



# Scoping Checklist Project Management

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL:</b>	N/A	Yes	No
Design and construction references have been checked, are appropriate and specifically identified by date and/or edition number.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Issues raised and errors found in the review processes (15%, 25%, 30%) are reconciled and/or corrected in the final documents. Consensus has been reached. Comment Resolution sheets have final dispositions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drainage analysis has been completed and reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge Selection Report has been completed and reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The spatial datum (benchmark) has been identified, properly referenced and located in the field, and adjacent existing improvements are referenced to the same datum.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical Report and Pavement design has been reviewed and approved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The 30% plans have been reviewed for constructability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost Estimate is current and accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The IGA requirements have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADOT/FHWA coordination has been conducted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need for public involvement has been evaluated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30% quality has been verified. Final Scoping Document and 30% Plan assembly has been reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plans have been checked by design team in the field within the previous 60 calendar days prior to issue for bid signatures and any resulting issues have been resolved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field review completed by the design team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Design Criteria

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Design year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design speed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Existing and Design year ADT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type of terrain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Average project elevation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard typical section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of travel lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ROADWAY DESIGN CRITERIA:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Roadway width	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lane widths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shoulder widths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear zone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum and minimum slope rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Median configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum allowable superelevation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum and minimum allowable grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum allowable horizontal curve radius and length	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum allowable horizontal deflection without a curve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum allowable vertical curve length and rates of vertical curvature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum allowable vertical grade break without a curve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum stopping sight distance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intersection stopping sight distances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Barrier runout information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>PAVEMENT DESIGN CRITERIA:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Pavement design life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Design Criteria

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
	N/A	Yes	No
<b>DRAINAGE DESIGN CRITERIA:</b>			
Design storm for roadways, culverts and roadside design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pavement drainage design event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applicable method for hydrology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum pipe sizes for roadways and driveways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum and maximum fill cover for pipes and box culverts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum and minimum allowable velocities for the culverts and channels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion and scour protection requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allowable side slopes for channels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requirements for retention and/or detention basins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requirements for storm drain systems design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scour criteria for bridge foundation design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>TRAFFIC DESIGN CRITERIA:</b>			
Pavement marking requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Signing requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Signal requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ITS requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access requirements (driveways and intersections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traffic Operations requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>STRUCTURES DESIGN CRITERIA:</b>			
Design method and requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material Properties for steel (tensile strength, yield strength, modulus of elasticity, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material Properties for concrete (compressive strength, unit weight, modulus of elasticity, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Design Criteria

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>RIGHT-OF-WAY DESIGN CRITERIA:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Minimum R/W requirement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increments for R/W acquisition dimensions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum distance required from cut/fill line to R/W line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stationing requirements for R/W breaks (e.g. only at even stations, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct centerline for R/W dimensioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preferences for Drainage Easement or Slope Easement over new R/W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance requirements around culverts for new R/W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R/W requirements to account for ponding areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>APPENDICES:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Summary of the Technical Memorandum that will become part of the SDR section detailing the design criteria. The contents are defined in the SDR guidelines under the design criteria section.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Drainage

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>EXISTING DRAINAGE CONDITIONS:</b>	N/A	Yes	No
Discuss existing drainage conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify the project watershed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify existing drainage structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field verify and document existing drainage structure information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe the existing drainage patterns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detail all data sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>FLOOD ZONE CLASSIFICATION:</b>	N/A	Yes	No
Describe relevant flood zones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Include a map showing relevant flood zones and their classifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discuss impacts, improvement limitations and required mitigation measures, and application processing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detail data sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>DESIGN FLOWS:</b>	N/A	Yes	No
Identify any off-site flows estimated in previous studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confirm current applicable hydraulic design criteria including rainfall source and analytical methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calculate and discuss off-site flows using applicable analytical method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delineate onsite drainage areas and quantify design peak flows using applicable analytical method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detail all data sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Drainage

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>PROPOSED DRAINAGE CONCEPT:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Present a proposed drainage concept based on the applicable design criteria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify and address all assumption and limitation associated with the proposed drainage concept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify water quality regulations and the need for corresponding mitigation measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ADJACENT IMPACTS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Describe all upstream and downstream impacts caused by the proposed drainage improvements and mitigation measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>DRAINAGE INLETS AND STORM DRAINS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Identify the location and sizes of inlets and storm drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document inlets per maximum allowable street flows, collection structure locations, allowable flow spread criteria, and at other critical areas such as roadway intersections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State allowable types of drainage inlets and grates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State the applicable clogging factors when sizing drainage inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At on-grade inlets, ensure that bypass flows from larger storms discharge at the designated collection point; otherwise, size the structure to capture the maximum design storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For sump locations, ensure that the elevation difference to the nearest grade break is not less than the water depth used in the inlet analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document the allowable sizes, cover and material of storm drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide discussion related to the hydraulic grade line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensure hydraulic grade line at inlet location is sufficiently below the lip of the gutter for the design storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide the flow velocities and ensure that storm drain flow velocity is within acceptable limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide details of any utility conflict and mitigating design.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document all design procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>CULVERT AND CHANNEL DESIGN:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Describe the proposed culvert and channel improvements with regard to the pavement drainage, off-site drainage, and roadside ditch configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Drainage

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>CULVERTS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Discuss the design procedure and any deviation from the existing flow paths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document the allowable culvert sizes and material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide the minimum cover requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide evaluation of the applicable starting conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document water head details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document culvert design impacts and mitigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document the backwater impact from the water head at the upstream side of the culvert and ensure that it is properly incorporated in any upstream conveyance element, such as a wash or a side ditch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide the outlet velocities and ensure that they are within allowable limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document the need for and provide adequate scour protection measures at the culvert outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document that the culvert length, end treatment, and scour protection measures accommodate clear zone requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>CHANNELS/ROADSIDE DITCHES:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Document the roadside design approach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detail the side slopes used in design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document channel velocities and check against the need for appropriate channel lining for scour protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The applied Manning's roughness coefficient are documented and correspond to the type of channel surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document and ensure that the water surface profile meets the design requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State that any applicable lining material accommodates the applicable clear zone requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Drainage

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
	N/A	Yes	No
<b>STORMWATER STORAGE REQUIREMENTS:</b>			
Identify stormwater storage requirements for retention, detention or water quality/first flush applications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document design decisions related to R/W and clear zone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detail and ensure the maximum water depth in the basins meets design requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensure retention basins are drained within specified time through surface percolation or dry wells, if necessary. Conduct percolation tests to identify applicable discharge rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State the design parameters of the basin and provide related data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SCOUR ANALYSIS:</b>			
Evaluate and document whether drainage structures require scour protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discuss scour protection locations and methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide supporting documentation and calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>CONCLUSIONS</b>			
List the report's conclusions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>REFERENCES</b>			
List the report's references	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>APPENDICES:</b>			
All supporting calculations and technical data used in the design.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excerpts from previous studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced copies of plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Electronic Data used in the report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System plan view sheet summarizing the most important drainage calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Bridge Plan & Elevation Sheets

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL INFORMATION:</b>	N/A	Yes	No
Use standard MCDOT plan and profile border	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compile plan and elevation on the same sheet (exceptions may be granted by MCDOT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Follow MCDOT CADD and Drafting Guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>EXISTING PLAN REFERENCES:</b>	N/A	Yes	No
Show existing control information such as section lines, corners, monuments and benchmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing right-of-way and easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing features pertaining to pavement, drainage and vegetative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing roadway features such as pavement, driveways, guardrail, signs and signals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing drainage features such as riprap, streams, pipes, culverts and structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing utility features such as poles, lines, utility boxes and structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing contours (at 1' interval) (exceptions may be granted by MCDOT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>PROPOSED PLAN DETAILS:</b>	N/A	Yes	No
Show proposed alignments such as mainline and crossroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show important points such as POB, PC, PI, PT, POE, and station equations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed right-of-way and easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed design features pertaining to bridge design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed roadway design features such as pavement, driveways, guardrail and cut/fill limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed drainage design features such as riprap, pipes, culverts, ditches and structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Bridge Plan & Elevation Sheets

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>PLAN ANNOTATION AND DIMENSIONING:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Annotate proposed alignments such as mainline and crossroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annotate important points such as POB, PC, PI, PT and POE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide taper rates, begin and end project callouts, tangent length, bearings and station equations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show curve data (PI, Δ, D, T, L and R)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dimension bridge, pavement and right-of-way widths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annotate existing and proposed features such as pavement, drainage, driveways, medians and barriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide match lines with matching station and sheet number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Include North arrow and scale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ELEVATION DETAILS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Show existing ground along the roadway centerline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed bridge superstructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed bridge substructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ELEVATION ANNOTATION AND DIMENSIONING:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Annotate existing ground and proposed deck elevation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show station and elevation at key points, such as begin bridge, pier center line, and end bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show wingwalls or other similar features	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Denote joint types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>NOTES:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
Note design flow and water surface elevations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note bridge length	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note skew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Bridge Typical Section Sheet

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL INFORMATION:</b>	N/A	Yes	No
Use standard MCDOT plan and profile border	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Follow MCDOT CADD and Drafting Guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show bridge typical sections. Include annotation and dimensions of clear roadway, out of bridge, lane configuration, and roadway slope. Sections will include superstructure and substructure (i.e. barriers, deck, girders, piers, columns, drilled shafts, etc.). Annotation must specify type of material and size of individual structures in the typical sections. Must provide control points (alignment locations, etc.) within the typical sections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide general notes that includes but not limited to a general description of construction and design specifications, loads, stresses, and materials. Provide list or table of quantities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide list or table of quantities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Right-of-way

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>TYPICAL SECTIONS:</b>	N/A	Yes	No
Develop a new typical section for significant changes in roadway width	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Develop a new typical section for significant changes in drainage design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Develop a new typical section for significant changes in right-of-way width	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show cut and fill sections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show guardrail and barriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dimension existing and proposed right-of-way widths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dimension total width of the traveled way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>GEOMETRIC CONTROL:</b>	N/A	Yes	No
Show existing and proposed right-of-way with callouts; Dimensions are not needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>PLAN SHEETS:</b>	N/A	Yes	No
Show existing right-of-way and easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show city and county limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show existing parcel boundaries and ownership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Show proposed right-of-way and easements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>NOTES AND QUANTITIES:</b>	N/A	Yes	No
List item notes in a sequential order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use same item note numbers for a particular item throughout the plan set	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide location and quantity of the removal items in the removal section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide location and quantity of the new construction items in construction section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide legend for symbols used on the plan sheets in the notes section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Signal Design

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL:</b>	N/A	Yes	No
Use standard MCDOT sheet border	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the signal new or an upgrade?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display existing R/W, county/city jurisdictional limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dimension existing and any new R/W limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display existing utility features such as poles, OH power lines, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display existing edge of pavement and all driveways near the intersection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display all existing and proposed striping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>FOR SIGNAL UPGRADE PLANS :</b>	N/A	Yes	No
Accurately display existing signal poles, mast arms and cabinet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display existing detection loops and advance loops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display location of existing pull boxes and conduit runs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indicate any removals for existing signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>FOR NEW SIGNAL PLANS:</b>	N/A	Yes	No
Accurately display station and offset location of new signal poles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify power source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display alignment of new signal and pedestrian heads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide callout for quantification purposes for new signal items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accurately display location of proposed new pullboxes and conduit runs (if known)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SIGNAL PLAN INTERSECTION AND OPERATIONAL ISSUES:</b>	N/A	Yes	No
Will special phasing such as split-phasing be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the signal head type and alignment match the signal phasing and operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check pavement elevations for rideability through the intersection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If rural intersection, evaluate need for ramps at corners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check corner radii for design vehicle right turning movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Survey

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

Designer: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Submittal Date: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>FACE SHEET:</b>	N/A	Yes	No
Include as built table with township range and section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>GEOMETRIC CONTROL:</b>	N/A	Yes	No
All secondary control shown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stations and Offset to all monuments and alignments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear designation between construction centerline and monument line when different.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the construction centerline and monument centerline differ at the beginning or end of the project, dimension bearing and distance tie to each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide coordinates of the beginning and ending of the project on construction centerline if not on a physical monument.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annotate all monuments with point numbers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(GC11) The coordinate table should include and Point Name/Number, Northing, Easting, Elevation and Station and Offset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Include the PLSS corner diagram at point appropriate point.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Right of Way shall be on the same station and offset as the construction centerline.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Scoping Checklist Utility

Project Name: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Manager: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

Project No.: \_\_\_\_\_  
 Submittal Date: \_\_\_\_\_  
 Review Date: \_\_\_\_\_

	Reviewer		
	Quality Assurance		
<b>GENERAL:</b>	N/A	Yes	No
Utility list documented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility mapping aquired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility contact list documented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential utility and railroad conflicts identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility prior rights identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential utility and railroad costs identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility Technical Memorandum complete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHERS:</b>	N/A	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>