

INTRODUCTION

Welcome to ITIC NextGen – the future of online ticketing!

Online ticketing systems have required users to spend their time entering text information before allowing them to do the all-important work of finding their the dig site on a map. As we considered ways to improve the online ticketing process, we became convinced that if users identified their dig site on the map *first*, nearly all text entry could be automated. As our research in modernizing on-line ticketing continued, we found other ways to save the user time and effort by building the notification center's business rules into the system.

One of the biggest differences you will notice from the very first time you use NextGen is that identifying your dig site starts, not ends, with an aerial photo of your work area. After minimal text entry, easy-to-use tools allow you to specify each individual dig location within your work area. Once you have specified all the work areas, NextGen automatically divides or combines them into the appropriate number of tickets, each one complete with text-based location information. That's right - NextGen presents you with *completed* tickets for your review.

We believe NextGen will change the way people think about damage prevention. For the very first time: an online ticketing application:

- Starts the process with an aerial photo. Use the width of streets, the location of buildings, and the location of other geographic features to help identify where you are digging in relation to the actual conditions at your work site.
- Uses the information contained in the notification center's base map. NextGen helps you complete your ticket, allowing you to fully concentrate on identifying the precise location where you will dig instead of entering text.
- Gives you the means to precisely define the area in which your work will take place. We've eliminated the need to "go broad" or "over-cover" your work site. Each individual excavation site you define will be compared with the notification center's database so affected operators are notified.

This manual is divided into two parts. The first is a "quick start" that covers the basics of using NextGen to file your locate requests. Long-time ITIC users may be more comfortable starting here. The second section provides more detailed information about NextGen's advanced features. With that in mind, all users will benefit from reviewing some of the new terms and ideas used in discussing creating an online ticket with NextGen.

Session - A period of user interaction with NextGen characterized by defining one or more excavation entities which subsequently results in the creation of one or more tickets.

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INTRODUCTION - DEFINITION OF TERMS

Excavation Entity – A circle, route, parcel, GPS generated polygon or free-hand polygon representing an area of excavation (see below). The NextGen user creates a discrete excavation entity during a session as they identify the limits of an area of work. Users can create as many excavation entities as necessary during a single session.

Route – An excavation entity created when a user selects a series of points on a map that form a continuous line. The line is converted into an excavation entity based on the "width" specified by the user.

Circle – An excavation entity created when a user selects a point on a map that is then converted into a circle based on the length of the radius requested by the user.

Parcel – An excavation entity created when a user selects part or all of a parcel of property. Parcel size is often associated with a single address and does not include the road right of way. Users can extend parcel size with the "parcel" tool. NOTE: Available parcel data may be limited in some areas.

That's it! Turn to the next page to get started.

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ABOUT YOUR SESSION - A QUICK OVERVIEW

Session – A period of user interaction with ITIC characterized by defining one or more *excavation entities* which subsequently results in the creation of one or more tickets.

The workflow of a session consists of three parts:

Confirming your contact and profile (if used) information

Upon logging in, ITIC will present you with the contact information on file with the lowa One Call call center. At the start of the session, you will be able to update this record so that modified information appears on all locate requests you generate. You can also modify or create new profiles as needed before actually beginning the process of creating your tickets. Finally, you can modify the record on each ticket individually during the ticket creation process.

Creating excavation entities to cover your work areas

The number of excavation entities you can create in a single session is unlimited. Feel free to create as many as required to meet your needs. ITIC applies the business rules as established by IOC to split or combine the excavation entities into the appropriate number of locate requests. Tickets will be presented to you for your review and confirmation, complete with text field entries, such as county, city, and street names, based on your excavation entities.

It is important to devote your full attention to the creation of the excavation entities because they are the foundation that ITIC uses to determine which utilities need to be notified. ITIC includes a series of tools designed to help users create excavation entities for the most common types of excavations (route, single point, etc.).

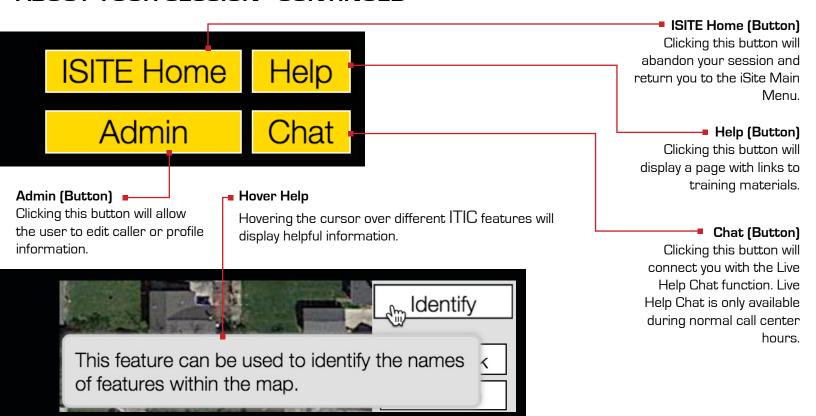
Suggested Next Step

ITIC offers updated advice on how to proceed, whether at the beginning, middle, or end of the process. Look for this box at the top of the screen. The text will continually refresh as you work through your session.

Suggested Next Step

Click one of the larger buttons to the right of the map to create an excavation area OR Enter a starting location in the "Starting Address Location" window OR zoom/pan to the general location of the planned excavation OR click on the "Advanced/Alternate Search" button to the right.

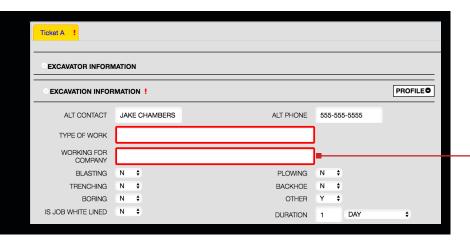
ABOUT YOUR SESSION - CONTINUED



Complete, review, and release your tickets

ITIC presents you with partially completed tickets once you indicate you have finished a session. You must enter precise marking instructions on each ticket. Alerts will appear if any other text fields need further review. Those most commonly in need of attention are special purpose fields, such as those indicating whether explosives or trenchless technology (horizontal boring) will be used.

Sections missing required information are marked with a red exclamation point ("!"). Tickets that are waiting for review are marked with a red globe. All users will be required to review the completed ticket prior to moving to the next step.



Fields missing required information will be highlighted with a red border.



LOGGING IN

To access ITIC point your web browser to https://ia.itic.occinc.com

If you do not already have an ITIC login, click the **NEED TO REGISTER?** button located below the login and password fields.

If you have forgotten your login information, you can also click the **FORGET YOUR PASSWORD?** link, also located below the login and password fields.

Once you enter your password and login and hit return, you'll be logged in to the sandbox.



Search and Status



LANDING PAGE

By default, you will be logged into NextGen.



The first page of NextGen is broken into two sections, **Caller Information** and **Profile Information**.

The **Caller Information** section contains identifying and contact information for your company. You can edit your Caller Information at any time. After changing information, you must advance to the next field before the **SAVE CHANGES** button will appear in the upper-right corner. Click this button to retain any changes you have made. **NOTE**: If you edit any fields in the Caller Information section but do not exit the field and **SAVE CHANGES**, your *changes will be made for this session only*.

Create new Profiles or select from a list of existing profiles in the **Profile Information** section. Profiles are used to auto-fill specific fields with your routinely used information. Utilizing the 'Profiles' feature will enable ITIC to 'remember' your information - saving you time in the Locate Request process.

Click the **NEW TKT** button when you are ready to start. NextGen will then take you to the Map page.

Users who have ITIC privileges in multiple states will see a series of "tabs" across the top of the ticket entry window. Select the state in which you will file your locate request by clicking on the corresponding tab.

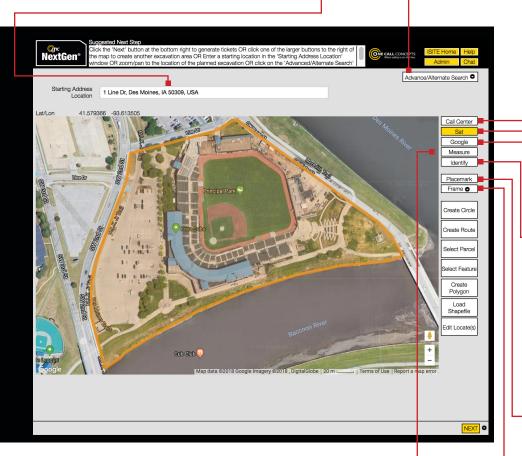


THE MAP

Map your work site(s) to begin filing a ticket with ITIC. Several tools are available to help you accurately map your locate requests:

Starting Address Location

Use this search field to find an address, an intersection, or the name of a business or municipal building that can serve as the starting point for your excavation(s).



Measure

Use this tool to measure the distance between points on the map. Get in the habit of using this tool regularly to ensure proper coverage of excavation areas and confirm distances along roads.

Advanced/Alternate Search

Use the Advanced Search tool to find locations that do not appear in the Starting Address Search. You can use the drop-down menu to search by more specific address information, coordinates, map grids, mapping from a previous locate request, or GPS locations. (See pg. 19 for more info).

Map View Buttons

Change the image of the map to the Call Center map view, Google map view, or Satellite view (pictured). We recommend using satellite view whenever you create excavation entities.

Identify

Identify map features that do not display a name (such as roads, highways, rivers, etc.) with this tool. The name will appear in the top section of the map next to "Highlight." The Identify tool is also useful for identifying the address range of a specific block. Note: zooming in on the map makes more names visible.

Placemark

Place a pin-mark on the map for later reference with this tool. This can be very helpful when used in conjunction with the Measure tool.

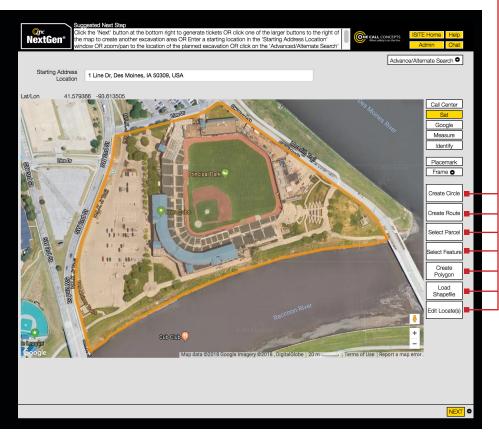
NOTE: Placemarks only last the duration of the session in which they are created.

Frame

Use this function to center the map on:
A) Excavation entities you have created.
B) Placemarks you have created.
C) Both of the above.
[Use the drop-down menu to select A, B, or C)

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THE MAP - CONTINUED



Entity Creation Buttons

Several tools are available to create excavation entities that encompass your work location. The tools are based on the most commonly described kinds of excavation areas. Choose the one that best meets your needs. Find out more in the following descriptions:

Create Circle

Generates a circular excavation entity, or a series of circular polygons. This tool is an excellent choice for jobs involving pole installation, tree planting,

(See pg. 20 for more info.)

Create Route

Creates long, narrow excavation entities. This tool is an excellent choice for jobs involving "long and skinny" work that does not take place in a roadway.

(See pg. 22 for more info.)

Select Parcel

Defines excavation entities based on available parcel data. Use the Select Parcel tool when a dig site is confined to all or part of a piece of private property. (See pg. 25 for more info.)

Select Feature

Creates excavation entities that look similar to those created by the Create Route tool. The Select Feature tool defines excavation entities when you click on map features. Select this tool for jobs contained primarily in the roadway.

(See pg. 27 for more info.)

Create Polygon

Reserved for situations where no other excavation entity will properly cover the dig site, the Create Polygon tool allows you to draw an entity polygon "free-hand." (See pg. 29 for more info.)

Create GPS

tickets offsite.

Delineates an excavation entity using your device's GPS capability while in the field.

Note: Do not use this tool when inputting

(See pg. 31 for more info.)

Load Shapefiles

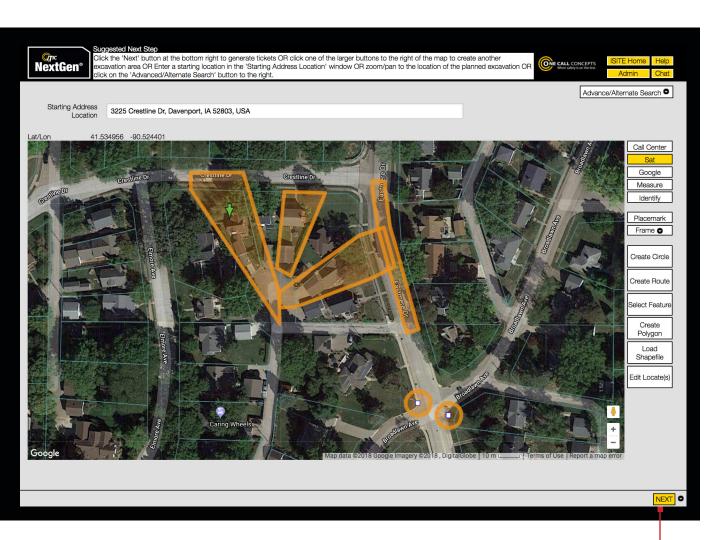
Use this tool if you have shape (.shp/. shx) files that define points, lines or polygons covering your dig site. ITIC will then convert your shapefiles to excavation entities.

Edit Locate(s)

Using this tool deletes or modifies existing excavation entities. You can left-click on any existing entity polygon to edit it, or right-click to delete it while the Edit Locate(s) tool is active.

MAPPING YOUR WORKSITE(S)

Create at least one excavation entity to encompass each dig site after locating your general work location on the map. Create as many excavation entities, in any combination, as you need to cover the work site(s).



In this example the work site has been mapped out using the **Create Circle**, **Select Feature** and **Select Parcel** tools.

When you have mapped out your entire work area click the **NEXT** button. ITIC will display the Ticket Information page.



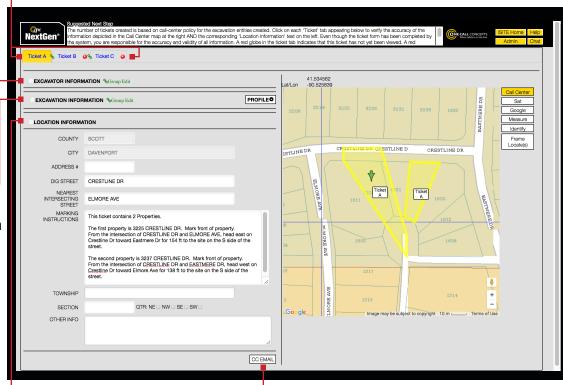
TICKET INFORMATION PAGE

ITIC calculates the most efficient way to break up or combine the excavation entities you have created and assign them to locate requests. ITIC automatically applies the business rules as established by lowa One Call to make this determination. The tickets appear at the top of the screen. Each tab represents a ticket.

Review the information on each ticket for accuracy and make any necessary additions or revisions. Here are some tips that will assist you in that process:

Excavator Information is drawn from the information you confirmed at the start of the session (See pg. 8 for more info.)

Information is auto-filled with information you entered in the Profile section of the ITIC landing page. Change this information by choosing a different profile using the profile drop-down menu. You can also fill out the fields by hand.



NextGen enters the **Location Information** based on the data encoded in the base map where you created each excavation entity. Carefully review all information in this section, paying particular attention to the **Marking Instructions**.

If you edit this information, your ticket may be held and reviewed by staff at the notification center. Please be aware that the review process may delay the release of your ticket. lowa One Call will automatically send you a copy of your completed ticket. Click the **CC EMAIL** button to send a copy of the ticket to another email address.

TICKET INFORMATION PAGE - CONTINUED

The red border indicates a required field. Fill out all fields with a red border or you will not be able to proceed. The Red Exclamation Ticket A !% Ticket B **9**! Point ! appears when there is missing information **EXCAVATOR INFORMATION** %Group Edit in the corresponding ticket. Enter the missing **EXCAVATION INFORMATION**! **PROFILE** Group Edit information or you will be unable to proceed. **ALT CONTACT** JAKE CHAMBERS **ALT PHONE** 555-555-5555 TYPE OF WORK WORKING FOR **COMPANY \$** The Green Chain-Link % BLASTING **PLOWING** indicates the Group Edit **TRENCHING** BACKHOE function is active on the **BORING OTHER** corresponding ticket(s). IS JOB WHITE LINED **DURATION** DAY Group Edit: %Group Edit The Red Globe 9 Click on this link to toggle Group Edit indicates the corresponding ticket on or off. The Group Edit feature allows is waiting for review. You must

Click on this link to toggle Group Edit on or off. The Group Edit feature allows you to edit the Excavator Information and/or Excavation Information on multiple tickets at one time. When Group Edit is activated any change you make will appear on each ticket. Group Edit is not available for use with Location Information. In contrast, Individual Edit mode allows you to enter information on a single ticket.

indicates the corresponding ticket is waiting for review. You must review the mapping, location and excavation information or you will be unable to proceed.

When you are certain all ticket information is accurate, select the next ticket by clicking a tab and review the next ticket. Once you have completed and reviewed all tickets click the **NEXT** button in the lower right corner of the page.

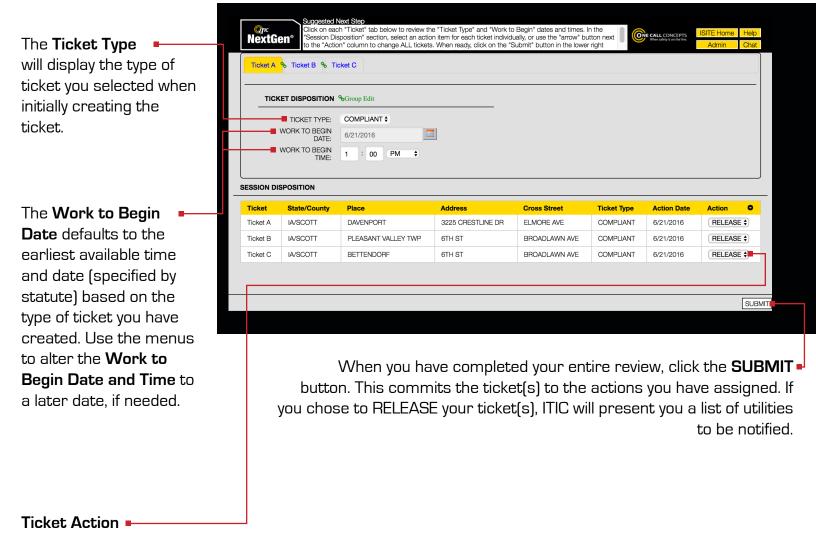
Corner of the page.

This will take you to the

Ticket Disposition page.

TICKET DISPOSITION PAGE

You can edit the Start Date and Time, and the Action ITIC will take for each ticket.



Use the drop-down menus to assign an action to each ticket individually, or use the white arrow key to assign the same action to all tickets. (See box below for more info.)

AVAILABLE ACTIONS

Discard abandons the ticket. If you choose this function, the ticket will not be transmitted, and all work you have done on it (mapping, location information, etc.) will be discarded.

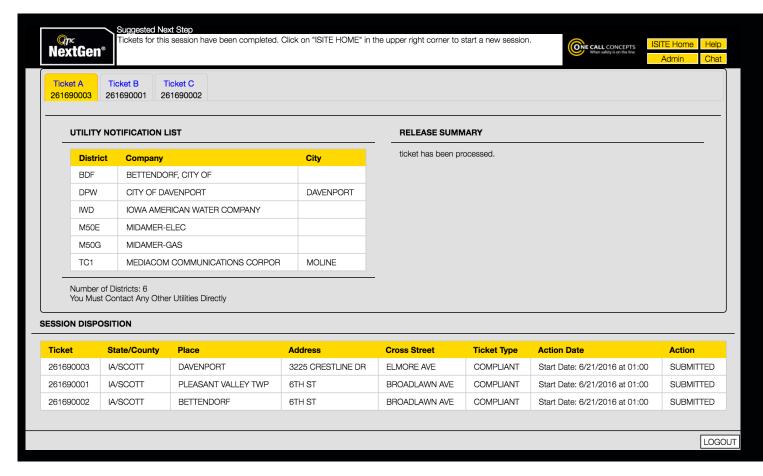
Release transmits the ticket to the notification center for review or directly to the affected utilities (depending on your NextGen User Privileges).

NOTE: ticket numbers are only assigned when a locate request is directly released. Reviewed tickets are assigned numbers upon release by notification center staff.

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UTILITY NOTIFICATION LIST

ITIC will present you with the **Utility Notification List** once tickets are released. This page contains a complete list of the Facility Operators to be notified as a result of your ticket(s).



You can now choose to log out, or return to the iSite main menu.

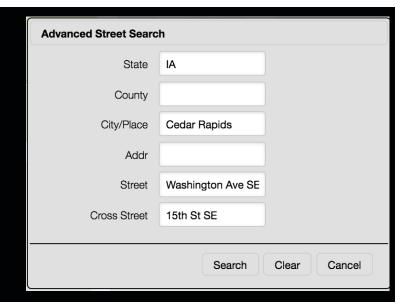


ADVANCED/ALTERNATE SEARCH

Use the Advanced Search if you are unable to find your worksite with the Starting Address Location search.

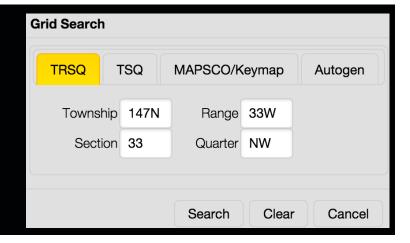
Advanced Street

Search can be used to search for roads and intersections.



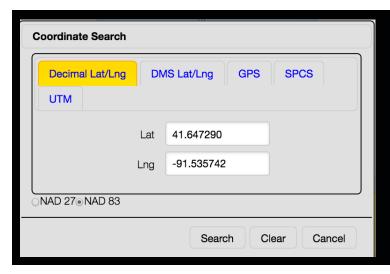
Grid

Search allows for searching based on grid names in various formats, such TRSQ.*



Coordinate

Search can be used for latitude/longitude and other coordinate type formats.



Prev Ticket

Search can be used to show the excavation polygons from previously filed tickets.



GPS Location

Centers the map on your current location. NOTE: GPS Location Search only works if your device is GPS equipped.

^{*}Not all grid types can be used in Iowa.

CREATE CIRCLE | Create Circle

The Create Circle tool allows users to create circular excavation entities with a pre-determined radius. The Create Circle tool is an excellent choice for jobs involving pole installation, tree planting, or any other type of work where a circle best describes the work area. You can create as many Circle entities as needed.

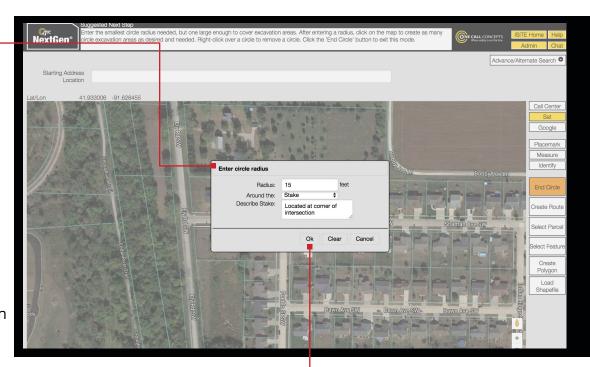
First, click Create Circle.

You will be prompted to enter a series of information.

The radius refers to the size of the circle.

The drop-down menu is used to indicate how the worksite is designated.

The Description field is used for additional information for locating and/or describing the worksite. This information is not required, but can help locators to find and mark the worksite correctly.



Once you have entered the information click Ok.



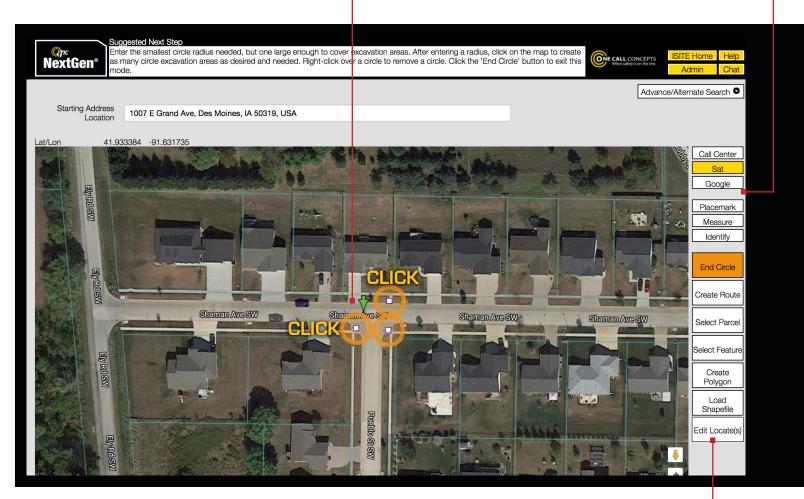
Now click on the map where you would like to place your circle.

CREATE CIRCLE - CONTINUED

Create Circle

You can continue placing circular excavation entities by clicking on the map.

When you are finished click the **End Circle** button.



To expand or edit the excavation entity click the **Edit Locate(s)** button.

CREATE ROUTE Create Route

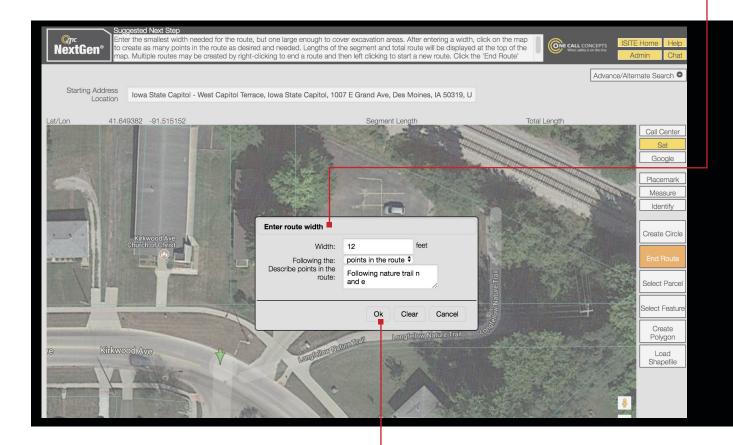
The **Create Route** tool allows users to create long, narrow excavation entities. The **Create Route** tool is an excellent choice for defining an excavation area when trenching, performing road repair/replacement, or any other type of work involving a long, narrow excavation area. You can create as many Route entities as needed.

First, click Create Route. You will be prompted to enter a series of information.

The width will specify the width of the route.

The drop-down menu is used to indicate how the worksite is designated.

The Description field is used for additional information for locating and/or describing the worksite.

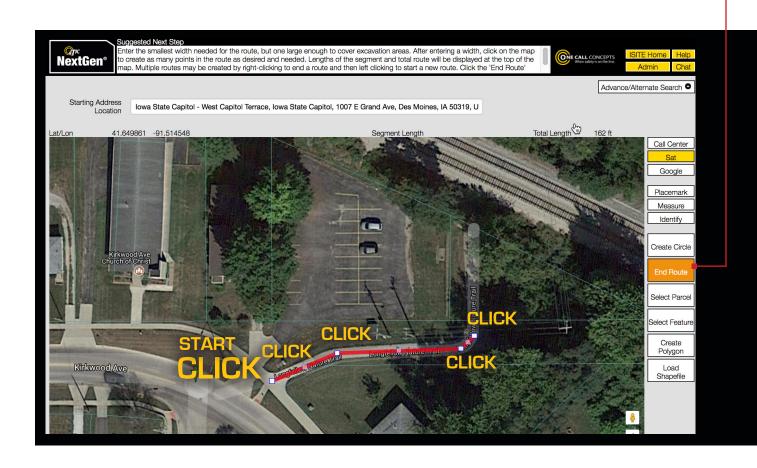


Once you have entered the information click **Ok**.

CREATE ROUTE - CONTINUED

Create Route

Now click on the map where you would like to begin your route. Move the mouse to the next turning point in your route and click again. Continue this process until your entire route has been covered, then click the **End Route** button.



CREATE ROUTE - CONTINUED | Create Route

Clicking the End Route button will convert the route to an excavation entity with the width you had previously designated. To expand or edit the excavation entity click the Edit Locate(s) button.

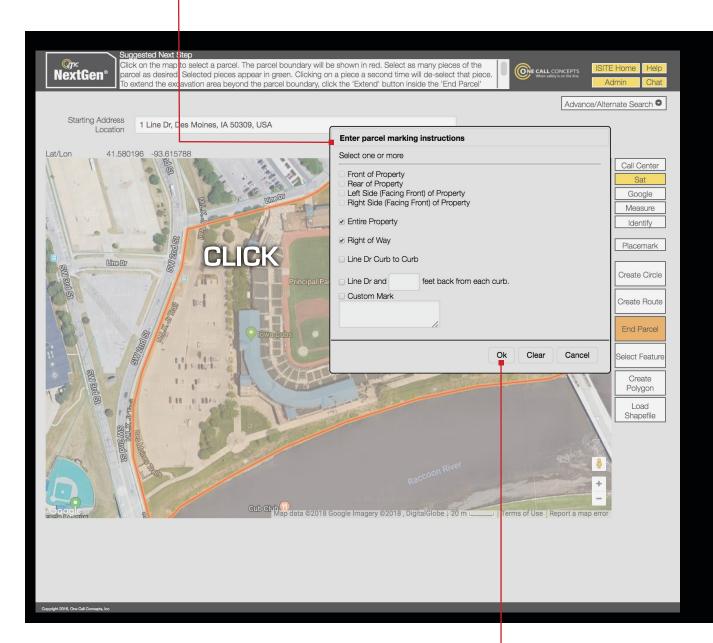


SELECT PARCEL | s

Select Parcel

The **Select Parcel** tool allows users to create polygons based on available parcel data. The **Select Parcel** tool should be used when you are excavating on a specific address/parcel of land. You can create as many Parcel entities as needed.

First click the **Select Parcel** tool. Then click on the area of excavation. If parcel data is available the entire parcel will be highlighted. You will also be prompted to describe what section of the parcel the work will take place in.



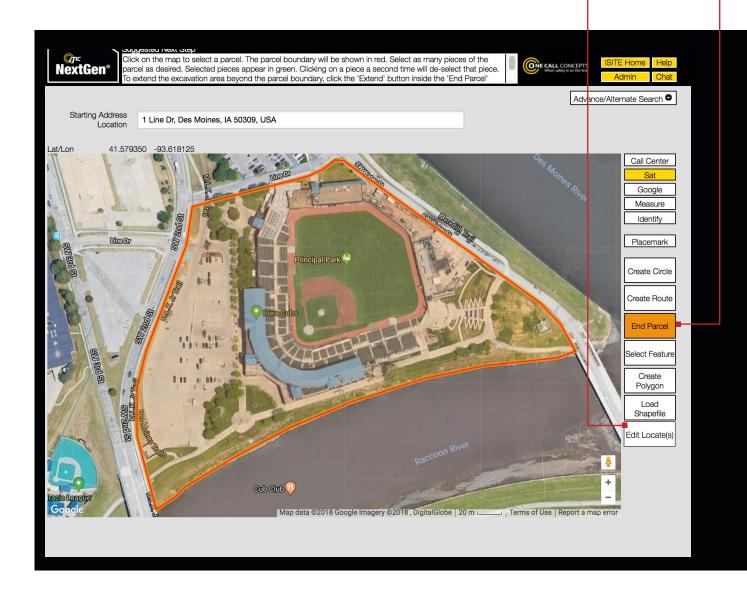
Use the check boxes to describe your work area, then click OK.

SELECT PARCEL - CONTINUED

Select Parcel

When you have finished click the End Parcel button.

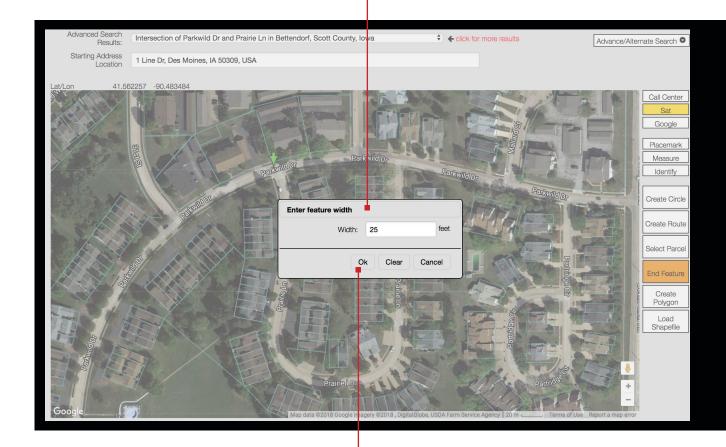
To expand or edit the excavation entity click the Edit Locate(s) button. -



SELECT FEATURE Select Feature

The Select Feature tool allows users to create excavation entities based on available map features, such as roads and highways. Select Feature is a good choice for excavations taking place along existing roadways.

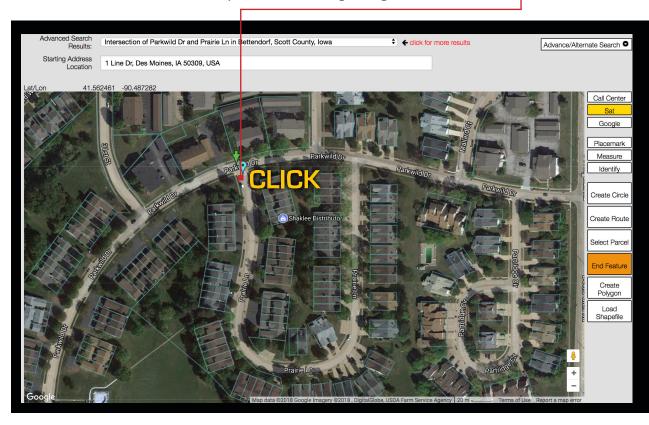
You can create as many Feature entities as needed. -



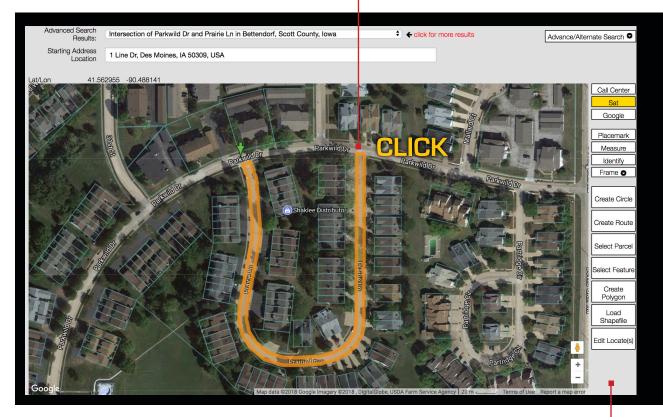
First click the Select Feature tool. You will be prompted to enter a width in feet. Once you have specified a width click Ok.

SELECT FEATURE - CONTINUED | Select Feature

Next click on the road where the work will take place, at the beginning of the work area.



Then designate the end of the work area with a second click. If the feature is available an orange border will appear along that section of road. •



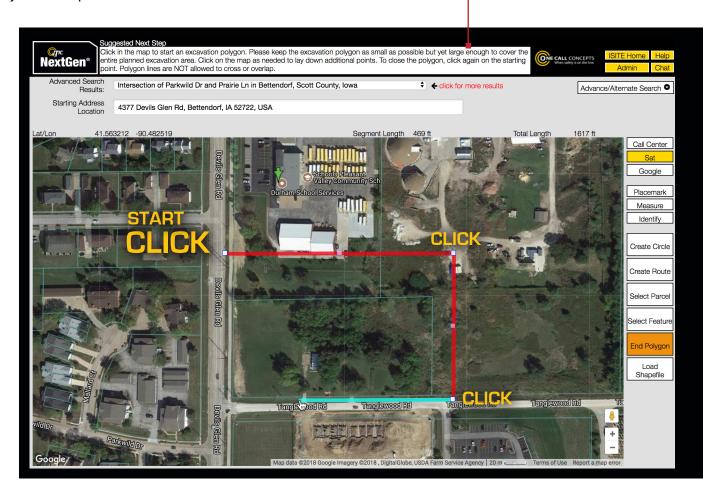
To expand or edit the excavation entity click the Edit Locate(s) button. •

CREATE POLYGON

Create Polygon

The **Create Polygon** tool should only be used when no other mapping options will adequately define the excavation area. The **Create Polygon** tool allows you to "free-hand" draw an excavation entity. When using the **Create Polygon** tool please keep the excavation polygon as small as possible, yet large enough to cover the entire planned excavation area.

First click the **Create Polygon** button. Begin by making a single click on the map where you would like to set your first point.

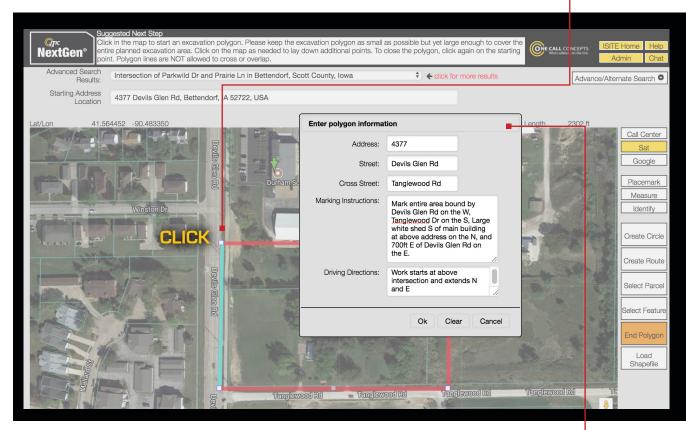


Continue setting points until you completely encompass the entire area of excavation.

CREATE POLYGON - CONTINUED

Create Polygon

To close/complete the polygon, simply click the same square point where you began. -



You will then be prompted to enter information about the dig site. All fields are required. • Once you have completed the form click OK.



To expand or edit the excavation entity click the Edit Locate(s) button.

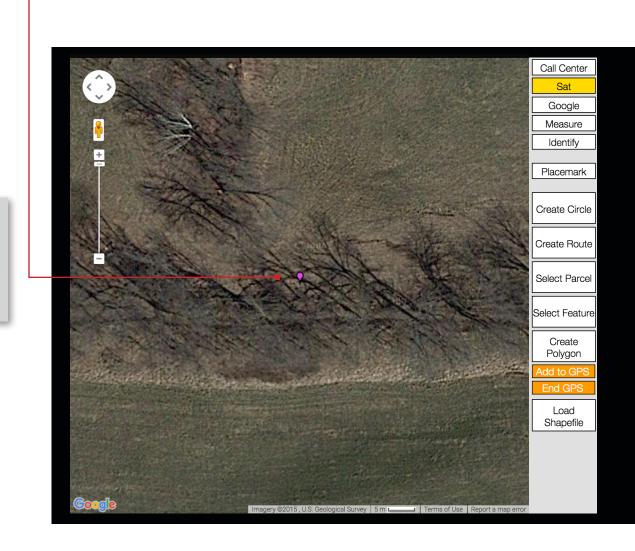
CREATE GPS

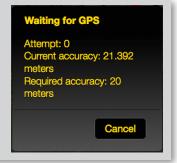
Create GPS

The **Create GPS** tool utilizes the GPS capabilities on your device* to create an excavation entity by walking the excavation perimeter and designating points. You can create as many GPS entities as needed.

When physically located at your work site walk to a corner of your excavation area and click the **Create GPS** button. This will activate **GPS Mode**. You should see a small purple pin-mark on the map where you are standing.

*Please note that some devices may not have the required GPS capability needed to use this feature.





Create GPS

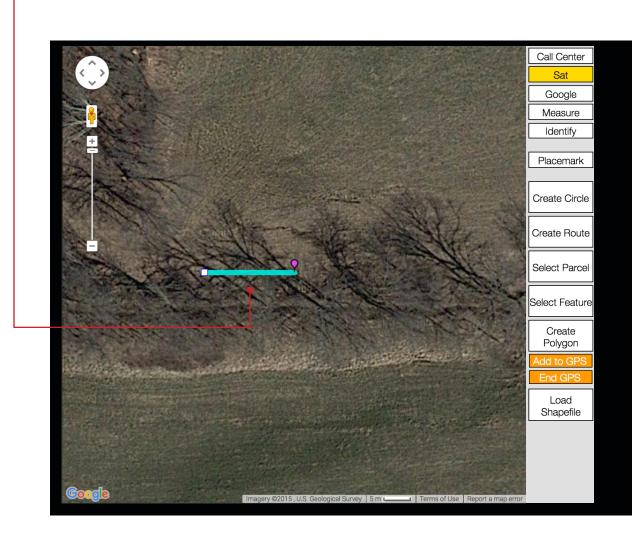
You can now begin laying down borders for your GPS excavation entity. First click the **Add to GPS** button. This will place a corner point (represented by a small white box) where you are standing.





Create GPS

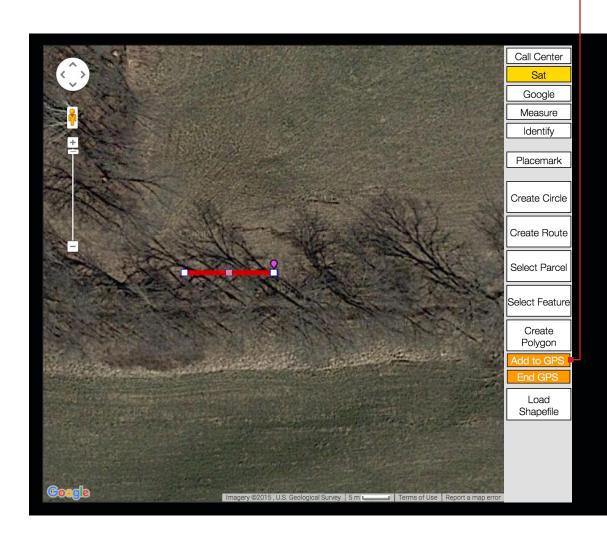
Walk to the next corner of your excavation area. You should see a blue line trailing from your current location to the last corner point you placed.

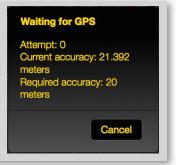




Create GPS

Click Add to GPS to add another corner point.

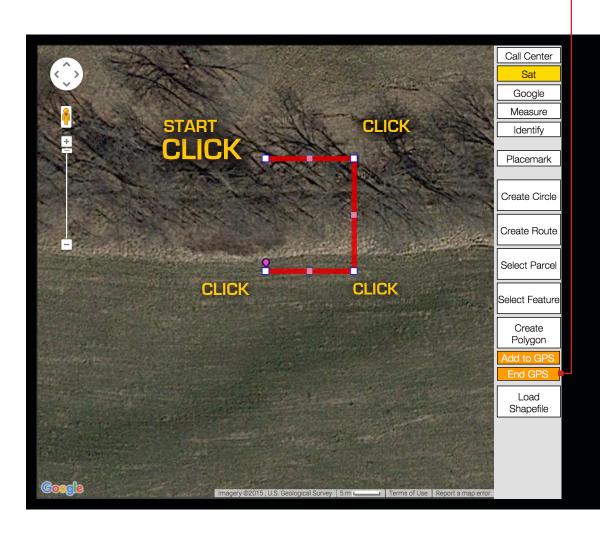




Create GPS

Continue to walk the border of your work site until you have encompassed your entire excavation area.

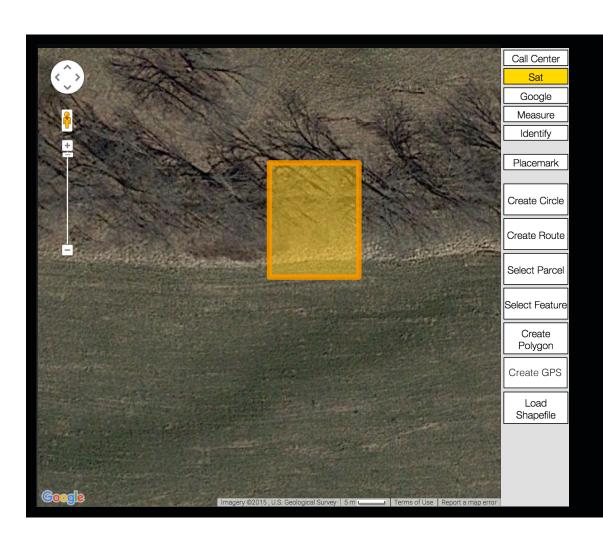
When you are ready click **End GPS** to close out the excavation entity.





Create GPS

The completed GPS excavation entity will appear on the map in orange.





ENTITY GROUPING

The Entity Grouping menu allows you to choose between creating a separate ticket for each excavation entity, or combining multiple entities into one or more tickets.

To access the Entity Grouping menu click the white arrow located near the NEXT button in the lower-right corner of the screen.

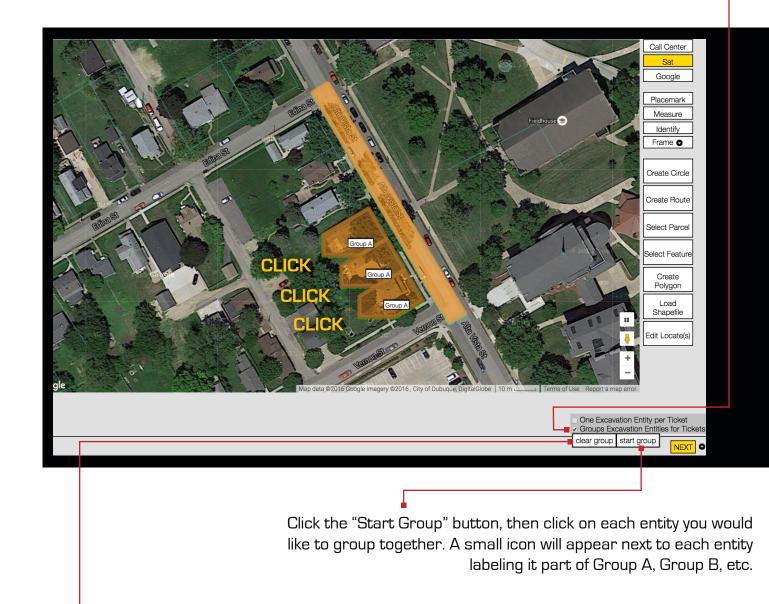
Choose "One Excavation Entity per Ticket" to have ITIC create a different ticket for each Excavation Entity in your session.



NOTE: No matter what you choose in the Entity Grouping menu, the rules as established by IOC apply. If you try to group a series of entities that must be split into multiple tickets, ITIC will split them into the necessary number of tickets automatically.

ENTITY GROUPING - CONTINUED

Choose "Group Excavation Entities for Tickets" to combine multiple entities into one (or more) ticket(s).



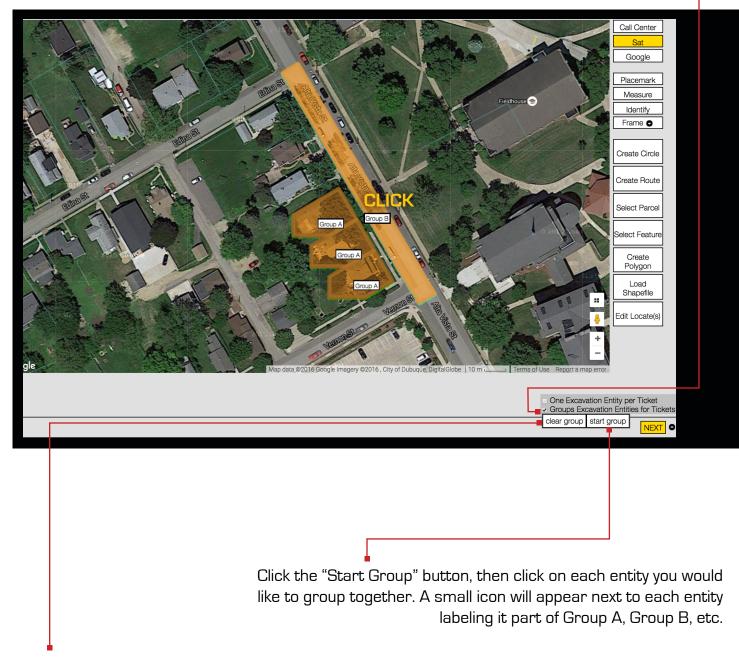
Click the "Clear Group" button to clear the current group you are on.

NOTE: No matter what you choose in the Entity Grouping menu, the rules as established by IOC apply. If you try to group a series of entities that must be split into multiple tickets, ITIC will split them into the necessary number of tickets automatically.

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ENTITY GROUPING - CONTINUED

Choose "Group Excavation Entities for Tickets" to combine multiple entities into one (or more) ticket(s).



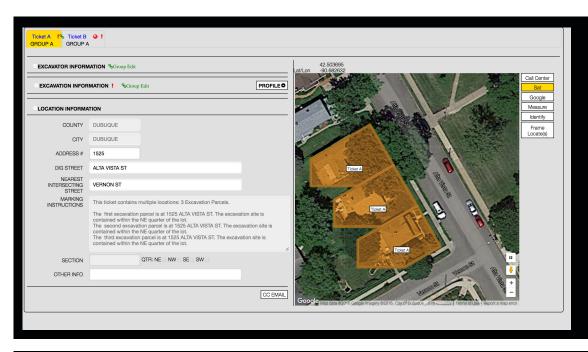
Click the "Clear Group" button to clear the current group you are on.

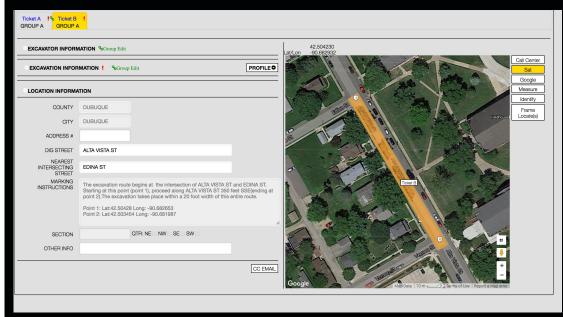
NOTE: No matter what you choose in the Entity Grouping menu, the rules as established by IOC apply. If you try to group a series of entities that must be split into multiple tickets, ITIC will split them into the necessary number of tickets automatically.

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ENTITY GROUPING - CONTINUED

If your grouping preferences conform to the the notification policies as set by lowa One Call, ITIC will combine the excavation entities in the manner you have specified.





If you do not choose an option in the Entity Grouping Menu ITIC will split or combine the excavation entities as efficiently as possible.

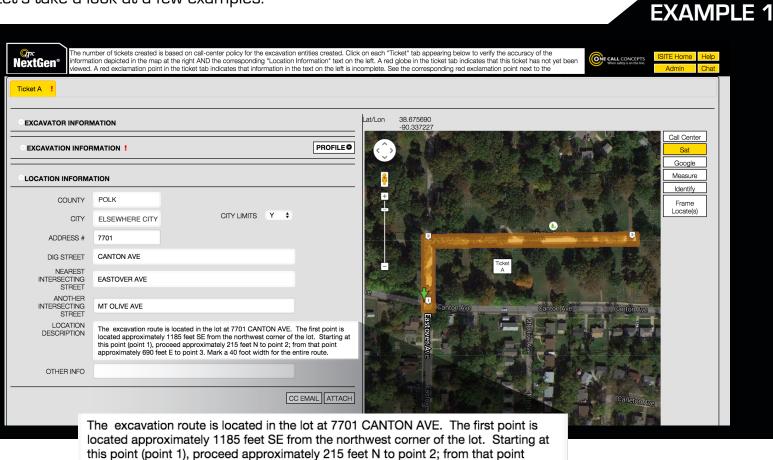
NOTE: No matter what you choose in the Entity Grouping menu, the rules as established by IOC apply. If you try to group a series of entities that must be split into multiple tickets, ITIC will split them into the necessary number of tickets automatically.

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PRECISE MAPPING AND WHY IT'S IMPORTANT

NextGen automatically creates Location Information based on the excavation entities you create in the map interface. NextGen uses base map data to convert the areas you have mapped into literal marking instructions. It is essential that you create excavation entities that precisely match your dig area(s) for the best results possible. To facilitate this, NextGen offers several options for creating your excavation entities.

Let's take a look at a few examples:



In this example, work is taking place along a walking path that starts at the intersection of Eastover Ave and Canton Ave, going north and then east to the intersection of the walking path and a dirt path going north. The Create Route tool will be the most effective in this situation.

Using satellite imagery to guide the mapping, we've drawn a Route entity going north from the intersection of Eastover Ave and Canton Ave to the turn in the path, then east to the intersection with the dirt path.

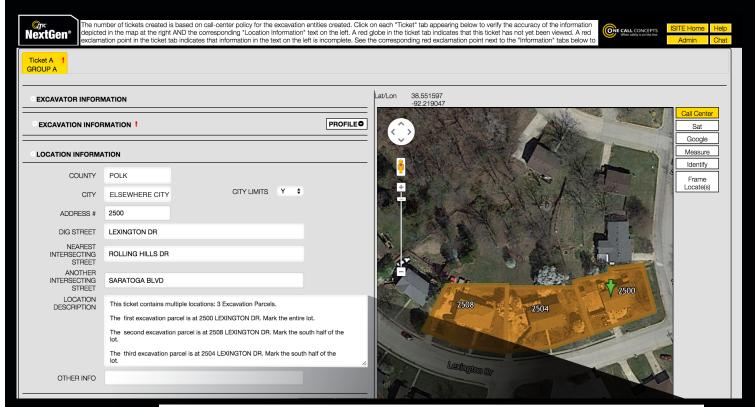
NextGen then analyzes the excavation entity and creates marking instructions and location information to describe the area enclosed by the user.

approximately 690 feet E to point 3. Mark a 40 foot width for the entire route.

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PRECISE MAPPING AND WHY IT'S IMPORTANT - CONTINUED

EXAMPLE 2



This ticket contains multiple locations: 3 Excavation Parcels.

The first excavation parcel is at 2500 LEXINGTON DR. Mark the entire lot.

The second excavation parcel is at 2508 LEXINGTON DR. Mark the south half of the

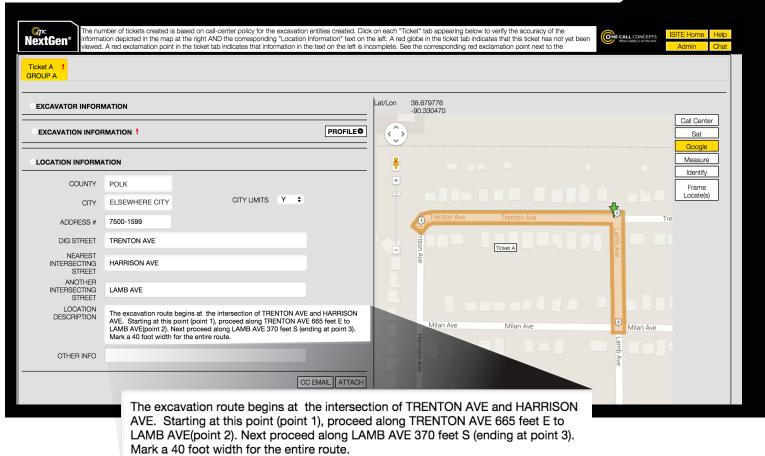
The third excavation parcel is at 2504 LEXINGTON DR. Mark the south half of the lot.

In this example, landscaping will take place in the front and back yards of addresses 2500, 2504, and 2508 Lexington Dr. The Select Parcel tool will be the most effective in this situation.

Using satellite imagery we can see that we needed to select only the south halves of the parcels for the 2504 and 2508. However, we selected the entire parcel of 2500 Lexington Dr in order to encompass both the back and front yards of that address.

PRECISE MAPPING AND WHY IT'S IMPORTANT - CONTINUED

EXAMPLE 3



In this example, work is taking place in the road right of way of Trenton Ave between Harrison Ave and Lamb Ave, then in the road right of way of Lamb Ave between Trenton Ave and Milan Ave. The Select Feature tool will be the most effective in this situation.

Using the Select Feature tool we can simply click on the two blocks the work is taking place on, and NextGen creates an entity that encompasses both blocks. Because we've specified a width of 40ft, this is translated into the marking instructions.

IN CLOSING

This ends the ITIC User's Manual. Remember to keep this manual handy when filing locate requests using ITIC, and refer back to it. If you require further assistance there are several resources available to you:

Tutorial Videos – Tutorial videos are available online at http://www.iaiticnextgen.com/resources/.

Live Chat – Click the Chat button in the upper-right corner of the screen to chat with a live operator. Live Chat is only available during normal business hours.



Contact the Notification Center - Email lowa One Call at ialead@occinc.com.



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