Instructions for Preparing Exhibits For The Following General Land Office Applications:

Miscellaneous Easements (Rights-of-Way)
Sub-Surface Easements

Maps (or plats) showing the location of proposed and as-built projects on state-owned lands are required as part of the General Land Office (GLO) application process. The following instructions are to be followed when applying for new work (proposed project), or for reporting as-built conditions for a previously approved project, when the activity is a **Miscellaneous Easement (Right-of-way/ROW), Surface Lease, or Sub-Surface Easement** on state land.

The information specified below represents **minimum** requirements of the GLO and additional information may be requested on a project-by-project basis to facilitate a full evaluation of the proposed activity.

The information should be submitted along with the required application form and processing fees. Each map or plat must conform to the specifications contained herein. An application is not considered complete, and processing of the application will not be initiated, until all information requested has been submitted and GLO staff has determined that it is adequate.

NOTE: Surveys and survey plats required by other entities, Federal, State, County and/or City, are PERMISSIBLE and USABLE for GLO applications provided they meet the following requirements.

IF SUBMITTING SURVEY PLATS DIGITALLY, PLEASE PROVIDE THE INFORMATION IN ONE OF THE FOLLOWING FORMATS:

1. In an ESRI format (i.e. Shape file, E00, or Geodatabase)
2. AutoDesk Map 6 or earlier version in a DWG format.
3. **And Projection Information of the data set submitted.**

A. GENERAL INSTRUCTIONS for ALL APPLICATIONS:

1. Each map or plat should be 8-1/2" x 11".

2. A one-inch margin should be left at the top edge of each sheet for binding purposes.

3. Any shading used to identify specific areas must be reproducible by ordinary copy machines.

4. Each map or plat submitted must have a title block identifying, at a minimum: (a) applicant name; (b) applicant address; (c) project name; (d) date of preparation; (e) name of preparer, and (f) project location as follows:

(1) if on state-owned uplands, then provide county, survey name (original grantee) and, as applicable, survey or section number, block number, township number, subdivision name, lot or tract number, and abstract number;

(2) if on submerged land, then provide county name, waterbody name, and state tract number;.

5. The scale for each map or plat must be clearly indicated both digitally and by graphic scale.

6. Vicinity Maps -- Exhibit A for each project application must be a Vicinity Map showing the general location of the proposed work. The Vicinity Map must be produced using a U.S.G.S. 7.5 minute Topographic Map, a Texas Department of Transportation County Road Map, or navigation chart as its base layer. A prominent arrow on the map should indicate the project location. An 8 1/2" x 11" Xerox copy from the original Topo, county map, or navigation chart showing the project location is sufficient. It is not necessary to submit the entire Topo or county map, so long as the map is appropriately identified as to the origin of the base information (e.g., name, and date of base map information used). This is most easily accomplished by copying the legend of the base map and making it part of the Vicinity Map.

7. Project Site Map -- Exhibit B for each project application should be a Project Site Map (in Survey Plat format), which provides specific project location information. The Project Site Map should be produced at sufficient scale and detail to enable field inspectors to locate the project on the ground with minimal difficulty. Demographic features such as road numbers, stream names, railroad crossings, corporate city limits, and other prominent locative features should be included on the Project Site Map. A prominent arrow on the map should indicate the project location and a North arrow must be provided. Annotation may be included on the map regarding distance of the project from known points (e.g., highway intersections, road stream crossings, etc.). **Additional guidance for preparing Project Site Maps is provided in Section B of this document.**

8. Detailed Project Plan -- Exhibit C for each project application should be a Detailed Project Plan, consisting of an aerial plan-view drawing and a cross-sectional drawing of all proposed or existing structures on state-owned lands at the project site.

Page 1 of the Detailed Project Plan should contain, at a minimum:

a. Location of the shoreline or banks if the project is on or adjacent to tidally influenced waters or crosses a state-owned river, stream, creek, or bayou.

b. The direction of ebb and flow if in or adjacent to tidal waters, or the direction of water flow if the project crosses a river, creek, stream, or bayou.

c. A North arrow.

d. The location of state tract lines (on tidally influenced lands), survey lines, or property lines, as applicable.

e. The location of any marshes, submerged grass flats, oyster reefs, mud or sand flats, or other sensitive natural/cultural resources known to exist in the project area.

f. The lines of mean high water and mean low water when applicable.

g. Dimensions of all structures (existing and proposed) that will encumber state-owned lands at the project site.

h. The registration, easement, or lease numbers for any structures at the site previously authorized by the GLO (available from GLO field offices upon request).

i. Any applicable Corps of Engineers application numbers covering the proposed work, as soon as that application number is available, but, in any event, prior to issuance of the easement.

Page 2 of the Detailed Project Plan should contain, as applicable, an explanation of construction methodology, techniques, and equipment that will be used at the site.

9. As-Built Survey -- A survey showing the depth of burial must be furnished for all projects on state-owned tidally influenced lands (Gulf of Mexico, bays, estuaries, etc.), crossings of state-owned rivers/streams/creeks/bayous. The survey shall show plan view only for projects on state-owned upland tracts. Failure to provide this information is, by terms of the state contract, grounds for termination of the easement and removal of the structure from state-owned land.

New Installations: Each application for installation of a **new** power transmission line or communication line must include with the application a profile drawing showing the **proposed** depth of burial at not less than 36" below the surface.

GLO will issue an easement using the **proposed** ROW and depth of burial information. Following installation of the line, however, the applicant is required by terms of the GLO contract to provide a survey of actual burial depth measurements for that portion of the ROW length occupying state-owned land. The spacing between depth-of-burial measurement points is a function of the length of ROW. If the easement length is less than 500 feet, the depth of cover of the structure and waterway bottom elevation shall be determined at intervals not to exceed 50 feet. If the easement length is greater than 500 feet but less than 5,000 feet the interval between measurement points shall be 100 feet. Easements greater than 5,000 feet in length shall be surveyed at 250-foot intervals.

All work shall be performed under the supervision of and sealed by a registered professional land surveyor. All submitted drawings must be sealed by the supervising registered professional land surveyor. All elevations must be referenced to a common datum (Mean Sea Level, National Geodetic Vertical Datum, Mean Low Water, etc.) and grid coordinates must reference Texas State Plane coordinate System of 1927 or 1983. The accuracy of the waterway bottom and installation elevations shall be +/- one-half (.5') foot for the waterway bottom and +/- one-half (0.5') foot for depth of burial less than or equal to 10 feet and +/- fifteen (15%) percent for depth of burial greater than ten (10) feet. Manual probing and electronic means (both active and passive) of survey type shall be acceptable for depth of burial determinations.

Existing Installations: At time of renewal of an easement for an existing underground power transmission line or communication line, provide the data as required under Section 3.02.(iv) of this easement contract.

CERTIFICATION BY A TEXAS REGISTERED PROFESSIONAL LAND SURVEYOR IS REQUIRED ON ALL OF THE FOLLOWING WITH THE EXCEPTION OF DIRECTIONALLY DRILLED WELL BORE LOGS IN ITEM B1C.

B. SPECIFIC INSTRUCTIONS:

Maps or Survey Plats to be submitted as the Project Site Map and/or the Detailed Project Plan (see A7 and 8 above) must contain the information described below.

Upland survey data should be reported to normal boundary land surveying minimum standards. Offshore or submerged sites shall be located to a specified accuracy of +/- 5 feet of any reported location.

1. Projects located on Tidally Influenced State-owned lands (Including the Gulf of Mexico, bay tracts, and the tidally influenced portions of rivers, creeks, streams, and bayous):

a. Rights-of-Way (e.g., Miscellaneous Easements for transmission lines, roads, etc.)

Coordinates must be provided at the beginning and ending points of the ROW's centerline, or on the principal point or points of tracts described by other means (directional well bores, etc.). These coordinates must be based on the Texas State Plane Coordinate System of 1927 or 1983. Courses and distances must be specified as either grid or geodetic for all centerlines and perimeter lines, and ties must be made from specific improvements (e.g., well heads, platforms, pilings, etc.) to a corner or corners of the lease or easement tract. All submerged state land tracts crossed by any part of the ROW must be shown and identified, and the points of each ROW crossing of a state-tract boundary identified in the Texas State Plane Coordinate System of 1927 or 1983. The distance between crossings of a state-tract boundary must be indicated in both feet and rods on the plat.

As-built plats (and confirmation surveys at time of renewal) must give bearing and distance between angle points along the easement route. In the event no angle points exist along the course of the ROW, the plat shall provide a minimum of one identified point for each 1,000 feet of ROW length. A ROW less than 1,000 feet long but greater than 500 feet in length requires one mid-point to be identified on the survey plat.

b. Surface Leases (e.g., well platforms on un-leased tracts, etc.)

A metes and bounds description (or other valid description) must be provided for the area encumbered by a surface lease. This description must be in increments of not less than one acre for the area surrounding a platform or structure, with the point of beginning, well location, and other structures on the leased site identified and properly located by coordinates. The point of reference from either the center or the corner of a platform or structure must be specified, with coordinates given at one or more points on the Texas State Plane Coordinate System of 1927 or 1983.

c. Sub-Surface Easements (e.g., directionally drilled well bores, etc.)

Sub-surface easements for directionally drilled well bores shall consist of a corridor having a ten (10) foot radius around the directionally drilled well bores as it is shown by an as-built directional well survey. Directional well surveys shall show the following information: surface location (as described in item B.1.b., above), sub-surface elevation of each angle point, and the bottom hole location as shown on well bore log. These items shall be identified by a value given at not less than one point on any locative document, referenced to the Texas State Plane Coordinate System of 1927 or 1983.

2. Projects Across (Rights-of-Way) State-owned Upland Property, or the state-owned portion of a river, creek, stream, or bayou above the limit of tidal influence:

a. Upland Tract (State Fee Lands):

For new project applications, information provided for projects on state-owned upland tracts shall include the beginning and end points of the easement centerline, identified by coordinates on the Texas State Plane Coordinate System of 1927 or 1983, and shall include course and distance of all segments of the proposed easement centerline. Course and distance from one end of the easement to the nearest survey corner or subdivision survey corner shall be included, along with the survey name (original grantee), and as applicable, survey or section number, block number, township number, subdivision name, lot or tract number, and abstract number of all surveys abutting the ROW easement.

At completion of construction, or at time of renewal, an as-built plat or confirmation survey (which ever is applicable) must be submitted. This plat must give bearing and distance between angle points along the easement route. In the event no angle points exist along the course of the ROW, the plat shall provide a minimum of one identified point for each 1,000 feet of ROW length. ROWs, less than 1,000 feet long but greater than 500 feet long, require one mid-point to be identified on the survey plat.

b. Crossing the State-owned portion of a river, creek, stream, or bayou above the limit of tidal influence.

Information provided for projects crossing non-tidal state-owned rivers, creeks, streams, or bayous shall include an identification of the stream or water body by local and any other names known (historic, from topographic or other maps, etc.). In addition, the beginning and end points of the easement centerline, identified by coordinates on the Texas State Plane Coordinate System of 1927 or 1983, and shall include course and distance of all segments of the easement centerline. Course and distance from one end of the easement to the nearest survey corner or subdivision survey corner shall be included, along with a cross section or profile of the crossing between the top of the high banks, survey name (original grantee), and as applicable, survey or section number, block number, township number, subdivision name, lot or tract number, and abstract number of all surveys abutting the ROW easement.