III-01.01 Reports and Resources

The designer should consult the following reports and resources as appropriate:

- **Traffic Data.** From the Planning and Programming Division. Information requested from this section includes average daily traffic and ESALs (Equivalent Single Axle Loads).

- **Pavement Condition.** The pavement distress and profile report, and maintenance management system project data are available from the Planning and Programming Division.

- **Old Plans for the Project Area.** Located in the records center are copies of completed projects which show what was constructed. These are used to become familiar with what is in place and what improvements will be necessary to bring the new project up to present standards.

  Also, the Surveys and Photogrammetry Section in the Design Division has a Survey folder for all proposed regrading projects on the R: drive. This folder contains the following information:

  Existing grading plans
  Railroad plats
  Public land records
  Triangulation Station data
  Bench Mark data
  City Plats
  Utility Plats

- **Linear Soils Survey Report and Pavement Design Recommendations.** These reports are furnished by the Materials and Research Division which provide soils recommendations, pavement recommendations (thickness of base and surfacing, class of aggregate, percent asphalt, etc.) and pavement design life. The pavement design life should be included in the design data information on the plan title sheet.

- **Wetland Delineation Report.** The wetland delineation report indicates impacts to any wetlands on the project, and what mitigation must be provided, if necessary. This is provided by the Engineering and Environmental Section in the Design Division. The consultant may provide this data on the projects they are designing.

- **Cultural Resources Report.** The Cultural Resources Report is provided by the Cultural Resource Section of the Design Division. The consultant may provide this report on projects they are designing.

- **Traffic Operations Report.** This report is provided by the Traffic Operations Section of the Planning and Programming Division and provides recommendations with respect to lighting, traffic signals, turning lanes, etc.

- **Survey Data.** After a survey is completed, the project survey data is transmitted to the Records Center by the Surveys & Photogrammetry Section of the Design Division.

- **Safety Review.** Completed by the Traffic Section in the Design Division. For proposed safety improvements, see Section III–14.

- **Right of Way Plats.** Located in the Surveys & Photogrammetry Section in Design Division. For in house projects, the existing ROW plats can also be found in the GIS folder of the NDDOT intranet homepage at http://mydot.nd.gov/.

- **Existing Pavement Structure.** Located on Main Frame or printed in the District Highway Information Booklets.

- **Existing Interstate Grading or Paving Plans.** Located in the Records Center in the basement of the Central Office. **

- **Existing Non-Interstate Paving Plans.** **
Plans are located in the Records Center in the basement of the Central Office.

- **Existing Non-Interstate Grading Plans**. **
Plans are located in the Records Center in the basement of the Central Office.

- **Existing Bridge Information.** Located in the Structure Inventory Abbreviated Master Listing (Bridge Book) or the Structure Inventory & Appraisal (SIA) Sheets in the Bridge Division.

- **Existing Bridge Plans.** Plans are located in Bridge Division's plan files and in the Records Center in the basement of the Central Office.

- **Existing Aerial Photos.** Located in the Aerial Photography Inventory – Photo Lab in the Survey and Photogrammetry Section of Design Division.

****** If unable to find at theses locations, check with the respective District.

III-01.02 Coordination During Plan Preparation Process

Generally**,** the following items need to be coordinated by the designer during the preparation of the plans.

III-01.02.01 Environmental

The designer needs to coordinate with the Engineering and Environmental Section (EES) to obtain the clearances if there is a 4(f) or 6(f) property on the project. See Sections II-05.05.02, II-05.05.03, and II-05.05.04.

If any wetlands are filled or otherwise altered, the designer needs to coordinate with the EES to obtain a 404 permit. See Section II-05.05.06.

If fill is placed in a floodplain, the designer needs to coordinate obtaining a Floodplain Permit. See Section II-05.05.07. If Floodway Authorization is needed, it will be stated in the Solicitation of Views letter from the North Dakota State Water Commission.

If a project lies partially or wholly below the ordinary high water mark of a navigable stream or waterway, the designer needs to coordinate with the EES to obtain a Sovereign Lands Permit. See Section II-05.05.08.

If any work is performed on any bridge, dam, dike, or causeway over or in any port, roadstead, haven, harbor, canal, navigable river, or other navigable water of the United States, the designer needs to coordinate with the EES to obtain a Coast Guard Permit. See Section II-05.05.09.

III-01.02.02 Bridge

The designer needs to coordinate with the Bridge Division if there are bridges and/or box culverts on the project, and what, if any, improvements will be made to them.

III-01.02.03 Right of Way

Generally in the design of a highway project there is a need for right of way of some type. This could also be true for a project designed in the district. The designer or the PCR author should notify the Right of Way Section in the Design Division, by the milestone date or as soon as it is available, of the right of way (R/W) needs for the respective project. Typically this would include but would not be limited to the following:

- Permanent R/W
- Temporary construction easement
- Borrow quantity needed
- Drainage easement

- Relocation assistance if the taking involves an occupied dwelling, business, farm operator or non-profit organization.
- Waste site to dispose of excess material
- Maintenance storage site
- Stockpile site
- Building site
- Request estimate of R/W cost.
- Check if R/W representative needs to go on the field review.

III-01.02.03.01 Right of Way Width For Urban Projects

New construction or major reconstruction on urban or urban extension systems or in cities with less than 50,000 population will normally require that adequate R/W is provided for street hardware, sidewalk and possibly a narrow boulevard. To provide this space will generally require 8 feet from the face of the proposed curb to the R/W. This should be done according to the following procedure:

- The Project Concept Report (PCR) should address the R/W needs from the curb to the R/W line. It should also address any general exceptions to the border width when the dimension is less than 8 feet from face of curb to the R/W line.

- Existing widths less than 8 feet which are not disturbed generally will be allowed to remain if there are no identifiable problems.

- In cases where the border width is reduced to less than 8 feet, the Design Engineer, Planning and Programming Engineer, District Engineers and the representative of the local agency should review the situation and recommend acquiring additional R/W or requesting an exception to the 8 foot width.

- The 8 foot width may be reduced at certain locations such as right turn lanes. The area must still safely provide space for sidewalk and street hardware (lighting, signing, etc.).

- Approval of the PCR by the Deputy Director for Engineering and FHWA, where appropriate, will constitute approval for all location exceptions identified in the report. Any deviations to the 8 foot width during design or construction should be coordinated with the Design Engineer.

III-01.02.04 Traffic Control and Guardrail

Generally, the project will involve traffic control items such as signing, pavement marking, traffic signals, and lighting. Guardrail may also be required. These items should be coordinated with the Traffic Section in the Design Division.

III-01.02.05 Utilities

Generally, there are utilities (gas, electric, water, sewer, telephone, etc.) on every project. In many cases they may be in the way of the proposed improvement. The designer needs to coordinate this with the Utilities Engineer in the Technical Support Section of the Design Division to determine the course of action to take. If the utilities have to be relocated or adjusted, the Utilities Engineer will coordinate this with the respective utility. For consulting engineers, see section III-08.04.

III-01.02.06 Airport Clearance

Whenever the project is near an airport, the designer needs to coordinate this with the Utilities Engineer in the Technical Support Section of the Design Division, who in turn will work with the Federal Aviation Administration to obtain an Airport Clearance. See Section III-17.

III-01.02.07 Special Provisions

There are times when the Standard Specifications don't cover the items to be incorporated into the project. When this occurs and a plan note will not suitably describe the requirements, the designer needs to coordinate with the Engineering Services Section of the Maintenance and Engineering Services Division to have a Special Provision written. See Section III-20.

III-01.02.08 Agreements (Preliminary Engineering, Cost Participation and Maintenance)

When a project involves an urban area, generally the local municipality must participate in the cost of preliminary and construction engineering and do maintenance. The Local Government Division will develop this agreement for cities with a population greater than 5,000. The designer for internally developed projects or the Technical Support Contact for consultant projects needs to coordinate with the Local Government Division and provide needed information.

For a city with a population under 5,000 the Planning and Programming Division will develop the agreement. The designer for internally developed projects or the Technical Support Contact for consultant projects needs to coordinate with the Planning and Programming Division and provide needed information.

III-01.02.09 Railroad Agreements

When the improvements on a project will take place on railroad right of way, the designer needs to coordinate with the Right of Way Section of the Design Division to obtain the necessary document permitting the Contractor to operate on Railroad right of way.

If the proposed work involves a railroad bridge, the designer needs to coordinate with the Bridge Division.

III-01.03 Mobilization

All plans should include a bid item for mobilization.

III-01.04 Plan Review Checklists

Plan review checklists are located in Appendix III-01 A through III-01C and can be found at http://www.dot.nd.gov/designmanual.html under Reference and Forms or under the pull down menu for Chapter 3 Section 1.