Michigan Department
Of Transportation
5100B (12/14)

# CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)



| REQUISITION NUMBER | DUE DATE | TIME DUE |
|---|---|---|
| 2005 | 6/20/2016 | noon est |

| MDOT PROJECT MANAGER | JOB NUMBER (JN) | CONTROL SECTION (CS) |
|---|---|---|
| Kyle Rudlaff | 112356C | 14051 |

DESCRIPTION
Design Service for 500 feet of drainage improvement on M-40 along Bair Lake, Cass County.

| **MDOT PROJECT MANAGER:** Check all items to be included in RFP<br>WHITE = REQUIRED<br>** = OPTIONAL<br>Check the appropriate Tier in the box below | | | **CONSULTANT:** Provide only checked items below in proposal |
|---|---|---|---|
| ☑ **TIER 1 ($50,000 - $150,000)** | ☐ **TIER II ($150,000-$1,000,000)** | ☐ **TIER III (>$1,000,000)** | |
| ☐ | ☐ | ☐ | Understanding of Service ** |
| ☐ | ☐ | ☐ | *Innovations* |
| ☑ | ☐ | ☐ | Organizational Chart |
| ☑ | ☐ | ☐ | Qualifications of Team |
| Not required as part of Official RFP | Not required as part of Official RFP | ☐ | Quality Assurance/Quality Control ** |
| ☑ | ☐ | ☐ | **Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity. |
| N/A | N/A | ☐ | Presentation ** |
| N/A | N/A | ☐ | Technical Proposal (if Presentation is required) |
| 3 pages (MDOT Forms not counted) Resumes will only be accepted for Best Value Selections | 7 pages (MDOT Forms not counted) | 14 pages (MDOT forms not counted) | Total maximum pages for RFP **not including key personnel resumes.** Resumes limited to 2 pages per key staff personnel. |

**PROPOSAL AND BID SHEET EMAIL ADDRESS –** mdot-rfp-response@michigan.gov

## GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

## MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

**5100D** – Request for Proposal Cover Sheet
**5100J** – Consultant Data and Signature Sheet (Required for all firms performing non-prequalified services on this project.)

**(These forms are not included in the proposal maximum page count.)**

# REQUEST FOR PROPOSAL



The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest (Consultant/Vendor Selection Guidelines for Services Contracts."

## RFP SPECIFIC INFORMATION

☑ ENGINEERING SERVICES ☐ BUREAU OF TRANSPORTATION PLANNING ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☑ NO ☐ YES DATED_____ THROUGH _____

☑ **Prequalified Services** – See the attached Scope of Services for required Prequalification Classifications.

☐ **Non-Prequalified Services** – If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, is on file with MDOT's Office of Commission Audits
This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.
**Form 5100J is required with proposal for all firms performing non-prequalified services on this project.**

☑ **Qualification Based Selection** - Use Consultant/Vendor Selection Guidelines.

**For all Qualifications Based Selections,** the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**For a cost plus fixed fee contract,** the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualification Based Selection / Low Bid** – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected.

☐ **Best Value** – Use Consultant/Vendor Selection Guidelines, See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required – no proposal required.)

## BID SHEET INSTRUCTIONS

Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) with the proposal, to the email address: mdot-rfp-response@michigan.gov. Failure to comply with this procedure may result in your bid being rejected from consideration.

## PARTNERSHIP CHARTER AGREEMENT

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the **ACEC-MDOT Partnership Charter Agreement** and are asked to follow all communications, issues resolution and other procedures and guidance's contained therein.

**NOTIFICATION**
**MANDATORY ELECTRONIC SUBMITTAL**

## Proposals submitted for this project must be submitted electronically.

**The following are changes to the Proposal Submittal Requirements:**

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section

- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

**The following are Requirements for Electronic Submittals:**

- Proposals must be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include "N/A" after the bookmark title.
  **Example**: Understanding of Service – N/A
- Proposals must be assembled and saved as a single PDF file
- PDF file must be 5 megabytes or smaller
- PDF file must be submitted via e-mail to MDOT-RFP-Response@michigan.gov
- MDOT's requisition number and company name must be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals must be *received* by MDOT on or before the due date and time specified in each RFP

**If the submittals do not comply with the requirements, they may be determined unresponsive.**

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. **Consultants are responsible for ensuring the MDOT receives the proposal on time.**

****Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response****

**Required Bookmarking Format:**

I. Request for Proposal Cover Sheet Form 5100D
   A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
II. Understanding of Service
   A. Innovations
III. Qualifications of Team
   A. Structure of Project Team
      1. Role of Firms
      2. Role of Key Personnel
   B. Organization Chart
   C. Location
IV. Quality Assurance / Quality Control Plan
V. Resumes of Key Staff
VI. Pricing Documents/Bid Sheet (if applicable)

**2/14/12**

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**NOTIFICATION**
**E-VERIFY REQUIREMENTS**

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: http://www.dhs.gov/E-Verify.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

9/13/12

**Michigan Department of Transportation**

**SCOPE OF SERVICE**
**FOR**
**DESIGN SERVICES**

**CONTROL SECTION(S):** 14051

**JOB NUMBER(S):** 112356C

**PROJECT LOCATION:**
The project is located on M-40 along the shore of Bair Lake and 0.75 miles south of M-60 in Porter Township, Cass County. The project length is 0.1 miles.

**PROJECT DESCRIPTION:**
Work involved in the design of the project consists of:
Shoulder reconstruction, hot mix asphalt cold milling and resurfacing, curb and gutter, storm sewer, temporary traffic signals, and right-of-way acquisition for drainage improvement.

**ANTICIPATED SERVICE START DATE:**
July 15, 2016

**ANTICIPATED SERVICE COMPLETION DATE:**
July 31 , 2018

**DBE PARTICIPATION REQUIREMENT:**
None

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**
Design-Roadway: Intermediate

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**
Design- Hydraulics I
Design - Traffic: Pavement Markings
Design – Taffic: Signal
Deisgn – Traffic: Signal Operations
Design – Traffic: Work Zone Maintenance of Traffic.
Surveying, Road Design

**PREFERRED QUALIFICATIONS AND CRITERIA (FOR NON-CLASSIFIED SERVICES):**

1) UTILITY COORDINATION
**X** MDOT shall be responsible for project Utility Coordination

**MDOT PROJECT ENGINEER MANAGER:**

Kyle Rudlaff
Southwest Region Cost and Scheduling Engineer
Region/TSC/Office: Southwest Region
Address: MDOT Southwest Region Office, 1501 E. Kilgore Road, Kalamazoo MI, 49001
Phone Number: 269-337-3928
Fax Number: 269-337-3750
E-mail: rudlaffk@michigan.gov

**CONSTRUCTION COST:**

A. The estimated cost of construction is:

| | | |
|---|---|---|
| **1.** | **Mainline Pavement** | **$ 130,000** |
| **2.** | **Drainage** | **$ 80,000** |
| **3.** | **Maintaining Traffic** | **$ 75,000** |
| **4.** | **Permanent Pavement Markings** | **$ 5,000** |
| **5.** | **Mobilization/Staking/Minor Traff** | **$ 50,000** |
| **6.** | **Miscellaneous** | **$ 25,000** |
| | **CONSTRUCTION TOTAL** | **$ 365,000** |

B. The estimated cost of real estate is: $ 25,000

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

**If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.**

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Published MDOT Design Advisories, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

The Consultant is required to use the MDOT Current Version of Bentley Microstation/GEOPAK or PowerGEOPAK (published at Section 2.2.2 of the Design Submittal Requirements) with the current MDOT workspace (published at Section 2.2.1 of the Design Submittal Requirements). 3D Models are required for all applicable projects. See Chapter 2 of the Design Submittal Requirements for a complete listing of applicable projects. The consultant shall comply with all MDOT CADD standards and file naming conventions.

## MISCELLANEOUS INFORMATION:

A. MDOT has performed the design survey. Survey work requested is for supplemental topographical data collection only. This task is only performed as requested by the MDOT project manager and limited to 20 hours. See Attachment A.

B. Geotechnical services are not requested. The slope stability associated with this improvement has been investigated and evaluated by MDOT.

C. This drainage improvement is being made to control M-40 storm flow and discharge it at toe of slope. The proposed outlet location is near the existing surface mounted downspout pipe at the approximate low point of the M-40 profile.

D. The improvement concept is to reconstruct the west half of the M-40 southbound lane and entire M-40 southbound shoulder. Install storm sewer and curb for approximately 500 feet along M-40 southbound to collect storm water and discharge at toe of slope. Replace guardrail in same alignment as existing. Resurface entire width of M-40 pavement and shoulders with top course for 500 feet. Acquire MDOT drainage easement for proposed outlet. A design exception for shoulder width will be requested. The M-40 profile will not be improved for the sake of flatter grades or longer sight distance. Provide desirable superelevation rates achievable with milling and single course resurfacing, while avoiding shoulder widening and roadside slope work on M-40 northbound. Design exception will be requested for superelvation to avoid expansion of reconstruction and grading limits if necessary. Incorporate existing lake access stairs into proposed road work.

E. Non-freeway signs are not impacted by this work.

F. One lane of M-40 traffic will be maintained in alternating directions with temporary traffic signals located outside the limits of work.

G. MDOT will solicit existing utility information. The Consultant must post utility locations to the plans and identify any conflicts with proposed work. Minimize utility impacts and use a matrix spreadsheet to track conflict resolution.

H. Removal, construction, and profile plan sheets with 1” = 40’ scale are required for this project.

## MDOT RESPONSIBILITIES:

A. Schedule and/or conduct the following:
   1. Project related meetings
   2. Base Plan Review
   3. The Plan Review
   4. Omissions/Errors/Check
   5. Utility Coordination Meeting

6. Final Trnsport item cost estimates

B. Furnish pertinent reference materials.

C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.

D. Obtain all permits for the project as outlined in previous section.

*E.* Coordinate any necessary utility relocation(s).

F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

**CONSULTANT RESPONSIBILITIES:**

Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

A. Perform design surveys.

B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.

C. Compute and verify all plan quantities.

D. Prepare staging plans and special provisions for maintaining traffic during construction.

E. Provide solutions to any unique problems that may arise during the design of this project.

F. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

G. Maintain a Design Project Record in ProjectWise, which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

H. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).

I. The Consultant shall prepare and submit in ProjectWise (in PDF format) a CPM network for the construction of this project.

J. The Consultant representative shall record the minutes and submit in ProjectWise (in PDF format), for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for The Plan Review Meeting.

K. The Consultant will provide to MDOT, by entering into MDOT ProjectWise at the scheduled submittal dates, electronic documents (in PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.

L. Prepare and submit electronically (native format or PDF) into MDOT ProjectWise, any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.

M. Attend any project-related meetings as directed by the MDOT Project Manager.

N. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.

O. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.

P. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

Q. The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the

course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.

R. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.

S. The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW).
This information can be obtained through Joe Rios, Utilities/Permits Section, Development Services Division at (517) 241-2103.

T. On the first of each month, the Consultant Project Manager shall submit in ProjectWise a monthly project progress report to the Project Manager.

**DELIVERABLES:**

The Consultant shall enter in MDOT ProjectWise, in the appropriate folders all electronic files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Designer Templates etc.) as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are published monthly to the MDOT website. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted, to MDOT ProjectWise, in the appropriate folders, in their native format with standard naming conventions as well as combined into one PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capture a legally signed document or a hard copy version of a document is all that exists.

Plan sheets shall be submitted to MDOT ProjectWise in the appropriate folders in a set in PDF 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the PDF set. The original title sheet shall be sent to the MDOT Project Manager.

Reference Information Documents (RID) shall be entered into MDOT ProjectWise in the appropriate folder with standard naming conventions and content at milestone submittals as defined by Chapter 4 of the Design Submittal Requirements. The RID files included will depend on the design survey deliverables and project template (See Chapter 2 of the Design Submittal Requirements). These files range from CADD, existing terrain, proposed cross sections, 3D

models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the txt and xml files necessary for import into the Trns*port bid letting software. The SAPW files shall be entered into MDOT ProjectWise in the appropriate folder.

The project removal, construction, and profile sheets will require a scale of **1"=40' or as approved by the Project Manager.** See Section 1.02.12 of the Road Design Manual for further direction.

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

**PROJECT SCHEDULE:**

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

MDOT
Preconstruction Tasks
Consultant Checklist
P/PMS Form Only

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Version 13
Updated
03-02-2015

*For questions on specific tasks, refer to the P/PMS Task Manual located on the MDOT Website.*
*For assistance in accessing this manual, please contact:*
***Dennis Kelley: (517) 373-4614***

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the P/PMS Task Manual for more details. Scheduling assistance may be accomplished with estimated completion dates. While not part of P/PMS, an Authorization Milestone and Post-Design Tasks have been included for your reference.

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

## PRELIMINARY ENGINEERING - DESIGN

| YES | NO | P/PMS TASK NUMBER AND DESCRIPTION | | DATE TO BE COMPLETED BY (mm/dd/yyyy) |
|---|---|---|---|---|
| | | **DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION** | | |
| X | ☐ | 3130 | Verify Design Scope of Work and Cost | 8/10/2016 |
| ☐ | X | 3310 | Prepare Aerial Topographic Mapping | / / |
| ☐ | X | 3320 | Conduct Photogrammetric Control Survey | / / |
| ☐ | X | 3321 | Set Aerial Photo Targets | / / |
| ☐ | X | 3325 | Geotechnical Structure Site Characterization | / / |
| X | ☐ | 3330 | Conduct Design Survey | 5/26/2017 |
| ☐ | X | 3340 | Conduct Structure Survey | / / |
| ☐ | X | 3350 | Conduct Hydraulics Survey | / / |
| X | ☐ | 3360 | Prepare Base Plans | 11/01/2016 |
| ☐ | X | *311M* | *Utility Notification* | / / |
| ☐ | X | 3365 | Pre-Conceptual ITS Design and Meeting | / / |
| ☐ | X | 3370 | Prepare Structure Study | / / |
| ☐ | X | 3375 | Conduct Value Engineering Study | / / |
| ☐ | X | 3380 | Review Base Plans | 11/15/2016 |
| ☐ | X | 3385 | Preliminary Load Rating | / / |
| ☐ | X | *332M* | *Base Plan Review (Pre-GI Inspection)* | 11/15/2016 |
| X | ☐ | 3390 | Develop the Maintaining Traffic Concepts | 10/03/2016 |
| | | **PRELIMINARY PLANS PREPARATION** | | |
| ☐ | X | 3500 | Develop Transportation Management Plan | / / |
| ☐ | X | 3510 | Perform Roadway Geotechnical Investigation | / / |
| ☐ | X | 3520 | Conduct Hydraulic/Hydrologic and Scour Analysis | / / |
| X | ☐ | 3522 | Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices | 1/31/2017 |
| ☐ | X | 3530 | Geotechnical Foundation Engineering Report | / / |
| ☐ | X | 3535 | Conduct Str. Review for Arch. & Aesthetic Improvements | / / |
| X | ☐ | 3540 | Develop the Maintaining Traffic Plan | 2/28/2017 |
| X | ☐ | 3551 | Prepare/Review Preliminary Traffic Signal Design Plan | 2/28/2017 |
| X | ☐ | 3552 | Develop Preliminary Pavement Marking Plan | 2/28/2017 |
| ☐ | X | 3553 | Develop Preliminary Non-Freeway Signing Plan | / / |
| ☐ | X | 3554 | Develop Preliminary Freeway Signing Plan | / / |
| X | ☐ | 3555 | Prepare/Review Preliminary Traffic Signal Operations | 2/28/2017 |
| ☐ | X | 3570 | Prepare Preliminary Structure Plans | / / |
| X | ☐ | 3580 | Develop Preliminary Plans | 2/28/2017 |
| ☐ | X | 3585 | Final ITS Concept Design and Meeting | / / |
| ☐ | X | 3590 | Review The Plans | / / |
| X | ☐ | *352M* | *THE Plan Review Meeting* | 4/14/2017 |
| ☐ | X | 3595 | Conduct ITS Structure Foundation Investigation | / / |

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

## PRELIMINARY ENGINEERING - DESIGN (cont'd)

| YES | NO | P/PMS TASK NUMBER AND DESCRIPTION | | DATE TO BE COMPLETED BY (mm/dd/yyyy) |
|---|---|---|---|---|
| | | **UTILITIES** | | |
| ☐ | X | 3610 | Compile Utility Information | / / |
| ☐ | X | 3615 | Compile ITS Utility Information | / / |
| ☐ | X | 3650 | Coordinate RR Involvement for Grade Separations | / / |
| ☐ | X | 3655 | Coordinate RR Involvement for At-Grade Crossings | / / |
| ☐ | X | 3660 | Resolve Utility Issues | / / |
| ☐ | X | *360M* | *Utility Conflict Resolution Plan Distribution* | / / |
| ☐ | X | *361M* | *Utility Meeting* | / / |
| ☐ | X | 3670 | Develop Municipal Utility Plans | / / |
| ☐ | X | 3672 | Develop Special Drainage Structures Plans | / / |
| ☐ | X | 3675 | Develop Electrical Plans | / / |
| ☐ | X | 3680 | Preliminary ITS Communication Analysis | / / |
| ☐ | X | 3690 | Power Design (Power Drop in Field) | / / |
| | | **MITIGATION/PERMITS** | | |
| ☐ | X | 3710 | Develop Required Mitigation | / / |
| X | ☐ | 3720 | Assemble Environmental Permit Applications | 5/10/2017 |
| ☐ | X | 3730 | Obtain Environmental Permit | / / |
| | | **FINAL PLAN PREPARATION** | | |
| ☐ | X | 3815 | Geotechnical Structure Design Review | / / |
| X | ☐ | 3821 | Prepare/Review Final Traffic Signal Design Plan | 8/01/2017 |
| X | ☐ | 3822 | Complete Permanent Pavement Marking Plan | 8/01/2017 |
| ☐ | X | 3823 | Complete Non-Freeway Signing Plan | / / |
| ☐ | X | 3824 | Complete Freeway Signing Plan | / / |
| X | ☐ | 3825 | Prepare/Review Final Traffic Signal Operations | 8/01/2017 |
| X | ☐ | 3830 | Complete the Maintaining Traffic Plan | 8/01/2017 |
| X | ☐ | 3840 | Develop Final Plans and Specifications | 8/01/2017 |
| X | ☐ | *380M* | *Plan Completion* | 8/01/2017 |
| ☐ | X | 3850 | Develop Structure Final Plans and Specifications | / / |
| X | ☐ | 3870 | Hold Omissions/Errors Check (OEC) Meeting | 9/15/2017 |
| ☐ | X | 3875 | Final Load Rating | / / |
| X | ☐ | *387M* | *Omissions/Errors Checks Meeting* | 9/15/2017 |
| X | ☐ | *389M* | *Plan Turn-In* | 10/6/2017 |

| | | | | | |
|---|---|---|---|---|---|
| ☐ | X | 3880 | CPM Quality Assurance Review | / | / |
| ☐ | X | 3890 | Final ITS Communication Analysis | / | / |

## MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

**CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

All billings for services must be directed to the Department and follow the current guidelines. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

MDOT will reimburse the consultant for **vehicle expenses and the costs of travel** to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418. MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay **overtime** in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

**ATTACHMENT A**

**SCOPE OF SERVICE**
**FOR**
**DESIGN SURVEY**
As of October 2015

Survey Limits: As needed for Design, Right of Way, and Construction. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

**NOTES**: The Selected Consultant shall discuss the scope of this survey with an MDOT Region Surveyor or an MDOT Lansing Design Surveyor before submitting a priced proposal.

The Selected Consultant surveyor must contact the Region or TSC Traffic and Safety Engineer for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan** **must** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as horizontal control, leveling, mapping, alignment determination, etc., **must** be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

**GENERAL REQUIREMENTS:**

1. Surveys must comply with **all Michigan law** relative to land surveying.

2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan.

3. Work in any of the following Survey Services Categories: Surveying: Hydraulics, Surveying: Right of Way, Surveying: Road Design, Surveying: Structure and Surveying: Geodetic Control and Leveling must be completed by a survey firm which is pre-qualified by MDOT for that category.

4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated May 2014, except for naming conventions. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.

5. Consultants must obtain all necessary permits required to perform this survey on any

public and/or private property, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section.

6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).

7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.

8. The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.

9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.

10. The Horizontal and Vertical datums and coordinate system must be clearly stated in the Survey Work Plan and subsequent submittal. For acceptable datums and coordinate systems refer to the MDOT Design Surveys *Standards of Practice*, which can be found on the MDOT Design Survey ftp site.

12. **Electronic submittal only.** Each structure must be submitted separately.

13. Each Survey Project Folder is divided into six sections. These sections are as follows: **Admin**, **Align & ROW**, **Control**, **Mapping**, **Misc**, and **RID** (Reference Information Documents).

14. To be included in the **Admin** section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, May 2014 revision, available from the MDOT Survey Support Unit. This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. It is highly recommended that the consultant become familiar with this document prior to preparing the proposal and again prior to assembling the final portfolio. **Failure to use and include this document may result in the immediate return of the project portfolio for completion.**

15. <u>All</u> submitted files must be scanned and/or converted to one PDF format file. A Table of Contents in PDF format is required that has all PDF files bookmarked/linked so each place in the PDF archive can be accessed with a single click of the computer mouse. Specified format files such as Microsoft Word and MicroStation GEOPAK must have separate access in native format outside of the PDF file.

16. The MDOT Project Manager is the official contact for the Consultant. The Consultant

must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor. **The MDOT Project Manager must be copied on any and all correspondence.**

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT. Please include MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must be sent to the MDOT Project Manager for Design and the MDOT Supervising Land Surveyor.

**Acceptance of this survey by the MDOT Project Manager and/or the MDOT Supervising Land Surveyor does not relieve the Consultant of any liability for the content of the survey.**

**WORK RESTRICTIONS**

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT TSC Traffic and Safety Engineer NAME at PHONE or EMAIL prior to submitting a priced proposal. Traffic Control costs not included in the priced proposal will not be paid by MDOT.

The Consultant must submit a five (5) day advanced notice through the permit system prior to work.

No work shall be performed or lane closures allowed during the Memorial Day, Independence Day, Thanksgiving, Christmas, New Year or Labor Day holiday periods. The holiday periods will be defined by the local Traffic and Safety Engineer which has jurisdiction over the project area.

All work on the road shall be conducted during daylight hours Monday through Saturday only. Lane closures may only occur between the hours of 9:00 am and 2:00 pm, shoulder closures may only occur between the hours of 9:00 am and 3:00 pm. Weekend work is permitted on Saturdays between the hours of 7:00 am and 5:00 pm. Double lane closures are only permitted on Saturdays. *Example; NOT Typical – to be discussed with Traffic & Safety Engineer*

All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD) available on line at http://mdotcf.state.mi.us/public/tands/Details_Web/mmutcdcompleteinteractive.pdf. All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting. Sign covers shall be placed over existing regulatory signs that are not applicable during Survey work.

The Consultant shall use MDOT standard "maintaining traffic" typicals for any and all closures. Typical MDOT traffic control diagrams are available on line at http://mdotcf.state.mi.us/public/tands/plans.cfm

The Consultant may also use MDOT Maintenance Work Zone Traffic Control Guidelines, found on line at http://www.michigan.gov/documents/zonecontrol_112912_7.pdf.

The Consultant must have a vehicle with markings/logo that identifies the company within sight distance of survey activity and must have a 360 degree flashing strobe light on the top of the vehicle whenever they are working on or near the road.

Traffic control on city streets and county roads is under the jurisdiction of the local authorities where the project is located.

**COORDINATION WITH OTHER CONTRACTS IN THE VICINITY**

The Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Consultant.

The Consultant must contact the Operations Engineer at the MDOT Location TSC for information regarding project coordination.

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.08 of the 2012 Standard Specifications for Construction http://mdotcf.state.mi.us/public/specbook/2012/. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete scheduled work.

POST SURVEY CLEAN-UP

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

**FINAL REPORT**: ELECTRONIC SUBMITTAL

The final report for this project shall include:

1. In the **Admin** subfolder, the following will appear:
    - **XXXXXX_Survey_Notes_Receipt_and_transmittal-20YY-MM**
    - **XXXXXX_Survey_20YY-MM-DD.pdf**
        - An Adobe PDF with all of the contents of the portfolio scanned into it and

bookmarked for ease of location within the PDF file. Table of Contents – should appear bookmarked on the left side of the Adobe screen. Note: Upon completion, use Adobe's "Reduce File Size" command.

- **XXXXXX_Surveyors_Report_20YY-MM-DD.pdf**
  - Surveyor's Project Report, divided into subsections, containing a complete synopsis of project survey including, but not limited to:
    - Explanation of any deviation from the Scope and/or the Standards
    - Basis of horizontal and vertical control, with specific emphasis on datum sources used (list CORS and NAVD benchmarks tied), equipment, software, methods used to establish the coordinates and methods used to detect errors and eliminate them. If RTK is used, explain the methodology, equipment and procedure used. Include a detailed explanation relating to CORS usage or site calibration (Base Station) (for level loops, Primary and Intermediate Control networks)
    - Provide a complete discussion of all Alignments relative to the project. Include all information and methods used to determine the location and designation of each.
    - Property boundary issues addressed, with specific information that may be useful for a surveyor to retrace or an engineer during design. If necessary, include a summary of conversations with property owners and their concerns.
    - Any mapping issues encountered, with specific information that may be useful for an engineer during design.
    - Any information obtained regarding drainage issues observed or reported by local authorities or residents should be discussed.
    - Discuss the contents of anything that appears in the miscellaneous section.
    - The signed, sealed, and dated "PROFESSIONAL SURVEYOR'S CERTIFICATION FOR MDOT PROJECTS" as detailed in the MDOT Design Survey Standards of Practice.
      - Alignment information must be certified, signed and sealed by the Professional Surveyor as described in the Alignment section of the Standards of Practice.
      - Mapping information for the project should be summarized per the Standards of Practice.
      - Explanation of how the Reference Point locations were determined.

- **XXXXXX_Vicinity_Map.pdf**
  - Screen capture from Street Atlas, Google Maps, or some other resource, with the POB and POE labeled.
- **XXXXXX_QA/QC_Certification_20YY-MM-DD.pdf**
  - QA/QC Certification, signed and sealed by the lead QA/QC person (See the Standards of Practice Quality Assurance/Quality Control section – Page 24).

- **XXXXXX_MDOT_QA/QC_Checklist_20YY-MM-DD.pdf**
  - MDOT QA/QC Checklist and Certification Statement is filled out, signed and sealed by the Survey QA/QC Manager

A. **Correspondence (**subfolder):

- **XXXXXX_emails.pdf**
  - Copy of all correspondence pertaining to the project saved as a .pdf file.

- **XXXXXX_Phone_Log.pdf**
  - Transcript of all phone conversations pertaining to the project in a .pdf file format.

- **XXXXXX_Meeting_Minutes.pdf**
  - Copy of all Meeting Minutes pertaining to the project in a .pdf file format.

B. **Scopes** (subfolder):

- **Work_Permit_Permit_Name.pdf**
  - Copy of all work permits required for the project.

- **XXXXXX_Advanced_Notice_XXXXX_20YY-MM-DD.pdf**
  - Notice to proceed with work on the project.

- **XXXXXX_Form5102_Change_of_Scope_20YY-MM-DD.pdf**
  - Change of scope form.
  - This forms only needs to be filled out if the scope actually changes

- **XXXXXX_Notice_to_Proceed.pdf**
  - MDOT Form 5180 filled out and added to Scopes Folder

- **XXXXXX_Price_Proposal.pdf**
  - MDOT Price Proposal Package saved as a .pdf, wages and costs redacted

- **XXXXXX_Traffic_Control_Quotes.pdf**
  - Copies of the quotes obtained for traffic control in .pdf format.

- **XXXXXX_Work_Plan.pdf**
  - Detailed Description of the work that will be performed on the project.

2. In the **Align & ROW** subfolder, the following will appear:

- **XXXXXX_132_Survey_Owner_Name.pdf**

- Final Certificate of Survey saved as a .pdf file.
- If multiple surveys are required for a project they should each have a unique name.

- **Deed_C-123.pdf**
  - Copy of each deed used for the project.
  - Each deed saved as a separate file.

- **LCRC_J-10_TXXN_RXXE.pdf**
  - Copy of all LCRC Documents used for the project.
  - Each LCRC saved as a separate document.

- **Plat_Westgate_Park.pdf**
  - Copy of all Plats used for the project.
  - Each Plat saved as a separate document.

- **Tax_Desc_07-26-100-001.pdf**
  - Copy of all Tax Descriptions used for the project.
  - Each Tax Description saved as a separate Document.

- **Tax_Map_10-13H.pdf**
  - Copy of all Tax Maps used for the project.
  - Each Tax Map saved as a separate Document.

- **XXXXXX_Prop_20YY-MM-DD.doc**
  - Document containing all found property monumentation.

- **XXXXXX_Prop_20YY-MM-DD.txt**
  - Text document containing all found property monumentation.
  - Data saved in a comma separated format (csv).
  - Point Number, Northing, Easting, Elevation, Description.

3. In the **Control** subfolder, the following will appear:

- **XXXXXX_GPS_EDM_Control_Comparison.xls**
  - Table comparing GPS grid and EDM ground observations for primary control as described in the Standards of Practice – Item 7 Control

- **XXXXXX_NGS_Mark_Recovery_Form.pdf**
  - Form detailing the NGS marks recovered during the project.

- **XXXXXX_MDOT Monument Establishment**
  - MDOT Monument Establishment Data Sheets of all Primary Control Points established and or used as part of this project (Contact Lansing Survey Office for template).

A. **Horizontal** (subfolder);

- **XXXXXX_Intermediate_Control_Plot.pdf**
  - Plot(s) of the GPS network(s) from GPS software and sketch(s) or plot(s) of network or traverse with legible point numbers.

- **XXXXXX_Primary_Control_Plot.pdf**
  - Plot(s) of the GPS network(s) from GPS software and sketch(s) or plot(s) of network or traverse with legible point numbers.

- **XXXXXX_Primary_Minimally_Constrained_Adjustment_Report.pdf**
  - Input parameters: a-priori, centering error, etc.
  - Raw unadjusted closures,
  - Final coordinates with standard deviations (2 sigma)
  - Vector input data and analysis.
  - Histograms.
  - Error ellipses.
  - Traverse closures.
  - Statistical test results.
  - Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
  - Name of the adjustment program used with version or release.
  - Only Non-trivial vectors used

- **XXXXXX_Primary_Fully_Constrained_Adjustment_Report.pdf**
  - Input parameters: a-priori, centering error, etc.
  - Raw unadjusted closures,
  - Final coordinates with standard deviations (2 sigma)
  - Vector input data and analysis.
  - Histograms.
  - Error ellipses.
  - Traverse closures.
  - Statistical test results.
  - Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
  - Name of the adjustment program used with version or release.
  - Only Non-trivial vectors used

- **XXXXXX_Intermediate_Minimally_Constrained_Adjustment_Report.pdf**
  - Input parameters: a-priori, centering error, etc.
  - Raw unadjusted closures,
  - Final coordinates with standard deviations (2 sigma)
  - Vector input data and analysis.
  - Histograms.
  - Error ellipses.
  - Traverse closures.

- Statistical test results.
- Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
- Name of the adjustment program used with version or release.
- Only Non-trivial vectors used

- **XXXXXX_Intermediate_Fully_Constrained_Adjustment_Report.pdf**
  - Input parameters: a-priori, centering error, etc.
  - Raw unadjusted closures,
  - Final coordinates with standard deviations (2 sigma)
  - Vector input data and analysis.
  - Histograms.
  - Error ellipses.
  - Traverse closures.
  - Statistical test results.
  - Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
  - Name of the adjustment program used with version or release.
  - Only Non-trivial vectors used

- **XXXXXX_OPUS_Observation_Logs.pdf**
  - All OPUS log sheets combined together into one .pdf file

- **XXXXXX_OPUS_Manual_Conversion.pdf**
  - Manual conversion of OPUS Solution from Meters to International Feet.

- **XXXXXX_OPUS_Extended.pdf**
  - Extended output solution from OPUS for all Control Points that have been submitted to OPUS.

- NOTE: The Consultant is responsible to archive raw data for a period of five (5) years.

B. **Vertical** (subfolder):

- **XXXXXX_Data_Sheets.pdf**
  - A copy of all NGS Data Sheets used for the project

- **XXXXXX_V_Minimally_Constrained_Adjustment_Report.pdf**
  - input parameters
  - raw unadjusted closures,
  - final elevations with standard deviations
  - loop closures.
  - Statistical test results.
  - Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
  - Name of the adjustment program used with version or release.

        - OR supply all written calculations to support the final results.
    - Provide separate subfolders for each adjustment which contain the files used in the processing and analysis software. e.g.: Levproc, StarLev, MicroSurvey's StarNet only.

- **XXXXXX_V_Fully_Constrained_Adjustment_Report.pdf**
    - input parameters,
    - raw unadjusted closures
    - final elevations with standard deviations
    - loop closures.
    - Statistical test results.
    - Horizontal and vertical datums, ellipsoid, SPC zone, and units (International Feet)
    - Name of the adjustment program used with version or release.
        - OR supply all written calculations to support the final results.
    - Provide separate subfolders for each adjustment which contain the files used in the processing and analysis software. e.g.: Levproc, StarLev, MicroSurvey's StarNet only.

- NOTE: The Consultant is responsible to archive raw data for a period of five (5) years.

4. In the **Mapping** subfolder, the following will appear:

- **XXXXXX_Struc_Inventory_20YY-MM-DD.xls**
    - Drainage structure inventory report compatible with MDOT software and correlated to the connectivity drawing in Excel spreadsheet format

- **XXXXXX_Connectivity_20YY-MM-DD.dgn**
    - Map of the project area generated from PowerGEOPAK that shows all the drainage structures collected for the project, with lines connecting each structure.

- **XXXXXX_Images_20YY-MM-DD.zip**
    - Digital photos of the structure(s) and end sections or headwalls with names or tags correlating the photo with the information in Drainage Structure Inventory Report. **(Note: If deliverables are generated with SS3 the image should be integrated into the 3D.dgn)**

- **XXXXXX_Utility_List.doc**
    - Word document containing a utility company listing to include company name, address, phone number, and contact person, if required.

- **XXXXXX_Feature_Code.txt**
    - Individual utility / drainage station and offset reports generated by Feature Code in .dgn format drawing.

- e.g.: Catch Basin.txt, if required.

5. In the **RID** (Reference Information Documents) subfolder, the following will appear:

    - **S-XXXXXX_Align_ROW_20YY-MM-DD.dgn**
    - **S-XXXXXX_Align_LandXML_20YY-MM-DD.xml**
    - **S-XXXXXX_Survey_Info_Sheet_20YY-MM-DD.doc**
    - **S-XXXXXX_ControlPts_20YY-MM-DD.txt**
    - **S-XXXXXX_ExTriangle_20MM-YY-DD.dgn**
    - **S-XXXXXX_ExTriangle_LandXML_20YY-MM-DD.xml**
    - **S-XXXXXX_Survey_2D_20YY-MM-DD.dgn**
    - **S-XXXXXX_Survey_3D_20YY-MM-DD.dgn**

6. In the **Misc** subfolder, the following will appear:

    - Data not assignable to one of the other sections may be placed here and must be discussed in the survey report. Examples of appropriate site specific information might be: newspaper articles, photos of the project site looking up and down the roadway, various aspects of a structure, up and down stream and side to side at Hydro chains, etc. Photos shall be submitted in native format and annotated. All items must be included in the master PDF.
    - **Images** (subfolder)
        - This folder contains all pictures taken for the project.
        - All pictures should be sorted into separate sub folders and labeled according to their content for example:
            - XXXXXX_Hydro_Photos
            - XXXXXX_Drainage_Structures