

**Photogrammetry File Naming Standards**  
**(Deliverables & Archives)**

**MAPPING FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Topo Mapping	tip#_ph_t_date.dgn	r1234ab_ph_t_060325.dgn	2-D Design File
Planimetric Mapping	tip#_ph_pmm_date.dgn	r1234ab_ph_pmm_060325.dgn	2-D Design File
Shell Plan Sheet Mapping	tip#_ph_sps_date.dgn	r1234ab_ph_sps_060325.dgn	2-D Design File
Preliminary Plan Sheet Mapping	tip#_ph_pps_date.dgn	r1234ab_ph_pps_060325.dgn	2-D Design File
Plan Sheet Mapping	tip#_ps_date.dgn	r1234ab_ps_060325.dgn	2-D Design File
DTP (no field data)	tip#_ph_PT_dtp_date.dgn	r1234ab_ph_sps_dtp_060325.dgn	3-D Design File
DTM (photo & field)	tip#_PT_dtm_date.dgn	r1234ab_ps_dtm_060325.dgn	3-D Design File
TNP (no field data)	tip#_ph_PT_tnp_date.tin	r1234ab_ph_sps_tnp_060325.tin	Binary File
TIN (photo & field)	tip#_PT_tin_date.tin	r1234ab_ps_tin_060325.tin	Binary File
Contours File	tip#_ph_ctr_date.dgn	r1234ab_ph_ctr_060325.dgn	2-D Design File
Property (Municipal)	tip#_ph_prop_date.dgn	r1234ab_ph_prop_060325.dgn	2-D Design File
Helicopter Pavement Profile	tip#_ph_pvmt_dtm_date.dgn	r1234ab_ph_pvmt_dtm_060325.dgn	3-D Design File

**MAPPING FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Project Layout Limit	tip#_prj_layout.dgn	r1234ab_prj_layout.dgn	2-D Design File
Model Layout Limit (P.L)	mission#_ph_ml_DOP.dgn	m6565_ph_ml_051213.dgn	2-D Design File
Model Layout Limit (E.S.)	tip#_mission#_mod_DOP.dgn	r1234ab_m6565_mod_051213.dgn	2-D Design File
Control PAN	tip#_mission#_pan.txt	r1234ab_m6565_pan.txt	ASCII File
Giant File	tip#.gia	r1234ab.gia	ASCII File

**MULTIPLE PHOTO DIGITAL MOSAIC IMAGERY FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic (SID)(Corrd.)	tip#_ph_m_DOP.sid	r2345ab_ph_m_051211.sid	Raster File
SID World File (SDW)	tip#_ph_m_DOP.sdw	r2345ab_ph_m_051211.sdw	ASCII File
Mosaic Tile Layout	tip#_ph_m_lay_date.dgn	r2345ab_ph_m_lay_060121.dgn	3-D Design File
Digital Mosaic (TIF)	tip#_ph_m_tile#_DOP.tif	r2345ab_ph_m_680202_051211.tif	Raster File
TIF World File (TFW)	tip#_ph_m_tile#_DOP.tfw	r2345ab_ph_m_680202_051211.tfw	ASCII File
Digital Mosaic (JPEG)	tip#_ph_m_tile#_DOP.jpg	r2345ab_ph_m_680202_051211.jpg	Raster File
JPEG World File (JGW)	tip#_ph_m_tile#_DOP.jgw	r2345ab_ph_m_680202_051211.jgw	ASCII File
Descartes Imagery (HMR)	tip#_ph_m_DOP.hmr	r2345ab_ph_m_051211.hmr	Raster File

**MULTIPLE PHOTO DIGITAL MOSAIC IMAGERY FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic (SID)	tip#_ph_m_tile#_DOP.sid	r2345ab_ph_m_680202_051211.sid	Raster File
SID World File (SDW)	tip#_ph_m_tile#_DOP.sdw	r2345ab_ph_m_680202_051211.sdw	ASCII File

**SINGLE BRIDGE DIGITAL MOSAIC IMAGERY FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic (SID)	tip#_ph_m_DOP.sid	b4642_ph_m_051205.sid	Raster File
SID World File (SDW)	tip#_ph_m_DOP.sdw	b4642_ph_m_051205.sdw	ASCII File
Mosaic Design File	tip#_ph_m_date.dgn	b4642_ph_m_060401.dgn	2-D Design File

**Photogrammetry File Naming Standards**  
**(Deliverables & Archives)**

**RAILROAD CROSSING DIGITAL MOSAIC IMAGERY FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic (TIF) (Corrd.)	tip#_ph_m_DOP.tif	z4608a_ph_m_051205.tif	Raster File
TIF World File (TFW)	tip#_ph_m_DOP.tfw	z4608a_ph_m_051205.tfw	ASCII File
Mosaic Design File	tip#_ph_m_date.dgn	z4608a_ph_m_060325.dgn	2-D Design File

**RAILROAD CROSSING DIGITAL MOSAIC IMAGERY FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic (SID)	tip#_ph_mission#_exp#_DOP.sid	z4608a_ph_m6565_0111_051205.sid	Raster File
SID World File (SDW)	tip#_ph_mission#_exp#_DOP.sdw	z4608a_ph_m6565_0111_051205.sdw	ASCII File

**ORTHOPHOTOGRAPHY FOR PRELIMINARY DESIGN FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Orthophoto Tile (SID) (Corrd.)	tip#_ph_op_DOP.sid	r3456ab_ph_op_051120.sid	Raster File
SID World File (SDW)	tip#_ph_op_DOP.sdw	r3456ab_ph_op_051120.sdw	ASCII File
Orthophoto Tile Layout	tip#_ph_op_lay_date.dgn	r3456ab_ph_op_lay_060325.dgn	3-D Design File
2-D Drainage File	tip#_ph_drn_date.dgn	r3456ab_ph_drn_060325.dgn	2-D Design File
Digital Elevation Model	tip#_ph_op_dem_date.dgn	r3456ab_ph_op_dem_060325.dgn	3-D Design File
TNP (no field data)	tip#_ph_op_tnp_date.tin	r3456ab_ph_op_tnp_060325.tin	Binary File
Orthophoto Tile (TIF)	tip#_ph_op_tile#_DOP.tif	r3456ab_ph_op_680202_051120.tif	Raster File
TIF World File (TFW)	tip#_ph_op_tile#_DOP.tfw	r3456ab_ph_op_680202_051120.tfw	ASCII File
Orthophoto Tile (JPEG)	tip#_ph_op_tile#_DOP.jpg	r3456ab_ph_op_680202_051120.jpg	Raster File
JPEG World File (JGW)	tip#_ph_op_tile#_DOP.jgw	r3456ab_ph_op_680202_051120.jgw	ASCII File
Orthophoto Tile (HMR)	tip#_ph_op_tile#_DOP.hmr	r3456ab_ph_op_680202_051120.hmr	Raster File

**ORTHOPHOTOGRAPHY FOR PRELIMINARY DESIGN FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Orthophoto Tile (SID)	tip#_ph_op_tile#_DOP.sid	r3456ab_ph_op_680202_051120.sid	Raster File
SID World File (SDW)	tip#_ph_op_tile#_DOP.sdw	r3456ab_ph_op_680202_051120.sdw	ASCII File

**PHOTO RECTIFICATION WORKFLOW FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
LiDAR Limit File (V8)	tip#_ph_lidar_limits.dgn	u1234cc_ph_lidar_limits.dgn	3-D Design File
LiDAR Limit File (V7)	tip#_ph_lidar_limits7.dgn	u1234cc_ph_lidar_limits7.dgn	3-D Design File
GeoMedia Workspace	tip#_mission#.gws	u1214cc_m6065.gws	ASCII File
OrthoPro Project Setting	tip#_mission#.opj	u1214cc_m6065.opj	ASCII File
Microsoft Access Data File	tip#_mission#.mdb	u1214cc_m6065.mdb	Data Base File
Elevation Data File (TTN)	tip#_mission#_ttn	u1234cc_m6065.ttn	Binary File
Bridge Deck Data File (TTN)	tip#_mission#_bd_ttn	u1234cc_m6065_bd_ttn	Binary File
Ordem (Survey Feet)	tip#_ph_ordem_sf.dgn	u1234cc_ph_ordem_sf.dgn	3-D Design File
ASCII Data File	tip#_mission#.asc	u1234cc_m6065.asc	ASCII File

**Photogrammetry File Naming Standards**  
**(Deliverables & Archives)**

**MITIGATION MAPPING FILES**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Shell Topo Mapping	site#_ph_st_date.dgn	wm019_001_ph_st_060325.dgn	2-D Design File
DTP (no field data)	site#_ph_st_dtp_date.dgn	wm019_001_ph_st_dtp_060325.dgn	3-D Design File
TNP (no field data)	site#_ph_st_tnp_date.tin	wm019_001_ph_st_tnp_060325.tin	Binary File
Orthophoto Tile (SID) (Corrd)	site#_ph_op_DOP.sid	wm019_001_ph_op_051121.sid	Raster File
SID World File (SDW)	site#_ph_op_DOP.sdw	wm019_001_ph_op_051121.sdw	ASCII File
Orthophoto Tile Layout	site#_ph_op_lay_date.dgn	wm019_001_ph_op_lay_060325.dgn	3-D Design File
Orthophoto Tile (TIF)	site#_ph_op_tile#_DOP.tif	wm019_001_ph_op_680214_051121.tif	Raster File
TIF World File (TFW)	site#_ph_op_tile#_DOP.tfw	wm019_001_ph_op_680214_051121.tfw	ASCII File
Orthophoto Tile (JPEG)	site#_ph_op_tile#_DOP.jpg	wm019_001_ph_op_680214_051121.jpg	Raster File
JPEG World File (JGW)	site#_ph_op_tile#_DOP.jgw	wm019_001_ph_op_680214_051121.jgw	ASCII File
Orthophoto Tile (HMR)	site#_ph_op_tile#_DOP.hmr	wm019_001_ph_op_680214_051121.hmr	Raster File

**MITIGATION MAPPING FILES (Archive only, not delivered)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Orthophoto Tile (SID)	site#_ph_op_tile#_DOP.sid	wm019_001_ph_op_680214_051121.sid	Raster File
SID World File (SDW)	site#_ph_op_tile#_DOP.sdw	wm019_001_ph_op_680214_051121.sdw	ASCII File

**GPS-IMU CONTROL FILES (Archive only, not delivered)**

<b><u>Product &amp; Name</u></b>	<b><u>Example</u></b>
GPS-IMU EO Text Grid (English)	
tip#_mission#_adjusted_GPS-IMU_EO_grid.txt	r2111a_m6065_adjusted_GPS-IMU_EO_grid.txt
GPS-IMU EO Excel Grid (English)	
tip#_mission#_adjusted_GPS-IMU_EO_grid.xls	r2111a_m6065_adjusted_GPS-IMU_EO_grid.xls
GPS-IMU EO Text Local (English)	
tip#_mission#_adjusted_GPS-IMU_EO_local.txt	r2111a_m6065_adjusted_GPS-IMU_EO_local.tx
GPS-IMU EO Excel Local (English)	
tip#_mission#_adjusted_GPS-IMU_EO_local.xls	r2111a_m6065_adjusted_GPS-IMU_EO_local.xls
GPS-IMU EO Text Grid (Metric)	
tip#_mission#_adjusted_GPS-IMU_EO_grid_metric.txt	r2111a_m6065_adjusted_GPS-IMU_EO_grid_metric.txt
GPS-IMU EO Excel Grid (Metric)	
tip#_mission#_adjusted_GPS-IMU_EO_grid_metric.xls	r2111a_m6065_adjusted_GPS-IMU_EO_grid_metric.xls
GPS-IMU EO Text Local (Metric)	
tip#_mission#_adjusted_GPS-IMU_EO_local_metric.txt	r2111a_m6065_adjusted_GPS-IMU_EO_local_metric.txt
GPS-IMU EO Excel Local (Metric)	
tip#_mission#_adjusted_GPS-IMU_EO_local_metric.xls	r2111a_m6065_adjusted_GPS-IMU_EO_local_metric.xls

**Photogrammetry File Naming Standards**  
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**CONSTRUCTION EARTHWORK**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Original X-Sections	tip#_ph_line.ori	r1234ab_ph_y13.ori	Fe_Earth
Intermediate X-Sections	tip#_ph_line.int	r1234ab_ph_y13.int	Fe_Earth
Final X-Sections (no temp)	tip#_ph_line.fin	r1234ab_ph_y13.fin	Fe_Earth
Final X-Sections (with temp)	tip#_ph_linet.fin	r1234ab_ph_y13t.fin	Fe_Earth
Original X-Sections	tip#_ph_oxs_date.dgn	r1234ab_ph_oxs_030620.dgn	2-D Design File
Original DTM	tip#_ph_oxdtm_date.dgn	r1234ab_ph_oxdtm_030620.dgn	3-D Design File
Intermediate DTM	tip#_ph_fidtm_mission#_date.dgn	r1234ab_ph_fidtm_fi612a_030620.dgn	3-D Design File
Final DTM	tip#_ph_fxdtm_date.dgn	r1234ab_ph_fxdtm_030620.dgn	3-D Design File
Original TIN	tip#_ph_ox.tin	r1234ab_ph_ox.tin	Binary File
Intermediate TIN	tip#_ph_mission#_tin	r1234ab_ph_fi612a.tin	Binary File
Original DAT	tip#_ph_ox.dat	r1234ab_ph_ox.dat	Binary File
Intermediate DAT	tip#_ph_mission.dat	r1234ab_ph_fi612a.dat	Binary File
Final DAT	tip#_ph_fx.dat	r1234ab_ph_fx.dat	Binary File
Final Volume Shapes	tip#_ph_fxshp_date.dgn	r1234ab_ph_fxshp_030620.dgn	3-D Design File
Intermediate Volumes	tip#_ph_fi_mission#.vol	r1234ab_ph_fi_fi612a_vol	Fe_Earth
Intermediate Volumes (text)	tip#_ph_fi_mission#_vol.txt	r1234ab_ph_fi612a_vol.txt	ASCII File
Final Volumes (no temp)	tip#_ph_fx_line.vol	r1234ab_ph_fx_y13.vol	Fe_Earth
Final Volumes (with temp)	tip#_ph_fx_linet.vol	r1234ab_ph_fx_y13t.vol	Fe_Earth
Final Volumes (Prismoidal)	tip#_ph_fxvol_sa#.txt	r1234ab_ph_fxvol_sa2.txt	ASCII File
Earthwork Summary	tip#_ph_fxew.xls	r1234ab_ph_fxew.xls	Excel File
Alignment GPK	tip#_ph.gpk	r1234ab_ph.gpk	Database
Alignment DGN	tip#_ph_date.dgn	r1234ab_ph_030620.dgn	Alignment File

**CONSTRUCTION EARTHWORK Archive Only**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Intermediate X-Sections/Shears	tip#_ph_fixs_date.dgn	r1234ab_ph_fixs_030620.dgn	2-D Design File
Final X-Sections/Shears	tip#_ph_fxs_date.dgn	r1234ab_ph_fxs_030620.dgn	2-D Design File
Alignment Input	tip#_ph.inp	r1234ab_ph.inp	ASCII File

**CONSTRUCTION EARTHWORK Borrow Pits**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Original DTM	tip#_ph_oxdtm_pit_date.dgn	r1234ab_ph_oxdtm_sawyer_030620.dgn	3-D Design File
Intermediate DTM	tip#_ph_fidtm_pit_date.dgn	r1234ab_ph_fidtm_sawyer_030620.dgn	3-D Design File
Final DTM	tip#_ph_fxdtm_pit_date.dgn	r1234ab_ph_fxdtm_sawyer_030620.dgn	3-D Design File
Original TIN	tip#_ph_ox_pit.tin	r1234ab_ph_ox_sawyer.tin	Binary File
Intermediate TIN	tip#_ph_fi_pit.tin	r1234ab_ph_fi_sawyer.tin	Binary File
Final TIN	tip#_ph_fx_pit.tin	r1234ab_ph_fx_sawyer.tin	Binary File
Intermediate Volumes	tip#_ph_fivol_pit.txt	r1234ab_ph_fivol_sawyer.txt	ASCII File
Final Volumes	tip#_ph_fxvol_pit.txt	r1234ab_ph_fxvol_sawyer.txt	ASCII File
Baseline GPK	tip#_ph_pit.gpk	r1234ab_ph_sawyer.gpk	Database
Baseline DGN	tip#_ph_pit_date.dgn	r1234ab_ph_sawyer_030620.dgn	2-D Design File

**CONSTRUCTION CONTROL (Archive Only)**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Control PAN	tip#_mission#_pan.txt	r1234ab_cs541_pan.txt	ASCII File
Control MOD	tip#_mission#_mod_DOP.dgn	r1234ab_cs541_mod_030620.dgn	3-D Design File

**Photogrammetry File Naming Standards**  
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**META DATA FILE NAMING STANDARDS**

<b><u>Product</u></b>	<b><u>Name</u></b>	<b><u>Example</u></b>	<b><u>File Type</u></b>
Digital Mosaic	tip#_ph_m_meta.doc	r2579_ph_m_meta.doc	WORD
Digital Mosaic (Bridges-Division Wide)	bridges_cfy#_div#_ph_m_meta.doc	bridges_cfy09_div07_ph_m_meta.doc	WORD
Digital Mosaic (Railroads-Division Wide)	rr_ffy#_div#_ph_m_meta.doc	rr_ffy05_div09_ph_m_meta.doc	WORD
Planimetric Mapping	tip#_ph_pmm_meta.doc	u3808_ph_pmm_meta.doc	WORD
Orthophotos (Orthophotos, drainage file, DEM, and TNP)	tip#_ph_op_dem_meta.doc	u3109_ph_op_dem_meta.doc	WORD
Topo Mapping (Planimetric mapping, DTP, TNP, and contours)	tip#_ph_t_dtp_meta.doc	u4007_ph_t_dtp_meta.doc	WORD
Topo Mapping with Orthophotography (Planimetric mapping, DTP, TNP, contours and Orthophotos )	tip#_ph_t_dtp_op_meta.doc	r2611_ph_t_dtp_op_meta.doc	WORD
Preliminary Plan Sheet Mapping (Planimetric mapping, DTP, TNP)	tip#_ph_pps_dtp_meta.doc	r2413_ph_pps_dtp_meta.doc	WORD
Preliminary Plan Sheet Mapping with Digital Mosaic (Planimetric mapping, DTP, TNP, and Digital Mosaics)	tip#_ph_pps_dtp_m_meta.doc	u3621_ph_pps_dtp_m_meta.doc	WORD
Shell Plan Sheet Mapping (Base plan sheets, DTP, TNP)	tip#_ph_sps_dtp_meta.doc	b4790_ph_sps_dtp_meta.doc	WORD
Shell Plan Sheet Mapping with Digital Mosaic (Base plan sheets, DTP, TNP, and Digital Mosaics)	tip#_ph_sps_dtp_m_meta.doc	fm2410_ph_sps_dtp_m_meta.doc	WORD
Plan Sheet Mapping (Base plan sheets, DTM, TIN)	tip#_ph_ps_dtm_meta.doc	u2800_ph_ps_dtm_meta.doc	WORD
Plan Sheet Mapping with Digital Mosaic (Base plan sheets, DTM, TIN, and Digital Mosaics)	tip#_ph_ps_dtm_m_meta.doc	u3300b_ph_ps_dtm_m_meta.doc	WORD
High Accuracy Pavement Data (Helicopter DTM)	tip#_ph_pvmt_dtm_meta.doc	r2123ce_ph_pvmt_dtm_meta.doc	WORD
Mitigation Mapping (Shell topo mapping, DTP, TNP, and Orthophotos)	site#_ph_st_op_dtp_meta.doc	wm100_001_ph_st_op_dtp_meta.doc	WORD
Construction Earthwork (OX, FI, FX)	tip#_ph_ox_meta.doc tip#_ph_fi_meta.doc tip#_ph_fx_meta.doc	r2417bb_ph_ox_meta.doc r2206a_ph_fi_meta.doc u2102_ph_fx_meta.doc	WORD WORD WORD

**Photogrammetry File Naming Standards**  
**(Deliverables & Archives)**

**SPECIAL NOTES ABOUT DIGITAL FILES**

- All plan sheet mapping (including classified, preliminary, and shell) utilizes plan sheet CADD symbology and specifications. Plan sheet mapping does not include contour information.
- All planimetric and topographic mapping utilizes topo CADD symbology and specifications, except for mitigation mapping.
- Topographic mapping for mitigation sites utilize plan sheet CADD symbology and specifications.
- All topographic mapping includes contour information, either embedded with the planimetric data or supplied in a separate contour file.
- All file names shall be lower case letters.
- All reference files will retain the naming convention by which they were delivered. In the case where a reference file is modified, the date will be changed appropriately and a ‘p’ at the end of the name prior to the suffix. Example: A Property File from Location & Surveys: **u2005\_ls\_prl\_030620.dgn** will change to: **u2005\_ls\_prlp\_030622.dgn**.
- All files are to be made READ ONLY before being delivered.
- When multiple files are required to deliver a particular product, the product abbreviation will be followed by sequential numbers to accommodate the required number of files (i.e. ps1, ps2, ps3, etc.; dtm1, dtm2, dtm3, etc.; dem1, dem2, dem3, etc.; m1, m2, m3, etc.)
- The date in design file and ASCII file names is to be the date the file is transmitted. The format of the date is year-month-day.
- The DOP of the imagery files (raster data) is to be the date of the photography. The DOP of the georeferencing world file (TFW, JGW) is to be the date of the photography. The format of the date is year-month-day.
- The Office of Natural Environment gives mitigation sites a unique site number. This number consists of wm, followed by the county ID number, and then by a unique counter number for that county.
- Tile numbers will follow the North Carolina Land Records numbering format.
- All files containing both Photogrammetry and field data will drop the “\_ph” from the delivered and archived file name. Example: **r1234ab\_ph\_ps\_030620.dgn** is changed to **r1234ab\_ps\_030620.dgn**
- All DTP, DTM, TNP, and TIN files will include the product type abbreviation in the delivered and archived file name. Example: **r1234ab\_dtm\_030620.dgn** is changed to **r1234ab\_ps\_dtm\_030620.dgn**
- All files not on the “Deliverables & Archives” list should be deleted from the electronic project folder before archiving unless asked to be kept by the Project Engineer.

**Photogrammetry File Naming Standards**  
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**PRODUCT TYPE (PT) ABBREVIATIONS**

- m - Digital mosaics (OrthoPro and Descartes)
- op - Orthophotography
- pmm - Planimetric mapping (Planimetric mapping only)
- t - Topographic mapping (Planimetric mapping, DTM, and contours file; or mitigation mapping)
- ps - Base Plan Sheet mapping (Base plan sheets, DTM, and field data)
- dtm - Digital Terrain Model (includes ground surveyed elevation data and comprehensive breaklines)
- dtp - Digital Terrain Model (includes photogrammetric and/or LIDAR derived elevation data with comprehensive breaklines. May or may not contain obscured areas)
- dem - Digital Elevation Model (includes photogrammetric and/or LIDAR derived elevation data, with or without limited breaklines. May or may not contain obscured areas)
- tin - Triangular Irregular Network (includes field data)
- tnp - Triangular Irregular Network (no field data)
- ox - Original construction DTM
- fi - Intermediate construction DTM
- fx - Final construction DTM
- ctr - Contours file
- drn - 2-D drainage file
- pvmt - High accuracy pavement profiles
- prop - Municipal property data (cadastral data, not surveyed)
- lay - Tile layout for mosaics or orthophotos (follows NC Land Records Management Numbering System)
- lidar - **Light Detection And Ranging**
- 20ft - Gridded LiDAR (20 foot spacing between each point)
- be - Bare Earth LiDAR

**Product descriptor abbreviations used on non-image digital products**

- p - Preliminary (partial or incomplete data delivered)
- s - Shell (No field classification or surveyed data provided with the mapping)

**Examples:**

- st - Shell Topographic mapping (no classification or field data; typical mitigation mapping)
- pps - Preliminary Plan Sheet mapping (includes classification but no surveyed utilities or property)
- sps - Shell Plan Sheet mapping (no classification or field data)
- pdtm - Preliminary DTM for Plan Sheet mapping (obscured areas, EPs, and/or Hydro shots not included)
- pprop - Preliminary Municipal property (owners names not included)