side is required to provide necessary support for the data collection.

11. Technical assistance (“Soft Component” of the Project)

Considering the sustainable operation and maintenance of the products and services granted through the Project, the following technical assistance is planned under the Project.

- Overload prevention measures
To understand the impact of overloaded vehicles on pavements and structures through seminars.
- Bridge maintenance methods
Capacity development for the awareness of the importance of daily and periodic inspections and the methods for inspections through seminars and site inspection.
- Emergency measures for landslides
Capacity development for the recognition of the landslides characteristics of landslides and the execution of appropriate inspections, observations, and emergency landslide countermeasures.

The Honduras side confirmed that it would send appropriate and compete participants in purpose of the technical assistance as described in the Draft Report.

12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 4. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 1. (2) NO.5 of Annex 4, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by SIT during the implementation stage of the Project.

The Honduras side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

Both sides also confirmed that Annex 4 will be used as an attachment of G/A.

Both sides confirmed that SIT shall take necessary measures to ensure and maintain the security of the Project site and the persons related to the implementation of the Project, in cooperation with relevant authorities during the Project implementation period. Such security measures shall reasonably reflect the needs of the Consultant/the Contractor engaging in the Project, as shown in Annex 4.

Both sides agreed that if the additional security cost would be necessary for the implementation of the Project, such cost shall be borne by the Recipient without using the Grant.

13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 5. The timing of submission of the PMR is described in Annex 5.

14. Project completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly by the Executing Agency, but in any event not later than six months after the completion of the Project.

15. Environmental and Social Considerations

15-1 General Issues

15-1-1 Environmental Guidelines and Environmental Category

The Team explained that ‘JICA Guidelines for Environmental and Social Considerations (January 2022)’ (hereinafter referred to as “the Guidelines”) is applicable for the Project. The Project is categorized as B because the Project is not considered to be a large-scale bridge project, is not located in a sensitive area, and has none of the sensitive characteristics under the guidelines, hence it is not likely to have a significant adverse impact on the environment.

15-1-2 Environmental Checklist

The environmental and social considerations including major impacts and mitigation measures for the Project are summarized in the Environmental Checklist attached as Annex 8. Honduras side assured that they shall take the necessary measures in accordance with the Environmental Checklist. Both sides agreed that in case of major modification of the content of the Environmental Checklist, the Honduras side shall submit the modified version to JICA in a timely manner.

15-2 Environmental Issues

15-2-1 Environmental Impact Assessment (EIA)

The EIA report is not required for the Project in the country's legal system.

15-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 7, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and EMoP, which may be updated during the Detailed Design stage.

15-2-3 Consultation with Local Stakeholders

Honduras side explained that local stakeholder meetings on the Project with relevant stakeholders and local residents with particular attention to directly affected peoples by the Project were held at San Antonio de Oriente and construction site in March. Advance announcements were given by Honduras side. Questions and opinions such as Questions and Comments were raised by attendees. Honduras explained the outcome of such consultations was incorporated into the project plans. However, there were no objections to the implementation of the Project. Details regarding the stakeholder meetings are summarized as per Annex 6. Honduras side explained appropriate considerations have been given to vulnerable social groups during those meetings by the local stakeholder meeting.

15-3 Social Issues

15-3-1 Land Acquisition

Both sides confirmed the 14,100m² of land would be acquired, 9 Households /36 people would be affected, and 9 Households /36 people would be fully compensated according to the affected area due to the implementation of the Project.

Such land acquisition shall be completed by November 2024, based on the "(Abbreviated) Resettlement Action Plan (RAP)" as Annex 8 which was prepared in line with the Guidelines and authorized by the Honduras side . The cost for RAP implementation is estimated as 14,100,000 Lps and Honduras side shall secure budget for the cost.

15-4 Environmental and Social Monitoring

15-4-1 Environmental Monitoring

Both sides agreed that the Honduras side will submit results of environmental monitoring to JICA as a part of Monthly Progress Report by using the monitoring form attached as Annex 9. The timing of submission of the monitoring form is described in Annex 4. In case JICA finds that there is a need for improvement in a situation with respect to environmental considerations after the agreed monitoring period, JICA may request to extend the period of monitoring and reporting until JICA confirms the issues have been properly addressed. The extension of the monitoring will be decided in accordance with the agreement between Honduras and JICA.

15-4-2 Social Monitoring

Both sides confirmed that the Honduras side will implement social monitoring about land acquisition and compensation proposed in the "RAP". Honduras agreed that progress of land acquisition and implementation of "RAP" will be monitored until land acquisition and compensation activities. The Honduras side and the Team agreed that the Executing Agency will submit results of social monitoring to JICA by using the monitoring form attached as Annex 9.

In case there is a remaining issue that needs to be addressed, JICA may request to extend the period of monitoring and reporting until JICA confirms the issues have been properly addressed and solved. The extension of the monitoring will be decided in accordance with the agreement between Honduras and JICA.

15-4-3 Information Disclosure of Monitoring Results

Both sides confirmed that it will take stipulated procedures for information disclosure in accordance with SINEIA Laws and Regulations. In addition, the Team requested Honduras side to disclose results of environmental and social monitoring to local stakeholders and Honduras side agreed to disclose monitoring results through their system by date.

The Honduras side agreed that JICA will disclose results of environmental and social monitoring submitted by the Honduras side as the monitoring forms attached as Annex 9 on its website. If the third parties request further information, JICA discloses the information, which is subject to approval by Honduras.



16. Other Relevant Issues

16-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

16-2 Gender Mainstreaming

Both sides confirmed that gender mainstreaming should be duly practiced for the Project implementation as the project is categorized as GIP (Gender Equality Project or Project Targeting Women), or GIS (Gender Integrated Project). In particular, both sides agreed on the following gender elements to be integrated into the Project.

- (a) Actively promote the participation of women in all projects conducted by SIT.
- (b) To collaborate with vocational training centers to implement programs to provide training in plastering, pilling, paving, etc. for road construction.

【Annex 1: Project Site】

【Annex 2: Organization Chart】

【Annex 3: Project Implementation Schedule】

【Annex 4: Major Undertakings to be taken by the Government of Honduras】

【Annex 5: Project Monitoring Report】

【Annex 6: Environmental Check List】

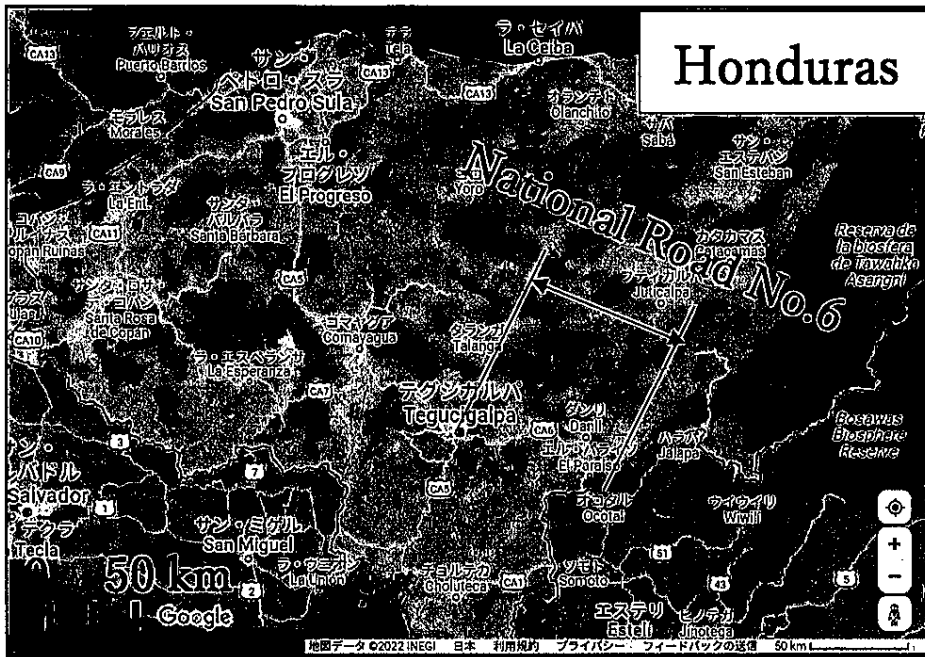
【Annex 7: Environmental Management Plan/Environmental Monitoring Plan】

【Annex 8: (Abbreviated) Resettlement Action Plan】

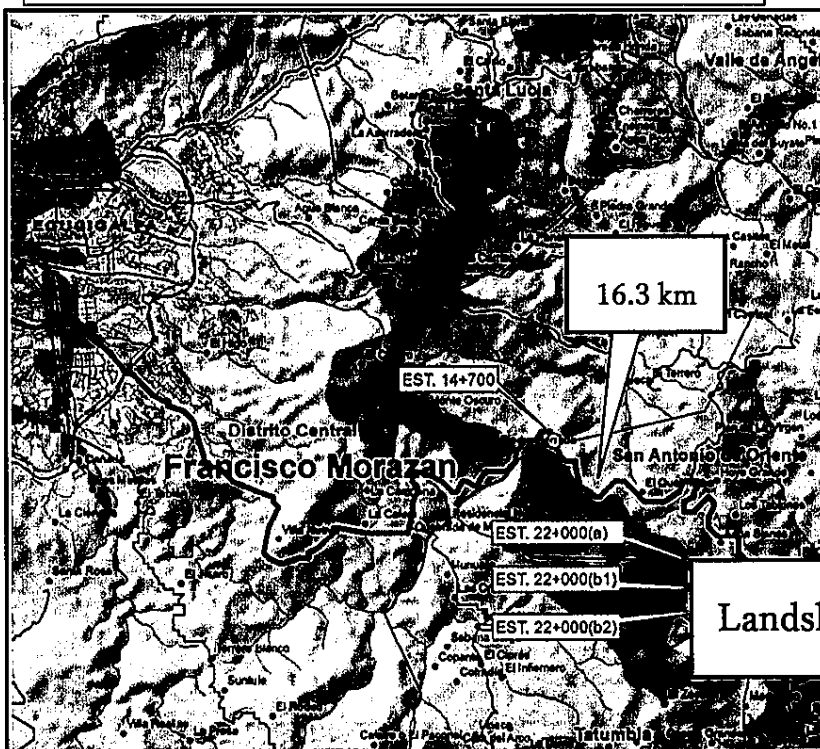
【Annex 9: Environmental and Social Monitoring Form】



PROJECT SITE



Detailed map of the 16.3km point on National Road No.6



Landslide area

A bridge construction point

8



[illegible]

Major Undertakings to be taken by the Government of Honduras

1. Specific obligations of the Government of Honduras which will not be funded with the Grant

(1) Before the Tender

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To obtain environmental license	Before Signing of the G/A	SIT		
2	To secure budget for the necessary commissions related to the Banking Arrangement	Within 1 month after signing of the G/A	SIT		
3	To sign the Banking Arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	Within 1 month after the signing of the G/A	BCH		
4	To issue the Authorization to Pay (A/P) to a bank in Japan (the Agent Bank) for the payment to the consultant	Within 1 month after the signing of the contract	BCH		
5	To bear the following commissions to the Agent Bank for the banking services based upon B/A		BCH-SIT	Lps 600,000	
	1) Advising the commission of A/P	within 1 month after the signing of the contract(s)	BCH-SIT		
	2) Payment of commission for A/P	every payment	BCH-SIT		
6	To secure the necessary budget for implementation of EMP and EMoP	Within 1 month after the signing of the G/A	SIT		
7	To secure the necessary budget and implement land acquisition and compensation cost in accordance with the "Resettlement Action Plan (RAP)"	Before notice of the bidding documents	SIT		
8	To compensate for the land acquisition in accordance with RAP	Before notice of the bidding documents	SIT	Lps 14,100,000	
9	To clear, level and reclaim the following 1) reallocate public services (electric and communication poles and wires. existing pipeline if any.) 2) existing facilities	Before notice of the bidding documents	SIT/ENE, Tigo, Claro	Lps 2,000,000	
10	To replace the local road located on the mountain side	Before notice of the bidding documents	SIT	Lps 3,700,000	
11	To secure and clear the following sites 1) right of way 2) temporary construction yard and stock yard near the project area 3) borrow pit and disposal site near the project area	Before notice of the bidding document	SIT	Lps 5,850,000	
12	To obtain the planning, zoning and construction permit	Before notice of the bidding document	SIT		
13	To submit Project Monitoring Report (with the result of Detail Design)	Before presentation of bidding documents	SIT		
	Total Estimated Cost			Total Lps 26,250,000	

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

Note:

BCH – Banco Central de Honduras, SIT – Secretaría de Estado en el Despacho de Infraestructura y Transporte, ENEE – National Electrical Energy

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the bank in Japan (the Agent Bank) for the payment to the Contractor(s)	Within 1 month after the signing of the contract(s)	BCH		
2	To bear the following commissions to a bank in Japan for the banking services based upon the B/A		BCH-SIT	Lps 600,000	
	1) Advising commission of A/P	Within 1 month after the signing of the contract(s)	BCH-SIT		
	2) Payment commission for A/P	Every payment	BCH-SIT		
3	To secure prompt customs clearance and to provide assistance to the Contractor(s) with regards to the procedures required for the internal transportation in Honduras	During the Project	SIT		
4	To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	During the Project	SIT		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted or be borne by its designated authority without using the Grant for the Project	During the Project	SIT		
6	To bear all the expenses necessary for the implementation of the Project, other than those covered by the Grant	During the Project	SIT		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	Within one month after completion of each work	SIT		
8	1) To submit Project Monitoring Report	Every month	SIT		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	Within one month after signing of Certificate of Completion for the works under the contract(s)	SIT		
9	To submit a report concerning completion of the Project	Within six months after completion of the Project	SIT		
10	To secure the following sites 1) temporary construction yard and stock yard near the project area 2) borrow pit and disposal site near the project area	During the construction	SIT		
11	To take measure necessary for security and safety of persons engaged in the Project. In case emergency transportation is required at the construction site, appropriate support will be proved. - traffic control around the site and on transportation routes of construction materials - public notifications	During the construction	SIT		

12	To implement Environmental Management Plan(EMP) and Environmental Monitoring Plan(EMoP)	During the construction	SIT	Lps 1,000,000	
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	During the construction	SIT		
	Total Estimated Cost			Total Lps 1,600,000	

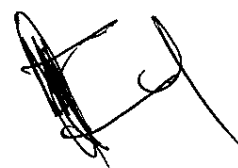
(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	SIT	637,310 Lps/year	
2	To implement EMP and EMoP	For a period based on EMP and EMoP	SIT	Lps 1,000,000	
3	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between SIT and JICA.	For three years after the Project	SIT		

2. Other obligations of the Government of Honduras funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To construct bridges/roads 1) A bridge to avoid landslide areas 2) Approach road works from existing roads to the bridge		
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
3	Contingencies		
	Total		2,748

* The Amount is provisional. This is subject to the approval of the Government of Japan.



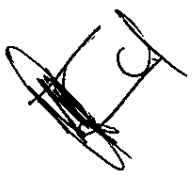
<u>Project Monitoring Report</u> on <u>Project Name</u> <u>Grant Agreement No. XXXXXXXX</u> 20XX, Month
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Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Executing Agency	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Line Ministry	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____



1: Project Description

1-1 Project Objective

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1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

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1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original (proposed in the outline design)	Actual
1.		

2-2 Scope of the work

Components	Original* (proposed in the outline design)	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

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2

2

2-3 Implementation Schedule

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations
See Attachment 2.

2-4-2 Activities
See Attachment 3.

2-4-3 Report on RD
See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant(Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
	1.			
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
	1.			

8

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (*at the time of outline design*)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

	Contingency Plan (if applicable):
Actual Situation and Countermeasures (PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

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5-2 Lessons Learnt and Recommendations

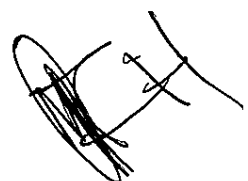
Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

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5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
 - Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)
12. Report on the Management of Safety for Construction Works



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

	Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment Price (Decreased) E=C-D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

	Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
1	Item 1	●	●	●			
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

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2

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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2

Report on the Management of Safety for Construction Works

Month/Year 2022 年×月	Cumulative number of labor 労働延人数	Cumulative number of public accident 公衆災害件数	Cumulative hours worked 延べ実労働時 間数	Number of deaths and injuries due to industrial accidents 労働災害による死傷者				Frequency rate 度数率	Severity rate 強度率
This Month 当月					Death and injuries 死傷者数	Aggregated number of calendar days absent 延べ休業日数	Aggregated number of work- days lost 延べ労働損失日数		
				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
Total 計									
Total including this month 当月迄累計				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
				Total 計					
Note 注)				1. Frequency rate is the frequency of occurrence of industrial accidents. Frequency rate = (Number of deaths and injuries due to industrial accidents ÷ Cumulative hours worked) × 1,000,000 度数率 = (労働災害による死傷者数÷延べ実労働時間数) × 100 万時間 2. Severity rate is degree of seriousness of the industrial accident. Severity rate = (Aggregated number of work-days lost ÷ Cumulative hours worked) × 1,000 強度率 = (延べ労働損失日数÷延べ実労働時間数) 1000 時間 3. Aggregated number of work-days lost = Aggregated number of calendar days absent × (300÷365) Death (7,500 days) : death as a result of an industrial accident includes not only instantaneous death but also death as a result of occupational injury or disease. 延べ労働損失日数 = 延べ休業日数 × (300÷365) ・ ・ ・ 死亡 7500 日 (即死のほか負傷が原因で死亡したものを含む) 4. Frequency rate and severity rate are rounding off the third decimal place. 度数率・強度率は小数点第 3 位以下四捨五入					

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Environmental and Social Considerations Checklist

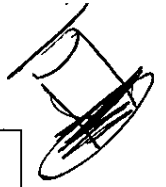
Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
1. Permits, Authorizations and Discussions Required	(1) Environmental assessment and environmental permits (licenses)	(a) Has the Environmental Impact Assessment (EIA) report been prepared? (b) Are the EIA and other documents written in the official language of the country or in a language widely used within the country proposing the assistance? (c) Have the EIA report and other documents been approved by the government assistance proponent? (In case it has not yet been approved, please indicate in the "Specific Environmental and Social Considerations" column the expected date. (d) Are there any additional conditions associated with the approval of EIA reports and other documents? If there are additional conditions, are they met? (e) Apart from the above-mentioned permits, were other environmental authorizations and permits obtained from relevant local agencies and institutions? (f) Are the elements of Appendix 2 of the JICA Guidelines covered (scope and level of detail can be adjusted according to the potential impact of the project)? (g) Have environmental and social considerations been confirmed for the entire scope of the project, considering cumulative impacts, secondary impacts arising from the project and associated projects?	(a) N (b) N (c) N (d) Y (e) N (f) Y (g) Y	(a) In order to prepare the report, it is necessary to carry out the preliminary phase, at this moment the engineers in charge on behalf of the Japanese cooperation, together with the support of technicians from the UGA-SIT, and the Road Maintenance Unit, among other units of the SIT, are in the phase of compiling the necessary information to carry out the Environmental Impact Study of the Project. (b) At this time, the project's Environmental Impact Study has not yet been prepared, but it is planned to be drafted in the country's official language (Spanish) or as required. (c) Once all the technical and legal requirements are completed and submitted by the UGA-SIT and the construction company that will carry out the project to the Secretariat of Natural Resources and Environment (SERNIA) of the Environmental Licensing, the aforementioned Secretariat issues in approximately one month the Operational License that serves to initiate the supervision and construction works of the project, and then the Functional License is issued by said Secretariat in approximately two months for a period of 5 years. (d) There are usually additional conditions based on the environmental category of the project and compliance with them is always achieved in order to carry out road infrastructure projects in the country. (e) As a first phase, the Environmental Licensing process must be carried out before SERNIA before carrying out the process of obtaining tree cutting permits granted by the Forest Conservation Institute (ICF), permission to carry out the emptying of solid waste in municipal dumps with the help of the Municipal Environmental Unit (UMA) of the project area, request for the extraction of material from the loan banks at the Honduran Institute of Geology and Mines (INHGEOMIN) with the support of the SIT Environmental Management Unit (UGA), among other permits. (f) The report is in the process of being prepared and is expected to comply with the guidelines of the Japanese cooperation agency JICA (Appendix 2). (g) It has been confirmed that there are no major social and environmental impacts in terms of the scope of the project because it is a project of punctual intervention within the main or secondary road CA-6 that leads to the east of Honduras.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(2) Explanation and discussion with local residents.	(a) Were all local stakeholders adequately analyzed and identified? (b) Were the content and impact of the project adequately explained to local stakeholders to gain their understanding through a process that ensures meaningful consultation, including disclosure (publication) of information? (c) Regarding meetings with local stakeholders, are records of meetings created, including attributes such as gender of participants? (d) Were the opinions and comments collected from the local population duly reflected in the content of the project?	(a) Y (b) N (c) N (d) N	(a) It has been identified that the list of inhabitants that will be directly affected or benefited by the project belong to the municipality of San Antonio de Oriente, and an important area is the University of El Zamorano, as well as the Hoya Grande Village. (b) At this time only field visits have been made to get to know the people and infrastructure that will be affected by the construction works, but the project will be socialized in its entirety. (c) At each meeting a list of the persons shall be made, including their name, cell phone number, signature, institution, and e-mail address. (d) The population will express any type of doubt and these doubts will be answered by the project's technicians and specialists; they will also be able to approach the SIT units in charge of the project for any doubt or consultation that the population of the area may have.

Category	Item	Main Verification Points	Yes Y No N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
(3) Analysis of alternatives		(a) Is the scope of the multiple project alternatives appropriate? (b) Were viable alternatives considered in terms of technology, finance, environmental and social considerations for the reduction of total greenhouse gas emissions according to the requirements in the environmental and social considerations sections? (c) Was a comparison of the alternative without and with project implementation performed?	(a) Y (b) Y (c) Y	(a) If the Alternatives considered to carry out the construction of the project are appropriate, these Alternatives are described below: Alternative 1: Minimum Curvature, Minimize area affected by construction using minimum curvature, avoid landslide area by moving road to mountain side, road (479m), Bridge (120m), Bridge length less than proposed No.3 and more economical. The detour is relatively short. It can be repaired from the existing road, the radius of curve is minimal decreasing the safety and ease of driving, environmental consideration of the slope of the cut slope is required. There is no relocation of any settlers, the bridge abutment can be built in the center, the entrance to the hotel near the project is considered. Alternative 2: Curvature similar to current road, avoid landslide area by moving route to mountain side, Road (476 m), Bridge (120 m), Bridge length is shorter than proposed No.3, and more economical, Detour is relatively short. It can be separated from the existing road, the driving safety and longitudinal gradient are maintained at the current level, environmental consideration of the cut slope is required. No relocation of population, Bridge abutment can be built in the center, Access to hotel entrance should be considered. Alternative 3: Improve Alignment Use a higher curvature than the current one, Cross landslide area using a bridge, Road (316 m), Bridge (240 m), Bridge length is longer than the other two proposals and less economical, Length of detour is long, Valley landslide needs to be taken into account, Horizontal curvature is improved, but the vertical gradient of 5.6% is not favorable, No concern about environmental impact. No relocation of residents, Bridge span distance is long to avoid landslide area, Minimal impact to hotel driveway access, Current Road can be used. (b) The project indicates that there will be a reduction in greenhouse gas (CO2) pollution because travel times will be shorter due to the construction of the bridge, since at this time the span is in very poor condition. (c) In the area there have been multiple fillings of material in the cracks that are formed as a result of the landslide, together with large investments in the area such as the construction of a gabion wall and the construction of piles to prevent the landslide, so the construction of the bridge, after being evaluated by specialists in the area, is the best solution and investment that can be made to solve the problem of trafficability.

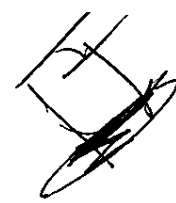
Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
Pollution Control Measures	(1) Air Quality	(a) Could air pollutants emitted by automobiles or other vehicles in circulation impact the environment? Does the Project meet the environmental standards of the promoting country? (b) In the event that air pollution in the area where the planned road crosses already exceeds environmental standards, is the present project likely to aggravate the situation? (c) Is there a negative impact due to construction? Are any impact mitigation measures contemplated?	(a) Y (b) N (c) N	(a) The project area will be affected mainly by the production of particulate matter (dust) resulting from the movement of earth and the circulation of the hauling equipment along the existing road. It will be controlled and mitigated by periodically sprinkling water on the site to reduce the impact of suspended dust. Noise and vibrations will also be generated by the noise pollution produced by the construction equipment, but an environmental protocol will be in place and followed to comply with the standards established by the country's governmental entities. (b) As mentioned above, air pollution (dust, noise and vibrations) will be controlled in compliance with all the standards of the country, so there will not be an excessive increase in pollution that aggravates the current situation where the project is intended to be carried out. (c) There is no negative impact due to the large-scale project, all mitigation measures will be contemplated to avoid air pollution due to dispersed emissions such as smoke, combustion gases, dust, etc., as well as noise and vibration generation, portable latrines will also be used to avoid sewage contamination, wastewater contamination will be avoided since it can be stored in appropriate containers for disposal in approved sites, soil contamination, social environment and labor risks that may arise in the project will be avoided.
	(2) Water Quality	(a) Is there any possibility that land (soil) runoff from earth moving activities such as cut and fill will cause water quality degradation in the downstream watershed? (b) Will the project affect surrounding water sources, such as wells? (c) Does effluent from various facilities, such as parking lots and service areas (including domestic and stormwater) comply with the effluent standards of the promoting country? (d) Is there a possibility that effluents may form water bodies that do not meet the environmental water quality standards of the promoting country? (e) Will there be any negative impact due to the construction work? In addition, were mitigation measures contemplated?	(a) N (b) N (c) N/A (d) N (e) N	(a) The factors that can contaminate the soil are soil compaction, changes in land use, alteration of slope stability and landslides, increase in solid waste, and activation of erosion and sedimentation processes; this particular project will not cause any degradation of water quality in the downstream watershed. (b) Not at this time, but studies will be conducted to verify that the wells surrounding the project will not be affected by the project. (c) Not applicable for this specific project. (d) There is no possibility of effluents forming water bodies that affect the environment in the project area. (e) During construction work, the respective section must be kept adequately drained to avoid damage to both the environment and the construction itself.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(3) Noise and vibration	(a) Do the noise and vibrations resulting from vehicle and train traffic comply with the environmental regulations and other legal provisions of the promoting country? (b) Does the low-frequency sound produced by the transit of vehicles and trains comply with the regulations and other legal provisions on environmental issues in the promoting country? (c) Will there be any negative impact due to the construction work? In addition, were mitigation measures contemplated?	(a) Y (b) Y (c) Y	(a) There are no trains passing through the project area, but there are a large number of vehicles passing through because it is a main road that connects with the border called "Las Manos" between Honduras and Nicaragua; this passage of vehicles is already planned for heavy cargo vehicles, people carriers, motorcycles, small vehicles, etc., and therefore it was considered that the noise and vibrations produced by such traffic comply with the maximum environmental and legal limits. (b) As mentioned above, since it is a main road, the low-frequency sound produced by vehicle traffic complies with the country's environmental regulations and other legal provisions. (c) They will be inherent to the construction process, but will be socialized with the people around the project and the following mechanisms will be considered to mitigate such impact: • Install the shredding plant away from populated areas or at a prudent distance at which noise levels do not exceed the limits established in the General Regulation on Preventive Measures for Occupational Accidents and Occupational Diseases. • Likewise, if there are houses near the crusher plant, it should be located in such a way that the wind does not transport the noise to them. • Provide personal protective equipment (hearing protectors) to workers at the crushing plant who are exposed to noise levels above 80 dbA. • Regulate the start time of construction activities between 6:00 am and end at 6:00 pm in the sections that cross population centers. • Ensure the use of mufflers on equipment in good condition and provide periodic maintenance of the equipment used; to this end, a maintenance log of equipment and machinery must be kept. • Removal of equipment and machinery that generates noise at unacceptable levels due to the lack of noise reduction mechanisms (silencers).
3. Natural Environment	(1) Protected Areas	(a) Is the project site located within a protected area designated by the country's laws or international treaties? (b) Will the project affect the protected area? (c) Will there be any negative impact due to the construction work? In addition, will impact mitigation measures be considered?	(a) N (b) N (c) N	(a) The project is located approximately 840 meters from the core zone and 960 meters from the buffer zone of the Uyuca Biological Reserve, which is 1,650 meters above sea level and is the heart of a wonderful forest that shelters species of birds, deer, and butterflies, among other animal species, but the project itself will not affect the Biological Reserve. (b) The project will not affect the aforementioned protected area. (c) There will be no negative impact on the protected area due to the construction of the project.



Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(2) Biodiversity	(a) Does the project site include primary forests, natural tropical forests, ecologically important habitats (coral reefs, mangroves, tidal flats, etc.)? (b) Does the project site include habitats where endangered species protected by domestic legislation or international conventions exist? (c) Does the project involve significant conversion or degradation of critical habitats or critical forests, with significant impacts on biodiversity of concern? If yes, are appropriate measures being considered to address biodiversity impacts? (d) Will measures be taken to avoid wildlife and domestic animal migration routes, habitat fragmentation, animal-caused traffic accidents, etc.? (e) Road and bridge construction will cause deforestation, poaching, desertification, drying up of wetlands, etc. related to development? Is there a risk of exotic species (that did not previously inhabit the area), pests, etc.? enter and disrupt the ecosystem? (If such a possibility exists, countermeasures should be described in the "Specific Environmental and Social Considerations" column.) (f) Will illegal logging associated with the project be prevented, or will the project proponents (executing unit) obtain forest certification? (g) If there are other serious impacts on biodiversity, are measures taken to reduce impacts on biodiversity? (h) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) Y (b) N (c) N (d) Y (e) N (f) Y (g) Y (h) N	(a) An area of influence of the project has been mapped with an approximate area of 0.27 km² where Mixed Forests, Pastures and Crops, Dense Coniferous Forest, and Sparse Coniferous Forest are located. (b) There are no endangered species protected by domestic legislation or international agreements at the project site. (c) The project does not involve any significant degradation or conversion of habitats or forests that impact biodiversity or are of concern. (d) Projects of this type are focused on contributing to avoid the loss of biodiversity, the conservation of natural habitats and to revalue the importance of wild fauna and flora, therefore, all necessary measures will be taken to avoid wildlife migration routes, domestic animals and traffic accidents. (e) The project will not cause deforestation, poaching, desertification, drying up of wetlands, etc. There are also no exotic species that would disrupt the existing ecosystem as a result of carrying out this project, nor are there any exotic species at risk of disturbing the existing ecosystem. (f) Whether illegal logging associated with the project will be prevented. There have already been meetings with the Forest Conservation Institute (ICF), which is the entity in charge of issuing all permits associated with logging for the project, and the Environmental Management Unit (UGA) of the SIT will be in charge of requesting such permits. (g) All necessary measures shall be taken to reduce impacts that may affect biological biodiversity near the project. (h) There is no possibility that construction activities will have a negative impact, in any case, if the environmental mitigation measures necessary to carry out the construction of the project are contemplated.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
(3) Hydrology		(a) Is there a possibility that changes in aquifer systems will adversely affect surface and groundwater flow due to the implementation of the structures? (b) Is there a possibility that stormwater runoff volume and runoff characteristics will change due to massive logging, construction of forest roads, etc., and will this affect the surrounding hydrology? (c) Is there a possibility that deforestation will result in the loss of watershed recharge functions, affecting the entire watershed that uses the forest as a water source? (d) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N (c) N (d) Y	(a) There will be no aquifer changes due to the construction of the project. (b) There is no such possibility. (c) There is no such possibility. (d) All relevant measures shall be contemplated to carry out all construction works.
(4) Topography and geology		(a) Are there locations with poor geological conditions along the project alignment or route where landslides and/or mudslides are likely to occur? (b) Will earthworks such as cut and fill cause landslides or slope slides? (If there is a possibility of occurrence, measures to prevent landslides and mudslides should be described in the column "Specific environmental and social considerations"). (c) Is there a possibility of sediment runoff from the fill and/or cut embankment, excess soil disposal site and sand collection (fine and coarse aggregate quarry)? (If there is a possibility of occurrence, measures to prevent sediment runoff should be described in the "Specific Environmental and Social Considerations" column). (d) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) Y (b) N (c) N (d) N	(a) There is a landslide that is triggered by heavy rainfall in the area, which is why this project is being implemented. (b) There is no such possibility. (c) There is no such possibility. (d) There is no such possibility, in all cases of the work, all environmental measures appropriate to the project will be implemented.



Category	Item	Main Verification Points	Yes: Y No: N	Specific-Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
4. Social Environment	(1) Resettlement and Land Acquisition	(a) Will land acquisition accompanied by involuntary resettlement be required for project implementation? If so, describe the scale of land acquisition and resettlement. (b) Are efforts to minimize the impact of resettlement being contemplated? Will there be any additional land acquisition or loss of livelihoods? (c) Will there be explanatory meetings on compensation and livelihood reconstruction measures prior to resettlement? (d) Will an investigation be conducted to determine the residents' need for resettlement and will a relocation plan be developed that includes compensation based on the repurchase price and restoration of livelihoods after resettlement? (e) Will compensation be paid prior to resettlement? (f) Will the compensation policy be established in writing? (g) Does the resettlement plan give due consideration to socially vulnerable groups such as women, children, the elderly, people with limited economic resources, people with special abilities, external and internal refugees and minorities? (h) Will the details of the agreed compensation be explained in writing to the residents and will their consent be obtained prior to resettlement? (i) Is there an adequate system (procedure) to implement resettlement? Will budgetary resources be allocated and is there sufficient implementation capacity? (j) Will resettlement impact monitoring plans be prepared? (k) Is there a grievance management mechanism in place?	(a) Y (b) Y (c) Y (d) Y (e) Y (f) Y (g) N (h) Y (i) Y (j) Y (k) Y	(a) Relocation of accesses to 2 houses adjacent to the area. And land acquisition only, based on site inspections, it was determined that no compensation for improvements or resettlement is required. (b) Consideration has been given to reducing the right-of-way area (tentatively and as a result of negotiations with the people most affected by the project). (c) Meetings will be held to socialize the project and conduct interviews to collect data and clarify doubts regarding the project. (d) In accordance with the land acquisition guidelines and schedule, a compensation process governed by the Special Law for the Simplification of Public Infrastructure Investment Procedures (Decree 58-2011) of Honduras (Fast Track Law) will be carried out. (e) There will be no resettlement, only compensation for affected land and improvements. (f) According to the laws pertinent to the process and different types of negotiations where promises of purchase and sale are signed where the commitment is agreed upon by the affected party and the Government of Honduras. (g) Resettlement in the area shall not be necessary. (h) They will be provided with a plan showing the area needed for the project and through negotiations previously carried out, the promise of sale will be signed, specifying the costs for land and costs for improvements (based on the Price Parameter Report prepared by the Appraisal Engineer certified by the National Banking and Insurance Commission). (i) The activities to be implemented for land acquisition are attached in the schedule. The Methodological Guide will be prepared to prioritize and allocate funds to the project. (j) Whether progress reports will be continuously made to JICA and the Project coordinators at SIT.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(2) Living conditions and Economic support	(a) If bridges and access roads are built as a result of a new project, will there be any impact on existing modes of transportation and the lives of the residents who use them? Also, will there be major changes in land use/livelihoods, unemployment, etc.? If such impacts are expected, mitigation measures should be described in the "Specific Environmental and Social Considerations" column. (b) Will the project have a negative impact on the lives of residents who do not directly relate to it? (c) Will the project have a negative road impact on traffic in the surrounding area (congestion, increased traffic accidents, etc.)? (d) Will the project create impediments to the movement of residents? (e) Is there a possibility that overpasses, viaducts, etc., could be used as a means of transport? block sunlight or interfere with radio waves? (f) Will the project negatively affect ecosystem services provisioning (supply and regulation), affecting the health and safety of communities, especially indigenous peoples who depend on such services? (g) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N (c) N (d) N (e) N (f) N (g) N	(a) There will be no negative impact from the construction of the bridge; rather, it will improve traffic flow in the project area. (b) The project will not have any negative impact on the life of the population near the project. (c) The project will not have any negative impact on the traffic of vehicles traveling along the section where the project will be carried out. (d) No impediment will be generated with the relocation of residents near the project. (e) There is no such possibility. (f) The project will not affect ecosystem services provision affecting the health and safety of the communities. (g) There is no such possibility, all appropriate measures shall always be taken to carry out the project.
	(3) Social Vulnerability	(a) Will due consideration be given to socially vulnerable groups, such as women, children, the elderly, the poor, people with special needs, people with special abilities, external and internal refugees and minorities? (b) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) Y (b) N	(a) From the beginning of the study of this project, all vulnerable people linked to the project are being considered. (b) There is no such possibility; all appropriate measures will always be taken to carry out the project.
	(4) Cultural Heritage	(a) Is there a risk that the project will damage archaeologically, culturally or religiously valuable cultural heritage or historical sites? In addition, are the measures stipulated by the domestic laws of the promoting country taken into account? (b) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N	(a) There is no risk. (b) There is no such possibility; all appropriate measures will always be taken to carry out the project.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(5) Landscaping	(a) If there is landscaping with special consideration, is there a negative impact on it? (b) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N	(a) No negative impact (b) There is no such possibility; all appropriate measures will always be taken to carry out the project.
	(6) Minority ethnic groups and indigenous peoples	(a) Are considerations to reduce impacts on the cultures and lifestyles of the country's ethnic minorities and indigenous peoples taken into account? (b) Are the land and natural resource rights of minorities and indigenous peoples respected? (c) Will plans for indigenous peoples be developed and published as appropriate? (d) Are efforts made to obtain the free prior consent of ethnic minorities and indigenous peoples after sufficient information has been provided? (e) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N (c) N/A (d) N/A (e) N	(a) There are no ethnic groups near the project. (b) There are no indigenous peoples near the project. (c) Not applicable (d) Not applicable (e) There is no such possibility, all appropriate measures will always be taken to carry out the project.
	(7) Work environment	(a) Will the occupational health and safety laws of the country promoting the project be complied with? (b) Will "hard" safety measures be implemented for project workers, such as installation of safety equipment to prevent occupational injuries and accidents; management of hazardous substances; etc.? (c) Will "soft measures" be planned and implemented for those involved in the project, such as the formulation of a safety and health plan; safety trainings (including road safety and public health) for workers; etc.?	(a) Y (b) Y (c) Y	(a) Health and safety laws in the work environment shall always be complied with. (b) If "hard measures" of safety for the project workers will be implemented, they must comply with all established standards based on the law and the safety standards of the construction and supervising company. (c) Whether health and safety plans will be implemented, as well as road safety and personnel training from the beginning to the end of the project.

Category	Item	Main Verification Points	Yes: Y No: N	Specific Environmental and Social Considerations (Reasons and rationale for Yes/No consideration, mitigation measures, etc.)
	(8) Health, security and its preservation in the communities	(a) Will the influx of workers associated with the project have any negative health and hygiene impacts, such as disease outbreaks (including infectious diseases such as HIV)? In addition, will impact mitigation measures be considered? (b) Will the influx of workers associated with the project have any negative impact on the safety of the local community, such as the deterioration of citizen security? (c) In the event that the proponent country or other related entity hires security or other personnel to provide security during project formulation or implementation, are appropriate measures being considered to ensure that security capabilities are exercised for preventive and self-defense purposes only? (d) Is there a potential for construction activities to have a negative impact? In addition, will impact mitigation measures be considered?	(a) N (b) N (c) Y (d) N	(a) At the moment, no personnel are being hired to carry out the work; in the process, the necessary hiring measures will be taken. (b) No negative impacts will be generated by the construction of the project. (c) All appropriate measures shall be considered to ensure that security capabilities are exercised only for preventive and self-defense purposes once the project commences. (d) There is no such possibility, all appropriate measures will always be taken to carry out the project.
5. Others	(1) Monitoring	(a) Will the proponent plan and implement the monitoring plan for the above environmental and social elements that may have an impact? (b) How will the items, method, frequency, etc. of the plan be established? (c) Is the service provider monitoring system in place (organization, personnel, equipment, budget, etc. and its continuity)? (d) Is the method and frequency of reporting the results of environmental monitoring of business operators to the competent authorities and related entities established? (e) Will an environmental and social grievance mechanism be developed?	(a) Y (b) N/A (c) N (d) N (e) Y	(a) The UGA will be the entity in charge of all the administrative processes for obtaining the environmental license prior to the start of the work. (b) Once the final study of the project has been carried out, all the corresponding items and methods will be established in order to fully carry out all the methods and compliance with the environmental measures. (c) Methods shall be established for reporting all environmental monitoring results of the project. (d) The method and frequency of reporting of environmental monitoring results of business operators to competent authorities and related entities shall be established. (e) Whether the environmental and social grievance management mechanism will be generated in the institution.

Respondent Data

Category 1, 2, 3, 5

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Date: March 15, 2023

Signature: _____



1. Environmental Management Plan

Annex 7

Environmental Management Plan

Item	Mitigation Measure	Implementation Agency	Responsible Agency	Cost
1 Air pollution	Before and During Construction : ➤ The equipment shall be carried out to keep it in good condition all times. ➤ Water shall be sprinkled where necessary to prevent dust from being blown up, and vehicle tires shall be washed. ➤ Management should be instructed to use construction vehicles that comply with the emission standards set by the government. When transporting earth and sand, etc., the vehicles shall be operated along the shortest route to minimize CO2 emissions, and the cargo bed shall be covered with a sheet to minimize the scattering of dust and sand. ➤ Establish monitoring items and conduct monitoring as necessary to confirm compliance with laws and regulations. In addition, instruct drivers to stop idling while stopped. ➤ Monitoring will be conducted as necessary to confirm compliance with laws and regulations.	Contractor	SIT	Included construction cost
2 Water pollution	Before and During Construction : ➤ Install a sedimentation basin and sewage tank for sewage treatment in the construction yard. ➤ Thoroughly conduct daily maintenance and inspections to prevent oil and other liquids from leaking from construction equipment. ➤ Conduct monitoring as necessary to confirm compliance with laws and regulations.	Contractor	SIT	Included construction cost
3 Waste	Before and During Construction : ➤ Construction waste: The contractor shall transport construction waste to a disposal site designated by SIT for proper disposal. ➤ General waste materials discarded by workers: Collect wastes at designated locations at the construction site and dispose of them under the control of the construction contractor. Ensure that workers keep the construction site and surrounding area free of waste constantly and return tools, etc. to their original locations. ➤ Wood chips: The contractor shall accumulate by-products from trees at designated locations and implement measures specified by SIT.	Contractor	SIT	Included construction cost
4 Soil Contamination	Before and During Construction : ➤ Thoroughly perform daily maintenance and inspections to ensure that oil and other substances do not leak from construction	Contractor	SIT	Included construction cost

Item		Mitigation Measure	Implementation Agency	Responsible Agency	Cost
		equipment. ➤ Yards for repairing heavy equipment should be prepared with watertight sheets to prevent oil, grease, etc. from contaminating the soil.			
5	Noise and Vibration	Before and During Construction : ➤ In construction sites adjacent to residences, construction machine that generate large amounts of noise should be covered with soundproof covers to minimize noise generation. ➤ If there are complaints from residents in the vicinity, SIT and the contractor shall discuss countermeasures. ➤ Monitoring shall be conducted as necessary to confirm compliance with laws and regulations.	Contractor	SIT	Included construction cost
6	Ecosystem	Before and During Construction : ➤ Implement appropriate construction planning and management to prevent unnecessary tree cutting and land alteration. ➤ Tree planting shall be appropriately done in accordance with ICF regulations (three trees per one tree) based on the amount of tree cut. ➤ In the event that nesting or other biological protection is deemed necessary, the contractor shall promptly report to SIT for instructions. ➤ Hunting, trapping and extraction of wild animals and introduction of exotic species on the site shall be prohibited. This restriction also applies to different plant species.	Contractor	SIT	Included construction cost
7	Land acquisition	Before Construction : ➤ After consultation and consensus building with the affected residents prior to the start of construction, appropriate compensation payments will be made.	SIT	SIT	SIT Budget
8	Poverty	Before Construction : ➤ Since the target residents are poor, special consideration should be given to employment in the construction project, etc.	SIT	SIT	SIT Budget
9	Land usage and local resource values	Before and During Construction : ➤ SIT should be responsible for procuring land for construction yards, material storage areas, offices, soil dumping sites, soil removal sites, etc. prior to the start of construction. ➤ Implement appropriate construction planning and management to minimize land alteration.	Contractor	SIT	Included construction cost
10	Water usage	Before and During Construction : ➤ Periodically conduct interviews with neighbors to confirm the water usage situation that does not occur.	Contractor	SIT	Included construction cost
11	Existing social infrastructure and service	Before and During Construction : ➤ Construction of an access road for the Uyuka Guest House and	Contractor	SIT	Included construction cost

Item		Mitigation Measure	Implementation Agency	Responsible Agency	Cost
		relocation of utility poles are needed prior to the start of construction. ➤ In order to prevent traffic accidents, the contractor should consult with SIT and the police in advance and consider mitigation measures. ➤ Speed limits will be set for construction vehicles, and signs, protective facilities, etc. shall be placed to prevent accidents.			
12	Landscape	Before and During Construction : ➤ Implement appropriate vegetation work in accordance with item 2. Of 6. Ecosystems of the preparatory survey report.	Contractor	SIT	Included construction cost
13	HIV/AIDS and other infectious diseases	Before and During Construction : ➤ Holding regular workshops for the acquisition of correct knowledge. ➤ The contractor will supervise for hazardous behavior.	Contractor	SIT	Included construction cost
14	Occupational Health (Work safety)	Before and During Construction : ➤ Ensure a good working environment by complying with working conditions based on Honduran national regulations and environmental measures presented by the Ministry of Environment. (1) Obligation to wear work clothes and helmets. (2) Educational activities on occupational health using morning meetings and workshops. (3) Establishment of an emergency response system in the event of an accident, etc.	Contractor	SIT	Included construction cost
15	Accident	Before and During Construction : ➤ Prevent accidents by complying with working conditions based on Honduran national regulations and environmental measures presented by the Ministry of Environment. ➤ Implementation items shall be the same as "11. Existing social infrastructure and social services".	Contractor	SIT	Included construction cost

Source: JICA Survey Team

2. Environmental Monitoring Plan

Environmental Monitoring Plan

	Item	Monitoring Item	Location	Frequency	Implementation
Before Construction					
1	Air Pollution	TSP, PM10, CO, NO2, SO2	Near construction site	1 time (for baseline data)	Contractor
2	Noise	Noise level	Near construction site	1 time (for baseline data)	Contractor
3	Vibration	Noise level	Near construction site	1 time (for baseline data)	Contractor
4	Land Acquisition	The process from consultation with the subject, formation of an agreement, and payment	Subjects of the project section	Before start construction	SIT

	Item	Monitoring Item	Location	Frequency	Implementation
5	Existing social infrastructure and social services	Construction of access road to guest house, utility relocation work	The project section	Before start construction	SIT
During Construction					
6	Air Pollution	TSP, PM10, CO, NO2, SO2	Near construction site	1 time/3 months or construction period with high pollutant	Contractor
7	Waste	Construction waste soil, logged trees and other construction waste	Construction site	Every day	Contractor
8	Soil Contamination	Liquid pollutants	Construction site	Every day	Contractor
9	Noise	Noise level	Near construction site	1 time/3 months	Contractor
10	Ecosystem	Tree cutting and reforestation work (re-impact assessment of vegetation, if necessary)	The project section	If necessary	Contractor
11	Existing social infrastructure and social services	Access to the construction site	The project section	1 time/3 months or immediately after the incident	Contractor Consultant
12	Poverty and Gender	Employment status and understanding	Construction site	1 time/3 months or immediately after the incident	Contractor Consultant
13	Infectious disease and HIV/AIDS	Enlightenment education	Construction site	1 time/3 months or immediately after the incident	Contractor Consultant
14	Work environment and accidents	Conduct safety education and meetings	Construction site	Every day	Contractor
Operation					
15	Water Pollution	CO, TPS, PM10, PM2.5, NO2, SO2	Near project site	As needed (2 years after operation)	SIT
16	Noise	Noise level	Near project site	As needed (2 years after operation)	SIT
17	Accident	Record of traffic accident	Near project site	As needed (2 years after operation)	SIT

Source: JICA Survey Team

Republic of Honduras
The Project for Bridge Construction
on National Road No.6

Abbreviated Resettlement Action Plan
for Environmental and Social
Considerations Survey

August 2023

Nippon Koei Co., Ltd.

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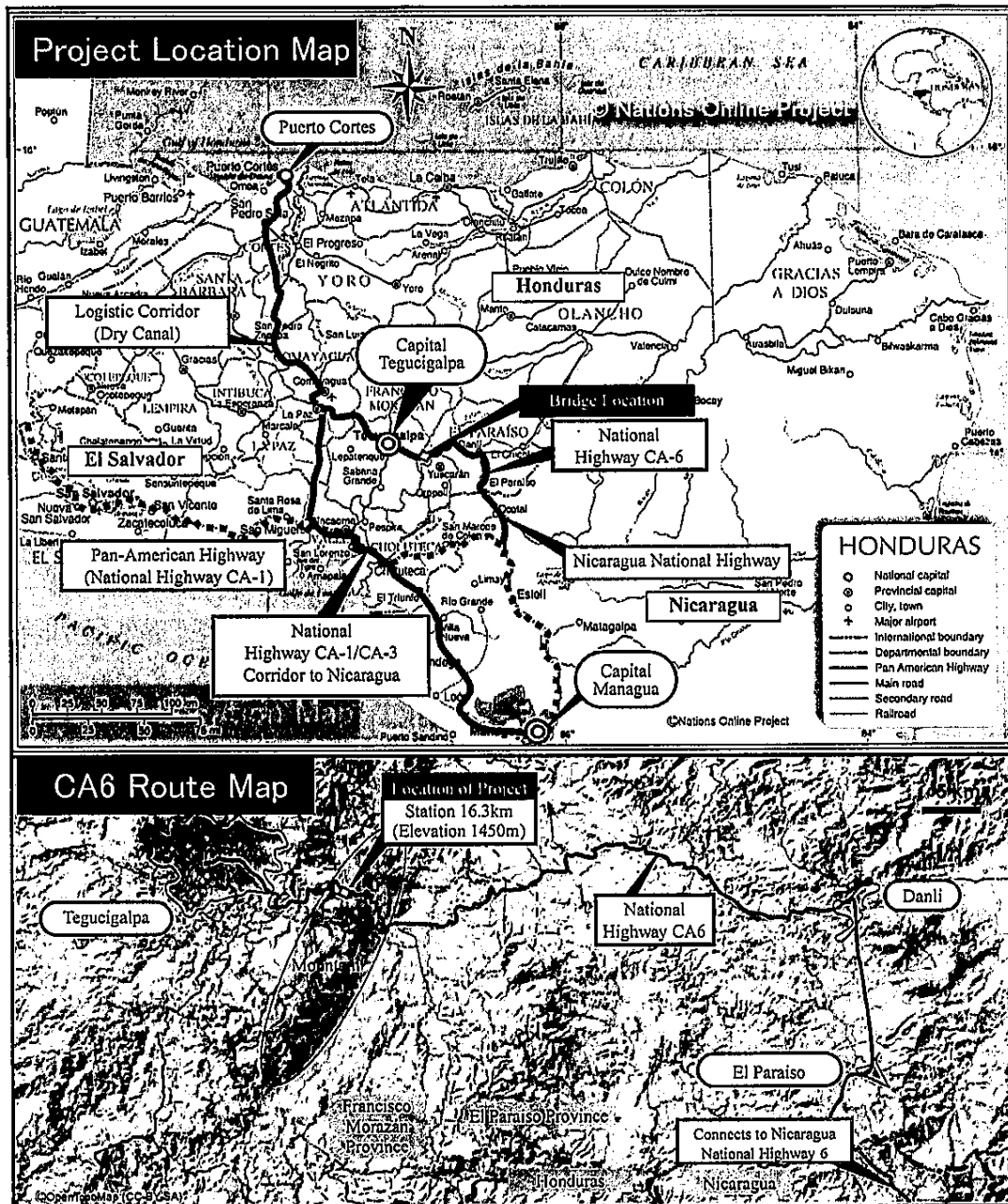
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Abbreviations and Acronyms

Abbreviation	Official Name (English or Spanish name)
ARAP	Abbreviated Resettlement Action Plan
CA6	Central American Highway 6
DD	Detailed Design
DECA	Dirección General de Evaluación y Control Ambiental
EEH	Empresa Energía Honduras (Energy Company of Honduras)
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EP	Entitled People
FM	Francisco Morazán Department
HH	Households
HNL (Lps)	Honduran Lempira
ICF	Instituto Conservación Forestal (Forestal Conservation Institute)
IP	Instituto de la Propiedad (Institute of Property)
JICA	Japan International Cooperation Agency
PAP	Project Affected Persons
PAU	Project Affected Units
PMR	Project Monitoring Report
RAP	Resettlement Action Plan
RBU	Reserva Biológica Uyuca
ROW	Right-of-way
SAO	San Antonio de Oriente
SEFIN	Secretaría Municipal de Finanzas e Planeamiento
SERNA	Secretaría de Recursos Naturales y Ambiente
SHM	Stakeholder Meeting
SIT	Secretaría de Infraestructura y Transporte
UGA	Unidad de Gestión Ambiental (Environmental Unit)
UMA	Unidad Municipal Ambiental
USD	United States Dollar
WB	World Bank

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Project Location Map



1. Introduction to the Project

1.1 Current Situation of Honduras

The Republic of Honduras is located in the center of the Central American region, bordered by the Republic of Guatemala to the west, the Republic of El Salvador to the south, and the Republic of Nicaragua to the east, and bordered by the Caribbean Sea to the north and the Gulf of Fonseca in the Pacific Ocean partially to the south. With a land area of 112,492 km², it is the second largest country in Central America. The total population was 9.3 million in 2020.

The topography of the country is divided into the Northern Coastal Lowlands (Caribbean side), the Central Mountainous (Plateau) Region, and the Southern Coastal Lowlands (Pacific side). The climate is mostly tropical, with little temperature fluctuation throughout the year and a rainy season (May to October) and a dry season (November to April).

The city of San Antonio de Oriente, Francisco Morazán Province, which is the target area for this Project, belongs to the mountainous region in the southern part of Honduras. The average annual temperature is 23.4°C, and the annual temperature variation varies between 29.4°C and 14.5°C. Average annual precipitation is 996 mm, concentrated in the rainy season.

Every year, around August to October, a hurricane originating in our Caribbean Sea often moves while developing, and when this hurricane makes landfall, landslides and floods often occur. In addition, Hurricane Mitch, which hit Central America in October 1998, caused extensive damage in Honduras, severing the road network in almost all areas of the country, and causing extensive damage to social infrastructure.

The total length of roads in Honduras is 16,955.6 km as of 2023. Of the 16,955.6 km of road network, paved roads account for 22.84%, or 3,873.08 km, and unpaved roads 77.16%, or 13,082.54 km, which is still at a low level.

1.2 Background of the Project

Honduras Government implemented landslide control measures at 16.3 km of National Highway 6 (hereafter CA6), including deterrent pile works, bedding cage works, deterrent works with drainage measures and drainage control works (2014-2015), with financing from the World Bank. However, the landslide in the construction area has been expanding since 2016. If the area in question were to be damaged, not only would it lead to a major accident, but the logistics network from the Tegucigalpa metropolitan area to Nicaragua could be paralyzed due to the closure of CA6, resulting in significant economic losses. Furthermore, the effectiveness of the Japanese Grant Aid “National Highway No.6 Landslide Prevention Project” may also be undermined. The Government of Honduras requested Japan for the “National Highway Route 6 Bridge Construction Project (hereinafter referred to as “the Project”)” to connect the 16.3 km point by a bridge, since the safety cannot be ensured by landslide countermeasures. The Project is to connect the 16.3-km point with a bridge.

Honduras request was discussed with the implementing agency, the Ministry of Infrastructure and Transport (Secretaría de Infraestructura y Transporte: SIT), who confirmed that they consider the bridge construction Project necessary to prevent landslides at the 16.3 km point of CA6. There is no particular change in the content of the request,

which is in line with the initial request. In addition, the SIT side initially stated that they expected that this study would be based on the assumption that the bridge improvement would be used to counter the slope, considering the effectiveness of the World Bank's slope countermeasures that have already been implemented. In response, the survey team agreed with SIT that the landslide countermeasures in the area had not been sufficiently examined, and that the best overall plan should be applied to the Project after considering countermeasures other than bridges in this survey.

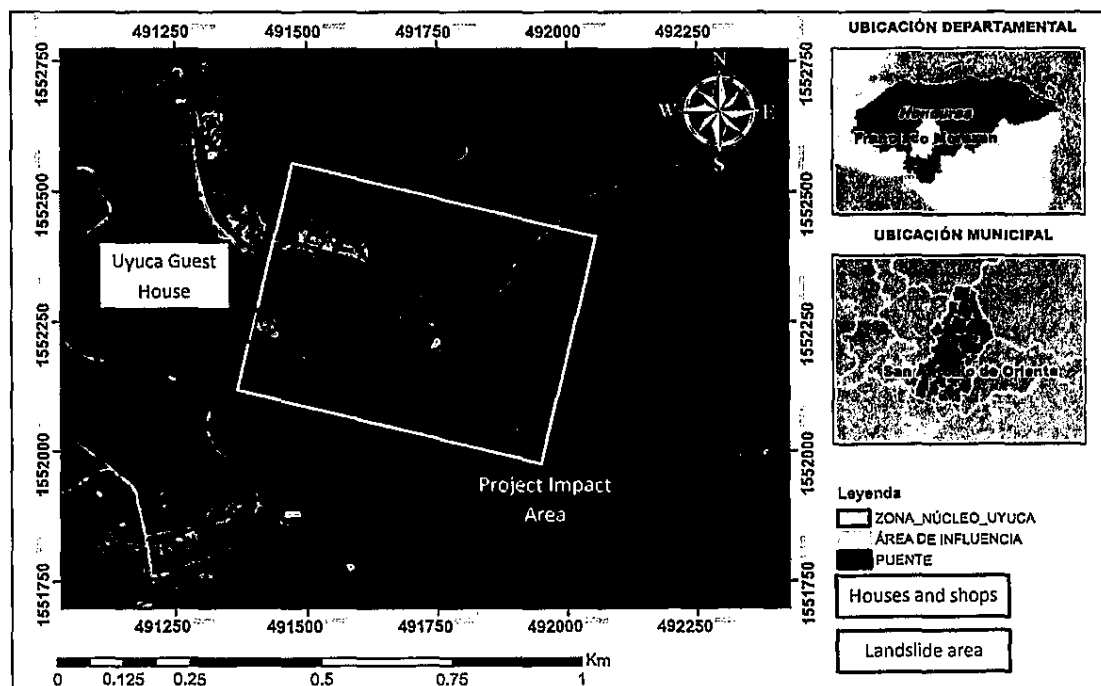
1.3 Project Objective

This Project aims by constructing a bridge at the landslide site of CA6, a major arterial road, to develop a safe and smooth logistics network by reducing vulnerability to natural disasters, thereby contributing to the economic revitalization of Honduras.

1.4 Project location

The present Project is located at the KM 16.3 of CA6 in the province of Francisco Morazan (FM) in the city of San Antonio de Oriente. The following figure shows the location of the Project and the present Project's impact area and the location of the houses and shops which will be potentially impacted during the implementation stage.

It is noted that the Project location is near to the biological reserve of "Cerro Uyuca". The proposed Project site does not fall within the Uyuca Protected Area (RBU) and is not included in the management plan area. The linear distance between the Project site and the core and buffer zones of the Uyuca Protected Area is approximately 1.0 km, and the difference in elevation is approximately 300 m. No other National Protected Area System-designated areas for cultural heritage protection, etc. have been identified in the vicinity of the Project site.



Source: SIT Environmental Management Unit (UGA)

Figure 1-1 Project location

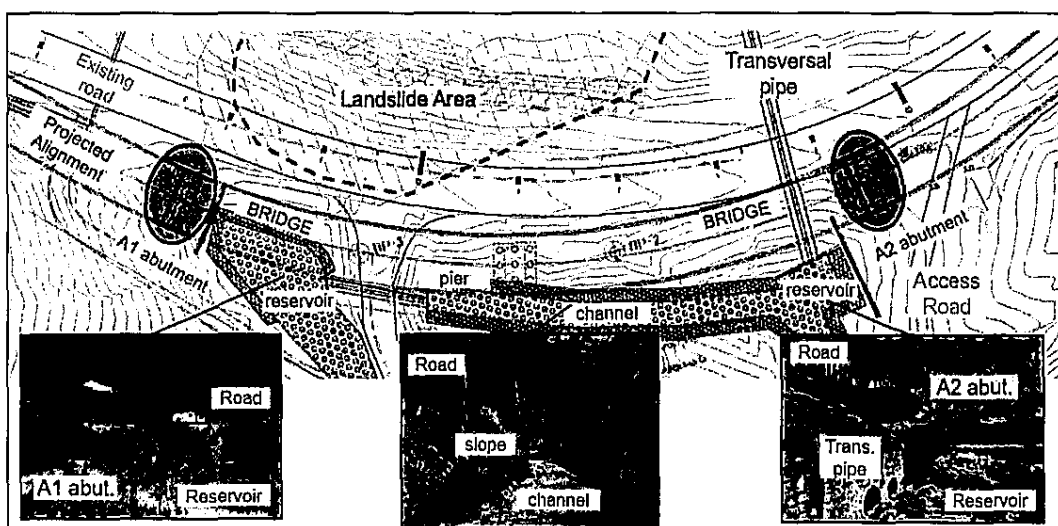
1.5 Description of the Project

The following table and figure show a summary of the Project components:

Table 1-1 Outline of Projects Components

Bridge	Bridge Name	To be defined
	Length of bridge (between branches)	140.0m
	Typical Section	1.20+4.55+4.55+1.20m
	Upper Work Form	PC 2-span continuous box girder bridge
	Lower Work Form	Inverted-T abutment, wall piers
	Foundation work	Cast-in-place piles (φ1.2m)
Approach Road	Roadway Extension	205m at origin side, 175m at terminus side
	Typical Section	1.50+3.65+3.65+1.50m
	Open drainage	A1 side 17.6m, A2 side 54.0m
	A1 side waterway berm	125.0m
	A2 side waterway berm	152.5m

Source: JICA Survey Team



Source: JICA Survey Team

Figure 1-2 Outline of Bridge Component and Current Situation

1.6 Project's Environmental Category

According to the Regulations of the Environmental Law of Honduras (1994) and the Table of Environmental Categorization (2021 ver.) the Project's category is "2". The Category "2" corresponds to Projects, works or activities considered of Moderate Potential Environmental Impact or Moderate Environmental Risk, which complies to the JICA Guidelines Category "B". The Honduras Law stipulates that in order to get the Environmental License of the Project, this category requires the submission of a simplified technical report and a summary table of the environmental assessment plan, which means that it does not require the preparation of the Environmental Impact Assessment (EIA) Study. The environmental license procedures will be conducted by the Environmental Management Unit (UGA), which is a department of SIT.

1.7 Objectives of the Abbreviated Resettlement Action Plan

The main objective of this Abbreviated Resettlement Action Plan (ARAP) for the proposed Project is to avoid or minimize the impacts that may arise when people are displaced from their homes, land, or livelihoods as a result of a development Project and to ensure that people be treated fairly. The main objective above mentioned is based on the following policies:

- Avoid or minimize, to the most possible extent, the land expropriation and involuntary resettlement by analyzing all the possible alternatives in the bridge and road design.
- Ensure that people affected by the Project (PAPs) are consulted and have the opportunity to participate in all the key stages of the ARAP process development and Project implementation.
- Plan compensation based on Project impacts to ensure that no Project affected person is penalized or impoverished.
- Establish a fair, transparent, effective, and reassuring compensation process.
- Assist those affected in their efforts to improve their livelihoods and standard of living, or at least restore them to their pre-Project level.
- Design and implement compensation activities as a sustainable development program, providing sufficient investment resources for the people affected by the Project so that they have the opportunity to share the Project benefits equitably.
- Give special attention to gender issues and the needs of the most vulnerable people among the affected populations. Gender-based discrimination results from unequal treatment of persons because of their gender; this vulnerability implies the application of positive discrimination measures.

2. Methodologies Adopted

For the preparation of the present ARAP it was collected both primary and secondary data. Primary data was collected from the affected households (HHs) and landowners visiting every Project Affected Units (PAUs) within the right-of-way (ROW) and construction-affected area. PAPs who own a land inside the Project implementation area but live elsewhere, such as the case of Uyuca Guest House Owners, were contacted via local people and the government's network. Regarding the secondary data, as a supplement to primary data, it was obtained from SIT via its Environmental Unit, ROW Department, Cadaster Department, etc.

2.1 Site Surveys

Several site surveys were conducted at the site area visiting the affected HHs with the participation of SIT and UGA in order to identify the possible impacts and hear their opinion about the Project. In this regard, ROW affections were verified on-site, cadastral information was collected from the landowners and potential cutting tree species were verified.

8



2.2 Stakeholder Meetings

The stakeholder meeting was conducted, dividing strategically into five (5) groups during March 2023. The first and second groups were the Municipality of San Antonio de Oriente and the University of “El Zamorano”. In these meetings, the number of participants was reduced due to the necessity to gather specific, detailed information about the environmental components of the Project. The third group consisted of the owner of the “Uyuca Guest House” located inside the Project’s implementation area. The fourth and fifth groups consisted of the PAPs with HH before and after the new bridge implementation area. The participants were seven (7) and (5) people respectively due to the reduced numbers of HHs inside the Project implementation area. All the participants were informed about the meetings with prior verbal notice. The following issues were addressed during the consultation meetings:

- Dialogue with local people about goals and objective of the Project.
- Disclosure of the Project components including presentation of 3D model of the new bridge and approach road by construction phases for groups 4 and 5.
- Gather feedback on potential risks.
- Gather requests and opinion from the participants in order to reflect them into the design.

2.3 Economic and household census

Population census and socioeconomic survey were conducted with all affected HHs during the stakeholder meetings. A structured questionnaire divided in chapters, such as general information, profile of the PAPs, family budget, properties, public services, and nuclear family information, was developed to collect information about property owners, gender, labor form, monthly income, socially vulnerable members, etc.

The questionnaire sheets are attached in Appendix-1. It is noted that the captioned questionnaire was prepared and filled in Spanish for better comprehension of the interviewer and interviewee. These questionnaire sheets were filled after each stakeholder meeting by a SIT member with the supervision of the JICA Survey Team member.

2.4 Preparation of Abbreviated Resettlement Action Plan (ARAP)

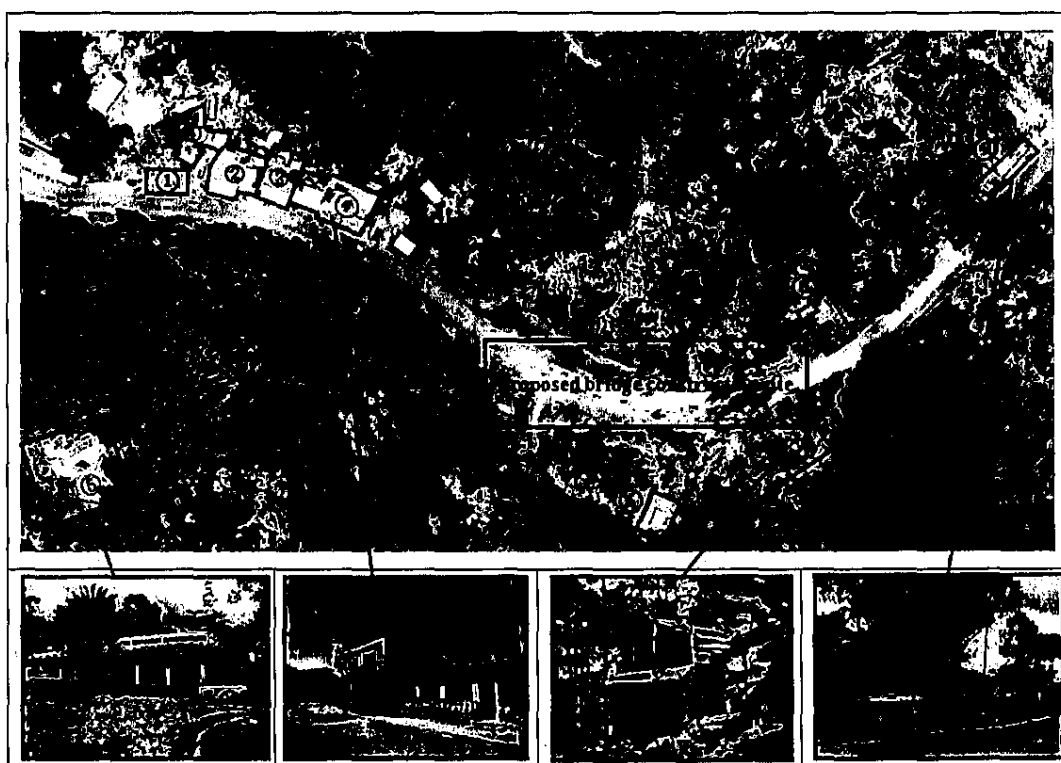
The present ARAP was drafted based on the site surveys, stakeholder meetings, economic and householding census, opinions of the people from consultation meetings, and collection of secondary data, following the JICA guidelines and the Involuntary Resettlement Sourcebook of the World Bank.

3. Land Acquisition and Resettlement Impacts

No primary structures will be affected due to the intervention of the proposed Project. There are some secondary structures that will be impacted at the Project implementation stage. These secondary structures consist of boundary walls, access road and trees. However, making changes to these structures will not result in the displacement of households.

3.1 Impact on land

Figure 3-1 shows the HHs confirmed within the Project impact area. There are 6 HHs (No.1 to 4 and No.8 to 9) affected by the alignment of the approach road and 2 HHs (No.6 and 7) affected by the construction of the bridge abutments. And 1 Guest House (No.5) which access road will be relocated during the construction phase.



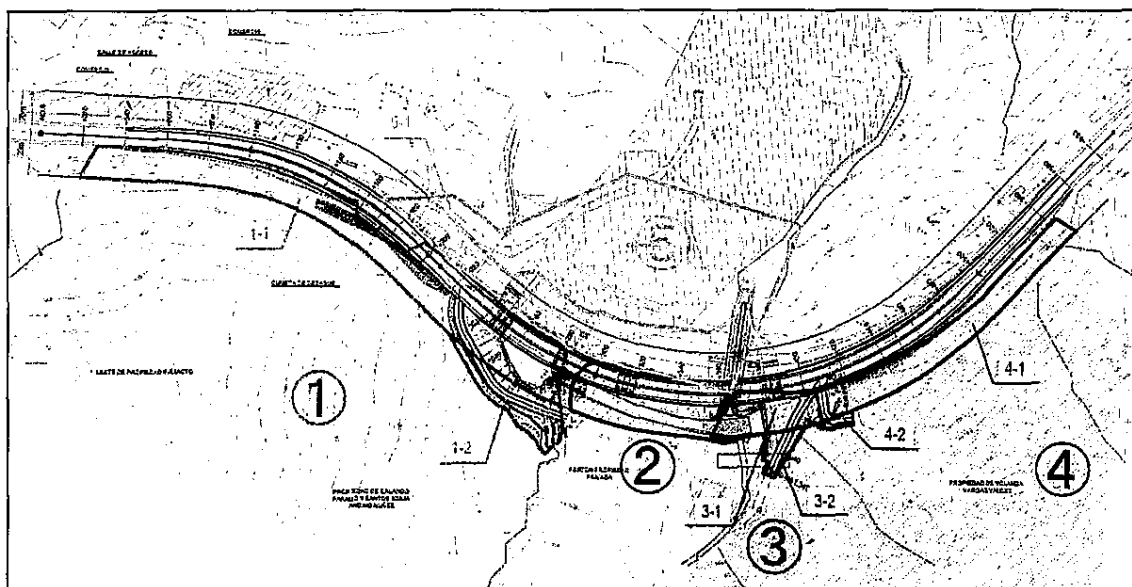
Source: JICA Survey Team

Figure 3-1 Households within the Project-affected zone

In this Project, land acquisition and land lease candidate sections were surveyed, taking into consideration the scope of permanent structures and temporary structures for implementation. The area of land acquisition for this Project was determined by overlaying the cadastral map provided by SIT on the plan of the main alignment of the road and bridges, and the area of land acquisition required for the Project was calculated by taking the ROW of 20 m from the main alignment as the offset area and adding the area of structures exceeding 20 m, if any. The range of land acquisition required was calculated by adding the range of structures that exceed 20 m. As a result, 5 land acquisition areas and 3 leased land areas were identified. Source: JICA Survey Team

Figure 3-2 and Table 3-1 show the areas subject to land acquisition and land lease by landowner.

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Source: JICA Survey Team

Figure 3-2 Landowners of the land acquisition is required

Table 3-1 Land acquisition and leased areas

#	Landowner	Area No.	Type	Construction Scope	Land Acquisition Area (m ²)	Land Lease (m ²)	Subtotal (m ²)
1	Orlando Paramo & Santos Edilia Andino	1-1	Acquisition	Permanent Structure Scope (Japanese side)	4,918	-	5,759
		1-2	Acquisition	Permanent Structure Scope (Honduras side)	840	-	
2	Private land (Owner unknown)	2	Acquisition	Permanent Structure Scope (Japanese side)	1,882	-	1,882
3	José Manuel Vargas Valdez	3-1	Acquisition	Permanent Structure Scope (Japanese side)	914	-	1,064
		3-2	Lease	Temporary construction	-	151	
4	Yolanda Vargas Valdez	4-1	Acquisition	Permanent Structure Scope (Japanese side)	1,861	-	1,935
		4-2	Lease	Temporary construction	-	74	
5	Carlos Humberto Ponce Salgado	5-1	Acquisition	Permanent Structure Scope (Japanese side)	3,671	-	11,111
		5-2	Lease	Horizontal boring (temporary)	-	7,440	
Total*					14,086	7,665	21,751

Source: JICA Survey Team

*4,000m² of leased land was included for temporary construction yard and offices

As a result of the above considerations, the total land acquisition area required for the Project is approximately 14,100 m², and the total leased land area is approximately 11,700 m². In this study, on-site discussions were held with each landowner to obtain their agreement. For sites with unknown owners, the Consultant have requested SIT to conduct an additional survey to expedite the identification process, and will follow up on the progress and results during the detailed design period. The cost of land acquisition will be secured.

3.2 Impact on Trees

During the present survey it was observed a fifteen (15) number of trees species as it is shown in Table 3-3. None are endemic species that require special care. It was estimated that approximately 200 numbers of trees will be affected during the construction stage.

The tree-cutting activity requires a permit. In this regard, SIT must consult with the National Agency for Forest Conservation and Development and Wildlife Conservation (ICF) to obtain the captioned permit. The procedure for obtaining the tree cutting permit is shown in the following table. The issuance of an environmental license is a prerequisite for starting the process, which is estimated to take about two months.

Table 3-2 Procedure for Obtaining a Tree Cutting Permit

No.	Institution	
1	SIT	Employment of forestry professionals
2	SIT	Salvage plan development (Acuerdo-011-2020)
3	SIT	Submission of Salvage Plan to Regional ICF
4	ICF	On-site verification of salvage plan and issuance of opinion
5	ICF/SIT	Sign reforestation pledge (3 saplings per logging)
6	SIT	Payments to ICF according to m3 harvested
7	ICF	Approval by resolution of salvage plan (Approximately takes 2 weeks for review)
8	SIT	Submission of Salvage Plan to the Environmental Authority of the Municipality of San Antonio de Oriente (UMA)
9	SIT	Payment to UMA for use of natural resources (per unit)
10	ICF	Tree cutting permit is issued to SIT

Source: JICA Survey Team

During the construction stage, the Contractor must comply with the salvage plan which includes a reforestation plan, taking into account the number and size (diameter) of trees and other specifications given by ICF.

3.3 Impact of approach road

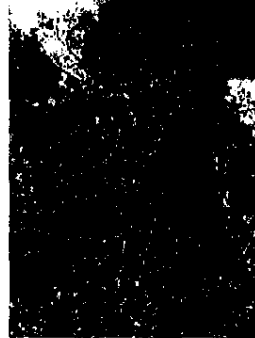
No structures or shops will be affected due to the construction of the Approach Road.

3.4 Impact of horizontal boring at landslide area

As it is stated at Area No.5 of Table 3-1 and Figure 3-2, the area at the valley side of the existing road is considered to be the area for the installation of temporal horizontal boring during the construction stage. This measure was taken as a temporary protective measure inside the landslide area during the implementation of the Project. There is no affection but some minor shrubbery cutting because this land has no commercial or housing usage due to the unstable condition of the landslide.



Table 3-3 Survey of tree species near the Project site

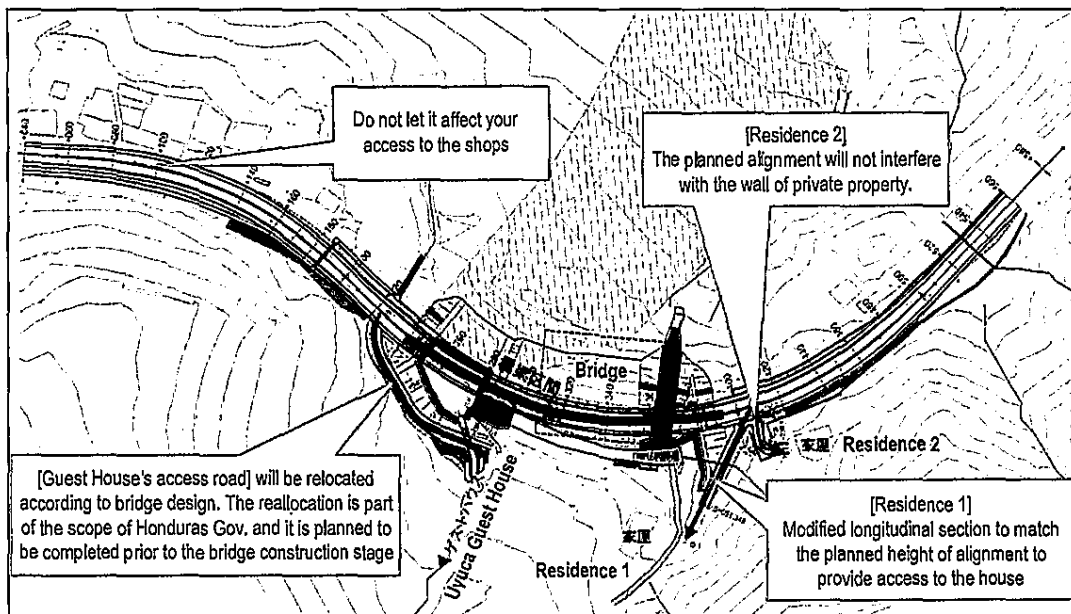
			
1.Eucalipto camaldulensis (Eucalyptus amaldulensis)	2.Pino pinabete (Pinus Oocarpa)	3.Guama (Inga Desinflora) or guaba (Inga Eduelis)	4.Izote (Yucca Girantea)
			
5.Guayaba (Psidium Guajava)	6.Pino Australiano (Casuarina)	7.Maguey (Agave Lechuguilla)	8.Espino
			
9. Liquidanbar	10. Leucaena	11. Robles	12. Encino
			
13. Arbustos	14. Higueria	15. Llama del Bosque (Spathodea Campanulata)	

Source: JICA Survey Team

3.5 Impact on access roads

The implementation of the Project considers the affection at the access road of the Uyuca Guest House and the 2 residences located near the abutment A2 (Refer to areas 1-1, 1-2, 3-2 of Table 3-1 and Figure 3-2). These access roads will be relocated before the start of the construction stage in order to secure the accessibility of the residents and other users.

The next figure shows the consideration taken for the design of the access roads.



Source: JICA Survey Team

Figure 3-3 Considerations taken for the design of access roads

4. Legal framework for land acquisition

4.1 Legal framework for land acquisition in Honduras

Article 14 of the Honduras Road Communications Network Law (Ley de Comunicación Terrestre Decreto No.173, 1995), stipulates that the ROW is a minimum of 15 meters, measured at center alignment. In addition, Article 16 of the same law defines a reserve area of 5 m, for a total of 20 m. Construction of any type of building is prohibited within the ROW and reserve area. The Project is being implemented with a total ROW of 20 meters. Inside the area where the bridge and road are planned to be constructed, it was confirmed that the width of the ROW is not being complied for several hundred meters due to the presence of houses and stores adjacent to the road.

Based on the above situation, in order to minimize the land acquisition area and to cover the construction impact area, the Consultant Team calculated the area where land acquisition would be necessary by setting the ROW as 20 m offset from the main road alignment to the left and right, taking into account the entry of heavy machinery from the edge of the structure and the location of the rubbing of the soil pile. However, for areas where buildings are located, efforts were made to secure space as close to the walls of the buildings as possible.

Resettlement is not necessary in the present Project. The policy and necessary process for land acquisition and resettlement needs was discussed and agreed with the Deputy Minister of SIT.

The following table shows the Honduras legal framework for land acquisition.

Table 4-1 Honduras Land Acquisition Concerned Laws

Year	Law	Description
1954	Compulsory Expropriation Law (Decree No. 113)	It contains the legal basis for the compulsory seizure law for public Projects.
2011	Fast Track Law (Decree No. 582011)	A collection of laws in various fields that simplify approval procedures to facilitate the implementation of public works Projects (mainly infrastructure investment Projects).

Source: JICA Survey Team

4.2 Gap analysis and gap filling measures

A comparison of the JICA guidelines and the Honduras system and study cases regarding involuntary resettlement and land acquisition was analyzed to make a decision on the policy to be followed in this Project. Basically, the Honduran system is implementing land acquisition and resettlement in accordance with the World Bank's Regulation (WB OP 4.12), and it was confirmed that there is no gap with the JICA guidelines. The following table shows the results of the gap analysis and gap filling measures.

Table 4-2 Comparison Table between JICA and Honduras guidelines

No	JICA Guidelines	Honduras (WB OP4.12)	Gap	Policy for this Project
1.	Involuntary resettlement and loss of means of livelihood must be avoided by all possible means.	WB OP4.12 states that involuntary resettlement should be avoided to the extent possible, minimized and alternatives explored (paragraph 2 (a)).	No Gap	Involuntary resettlement and loss of means of livelihood will be avoided or minimized to the extent possible by considering all feasible alternatives.
2.	If avoidance is not possible after these considerations, effective measures must be taken to minimize the impact and compensate for the loss	WB OP 4.12 states that if avoidance is not possible, resettlement activities should be implemented as a sustainable development plan and sufficient investment resources should be allocated to ensure that the resettled population benefits from the project (paragraph 2 (b)).	No Gap	If resettlement is unavoidable, effective measures will be taken to minimize impacts and compensate for losses.
3.	Provide compensation and assistance to the relocated residents to improve or at least restore their standard of living, income opportunities, and production to what it was before the relocation.	On public and state-owned land, the owners of the affected buildings, and in all cases, including those involving economic relocation, must be in the same or improved condition as they were before the project was implemented.	No Gap	Involuntary resettlement will ensure that people are not prevented from earning or losing their means of livelihood, and that they receive adequate compensation and support to restore or improve their standard of living, income opportunities, and production levels to at least the pre-Project level.

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No	JICA Guidelines	Honduras (WB-OP4.12)	Gap	Policy for this Project
4.	Compensation must be based on reacquisition costs whenever possible	The price paid to affected residents, if they are regular owners, will be determined based on the minimum requirements set forth in WBOP 4.12: Honduras Fast Track Law	No Gap	Follow fast track laws. Non-regulars shall also be compensated.
5.	Compensation and other assistance must be provided prior to physical relocation	WB OP4.12 states that acquisition of land and assets is only after compensation has been paid and, where applicable, relocation sites and allowances have been provided to relocated residents	No Gap	SIT and the contractor will pay compensation to the affected residents prior to the public announcement.
6.	For projects involving large-scale involuntary resettlement, a resettlement plan must be prepared and made publicly available	WB OP4.12 states that the borrower must create a transfer plan or transfer policy framework (paragraph 6).	No Gap	No large-scale involuntary resettlement will occur in this Project
7.	In the preparation of resettlement plans, sufficient information must be made available to the public in advance, and consultation with affected people and communities must be based on this information.	Under WB OP 4.12, information on one's options and rights regarding relocation is to be provided (paragraph 6(a)(i)); technically and economically feasible relocation alternatives are to be discussed and options are to be presented and provided (paragraph 6(a)(ii)).	No Gap	No large-scale involuntary resettlement will occur in this Project
8.	Consultations must include explanations in a language and format that is understandable to those affected.	WB OP4.12 states that the information shall be made available in a place accessible to resettled residents and NGOs in a format, manner, and language that is easy to understand (paragraph 22).	No Gap	During public consultations, explanations should be provided in a form, manner, and language that is understandable to those affected.
9.	Adequate participation of affected people must be promoted in the planning, implementation and monitoring of measures for involuntary resettlement and loss of means of livelihood	WB OP4.12 states that relocated residents and communities shall be provided with relevant information in a timely manner, be included in consultations on relocation options, and be provided with opportunities to participate in planning, implementation, and monitoring: paragraph 13 (a)	No Gap	The SIT shall endeavor to facilitate the coordination of the appraiser with the landowner to participate in the compensation establishment process.
10.	Mechanisms must be in place to address complaints from affected people and communities	According to WB OP 4.12, mechanisms must be in place to address complaints from affected people and communities.	No Gap	The SIT shall establish a simplified accessible grievance mechanism for affected people and their communities.
11.	Affected populations will be identified and recorded through initial baseline surveys (including population censuses, asset and property surveys, and socioeconomic surveys)	Same as on the left	No Gap	A preliminary survey of the site and potential PAPs shall be conducted in the early stages of the Project to avoid and minimize negative Project impacts. Affected people and enterprises shall be identified

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No	JICA Guidelines	Honduras (WB OP4.12)	Gap	Policy for this Project
	to establish entitlements to compensation and assistance. This should be done as early in the project as possible to prevent undue influx of people seeking compensation, assistance, or other benefits (WB OP 4.12/6, para.)			and recorded to establish their eligibility through a baseline survey after design and construction plans have been reviewed and approved by the SIT.
12.	The recipients of compensation or assistance shall be those that have legal rights to the land, those that do not have legal rights to the land, but whose rights would be recognized under the legal system of the country concerned if they claimed them, and those that cannot confirm their legal rights and claims to the land they occupy (WBOP paragraph 4.12/15).	Same as on the left	No Gap	The identified landowner has formal legal rights to the land and the land is eligible for benefits.
13.	Where the livelihoods of relocated residents are rooted in the land, land-based relocation strategies shall be prioritized (WB OP 4.12/11 paragraph).	Same as on the left	No Gap	No large-scale involuntary resettlement will occur in this Project
14.	Provide assistance during the transition period (WB OP4.12/6 paragraph)	Same as on the left	No Gap	No large-scale involuntary resettlement will occur in this Project
15.	Special consideration will be given to socially vulnerable groups among the resettled population, especially the poor and landless, the elderly, women, children, indigenous peoples, and ethnic minorities (WB OP 4.12/8).	Same as on the left	No Gap	No large-scale involuntary resettlement will occur in this Project
16.	For projects involving resettlement or land acquisition for less than 200 persons, prepare a relocation plan (summary version) (WB OP 4.12/25 paragraph)	Same as on the left	No Gap	Not applicable

Source: JICA Survey Team

4.3 Process for land Acquisition in Honduras

Table 4-3 Process for land Acquisition in Honduras

No.	Responsible Organization	Required Process
1	SIT	Conduct a site survey to confirm the ROW and the extent of land acquisition on site. Hold a briefing session for local residents involved in the land acquisition to publicize the Project and officially notify them of its implementation.
2	SIT	Hiring of experts and appraisers
3	Appraiser	Eminent domain price is assessed at the Project site, and a Price Parameter Report is prepared (Approximately 1 month).
4	SIT	Formation of Appraisal Committee: (1) SIT (implementing agency), (2) National Property Office (SEFIN), (3) Institute of Property (IP), and (4) representatives of the San Antonio de Oriente Municipal and Land Registry Office.
5	Board of Appraisers	Preparation of appraisal report (approximately 3 months) • Collection of cadastral information • Verification of land registry information by IP and issuance of land registry status certificate • Discuss the expropriation price with the landowner based on the price identified by the appraiser • Landowner accepts the offered price and signs the contract • Appraisal report is submitted to the State Property Management Bureau • After approval by the National Property Management Bureau, submit the final version of the appraisal report and the Executive Agreement form to the Office of the President.
6*	Cabinet	Review of appraisal reports, signing of Executive Agreement and official publication (La Gaceta official newspaper).
7	President	Authority granted to the Attorney General's Office to appoint a notary public to prepare the "Protocol of Deeds".
8	SIT	Submission of appraisal report to the State Property Management Bureau
9	Public Notary	Preparation of the "Protocol of Deed" and signature of the landowner
10	IP	Registration of certificates (assignment of registration number, volume number, and description)
11	SIT	Request for payment to the National Treasury
12	State Treasury	Payments of compensation amount to landowners

* If a Trust Fund is used, the steps after 6 can be replaced by the intervention of the private company in charge, and payments are made directly.

Source: JICA Survey Team

5. Stakeholder Meetings

5.1 Stakeholder Consultation Meeting

According to the JICA Guidelines for Environmental and Social Considerations 2022, consultation with affected and interested parties as well as the general public is required, and their opinions must be taken into account when the Project is being planned and carried out. Honduras legislations also require consultation with both affected and interested parties.

Taking into consideration the stated above, it was held a total of five (5) stakeholder meetings with local authorities, affected people, and the public in general in order to cover all the interested parties. The following table shows a summary of the captioned meetings. The complete set of Minutes of Meetings, as well as the participant lists and handouts, are attached in Appendix-2.

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Table 5-1 Summary of Stakeholder Consultation

1. Municipality of San Antonio de Oriente	
Date and venue	2023.03.07; 12:30 - 13:00; San Antonio de Oriente (SAO) City Hall
Participants	• SAO Municipality: 1 (Local Government Environment Unit; UMA representative) • SIT: 2 • JICA Survey Team: 2
Details of Discussions	• Explanation of the outline of the Project (location of the bridge, type of work, scope of construction, main equipment, etc.). • Explanation of the environmental and social considerations associated with the implementation of the Project. • Explanation of the need for a waste treatment plant, dumping site, soil removal site, etc. ✓ Request to share the following information: ✓ Land registry information from the Population and Property Registry ✓ Certificates required when obtaining environmental licenses (presenting rural registration certificates, public property certificates, reports describing the current status of the Project area, etc.)
Results	• Participants were provided with an overview of the Project and its environmental and social impacts. • It was confirmed that the Project site is not located within the buffer zone or core zone of the Uyuca Ecological Reserve. • ICF and SIT should discuss the tree cutting permit first. • The municipality does not have an approved solid waste disposal site. Solid waste is transported to Tegucigalpa City. However, there is one village with a crematorium. • The municipality does not have a specific place to dispose of surplus materials from civil works. Usually, these earth waste materials are donated to people interested in reclaiming private land.
Handouts	Summary presentation of the Project
	
2. El Zamorano University	
Date and venue	2023.03.07; 15:30 - 17:00; El Zamorano University; Environmental and Development Engineering Office
Participants	• El Zamorano University: 1 (Dean of the Faculty of Environment and Manager of the Uyuca Biological Reserve) • SIT: 2 • JICA Survey Team: 2
Details of Discussions	• Explanation of the outline of the Project (location of the bridge, type of work, scope of construction, main equipment, etc.). • Explanation of the environmental and social considerations associated with the implementation of this Project. • Request for sharing the following information: ✓ Location map of the buffer zone and core zone of the Uyuca Ecological Protected Area (shp) ✓ Draft report of the Annual Report of Uyuca Ecological Protected Area (published in June) ✓ Management Plan Plan for Uyuca Ecological Protected Area (latest version) ✓ Sharing of precipitation, temperature, and other hydro-meteorological parameters shp files for micro watersheds
Results	• Participants were provided with an overview of the Project and its environmental and social impacts. • It was confirmed that the Project site is not located within the buffer zone or core zone

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	of the Uyuca Ecological Reserve. • The Project site is outside the buffer zone of the Uyuca Ecological Reserve, but within the zone of influence. • The impact of the bridge construction on the Uyuca Ecological Reserve is estimated to be low. • Impacts to wildlife (wild mammals and birds) from noise and dust generated by construction activities are estimated. • Because the protected area is located upstream of the Project area, there are estimated to be no issues of pollution of water bodies due to runoff. • Regarding endangered species in the protected area, the quetzal, a bird species under study, stands out. • Cases of large mammals being hit by vehicles while attempting to cross roads have been observed. Therefore, the risk of such accidents may increase with the construction of bridges and traffic, as vehicles are more likely to speed up. Considering that this is a wildlife crossing, it is recommended that signage be installed to encourage vehicles to slow down. • It is recommended that a "mitigation management fund" for reducing impacts to the Uyuca Ecological Reserve be included in the Project budget.
Shared material	• Summary presentation of the Project • Outline floor plan of the Project
 	
3. Uyuca Guest House	
Date and venue	2023.03.20; 10:30 - 12:00; Uyuca Guest House Living Room
Participants	• Uyuca Guest House: 2 (Owners) • SIT: 1 • JICA Survey Team: 4
Details of Discussions	• Explanation of the outline of the Project (location of the bridge, type of work, scope of construction, main equipment, etc.). • Explanation of the environmental and social considerations associated with the implementation of the Project. • Explanation of the necessity of relocation of guesthouse access roads required for the construction. • Explanation of the environmental impact during construction. • Explanation of tree trimming associated with the relocation of the access road. • Implementation of the Economic and Householding Census Questionnaire.
Results	• Participants were able to understand the Project and its environmental and social impacts. • The relocation of the access road was understood. • Request for appropriate afforestation work near the access road. • The guest house owners agreed to cooperate with the construction work.
Handouts	• General floor view and cross-sectional view of the bridge and approach roads

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4. Residents inside the Project Area 1: Before and after bridge start point (valley side)	
Date and venue	2023.03.22
Participants	• Local residents: 7 • SIT: 4 • JICA Survey Team: 4
Details of Discussions	<u>Brief Explanation of the Project by SIT</u> • Design and construction of this Project will be carried out under the Japanese government's grant aid program. • The design and construction will be carried out by Japanese contractors. The contractor has a successful track record in design and construction management of landslide control Projects in KM14.7, KM22.0, and KM63.0 in CA-6. • The purpose/reason for the bridge construction proposal is to provide a solution to the frequent traffic blockages caused by landslides. • One advantage of the bridge construction proposal is that the bridge piers and abutments are supported by durable ground, so that new landslides in the future will not affect the bridge structure. • The bridge construction will not affect existing traffic or surrounding residences. • Construction is scheduled to begin in approximately 18 months. <u>Technical explanation of the Project by the JICA Survey Team</u> • Explanation of the design outline of the new bridge using general drawings (plan and cross section view). • Introduction of the bridge construction process using 3D/BIM models. • All participants visited the bridge construction site, and an explanation in the field was performed, answering their questions using the two tools described in the previous section. <u>Explanation of Environmental and Social Considerations by the Survey Team</u> • The primary environmental impacts during the construction period will be air pollution, noise, and vibration from construction activities. • There are no bodies of water within the sphere of influence of this work, so it is estimated that there will be no contamination of aquifers. • The current design does not affect houses adjacent to the road, but necessary land acquisition will be planned according to the final design. • Tree trimming will be performed in accordance with a salvage plan to be prepared by SIT prior to the start of construction. • During the construction period, it is anticipated that jobs will be created for nearby residents as well as an increase in the number of customers using the simple restaurant and souvenir shop. • All participants and their families were requested to support the Project and expressed their willingness to cooperate. <u>Economic and Householding Census Questionnaire</u> • Questionnaires were administered to each householder by members of the SIT under the supervision of the JICA Survey Team.
Results Q&E	• Participants were provided with an overview of the Project and its environmental and social impacts. • Question 1: Will structures within the ROW be affected by this Project? • Answer (SIT): We do not anticipate any impacts to existing structures adjacent to the road. However, if it is necessary to acquire a portion of the owner's land in order to

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	construct the bridge/road, the owner will be notified in order to complete the corresponding procedures. • Question 2: What is the size of the horizontal drainage area to be installed in the landslide area? Answer (survey team): The horizontal drain will be installed from the bottom of the fault where the boundary fence installed by the landowner is located to the top of the existing road. This is a measure to reduce the risk of landslides by draining water out of the ground, which will be installed during the bridge construction phase.
Handouts	• General floor view and cross-sectional view of the bridge and approach roads • 3D/BIM model of bridge construction process • Economic and Householding Census Questionnaire Form
	
5. Residents inside the Project Area 2: Near A2 abutment (mountain side)	
Date and venue	2023.03.22
Participants	• Local residents: 5 • SIT: 4 • JICA Survey Team: 4
Details of Discussions	<u>Brief Explanation of the Project by SIT</u> • Design and construction of this Project will be carried out under the Japanese government's grant aid program. • The design and construction will be carried out by Japanese contractors. The contractor has a successful track record in design and construction management of landslide control Projects in KM14.7, KM22.0, and KM63.0 in CA-6. • The purpose/reason for the bridge construction proposal is to provide a solution to the frequent traffic blockages caused by landslides. • One advantage of the bridge construction proposal is that the bridge piers and abutments are supported by durable ground, so that new landslides in the future will not affect the bridge structure. • The bridge construction will not affect existing traffic or surrounding residences. • Construction is scheduled to begin in approximately 18 months. <u>Technical explanation of the Project by the JICA Survey Team</u> • Explanation of the design outline of the new bridge using general drawings (plan and cross section view). • Introduction of the bridge construction process using 3D/BIM models. • All participants visited the bridge construction site, and an explanation in the field was performed, answering their questions using the two tools described in the previous section. <u>Explanation of Environmental and Social Considerations by the Survey Team</u> • The primary environmental impacts during the construction period will be air pollution, noise, and vibration from construction activities. • There are no bodies of water within the sphere of influence of this work, so it is estimated that there will be no contamination of aquifers.

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	• The current design does not affect houses adjacent to the road, but necessary land acquisition will be planned according to the final design. • Tree trimming will be performed in accordance with a salvage plan to be prepared by SIT prior to the start of construction. • During the construction period, it is anticipated that jobs will be created for nearby residents as well as an increase in the number of customers using the simple restaurant and souvenir shop. • All participants and their families were requested to support the Project and expressed their willingness to cooperate. <u>Economic and Householding Census Questionnaire</u> • Questionnaires were administered to each householder by members of the SIT under the supervision of the JICA Survey Team.
Results Q&E	• Participants were provided with an overview of the Project and its environmental and social impacts. • Comments from participants about the existing drainage channel ✓ For several years, the amount of water flowing into the channel due to rainfall has increased, and the resulting sediment material from driftwood and other sources has been regularly clogging the cross-drainage pipes. Every year during the rainy season, the water level rises to the level of the access road to the owner's residence. ✓ Due to the above conditions, each year the owner voluntarily performs maintenance work not only on the channel and cross drainage pipes, but also on the embankment adjacent to the channel. ✓ Currently, there are three sources of water that join the channel through culverts. ✓ The survey team was asked to consider in this Project a solution to the cliff collapse on both sides of the channel (owner's story) caused by the presence of the drainage and crossing pipes. ✓ Due to the high surface moisture in the area covered by the Project, fog is thick at night, and in some cases, it obstructs the visibility of people passing on the road, so consideration should be given to this issue.
Handouts	• General floor view and cross-sectional view of the bridge and approach roads • 3D/BIM model of bridge construction process • Economic and Householding Census Questionnaire Form
	

Source: JICA Survey Team

Comments from nearby residents and related agencies requesting reduction of exhaust emissions and dust materials and improvement of the existing crossing pipe (culvert) located on the mountain side were received and reflected in the Project content. Improvements are expected to be made through the construction of bridges to improve the prime traffic flow and the channel in combination with the construction of the bridge.

5.2 Impacts identified by Stakeholders

Upon disseminating information by the JICA Survey Team, Project authority (SIT/UGA), stakeholders identified some pertinent issues relating to the compensation, displacement, resettlement, livelihood restoration, etc. Identified potential beneficial and adverse impacts are described below.

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Table 5-2 Impacts identified by Stakeholders

Identified Beneficial Impacts	Potential Adverse Impacts
1. Reduction of noise and vibration, as well as CO and dust due to improvement of poor pavement condition of the road. 2. Increase in shoppers due to road improvement. 3. Solution to the road blocking problem due to the active landslide. 4. Solution to the rainfall drainage problem with the improvements of drainage facilities. 5. During the construction phase, the nearby shops can provide alimentation. 6. Generation of new sources of work, as laborers in the construction site	1. In case a large number of landowners will lose their land, their homestead and business which will have significant impact on them. 2. In case the drainage channel condition at the mountainside, they will face continuous inundation as it is currently occurring.

Source: JICA Survey Team

5.3 Major discussion in Detail Design stage

Major discussion with the relevant stakeholders is suggested during the detail design stage in coordination with SIT and UGA, using the updated alignment of the bridge/roads.

6. Economic and household census results

The results of the economic and household census survey are shown in the following table, confirming that all nine (9) households are landowners. The cut-off date is basically set as the start date of the population census survey (March 22, 2023), but a new date may be set after the formation of the appraisal committee in accordance with the Honduras law. Therefore, the cutoff date should be confirmed at a stage after the completion of this survey.

Table 6-1 Number of Project Affected Units (PAUs) and Affected Persons (PAPs)

Item	PAUs			PAPs		
	Legal	Illegal	Total	Legal	Illegal	Total
Required for displacement						
1. HH (Structure owner on Gov. land)	0	0	0	0	0	0
2. HH (Structure on Private land)	0	0	0	0	0	0
3. HH (Tenants)	0	0	0	0	0	0
4. CBEs (Structure owner Gov. land)	0	0	0	0	0	0
5. CBEs (Structure owner on Private land)	0	0	0	0	0	0
6. CBEs (Tenants)	0	0	0	0	0	0
7. Community owned structures	0	0	0	0	0	0
Not required for displacement						
8. Land owners	9	0	9	36	0	36
9. Wage earners	0	0	0	0	0	0
合計 (1-8)	9	0	9	36	0	36

HH: House Hold, CBEs: Commercial and Business Enterprises

Source: JICA Survey Team

The following table shows the potentially affected householders by the Project and their assets obtained from the survey questionnaire. It is assumed that the households that will need to acquire land for the Project are HHs No. 5, No. 6, and No. 7 at the same table. For the location of each HHs refer to Figure 3-1.

Table 6-2 Assets Survey Summary

HH No.	Name of HH owner	Family		Work	Income (USD/month)	Socially vulnerable person
		Male	Female			
1	Carlos Alberto Cruz Ponce	1	1	Own business	824	1 illiterate person
2	Maura Ponce Salgado	2	3	Own business	618	None
3	María Santiago Ponce Salgado	2	4	Own business	2,473	None
4	Ana Julia Ponce Salgado	1	4	Own business	2,473	One girl who is 1 year old
5	Leyla Paramo	1	0	Own business	unknown	None
6	Santos Dalila Valdez	2	3	Pensioner	660	2 elderly persons over 80 years old
7	Yolanda Vargas Valdez	3	1	Employee	2,144	None
8	Marilú Velásquez Pérez	3	1	Own business	1,237	None
9	Carlos Humberto Ponce Salgado	2	2	Own business	157	Monthly income is lower than Honduras necessity basket
		17	19			

Source: JICA Survey Team

As the above results show, approximately 70% of the 9 households are self-employed or running their own businesses. Except for 1 HH who replied that her income is unknown, the other 8 HHs monthly income is above \$306/month which is the average of the monthly basket of necessities published by the Secretariat for Economic Development (24.03.2023-31.03.2023) of Honduras. Regarding social vulnerabilities, one illiterate person, one 1-year-old girl, and two elderly persons have been identified. Regarding public infrastructure, all households are connected to electricity, but water and sewage systems are not yet in place, which was mentioned in the captioned questionnaire as an issue to be solved in the future.

7. Eligibility Policy and Entitlement Matrix

The eligibility criteria for this Project will be that regardless of their ownership of property, all Entitled People (EPs) will get compensation, resettlement benefits, and assistance based on loss and impact categories identified through census, socioeconomic survey, and inventory of losses. The cut-off date will restrict who is eligible to get compensation and other assistance.

According to the policy stated above, Entitlement Matrix was prepared as shown in the following table.

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Table 7-1 Entitlement Matrix

No	Type of loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Organization
1	Loss of land	Legal owner(s) of land	The following compensation shall be performed in accordance with the Honduras State Fast Track Law and WB OP 4.12. • The cost of compensation shall be the condemnation value as determined by a real estate appraiser for the area of land within the ROW based on the design drawings. • If the loss of land is partial, compensation shall be made for the final extent.	SIT
		Persons who do not own legal title to land	Basically, it is not covered by the compensation, but if a house, store, etc. is confirmed, the same structure is covered by the compensation.	SIT
2	Loss of land on which trees are planted	Legal owner(s) of land	The following compensation shall be performed in accordance with the Honduras State Fast Track Law and WB OP 4.12. • The cost of compensation shall be the eminent domain value of the land within the ROW based on the design drawings, as determined by a real estate appraiser. • For planted trees, a salvage plan will be developed and compensated under the supervision of ICF after consultation with the owner.	SIT
3	Loss of existing structures	Building or Structure Owner	Basically, it is not covered by the compensation, but if a house, store, etc. is identified, the same structure will be covered by the compensation. • The final scope of compensation will be discussed with the owner. • The cost of compensation will be based on a real estate appraiser's valuation, taking into consideration the scope and materials. Depreciation is not included.	SIT
4	Compensation for land involved in road and bridge construction	Legal owner(s) of land	For land that will need to be temporarily leased for temporary construction purposes (e.g., construction roads, construction yards, horizontal boring, etc.), the cost of compensation shall be the amount assessed by the real estate appraiser.	SIT

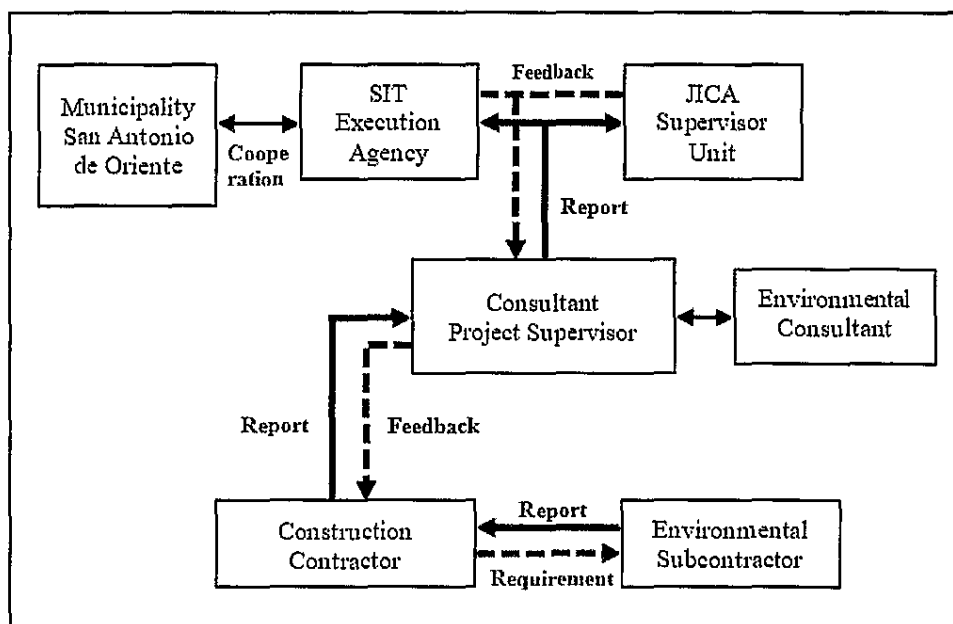
Source: JICA Survey Team

8. Implementation System

The process for land acquisition and lease will be carried out by SIT in accordance with the process described in Table 3-1. In the current eminent domain process, the following scenarios are assumed 1) the landowner agrees to the amount of compensation and donates the land for a fee, and 2) the landowner does not agree to the amount of compensation. Currently, no opposition has been expressed, and the agreement has been reaffirmed through explanations given again at the stakeholder meetings held in March 2023. On the other hand, in case 2) situation occurs, the Compulsory Seizure Law (Decree No. 113) will be applied.

8.1 ARAP Institutional and implementation system

The following figure shows the proposed implementation system. The monitoring measured by the construction contractor will be reported to the construction manager and later to the Project Supervisor and/or Execution Agency according to the blue flow, and any problems with the measurement results will be fed back (red arrows). If necessary, the involvement of an environmental and social survey company and/or consultant will be considered.



Source: JICA Survey Team

Figure 8-1 Implementation structure for ARAP monitoring

8.2 Grievance Redress Mechanism

The grievance redress mechanism will be handled in accordance with the implementation system shown in Figure 8-1. The monitoring form (draft) will be managed by setting up a column for receiving complaints before, during, and after construction (when the project is in service).

SIT, as the executing agency, will be responsible for the acquisition of land for this Project including the necessary compensation to HHs. However, since this is a grant aid project, JICA will endeavor to provide technical support. The counterpart of the Project in charge of site acquisition will be Mrs. Marcela Tatiana Rodriguez (SIT Road Maintenance Department and Project Coordinator).

9. Compensation Cost and Budget

The compensation cost for land acquisition and leasing will be determined by an official appraisal by a Price Parameter Report as an essential part of the land acquisition process to be held by SIT to be completed during the Detail Design Stage.

JICA Survey Team estimated the compensation cost based on the research of announcements of land sales by private parties on the National Highway CA6 and close to the location of the Project because it was not found in recent past examples of land acquisition at SIT. As a result of this investigation, the cost per square meter ranges between 600 and 1200 lempiras.

Taking into account the above, the compensation costs for land acquisition and lease were estimated as follows:

Table 9-1 Estimated compensation costs

No	Item	Area (m2)	Unit Cost (Lps./m2)	Total Cost (Lps.)
1	Land acquisition	14,100	1,000	14,100,000
2	Land lease	11,700	500	5,850,000
Total Cost				19,950,000

Source: JICA Survey Team

It is noted that the cost per m2 should be verified by SIT following the land acquisition and lease procedures stated at Table 4-3.

In March 2023, discussions were held with the Deputy Minister at SIT Office, the implementing agency, regarding the area required for site acquisition and temporary construction. At that time, it was reaffirmed that SIT is the implementing agency for the land acquisition process, and agreement was reached on the need to complete the process prior to the announcement of the bid for the project.

In this regard, SIT will calculate and secure the necessary costs for land acquisition and land lease in accordance with the procedures described in Table 4-3, based on the land acquisition and land lease area map prepared in this study, and in consultation with the landowners. As shown in Table 3-1, some landowners have not been identified at this time, but SIT will expedite the identification process and secure the costs for land acquisition.

10. Monitoring and Reporting

The monitoring and reporting of the ARAP will be executed jointly with the environmental monitoring as part of the Environmental Management Plan (EMP), according to the following proposal.

Table 10-1 Proposed monitoring plan

No	Item	Monitoring Item	Location	Frequency	In-charge
Before construction stage					
1	Air Quality	CO, PM10, PM2.5, NO2, SO2	Around the construction site	At least 1 time	Contractor
2	Noise	Noise Level	Around the construction site	At least 1 time	Contractor
3	Vibration	Vibration Level	Around the construction site	At least 1 time	Contractor
4	Land acquisition	Identification of landowners, consultation, formation of an agreement, and payment with PAP	PAPs within the Project site	Before project implementation stage	SIT

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No	Item	Monitoring Item	Location	Frequency	In-charge
5	Existing Social infrastructure and social services	Construction of access road to Uyuca Guest House and near residences Utility relocation works	PAPs within the Project site	Before project implementation stage	SIT
During construction stage					
6	Air Quality	CO, PM10, PM2.5, NO2, SO2	Around the construction site	Quarterly or construction period with high pollutant generation	Contractor
7	Waste treatment	Surplus soil treatment, logged trees and other construction waste material	Around the construction site	Every day	Contractor
8	Soil pollution	Liquid pollutant control	Around the construction site	Every day	Contractor
9	Noise and vibration	Noise Level and Vibration Level	Around the construction site	Quarterly	Contractor
10	Ecosystem	Tree cutting and reforestation work (Assessment of revegetation, if necessary)	Within the Project site	As necessary	Contractor
11	Existing Social infrastructure and social services	Access to the site	Within the Project site	Quarterly or immediately after an incident	Contractor Supervisor
12	Poverty and Gender	Employment status/form	Construction site	Quarterly or immediately after an incident	Contractor Supervisor
13	HIV/AIDS and other infectious diseases	Enlightenment education	Construction site	Quarterly or immediately after an incident	Contractor Supervisor
14	Work Environment and Accidents	Conduct safety training and meetings	Construction site	Every day	Contractor
During service period					
15	Air Quality	CO, PM10, PM2.5, NO2, SO2	Around the construction site	As necessary (2 years)	SIT
16	Noise	Noise Level	Around the construction site	As necessary (2 years)	SIT
17	Vibration	Vibration Level	Around the construction site	As necessary (2 years)	SIT

Source: JICA Survey Team

As it is stated in the above proposed monitoring plan, the confirmation of the landowner's post-acquisition payment of compensation and other costs, as well as any complaints during the construction period, will be conducted by SIT on a quarterly basis over the course of the construction period. The results of the monitoring will be reported in the Project Monitoring Report (PMR) using the following proposed monitoring form.

Table 10-2 Proposed monitoring form

FORMATO DE MONITOREO AMBIENTAL								
Nombre y apellido:				No. de monitoreo:				
Punto de monitoreo:				Fecha:				
ETAPA ANTES DEL INICIO DE LAS OBRAS DE CONTRUCCIÓN								
1. Permisos y Licenciamientos								
Ítems de Monitoreo			Resultados de Monitoreo durante el Periodo de Informe					
Licenciamiento Ambiental			Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma					
Adquisición de Terrenos (Incluye terrenos de préstamo)			Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma					
Reubicación del acceso de la Casa de Hospedaje Uyuca			Detallar fecha de inicio y fecha esperada de culminación de las obras de construcción, así como el status actual y condiciones para la misma					
Reubicación de instalaciones de postes de electricidad y telefonía			Detallar fecha de inicio y fecha esperada de culminación de las obras de construcción, así como el status actual y condiciones para la misma					
Permiso para corte de árboles			Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma					
Permiso para uso de botaderos de material excedente y residuos sólidos			Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma					
2. Contaminación								
Calidad del Aire								
Punto de Medición								
Parámetro	Unidad	Linea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
PM10	µg/m3				< 45µg/m3	< 0.10mg/m3	< 45µg/m3	Mínimo 1 vez antes de comenzar las obras
PM2.5	µg/m3				< 15µg/m3	< 35µg/m3	< 15µg/m3	
CO	µg/m3				< 35µg/m3	-	< 35µg/m3	
NO2	µg/m3				< 200µg/m3	-	< 200µg/m3	
SO2	µg/m3				< 500µg/m3	-	< 500µg/m3	
Ruido y Vibración								
Punto de Medición								
Parámetro	Unidad	Linea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
Ruido	dB				< 65dB	< 65dB	< 65dB	Mín. 1 vez antes de comenzar las obras
Vibración	dB				-	< 75dB	< 75 dB	
3. Respuesta a Comentarios y/o quejas del Público								
Contenido de comentarios y/o quejas recibidas con respecto detalle de acciones tomadas			Detallar fecha del comentario/queja recibida, su contenido y las acciones tomadas incluyendo la fecha en la cual se ejecutó la medida					
4. Otros Ítems a ser reportados (Agregar ítems en caso sea necesario)								
Ítem	Resultados de Monitoreo				Medidas a ser tomadas			
Derrames de grasas								
Accidentes								
Uso de agua								

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FORMATO DE MONITOREO AMBIENTAL

Los resultados actualizados de los siguientes ítems de monitoreo ambiental deben ser presentados a JICA como parte del Informe de Progreso Trimestral.

Nombre y apellido:	No. de monitoreo:
Punto de monitoreo:	Fecha:

ETAPA DURANTE LA EJECUCIÓN DE LAS OBRAS DE CONTRUCCIÓN

1. Permisos y Licenciamientos

Ítems de Monitoreo	Resultados de Monitoreo durante el Periodo de Informe
Licenciamiento Ambiental	Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma
Adquisición de Terrenos (Incluye terrenos de préstamo)	Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma
Permiso para corte de árboles	Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma
Permiso para uso de botaderos de material excendente y residuos sólidos	Detallar fecha de aplicación y fecha esperada de obtención de la licencia o permiso, así como el status actual y condiciones para la misma

2. Contaminación

Calidad del Aire

Punto de Medición								
Parámetro	Unidad	Línea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
PM10	µg/m3				< 45µg/m3	< 0.10mg/m3	< 45µg/m3	Trimestral
PM2.5	µg/m3				< 15µg/m3	< 35µg/m3	< 15µg/m3	
CO	µg/m3				< 35µg/m3	-	< 35µg/m3	
NO2	µg/m3				< 200µg/m3	-	< 200µg/m3	
SO2	µg/m3				< 500µg/m3	-	< 500µg/m3	

Ruido y Vibración

Punto de Medición								
Parámetro	Unidad	Línea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
Ruido	dB				< 65dB	< 65dB	< 65dB	Trimestral
Vibración	dB				-	< 75dB	< 75 dB	

3. Respuesta a Comentarios y/o quejas del Público

Contenido de comentarios y/o quejas recibidas con respectivo detalle de acciones tomadas	Detallar fecha del comentario/queja recibida, su contenido y las acciones tomadas incluyendo la fecha en la cual se ejecutó la medida
--	---

4. Actividades de Reforestación

Estatus de las actividades de reforestación según el Plan de Salvamento	Detallar avances y medidas a tomar en adelante
---	--

5. Otros ítems a ser reportados (Agregar ítems en caso sea necesario)

Ítem	Resultados de Monitoreo	Medidas a ser tomadas
Derrames de grasas		
Accidentes		
Uso de agua		

*The Project for Bridge Construction on National Road No.6 in Honduras
Abbreviated Resettlement Action Plan for Environmental and Social Considerations Survey*

FORMATO DE MONITOREO AMBIENTAL

Los resultados actualizados de los siguientes ítems de monitoreo ambiental deben ser presentados a JICA como parte del Informe de Progreso Trimestral.

Nombre y apellido:	No. de monitoreo:
Punto de monitoreo:	Fecha:

ETAPA DE SERVICIO

1. Contaminación

Calidad del Aire

Punto de Medición								
Parámetro	Unidad	Linea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
PM10	µg/m ³				< 45µg/m ³	< 0.10mg/m ³	< 45µg/m ³	Mínimo 1 vez al finalizar las obras
PM2.5	µg/m ³				< 15µg/m ³	< 35µg/m ³	< 15µg/m ³	
CO	µg/m ³				< 35µg/m ³	-	< 35µg/m ³	
NO2	µg/m ³				< 200µg/m ³	-	< 200µg/m ³	
SO2	µg/m ³				< 500µg/m ³	-	< 500µg/m ³	

Ruido y Vibración

Punto de Medición								
Parámetro	Unidad	Linea base	Valor medido promedio	Valor medido máximo	Norma WHO	Norma Japonesa	Norma Contractual	Frecuencia
Ruido	dB				< 65dB	< 65dB	< 65dB	Mín. 1 vez al finalizar las obras
Vibración	dB				-	< 75dB	< 75 dB	

3. Respuesta a Comentarios y/o quejas del Público

Contenido de comentarios y/o quejas recibidas con respectivo detalle de acciones tomadas	Detallar fecha del comentario/queja recibida, su contenido y las acciones tomadas incluyendo la fecha en la cual se ejecutó la medida
--	---

4. Actividades de Reforestación

Estatus de las actividades de reforestación según el Plan de Salvamento	Detallar avances y medidas a tomar en adelante
---	--

5. Otros Ítems a ser reportados (Agregar ítems en caso sea necesario)

Ítem	Resultados de Monitoreo	Medidas a ser tomadas
Derrames de grasas		
Accidentes		
Uso de agua		

11. ARAP implementation schedule

A tentative time-bound implementation schedule for the ARAP in accordance with the project construction schedule. The overall schedule of ARAP implementation is based on the principle that people affected by the project are paid their due compensation, grant, resettlement benefits and assistance prior to displacement as it is stipulated in JICA Guidelines.

Figure 11-1 shows the tentative implementation schedule for ARAP prepared considering that the land acquisition and lease procedures must be finished during the Detailed Design (DD) stage. Also, it is noted that environmental license procedures, relocation of the access road for Uyuca Guest House and residents near abutment A2, and public utility relocation, also should be completed during the DD Stage.

Items			Application destination	Months	2024												2025			
					Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.		
Japanese Government	(1) Detail Design preparation	-	7.0																	
	(2) Preparation and approval of bidding documents	-	3.0																	
	(3) Bidding Publication	-	-																	
	(4) Contract with awarded company	-	-																	
	(5) Construction Stage Start	-	-																	
Honduras Government	(1) Land acquisition	Land owners	8.0																	
	(2) Environmental Licensing	SERNA	6.0																	
	(3) Tree cutting permit procedures	ICF/UMA	2.5																	
	(4) Relocation of access road	Uyuca Guest House/UMA	9.0																	
	(5) Public Utility relocation																			
	○ Electric power facilities	EEH	9.0																	
	○ Telephone and Internet facilities	TIGO	9.0																	
	○ Telephone and Internet facilities	CLARO	9.0																	
	(6) Spoil bank and borrowing pit usage permission	UMA	9.0																	
	(7) Construction waste dumping site permission	UMA	9.0																	

Figure 11-1 ARAP implementation schedule (Tentative)

12. Appendix

Appendix-1 Economic and Household Census Interview Sheets
Appendix-2 Minutes of Stakeholder Meetings with list of participants

Appendix-1

Economic and Household Census Interview Sheets

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Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. _____

Fecha: 22/03/2023

I. INFORMACIÓN GENERAL	
01	Nombre y apellido del propietario/ocupante <i>Carlos Alberto Cruz Ponce</i>
02	Locación de la entrevista (Dirección y/o Coordenadas)
03	Hora de la entrevista <i>11:52</i>
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) <u>(No)</u>
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)	
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar) <i>d) hijo de la dueña (Ana Julia Ponce)</i>
08	¿Vive dentro del área afectada?: a) Sí; b) <u>(No)</u>
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)
09	Perfil del jefe de familia:
A	Jefe de familia: Nombre y Edad <i>Carlos Alberto Cruz Ponce / 19</i>
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar) <i>b)</i>
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.) <i>h) Comerciante</i>
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar) <i>c) Noveno Grado Sabe leer y Escribir</i>
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar) <i>e) Evangelica</i>

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado			
3. Negocios/Comercio		20,000	
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros: Artesanía			
Ingreso Total		15,000	

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno	/	5. Caprino	/	9. Camello	/
2. Bovino	/	6. Porcino	/	10. Pollo	/
3. Bufalino	/	7. Burro	/	11. Pato	/
4. Ovino	/	8. Caballo	/	12. Otros:	/

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		X
2. Cosechadora		X
3. Equipos de forraje		X
4. Labranza		X
5. Pulverizador		X
6. Desmalezadoras		X
7. Bomba eléctrica		X
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor	X	
2. Refrigeradora	X	
3. Cocina gas/eléctrica	X	
4. Olla eléctrica		X
5. Ventiladora, A/C		X
6. PC/Laptop		X
7. Horno / microondas	X	
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		X
2. Automóvil / Jeep	X	
3. Camión	X	
4. Autobús		X
5. Carrosa		X
6. Otros:		

15. Ahorro anual total (aproximado): 10,000 Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

Alto

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	a)
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	a) Láminas
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales. etc.)	Madera y Bloque

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	d) hijo de la dueña (Ana Julia Borge)
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	d) la dueña paga impuestos a la Alcalde

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura		
2. Huerta		
3. Otros (especificar):		
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si ☒ b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

El Servicio del Agua Potable

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable: a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	f) No disponible, compran el agua en carros cisternas
----	--	---

V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a)
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	c) Baño / Fosa Septica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	a)

VI. INFORMACIÓN DE FAMILIA NUCLEAR

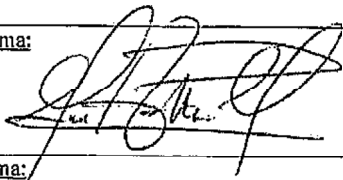
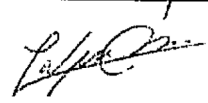
23. Actividad económica principal : Comerciante

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Carlos Alberto Cruz Ponce	19	M	Noveno Grado	Comerciante
2	Edic Orlando	34	M	Analfabeta	Comerciante
3					
4					
5					
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

No

VII. FIRMAS		
1	Entrevistado Nombre, No. de identificación, contacto: <i>Carlos Alberto Cruz Ponce</i> 	<u>Firma:</u> <i>Carlos Cruz</i>
2	Entrevistador (SIT) Nombre: <i>Gerardo Alfredo Pineda</i> <i>Gerardo</i>	<u>Firma:</u> 
3	Asistencia (Equipo de Estudio JICA) Nombre: <i>TAKUMA OUE</i>	<u>Firma:</u> 



8

Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. _____

Fecha: 22 / 07 / 2012

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	Manuela Ponce Rodríguez
02	Locación de la entrevista (Dirección y/o Coordenadas)	Calle 100 No. 100, Barrio 100, San Juan, P.R.
03	Hora de la entrevista	11:00 AM
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No	b)
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público	
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	a)
08	¿Vive dentro del área afectada?: a) Sí; b) No	b)
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)	
09	Perfil del jefe de familia:	
A	Jefe de familia: Nombre y Edad	Manuela Ponce Rodríguez 55 años
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar)	a)
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.)	e)
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	c)
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	a)

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado			
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno		5. Caprino		9. Camello	
2. Bovino		6. Porcino		10. Pollo	
3. Bufalino		7. Burro		11. Pato	
4. Ovino		8. Caballo		12. Otros:	

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		
2. Cosechadora		
3. Equipos de forraje		
4. Labranza		
5. Pulverizador		
6. Desmalezadoras		
7. Bomba eléctrica		
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor		
2. Refrigeradora		
3. Cocina gas/eléctrica		
4. Olla eléctrica		
5. Ventiladora, A/C		
6. PC/Laptop		
7. Horno / microondas		
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		
2. Automóvil / Jeep		
3. Camión		
4. Autobús		
5. Carroza		
6. Otros:		

15. Ahorro anual total (aproximado): _____ Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	a)
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	Láminas y tejas
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	NO

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	a)
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	a) No alquilado

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura		
2. Huerta		
3. Otros (especificar):		
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si ☒ b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

1. No existe falta de agua potable

2.

3.

4.

5.

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	c)

V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a)
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	c) Pozo séptico
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	b) Porque hay trabajo y comida

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : comerciante

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Maria Ponce Salgado	57	F	Secundaria	comerciante
2	Kelly azucena Eaitan Ponce	28	F	universitaria	Desempleado
3	Yolani Cecilia Eaitan Ponce	24	F	universitaria	comerciante
4	Cesar Alejandra Eaitan Ponce	19	H	Secundaria incompleta	comerciante
5	Axel Daniel Ponce Salgado	5 meses	M	N/A	N/A
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

NO

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: Maura Ponce Salgado 	<u>Firma:</u> maura ponce s.
2	Entrevistador (SIT) Nombre: Vania Bueso Cerrato	<u>Firma:</u> Bueso
3	Asistencia (Equipo de Estudio JICA) Nombre: TAKUMA OWE	<u>Firma:</u> 

Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. 1

Fecha: 10:49 22/Novo/2011

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	Maria Santiago Rivera Salgado.
02	Locación de la entrevista (Dirección y/o Coordenadas)	
03	Hora de la entrevista	11:49 AM
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No	
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	
05	¿Cuál es el estatus del terreno? (a) Terreno de propiedad privada; b) Terreno público	
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	No.

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: (a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	
08	¿Vive dentro del área afectada?: (a) Sí; (b) No	
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	25 años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes legales)	
09	Perfil del jefe de familia:	
A	Jefe de familia: Nombre y Edad	50 años Mario S. Ponce
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; (e) Otros (especificar)	Unico hijo
C	Profesión: a) Sector público; b) Servicio privado; (c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.)	
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa, d) Graduado universitario; e) Otros (especificar)	Lea y escribe bien.
E	Religión: (a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	

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III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado			
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno		5. Caprino		9. Camello	
2. Bovino		6. Porcino		10. Pollo	
3. Bufalino		7. Burro		11. Pato	
4. Ovino		8. Caballo		12. Otros:	

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		X
2. Cosechadora		X
3. Equipos de forraje		X
4. Labranza		X
5. Pulverizador		X
6. Desmalezadoras		X
7. Bomba eléctrica		X
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor	✓	
2. Refrigeradora	✓	
3. Cocina gas/eléctrica		✓
4. Olla eléctrica		✓
5. Ventiladora, A/C		✓
6. PC/Laptop	✓	
7. Horno / microondas	✓	
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		✓
2. Automóvil / Jeep	✓	
3. Camión		✓
4. Autobús		✓
5. Carrosa		✓
6. Otros:		

15. Ahorro anual total (aproximado): 4000 mil colones Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

No

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	Una planta
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	Casa de bloques, paredes de madera y malla

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	Propio

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura	N/A	
2. Huerta	N/A	
3. Otros (especificar):	N/A	
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

Acceso a la educación

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	Respuesta
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	Compran una pipa (Bm) semanal

V. SERVICIOS PÚBLICOS	
20	Estatus del sistema eléctrico: ☒ a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible
21	Estatus del sistema de desagüe: a) Sistema de desagüe público ☒ b) No disponible c) Otros: Fosa séptica.
22	Nivel de satisfacción de su calidad de vida (y razón) ☒ a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Agricultura (Domados del Estado y familiares)

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Maria Ponce Salgado	50	F	Pre Escolar	Negocio
2	Diana Raquel Caraniza	29	F	Universitaria	Trabaja con la madre
3	Leonel Salgado Ponce	6	M	Segundo Grado	—
4	José María Salgado Salgado	42	M	Sexto Grado	Agricultura
5	Reina Salgado	22	F	Segundo Grado	Trabaja con doña María.
6	Dulce María Salgado	12	F	Sexto Grado	—
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: María Santiago Ponce Salgado	Firma:
2	Entrevistador (SIT) Nombre: MARCELA RODRIGUEZ	Firma:
3	Asistencia (Equipo de Estudio JICA) Nombre: TAKUMA OUE	Firma:

Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. 41

Fecha: 22/03/2023

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	ANA JULIA PONCE LINDO
02	Locación de la entrevista (Dirección y/o Coordenadas)	El Dacha, la montaña
03	Hora de la entrevista	10:50 AM
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No	
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público	
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	a)
08	¿Vive dentro del área afectada?: a) Sí; b) No	a)
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	25 años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)	
09	Perfil del jefe de familia:	A
A	Jefe de familia: Nombre y Edad	ANA JULIA PONCE
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar)	b) Madre soltera
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.)	c)
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	c) Auxiliar enfermera
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	c)

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado			
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno		5. Caprino		9. Camello	
2. Bovino		6. Porcino		10. Pollo	
3. Bufalino		7. Burro		11. Pato	
4. Ovino		8. Caballo		12. Otros:	

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		
2. Cosechadora		
3. Equipos de forraje		
4. Labranza		
5. Pulverizador		
6. Desmalezadoras		
7. Bomba eléctrica		
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor		
2. Refrigeradora		
3. Cocina gas/eléctrica		
4. Olla eléctrica		
5. Ventiladora, A/C		
6. PC/Laptop		
7. Horno / microondas		
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		
2. Automóvil / Jeep		
3. Camión		
4. Autobús		
5. Carroza		
6. Otros:		

15. Ahorro anual total (aproximado): 120 Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

NO

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	a)
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	Lámina
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	Cerco de ladrillos

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	a)
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	d) no alquilado

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura		
2. Huerta		
3. Otros (especificar):		
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

Agua potable, no existe pago de agua

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	b)

V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a)
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	b) c) Fozza Septica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	a) porque no falta trabajo y sustento diario

VI. INFORMACIÓN DE FAMILIA NUCLEAR

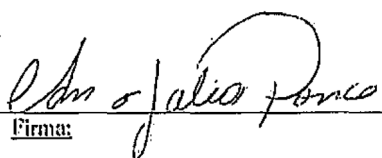
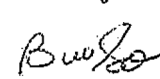
23. Actividad económica principal : Comercio

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Ana Julia Ponce	40	F	Auxiliar enfermería	Comerciante
2	Ana Gabriela Ponce	21	F	Hoteles y Turismo	Comerciante / conductor
3	Tania Nicole Cruz Ponce	18	F	Secundaria	Estudiante
4	Carlos Alberto Cruz Ponce	19	H	Secundaria	Comerciante / en vivero
5	Ana Sofía Cruz Saucedo	1	F	N/D	N/A
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

La hermana, Victoria Salazar, tiene un hijo con discapacidad

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: Ana Julia Ponce Salgado [REDACTED]	Firma: 
2	Entrevistador (SIT) Nombre: Vania Alejandra Bueso	Firma: 
3	Asistencia (Equipo de Estudio JICA) Nombre: TAKUMA OUE	Firma: 

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Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. 1

Fecha y hora: 20/03/23 10:30 am

I. INFORMACIÓN GENERAL	
01	Nombre y apellido del propietario/ocupante <i>Leyla Páramo Andino</i>
02	Locación de la entrevista (Coordenadas) <i>491432.015 / 1552225.73 Zona 16</i>
03	Fecha de y hora de la entrevista <i>20/03/23 11:00 am</i>
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No <i>No</i>
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público <i>Terreno de Propiedad Privada</i>
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar) <i>El Acceso al Inmueble</i>

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)	
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)
08	¿Vive dentro del área afectada?: a) Sí; b) No <i>No</i>
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)
09	Perfil del jefe de familia:
A	Jefe de familia: Nombre y Edad <i>Leyla Páramo Andino / 47 años</i>
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar) <i>Casada</i>
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especificar) <i>h) Otros (Ama de Casa)</i>

D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	d) <i>Graduada Universitaria / Ingeniería Industrial y de Sistemas</i>
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo	<i>Evangelica</i>

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Annual
1. Agricultura			
2. Trabajo asalariado			
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

Inmueble de Uso Personal

11. Recursos Ganaderos (Bienes del propietario)

Item	No.	Item	No.	Item	No.
1. Vacuno	/	5. Caprino	/	9. Camello	/
2. Bovino	/	6. Porcino	/	10. Pollo	/
3. Bufalino	/	7. Burro	/	11. Pato	/
4. Ovino	/	8. Caballo	/	12. Otros:	/

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		X
2. Cosechadora		X
3. Equipos de forraje		X
4. Labranza		X
5. Pulverizador		X
6. Desmalezadoras		X
7. Bomba eléctrica		X
8. Otros: <i>Tanque de Agua</i>		

13. Electrodomésticos

Items	Si	No
1. Televisor	X	
2. Refrigeradora	X	
3. Cocina gas/eléctrica	X	
4. Olla eléctrica	X	
5. Ventiladora, A/C		X
6. PC/Laptop	X	
7. Horno / microondas	X	
8. Otros:		

14. Otros bienes familiares

Items	Si	No
1. Motocicleta / Scooter	X	
2. Automóvil / Jeep	X	
3. Camión		X
4. Autobús		X
5. Carrosa		X
6. Otros:		

ATB, autómoto (3) (2)

15. Ahorro anual total (aproximado): 600,000 Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

No

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	a)
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	Techo lámina, Hormigón
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	ladrillos

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	Propio con título de Propiedad.
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	Uso Personal

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☐ b) No ☒

B. Área total de terreno agrícola

Tipo de terreno:	M2	HA
1. Agricultura	/	/
2. Huerta	/	/
3. Otros (especificar):	/	/
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si ☐ b) No ☒

D. ¿Cuál es el problema más grave para su sustento de vida?

Por el momento Ninguno

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	Respuesta
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	a) Pozo Agrade Manantial con sistema de gravedad

V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a) Sistema Eléctrico Público
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	c) Otros: Fosa Séptica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	a) Muy Satisfecho

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Empresario / Tecnología de Mangos de Pico contra Enchufes

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Alberto Cartillo Torres	47	M	Ing. Mecánico	Empresario
2	Leyla Párrama Arce	47	F	Ing. Industrial y Sistemas	Ama de Casa
3	Artem Vallecillo Sandoval	44	M	Primaria / Tercer Grado	Vigilante
4	Orfelia González	38	F	Primaria / Segundo Grado	Empleada Doméstica
5					
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

No

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: <i>Leyla Gisela Páramo</i> [Redacted]	Firma: <i>L. Páramo</i>
2	Entrevistador (SIT) Nombre: <i>Gerardo Alberto Pineda Guerra</i>	Firma: <i>Gerardo Alberto Pineda Guerra</i>
3	Asistencia (Equipo de Estudio JICA) Nombre: <i>TAKUMA OUE</i> <i>Cons. Ambientales y Sociales</i>	Firma: <i>Takuma Oue</i>

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Encuesta Socioeconómica de las Personas Afectadas por el Proyectó (PAP)

Encuesta No. _____

Fecha: _____

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	Santos Dalila Valdez Rosales
02	Locación de la entrevista (Dirección y/o Coordenadas)	
03	Hora de la entrevista	3:45 PM
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto? ☒ Sí ☐ No	
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	_____
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	_____
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	_____
05	¿Cuál es el estatus del terreno? ☒ a) Terreno de propiedad privada; b) Terreno público	
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	El Acceso a su vivienda

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: ☒ a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	
08	¿Vive dentro del área afectada? ☒ a) Sí; ☐ b) No	
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	10 años de vivir pero adquirieron en 83.
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)	_____
09	Perfil del jefe de familia:	
A	Jefe de familia: Nombre y Edad	Santos Dalila Valdez Rosales
B	Estado Civil: ☒ a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar)	
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.)	Enfermero Auxiliar Docente de Estudios Sociales.
D	Educación: a) Analfabeto; b) Solo sabe leer; ☒ c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	Evangelica

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado	Jubilación 16000		
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno		5. Caprino		9. Camello	
2. Bovino		6. Porcino		10. Pollo	
3. Bufalino		7. Burro		11. Pato	
4. Ovino		8. Caballo		12. Otros:	

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		✓
2. Cosechadora		✓
3. Equipos de forraje		✓
4. Labranza		✓
5. Pulverizador		✓
6. Desmalezadoras		✓
7. Bomba eléctrica		✓
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor	✓	
2. Refrigeradora	✓	
3. Cocina gas/eléctrica	✓	
4. Olla eléctrica	✓	
5. Ventiladora, A/C		X
6. PC/Laptop		X
7. Horno / microondas	✓	
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		X
2. Automóvil / Jeep	✓	
3. Camión		X
4. Autobús		X
5. Carroza		X
6. Otros:		

15. Ahorro anual total (aproximado): 3000 Lps al mes Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	☒ a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	☒ a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	propio

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura	—	—
2. Huerta	—	—
3. Otros (especificar):	—	—
TOTAL	—	—

C. ¿Hay presencia de ocupantes ilegales? a) Si ☒ b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

Son personas de 3er edad.

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable: a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible ☒ g) Otras fuentes naturales:	Vertiente natural.
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V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: ☒ a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible ☒ c) Otros:	Poza séptica.
22	Nivel de satisfacción de su calidad de vida (y razón) ☒ a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	

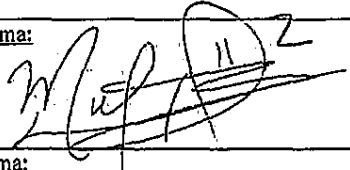
VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Pencuño

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Santos Dalila	82	F	Media	Jubilada
2	Benigno Vargas	83	M	Agriculto	Agricultor (Inactivo)
3	Claudio Alejandro Enamorado	17	F	Media	Estudiante.
4	Diego Alejandro Enamorado	15	M	Media	Estudiante.
5	Diego Dulce Enamorado	14	F	Media	Estudiante.
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: Santos Dalila Valdez Rosas	Firma: 
2	Entrevistador (SIT) Nombre: Marcela Rodríguez	Firma: 
3	Asistencia (Equipo de Estudio JICA) Nombre: TAKUMA OUE	Firma: 

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Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. _____

Fecha: 22/03/23

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	Yolanda Vargas Valdez
02	Locación de la entrevista (Dirección y/o Coordenadas)	
03	Hora de la entrevista	3:40 pm
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No	a) Si
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	b)
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	a) Lámina de Zinc b) Ladrillo, columnas de concreto, zapatas
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	a)
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público	a)
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	El Acceso a la Vivienda

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	a)
08	¿Vive dentro del área afectada?: a) Sí; b) No	a)
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	23 años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes legales)	Toda la vida
09	Perfil del jefe de familia:	
A	Jefe de familia: Nombre y Edad	Yolanda Vargas Valdez / 58
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar)	a)
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especif.)	d) Asalariada
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	d)
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	e) Evangélica

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura			
2. Trabajo asalariado		35,000.00	
3. Negocios/Comercio		17,000.00	
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Item	No.	Item	No.	Item	No.
1. Vacuno	/	5. Caprino	/	9. Camello	/
2. Bovino	/	6. Porcino	/	10. Pollo	/
3. Bufalino	/	7. Burro	/	11. Pato	/
4. Ovino	/	8. Caballo	/	12. Otros:	/

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		X
2. Coschadora		X
3. Equipos de forraje		X
4. Labranza		X
5. Pulverizador		X
6. Desmalezadores		X
7. Bomba eléctrica		X
8. Otros:		

13. Electrodomésticos

Items	Si	No
1. Televisor	X	
2. Refrigeradora	X	
3. Cocina gas/eléctrica	X	
4. Olla eléctrica	X	
5. Ventiladora. A/C		X
6. PC/Laptop	X	
7. Horno / microondas	X	
8. Otros:		

14. Otros bienes familiares

Items	Si	No
1. Motocicleta / Scooter		X
2. Automóvil / Jeep	X	
3. Camión		X
4. Autobús		X
5. Carroza		X
6. Otros:		

15. Ahorro anual total (aproximado): 25,000.00 Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

Si se ven afectados en la parte comercial ya que ella tiene pensado hacer un negocio cercano al proyecto

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	Respuesta b)
B	Descripción de la residencia a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	Respuesta a) b) Paredes de ladrillo, Columnas de concreto

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad? a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	Respuesta a)
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad) a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	Respuesta d) Paga impuestos al estado

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si b) No

B. Área total de terreno agrícola:

Tipo de terreno	M2	HA
1. Agricultura		
2. Huerta		
3. Otros (especificar):		
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

No tiene Problemas

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable: a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	Fuente natural propia Verterte
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V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a)
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	Bano / Fosa Séptica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	a)

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Asalariado y Alquiler

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Yolanda Vargas Valdez	58	F	Grado Universitario	Asalariado y Alquiler
2	Rene Alfredo Soto Rivera	63	M	Eng. Forestal M.Sc. Ambiental	Consultor Individual Independiente
3	Rolando Jori Soto Vargas	30	M	Merchadólogo	Comerciante Individual
4	Rene Alfredo Soto Vargas	27	M	Eng. Industrial	Asalariado / Empresa de Plataformas Universitarias (SUMADIS)
5					
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

No

VII. FIRMAS		
1	Entrevistado Nombre, No. de identificación, contacto: <i>Yolanda Vargas Valencia</i> [Redacted]	Firma: <i>[Signature]</i> [Redacted]
2	Entrevistador (SIT) Nombre: <i>Gerardo Alfredo Pineda Guerra</i>	Firma: <i>[Signature]</i>
3	Asistencia (Equipo de Estudio JICA) Nombre: <i>TAKUMA OUE</i>	Firma: <i>[Signature]</i>

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Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. _____

Fecha: 25 de marzo 2011

I. INFORMACIÓN GENERAL		
01	Nombre y apellido del propietario/ocupante	Marilú Velósquez Perez
02	Locación de la entrevista (Dirección y/o Coordenadas)	
03	Hora de la entrevista	12
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No	
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)	
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público	
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)	No

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)		
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar)	
08	¿Vive dentro del área afectada? a) Sí; b) No	
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años	20 años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)	
09	Perfil del jefe de familia:	
A	Jefe de familia: Nombre y Edad	Marilú Velósquez
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar)	Unión Libre
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especificar)	Vendo frutas y verduras y queso
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar)	Secundario incompleto.
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar)	

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura	---		
2. Trabajo asalariado	---		
3. Negocios/Comercio	1,000 Lempiras diarios		
4. Servicios	---		
5. Ganadería	---		
6. Pesca y Acuicultura	---		
7. Silvicultura	---		
8. Otros:	---		
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno	---	5. Caprino	---	9. Camello	
2. Bovino	---	6. Porcino		10. Pollo	
3. Bufalino	---	7. Burro		11. Pato	
4. Ovino	---	8. Caballo		12. Otros:	

12. Implementos agrícolas

Equipo	Si	No
1. Tractor		
2. Cosechadora		
3. Equipos de forraje		
4. Labranza		
5. Pulverizador		
6. Desmalezadoras		
7. Bomba eléctrica		
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor	✓	
2. Refrigeradora	✓	
3. Cocina gas/eléctrica	✓	
4. Olla eléctrica		✓
5. Ventiladora, A/C	✓	
6. PC/Laptop	✓	
7. Horno / microondas	✓	
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		✓
2. Automóvil / Jeep		✓
3. Camión		✓
4. Autobús		✓
5. Carrosa		✓
6. Otros:		

15. Ahorro anual total (aproximado): 3000 aproximado Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

Una parte de las actividades se desarrollan dentro del terreno del futuro proyecto y algunos de los bienes arriba mencionados se ven comprometidos por el futuro proyecto.

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	☒ a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	Teja y Lomina.
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	Casa de bloque negro y cemento

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	En trámite proceso de escrituración
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	☒ a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura		
2. Huerta		
3. Otros (especificar):		
TOTAL		

C. ¿Hay presencia de ocupantes ilegales? a) Si ☒ b) No

D. ¿Cuál es el problema más grave para su sustento de vida?

No hay gran problema

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	Respuesta
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público ☒ f) No disponible g) Otras fuentes naturales:	Compran el agua a la comunidad.

V. SERVICIOS PÚBLICOS	
20	Estatus del sistema eléctrico: ☒ a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible ☒ c) Otros: Fosa Séptica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho ☒ b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Negocio

24. Miembros de la Familia:

No	Nombre	Edad	Género	Educación	Empleo
1	Mariú Velásquez	53	F	Secundario incompleta	Negocio
2	Sergio Ponce	48	M	Primaria incompleta	Periclista y operador de maquinaria
3	Sergio Ponce V.	24	M	Universitario	---
4	Wilmer Ponce V.	21	M	Universitario	---
5					---
6					
7					
8					

Esposo →
Hijo →

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

VII. FIRMAS	
1	Entrevistado Nombre, No. de Identificación, contacto: Maryló Velásquez Perez [Redacted]
	Firma: <i>Maryló Velásquez</i>
2	Entrevistador (SIT) Nombre: Marcela Rodríguez
	Firma: <i>Marcela Rodríguez</i>
3	Asistencia (Equipo de Estudio JICA) Nombre: TAKUMA OWE
	Firma: <i>Takuma Owe</i>

Encuesta Socioeconómica de las Personas Afectadas por el Proyecto (PAP)

Encuesta No. _____

Fecha: 22/03/23

I. INFORMACIÓN GENERAL	
01	Nombre y apellido del propietario/ocupante <i>Carlos Humberto Ponce Salgado</i>
02	Locación de la entrevista (Dirección y/o Coordenadas)
03	Hora de la entrevista <i>10:51 am</i>
04	¿Hay alguna vivienda susceptible de verse afectada por el Proyecto?: a) Sí; b) No <i>b) No</i>
A	En caso afirmativo, ¿cuál es el tipo de residencia que probablemente se verá afectada? a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples
B	En caso afirmativo, escriba la descripción de la apariencia de la residencia: a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.) b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)
C	En caso afirmativo, ¿cuál es el estatus del terreno y su residencia? a) Propietario del terreno y casa; b) Propietario de la casa y terreno en arriendo; c) Terreno y casa en arriendo; d) Propietario de la casa, pero con ocupación ilegal de terreno; e) Otros (especifique)
05	¿Cuál es el estatus del terreno? a) Terreno de propiedad privada; b) Terreno público
06	¿Hay algún otro bien/activo que se vea afectado por el futuro Proyecto? (Especificar)

II. PERFIL DE LAS PERSONAS AFECTADAS POR EL PROYECTO (PAP)	
07	Relación del PAP con el proyecto: a) propietario del terreno; b) residente; c) arrendatario; d) otros (especificar) <i>a) Propietario</i>
08	¿Vive dentro del área afectada?: a) Sí; b) No <i>No</i>
A	En caso afirmativo, ¿cuánto tiempo lleva viviendo aquí? Proporcionar número aproximado de años
B	En caso afirmativo, ¿cuánto tiempo (en años) piensa vivir allí? (solo para ocupantes ilegales)
09	Perfil del jefe de familia:
A	Jefe de familia: Nombre y Edad <i>Carlos Humberto Ponce Salgado / 63</i>
B	Estado Civil: a) Casado; b) Soltero; c) Separado; d) Viudo/a; e) Otros (especificar) <i>a)</i>
C	Profesión: a) Sector público; b) Servicio privado; c) Negocio propio; d) Asalariado; e) Jornalero diario; f) Agricultura; g) Desempleado; h) Otros (especificar) <i>c)</i>
D	Educación: a) Analfabeto; b) Solo sabe leer; c) Educación primaria y secundaria completa; d) Graduado universitario; e) Otros (especificar) <i>a)</i>
E	Religión: a) católica; b) musulmana; c) hindú; d) budismo; e) Otros (especificar) <i>a)</i>

III. PRESUPUESTO FAMILIAR

10. Ingresos (Incluir solo las actividades ejecutadas dentro del terreno ocupado por el entrevistado)

Fuente de ingreso	Ingreso promedio		
	Diario	Mensual	Anual
1. Agricultura		1,000	
2. Trabajo asalariado		2,800	
3. Negocios/Comercio			
4. Servicios			
5. Ganadería			
6. Pesca y Acuicultura			
7. Silvicultura			
8. Otros:			
Ingreso Total			

11. Recursos Ganaderos (Bienes del propietario)

Ítem	No.	Ítem	No.	Ítem	No.
1. Vacuno	/	5. Caprino	/	9. Camello	/
2. Bovino	/	6. Porcino	/	10. Pollo	/
3. Bufalino	/	7. Burro	/	11. Pato	/
4. Ovino	/	8. Caballo	/	12. Otros:	

12. Implementos agrícolas:

Equipo	Si	No
1. Tractor		X
2. Cosechadora		X
3. Equipos de forraje		X
4. Labranza		X
5. Pulverizador		X
6. Desmalezadoras		X
7. Bomba eléctrica		X
8. Otros:		

13. Electrodomésticos

Ítems	Si	No
1. Televisor	X	
2. Refrigeradora	X	
3. Cocina gas/eléctrica	X	
4. Olla eléctrica		X
5. Ventiladora, A/C		X
6. PC/Laptop		X
7. Horno / microondas		X
8. Otros:		

14. Otros bienes familiares

Ítems	Si	No
1. Motocicleta / Scooter		X
2. Automóvil / Jcnp		X
3. Camión		X
4. Autobús		X
5. Carroza		X
6. Otros:		

15. Ahorro anual total (aproximado): 0.00 Lempiras

16. ¿Algunas de estas actividades se desarrollan dentro del terreno del futuro proyecto o alguno de los bienes arriba mencionados se ven comprometidos por el futuro proyecto?

No

IV. PROPIEDAD

17. Tipo de Propiedad

A	¿Cuál es el tipo de residencia?	Respuesta
	a) Unifamiliar de una sola planta b) Vivienda unifamiliar de dos plantas c) Viviendas unifamiliares de tres plantas o más d) Departamento (vivienda multifamiliar) e) Cabaña, choza, carpa, otras viviendas simples	a)
B	Descripción de la residencia	Respuesta
	a) Techo (Láminas; Tejas; Materiales naturales; Hormigón; etc.)	Techo de Laminas
	b) Muros (Hormigón; ladrillos; madera; otros materiales naturales, etc.)	Muros de Ladrillo

18. Status de la Propiedad

A	¿Cuál es el estado de la propiedad?	Respuesta
	a) Propio con título de propiedad b) Con licencia de habitabilidad c) Con tarjeta de propiedad temporal d) Otros (especificar)	a)
B	¿Cuál es el estado de tenencia? (En caso de ser dueño de la propiedad)	Respuesta
	a) Alquilado sin costo b) Alquilado a autoridades públicas c) Alquilado de terceros (privados) d) Otros (especificar)	d) Paga Impuestos a la Alcaldía

19. Área del terreno

A. ¿Tiene terrenos agrícolas? a) Si ☒ b) No ☒

B. Área total de terreno agrícola

Tipo de terreno	M2	HA
1. Agricultura	10,458.35	1.5 M2
2. Huerta	10,458.35	1.5 M2
3. Otros (especificar):		
TOTAL	20,916.71	

C. ¿Hay presencia de ocupantes ilegales? a) Si ☐ b) No ☒

D. ¿Cuál es el problema más grave para su sustento de vida?

No tiene ningún problema

V. SERVICIOS PÚBLICOS

19	Estatus del agua potable:	
	a) Pozo excavado (privado) b) Pozo excavado (común) c) Pozo de bombeo (privado) d) Pozo de bombeo (común) e) Sistema de agua potable público f) No disponible g) Otras fuentes naturales:	f) No disponible Compran el Agua a Carro Cisterna

V. SERVICIOS PÚBLICOS		
20	Estatus del sistema eléctrico: a) Sistema eléctrico público b) Generador (privado y/o compartido) c) No disponible	a)
21	Estatus del sistema de desagüe: a) Sistema de desagüe público b) No disponible c) Otros:	c) Letrinas con Fosa Séptica
22	Nivel de satisfacción de su calidad de vida (y razón) a) Muy satisfecho b) Satisfecho c) Insatisfecho d) Muy insatisfecho e) Otros:	b)

VI. INFORMACIÓN DE FAMILIA NUCLEAR

23. Actividad económica principal : Siembra, Agricultura

24. Miembros de la Familia

No	Nombre	Edad	Género	Educación	Empleo
1	Carlos Humberto Ponce Salgado	63	M	Sin Estudio	Jornalero
2	Emérita Reyes Alcaro	64	F	Sin Estudio	Amra de Casa
3	Carlos Ponce Reyes	25	M	Educ. Primaria y Secundaria	Vendedor de Agua
4	Maria Guadalupe Reyes	23	F	Educ. Primaria y Secundaria	Estudiante
5					
6					
7					
8					

25. Familiares con habilidades especiales o enfermedad (Favor detallar)

La Esposa Emérita Reyes Alcaro padeca de Arterio Escler

VII. FIRMAS		
1	Entrevistado Nombre, No. de Identificación, contacto: <i>Carlos Humberto Ponce Salgado</i> <i>No recuerda</i> <i>No usa celular</i>	Firma: <i>Carlos Humberto Ponce</i>
2	Entrevistador (SIT) Nombre: <i>Guillermo Alberto Pineda Guzmán</i>	Firma: <i>Guillermo Alberto Pineda Guzmán</i>
3	Asistencia (Equipo de Estudio JICA) Nombre: <i>TAKUMA OUE</i>	Firma: <i>Takuma Oue</i>

Appendix-2
Minutes of Stakeholder Meetings and
list of participants

Minuta de Reunión con Alcaldía de San Antonio de Oriente

Proyecto : Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6
Fecha : 7 de Marzo, 2023 12:30~13:00
Lugar : Oficina de Unidad Municipal Ambiental (UMA) de la Alcaldía de San Antonio de Oriente

Participantes

No.	Nombre	Cargo
Alcaldía San Antonio de Oriente		
1	Ing. Saul Oseguera	Coordinador UMA
Secretaría de Infraestructura y Transporte (SIT)		
1	Ing. Marcela Rodriguez	Encargado del Proyecto SIT
2	Ing. Gerardo Pineda	Especialista Ambiental SIT/UGA
Equipo de Estudio JICA (Nippon Koei)		
1	Ing. Takuma Oue	Consideraciones Ambientales y Sociales
2	Ing. Francisco Espinoza	Ingeniero Asistente

I. Objetivo de la Reunión

Explicar al representante de la Alcaldía San Antonio de Oriente los aspectos generales del Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6 y solicitar asistencia para la recopilación de información para el estudio de Consideraciones Ambientales y Sociales del Proyecto.

II. Puntos de la presentación

Los representantes del SIT y el Equipo de Estudio JICA (en adelante EBJ) explicaron los siguientes puntos:

1. Aspectos generales del presente estudio
2. Ubicación del Proyecto
3. Principales Actividades de Construcción del Proyecto
4. Información solicitada

Se adjuntan las diapositivas utilizadas como anexo a esta Minuta de Reuniones.

III. Temas de discusión y acuerdos adoptados

Explicación del representante de la Alcaldía

- El sitio de obra no se encuentra dentro de la zona de amortiguamiento de la Reserva Biológica del Cerro Uyuca.
- El Instituto de Conservación Forestal (ICF) cuenta con los archivos de georreferenciación de la zona de amortiguamiento y el núcleo de la Reserva Biológica del Cerro Uyuca.
- El permiso para el corte de árboles debe ser coordinado con el ICF.
- Sobre el registro de la población y el bien público (instalaciones públicas como postes de electricidad) en la zona del proyecto existe información en la Oficina de Catastro de la Alcaldía.

- La alcaldía no cuenta con un botadero de residuos sólidos licenciado. Los residuos sólidos son llevados a la ciudad de Tegucigalpa. Sin embargo, existe una aldea que cuenta con un crematorio.
- La alcaldía no cuenta con los lugares específicos habilitados para el botadero de material excedente producto de las actividades de movimiento de tierras. Normalmente estos materiales son donados a las personas interesadas en realizar rellenos en sus terrenos particulares.

Solicitud por parte de la SIT/UGA y el EEJ

- Solicitud de información catastral sobre el registro de población y bienes.
- Solicitud de constancia de registro rural o urbana, constancia de bien público y constancia del estado actual de la zona del proyecto.

IV. Registro Fotográfico



Fin del Documento

NIPPON KOEI





The Project for Bridge Construction in National Road No.6

NIPPON KOEI CO.,LTD
March 2023

Brief of the Project

Background

National Highway 6 (hereinafter called "CA-6") is one of the most important routes of the logistics network. However, the route of the CA-6 road passes through mountainous areas, and due to natural disasters and heavy rains have resulted in sliding slopes and soil erosion, causing the closure of the road.

Because of this, JICA has implemented measures to prevent slips on 14.7 km, 22.0 km, and 63.0 km. On the 16.3 km, although another donor applied slide prevention measures, landslides have increased. Therefore, the Government of the Republic of Honduras has requested "The Project for Bridge Construction in National Road No.6"

Outline

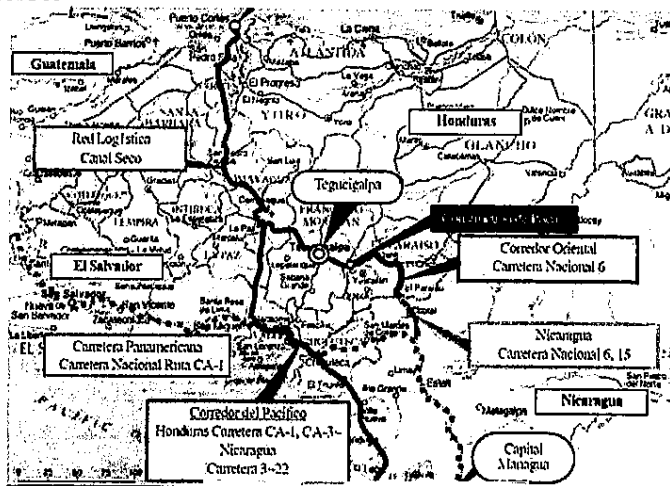
Objectives	The goal is to reduce land slide damage on the CA-6 road and increase the stability of the road, contributing to the revitalization of the economy.
Results	Reduction of damage from natural disasters and increased stability of the road network in CA-6 through the construction of the bridge.
Scheme	Construction Plan for the CA-6 Bridge (Tegucigalpa-Danil: 16.3 km)
Region	Tegucigalpa, Francisco Morazán
Representative Agency	Secretaría de Infraestructura y Transporte (SIT)

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2

Brief of the Project

Location

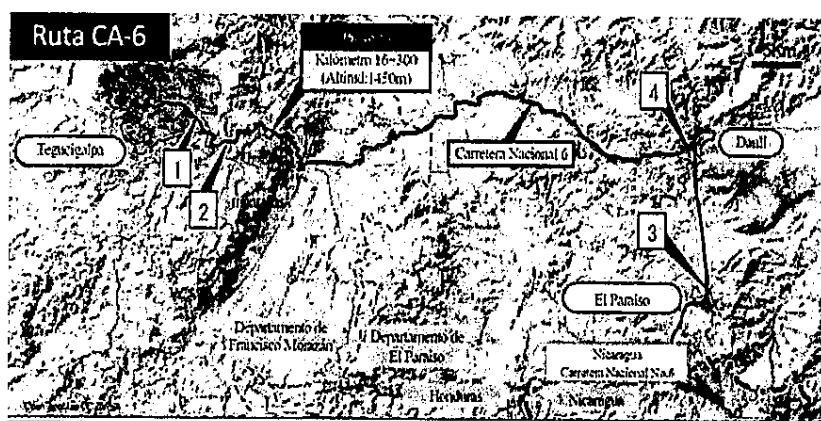


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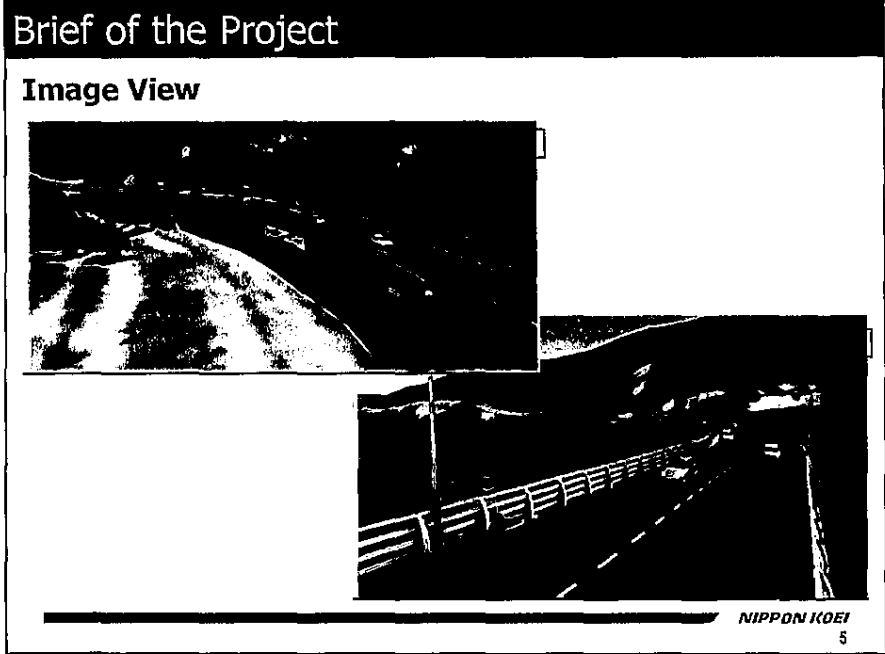
Brief of the Project

Location



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Minuta de Reunión con Universidad El Zamorano

Proyecto : Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6
Fecha : 7 de Marzo, 2023 15:30~17:00
Lugar : Universidad El Zamorano, Oficina de Ingeniería en Ambiente y Desarrollo

Participantes

No.	Nombre	Cargo
Universidad El Zamorano (Escuela Agrícola Panamericana Inc.)		
1	Sr. Oliver Komar	Profesor Pleno Biología de Conservación, Áreas Protegidas y Ornitología del Departamento de Ambiente y Desarrollo
Secretaría de Infraestructura y Transporte (SIT)		
1	Ing. Marcela Rodríguez	Encargado del Proyecto SIT
2	Ing. Gerardo Pineda	Especialista Ambiental SIT/UGA
Equipo de Estudio JICA (Nippon Koei)		
1	Ing. Takuma Oue	Consideraciones Ambientales y Sociales
2	Ing. Francisco Espinoza	Ingeniero Asistente

I. Objetivo de la Reunión

Explicar al Director de la Universidad El Zamorano encargado de la Reserva Biológica del Cerro Uyuca los aspectos generales del Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6 y solicitar asistencia para la recopilación de información para el estudio de Consideraciones Ambientales y Sociales del Proyecto.

II. Puntos de la presentación

Los representantes del SIT y el Equipo de Estudio JICA (en adelante EEJ) explicaron los siguientes puntos:

1. Aspectos generales del presente estudio
2. Ubicación del Proyecto
3. Principales Actividades de Construcción del Proyecto
4. Información solicitada

Se adjuntan las diapositivas utilizadas como anexo a esta Minuta de Reuniones.

III. Temas de discusión y acuerdos adoptados

Explicación del representante de la Universidad El Zamorano

- Al igual que el Centro Zamorano donde se encuentra la estación meteorológica instalado por el Equipo de Estudio, el sitio de obra se encuentra fuera de la zona de amortiguamiento de la Reserva Biológica del Cerro Uyuca.
- Si bien es cierto que la zona de proyecto está fuera de la zona de amortiguamiento, ésta se encuentra dentro de la zona de influencia de la Reserva Biológica del Cerro Uyuca.
- En general, se estiman que los efectos producidos por la construcción del puente serán bajos.
- Se estiman efectos para la fauna (mamíferos y aves silvestres) producto del ruido y el polvo producido por las actividades de construcción.

- No se estiman problemas de contaminación de cuencas producto de escorrentía debido a que la reserva se encuentra aguas arriba de la zona del proyecto.
- Respecto a las especies amenazadas se destacan los quetzales, las cuales son aves que se encuentran en investigación.
- Se observaron casos de mamíferos de gran tamaño (pumas, gatos, venados de cola blanca, etc.) atropellados por vehículos al intentar cruzar la carretera. Por esta razón, los riesgos de este tipo de accidentes podrían incrementar al construirse el puente y mejorar el tránsito, ya que probablemente los vehículos aumenten su velocidad. Se recomienda colocar rótulos para que los autos tengan en consideración que es un pase de animales silvestres y bajen su velocidad.
- Se recomienda incluir en el presupuesto del proyecto un “fondo de manejo de mitigación para la Reserva Biológica del Cerro Uyuca”. Este fondo podría incluir un plan de reforestación.
- La Universidad El Zamorano requiere financiamiento para las siguientes partidas:
 - Mejoramiento de puente peatonal, la cual es parte de un sendero dentro de la Reserva. Se requiere un diseño estructural/arquitectónico para dicho puente.
 - Infraestructura de alojamiento para el Centro Zamorano.

Solicitud por parte de la SIT/UGA y el EEJ

- Solicitud de información de georreferenciación (archivos shp) de la zona de amortiguamiento y núcleo de la Reserva Biológica del Cerro Uyuca.
- Solicitud del borrador del Anuario de la Reserva Biológica del Cerro Uyuca (Junio?).
- Solicitud del Plan de Manejo actualizado de la Reserva Biológica del Cerro Uyuca.
- Solicitud de información sobre precipitación, temperatura y demás parámetros hidrometeorológicos.
- Solicitud de archivos shp de microcuencas.

IV. Registro Fotográfico



Fin del Documento

NIPPON KOEI





The Project for Bridge Construction in National Road No.6

NIPPON KOEI CO.,LTD
March 2023

Brief of the Project

Background

National Highway 6 (hereinafter called "CA-6") is one of the most important routes of the logistics network. However, the route of the CA-6 road passes through mountainous areas, and due to natural disasters and heavy rains have resulted in sliding slopes and soil erosion, causing the closure of the road.

Because of this, JICA has implemented measures to prevent slips on 14.7 km, 22.0 km, and 63.0 km. On the 16.3 km, although another donor applied slide prevention measures, landslides have increased. Therefore, the Government of the Republic of Honduras has requested "The Project for Bridge Construction in National Road No.6"

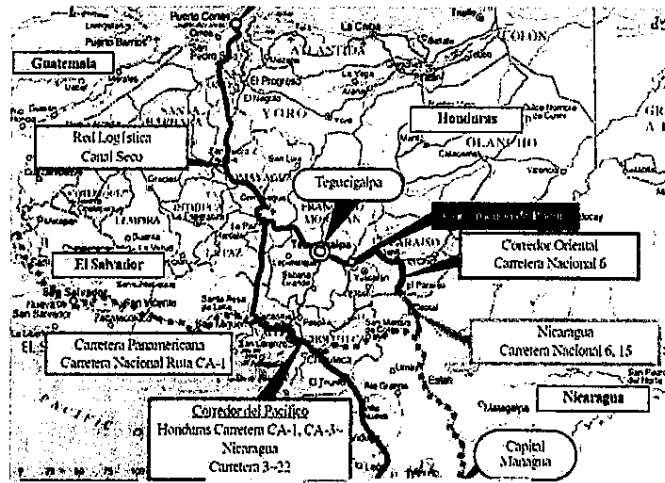
Outline

Objectives	The goal is to reduce land slide damage on the CA-6 road and increase the stability of the road, contributing to the revitalization of the economy.
Results	Reduction of damage from natural disasters and increased stability of the road network in CA-6 through the construction of the bridge.
Scheme	Construction Plan for the CA-6 Bridge (Tegucigalpa-Danli: 16.3 km)
Region	Tegucigalpa, Francisco Morazán
Representative Agency	Secretaría de Infraestructura y Transporte (SIT)

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Brief of the Project

Location

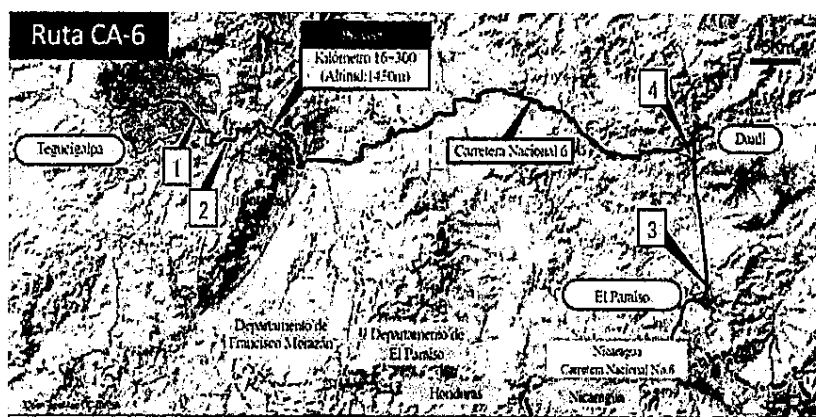


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3

Brief of the Project

Location



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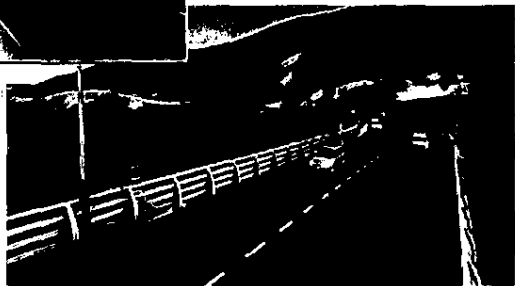
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Brief of the Project

Image View



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3

Minuta de Reunión con la Propietaria de Uyuca Guest House

Proyecto : Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6
Fecha : 20 de marzo, 2023 10:30~12:00
Lugar : Sitio del proyecto y sala de Uyuca Guest House

Participantes

No.	Nombre	Cargo
Propietarios Uyuca Guest House		
1	Srta. Leyla Paramo Andino	Propietaria
2	Sr. Carlos	Familiar de propietaria
Secretaria de Infraestructura y Transporte (SIT/UGA)		
1	Ing. Gerardo Pineda	Especialista Ambiental SIT/UGA
Equipo de Estudio JICA (Nippon Koei)		
1	Ing. Shinichi Nii	Sub-Jefe de Equipo de Estudio JICA
2	Ing. Yusuke Okano	Diseño de Puentes
3	Ing. Carlos Barba	Coordinador / Traductor
4	Ing. Takuma Oue	Consideraciones Ambientales y Sociales

I. Objetivo de la reunión

- Socialización del proyecto a los propietarios del Guest House Uyuca y explicación de las afectaciones en su acceso de entrada durante y después del proyecto.

II. Notas de la discusión en sitio de proyecto

- El Equipo de Estudio de JICA (EEJ) explicó el cambio de alineamiento del acceso a la entrada del Uyuca Guest House planeado (desvío hacia parte anterior del estribo A1 mediante un acceso pegado a la montaña).
- EEJ explicó que la zona del nuevo acceso requiere de un relleno temporal debido a que servirá como acceso temporal para las obras a ser realizadas para el estribo A1 y pilar central.
- EEJ explicó que para realizar las dos actividades anteriormente mencionadas se cortarán parte de los árboles existentes, las cuales serán reforestadas conforme a lo evaluación a ser realizada por el ICF.
- EEJ explicó que se tomarán las medidas necesarias como la colocación de vallas para que el polvo generado por la construcción no pase a la parte superior de la montaña.
- Los propietarios entendieron y accedieron a colaborar con los trabajos a ser realizados.
- Los propietarios no están haciendo uso de los servicios públicos de agua potable y desagüe. Solamente están conectados a la red eléctrica pública.

III. Encuesta socioeconómica

- El representante de la SIT realizó la encuesta socioeconómica con la asistencia del Equipo de Estudio.
- Los propietarios accedieron a brindar las respuestas a la encuesta socioeconómica.

V. Registro Fotográfico



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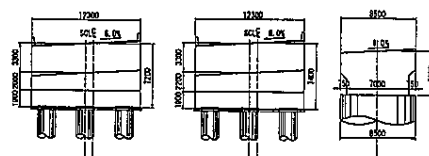
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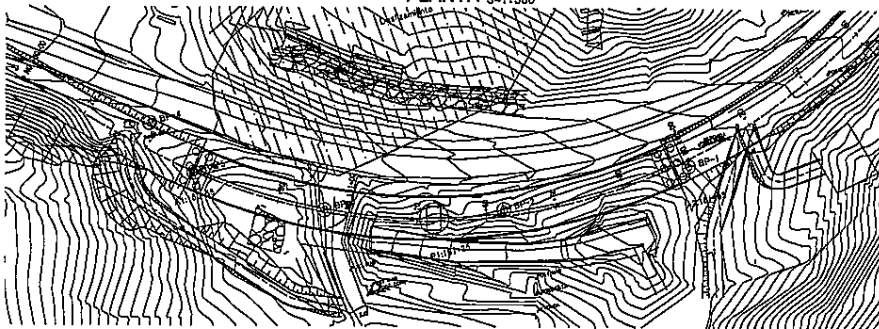
A1 ESTRIBO

A2 ESTRIBO

P1 PILAR

[illegible]

PLANTA S=1:500



General Data/Info	Velocity	Yukon/400
	Longitude	12440.0000
	Curve	8+1650
	Pendante	5.2924 (A) $\rightarrow$ A23
	Angle	0°
	Archers	1.20+1.30+1.65+3.65+1.20m
	Curves line	ADHIO 1978, 16-43
	Traffic	
	Perimetro	Afialto 1978m
	Subarea	Rinde
Investment	Charge of bridge	Nide
	Electric	Nide 25
	Time of Punte	Nide 25
	Control of the frame	Nide 25
	Concrete	grain=CONcrete
	Acero	Grain 60
	Type of structure	Retiro en 2. Pilar en 1
	Type of foundation	Pilotes de Calen
	Bois	Bois, Tuff
	Concrete	grain=CONcrete
Substructure	Acero	Grain 60
Material de Pileto		

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.6

PROJECT NO. • •

REVISION RECORD

 JAPAN INTERNATIONAL COOPERATION AGENCY

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STATUS: -

DRAWING NO. =

REV	DATE	DESCRIPTION

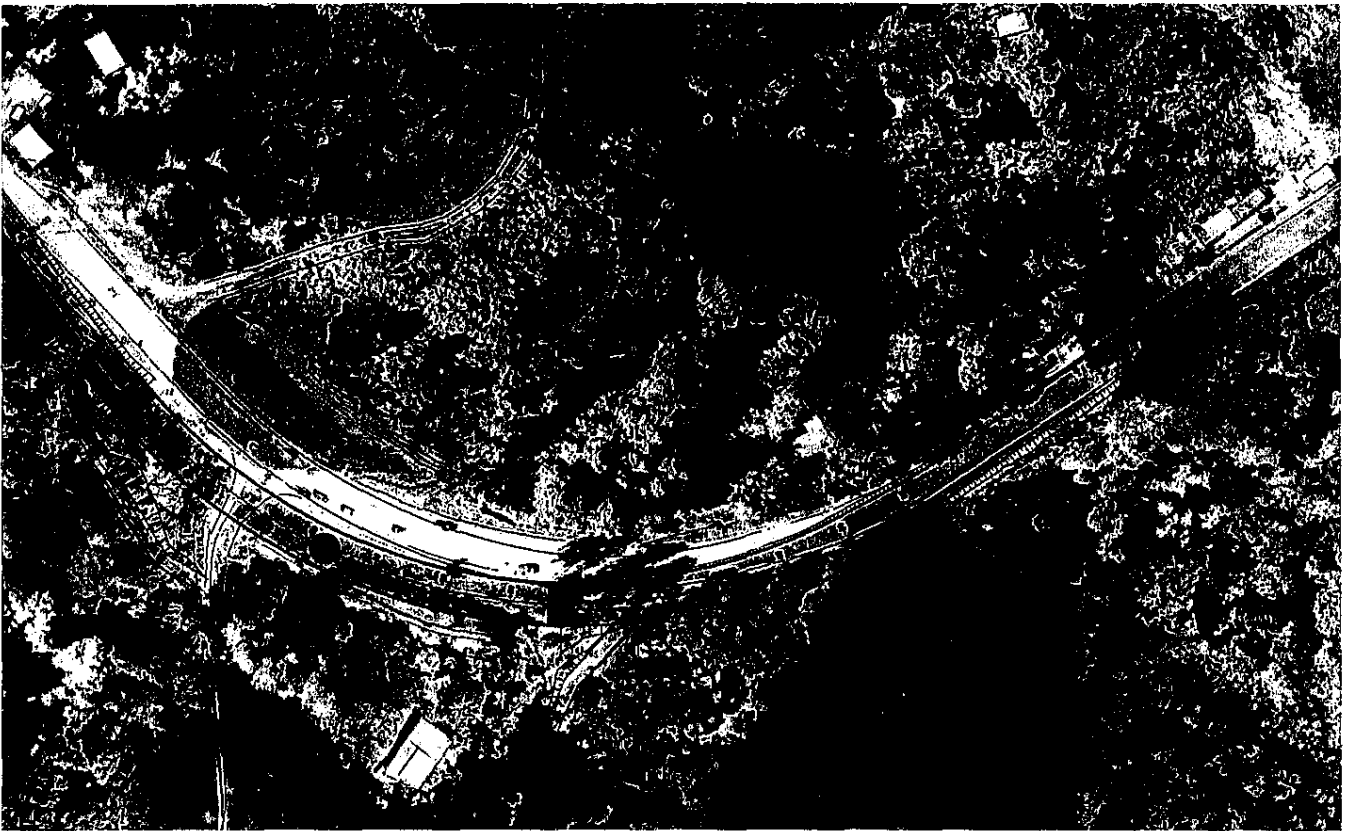
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SCALE _____

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SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)  JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT  NIPPON KOEI CO., LTD.	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.8 STATUS: - TITLE:	PROJECT IGL. - - DRAWING IGL. - SCALE - DATE - -	REVISION RECORD								
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REV	DATE	DESCRIPTION										

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SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT) JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT NIPPON KOEI CO., LTD.	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO. 3 STATUS: - TITLE:	PROJECT NO. - DRAWING NO. - SCALE - DATE -	REVISION RECORDS <table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DATE	DESCRIPTION									
				REV.	DATE	DESCRIPTION										

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Minuta de Reunión con las Partes Interesadas Locales

Proyecto : Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6
Fecha : 22 de marzo, 2023 09:30~12:30
Lugar : Sitio del Proyecto (KM16.3 de la carretera CA-6)

Participantes

No.	Nombre	Cargo
Interesados Locales		
1	Sr. Sergio Gabriel Ponce	Poblador Local Margen Izquierda (Lado del valle)
2	Sra. Maura Ponce	Poblador Local Margen Izquierda (Lado del valle)
3	Sra. María Ponce	Poblador Local Margen Izquierda (Lado del valle)
4	Sra. Carlos Alberto Cruz Ponce	Poblador Local Margen Izquierda (Lado del valle)
5	Sra. Ana Julia Ponce Salgado	Poblador Local Margen Izquierda (Lado del valle)
6	Sr. Carlos Humberto Ponce	Poblador Local Margen Izquierda (Lado del valle)
7	Sra. Alba Argentina Saucedo	Poblador Local Margen Izquierda (Lado del valle)
Secretaría de Infraestructura y Transporte (SIT)		
1	Ing. Marcela Rodríguez	Ingeniera Coordinadora de Proyectos
2	Ing. Gerardo Pineda	Especialista Ambiental SIT/UGA
3	Ing. Vania Bueso	Ingeniera ULDV
4	Ing. Rosa Valladares	Ingeniera ULDV
Equipo de Estudio JICA (Nippon Koei)		
1	Ing. Shinichi Nii	Sub-Líder del Equipo de Estudio
2	Ing. Takuma Oue	Consideraciones Ambientales y Sociales
3	Ing. Carlos Barba	Coordinador/traductor
4	Ing. Yusuke Okano	Especialista de Estudio de Tránsito

I. Objetivo de la Reunión

- Socialización del Proyecto a los pobladores locales de la margen izquierda anterior y posterior a la ubicación del puente.

II. Explicación del Presente Proyecto (SIT) a las Partes Interesadas Locales

- Este proyecto está financiado por el Gobierno Japonés a través de una donación no reembolsable.
- El diseño y construcción será ejecutado por empresas japonesas. El gobierno de Japón viene apoyado a Honduras en proyectos de fallas que han resultado exitosas, como las fallas del KM14.7, KM22.0 y KM63 del CA-6.
- El objetivo y razones por la cual se construirá el puente se basa en dar solución al corte de tránsito de vehículos debido a los efectos de la falla producida por el deslizamiento.
- Beneficio al ser puente: La parte inferior (columnas del puente) del puente quedará cimentado sobre una base rocosa, si llegara en un futuro a haber nuevos deslizamientos, ésta no afectará al puente.
- Construcción no afectará al tránsito actual ni a las residencias en su alrededor.
- Inicio de trabajos de construcción en año y medio aproximadamente

III. Explicación Técnica del Puente (Equipo de Estudio)

- La explicación de los aspectos generales del diseño y ubicación del puente, así como su alineamiento fueron explicados utilizando un plano general adjunto (Planta general y sección transversal de la estructura superior del puente).

- Se presentó un modelo en 3D que muestra cada una de las etapas de la construcción del puente, incluyendo su estado final.
- Se realizó una visita al sitio del puente con todos los asistentes para explicar y atender sus consultas en el mismo campo utilizando las dos herramientas explicadas en los apartados anteriores.

IV. Explicación de Consideraciones Sociales y Ambientales (Equipo de Estudio)

- Las principales afectaciones ambientales durante el periodo de construcción son la contaminación atmosférica, ruido y vibración propias de los trabajos de construcción.
- Se estima que no habrá contaminación de los acuíferos ya que no existen cuerpos de agua dentro de la zona de influencia del proyecto.
- No se afectarán las casas aledañas a la vía, sin embargo, se prevé la adquisición de terrenos conforme los diseños que siguen en preparación a la fecha de esta reunión.
- Se realizará el corte de árboles conforme al plan de salvamento que será preparado por la SIT y socializado debidamente antes de comenzar la construcción.
- Durante la etapa de construcción se generará empleo para los pobladores, además de un aumento de clientes que harán uso de sus locales comerciales.
- Se solicitó el apoyo de todos los participantes y sus familiares, los cuales manifestaron su intención de colaboración.

V. Ronda de Preguntas y Respuestas (SIT/Equipo de Estudio)

- (Consulta 1) ¿Se verá afectada alguna huerta o estructura aledaña a la vía, dentro del derecho de vía? La propietaria indicó que tiene ya tiene tramitado las escrituras.
(Respuesta SIT) Las estructuras aledañas a las vías no se verán afectadas. Sin embargo, en caso se requiera adquirir parte de su terreno para la construcción del puente y/o vía de acceso, se les informará para realizar los procedimientos correspondientes.
- (Consulta 2) ¿Cuál es el área de drenajes horizontales a ser colocados en la zona de la falla?
(Respuesta Equipo de Estudio) Los drenajes horizontales se colocarán desde la parte inferior de la falla donde se ubica un cerco perimetral colocado por el propietario hasta la parte superior de la vía existente. Éstos se colocarán durante la etapa de construcción del puente para drenar las aguas que se encuentran en el terreno con el fin de aminorar los riesgos de deslizamiento.

VI. Encuesta a los Jefes de Familia (SIT/Equipo de Estudio)

- Se desarrolló la encuesta a cada uno de los jefes de familia que residen dentro de la zona de afectación del proyecto para conocer su estatus socio-económico.

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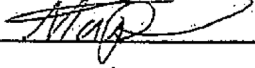
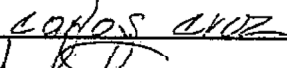
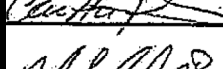
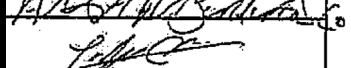
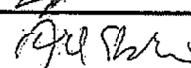
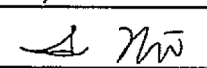
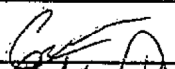
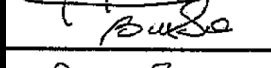
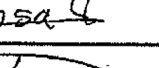
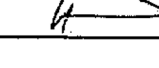
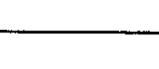
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VII. Registro Fotográfico



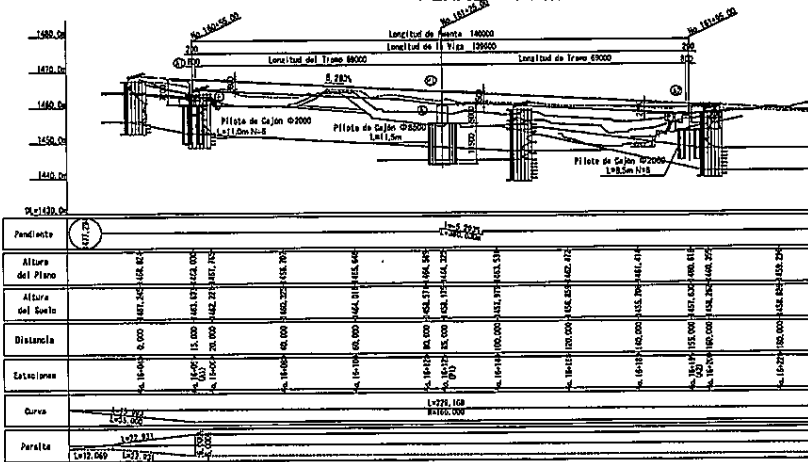
VIII. Información Anexa

- Lista de Asistencia
- Planos generales del proyecto
- Encuestas Socio-económicas

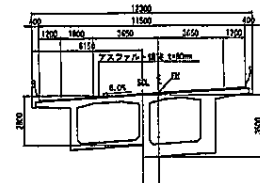
Estudio Preparatorio para el Proyecto de Construcción de Puente en la CA-6 (KM16.3)			
Lista de Participantes de la Reunión de Partes Interesadas			Fecha: 22 de Marzo, 2023
No.	Nombre	Teléfono	Firma
1	Sergio Gabriel Ponce		
2	Maura Ponce S.		
3	Maria Ponce S.		
4	Carlos Alberto Cruz Ponce		
5	Ana Julia Ponce Salgado		
6	Carlos Humberto Ponce Salgado		
7	ALBA ARGENTINA SAUCE		
8	TAKUMA OUE (NK)		
9	YUSUKE OKANO		
10	Shinichi Nii (NK)		
11	Carlos Barba		
12	Marcela Tatiana Rodríguez		
13	Vanica Alejandra Bueso C.		
14	Rosa Valladares		
15	Gerardo Pineda		
16			
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GENERAL

PERFIL S=1:500



SUPERESTRUCTURA S=1:100

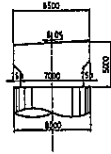
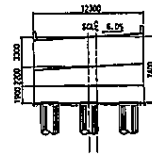
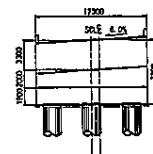


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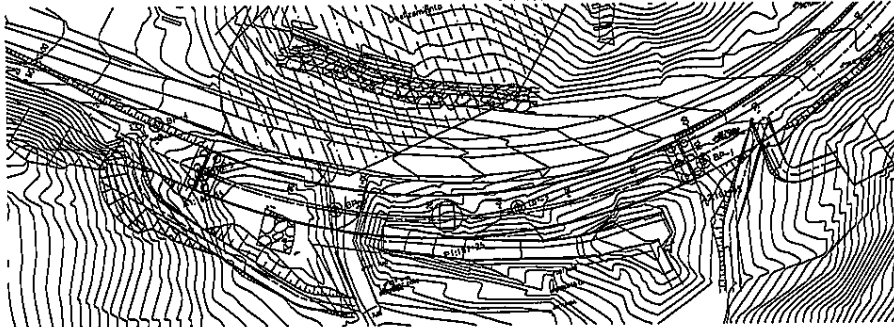
A1 ESTRIBO

A2 ESTRIBO

P1 PILAR



PLANTA S=1:500



Velocidad	140km/h
Longitud	260.00m
Curva	30.00m
Pendiente	0.00% (A1) A3
Ángulo	0° 30'
Arquero	1.20x1.80x3.60x3.60x1.20m
Grasa Vira	ASPH/17/88, MC-83
Trafico	
Pavimento	Asfalto 140mm
Subrasa	Reda
Carga de Horno	Nada
Simbolos	UWB 25
Tipo de Puente	Viga cajón continuo PC de 2 tramos
Longitud del Tramo	70.00-10.00m
Mat.	Concreto
Acera	Grado 40
Tipo de Estructura	Estrubo en T. Pilar en T
Tipo de Fundación	Pileta de Cajón
Suelo	Araya y Roca, Tuff
Mat.	Concreto
Acera	Grado 40
Manual de Diseño	MANUAL 105.03
ASHTO LRFD Bridge Design Specification	4th Edition 2007

SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)

CONSULTANT

THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.8

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO.,LTD.

STATUS: -

TITLE:

PROJECT NO.	REV	DATE	DESCRIPTION

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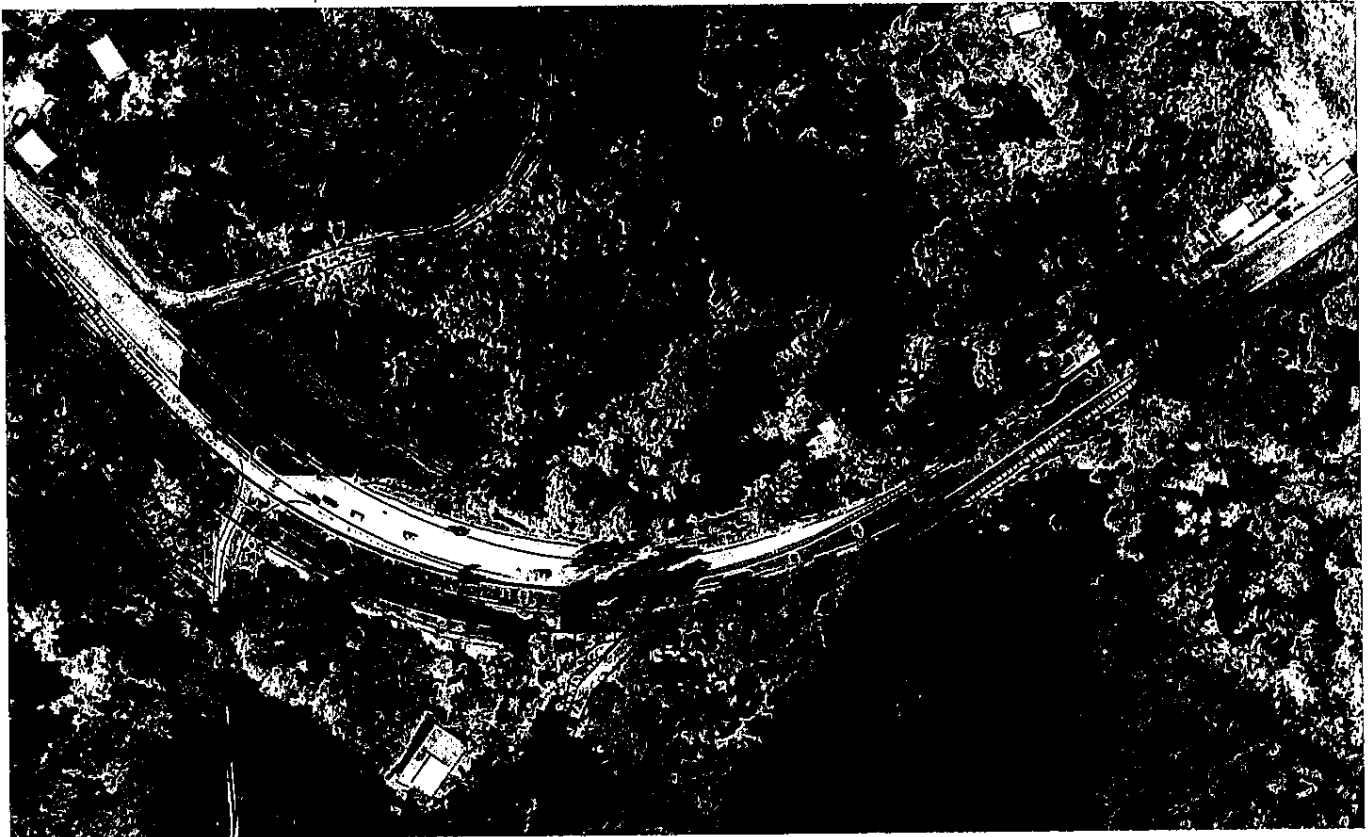


SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT) JICA JAPAN INTERNATIONAL COOPERATION AGENCY	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.8	PROJECT NO. . . .	REVISION RECORD		
	◎ NIPPON KOEI CO.,LTD.	STATUS: . . .	DRAWING NO. . . .	REV	DATE	DESCRIPTION
		TITLE:	SCALE . . .			
			DATE . . .			

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SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT NIPPON KOEI CO., LTD.	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO. 6	PROJECT NO. - -	REVISION RECORD		
		STATUS: - -	DRAWING NO. - -	REV.	DATE	DESCRIPTION
JAPAN INTERNATIONAL COOPERATION AGENCY		TITLE:	SCALE - -			
			DATE - -			

Minuta de Reunión con las Partes Interesadas Locales

Proyecto : Estudio Preparatorio para el Proyecto de Construcción de Puente en la Carretera Nacional CA-6
Fecha : 22 de marzo, 2023 13:30~15:30
Lugar : Sitio del Proyecto (KM16.3 de la carretera CA-6)

Participantes

No.	Nombre	Cargo
Interesados Locales		
1	Sr. Rene Soto	Poblador Local Margen Izquierda (Lado del valle)
2	Sra. Yolanda Vargas	Poblador Local Margen Izquierda (Lado del valle)
3	Sra. Dalila Valdez	Poblador Local Margen Izquierda (Lado del valle)
4	Sr. Rolando Soto	Poblador Local Margen Izquierda (Lado del valle)
5	Sr. Rene Soto (hijo)	Poblador Local Margen Izquierda (Lado del valle)
Secretaria de Infraestructura y Transporte (SIT)		
1	Ing. Marcela Rodriguez	Ingeniera Coordinadora de Proyectos
2	Ing. Gerardo Pineda	Especialista Ambiental SIT/UGA
3	Ing. Vania Bueso	Ingeniera ULDV
4	Ing. Rosa Valladares	Ingeniera ULDV
Equipo de Estudio JICA (Nippon Koei)		
1	Ing. Shinichi Nii	Sub-Líder del Equipo de Estudio
2	Ing. Takuma Oue	Consideraciones Ambientales y Sociales
3	Ing. Carlos Barba	Coordinador/traductor
4	Ing. Yusuke Okano	Especialista de Estudio de Tránsito

I. Objetivo de la Reunión

- Socialización del Proyecto a los pobladores locales de la margen izquierda anterior y posterior a la ubicación del puente.

II. Explicación del Presente Proyecto (SIT) a las Partes Interesadas Locales

- Este proyecto está financiado por el Gobierno Japonés a través de una donación no reembolsable.
- El diseño y construcción será ejecutado por empresas japonesas. El gobierno de Japón viene apoyado a Honduras en proyectos de fallas que han resultado exitosas, como las fallas del KM14.7, KM22.0 y KM63 del CA-6.
- El objetivo y razones por la cual se construirá el puente se basa en dar solución al corte de tránsito de vehículos debido a los efectos de la falla producida por el deslizamiento.
- Beneficio al ser puente: La parte inferior (columnas del puente) del puente quedará cimentado sobre una base rocosa, si llegara en un futuro a haber nuevos deslizamientos, ésta no afectará al puente.
- Construcción no afectará al tránsito actual ni a las residencias en su alrededor.
- Inicio de trabajos de construcción en año y medio aproximadamente

III. Explicación Técnica del Puente (Equipo de Estudio)

- La explicación de los aspectos generales del diseño y ubicación del puente, así como su alineamiento fueron explicados utilizando un plano general adjunto (Planta general y sección transversal de la estructura superior del puente).

- Se presentó un modelo en 3D que muestra cada una de las etapas de la construcción del puente, incluyendo su estado final.
- Se realizó una visita al sitio del puente con todos los asistentes para explicar y atender sus consultas en el mismo campo utilizando las dos herramientas explicadas en los apartados anteriores.

IV. Explicación de Consideraciones Sociales y Ambientales (Equipo de Estudio)

- Las principales afectaciones ambientales durante el periodo de construcción son la contaminación atmosférica, ruido y vibración propias de los trabajos de construcción.
- Se estima que no habrá contaminación de los acuíferos ya que no existen cuerpos de agua dentro de la zona de influencia del proyecto.
- No se afectarán las casas aledañas a la vía, sin embargo, se prevé la adquisición de terrenos conforme los diseños que siguen en preparación a la fecha de esta reunión.
- Se realizará el corte de árboles conforme al plan de salvamento que será preparado por la SIT y socializado debidamente antes de comenzar la construcción.
- Durante la etapa de construcción se generará empleo para los pobladores, además de un aumento de clientes que harán uso de sus locales comerciales.
- Se solicitó el apoyo de todos los participantes y sus familiares, los cuales manifestaron su intención de colaboración.

V. Ronda de Preguntas y Respuestas (SIT/Equipo de Estudio)

(Sobre canal de drenaje que se encuentra paralelo a la vía existente y drenajes transversales a la vía existente aledaña a la casa de la Sra. Dalila)

- Desde hace varios años atrás, las precipitaciones han aumentado en intensidad y volumen de agua, las cuales trae consigo piedras y troncos que tapan la alcantarilla. Todos los años en épocas de lluvia, cuando la precipitación es intensa, el nivel de agua sube hasta la altura del camino de acceso de su casa.
- Los propietarios realizan todos los años trabajos de mantenimiento (limpieza) del canal y el dique construido por ellos mismos debido al material que cae desde los taludes aledaños al canal, que obstruye el flujo de agua tapando los drenajes transversales que conectan con la parte inferior de la zona de la falla.
- Existen 3 caídas de agua que se juntan en dicha alcantarilla.
- El propietario solicitó al equipo de estudio una solución para dicho canal de drenaje y los derrumbes ocurridos debido a las constantes precipitaciones.
- Debido a la humedad superficial, durante la noche, es muy densa la neblina, la cual impide la visibilidad de los transeúntes de la vía.

(Respuesta Equipo de Estudio)

El Equipo de Estudio respondió que estas actividades están fuera del alcance de los Servicios del presente estudio preparativo, sin embargo, informará a JICA la situación para verificar si se puede incluir alguna solución a este problema en el alcance del presente proyecto.

VI. Encuesta a los Jefes de Familia (SIT/Equipo de Estudio)

- Se desarrolló la encuesta a cada uno de los jefes de familia que residen dentro de la zona de afectación del proyecto para conocer su estatus socio-económico.

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VII. Registro Fotográfico



VIII. Información Anexa

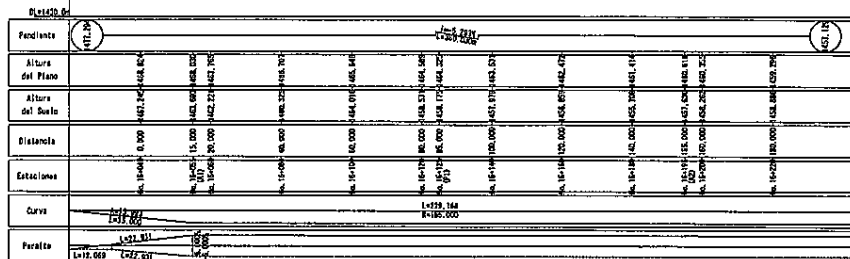
- Lista de Asistencia
- Planos generales del proyecto
- Encuestas Socio-económicas

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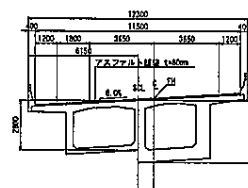
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Attendance List				
Project:	Estudio Preparatorio para el Proyecto de Construcción de Puente en la CA-6			Date: 22/03/2023
Meeting:	STAKE HOLDER MEETING AT SITE			
Name	Position	Affiliation	E-mail	Signature
Rene Alfredo Soto	Consultor	---		Rene Soto
Yolanda Vargas	Docente			Yolanda Vargas
Daniela Valdes				(Daniela)
Felipe Soto	Business Owner			Felipe Soto
Rene Soto	Ing. Industrial			Rene Soto
Gerardo Prieto Guerra	Especialista Ambiental	UGA/STT		Gerardo Prieto
Rosa Villadares	Ing. ULDV	SIT		Rosa Villadares
Vania Bueso	Ing. ULDV	"		Vania Bueso
TAKUMA OUE	CONSIDERA Como sociales y ambientales	Nippon Koei		Takuma Oue
Carlos Brika	Traductor	Nippon Koei		Carlos Brika
SKANO YUSUKE	Estudio Tufu	Nippon Koei		SKANO YUSUKE
Shinichi Nii	Dephty TL	Nippon Koei		Shinichi Nii
Marcela T. Rodriguez	Coordinadora Proyecto	URRYPEEN / SIT		Marcela T. Rodriguez

GENERAL



SUPERSTRUCTURA S=1:100

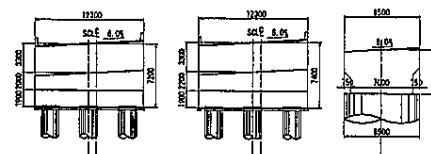


SUBESTRUCTURA S=1:200

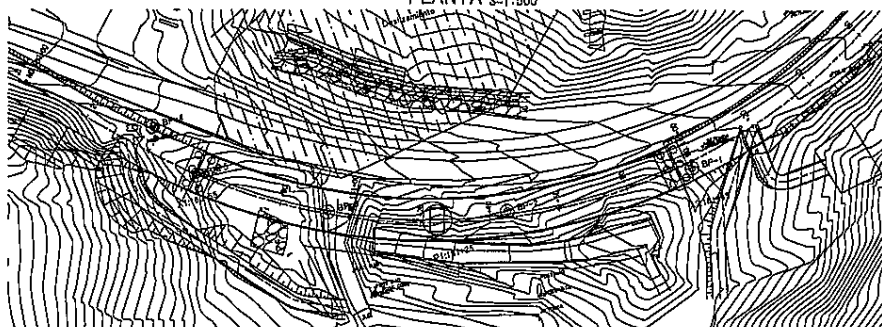
A1 ESTRIBO

A2 ESTRIBO

P1 PILAR



PLANTA S=1:500

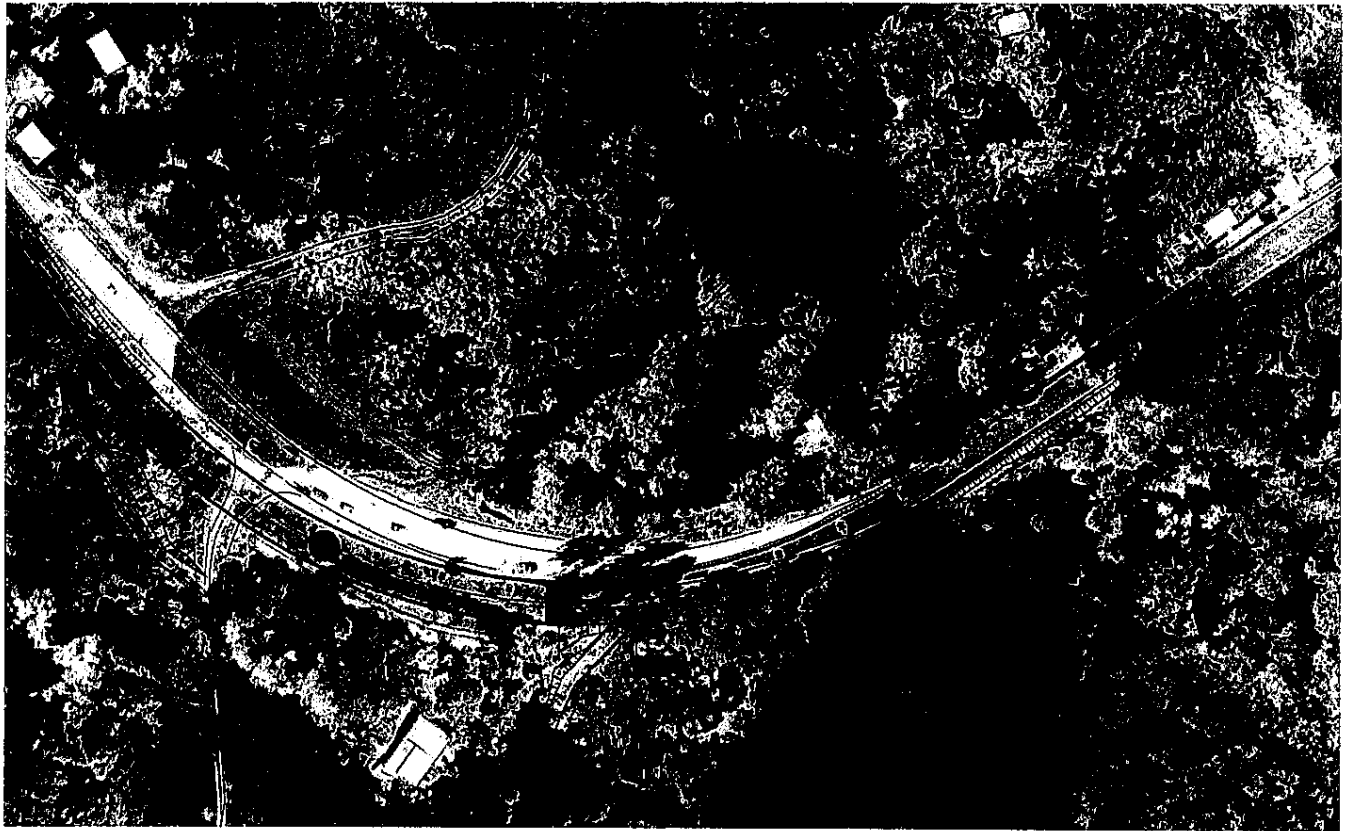
[illegible]

PLANTA S=1:500



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.8	PROJECT NO. - - DRAWING NO. - -	REVISION RECORD <table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DATE	DESCRIPTION												
REV.	DATE	DESCRIPTION																
JICA JAPAN INTERNATIONAL COOPERATION AGENCY	NIPPON KOEI CO., LTD.	STATUS: - - TITLE:	SCALE - - DATE - -															

PLANTA S=1:500



SECRETARÍA DE INFRAESTRUCTURA Y TRANSPORTE (SIT)	CONSULTANT	THE PROJECT FOR BRIDGE CONSTRUCTION IN NATIONAL ROAD NO.8	PROJECT NO. -	REVISION RECORD		
JICA JAPAN INTERNATIONAL COOPERATION AGENCY	NIPPON KOEI CO., LTD.	STATUS: -	DRAWING NO. -	REV.	DATE	DESCRIPTION
		TITLE:	SCALE -			
			DATE -			

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II. Monitoring Form

- JICA undertakes environmental and social monitoring based on regular monitoring reports submitted by project proponents. The reports should include measured data of environmental and social monitoring items agreed at the JICA's environmental review. Where necessary, project proponents may refer to this monitoring form when submitting the monitoring reports.
- When defining monitoring items, frequency, and methods, etc., project phases and project life cycle (e.g., construction phase and operation phase) should be taken into account.

1. Permits and Consultations

Monitoring Item	Monitoring Results during Reporting Period (In the case of consultations with local stakeholders, describe whether there are records of the consultations, the dates, the number of participants, etc.)
Ex.: Responses/actions to comments from authorities when obtaining environmental permits	
Ex.: Acquisition status of various permits	
Ex.: Implementation status of local stakeholder consultations	

2. Pollution Control

Item※	Monitoring Item (unit)	Measured Value (Mean)	Measured Value (Max.)	Standards of the country	International Standards	Remarks (measurement point, frequency, method, etc.)
Ex.: Air Pollution	Ex.: SO ₂ (PPM)					

※In addition to "air pollution", water pollution, soil contamination, waste, noise / vibration, ground subsidence, odor, topography / geology, sediment, etc. can be considered as items. Describe items that are deemed necessary by JICA through the environmental review.

3. Natural Environment (Biodiversity, Ecosystem)

Monitoring Item	Monitoring Results during Reporting Period
Ex.: Protected areas, critical habitats, critical forests, impacts on rare species, mitigation measures, etc.	

4. Social Environment

(1) Involuntary Resettlement

Monitoring Item	Monitoring Results during Reporting Period

(2) Living and Livelihood

Monitoring Item	Monitoring Results during Reporting Period

(3) ※

Monitoring Item	Monitoring Results during Reporting Period

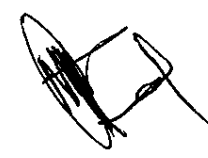
※In addition to "involuntary resettlement" and "living and livelihood", water use, accident, utilization of land and local resources, vulnerable social groups such as indigenous peoples, gender, cultural heritages, and working conditions, etc. can be considered as items. Describe items that are deemed necessary by JICA through the environmental review.

5. Complaint Reception Status

Number and content of complaints	Responsible organization	Current situation

End.

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