#### **Daily Diary**

Keeping project records, including the preparation, assembly, and preservation of such records is considered one of the most important duties and responsibilities that the Engineer delegates to the Inspector.

Diaries are kept to provide a complete narrative picture of the project, covering both the normal work processes and anything unusual that might have occurred on the project. The diary is used to document work progress, site conditions, labor and equipment usage, and the contractor's ability (or inability) to perform his/her work, and can provide valuable information necessary to accurately reconstruct the events of the project in preparation of a claim. It is a collection point for many of the project's pertinent facts arrange in any chronological order. It may show: how questions were answered, how problems were solved, and unusual conditions pertaining to working days charged. In maintaining these reports, project personnel must be consistent in recording the events and activities on the job, particularly those relating to claims or potential claims. Daily diaries are the key to claims avoidance and mitigating damages. It is also available for reference long after the work is complete.

Failure to record an event carries with it the implication that the event did not occur or was insignificant and threatens the credibility of the entire log.

- The diaries and daily or other reports are meant to supplement each other and do not need to contain identical information.
- The diaries and other reports are public record and may be used in case of litigation.
- Include only factual information in them.
- Minimize personal remarks, which may not be factual, about operations or personnel of the Contractor, Agency, or other organization. Such remarks may be used to demonstrate the inspector was hostile and did not behave in a manner consistent with good faith.
- All entries should be clear, neat, and most importantly, legible.
- Summarize key points of any discussion of work activities with the Contractor.
- Be specific.

Each technician assigned to a supervisory position or as Inspector of a major phase of a contract such as grading, bridge, or street inspection is encouraged to keep a diary. An Engineer or Project Supervisor exercising supervision of a project need not maintain a daily diary; however, entries should be made in an Inspector's diary whenever an event occurs that is likely to require personal involvement later. Diaries must be kept for each separate contract even though there may be two or more contracts within the same general area that involves the same contractor and engineering personnel. The diaries will become an important part of the project records if the project is subjected to audit, investigation, or litigation. To be effective, all entries should be accurate and concise yet complete enough so that the writer can recall the events early. No personal opinions or editorial comments are to be made in any diary that is a part of the project records.

All diaries are to be kept in bound field notebooks or in an approved electronic format. Each book is to be labeled and indexed but pages need not be numbered since all entries are dated. Label the complete

set of diaries uniformly; place the project, highway, and contract numbers on the front cover, together with other information indicating the scope and contents of each book.

Entries are to be made each day the diarist is on or involved with the project. The entry for each day must be dated. Note all critical changes at the time of change. Entries should be referenced to the appropriate stationing or other convenient reference.

When the project is small or will only require a <u>minimum</u> amount of staking, supervision or inspection, all entries may be made in one book, which will be known as the project diary.

#### **Engineer's Diary/Project Diary**

The Project Engineer is responsible for ensuring that a Project Diary is kept current for every construction contract. The Project Engineer may delegate the responsibility of keeping the project diary to the Chief Inspector. The Project Diary is a recorded collection of events, data, occurrences, instructions, situations, circumstances, and work performed each day during a construction project. Data is collected on every phase of work performed by a contractor, subcontractor, or utility company. Recorded information must be clear, detailed, accurate, complete, and objective. Anyone reading the Project Diary should be able to comprehend the project status and determine work performed. The Project Diary should be used to record all matters of importance which are not covered by other routine reports or may contain a record of routine matters if the circumstances are unusual, conferences with the Contractor, agreements made, special notes regarding equipment or organization, labor conditions, weather or other causes for delays if of any consequence, and any other matters that might have a bearing on the completion of the project.

#### Entries that may prove helpful include:

- Weather conditions affecting operations and temperature range. Identify days when crews were sent home or were unable to work due to weather or field conditions.
- Contractor's work force, equipment, and hours worked. Describe inefficient operations and poorly maintained equipment.
- Description of major construction activity. Include locations and approximate quantities. Description of any extraordinary work being performed.
- Controlling item(s) of work.
- Comments on the progress of operations as compared to the Contractor's approved schedule.
- Suspensions and resumptions of contractor operations. Causes and dates should be recorded.
- Utility operations. Report on their progress, conflicts with contractor operations and any resultant delays, and quality of workmanship as it affects the project.
- Summary of significant conversations. Include orders to the contractor, especially those
  pertaining to work schedule, work methods, materials, or payment; directions and advice from
  supervisor, and discussions with FHWA representative, property owners, local officials, and
  utility and railroad representatives.
- Reports of meetings and conferences. Record all sources of dispute and subsequent decisions.
- Comments on construction safety hazards and corrective measures.

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- Unusual or materially different physical working conditions from those expected under the contract. Record all significant information about the working conditions, progress of work, working force, equipment and materials, which would be of value should the contractor file claims for extra compensation.
- Disagreements with the Contractor over work quality or performance, including rejected work or materials and reasons.
- Delays, difficulties, accidents, utility damages, and other unusual conditions.
- Lane closures, traffic disruptions, etc.
- Days charged and days worked. If no day is being charged, the reason for lost time days or periods when no work is in progress or no work was accomplished and reasons why.
- Describe factors or conditions that may hinder the Contractor's operations and cause delays. Also, include the time of suspending or resuming work and explanations.
- Significant information on other work operations if not recorded in a separate field inspection diary.
- Major discrepancies in the contract. Necessary changes and subsequent actions taken to correct the situation should be recorded.
- Work or materials rejected and why.

#### **Inspector's Diary**

Each Inspector who is charged with the responsibility of reporting a construction activity must keep a daily diary. Ordinarily, separate diaries should be kept for such major construction items as grading, bridge, base and surfacing construction; for plant production of aggregates, concrete and bituminous mixtures and for specialty items such as fencing, lighting and signing. These, however, depend on the size and scope of the contract. In any event, all construction operations must be covered whether in a single diary or in separate diaries. When the contractor operates on a multiple shift basis the entry for each succeeding shift is made in the same diary under the date on which the shift started. The Inspector on each shift is responsible for making and signing his/her own record.

The inspector's daily diary should include a record of the day's happenings, contractor activity on the project, instructions given the contractor, and extra work order agreements made. Daily diaries can assume legal importance.

If a diary is lost, stolen, or otherwise misplaced, a new diary should be started immediately. The first entry in the replacement diary should document the conditions relative to the loss of the original diary and then continue with the usual diary entries for the remainder of the project.

Inspectors should include in their diaries all decisions made and all actions taken each day, material record and progress estimates and other information, which might be of assistance in case of dispute. When one individual makes all entries in a diary, a statement to this effect, along with that individual's signature may be placed on the front page of the diary. Otherwise, the person making the entry must sign each separate entry.

#### Entries that may prove helpful include:

• Weather conditions and how they affect operations

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- Contractor forces, equipment, materials used, and hours worked.
- Detailed description of work, including location, sizes, quantities and methods, the quality of workmanship, difficulties encountered and method of correction.
- Percent of delays, reasons for the delays and subsequent corrections by the contractor.
- Inspection checks, tests and samplings. Material accepted on visual inspection or material rejected.
- Information as to time, materials, working force and equipment used for authorized extra work, i.e., claims, force account.
- Instruction from Mn/DOT representatives.
- Instructions given to the contractor.
- Requests from the contractor and disposition of those requests.
- Contact with property owners, utilities, the public, and others.
- Contractor compliance with specifications.

Remember to date each page (include year) and sign each entry.

The diary should be turned into the District Office upon completion of the contract work.

#### For Projects with Utility Agreements

Document the Utility company's time, workforce, equipment on the diary; this replaces the daily Utility Report. Document any overtime worked by Utilities. The Utility company may be added to the diary similar to the method used to add Contractors.

#### **Survey Chief's Diary**

Survey Chiefs may keep a diary. If they do, it should include a brief listing of the survey crew activities for each day, indicating the progress of staking operations, difficulties encountered, contact with the contractor, any resetting of stakes necessary, and other information indicating the sequence and adequacy of construction surveying.

Also included, along with the date, weather, and temperature data, should be the names of the individuals working in the survey party each day. The person making the entry must sign each daily entry, unless one individual makes all entries in which case that person should sign the diary on the front page.

### Critical Path Management (CPM) Projects - Weekly Diary and Working Day Documentation

Projects that utilize 1803.1 CPM Special Provisions and their accompanying modifications to Special Provisions 1804, 1806 and 1807 will not be required to submit a Weekly Diary or Statement of Working Days to the contractor, nor be required as part of the finals package. It is still advisable to maintain project records documenting conditions that affect work in a Daily Diary or Daily Report.

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#### **Photography as Documentation**

Should the project ultimately become immersed in a dispute, job photos can serve as an important element in the presentation of facts surrounding the details of a claim.

You may be asked to recall details of what you saw at the site some months or years after the site visit. Nothing will refresh your memory as well as a good photograph. Photographs provide excellent evidence, and are one of the least challenged tools used to document a case.

Take a lot of pictures. The most common problem is too few photographs. Photographs should be of high quality and should illustrate the facts of the site as accurately as possible. Know what the issue is that you're trying to document. Photographic documentation should tell the story with as little need for narrative as possible.

Remember, size and distance of objects in photographs can often be deceiving. Think about including a reference point in your photographs - a person, a notebook, a pen, or ruler are examples of common objects that can give a sense of scale to other objects in the picture. Remember too that photographs can also distort or understate conditions. Try to be objective in making your visual record. It is helpful to take a series of photos from varying perspectives as described below.

- Establish a reference: Take photos from a distance to establish perspective. Show the subject in reference to one or more permanent landmarks. If helpful, show the compass orientation of the subject.
- Medium shots: Take multiple photos to depict the object or event in context of the immediate surroundings. Shoot a series from all angles.
- Tight or Detail shots: Focus on the issue under review; photos should identify the specific item or event in question.

#### Type of Camera and Photographic Media

The following types of cameras are acceptable for use in the field:

- Digital camera.
- 35 mm still camera.
- Video camera.

Do not use a Polaroid camera to document case evidence. Polaroid photos are not very useful for evidentiary purposes because they can't easily be enlarged or duplicated with quality.

### Instructions for Taking Pictures and/or Video

Photographs/videos should be taken from the perimeter of the area in toward the center in increasingly close shots. Be sure to capture all objects and markings thoroughly so they can be identified later. Pencils, rulers, pens, and similar familiar objects--even a person--can provide a reference to the sizes of objects in the frame.

#### Important notes:

- Use natural light wherever possible, even if you must use fast film.
- Never videotape a violation scene with the recording microphone turned on. It is easy to reach
  erroneous conclusions, make other verbal mistakes, or make disparaging or prejudicial
  comments during a live narration. The video should be supported by live testimony later in the
  case without any taped comments that conflict with sworn testimony. Remember you cannot
  erase taped verbal errors.
- Be aware that you may need permission to record someone.

#### **Identification of Photos/Videos**

Identifying information must be written on the back of each picture (for prints) and/or in a "photo log" (for all types of cameras).

Documentation should include the following:

- Type of camera, film, and/or video equipment used.
- Date/time the picture/video was taken.
- Film roll/frame number (for 35 mm still cameras).
- A brief description of the photograph's location, content, or what is being documented, and direction of the view depicted in the picture. Names of individuals present when the picture was taken and their place of employment and position.
- Light conditions and/or weather.
- Person's name who took the picture(s) and his/her signature or initials.
- Chain of custody on the photographs or video.

#### Storage of Photographs/Videos

- Prints and negatives keep with the photo log in the field staff file. Photos should NOT be attached to sheets of paper with tape.
- Digital photo files copy to a CD/DVD marked with the date/location and keep with the photo
  log in the field staff file. Backup copies can be kept in a secure electronic file location. This
  location should be noted in the field staff file.
- Videotapes keep in their individual cases, marked with the date/location and keep with the photo log in the field staff file.

#### Suggested Photos:

#### **Preliminary Photos**

Prior to construction, take photos over the entire project. Include:

- areas that are not to be disturbed,
- areas of unusual terrain,
- · existing structures and water courses which are to be replaced or altered,
- existing road conditions,

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other locations where changes of interest will occur.

#### **Progress Photos**

As construction progresses, take photos showing:

- intermediate stages of work,
- equipment and adequacy,
- construction methods employed,
- other indications of progress.

#### **Feature Photos**

During construction, take photos of all features of special interest and significance:

- special construction methods
- new equipment and experimentations,
- subsurface or latent physical conditions

#### **Final Photos**

Upon completion of the project, photos should be taken over the entire project as "repeats" of the preliminary photos to show the end results. Other photos should be taken as necessary to show the completed construction at all points of interest. All repeat photos should be taken from the same camera position as the preliminary photos so the before and after relationship will be a true representation.