



## Forced Betterment Guideline

Forced Betterment incorporated into a reimbursable utility adjustment requires advanced approval from the Austin District. Review and thoroughly apply this guideline when preparing a Forced Betterment submittal package (i.e. approval request) to the Austin District. Applying this guideline will lead to a submittal that is sufficiently detailed and will minimize the likelihood of that submittal being rejected and needing continual rework.

This guideline is broken down into the following processes:

1. Identifying situations where forced betterment is needed.
2. Completing Forced Betterment Approval Form.
3. Assembling the forced betterment submittal package.
4. Examples of forced betterment requests that were approved in the past.

### Process #1-Identify the need for forced betterment

1. What is forced betterment and how is it different from elective betterment?
  - a. Forced betterment is an upgrade to the utility company's current infrastructure, that is necessitated by the transportation project and not solely for the benefit of the utility company. When a utility adjustment is eligible for reimbursement that same reimbursement eligibility applies to any forced betterment that has been approved.
  - b. Elective Betterments are improvements to the existing facility that the utility owner makes as choice, and not attributable to the transportation project. This type of betterment is not eligible for reimbursement.
2. After the need has been identified and the forced betterment is approved, it will be documented in the standard utility agreement (SUA) that covers the reimbursable utility adjustment.
  - a. SUA - Attachment A
    - i. Plans should include call outs showing areas where forced betterment is proposed.
    - ii. Forced betterment items are treated as IN-KIND items on the cost estimate, and are therefore eligible for reimbursement.
  - b. SUA - Attachment G
    - i. Forced betterment back-up documentation shall be included in attachment G.
    - ii. Note: When elective betterment is included in the utility adjustment, an itemized side-by-side cost estimate comparison ["IN-KIND" listed on left & "Proposed w/ BETTERMENT" listed on right] should be included in attachment G, and used to calculate the betterment percentage. A betterment percentage calculation is required only when elective betterment is included.
3. What are the criteria for forced betterment? Due to the transportation project, forced betterment can be approved for one or more of the following six reasons, which are the only acceptable reasons:
  - a. non-stocked items that are uneconomical to purchase
  - b. items to comply with governmental laws and ordinances
  - c. appropriate regulatory commission codes
  - d. published, current design practices regularly followed by the utility in its own work
  - e. installment of replacements of equivalent standard, although not identical
  - f. betterments for which there are direct benefits to, and/or are required for, the transportation project.



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## Process #2 – Completing Forced Betterment Approval Form

1. Fill in the top section of the form with the correct project information and utility information.
  - a. This information can be found in TxDOT Connect.
  - b. If access to TxDOT Connect is not available, obtain confirmation from the TxDOT PM that the information is correct on the form before submitting.

		<b>Austin District</b>	
<i>Texas Department of Transportation</i>		<b>Forced Betterment Approval FORM</b>	
Date of Request:	<input type="text"/>	Utility ID:	<input type="text"/>
Utility Name:	<input type="text"/>		
Construction CSJ:	<input type="text"/>	ROW CSJ:	<input type="text"/>
Highway:	<input type="text"/>	Limits From:	<input type="text"/>
Letting Date:	<input type="text"/>	Limits To:	<input type="text"/>

- c.
2. When claiming forced betterment exists make sure that one or more of the acceptable reasons apply. Refer to the list on the form. Those are the **ONLY** acceptable reasons for forced betterment.

Forced Betterment is being claimed for the following reason(s):	
<input type="checkbox"/>	non-stocked items that are uneconomical to purchase;
<input type="checkbox"/>	items to comply with governmental laws and ordinances;
<input type="checkbox"/>	appropriate regulatory commission codes;
<input type="checkbox"/>	published, current design practices regularly followed by the utility in its own work;
<input type="checkbox"/>	installment of replacements of equivalent standard, although not identical;
<input type="checkbox"/>	betterments for which there are direct benefits to, and /or are required for, the transportation project.

- a.
- b. Project schedule is not an acceptable reason for forced betterment.
3. Per instructions on the form, summarize the forced betterment replacement; explain the justification.
  - a. Failure to provide adequate justification could result in rejection of the submittal. The summary and justification should be comprehensive and specific, including details to establish context.
  - b. How to summarize the forced betterment:
    - i. Describe the existing material type, size, and quantity.
    - ii. Separately describe the proposed forced betterment material type, size, and quantity.
  - c. Explain the justification:
    - i. State the reason that forced betterment is being claimed (please remember: the only acceptable reasons for forced betterment are listed in the checklist within the form).
    - ii. Individually explain how one or more of the acceptable reasons for forced betterment applies to the utility adjustment; be sure to highlight relevant comparisons and distinctions.
    - iii. Describe the nature of the conflict between the proposed transportation project and the existing utility facility. In other words, state whether the conflict is due to construction; UAR; local ordinance; safety, etc. and elaborate on the details that illustrate the conflict in specific details applicable to the required utility adjustment.



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- iv. Explain why IN-KIND replacement is insufficient and why betterment replacement is necessary instead. In other words, describe differences between the conditions that exist before and after the project construction which make IN-KIND replacement unfeasible.
- v. In addition to listing direct benefits to the transportation project (if any), elaborate on those direct benefits in specific detail and provide supporting documentation.
- vi. Describe the hardship to the transportation project that would be caused if the forced betterment is not approved.
- vii. Cite specific references to the rules (TAC UAR), regulations, utility design criteria, etc. that support the forced betterment justification.
- viii. Add a page to write the complete summary and justification when space on the form is insufficient. In that case, the information on the form shall be brief and comprehensive.
- ix. In some cases, for relatively complicated situations, it may be required that the forced betterment justification be supported by a signed letter from the utility coordination consultant, on the consultant firm’s letterhead.

**Summarize the Forced Betterment and Explain the Justification (May require letter from utility coordinator).**

- d.
- 4. The form includes another checklist, listing three items of additional information. All three of those items are required and must be provided with the forced betterment approval request submittal.
  - a. Note: One of the items on the checklist refers to an Excel spreadsheet that is required to be included with each submittal. The spreadsheet should display a table that describes comparisons between existing items and proposed forced betterment items. To assist with fulfilling that requirement, the Austin District has made available an Excel spreadsheet workbook containing multiple table templates. The table template that best describes the nature of the forced betterment should be used.

<b>Checklist for additional information included with this Forced Betterment Approval (all three REQUIRED)</b>	
<input type="checkbox"/>	exhibit showing location of forced betterment;
<input type="checkbox"/>	back up documentation (design manuals, ordinances, cost estimates, etc.);
<input type="checkbox"/>	Excel spreadsheet describing existing facility structures and proposed facility structures.

- b.
- 5. The request for the approval signatures shall be coordinated by the TxDOT Austin District Engineering Services Utilities Section.



**Austin District Engineering Services Utility Section**  
**Forced Betterment Guideline**

TxDOT Austin District Approval Process - signatures required	
1.) TxDOT Project Manager	Date
2.) AUS Utility Team member processing AGMT	Date
3.) AUS District Utility Processing Team Lead	Date
4.) AUS District Design Engineer	Date

- a.
- b. This form is an internal TxDOT Austin District document used to document review and approval; therefore, this form will not remain in the executed standard utility agreement.

**Process #3 – Assembling the Forced Betterment Package**

1. What is required to be included in the forced betterment submittal package?
  - A completed Austin District Forced Betterment Approval Form.
  - An exhibit showing the location of the forced betterment. The exhibit can be a plan sheet from the utility relocation design plans, or when in earlier phases of the project, the existing and proposed utility layouts that are prepared by the TxDOT utility coordination consultant.
  - The exhibit shall clearly show required details as follows:** (needed to verify In-Kind vs. Betterment replacement)
    - TxDOT project stationing
    - Existing & proposed ROW lines (only the existing ROW line is required when no new ROW is being acquired.)
    - Existing & proposed utility facility descriptions: utility type, material, size, quantities and other information (e.g. strength class., pipe diam., conductor size, fiber cable count, conduit size/# of ducts, cable pair qty.)
    - Existing & proposed utility easements
    - Existing & proposed joint-use areas
    - Existing & proposed highway features (edge of pavement (EOP), shoulder/ditch, drainage, retaining walls, etc.)
    - Special characteristics – such as operating pressures, directions of flow, source of power, wall thickness (of pipe), coatings, anode beds, yield strength, design factor or class locations, use of Barlow’s formula, etc. (if applicable).
    - UAR Compliance (depth of cover, OH clearance, length of encasement, distance from ROW line/EOP, etc.)
    - Legend or notations that are consistent and clearly define all symbols used in the plans.
    - Conflict with existing utility facility (with call-out notes, highlight features and text to describe the nature of the conflict.)
    - Forced betterment location (enhanced with call-out notes, highlight features, detail boundary).
    - North direction arrow and scale



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- d. Required back up documentation (design manuals, ordinances, cost estimates, etc.).
- e. Excel spreadsheet table that lists descriptions and comparison of existing and proposed facilities.
2. Use the Forced Betterment form as a checklist. Understand that as the utility coordinator consultant or engineer preparing a submittal on behalf of a utility owner you are trying to tell a story that justifies forced betterment as it relates to at least **one of the six** acceptable reasons for forced betterment.
3. In many cases a letter from the consultant performing utility coordination on behalf of TxDOT for the transportation project may be required to explain the engineering decisions for the project that caused the need for the utility adjustment, and consequently the forced betterment.

### Process #4 – Examples of Forced Betterment approved in the past

In this section we will provide some examples of forced betterment submittals that may be used as go-by examples. Each project is different and may require unique justification documentation.

1. Example #1 – **UPSIZING of Water Line** - For this example a rural water utility had an existing 2” water line in an easement within TxDOT ROW acquisition that was in conflict and needed to relocate. Documentation was provided to justify that because this facility was in the City of Austin ETJ (Extra-Territorial Jurisdiction), the water utility must comply with City of Austin design requirements.
  - a. A letter was provided by the utility design engineer explaining the need for TxDOT to approve forced betterment to upsize the existing 2” PVC water line to an 8” PVC water line.
  - b. A map was included to show that the location of this facility was within the City of Austin ETJ.
  - c. City of Austin design criteria was provided to demonstrate that any water distribution lines being installed or replaced along roadways in the ETJ must be a minimum of 8 inches.
2. Example #2 – **Overhead to Underground** - A telecom was attached to the overhead electric facility crossing state highway at an intersection where TxDOT was installing a grade separation (overpass). The existing poles were reimbursable due to the fact they were in easements within proposed ROW acquisition. The attached telecom was determined to be reimbursable due to attachment agreement.
  - a. Overhead electric company decided to relocate the crossing east of the intersection about 1,200 feet to cross at existing grade.
  - b. The telecom provided need to maintain the crossing at the intersection; therefore, justification was provided for the overhead crossing to be relocated to an underground crossing.
  - c. A letter from the utility coordination consultant along with an exhibit was included in the standard utility agreement to justify this decision.
3. Example #3 – **Material Change** - A City of Austin pressurized forced main was required to relocate for a TxDOT highway project. The existing line was a 12” ductile iron pipe. Published City of Austin design manual stated that all new or replaced forced mains must polyethylene pipe (PE). It was determined that HDPE is an available type of PE pipe. Justification was provided to change the material from ductile iron to HDPE; however, 12” HDPE did not have the same inside diameter as ductile iron. Additional documentation was required to documents that 16” HDPE pipe had the equivalent inside diameter measurements as 12” ductile iron.