

Appendix B *

Import (CAD Transfer) Mode Keyboard Shortcuts


Mode-Changing Keys

- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-D** Show Display menu
- Alt-E** Show Edit menu
- Alt-F** Show File menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-O** Show Options menu
- Alt-V** Show View menu
- Alt-W** Show Window menu



PDF Multi-Page Preview Dialog Keys

- Tab** Display image corresponding to number typed in *Page Number* field
- Space** Zoom in/out at Arrow  pointer location over currently displayed dialog image

PDF Plan Image Vectorization Keys

- Esc** Cancels *Analyzing PDF Data* phase of raster-to-vector conversion process (if process is proceeding too slowly—typically due to large numbers of dashed contours)

Data-Display Keys



- Home** Restore default display setting (zoom to extents of visible data)
- Space** Zoom in/out at Arrow  pointer location
- Page Up** Increase zoom at Arrow  pointer location

* A PDF copy of this Appendix B is included in the Day 2 zip package (see Appendix C). Shortcut key help pages are also available within the AGTEK program, including an abbreviated printable reference sheet (Help > Hot Key Help from program menu or at www.agtek.com/help/gw/keyboard_shortcuts.htm).

Appendix B

Import (CAD Transfer) Mode Keyboard Shortcuts (Cont.)

Data-Display Keys (Cont.)

- Page Dn** Decrease zoom at Arrow  pointer location
- Alt-B** Show Import Layers dialog (check/uncheck layers to show/hide on screen display). Other Functions: **(1)** press **Shift** or **Ctrl** and **double-Left** click a layer name to *Hide All But* on screen display, (AGTEK 3D only) keep Arrow  pointer in dialog and tap **↑** or **↓** key to incrementally add one additional layer to screen display, **Left** click any other layer to restore original layer display; **(2)** *Range* layer selection: press **Shift** and **Left** click a layer name and repeat at another layer name to range-select the bounded layers (click any layer checkbox in the selected range to invert their show/hide screen display); **(3)** *Cumulative* layer selection: press **Ctrl** and **Left** click desired layer names for cumulative selection (click any selected-layer checkbox to invert their show/hide screen display). *[Note: Range and Cumulative selected layers are helpfully back-shaded in AGTEK 3D but back-shading is disabled in current versions of AGTEK 4D due to a program bug.]*
- Alt-H** Hide currently selected data (press **Alt-H** again to redisplay the hidden data)
- Alt-S** Show all currently hidden data
- T** Toggle background image display off/on
- R** Rotate displayed background image 45 degrees right
- L** Rotate displayed background image 45 degrees left
- M** Toggle shading (white/gray) of background PDF plan image; toggle brightness of other background images
- F2** Toggle data point “Plus Marks” on/off
- ↑ ↓** Pan up / Pan down
- ←** Pan right / Pan left

Data-Selection/Transfer Keys

- Shift** Press **Shift** for cumulative select (deselect) of individual CAD layer objects
- Ctrl** Press **Ctrl** for cumulative select (deselect) of CAD layers
- Esc** Deselect any selected data
- Delete** Delete currently selected data
- S** Send currently selected data to destination Surface/Layer
- Z** AGTEK 3D only: Toggle zoom to selected point on/off (use **Options > Sticky Zoom** menu in AGTEK 4D)
- Ctrl-Z** Undo last function
- Ctrl-Y** Redo last undo

Appendix B

Edit Mode Keyboard Shortcuts

Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Entry mode
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-E** Show Edit menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-W** Show Window menu

Data-Selection/Editing Keys

- Shift** Press **Shift** for cumulative select (deselect) of individual objects (same function as **Ctrl**). Other Uses: **(1)** see **Ctrl-L** for cumulative Label Select using **Shift**; **(2)** to renumber *Benchmarks* for AGTEK 3D's paper plan scaling sequence, **Left** click desired *Benchmark 1*, press **Shift** and **Left** click desired *Benchmark 2*, press **Shift** and **Left** click desired *Benchmark 3*, **Right** click then click **OK** in *Reorder Benchmarks* dialog.
- Ctrl** Press **Ctrl** for cumulative select (deselect) of individual objects (same function as **Shift**). Special case: see **Ctrl-L** for cumulative Label Select.
- Delete** Options: **(1)** Delete selected object(s); **(2)** Delete selected segment(s) of object
- Esc** Options: **(1)** Deselect all selected data; **(2)** AGTEK 4D only: While Template is being applied, press once to suppress line plotting for faster application (useful with long reference alignments) or press twice to cancel Template application
- S** Toggle "Snap" function on/off (see Gradework 4D's **F7** snap option on next page)
- Alt** AGTEK 4D only: When *Stake List Editor* is open, press **Alt** while selecting base point for offset stake guide lines, release **Alt** then select desired stake point for reoriented offset stake guide lines
- Alt-A** Select all data on active surface/layer
- Alt-H** Hide currently selected data (press **Alt-H** again to redisplay last hide)
- Alt-S** Show all hidden data (any layers *Unchecked* in **Alt-B** dialog remain hidden)
- Alt-X** Region selection tree dialog (Perimeter/Area/Region layers only)

Appendix B

Edit Mode Keyboard Shortcuts (Cont.)







Data-Selection/Editing Keys (Cont.)

- Ctrl-A** Convert selected data to/from annotation
- Ctrl-C** Copy data selected on active surface/layer
- Ctrl-F** Fillet **(1)** converts a selected angle point to user-defined radius or **(2)** arc-joins the gap between two selected lines. See AGTEK's Fillet video at www.agtek.com/video.html?id=545.
- Ctrl-V** Paste copied/cut data to active surface/layer
- Ctrl-J** Join selected broken line segments (select **Options > Bridge Gap Distance** from menu to set maximum horizontal and vertical Join gap distances). If multiple lines are selected and Joined, they will remain selected for ease of hiding (**Alt-H**). See AGTEK videos at www.agtek.com/video.html?id=280 and www.agtek.com/video.html?id=607.
- Ctrl-L** Run Label Select utility to select all objects on current layer matching a selected object's *Line Label*. Options: **(1)** after running label select, press **Shift** or **Ctrl** to pick an unselected object, then press **Ctrl-L** for cumulative label selection (repeat as needed); **(2)** if no object is selected when **Ctrl-L** is pressed, a pop-up *Label Selection* dialog allows label selection by specifying a *Line Label*, a *Point Label* or (in Gradework 4D only per related video at <https://bit.ly/41X9Jxy>) a *Group* name (Groups only apply to *Stripping Area* and *Report Region/Sectional Area* object selections); **(3)** the *Label Selection* dialog supports use of "*" (multi-character) and "?" (single-character) wildcards for partial *Line* or *Point Label* matching; **(4)** the *Label Selection* dialog (in AGTEK 4D only) will select all unlabeled objects on current layer if the *Line* or *Point Label* field is left blank/empty (in Gradework 4D only, *Stripping Area* and *Report Region/Sectional Area* objects with no *Group* assigned are selected if "UNNAMED" is used in *Group* field).
- K** AGTEK 4D only: **(1)** If one or more *Report Regions/Sectional Areas* are selected, press **K** to display the *Report Regions* editing dialog; **(2)** If one or more *Stripping Areas* are selected, press **K** to display the *Stripping Areas* editing dialog (see related video at <https://bit.ly/41X9Jxy>).
- L** AGTEK 4D only: **(1)** Displays *Edit Point/Line Labels* dialog to add/change labels for all selected objects (if 3D view is on, press **T** before pressing **L**); Gradework 4D only: **(2)** if *Stripping Areas* are selected, use the dialog to modify *Line Label*, *Group* name and *Stripping Depth*; Gradework 4D only: **(3)** if *Report Regions* are selected, use the dialog to modify *Line Label*, *Group* name and *Fill Factor*; Gradework 4D only: **(4)** if *Sectional Areas* are selected, use the dialog to modify *Line Label*, *Group* name and *Sectional Depth* (see Gradework video at <https://bit.ly/41X9Jxy>).
- Ctrl-M** Move start point of closed object to selected data point
- Ctrl-O** Run *Offset Line Editor* for selected data line(s)
- Ctrl-P** AGTEK 3D only: Run Auto Pad utility (use **Ctrl-W** in AGTEK 4D); AGTEK 4D only: **Ctrl-P** runs Apply Template utility with selected line(s)
- Ctrl-R** AGTEK 4D only: ("Swap Ends") Reverses the point entry order of any selected lines (use **Ctrl-S** in AGTEK 3D)
- Ctrl-S** AGTEK 3D only: ("Swap Ends") Reverses the point entry order of any selected lines (use **Ctrl-R** in AGTEK 4D)
- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)
- Ctrl-T** Trim visible (not hidden) lines that intersect selected line(s)/perimeter. Options: **(1)** if a single closed line is selected, available options are "Trim Only", "Remove Lines Inside" (trim and delete all lines inside selected line), and "Remove Lines Outside" (trim and delete all lines outside selected line); **(2)** the Remove Lines Inside/Outside variant under *Option 1* will apply to any hidden lines having "Break Line" as the *Line Label*; **(3)** if pairs of lines that were created with the same *Offset Line* (or *Apply Template*) utility reference are selected, the option to "Trim Between Lines" (trim and delete all lines between selected pairs of Offset/Template lines) is available.
- Ctrl-W** AGTEK 4D only: Run Auto Pad utility (use **Ctrl-P** in AGTEK 3D)
- Ctrl-X** Break line at selected data point


Appendix B

Edit Mode Keyboard Shortcuts (Cont.)

Data-Selection/Editing Keys (Cont.)

- Ctrl-Y** Redo last undo
- Ctrl-Z** Undo last command (select **Options > Max Undo Levels** from menu to set number of undo levels)
- F5** Determines the interpolated elevation of a data line at the Arrow  pointer tip, inserts a new data point on the data line at the determined elevation, and breaks the data line at the new data point (can also be used to insert/break other layer objects)—use **F6** if break is not desired at new point
- F6** Similar function as **F5**, but the data line *is not* broken at the new data point (can also be used to add additional points on other layer objects)
- F8** Options: **(1)** Auto-increment elevation snap for 2D-3D CAD contour conversion; **(2)** AGTEK 4D only: When *Stake List Editor* is open, adds specified point to *Stake List*
- F7** Move a selected point to Arrow  pointer's tip. Variations: **(1)** **press and hold F7** then move mouse to “drag” the selected point to a new location (release **F7** at desired drag-to location); **(2)** **F7** can be used to extend or shorten a selected line's end segment by the parallel distance to Arrow pointer's tip when the first (or last) two points of the selected line are drag-selected in the *Point Scroll* (resulting extended/shortened end-point elevation is recalculated using original slope between the two drag-selected points); **(3)** in AGTEK 4D only, when **F7** is used to move points on combined-entry *Report Region/Sectional Area* objects, moving a point on one object automatically moves the other object's corresponding point; **(4)** in Gradework 4D only, with *Snap* enabled (press **S**), select a point to move, position Arrow  pointer tip at the desired move-to location (either a data point or a line segment between two data points) then press **F7** to complete (the moved point is snapped to the move-to point/segment and its elevation is changed to match the move-to location's elevation). See AGTEK's **F7** video at <https://youtu.be/xRzd60zssxs>.
- F9** Elevation snap copies elevation from data point nearest the Arrow  pointer to the currently selected data point
- F11** Gradework 4D only: Shrink-Wrap utility horizontally conforms (“shrinks”) selected closed line(s) on any Layer to the bounded data of the Data Lines Layer for the active Surface; shrink-wrapped data remains on its respective starting Layer but it can be copied/cut and pasted to any desired destination Layer such as Perimeters, Stripping Areas, Report Regions, etc. (for details and examples, see AGTEK's **F11** video at www.agtek.com/video.html?id=592).
- 0 – 9** (If Arrow  pointer is in the *Point Scroll*) Numeric keys (or “+”, “-”, “.”) modify a selected data line point elevation via the *Point Editor*.
- A – Z** (If Arrow  pointer is in the *Point Scroll*) Alphabetic keys display the *Point/Line Label Editor*.






Data-Display Keys for Plan View Overlay

- O** Toggle plan view overlay off/on when 3D view is displayed
- Insert** AGTEK 4D only: Sequentially re-load aligned background images for Arrow  pointer location (if expected image does not re-load, verify corresponding image border is not hidden)
- Ctrl** Gradework 4D only: With Image Selection dialog displayed, **press and hold Ctrl** to cumulatively select multiple background images in dialog
- Shift** Gradework 4D only: With Image Selection dialog displayed, **press and hold Shift** to select range of background images in dialog
- T** Cycle display of 3D Terrain view and any current/loaded background image; Gradework 4D only: Cycle display between Slope Colors and current/loaded background image (3D Terrain view is disabled if Slope Color display is enabled)

Appendix B

Edit Mode Keyboard Shortcuts (Cont.)

Data-Display Keys for Plan View Overlay (Cont.)

J	<u>AGTEK 4D only</u> : Toggle current/loaded background image off/on
M	Toggle shading (white/gray) of background PDF plan image; toggle brightness of other background images
F2	<u>AGTEK 4D only</u> : Toggle data point "Plus Marks" on/off
C	Toggle compass display and location (on, left, center, right, off)
I	Display Length and Area information for any selected object(s); <u>AGTEK 4D only</u> : <i>If no objects are selected</i> , re-loads aligned background image for Arrow  pointer location (same function as Insert)
Ctrl-I	(Same function as I) Display Length and Area information for any selected object(s); <u>AGTEK 4D only</u> : <i>If no objects are selected</i> , re-loads aligned background image for Arrow  pointer location (same function as Insert)
L	<u>AGTEK 3D only</u> : (with 3D Terrain View off) centers plan-view display on currently-selected point (R provides this function in <u>AGTEK 4D</u>)
R	(with 3D Terrain View off) centers plan-view screen on currently-selected point
Z	<u>AGTEK 3D only</u> : Toggle zoom to selected point on/off (use Options > Sticky Zoom menu in <u>AGTEK 4D</u>)
Alt-B	Show Layers dialog (check/uncheck layers to show/hide on screen display)
Alt-F	Toggle area/region hatch patterns on/off
Alt-H	Hide currently selected data
Alt-P	Send current screen view to Print Page and switch to Print View mode
Alt-S	Show all hidden data (any layers <i>Unchecked</i> in Alt-B dialog remain hidden)
Alt-V	Toggle background layers off/on
Home	Zoom to extents of visible plan view overlay data
Space	Zoom on/off at Arrow  pointer location
Page Up	Increase zoom at Arrow  pointer location
Page Dn	Decrease zoom at Arrow  pointer location
↑ ↓	Pan up / Pan down
→ ←	Pan right / Pan left

Data-Display Keys for 3D Terrain View

T	Cycle display of 3D Terrain view and any current/loaded background image; <u>Gradowork 4D only</u> : Cycle display between Slope Colors and current/loaded background image (3D Terrain view is disabled if Slope Color display is enabled)
C	Toggle compass display and location (on, left, center, right, off)
B	Toggle 3D view between Land View (close perspective) and Sky View (distant perspective)

Appendix B

Edit Mode Keyboard Shortcuts (Cont.)

Data-Display Keys for 3D Terrain View (Cont.)

L	Rotate 3D view 15 degrees right (viewer turns head 15 degrees left)
R	Rotate 3D view 15 degrees left (viewer turns head 15 degrees right)
U	Tilt 3D view up
D	Tilt 3D view down
Alt-I	Zoom 3D view in
Alt-O	Zoom 3D view out
Alt-R	<u>AGTEK 3D</u> : See R ; <u>AGTEK 4D</u> : Shift viewer's perspective to right (3D view shifts to left), press Home to reset
Alt-L	<u>AGTEK 3D</u> : See L ; <u>AGTEK 4D</u> : Shift viewer's perspective to left (3D view shifts to right), press Home to reset
Alt-U	Raise viewer's perspective (lowers 3D view), press Home to reset
Alt-D	Lower viewer's perspective (raises 3D view), press Home to reset
Alt-P	Send current screen view to Print Page and switch to Print View mode
F1	Viewer's perspective from inside vehicle
F2	<u>AGTEK 3D only</u> : Viewer's perspective from 50' behind vehicle (use B in <u>AGTEK 4D</u>)
F3	Viewer's perspective from 50' right of vehicle
F4	Viewer's perspective from 50' left of vehicle
F11	Flip viewer's perspective 180 degrees (use Ctrl-F11 in <u>Gradework 4D</u>)
Ctrl-F11	<u>Gradework 4D only</u> : Flip viewer's perspective 180 degrees (use F11 in <u>AGTEK 3D</u> and <u>Earthwork 4D</u>)
Home	<u>AGTEK 3D</u> : Re-centers plan-view display, and resets 3D view's tilt and vertical scale; <u>AGTEK 4D</u> : Re-centers plan-view display and resets 3D view's vertical scale
+ / -	Increase/decrease 3D view's vertical exaggeration

Appendix B Entry Mode Keyboard Shortcuts



Mode-Changing Keys (with Arrow Pointer)

- A Switch to Import (CAD Transfer) mode
- E Switch to Edit mode
- F Switch to Profile View mode
- H Switch to Highway mode (if available)
- W Switch to Plan View mode
- V Switch to 3D View mode
- P Switch to Print View mode
- X Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys (with Arrow Pointer)








- Alt-E Show Edit menu
- Alt-G Show Guide menu
- G Display last-used *Data Entry Guide* dialog
- Alt-H Show Help menu
- Alt-W Show Window menu

Data-Display Keys for Plan View Overlay

- O Toggle plan view overlay off/on when 3D view is displayed
- Insert AGTEK 4D only: Sequentially re-load aligned background images for Arrow  or Crosshair  pointer location (if expected image does not re-load, verify corresponding image border is not hidden)
- I AGTEK 4D only: Re-load aligned background image for pointer location (same function as **Insert**)
- Ctrl-I AGTEK 4D only: Re-load aligned background image for pointer location (same function as **Insert**)
- Ctrl Gradework 4D only: With Image Selection dialog displayed, **press and hold Ctrl** to cumulatively select multiple background images in dialog
- Shift Gradework 4D only: With Image Selection dialog displayed, **press and hold Shift** to select range of background images in dialog
- T Cycle display of 3D Terrain view and any current/loaded background image; Gradework 4D only: Cycle display between Slope Colors and current/loaded background image (3D Terrain view is disabled if Slope Color display is enabled)
- J AGTEK 4D only: Toggle current/loaded background image off/on
- M Toggle shading (white/gray) of background PDF plan image; toggle brightness of other background images
- C Toggle compass display and location (on, left, center, right, off)

Appendix B Entry Mode Keyboard Shortcuts (Cont.)

Data-Display Keys for Plan View Overlay (Cont.)

Alt-B	Show Layers dialog (check/uncheck layers to show/hide on screen display)
Alt-F	Toggle area/region hatch patterns on/off with Crosshair  pointer (<u>AGTEK 4D only</u>); or Arrow  pointer (<u>AGTEK 3D and AGTEK 4D</u>)
Alt-P	Send current screen view to Print Page and switch to Print View mode
Alt-S	Show all hidden data (any layers <i>Unchecked</i> in Alt-B dialog remain hidden)
Alt-V	Toggle background layers off/on (with Crosshair  pointer or Arrow  pointer)
F2	<u>AGTEK 4D only</u> : Toggle data point "Plus Marks" on/off
Home	Zoom to extents of visible plan view overlay data
Space	Zoom on/off at Arrow  pointer location
Page Up	Increase zoom at Arrow  pointer location
Page Dn	Decrease zoom at Arrow  pointer location
↑ ↓	Pan up / Pan down
→ ←	Pan right / Pan left

Data-Display Keys (with Arrow Pointer only) for 3D Terrain View








T	Cycle display of 3D Terrain view and any current/loaded background image; <u>Gradework 4D only</u> : Cycle display between Slope Colors and current/loaded background image (3D Terrain view is disabled if Slope Color display is enabled)
C	Toggle compass display and location (on, left, center, right, off)
B	Toggle 3D view between Land View (close perspective) and Sky View (distant perspective)
U	Tilt 3D view up
D	Tilt 3D view down
Alt-I	Zoom 3D view in
Alt-O	Zoom 3D view out
Alt-R	Shift viewer's perspective to right (3D view shifts to left), press Home to reset
Alt-L	Shift viewer's perspective to left (3D view shifts to right), press Home to reset
Alt-U	Raise viewer's perspective (lowers 3D view), press Home to reset
Alt-D	Lower viewer's perspective (raises 3D view), press Home to reset
Alt-P	Send current screen view to Print Page and switch to Print View mode
F1	Viewer's perspective from inside vehicle (reset perspective with B key)

Appendix B Entry Mode Keyboard Shortcuts (Cont.)

Data-Display Keys (with Arrow Pointer only) for 3D Terrain View (Cont.)









- F2** AGTEK 3D only: Viewer's perspective from 50' behind vehicle (use **B** in AGTEK 4D)
- F3** Viewer's perspective from 50' right of vehicle (reset perspective with **B** key)
- F4** Viewer's perspective from 50' left of vehicle (reset perspective with **B** key)
- F11** Flip viewer's perspective 180 degrees (use **F11** or **Ctrl-F11** in Gradework 4D)
- Ctrl-F11** Gradework 4D only: Flip viewer's perspective 180 degrees (use **F11** in AGTEK 3D and Earthwork 4D)
- Home** AGTEK 3D: Re-centers plan-view display, and resets 3D view's tilt and vertical scale; AGTEK 4D: Re-centers plan-view display and resets 3D view's vertical scale
- +** Increase 3D view's vertical exaggeration ("-" to decrease exaggeration does not function in Entry mode)

Data-Entry Keys

- K** AGTEK 4D only: **(1)** If surface is set to *Existing*, press **K** to display the *Stripping Area* entry dialog; **(2)** if surface is set to *Design*, press **K** to display the *Report Region/Sectional Area* entry dialog (**K** key is a shortcut for the corresponding **Add Regions**  toolbar button—see related videos at <https://bit.ly/41X9Jxy> and <https://bit.ly/3Plc660>).
- L** **(1)** Displays *Edit Line/ Point Labels* dialog to label next entry; Gradework 4D only: **(2)** if layer is set to *Stripping Areas*, use the dialog to enter a *Stripping Area* (but dialog is limited to *Line Label*, *Group* name and *Stripping Depth*); Gradework 4D only: **(3)** if layer is set to *Report Regions*, use the dialog to enter a *Report Region* (but dialog is limited to *Line Label*, *Group* name and *Fill Factor*); Gradework 4D only: **(4)** if layer is set to *Sectional Areas*, use the dialog to enter a *Sectional Area* (but dialog is limited to *Line Label*, *Group* name and *Sectional Depth*)—see related Gradework videos at <https://bit.ly/41X9Jxy> and <https://bit.ly/3Plc660>.
- R** Fillet (radius) drawing tool; with Crosshair  pointer active, **(1)** enter first PC (start of curve) point, **(2)** enter PI point (point of intersection), **(3)** type "Rx" (where "x" represents desired curve radius value) and **(4)** enter second PC (end of curve) point.
- S** Toggle "Snap" function on/off (if applicable, Tablet Entry must be disabled via **Options > Tablet Entry** from menu)
- Ctrl-Q** AGTEK 3D only: Cycles *Status Bar* display between *Distance/Slope* (default), *Distance/OG Elevation*, *Discreet Distance/Slope*, and *Discreet Distance/Angle* (in AGTEK 4D, select **Options > Modeling Options > [Option]** from menu). See related **Q** and **F12** keys below).
- Q** (With Arrow  or Crosshair  pointer) Restores *Status Bar* display to default *Distance/Slope* mode (see the **Ctrl-Q** and **F12** key notes, and related video at <https://bit.ly/3WqD2oQ>).
- X** No data-entry function (replaced by **Q** above); Gradework 4D only: **X** switches to Materials/Underground mode.
- Ctrl-V** Paste copied/cut data to active surface/layer (with Arrow  pointer)
- Ctrl-Y** Redo last undo (with Arrow  pointer)
- Ctrl-Z** Undo last command, select **Options > Max Undo Levels** from menu to set number of undo levels (with Arrow  pointer)
- Backspace** During entry of an object on any layer: **press once** to delete object's last-entered point, press again to delete next point (or **press and hold Backspace** to sequentially "stream" delete multiple points)

Appendix B Entry Mode Keyboard Shortcuts (Cont.)

Data-Entry Keys (Cont.)

- F6** Snaps a data point to a data line segment by determining the segment's interpolated elevation at the Crosshair  pointer location (using **F6** snap in AGTEK 4D inserts a corresponding data point on the referenced line segment). **F6** can also be used in AGTEK 4D to match invert elevations on Pipe Lines layer.
- F8** Snaps to nearest data point within snap radius of Crosshair  pointer (select **Options > Snap Size** from menu and check **Draw Snap Circle** box to display snap radius circle). If snapping to a data line, the elevation will match that of the snapped data point; if snapping to an annotation line, the user may type a desired elevation or allow the program to interpolate a value. Also used for Line/Area snap with CAD data or when entering Stripping and Sectional Areas.
- F9** Elevation snap is used to “read and type” the elevation from a CAD text label (or data line point) and then attach the elevation to a new point on a data line (with Crosshair  pointer)
- F10** AGTEK 4D only: Calculates and enters pipe (lateral) invert elevation on Pipe Lines layer as vertical offset from interpolated active surface elevation at Crosshair  pointer (type negative offset value “-x” then press **F10**)
- F12** Reorients horizontal entry reference relative to the line segment nearest the Arrow  or Crosshair  pointer and sets *Status Bar* display to *Discreet Distance/Angle* mode (see related **Ctrl-Q** and **Q** keys above). See AGTEK's videos at <https://bit.ly/3WqD2oQ>, www.agtek.com/video.html?id=267 and www.agtek.com/video.html?id=355 for **F12** application examples.
- Shift** **Press and hold** for contour streaming using **Left** mouse button when “heads-up” digitizing from PDF or other background image
- A – Z** (If Arrow  or Crosshair  pointer is in the *Point Scroll*) Alphabetic keys display the *Point/Line Label Editor*.
- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)

Appendix B

Profile View Mode Keyboard Shortcuts


Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-D** Show Display menu
- Alt-E** Show Edit menu
- Alt-F** Show File menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-H** Show Help menu
- Alt-O** Show Options menu
- Alt-U** Show Utility menu
- Alt-V** AGTEK 3D only: Show View menu
- Alt-W** Show Window menu

Profile-Entry Keys (with Crosshair Pointer Active)






- F6** Snaps to a data line when there is no data point to snap to
- F8** Snaps to the data point nearest to the Crosshair  pointer; same function as Left click Mouse Snap
- Backspace** During entry of profile alignment: **press once** to delete profile's last-entered point, press again to delete next point (or **press and hold Backspace** to sequentially "stream" delete multiple profile points)

Data-Editing Keys

- Delete** Delete selected profile line
- Ctrl-Y** Redo last undo
- Ctrl-Z** Undo last function
- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)

Appendix B Profile View Mode Keyboard Shortcuts (Cont.)

Data-Display Keys

Insert	<u>AGTEK 4D only</u> : Sequentially re-load aligned background images for Arrow  or Crosshair  pointer plan-view location (if expected image does not re-load, verify corresponding image border is not hidden)
Ctrl	<u>Gradework 4D only</u> : With Image Selection dialog displayed, press and hold Ctrl to cumulatively select multiple background images in dialog
Shift	<u>Gradework 4D only</u> : With Image Selection dialog displayed, press and hold Shift to select range of background images in dialog
T	Cycle display of cut/fill color shading and any current/loaded background image (<u>Gradework 4D only</u> : Cycle display between Slope Colors and current/loaded background image, cut/fill color shading is disabled if Slope Color display is enabled)
J	<u>AGTEK 4D only</u> : Toggle current/loaded background image off/on
M	Toggle shading (white/gray) of background PDF plan image; toggle brightness of other background images
F2	<u>AGTEK 4D only</u> : Toggle data point "Plus Marks" on/off
C	Toggle compass display and location (on, left, center, right, off)
Z	Toggle "Sticky Zoom" (to selected point) on/off
Alt-B	Show Layers dialog (check/uncheck layers to show/hide on screen display)
Alt-P	Send selected profile to Print Page and switch to Print View mode
Home	Zoom to extents of visible plan view overlay data
Space	Zoom on/off at Arrow  pointer location
Page Up	Increase zoom at Arrow  pointer location
Page Dn	Decrease zoom at Arrow  pointer location
↑ ↓	Pan up / Pan down
→ ←	Pan right / Pan left

Appendix B

Plan View Mode Keyboard Shortcuts

Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- P** Switch to Print View mode
- V** Switch to 3D View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-D** Show Display menu
- Alt-E** Show Edit menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-H** Show Help menu
- Alt-O** Show Options menu
- Alt-U** Show Utility menu
- Alt-V** AGTEK 3D only: Show View menu
- Alt-W** Show Window menu


Volume Calculation Keys

- Ctrl-A** AGTEK 3D only: Create bounding area for Report Region volume calculations
- Ctrl-V** AGTEK 3D only: Run Report Region area volume calculations
- Alt-A** AGTEK 4D only: Create bounding area for Report Region volume calculations
- Alt-V** AGTEK 4D only: Run Report Region area volume calculations
- Ctrl-B** Run Balance Region area volume calculations
- Ctrl-S** AGTEK 3D only: Run Balance Region Horizontal Slice volume calculations
- Esc** Cancel volume calculations
- Space** Pause/resume volume calculations
- I** On pause (see **Space**), displays incremental cross-section "walk-through"

Appendix B

Plan View Mode Keyboard Shortcuts (Cont.)


Data-Entry Keys (with Crosshair Pointer Active)

- F6** Snaps to a data line when there is no data point to snap to
- F8** Snaps to the data point nearest to the Crosshair  pointer (can also be used for Line snap and Area snap); same function as **Left** click Mouse Snap

Data-Editing Keys

- Ctrl-Y** Redo last undo
- Ctrl-Z** Undo last function
- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)



Data-Display Keys

- Insert** AGTEK 4D only: Sequentially re-load aligned background images for pointer location (if expected image does not re-load, verify corresponding image border is not hidden)
- Ctrl** Gradework 4D only: With Image Selection dialog displayed, **press and hold Ctrl** to cumulatively select multiple background images in dialog
- Shift** Gradework 4D only: With Image Selection dialog displayed, **press and hold Shift** to select range of background images in dialog
- T** Cycle display of cut/fill color shading and any current/loaded background image (Gradework 4D only: Cycle display between Slope Colors and current/loaded background image, cut/fill color shading is disabled if Slope Color display is enabled)
- J** AGTEK 4D only: Toggle current/loaded background image off/on
- M** Toggle shading (white/gray) of background PDF plan image; toggle brightness of other background images
- O** Toggle plan view layers overlay off/on
- F2** AGTEK 4D only: Toggle data point "Plus Marks" on/off
- C** Toggle compass display and location (on, left, center, right, off)
- R** Update cut/fill colors
- L** Update cut/fill colors
- Alt-B** Show Layers dialog (check/uncheck layers to show/hide on screen display)
- Alt-F** Toggle area/region hatch patterns on/off
- Alt-P** Send current screen view to Print Page and switch to Print View mode
- Alt-K** Gradework 4D only: Captures copy of current cut/fill map's color shading for use as a background image display in Edit, Entry, Profile View and Plan View modes (see **T** and **J** keys above)
- Home** Zoom to extents of visible plan view overlay data
- Space** Zoom on/off at Arrow  pointer location

Appendix B

Plan View Mode Keyboard Shortcuts (Cont.)

Data-Display Keys (Cont.)

- Page Up** Increase zoom at Arrow  pointer location
- Page Dn** Decrease zoom at Arrow  pointer location
- ↑ ↓ Pan up / Pan down
- ← Pan right / Pan left

Appendix B

3D View Mode Keyboard Shortcuts

Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-E** Show Edit menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-V** AGTEK 3D only: Show View menu
- Alt-W** Show Window menu

Volume Calculation Keys




- Ctrl-A** AGTEK 3D only: Create bounding area for Report Region volume calculations
- Ctrl-V** AGTEK 3D only: Run Report Region area volume calculations
- Alt-A** AGTEK 4D only: Create bounding area for Report Region volume calculations
- Alt-V** AGTEK 4D only: Run Report Region area volume calculations
- Esc** Cancel volume calculations
- Space** Pause/resume volume calculations
- I** On pause (see **Space**), displays incremental cross-section “walk-through”

Data-Display Keys for Plan View Overlay

- O** Toggle plan view overlay off/on when 3D view is displayed
- C** Toggle compass display and location (on, left, center, right, off)
- Alt-B** Show Layers dialog (check/uncheck layers to show/hide on screen display)
- Alt-F** Toggle area/region hatch patterns on/off
- Alt-P** Send current screen view to Print Page and switch to Print View mode

Appendix B 3D View Mode Keyboard Shortcuts (Cont.)

Data-Display Keys for Plan View Overlay (Cont.)

Home	Zoom to extents of visible plan view overlay data
Space	Zoom on/off at Arrow  pointer location
Page Up	Increase zoom at Arrow  pointer location
Page Dn	Decrease zoom at Arrow  pointer location
↑ ↓	Pan up / Pan down
→ ←	Pan right / Pan left

Data-Display Keys for 3D Terrain View

T	Toggle 3D view off/on
Z	<u>Gradework 4D only</u> : If 3D Terrain view is displayed (press T if not displayed) and underground pipe lines are modeled in the job file using Gradework's integrated Materials-Underground module, shows/hides pipe lines on 3D Terrain view
C	Toggle compass display and location (on, left, center, right, off)
B	Toggle 3D view between Land View (close perspective) and Sky View (distant perspective)
L	Rotate 3D view 15 degrees right (viewer turns head 15 degrees left)
R	Rotate 3D view 15 degrees left (viewer turns head 15 degrees right)
U	Tilt 3D view up
D	Tilt 3D view down
Alt-I	Zoom 3D view in
Alt-O	Zoom 3D view out
Alt-R	Shift viewer's perspective to right (3D view shifts to left), press Home to reset
Alt-L	Shift viewer's perspective to left (3D view shifts to right), press Home to reset
Alt-U	Raise viewer's perspective (lowers 3D view), press Home to reset
Alt-D	Lower viewer's perspective (raises 3D view), press Home to reset
Alt-P	Send current screen view to Print Page and switch to Print View mode
F1	Viewer's perspective from inside vehicle
F2	<u>AGTEK 3D only</u> : Viewer's perspective from 50' behind vehicle (<i>use B in <u>AGTEK 4D</u></i>)
F3	Viewer's perspective from 50' right of vehicle
F4	Viewer's perspective from 50' left of vehicle

Appendix B

3D View Mode Keyboard Shortcuts (Cont.)

Data-Display Keys for 3D Terrain View (Cont.)

- F11** Flip viewer's perspective 180 degrees (use **F11** or **Ctrl-F11** in Gradowork 4D)
- Ctrl-F11** Gradowork 4D only: Flip viewer's perspective 180 degrees (use **F11** in AGTEK 3D and Earthwork 4D)
- Home** Re-centers plan-view display, and resets 3D view's tilt and vertical scale
- + / -** Increase/decrease 3D view's vertical exaggeration

Data-Selection Keys for 3D Terrain View

- Ctrl** Press **Ctrl** and **Left** click 3D view to select nearest corresponding point on Data Lines overlay

Data-Manipulation Keys for Plan View Overlay

- Ctrl-C** Copy Reference Surface Data Lines

Driving-Simulation Entry Keys (with Crosshair Pointer Active)

- Backspace** During entry of Driving Simulation path: **press once** to delete last-entered point, press again to delete next point (or **press and hold Backspace** to sequentially "stream" delete multiple path points)

Other Keys

- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)

Appendix B

Volume Report Mode Keyboard Shortcuts

Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-E** Show Edit menu
- Alt-F** Show File menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-H** Show Help menu
- Alt-O** Show Options menu
- Alt-W** Show Window menu

Other Keys

- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)

Appendix B

Haul Report Mode Keyboard Shortcuts

Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- P** Switch to Print View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-E** Display Edit menu
- Alt-F** Display File menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-H** Display Help menu
- Alt-O** Display Options menu
- Alt-W** Display Window menu

Other Keys

- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)

Appendix B

Print View Mode Keyboard Shortcuts


Mode-Changing Keys

- A** Switch to Import (CAD Transfer) mode
- E** Switch to Edit mode (press twice for Entry mode)
- F** Switch to Profile View mode
- H** Switch to Highway mode (if available)
- W** Switch to Plan View mode
- V** Switch to 3D View mode
- X** Gradework 4D only: Switch to Materials/Underground mode

Drop-Down Menu Keys

- Alt-E** Display Edit menu
- Alt-F** Display File menu
- Alt-G** Show Guide menu
- G** Display last-used *Data Entry Guide* dialog
- Alt-H** Display Help menu
- Alt-O** Display Options menu
- Alt-W** Display Window menu

Print Object Keys

- T** Add text box print object (at Arrow  pointer location)
- Del** Delete selected print object
- Shift** Select one print object under another print object (press and hold **Shift** key during selection)
- Tab** Cycle print object selection (with any print object selected press **Tab** to select next object)
- Page Up** Increase size of selected image print object
- Page Dn** Decrease size of selected image print object
- ↑ ↓** Move selected print object up / down
- ←** Move selected print object right / left

Other Keys

- Ctrl-S** AGTEK 4D only: Save current ESW job file (same function as **File > Save** from menu)