

## RFQ GIS Parcel Boundary Correction Services – BD 2015-035

### Questions and Answers – December 31st

December 10<sup>th</sup> –

1. We assume the mentioned inaccuracies refer to the “at least one foot in ten thousand” standard described in point three.

**Question:** Is this assumption correct?

**Answer:** There is no current accuracy standard for the current parcel boundary layer. Setting a standard of at least one foot in ten thousand is what we expect to have as the future accuracy of the property boundary.

**Question:** Are there other known inaccuracies (incorrect interpretation of legal description, drafting error, etc.)?

**Answer:** Most likely, but we don’t have a list. Those inaccuracies will come up during the project.

2. Regarding Data Sources as listed on page two and continuing on to page three:

**Question:** Other than the current parcel boundary layer (covered in our first questions) are there known inaccuracies in the data provided by the City?

**Answer:** Most of the data sources listed are legal documents, so I cannot speak to their inaccuracies. City owned data layers listed (aerials, control point and HARN points) and provided by the city have an accuracy of equal to or less than 1 foot.

**Question:** Can/will these be identified by the City?

**Answer:** See above.

December 15<sup>th</sup> –

**Question:** Where can I find the proposal?

**Answer:** The City Website RFQ page.

December 15<sup>th</sup> – pre-bid meeting recording:

**Answers to first question that Wendy could not make out:**

**Answer:** I think we need to define that somehow so we introduce a 1 to 10,000 as a benchmark. Certainly, we are not going to hold you responsible if you wind up entering deeds and the closure is worse than 1 to 10,000 (that’s not your fault). We are not asking for reconciliation of deed description errors.

**Answer:** Part of the product is getting a list of the ones that can’t be resolved.

**Answer:** If you wind up entering deeds and the closure is half of that, we would like to know to keep a running tally of those.

**Question:** Are we responsible for pulling all of these deeds and doing all of our own research or will the deeds be provided for us? If we are responsible, can we have some sort of an account at the County or do we put that into our RFP.

**Answer:** I think we were going to take the existing County parcel layer and try to manipulate that into a higher level of accuracy. I don't think we are going to try and pull every deed for every parcel within the corporate limits because that is a very large body of work.

**Answer:** I think that pulling deeds will probably be on more of an individualized basis when you are starting to see some major discrepancies. I don't know if the cost part of it is something the City will provide or not. Do we talk about that later or do we talk about that here.

**Question/Response:** I don't know if it will be that substantial of a figure especially now that your answer is more of a case by case basis type of a deal.

**Answer:** I would suspect at a minimum you're probably going to end up plotting all the platted subdivisions and then we will go from there. We will find gaps and overlaps from adjacent subdivisions or adjacent meets and bounds parcels. We are not trying to create a survey database, we are trying to generate a GIS parcel boundary layer. To me the survey world and the GIS world are very distinct and different. We do like accuracy, but we also all understand that there is a bunch of limitations in a project like this.

**Question:** Can you describe your local control?

**Answer:** It's a system that we developed in 1990. Instead of going with state plane we generated a local grid. We have a point of origin on one of our key center line monuments and we would be happy to make that available. That system also includes three HARN points.

**Question:** Roughly how many points are we speaking of on your local control point layer?

**Answer:** Somewhere in the 120 range.

**Question:** Because we are beginning (according to the RFP) with the Garfield County parcel layer, are we supposed to rectify the City's parcels with the County or just blow off the County and just start with what they have done for the City?

**Answer:** They are not two separate layers. The Garfield County parcel boundaries layer is what we use so it would be a function of cutting out our parcels from theirs and putting them back together and figuring that part out later to see what kind of discrepancies we have. It's definitely cutting them out, updating them and then seeing where the discrepancies are along the boundaries. I think Garfield County is going to take what we give to them to supersede what they have.

**Question:** So part of this project is not fixing what might be overlaps or gaps between City parcels and the rest of the County parcels, that will come later.

**Answer:** Correct.

**Question:** Could that come later as a separate contract or another task to estimate on, or is it a continuation of this one we are currently looking at?

**Answer:** That will probably just be in-house between the City and the County.

**Question:** Are the attributes staying the same or are we adding additional information to the existing property database that we will be working from?

**Answer:** I think the only thing we called for on the RFP that needs to stay the same is the parcel number.

**Question:** So we only need to provide the new shape and the parcel number?

**Answer:** Yes.

**Question:** A clarification on what I heard earlier that the surveying standards of 1 in 10,000. Is this accuracy standard part of the reporting data also?

**Answer:** It is, but I think that would be provided separately and not part of the attribute database that is associated to the parcel boundary.

**Question:** Is your intention to bring this into parcel fabric?

**Answer:** No.

**Question:** What level do you currently maintain on your ESRI license? Is it advanced or standard?

**Answer:** It's an advanced license.

**Question:** Is the methodology that you are requesting to be proposed as part of the proposal or are we going to come up with the methodology as we review the data and then discuss it?

**Answer:** I think we were hoping to have that as part of the RFQ so we can see where everybody is coming from and what angle the consultant will take to correct this layer.

*Jennie asked everybody at the meeting and calling in to send her an email with their contact information so she can get the question/answer list out to everybody.*

**Question:** How many parcels are in the City?

**Answer:** About 4,000

**Question:** Are the 120 local control points fairly uniform in their distribution or do they tend to be grouped?

**Answer:** They are typically section corners and interior points, some are street section monuments and some were points where we needed to densify that control.

**Question:** Are monument records available on all of those?

**Answer:** I don't know the answer to that but we can go over to the courthouse to see if the monument records are available.

**Question:** I would assume they would be in the State monument record database especially the ones tied to the PLSS. Is your City boundary monumented or part of that control layer?

**Answer:** No, it's not.

**Question:** For the plat maps (as part of the data source) that you will be providing, are those available in mylar or just in paper?

**Answer:** I think both as well as scanned. I think everything is scanned in our system as well as the County's.

**Answer:** Some are mylars and some are paper.

**Question:** Do you know if the scanned records were from mylars or from paper?

**Answer:** I would imagine some of both. The County is probably mylar but the City has some paper stuff that has been scanned.

**Question:** What about the land survey deposit book, do you want us to review any of that or is it a case by case basis?

**Answer:** I think it's a case by case basis.

**Question:** I'm still kind of confused on the methodology. If we are provided a database of existing property shapes in it and we need to correct that, how do we go about identifying if there are errors that need to be corrected other than by reviewing all of the deeds but we are being asked not to review all of the deeds and only on a case by case basis. Typically with the LSP's if we are not reviewing the LSP's for errors in the database and we are only looking at them on a case by case review what does the City see as a methodology of rectifying this basemap?

**Answer:** We have an idea of how we would like to see it rectified but part of the reason for this RFQ is to see people who have done this before and what is your past experience with correcting parcel layers. We are looking to the professionals who have done this before and what has worked in the past to be providing a methodology that we can review.

**Question/Response:** It sounds like we really need to spell out our methodology.

**Answer:** Yes, it needs to be a part of your response.

**Answer:** Absolutely, we would really like to see your methodology as part of your RFQ.

**Question:** You say the current parcel is from Garfield County. Do you have any quality codes or anything as far as notes on how the data was collected (source, metadata, etc...) for the other collective sources?

**Answer:** I think it is a combination of a few things. I don't have a County representative here right now but I know that talking to him in the past they were originally created from assessor records and digitized off of those. Since then they have been building them from subdivision plats and deeds so they have been slowly trying to correct them over the years and improving the layer as much as possible. Like a lot of other municipalities, I think that they started with assessor maps. It is a pretty old layer that has been around for a long time.

**Question/Response:** The assumption is that there isn't any code to denote what the quality is of the source parcels. For instance, if they were being geo-referenced and digitized off plat maps we don't necessarily have the RMS errors on those documents to give an idea of what sort of quality we are looking at.

**Answer:** Correct.

**Question:** Which right of way layers are you talking about?

**Answer:** Streets and public parcels are a good place to start.

**Answer:** We are not looking for an easement layer on this, just right of ways.

**Question:** I'm assuming we will get relatively full cooperation and free access to Garfield County records.

**Answer:** We can't speak for Garfield County and are not in a position to say yes to that request.

**Answer:** Just to the parcel layer.

**Question:** What is the ballpark budget for what you are thinking is excellent guidance to how much detail and methodology a successful bidder should be thinking of. Do you have something within a \$50,000 budget ballpark?

**Answer:** We have a budget assigned to this project but I would like to see people's proposals and their methodologies and exactly what would be included. We have a budget but we are going into a new year and depending upon the proposals that we get back we may add to that budget or we may decrease that budget. When we put this scope of work together we were a little bit uncertain of exactly what we wanted but also what kind of responses and questions we would get. I would like to see what you all

come back with as a reasonable number.

**Response:** That sounds perfectly appropriate, thank you.

**Question:** Does the City have all of the subdivision and survey plats that have been recorded in your possession if you are not sure what we can get out of the County.

**Answer:** I would say the City has all of the subdivision plats.

**Answer:** If the City doesn't have some, we will fill in what is missing.

**Question:** Are those all available in digital format?

**Answer:** They are all in pdf's.

**Question:** Is acquiring the records part of the proposal cost or is the City going to provide those (plats, deeds, photography, legals, etc...)?

**Answer:** I think that would be part of your proposal number but I look to Robin or Terri to answer that.

**Answer:** We have the pdf's of subdivision plats of record that the City will provide but anything above and beyond that will be your expense.

**Question:** Do you have AutoCAD standards?

**Answer:** We don't have any adopted standards.

**Question:** So you are looking for an AutoCAD deliverable and ESRI?

**Answer:** Yes, the RFQ states that we would like to have CAD format and ESRI format. We would like something recent in 2010 or newer format which is in the RFQ document.

**Question:** Back to the horizontal accuracy standards, 1 in 10,000 is a relative accuracy, is there an absolute standard?

**Answer:** That is a minimum. I want to reinforce that this is not a surveying project. If you have to enter a meets and bound parcel we expect it to be at least 1 to 10,000 and if it's not to that standard we want to know about it and need you to compile a listing of whatever documents you have plotted that do not meet that standard.

**Question:** Is there a spacial horizontal accuracy standard that you are requiring that would be described in terms of the National Map Accuracy Standard or the ASPRF accuracy standard for working on a scale, like how many feet or at a 95% confident level or something like that?

**Answer:** I am not sure how to answer that question.

**Action Response from Terri:** We may need to think about that question a little bit. We will write it down and respond in writing.

**Action Answer after the pre-bid meeting from Robin:** The closure error is calculated by using the error of closure in latitude, or northing, and the error of closure in departure, or easting. This is the horizontal linear distance between the location of the end of the last traverse line (as computed from the measured angles and distances) and the actual point of beginning of the closed traverse. For example, you come up with an error of closure in latitude of 5.23 feet and an error of closure in departure of 3.18 feet. These two linear intervals form the sides of a right triangle. The length of the hypotenuse of this triangle constitutes the linear error of closure in the traverse.

As an example, let's say the northing error is 0.65 feet and the easting error is 1.25 feet. The hypotenuse is 1.41 feet.

If the outer boundary was 7,056.5 feet long, the closure error would be 1.41:7056.5 or 1:5,004.61±, which

would not meet the 1:10,000 standard.

I think we are asking the consultant – if you have had to enter a metes and bounds description of a parcel, or the outer boundary of a platted subdivision and the horizontal closure of that metes and bounds parcel or subdivision falls below the 1:10,000 standard, provide the City some sort of listing of those parcels.

**Response:** *Just to reiterate, all of the questions and answers for this session will be typed up and our Purchasing Director, Ricky Smith, will email them out on December 31, 2015 which is the last day for questions. Submittals are due on January 8, 2016.*

**Question:** So we can send questions in between now and December 31<sup>st</sup>?

**Answer:** Yes, and send them to Ricky Smith. I will respond as quickly as possible to Ricky and Ricky will send the responses out to everyone.

**Question:** Where is the information on the parcel numbers from the assessor coming from? Is it on the survey plats or the data that we are going to get? How do we know what parcel number to enter into that particular polygon?

**Answer:** The parcel layer that you would be receiving is a GIS layer that has an associated database with it that has the parcel number in there.

**Question:** What about new parcels that need to be entered in?

**Answer:** We will be providing you with the most recent up to date parcel layer available.

**Response:** *To everyone in attendance at this meeting, please send Jennie Koenig your contact information via email.*

December 17<sup>th</sup> –

**Question:** We understand the question period ends December 31. Will the City be providing answers before that, especially minutes of the meeting of December 15?

**Answer:** Yes, we plan on sending out the minutes from the pre-bid meeting. We will send them out right after the final day for questions.

December 29<sup>th</sup> –

**Question:** How many parcels are involved?

**Answer:** 4,000

**Question:** Please can you describe the City's "local coordinate system"?

**Answer:** It's a system that we developed in 1990. Instead of going with state plane we generated a local grid. We have a point of origin on one of our key center line monuments and we would be happy to make that available. That system also includes three HARN points. There are about 120 control points and they are typically section corners and interior points, some are street section monuments and some were points where we needed to densify that control.

**Question:** Does the City have a budget in mind for the project?

**Answer:** We have a budget assigned to this project, but we would like to see people's proposals and their

methodologies and exactly what would be included. We have a budget, but we are going into a new year and depending upon the proposals that we get back we may add to that budget or we may decrease that budget. When we put this scope of work together we were a little bit uncertain of exactly what we wanted, but also what kind of responses and questions we would get. We would like to see what you all come back with as a reasonable number.

December 30<sup>th</sup> –

**Question:** I wondered if a summary of the Q&A from the December 15 pre-bid meeting for the GIS parcel correction RFQ might be available to review? I checked the website but did not see it there.

**Answer:** The Q&A will be available by 5pm on December 31<sup>st</sup>.

December 31<sup>st</sup> -

**Questions:** The RFP refers to the City's plan to move to an enterprise GIS. What Esri software is currently installed? What version and how many licenses?

**Answer:** We (city & county) are using ArcGIS Server Enterprise 10.3, and our spatial databases are stored in SQL Server 2012. We share an Enterprise License Agreement which entitles us to unlimited licensing. I believe Jennie has set up less than 6 users with licenses at this point.