NITC GIS Council Street Centerline and Address Working Group
Public Comment Review and Recommendations for
NITC 3-205 Street Centerline and NITC 3-206 Address
12.01.2014

The following are comments and recommendations to recent public comments received by the NITC Technical Panel for the NITC 3-205 Street Centerline and NITC 3-206 Address standards. The GIS Council has also added additional attribute fields for both Street Centerline and Address standard and follow each section. This review is conducted by various NITC GIS Council members and NITC GIS Council Street Centerline and Address Working Group members who were involved in development of the standards.

NITC 3-205: Street Centerline

GeoComm Comments (10/9/2014)

1.2 Spatial Representation
 1.2.2.1 Digitizing

 Reviewer Question/Comment: *Who is reviewing the data quality?*

 GIS Council Comments: There are many components involved in the process to assure what data is meeting appropriate standards. This involves several entities having responsibilities and authorities. These are currently already outlined in Sections 1.5, 5 and 6. Additional specifics are also dealt with in other documents such as business plans, data models and specifications depending on the project.

 Recommendation: No changes to standards at this time.

1.2.4.1 Lines (Polylines)

Reviewer Question/Comment: *"Actual address ranges" should be further defined. In rural settings, theoretical address ranges (following the address scheme) allow for more accurate address geocoding. It is best to consider both actual and theoretical address ranges when adding address attributes to a road centerline.*

GIS Council Comments: We recommend suggesting adding more information about actual versus theoretical address ranges for this section. Definition for theoretical is also referenced as the word 'potential' in other references.

Recommendation:

Modify the following information to section 1.2.4.1 to read,

A line represents the estimated center of a street or road and is not the legal right of way. Attribute data consists of four address range fields representing low to high on odd and even side of road segments necessary for geocoding. Address range values can be represented as theoretical (potential) or actual address ranges for the line segment and stored in the feature attribute table of the data set.

It is recommended whenever possible to develop actual address ranges. Theoretical address ranges typically start with zero and end with 99 for each street centerline segment. This includes every address between zero and 99 that is contained within each segment. Actual address ranges are defined as the actual ranges that exist along a street. The ranges can start with either a zero or one and end with a number that best represents that range for each street centerline segment. This method is desirable, as it produces greater range accuracies compared to theoretical address ranges. This results in better representation of geocoded addresses in relation to a street centerline. However, this approach is more costly to derive as it requires additional verification at the field to determine the exact range. If potential ranges are used, it is recommended to keep the range to a level appropriate for the segment. For example, consider going from a segment starting at 100 to 150 compared to 100 to 198.

1.3.4 Street Name

Reviewer Question/Comment: There may be exceptions to this standard if a jurisdiction's Master Street Address Guide (MSAG) reflects the number written out. GeoComm's recommendation is to state whether or not jurisdictions are required / encouraged to update MSAGs according to this standard.

GIS Council Comments: This section indicates the requirements for street naming as outlined by NENA and FGDC. Because data will be consolidated into a statewide model, NENA is suggesting that all jurisdictions define their data layers and attributes the same as they are specified in the upcoming release of the NENA NG9-1-1 GIS Data Model standard. So this would mean it would be in best interest that the MSAGs, Automatic Location Information (ALI), and local addressing standards are encouraged to update their databases according to this standard.

Recommendation:

Add the following information at the end of section 1.3.4 to read,

For public safety jurisdictions who maintain a Master Street Address Guides (MSAG), Automatic Location Information (ALI), and other local addressing standards are encouraged to update their databases to these standards. The NG9-1-1 requirements, as defined by NENA, define data layers and attributes to be the same throughout each of these databases since they will need to be standardized anyway in a statewide model.

GIS Workshop Comments (10/9/2014)

1.2.2.1 Digitizing

Reviewer Question/Comment: *Are we to assume that the document is referring to NMAS 1:2400 mapping accuracy requirements per the NSSDA? If so, we recommend this to be explicitly stated AND the actual statistical test for this accuracy be stated somewhere in the document and referenced in the document.*

GIS Council Comments: Reference is to be made using NSSDA statistical and testing methodology as pointed out in FGDC Geospatial Positioning Accuracy Standards. "The NSSDA implements a statistical and testing methodology for estimating the positional accuracy of points on maps and in digital geospatial data, with respect to georeferenced ground positions of higher

accuracy." (Source: FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

Reference to conformance levels or accuracy thresholds can be referenced as National Map Accuracy Standards (NMAS) or Accuracy Standards for Large-Scale Maps through ASPRS. However, ASPRS formed the basis for update of the NMAS to address map scales smaller than 1:20,000.

Also to be clear, this section describes the <u>originating</u> data source requirements. We are referencing the use of orthoimagery as the source. With this being said, NENA GIS Data Collection and Maintenance Standards (NENA 02-014) references the necessary orthoimagery specifications for these types of applications. It is explicit in that "aerial photography shall be obtained at a maximum scale of 1:2400, 1 foot pixel resolution which produces a NSSDA Horizontal RMSE (Root Mean Squared Error) Accuracy of 5 feet or better."

Many other states are meeting or exceeding this standard for better control. The state of Kansas's E911 initiated a project last year to complete aerial acquisition having the same requirements we are suggesting. North Dakota provides recommendations even at a greater level of capture scale from imagery at 1:1200 in order to conduct a centerline and address point data creation.

Recommendation:
In Section 1.2.3 Spatial Accuracy section, add:

The minimum positional accuracy standards need to meet the following standard as set forth in the FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

In Section 7.0 Related Documents, add: FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

Reviewer Question/Comment: *In regards to the remark, "(well intentioned), but unnecessarily high accuracy requirements."*

GIS Council Comments: These requirements are well in the threshold needed for this data, particularly if it is already cited federally through NENA and FGDC standards. In addition, other states are benchmarking at the same requirements or even greater accuracy requirements. That is another reason why we are developing these standards as to reinforce and educate data developers on these standards on what is acceptable.

Recommendation: None

Reviewer Question/Comment: *In regards to remark, "If NITC adopts these standards…will cost NE tax payers…isn't worth the expense. We recommend the NITC Technical Panel revert to accuracy standards that allow use of the free NAIP imagery, but maintain a recommendation to use higher accuracy imagery where it is already available."*

GIS Council Comments: The state has many intended uses for higher quality imagery including 'leaf-off' applications that go beyond what NAIP provides. Even though NAIP is free, it was intended only to be used for specific purposes. The NITC GIS Council is positioning a better

framework of geospatial data requirements statewide to allow other data sets to be derived from data such as ortho imagery.

There is a risk associated to using NAIP imagery at it's current resolution particularly when used to derive other data that have other data accuracy requirements. This risk can also be associated to costs and will eventually be more costly as it does not provide the adequate level of base imagery needed for the state for a multitude of applications it does not currently serve. So, eventually it will cost the tax payers even more if we continue using less accurate data sets for specific data requirements and applications. NAIP imagery has a resolution of 1 meter. This represents a horizontal accuracy of within +/- 3 meters relative to referenced USGS digital ortho quarter quadrangles. The current 'free' NAIP does not meet NENA or this standard.

Obviously, there will be a transition period from current data to new or enhanced data using current and higher accuracy imagery. Data acquisition for imagery continues to improve in both affordability and accuracy. These requirements outlined here are well within reason and justifiable in the cost particularly as it reduces risk from data derived from old and less accurate data sets.

The NITC 3-204 Imagery standards that are currently in place indicate the necessary requirements for resolution and accuracy for future imagery collection. These requirements are also tied to other data requirements and standards such as LiDAR as indicated in NITC 3-203 Elevation Acquisition using LiDAR as well as street centerline and address standards that are proposed here.

Recommendation:

In Section 1.2.2.1 Digitizing at the end, add:

For information regarding standards for imagery and LiDAR requirements for Nebraska, refer to the Elevation Acquisition using LiDAR Standards (NITC 3-203) and Imagery Standards (NITC 3-204).

In Section 7.0 Related Documents, add:
NITC 3-203 Elevation Acquisition using LiDAR Standards
NITC 3-204 Imagery Standards

1.3.6 Odd/Even Numbering (Address Parity)

Reviewer Question/Comment: *We recommend that the NITC educate themselves about this issue and resolve to support an effort to get county to county border addressing to match. Without resolution of this issue, NE will NEVER be able to enjoy a seamless, statewide street centerline database.*

GIS Council Comments: The NITC GIS Council is well informed and familiar with this issue. We have placed these standards first so that we have a benchmark of what needs to be met. Several steps need to take place prior to operations to meet these standards, particularly governance. Therefore, it is not a question for these standards but merely for a governance plan and then operations to meet standards. These items are already in discussion and being recommended to appropriate entities involved in the matter.

Recommendation: This is not a standard issue but dealt with in governance and operational plans.

1.4 Data Format

Reviewer Question/Comment: *We recommend that NITC consider additional suitable data formats so as to not favor one particular vendor.*

GIS Council Comments: The importance of these recommendations are to assure that technical aspects are met for meeting the topological requirements of these standards. With this being said, this can limit the choices of software and the data file storage format requirements. If we included other formats this can limit the ability to create and test topology. For example, topology rules are not able to be applied to Shapefiles and would need to be converted to another format. Having a standardized process will also reduce additional costs by reducing additional steps through complex changes to formatting and conversion of data sets. We also want to be clear that we also need to provide the data back in similar fashion so we will recommend a statement to that effect.

Recommendation:

Modify 1.4 Data Format through the following modification:

The data format provided will need to be in a format that can be interpreted by commercial GIS software, preferably as an Esri geodatabase. A geodatabase schema including domains can be provided by contacting the State of Nebraska, Office of the CIO GIS Shared Services. Street centerline data stored on NebraskaMAP will be in an Esri geodatabase format but provided through various formats for other users to consume.

Other supporting tabular data will need to be provided in MS ACCESS, DBF, or MS SQL formats.

General Comments

The following questions were submitted as general comments and are best addressed through governance and operational plans. These standards become effective as soon as NITC approves them. However, the NITC GIS Council realizes a transition will need to occur and plans are currently being outlined to provide this guidance.

1. When does the NITC propose to adopt these standards? The documentation only refers to the public comment period.

2. When does the NITC propose these standards become enforceable? Will existing data be grandfathered in? Will there be a grace period for adoption? These standards in their current form, while laudable, will put a very heavy fiscal burden on PSAPs, counties and the NEPSC (to the tune of millions of dollars) as it will require a complete rebuild of all existing 911 street centerline data to meet these standards. We recommend a grace period of at least 5 years to ease adoption of these standards.

GIS Council Comments

The National Emergency Numbering Association (NENA) have made some additional requirements that will require us to update our attribute tables.

Modify the section 1.3.4 Data Schema and Descriptions section.

The minimum required fields for these standards are represented by the following identifiers: "**R**" – required, "**RC**" –Recommended, and "**O**" – Optional.

Field Name	Field Type	Field Length	Field Description	Domain Name	Required Level
Street_Status_CD	String	1	Status code indicating operational condition of street (1=open, 2=retired, 3=temporarily closed, 4=under construction)	StreetStatus	~~O~~ R
FullStreet	String	150	Unique ID of corresponding street centerline segment	N/A	R
OneWay	String	2	Signifies if the segment is oneway in direction	OneWay	O
Travel	String	20	Direction of travel for divided roadways	N/A	O
RoadClass	String	15	This is the classification for the road segment as adopted from the MAF/TIGER Feature Classification Codes (MTFCC) Attachment D	RClass	O
SurfType	String	10	This is the surface type of the segment	SType	O
ZCoordS	String	Number	Elevation at the start of the segment node	N/A	R
ZCoordE	String	Number	Elevation at the end of the segment node	N/A	R
ESNCenter	String	5	Responsible ESN responder at centerline	N/A	O
UpdateBy	String	50	Person who made the last update to the record	N/A	M
ActiveDT	Date	26	Date when the segment is activated or becomes available for use.	N/A	M
UActiveDate	Date	26	Date when the segment becomes unactive or not available for use.	N/A	RC

OneWay

Domain	Description
FT	One way travel from FROM or Start Node to TO or End Node
TF	One way travel from TO or END node to FROM or Start Node
B	Travel in both directions allowed

RClass

Domain	Description
1	Primary
2	Secondary
3	Local
4	Ramp
5	Service
6	Vehicular Trail
7	Walkway
8	Alley
9	Private
10	Parking Lot
11	Trail
12	Other

SType

Domain	Description
1	Paved
2	Gravel
3	Soil
4	Proposed
5	Minimum

Delete Domain Table UnitType as it is not needed

NITC 3-206 Address

1.2.2.1 Digitizing

Reviewer Question/Comment: *Are we to assume that the document is referring to NMAS 1:2400 mapping accuracy requirements per the NSSDA? If so, we recommend this to be explicitly stated AND the actual statistical test for this accuracy be stated somewhere in the document and referenced in the document.*

GIS Council Comments: Reference is to be made using NSSDA statistical and testing methodology as pointed out in FGDC Geospatial Positioning Accuracy Standards. "The NSSDA implements a statistical and testing methodology for estimating the positional accuracy of points on maps and in digital geospatial data, with respect to georeferenced ground positions of higher accuracy." (Source: FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

Reference to conformance levels or accuracy thresholds can be referenced as National Map Accuracy Standards (NMAS) or Accuracy Standards for Large-Scale Maps through ASPRS. However, ASPRS formed the basis for update of the NMAS to address map scales smaller than 1:20,000.

Also to be clear, this section describes the underlined originating data source requirements. We are referencing the use of orthoimagery as the source. With this being said, NENA GIS Data Collection and Maintenance Standards (NENA 02-014) references the necessary orthoimagery specifications for these types of applications. It is explicit in that "aerial photography shall be obtained at a maximum scale of 1:2400, 1 foot pixel resolution which produces a NSSDA Horizontal RMSE (Root Mean Squared Error) Accuracy of 5 feet or better."

Many other states are meeting or exceeding this standard for better control. The state of Kansas's E911 initiated a project last year to complete aerial acquisition having the same requirements we are suggesting. North Dakota provides recommendations even at a greater level of capture scale from imagery at 1:1200 in order to conduct a centerline and address point data creation.

Recommendation:
In Section 1.2.3 Spatial Accuracy section, add:

The minimum positional accuracy standards need to meet the following standard as set forth in the FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

In Section 7.0 Related Documents, add: FGDC Geospatial Positioning Accuracy Standards Part 3, Appendix 3-D (FGDC-STD-007.3-1998)

Reviewer Question/Comment: *In regards to the remark, "(well intentioned), but unnecessarily high accuracy requirements."*

GIS Council Comments: These requirements are well in the threshold needed for this data, particularly if it is already cited federally through NENA and FGDC standards. In addition, other

states are benchmarking at the same requirements or even greater accuracy requirements. That is another reason why we are developing these standards as to reinforce and educate data developers on these standards on what is acceptable.

Recommendation: None

Reviewer Question/Comment: *In regards to remark, "If NITC adopts these standards…will cost NE tax payers…isn't worth the expense. We recommend the NITC Technical Panel revert to accuracy standards that allow use of the free NAIP imagery, but maintain a recommendation to use higher accuracy imagery where it is already available."*

GIS Council Comments: The state has many intended uses for higher quality imagery including 'leaf-off' applications that go beyond what NAIP provides. Even though NAIP is free, it was intended only to be used for specific purposes. The NITC GIS Council is positioning a better framework of geospatial data requirements statewide to allow other data sets to be derived from data such as ortho imagery.

There is a risk associated to using NAIP imagery at it's current resolution particularly when used to derive other data that have other data accuracy requirements. This risk can also be associated to costs and will eventually be more costly as it does not provide the adequate level of base imagery needed for the state for a multitude of applications it does not currently serve. So, eventually it will cost the tax payers even more if we continue using less accurate data sets for specific data requirements and applications. NAIP imagery has a resolution of 1 meter. This represents a horizontal accuracy of within +/- 3 meters relative to referenced USGS digital ortho quarter quadrangles. The current 'free' NAIP does not meet NENA or this standard.

Obviously, there will be a transition period from current data to new or enhanced data using current and higher accuracy imagery. Data acquisition for imagery continues to improve in both affordability and accuracy. These requirements outlined here are well within reason and justifiable in the cost particularly as it reduces risk from data derived from old and less accurate data sets.

The NITC 3-204 Imagery standards that are currently in place indicate the necessary requirements for resolution and accuracy for future imagery collection. These requirements are also tied to other data requirements and standards such as LiDAR as indicated in NITC 3-203 Elevation Acquisition using LiDAR as well as street centerline and address standards that are proposed here.

Recommendation:

In Section 1.2.2.1 Digitizing at the end, add:

For information regarding standards for imagery and LiDAR requirements for Nebraska, refer to the Elevation Acquisition using LiDAR Standards (NITC 3-203) and Imagery Standards (NITC 3-204).

In Section 7.0 Related Documents, add:
NITC 3-203 Elevation Acquisition using LiDAR Standards
NITC 3-204 Imagery Standards

1.3.1 General Address Components

Reviewer Question/Comment: *Pertaining to, "Each jurisdiction shall develop a master address database that can be referenced when new street names are created or assigned so that duplications are avoided?" What format should this "master address database" be in? What should it contain? Which jurisdiction does NITC recommend maintain it? The PSAP? The State? The County? The PSAP? The incorporated cities, towns and villages? Most counties in Nebraska already contain duplication of street names because of individual towns within a county/PSAP each containing "1st Street, 5th Avenue etc. How does NITC propose these existing cases are handled?*

GIS Council Comments: Many of these comments are handled within other governance and operational plans and need no recommendations in these standards.

Because data will be consolidated into a statewide model, NENA is suggesting that all jurisdictions define their data layers and attributes the same as they are specified in the upcoming release of the NENA NG9-1-1 GIS Data Model standard. So this would mean it would be in best interest that the MSAGs and local authoritative addressing databases are encouraged to update their databases according to this standard. They need to be able to translate to a statewide address database. The required attributes for the database are clear and outlined with NENA and FGDC as to avoid duplication. Particularly, since each address is unique to the city and zip code it is being derived.

There are several entities having responsibilities and authorities. These are currently already outlined in Sections 1.5, 5 and 6. The format for a localized copy of addressing authorities need to coincide.

Recommendation:
In Section 1.3.1 General Address Components, modify:

Addressing authorities at the local level that maintain address data within their ~~Each~~ jurisdiction shall develop a master address database that can be referenced to the NAD when new street names are being created or assigned so that duplications are avoided. All street names and address numbers shall be kept consistent with geospatial datasets.

Note: The reviewer did not make this comment in the Street Centerline standards. As to maintain consistency between the standards the following modifications will be made in the Street Centerline standards in Section 1.3.1 General Address Components.

Addressing authorities at the local level that maintain address data within their ~~Each~~ jurisdiction shall develop a master address database that can be referenced to the NSCD when new street names are being created or assigned so that duplications are avoided. All street names and address numbers shall be kept consistent with geospatial datasets.

1.3.2 Unique Identification Code

Reviewer Question/Comment: *May a unique ID be reused? If so, how and when? What are the rules for the stickiness of a unique ID? For example, what if a property is demolished and later rebuilt in the same or similar physical location with the same address, does the ID remain (and therefore history) or should it receive a new ID?*

GIS Council Comments: This really depends on the situation and the ID needs to be considered in an agile approach. The UniqueID relates two objects – the digital point itself as stored in a table and characteristics about that point. As long as the Unique identifier maintains the tie to the characteristics of the data and is able to be coincident from a local database to the statewide database it would be accepted to reuse UniqueIDs. Addresses do not cease to exist but attribution about that point can change. There are cases where we may need to reroute services to a preexisting location. The only situation we have discussed to change or retire addresses is if a series of addresses where to be removed or renumbered due to changes in buildings destroyed and rebuilt (ie, several houses to tall buildings or complex of apartments). However, even in the case where the address may be similar but then you have multiple buildings, you still would need to track sub-address information in order to properly route callers to a location within that address.

It is much easier to maintain the original Unique ID to the same address and not reassign to a different address. There are other purposes for the NAD beyond public safety and we will need to maintain continuity of the statewide database with other databases that we have relationships to using the same UniqueID. Local jurisdictions can keep maintaining their defined ID as long as it is still has conformity to the NAD UniqueID. However, the standard also applies to a specific unique ID for the statewide database.

Recommendation:

Modify 1.3.2 Unique Identification Code

A unique identifier is required for the statewide address point database. This unique identifier allows the data to be tied or joined to other spatial data sets having the same identifier. The field name for this unique code in NAD is "NEAddressID." The first four (4) digits are the county name followed by the number associated from the local addressing authority. In certain cases, the unique identifier may change at the local level. This is acceptable and will also need to be reflected as the change to the statewide address point database.

1.4 Data Format

Reviewer Question/Comment: *We recommend that NITC consider additional suitable data formats so as to not favor one particular vendor.*

GIS Council Comments: The importance of these recommendations are to assure that technical aspects are met for meeting the topological requirements of these standards. With this being said, this can limit the choices of software and the data file storage format requirements. If we included other formats this can limit the ability to create and test topology. For example, topology rules are not able to be applied to Shapefiles and would need to be converted to another format. Having a standardized process will also reduce additional costs by reducing additional steps through complex changes to formatting and conversion of data sets. We also want to be clear that we also need to provide the data back in similar fashion so we will recommend a statement to that effect.

Recommendation:

Modify 1.4 Data Format through the following modification:

The data format provided will need to be in a format that can be interpreted by commercial GIS software, preferably as an Esri geodatabase. A geodatabase schema including domains can be provided by contacting the State of Nebraska, Office of the CIO GIS Shared Services. Address data stored on NebraskaMAP will be in an Esri geodatabase format but provided through various formats for other users to consume.

Other supporting tabular data will need to be provided in MS ACCESS, DBF, or MS SQL formats.

1.5 Maintenance

Reviewer Question/Comment: *Identification of the numerous addressing authorities in NE is just the beginning. We believe only a thorough and ongoing training and education program will equip the "addressing authorities" with the knowledge and skills to comply with these standards. What does NITC propose to combat this?*

Reviewer Question/Comment: *What would the NITC consider a "timely manner" for providing updates to the central database by the jurisdiction?*

GIS Council Comments: These questions are best addressed elsewhere in other governance and operational plans and need no recommendations in these standards.

Recommendation: None

1.6.2 Physical Location

Reviewer Question/Comment: *NSSDA over reaching. See comments and responses from earlier as found in 1.2.2.1 Digitizing.*

GIS Council Comments: The requirements by NSSDA are clear. You are making assumptions in your determination on whether you can digitize accurately using NAIP. Also, with "leaf-on" imagery many primary living structures will have trees cover part or all of the structure? How can you digitize from accurately from this data? There are also techniques to get necessary results that do not entail climbing on roofs with GPS.

Recommendation: None, NSSDA outlines the procedure as per our reference.

General Comments

The following questions were submitted as general comments and are best addressed through governance and operational plans. These standards become effective as soon as NITC approves them. However, the NITC GIS Council realizes a transition will need to occur and plans are currently being outlined to provide this guidance.

1. When does the NITC propose to adopt these standards? The documentation only refers to the public comment period.

2. When does the NITC propose these standards become enforceable? Will existing data be grandfathered in? Will there be a grace period for adoption? These standards in their current form, while laudable, will put a very heavy fiscal burden on PSAPs, counties and the NEPSC (to the tune of millions of dollars) as it will require a complete rebuild of all existing 911 street

centerline data to meet these standards. We recommend a grace period of at least 5 years to ease adoption of these standards.

Reviewer Question/Comment: The name "NAD" to easily confused as North American Datum and not accurate description of the database.

GIS Council Comments: The general users are not familiar with North American Datum. This is not an issue. It also does not make any sense to add Point as it is already inclusive of an address would be considered at a location.

Recommendation: No recommendation to change the name.

GIS Council Comments

Modify the section 1.3.4 Data Schema and Descriptions section.

The following table represents the necessary data schema including field names, descriptions, and associated domains for the address point database. The minimum required fields for these standards are represented by the following identifiers: "**R**" – required, "**RC**" –Recommended, and "**O**" – Optional.

Field Name	Field Type	Field Length	Field Description	Domain Name	Required Level
FullAddress	String	75	Concatenated street address consisting of address number, pre direction, pre type, street name, street type, suffix direction, unit number, building, floor.	N/A	~~RC~~ R
MilePost	String	150	Mile marker or measurement at location	N/A	RC
NatGrid	String	15	This is the US National Grid address up to 10 digits at 1 meter	N/A	O
UpdateBy	String	50	Person who made the last update to the record	N/A	M
ActiveDT	Date	26	Date when the segment is activated or becomes available for use.	N/A	M
UActiveDate	Date	26	Date when the segment becomes unactive or not available for use.	N/A	RC