

EXHIBIT B

HANDBACK REQUIREMENTS

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1. Handback Requirements

The County must prepare a Handback Plan that contains the methodologies and activities to be undertaken or employed to meet the requirements of TxDOT at the time the County transfers the Brazoria Project to TxDOT (“Handback” or the “Handback Date”) pursuant to Section 8 of the Agreement. County must submit the Handback Plan, including a Residual Life Methodology Plan, to TxDOT for review at least 48 months before the anticipated Handback Date. The Parties will resolve comments to allow TxDOT approval of the Residual Life Methodology Plan at least 36 months before the anticipated Handback Date. The Residual Life Methodology Plan must include all elements that are part of the Brazoria Project, including entrance and exit ramps and associated structures (collectively, the “Elements”). The County is responsible for performing, at its expense, all work necessary so that the Brazoria Project meets the Residual Life Requirements specified in the Handback Plan on the Handback Date.

Table 1, Residual Life Requirements, defines the Residual Life at Handback which the Elements must have at Handback. For any Element in Table 1, where a Residual Life at Handback is specified, the Residual Life at Handback must be equal to or greater than the period set forth. The time period of the Required Final Residual Life as noted in Table 1 begins at Handback Date. For any Element of the Brazoria Project for which a Residual Life at Handback is not specified in Table 1, the Residual Life at Handback for the Element must equal the documented serviceable life of the Element or five (5) years, whichever is less.

2. Residual Life Inspections

(a) Once the County determines and notifies TxDOT of the intent to transfer the facility to TxDOT, the County will perform Residual Life Inspections within the Brazoria Project. The Residual Life Inspections will include all Elements within the Brazoria Project regardless of whether the County has undertaken Renewal Work for a particular Element in the period prior to any Residual Life Inspection. The County will prepare and submit to TxDOT a plan for conducting three (3) Residual Life Inspections over the course of 36 months prior to the Handback Date. TxDOT must be given the opportunity to witness any of the inspections and/or tests. The County must deliver to TxDOT, within ten (10) calendar days after it is created, the output data arising from any testing and any interpretation thereof made by the testers. Within thirty (30) days following performance of each Residual Life Inspection, the County must submit to TxDOT the findings of the inspection, Residual Life test results and Residual Life calculations. County must perform Residual Life Inspections and testing with appropriate coverage such that the results are representative of the whole Brazoria Project as described in Table 1.

(b) The Residual Life Methodology Plan must contain the evaluation and calculation criteria to be adopted for the calculation of the Residual Life at Handback for all Elements of the Brazoria Project. The scope of any Residual Life testing must be included, together with a list of all independent Residual Life testing organizations, proposed by the County.

(c) TxDOT’s written approval of the Residual Life Methodology Plan, including the scope and schedule of inspections, is required before commencement of Residual Life Inspections.

- (d) County must perform all Work necessary to meet or exceed the Residual Life requirements contained in Table 1 by the time of Handback of the Brazoria Project to TxDOT.
- (e) At the point of Handback, the County must certify in writing to TxDOT that all physical Elements of the Brazoria Project meet or exceed their respective Residual Life requirements.
- (f) Between thirty-six (36) and thirty-three (33) months prior to the Handback Date, the County must perform the first Residual Life Inspection (the First Inspection), including all Elements set forth in Table 1. Within thirty (30) calendar days following performance of the First Inspection, the County must submit to TxDOT the First Inspection Report which must contain the findings of the inspection, including Residual Life test results, the report of the independent testing organization(s), and County calculation of the Residual Life at Handback for all Elements.
- (g) Between twenty-one (21) and eighteen (18) months prior to the Handback Date, the County must perform the second Residual Life Inspection (the Second Inspection) including all Elements within the Brazoria Project, regardless of whether the County has undertaken Renewal Work for a particular Element in the period since the First Inspection. Within thirty (30) calendar days following performance of the Second Inspection, County must submit the Second Inspection Report to TxDOT, which must contain the findings of the inspection.
- (h) Between twelve (12) and six (6) months before the Handback date, the County must perform a final Residual Life Inspection (the Final Inspection) including all Elements within the Brazoria Project, regardless of whether the County has undertaken Renewal Work for a particular Element in the period since the First Inspection. Within thirty (30) calendar days following performance of the Final Inspection, the County must submit the Final Inspection Report to TxDOT, which must contain the findings of the inspection.

Table 1 Residual Life Requirements
for Brazoria Project

Element Category	Required Final Residual Life (yrs)	Element Category	Required Final Residual Life (yrs)	Element Category	Required Final Residual Life (yrs)
Structures		Road Pavement		Ancillary	
Reinforced concrete	50	Main lanes	10	Earthwork slopes	50
Pre-stressed concrete	50			Metal beam guard rail	10
Structural steelwork	50	Frontage/access roads	10	Concrete barrier	20
Weathering steel	50	Toll plaza approaches	10	Impact attenuators	*
Corrugated steel	20			Lighting columns	10
Corrosion protection for structural steelwork	10	High mast lighting	10	High mast lighting Overhead signs	10
Deck surfacing	10			Traffic signal housing and mountings	10
Deck joints	10			Fences	10
Bearings	30			Manhole covers, gratings, frames, and boxes	50
Railing	50	Toll Collection and TM Facilities	N/A	curbs and gutters	10
Sign/signal gantries	30			Lanterns (lamps/luminaires)	*
Retaining walls	25	Drainage		Roadside traffic signs	*
Noise Walls	25	Underground storm sewer systems	50	Pavement markings	*
Traffic signal poles	10	Culverts	50	Delineators	*
		Ditches	10		
		Inlets	50		

* See attached description of conditions at Handback

3. Description of Conditions at Handback

The County agrees that it will perform, at its expense, all work necessary so that the Brazoria Project meets the requirements shown below on the Handback Date.

3.1 Graffiti:

Graffiti is removed in a manner and using materials that restore the surface to a like appearance similar to adjoining surfaces.

3.2 Guardrails and Safety Barriers

All guardrails, safety barriers, concrete barriers, etc. are free of defects. They are appropriately placed and correctly installed at the correct height and distance from roadway or obstacles. Installation and repairs shall be carried out in accordance with the requirements of NCHRP 350 standards.

3.3 Impact attenuators

All impact attenuators are appropriately placed and correctly installed, and functional, free from structured defects.

3.4 Traffic, Toll, and Guide Signs

- a. Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical defects.
- b. Identification markers are provided, correctly located, visible, clean and legible.
- c. Sign mounting posts are vertical and structurally sound.
- d. All break-away sign mounts are clear of silt or other debris that could impede break-away features and shall have correct stub heights.
- e. Obsolete and redundant signs are removed or replaced as appropriate.
- f. Visibility distances meet the stated requirements.
- g. Sign information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements.
- h. All structures and elements of the signing system are free from debris and have clear access provided.
- i. Dynamic message signs are in an operational condition.

3.4.1 General – Safety critical signs

Requirements as above, plus: “Stop,” “Yield,” “Do Not Enter,” “One Way” and “Wrong Way” signs are clean, legible and undamaged.

3.5 Drainage

Pipes and Channels:

- a. Each element of the drainage system is functioning by cleaning, clearing and/or emptying as appropriate from the point at which water drains from the travel way to the outfall or drainage way.
- b. Drainage treatment devices: drainage treatment and balancing systems, flow and spillage control devices function correctly and their location and means of operation is recorded adequately to permit their correct operation in emergency.
- c. Travel Way: The travel way is free from water to the extent that such water would represent a hazard by virtue of its position and depth.
- d. Discharge systems: surface water discharge systems perform their proper function and discharge to groundwater and waterways complies with the relevant legislation and permits.
- e. Drainage pathways through and around concrete traffic barriers that are located between the toll/managed lanes and general purpose lanes, are maintained in their proper function and clean to

avoid ponding that impacts the travel way for the toll/managed lanes and the general purpose lanes.

3.6 Roadway Lighting - General

- a. All lighting is free from defects and provides acceptable uniform lighting quality.
- b. Lanterns are clean and correctly positioned.
- c. Lighting units are free from accidental damage or vandalism.
- d. Columns are upright, correctly founded, visually acceptable and structurally sound.
- e. All obstruction lights are present and working (if required).
- f. Compartment door is secure with all bolts in place.

3.7 Performance Requirements for Pavements

3.7.1 Pavement Condition Rating System

Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with a TxDOT approved Pavement Management Rating System.

Measurement:

Pavement Condition Score for 80% of Auditable Sections exceeding:

- Mainlanes and ramps – CRS = 7.5 - 100%

3.7.2 Pavement Ruts – Mainlanes, Shoulders & Ramps

Depth as measured using an automated device in compliance with TxDOT Standards. 10ft straight edge used to measure rut depth for localized areas.

Measurement:

Percentage of wheel path length with ruts greater than ¼” in depth in each Auditable Section:

- Mainlanes, shoulders and ramps – 3% - Nil
- Frontage roads – 10% - Nil

Depth of rut at any location greater than 0.5” – Nil

3.7.3 Pavement Ride Quality

Measurement of International Roughness Index (“IRI”) according to TxDOT standard Tex-1001-S, Operating Inertial Profilers and Evaluating Pavement Profiles.

To allow for measurement bias, an adjustment of -10 (minus ten) is made to IRI measurements for concrete pavements before assessing threshold compliance.

Renewal work and new construction subject to construction quality standards.

Measurement:

For 80% of all Auditable Sections measured, IRI throughout 98% of each Auditable Section is less than or equal to:

- Mainlanes, ramps – 95** inches per mile
- IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section, 0.1 mile average – 200** inches per mile
- Individual discontinuities greater than 0.75” – Nil

**To allow for measurement bias, an adjustment of -10 (minus 10) is made to IRI measurements for concrete payments before assessing threshold compliance.

3.7.4 Pavement Failures

No instances of failures exceeding the failure criteria set forth in the TxDOT approved Pavement

Management Rating System, including potholes, base failures, punchouts and jointed concrete pavement failures.

3.7.5 Joints in Concrete

Joints in concrete paving are sealed and watertight.

3.7.6 Curbs

Curbs are free of defects.

3.7.7 Pavement Markings

Pavement markings are:

- a. clean and visible during the day and at night
- b. whole and complete and of the correct color, type, width and length
- c. placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets

Markings – General Portable retroreflector, which uses 30 meter geometry meeting the requirements described in ASTM E 1710.

3.7.8 Raised reflective markers

Raised reflective pavement markers, object markers and delineators are:

- a. clean and clearly visible
 - b. of the correct color and type
 - c. reflective or retroreflective as TxDOT standard
 - d. correctly located, aligned and at the correct level firmly fixed in a condition that will ensure that they remain at the correct level.
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