
Design Public Hearing Displays

Design Manual
Chapter 1
General Information

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A design public hearing display is a CADD-generated color drawing used to present design details for a proposed project. The display is presented on paper to the general public at informational meetings and public hearings. For presentations to the Commission or department staff, it may be projected electronically or presented on paper. The display contains only the information that is relevant for understanding the geographic layout of the project.

Preparation of design public hearing displays requires coordination between the Office of Right of Way, the Office of Design, the Public Involvement Section of the Office of Location and Environment, and the District Office.

Office of Right of Way

As soon as the R1 event (Right of Way - Layout) is complete, the Office of Right of Way sends copies of the plans to the District Office personnel so they can respond about the concerns of the public. Copies are also sent to the Public Involvement Section who is responsible for scheduling the hearing. Right of Way shall inform the Office of Design when this occurs so Design can access the current right-of-way information (see *Automation Process* portion of this document for more details). This ensures that Design and the District Office have consistent information.

The Office of Right of Way is also responsible for all right-of-way information on the public hearing display. Right of Way personnel will create translucent filled shapes for permanent acquisitions and temporary easements and place parcel numbers and the names of property owners at an appropriate scale and orientation.

Office of Design

The Office of Design is responsible for the remainder of the display preparation. Design personnel will create filled shapes for pavement, paved medians, bridges, culverts, and other design features.

As soon as the display is complete, Design personnel shall notify the Public Involvement Section and the District Office so the display can be reviewed.

Public Involvement Section

When the public hearing date is set, the Public Involvement Section will notify the Office of Right of Way and the Office of Design, in writing. This letter will specify the “lock date” when various files, referenced by the display, should be locked to any further changes (see *Automation Process* portion of this document for more information). This date is normally six weeks before the public hearing date.

Changes to Plans

During the six-week period prior to the public hearing, no changes affecting right-of-way will be allowed in the public hearing files unless the Office of Right of Way is in agreement. Right of way may be affected by changes to: alignments, need lines, entrances, ditch widths, foreslopes, driveways, etc. Changes that do not affect right-of-way are allowed. Agreement from the Office of Right of Way is critical so the Office of Design and the Office of Right of Way attend the public hearing with the same plans. Consistency and communication among offices is crucial for a successful public hearing.

Display Review

Approximately three weeks before the public hearing, the Office of Right of Way, the Office of Design, the Public Involvement Section, and the District Office will meet to review the public hearing display. The Office of Design organizes this meeting. All offices and personnel involved must work together to create a successful public hearing.

Printing Plans

Two weeks prior to the hearing date, the Offices of Right of Way and Design will print plans used for the public hearing. This will include plan and profile sheets and cross sections. If alignment changes were permitted by the Office of Right of Way between the six-week lock date and the two-week print date, the plan and profile sheets and the roadway cross section sheets, in the Public Hearing directory, should be updated to reflect the change. The plans must be produced from the locked files, not the office's working files. Coordination between the Offices of Right of Way and Design is required to ensure the plans from both offices are identical.

Features Included on Displays

All projects should have an aerial photography background. Low flight aerials with a high level of detail are preferred.

There are some project features that require a separate display to adequately represent them. These items are:

- Off-site detours
- On-site detours of a complicated nature
- Staging displays
- Enlargements of Critical Areas of a project
- Off-site borrows
- Off-site haul roads
- Mitigation sites

The following table lists the proposed features included on a public hearing display and the color used to represent each feature (see also, the sample legend in the *Examples* portion of this document).

Feature	Color name & number (hwyclr.tbl)
Proposed pavement	Yellow (4)
Proposed paved on-site detour	Yellow (4) with black crosshatch (0)
Proposed granular surface	Orange (6)
Proposed granular on-site detour	Orange (6) with black crosshatch (0)
Proposed painted median	Yellow (4) with black diagonal (0)
Proposed raised median	Black (0)
Proposed sidewalk or bikeway	Purple (111)
Proposed retaining wall	Light green (146)
Proposed noise barrier	Black line (0) with white outline (16)
Proposed bridges	Red (3)
Proposed culverts larger than 48"	Red (3)
Any culverts that drain onto adjacent property outside ROW	Red (3)
Proposed permanent acquisition	Blue (119)
Proposed temporary easement	Tan (40)
Property lines	Red dashed line (3)
Ownership boundary symbol	Red arrows (3)
Permanent acquisition lines	Black dashed line – heavy (0)
Temporary easement lines	Black dashed line – medium (0)
Lot lines	Black dashed line – light (0)
Existing ROW lines	Black line (0)
Corporate lines	Black line (0)
North arrow and scale	Black (0)
Predetermined access location	Black diamond shape (0)
Road closure barricades	Black (0)
Proposed guardrail	Black line with square symbols (0)
Drainage arrows	Green (2)

Borrow areas should be outlined in black and labeled with text as described below. The fill color of borrow areas will be either blue or tan, depending on whether the borrow area falls within a permanent acquisition or a temporary easement, respectively.

All other lines shall be black, including all appropriate photogrammetric survey features.

Text Included on Displays

The text on the display, like the proposed features, should be limited to information required for understanding the geographic layout of the project. All text shown on the display shall be black. The following text should be included:

- Title of the display – This includes the county name, project number, and the date and type of the public involvement event

- Date of the aerial photography background – This should be shown in the lower left corner of each scroll as a month and a year
- Project limits for mainline and sideroads - This includes labeling the mainline with Begin Project/End Project and stationing, and labeling the sideroads with stationing only
- Previous and future projects – If other projects tie into the hearing display project, the roadway should be shown with a dashed outline and a label of either “future project” or “previously discussed project”
- Property owner names and parcel numbers
- Permanent acquisitions already purchased – If early acquisitions have been acquired prior to the lock down date, the owner should be listed as the “State of Iowa”, with the prior landowner’s name in parenthesis
- Mainline roadway name – i.e.: “Proposed U.S. 34” or “Existing U.S. 34”
- Labels for other streets, highways, streams, rivers, and other named waterways – Roadway labels will use the federal, state, or county route number followed by the “911” or “street sign” name in parenthesis
- Roadway stationing – Label the centerline stationing at 500 foot increments
- Borrows – Label as either “surface” or “pond”
- Haul roads – Label if in close proximity to the project
- Proposed roadway closures/obliterations
- Mitigation sites, if finalized
- Corporate limits

All other text (such as horizontal curve data, culvert data, bridge text, and utility text) should not be included.

Other Display Considerations

- For ROW Public Hearing/Information Meeting displays, also include total parcel ownership, if coverage is available, and station callouts
- Access locations will only be shown within access control limits. There are two ways to show access locations on the display, which include access on both sides of the roadway (shown as a solid diamond), or an access location in one direction and a Future Access Location in the other direction (shown as a diamond that is solid in the direction of the access location, but hollow in the other direction). A half diamond should never be shown. In the case where there are only Future Access Locations, no diamond should be shown. Below are a few special cases and how they are to be handled:
 - An interchange ramp with an entrance across from it should be shown as a solid diamond
 - An interchange ramp with no entrance across from it should be shown as a solid diamond in the direction of the ramp, but hollow in the other direction
 - On four lane divided highways, the crossovers will be shown at both access locations and Future Access Locations

- Property lines should not be shown extending to the centerline of the roadway or to the section line, as per ownership deeds. Instead, show the property line extending to the existing ROW line. The existing ROW line, adjacent to the roadway, will also be shown as a property line
- The north arrow, legend, and title should be placed every 6 feet on each scroll using a double black border on a gray shaded block
- The scale should be either 1" = 20' or 1" = 50' for urban projects, and 1" = 100' for rural projects. For metric projects, the scale should be either 1:250 or 1:500 for urban, and 1:1000 for rural
- All construction elements such as proposed pavement, bridges, structures, granular surfaces, sidewalks, retaining walls, and temporary pavement should be opaque. All ROW acquisition and easement elements should be transparent
- Proposed culvert shapes should be broken and omitted under proposed roadway shapes
- If corporate lines, property lines, drainage arrows or text are not legible when displayed against a dark portion of the aerial photography background, they should be outlined in white

Items that should NOT be shown on the display

- Center section symbols
- Temporary easement notes
- Water valves, intakes, electric and telephone lines, tile lines, etc.
- Outline the limits of the proposed ROW
- ROW symbols such as open or filled triangles and hexagons
- Types of ownership such as ¼, ½, life estates, etc.
- Existing pipes
- Township, section, and range information
- Cultural and archeological sites should not be shown. For historical sites, contact the Cultural Resources Section of the Office of Location and Environment for a final decision concerning appearance on the display.

Automation Process



Because a public hearing display may be presented at various times, it is important that the exact same display is presented each time—regardless of any changes made to the Design and ROW working files between presentations.


The following steps describe the general process that should be followed when creating a public hearing display. Following these steps will ensure that the same information is displayed at each presentation. Documentation for specific CADD procedures is available from the Office of Design's Automation Coordination Section (ODAC). Detailed instructions for the following steps are forthcoming.

1. The Office of Design should create a blank MicroStation file under the Design folder of the project directory. The name of this file will be generated using the county, route, and parenthesis portion of Design's project number, followed by an extension of .pub. From this point forward, this file will be referred to as the Design .pub file.
























2. Any MicroStation models required for the public hearing display should be referenced into the Design .pub file. There will probably be several models referenced from Design's .dsn file, as well as a model from Photogrammetry's .pho file, and a model from Right of Way's .row file.
3. Create filled shapes and place the fence plotting outlines in Design .pub.
4. Copy the necessary elements (such as the north arrow, scale blocks, etc.) into Design .pub. Scale and/or rotate them as necessary so they are oriented correctly to match the plotting outlines.
5. After the Public Involvement Section notifies Design and Right of Way of the lock date, Design should copy the Design .dsn file, and change the filename and extension from filename.dsn to filename.dsn.lock. The Office of Right of Way should copy the Right of Way .row file, and change the filename and extension from filename.row to filename.row.lock. At this point, the permissions on the Design and the Right of Way .lock files should be modified so no changes can be made by anyone.
6. The reference attachments to the Design .pub file must now be changed from the Design .dsn and Right of Way .row files to the corresponding new .lock files. From this point on, any changes made to the Design .dsn or the Right of Way .row files will not show up on the public hearing display.
7. Plot the public hearing display (either to paper or to an electronic PDF file, as needed).
8. Lock the Design .pub file after the final plot of the public hearing display has been made.


Examples

The following color examples illustrate (1) a sample legend, and (2) a portion of a sample display.


PUBLIC INFORMATION MEETING NOV. 11, 2004
U.S. HWYS 52, 61, & 151 DUBUQUE CO.
Iowa Department of Transportation

LEGEND

<p> PROPOSED PAVEMENT</p> <p> PROPOSED RAISED MEDIAN OR BARRIER</p> <p> PROPOSED PAINTED MEDIAN</p> <p> PROPOSED GRANULAR SURFACE</p> <p> PROPOSED SIDEWALK OR TRAIL</p> <p> PROPOSED ONSITE PAVED DETOUR</p> <p> PROPOSED ONSITE GRANULAR DETOUR</p> <p> PROPOSED RETAINING WALL</p> <p> BRIDGES AND BOX CULVERTS</p> <p> PROPOSED PERMANENT ACQUISITION</p> <p> PROPOSED TEMPORARY EASEMENT</p>	<p> PROPOSED NOISE BARRIER</p> <p> PROPOSED GUARDRAIL</p> <p> PROPOSED PERMANENT ACQUISITION LINES</p> <p> PROPOSED TEMPORARY EASEMENT LINES</p> <p> EXISTING RIGHT OF WAY LINES</p> <p> EXISTING PROPERTY LINES</p> <p> EXISTING LOT LINES</p> <p> EXISTING DRAINAGE</p> <p> ACCESS LOCATION (BOTH SIDES)</p> <p> ACCESS LOCATION (LEFT SIDE)</p> <p> ACCESS LOCATION (RIGHT SIDE)</p> <p> ROAD CLOSURE BARRICADE</p>
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0 100
FEET

