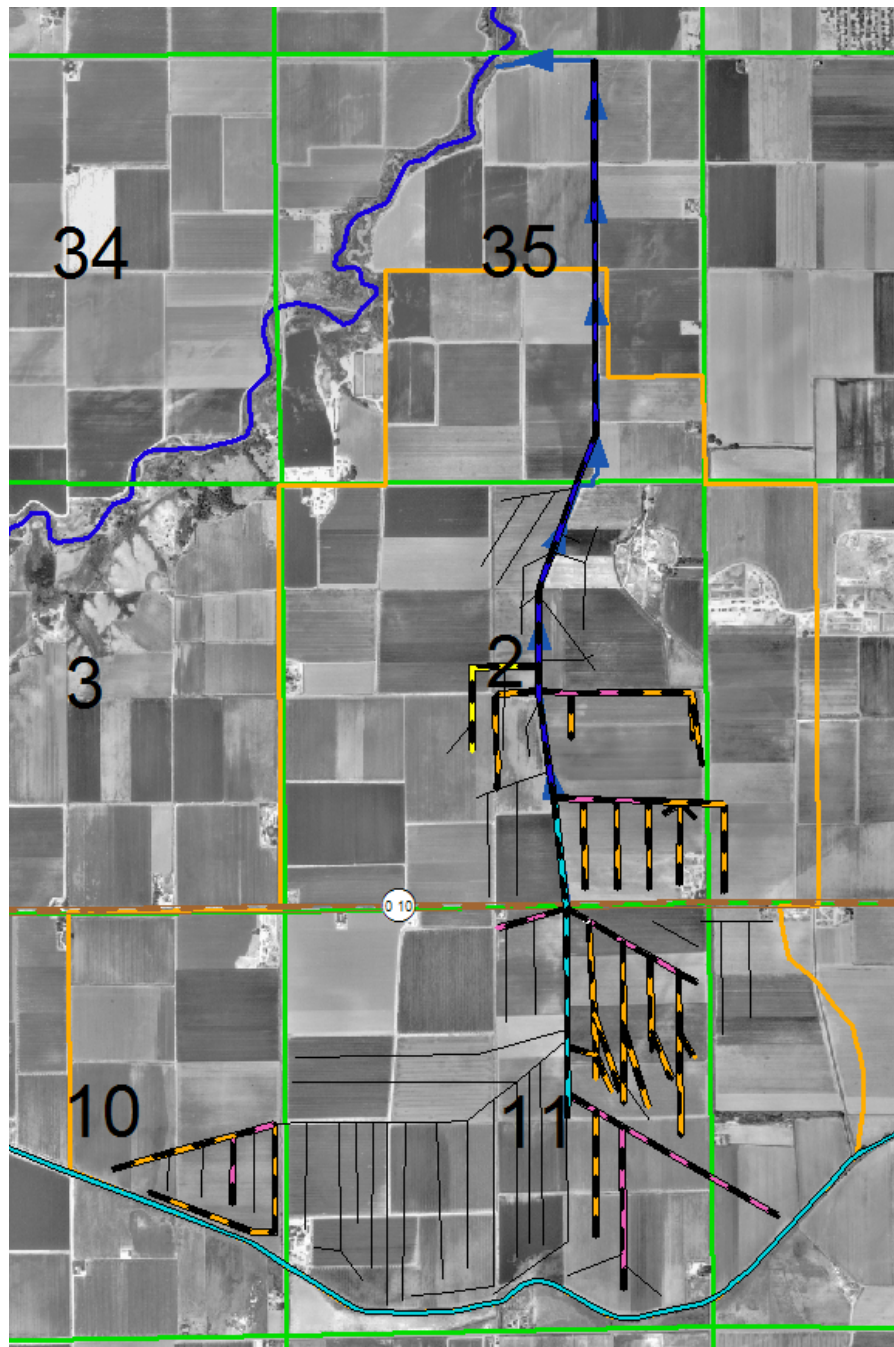


Fairmont Drainage District System Inventory

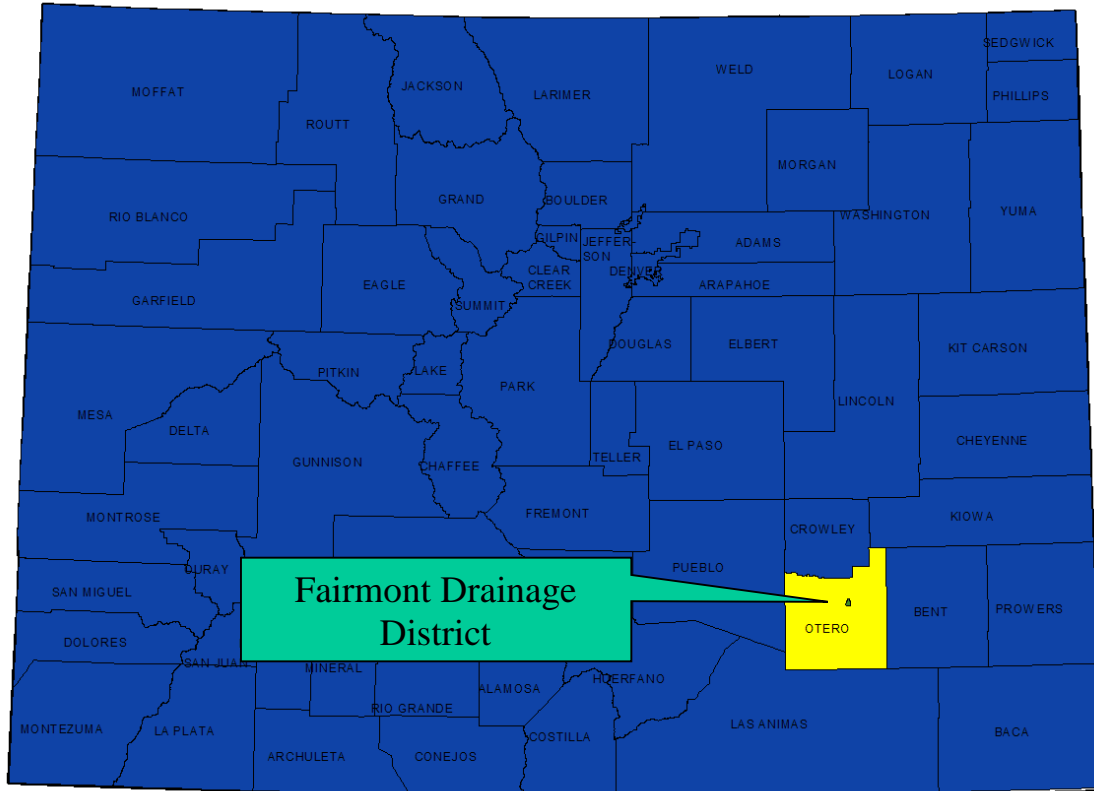


August 17, 2006, rev. 3/14/07 & 4/26/07

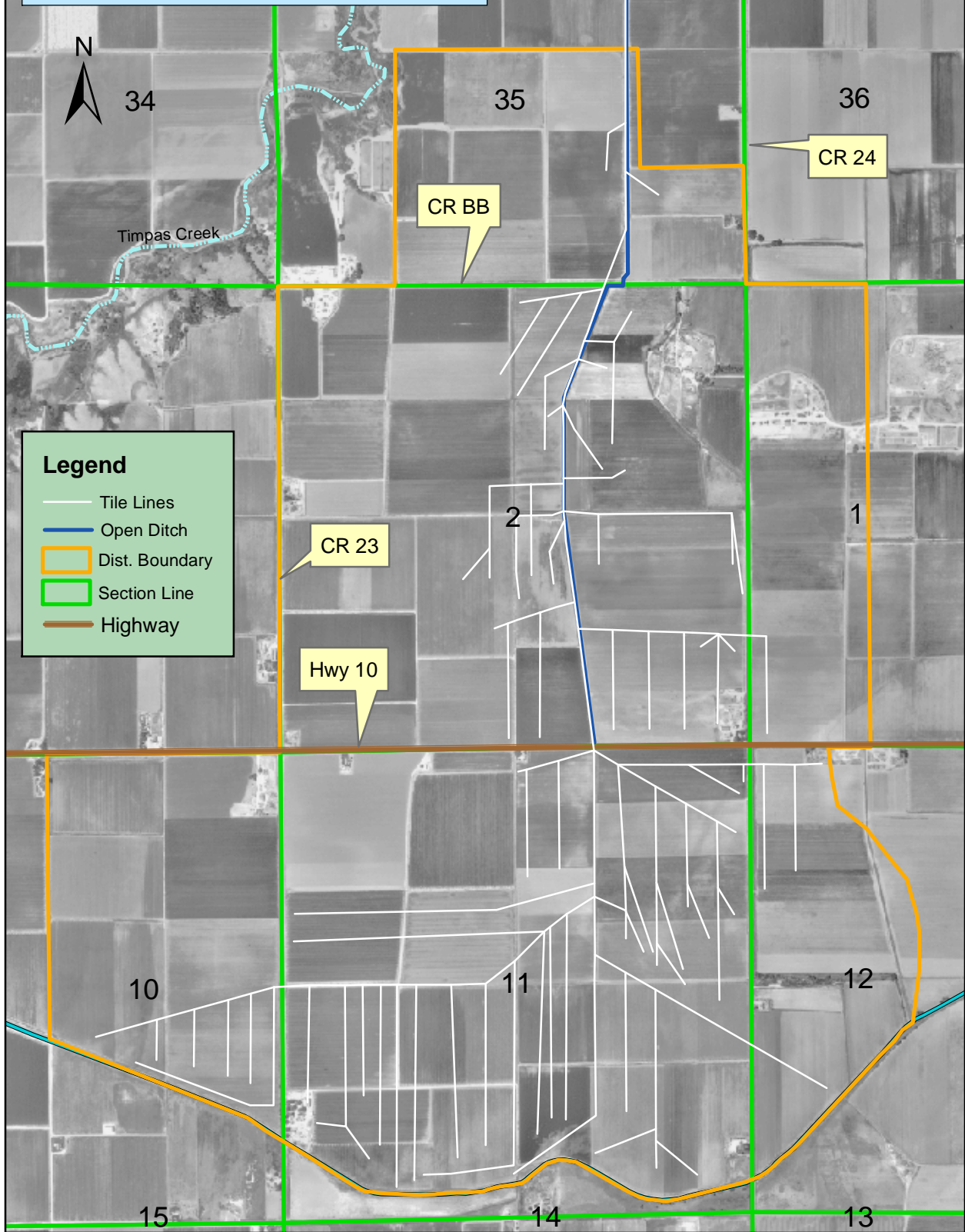
Prepared with the assistance of Lance Brundage, Leon Golden, Dave Kaess, Kenny Kimsey, Bob Klinkerman, Bill Milenski, Frank Milenski, Alfred Muth, Joe Petramalla, Rose Rotter, Bret Schafer, Marvin Schlagel, Dean, Keith, and Walter Tucker and Walter Epley

The Lower Arkansas Valley Drainage System Rehabilitation Study
Colorado State Univ., Dr. John Wilkins-Wells, Sociology Water Lab
Clark Building B258, Fort Collins, CO 80523 Ph: 970-491-5635

Location of Fairmont Drainage District In Colorado And Otero County



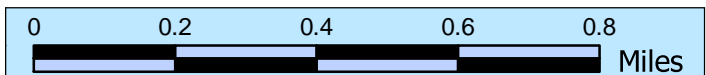
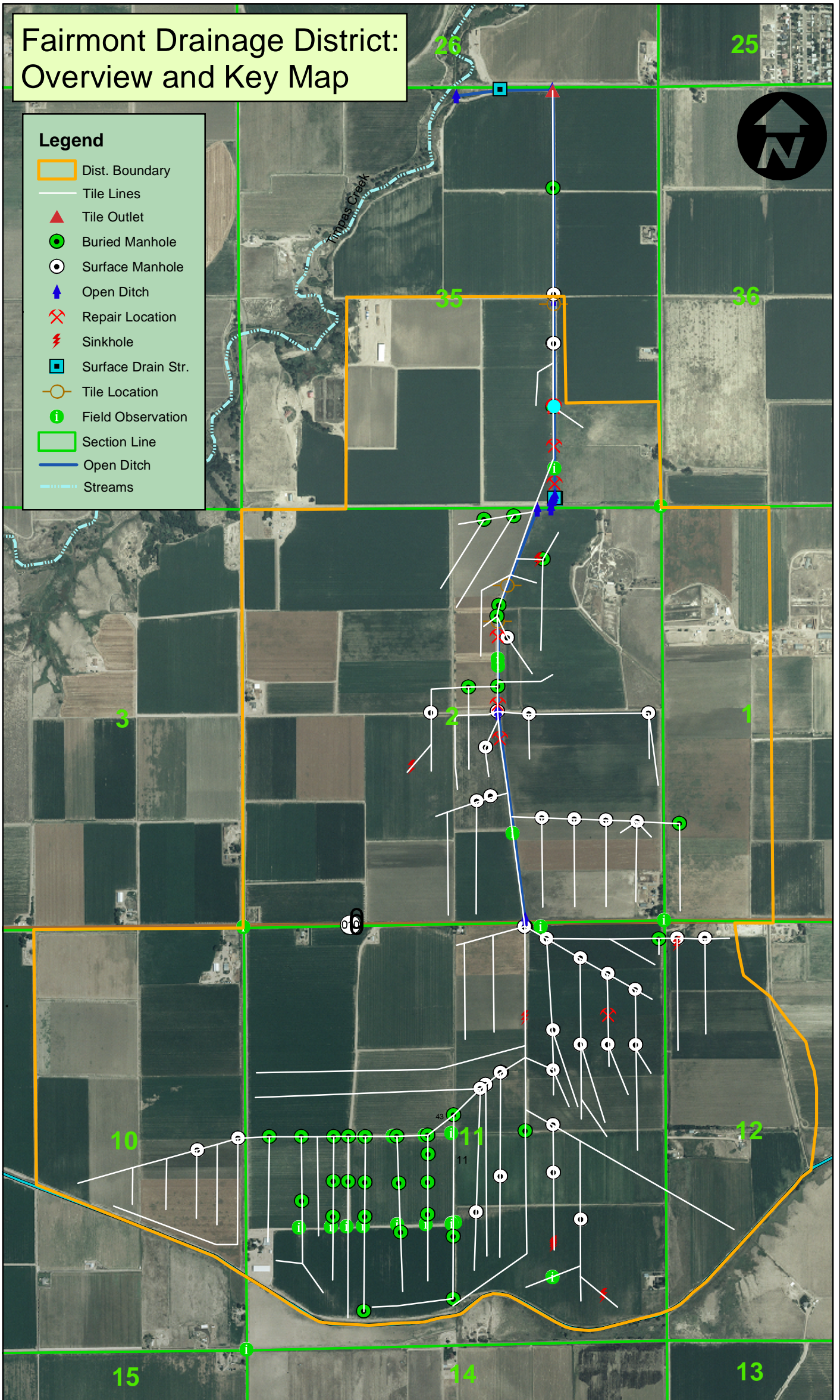
Fairmont Drainage District: Overview and Key Map



Fairmont Drainage District: Overview and Key Map

Legend

-  Dist. Boundary
-  Tile Lines
-  Tile Outlet
-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Field Observation
-  Section Line
-  Open Ditch
-  Streams



Fairmont Drainage District: Tile Size Map



Legend

Dist. Boundary

TILESIZE

Unk

4

6

7

8

10

14

15

Buried Manhole

Surface Manhole

Open Ditch

Repair Location

Sinkhole

Surface Drain Str.

Tile Location

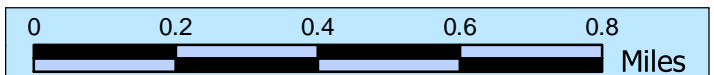
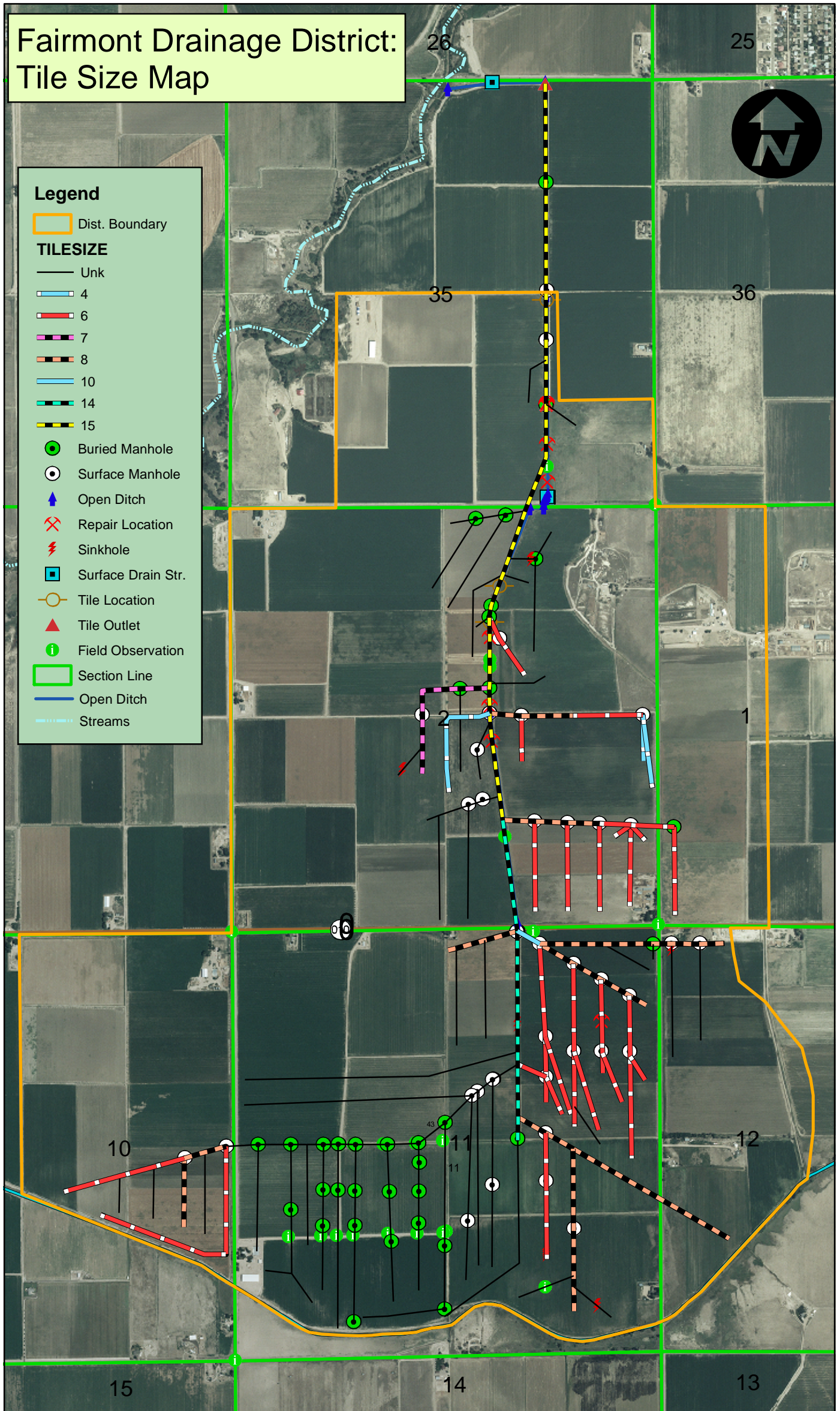
Tile Outlet

Field Observation

Section Line

Open Ditch

Streams



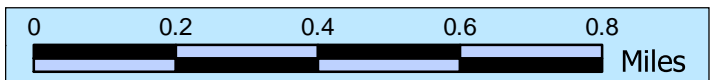
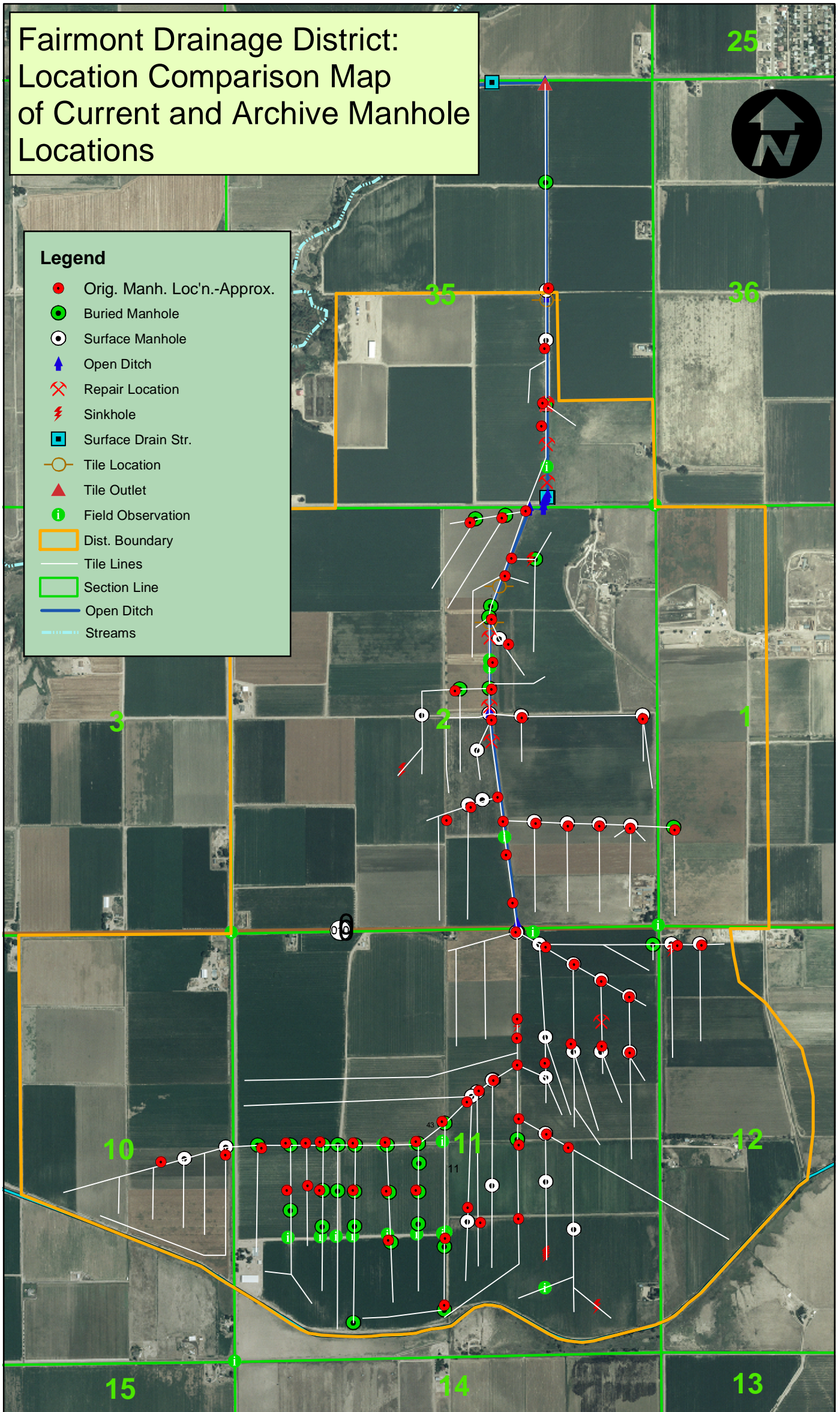
Fairmont Drainage District: Location Comparison Map of Current and Archive Manhole Locations

25



Legend

- Orig. Manh. Loc'n.-Approx.
- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Surface Drain Str.
- Tile Location
- ▲ Tile Outlet
- ⓘ Field Observation
- ▭ Dist. Boundary
- Tile Lines
- ▭ Section Line
- Open Ditch
- ⋯ Streams



Drainage District Infrastructure notes on the Fairmont Drainage District located in Otero County, Colorado. This district includes all or parts of Section 35 of T23S, R56 W, and Sections 1, 2, 10, 11, and 12 of T24S, R56W in Otero County, Colorado.

Waypoints and notes first taken on April 20, 2005, then again on December 1, 6, 8, and 9, 2005, March 10, 21, 24, 2006, and July 18, 2006. We used the Garmin GPSmap76 handheld unit with a backpack differential correction unit for most of the waypoints. Three waypoints were taken on the initial drive-around the district using a handheld unit. Twenty-eight locations were taken from survey sheets provided by local landowners which located buried manholes. In order to locate these points on a map, an ArcView 3.3 Extension was used. In these cases, Latitude and Longitude readings were not generated. Waypoints and notes done with the help of Lance Brundage, Leon Golden, Dave Kaess, Kenny Kimsey, Bob Klinkerman, Bill Milenski, Frank Milenski, Alfred Muth, Joe Petramalla, Rose Rotter, Bret Schafer, Marvin Schlagel, Dean, Keith, and Walter Tucker, and Walter Epley.

General Notes:

1. Fairmont Drainage District, situated just south and west of Swink, Colorado maintains a series of small open drains and tile lines adjacent to the Catlin Canal. The drains and tile lines move the effluent northward throughout the district, and outlet into Timpas Creek on the north edge of Section 35 of T23S, R56W. The district collects assessments for its operations through the Otero County Assessor.

2. In order to locate the open and tile drains in the district, we have used several methods. The most important has been field observation with the assistance of landowners and those who maintain the tile lines and have experience with their locations. We have used information from several sources indicating where tile lines might be such as sinkholes, manholes, and aerial photo interpretation. Black and white aerial photos from the NRCS, and color photos for the year 2000, from Otero County were used to assist in the location of tile lines. In addition, an archival map held by district officials was very helpful in determining the location of tile lines.

We have located manholes, spots where repairs have been made, and/or sinkholes have occurred, and have had to "connect-the-dots" to map out the full tile lines. We have relied heavily on the lines located on the archive map, a mylar copy of the original paper map of the district layout. We are not certain, however, that all lines were installed exactly as depicted on the map. In addition, we have located changes made since the original tile was laid based on the advice of those who are aware of the changes. Nevertheless, we are not sure whether we have properly located all the tile lines in the district. In short, we are not sure we have the tile lines drawn right, but this is the best approximation we have to this date. Hopefully, we can add to this knowledge base as more experience is gained with the exact location of the lines.

3. Note the spreadsheet included with these notes, which includes the recorded waypoint number (ident), latitude, longitude, and date and time of reading. In addition, statistics about the drainage infrastructure are included at the end of these notes.

Waypoint Log:

Waypoints 102, 104, 105 & 106: (#103 not used)

Manholes buried previously, and located using survey baselines. These are in Section 2, T24S, R56W. We have adjusted the location of tile lines leading to Waypoint 104, symbolizing a buried manhole, based on the principle that manholes were most often put in at the junction of tile lines. The location of the tile lines in the area of this waypoint is conjecture, and do not match the location placed on the original map of the district. Waypoint 103 was originally taken from survey data, on the premise that it was a buried manhole, but on inspection, was found to have a surface opening. The original waypoint 103 taken from survey data has been deleted and the actual manhole location substituted for it.

Waypoints 107 – 129: (Waypoint #125 not used)

Manholes buried previously, and located using survey baselines. These are in the west half of Section 11, T24S, R56W. These all have GPS readings associated with each manhole, but were unavailable for this report. (Note: See Diamond A Farms for details).

Waypoint 130:

Notes from conversation with Joe Petramala: (west 1/3 of SW ¼ of Section 1, T24S, R56W)
Manhole at this waypoint just east of CR 24 was falling into disrepair. The area was excavated, and the presence of an 8-inch clay tile noted. It was oriented in the form of an "L" coming from the west and turning south. This was repaired and buried in 2003. Note: (Archive maps show a line going to the northeast from this tile intersection).

Waypoint 131:

Notes from conversation with David Kaess: (in the SE ¼ of Section 11, T24S, R56W)
After purchasing the land in 1996, the area around this waypoint was so wet, one couldn't get across it with equipment. A new line was installed in this area in 1996.

Waypoint 132:

Notes from conversation with Dean Tucker on 9/12/2006: Location of place where South Swink Water Company dug up a water line that had been buried about 8 or 10 years ago, but not connected. They were connecting a new line to it, and dug up a short distance to find the exact end of the line. This hole was about 200 ft. east of Waypoint 288, about 45 feet from the centerline of the road. Dean indicated that he was told, and saw broken tile at the bottom of that hole, and that along that line where they put in the waterline which was said to be parallel to the highway, the old clay tile had been crushed. It is unclear how this relates to the tile system for the district at this time. Observations by local farmers indicate no tile-related problems in this area. The nearest northwest-southeast oriented tile line is approximately 100 feet southwest of this point, and the nearest east-west oriented tile line is 150 feet south of this waterline.

Waypoint 133:

Location of a repair by Keith Tucker in 1980.

(Note: Waypoint numbers 134 to 200 not used.)

Waypoint 201:

Manhole along main 15-inch line in the middle of north-south dirt road. This manhole has been repaired and buried. A metal manhole replaced the previous installation. During the repair of the manhole, archive maps showed a line entering from the southeast into this manhole. It could not be found by the construction crew. We have, nevertheless, placed the line on the maps, for the possibility that it is in the vicinity.

(Note: Waypoint numbers 202 to 227 not used.)

Waypoint 228:

A brick manhole, approximately 6 feet to dirt at the bottom. There is a 6-inch clay tile coming in from the south-southeast. The outlet is not visible from the surface. The manhole is covered by boards, and is level with the surface of the field.

Waypoint 229:

A brick manhole has belled clay tile coming into it, and going out of it. It is 6 feet to the dirt on the bottom of the manhole. The clay tile sits just on top of the dirt on the bottom. Two six-inch lines come into the manhole, one from the east, and one from the south. One 8-inch line exits to the west.

Waypoint 230:

A manhole 6 feet deep with wood board on the top made of 4 feet diameter corrugated metal

pipe. It is 6 feet deep with concrete at the bottom. Mr. Muth indicates that the two lines coming into this manhole are 4-inch. In field notes taken on inspection of the manhole for this report, the notes indicate that there was a 6-inch black plastic tile line that entered from the south-southwest and a 6-inch clay tile that exited to the west. Note from conversation with Mr. Muth on 13 November 2006: A wet-seepy area has developed to the south of this manhole this summer. Mr. Muth indicated he thinks the lines are plugged up here, and need to be cleaned. He indicated that the crop could not be harvested this year because of wetness.

Waypoint 231:

Manhole with wood board cover made of brick. There is water in the bottom at about 6 feet in depth. An 8-inch clay tile comes into this structure from the east. Water is running into and out of this structure.

Waypoint 232:

Large 4-foot CMP manhole with a wooden top at the field boundary. There are 2 2-foot sections of corrugated metal pipe on top of a concrete base. Manhole stands 2 feet above surrounding ground level. This is on the main line, 15-inch clay tile enters from the south, and exits toward the north. This is the main line of the Fairmont Drainage system. It is running half full today. The tile is 5 1/2 feet below the ground surface. One line which outlets into this manhole comes from the west, and is a 4-inch belled clay tile installed by Alfred Muth using district tile. He indicates the size is probably 4 inches, but may be 5 inches. Walter Tucker rebuilt this manhole and the surrounding concrete works on 5/11/1998.

Waypoint 233:

Brick manhole with wooden boards on the top. Sand on the bottom which is 6 feet from the top. There is a 7-inch clay tile entering from the north and south angling downward as it enters the manhole.

Waypoint 234:

Manhole with 4" concrete top. Can't view inside manhole.

Waypoint 235:

Manhole with concrete cover. Can't view inside manhole.

Waypoint 236:

Brick manhole that is 6 feet deep with wooden boards on the top. There is an 8-inch (estimate) tile line entering from the east, and the same exiting toward the west. A 6-inch clay tile enters into the southwest quadrant of the manhole.

Waypoint 237:

Brick manhole 6 feet deep with dirt on the bottom. Manhole is covered with wooden boards. A 6-inch clay tile line enters from the south. An 8-inch clay tile enters from the east and exits to the west.

Waypoint 238 and 239 (duplicate points):

Brick manhole with wooden board top. Diameter of top entry point is 32 inches. There is an upper section which is 18 inches deep, then at that point, the manhole reduces in size by 8 inches. This brick manhole is nearly level with surrounding ground level. Tile is 4 1/2 feet below the ground surface. A 14-inch line enters from the south, and exits to the north. A 10-inch line enters from the east southeast. An 8-inch line enters from straight west. See note for Waypoint 263 indicating that the line running straight south from this waypoint to Waypoint 263 has at least 2 manholes which were buried, but the location of which is unknown at this time. These manholes caved in, and were subsequently buried to permit traffic on the field road. Notes taken on 4/26/07 (Mr. Alfred Muth): Tile/water from the south running northward is nearly full, with 2-3" open space on the top. Mr. Muth states that it runs this way most of the time. It

may run half full after the irrigation season is over, when all irrigation has ceased. Mr. Muth states that the only time he has seen this tile dry, since 1975, was 3-4 years ago (2003) after a bad drought.

(Note: Waypoint numbers 240 and 241 not used.)

Waypoint 242:

Brick manhole in plowed field level with surface. It has a wooden cover. Water is flowing on the bottom of the manhole which is at a depth of 6 feet. A 10-inch clay tile line enters from the northwest, which is the "outlet" of the manhole. An 8-inch clay tile line enters from the east, and an 8-inch clay tile line enters from the southeast. Revisit of this manhole on November 13, 2006 shows water actively flowing through the manhole, with the tile line coming from straight east about 85% full of mud.

Waypoint 243:

Manhole in plowed field. Cannot view inside.

Waypoint 244:

Manhole with wooden cover. Cannot view inside.

Waypoint 245:

Brick manhole in alfalfa field. Wooden cover has some holes. It is 4 feet deep, and 4 feet in diameter. A 6-inch clay tile exits on the north side.

Waypoint 246:

A 4-foot diameter brick manhole with a wooden cover that is 4 - 6 feet deep in an alfalfa field. Dirt is covering the tiles at the bottom with animal holes present there. Water is running from the east southeast to northwest portion of the manhole.

Waypoint 247:

Brick manhole, 4 feet diameter, and 4 feet deep. Dirt at the bottom prevents viewing of the tile.

Waypoint 248:

This may be a remnant of a manhole. Dirt is covering it, but there is a sink or washout on the side of it, which permits viewing of what appears to be a brick structure. Mr. Muth indicates that during the spring of 2007, this was repaired and buried. The top of the brick structure was removed, leaving about 14" at the bottom where the tile entered, and capped with a 4-6 inch concrete top. Mr. Muth indicated that there was a 6" tile, clay, entering this manhole from straight south, and a line entering from the straight east orientation. He indicated that there was water entering the manhole structure from the south at the time of the work, but none coming from the east. He indicated that the amount of water entering from the south was about the amount that would fill a 2-3" pipe.

Waypoint 249:

Manhole in alfalfa field with a wooden cover. Can't see inside or get the cover off.

Waypoint 250:

A concrete box structure 6 feet by 6 feet: probably for field surface water management. There is a 15 inch tile entering and exiting. It has a north-northeast by south-southwest orientation.

Waypoint 251:

Location of a gate in the open ditch.

Waypoint 252:

Location of the open ditch.

Waypoint 253:

Manhole covered with wood. It is brick with dirt at the bottom. There is a 8-inch tile line about 5 feet down, entering from the south, and exiting to the north, with water running through it. It is 1/4 covered by dirt. Landowner reports this manhole has always functioned well, with water running through it from south to north.

Waypoint 254:

Landowner has indicated there is a sinkhole in this area. There are a few small animal holes in the vicinity.

Waypoint 255:

Landowner indicated possible sink, with 6 to 12-inch deep small holes.

Waypoint 256:

Landowner indicated there is a possible sink area also. Small depressions 1 - 2 feet in diameter or oblong. This might line up with the manhole to the north of this location.

Waypoint 257:

Manhole with tires and wood on top of it. Can't see inside.

Waypoint 258:

Manhole with dirt, tires, and concrete block on top of it. Can't see inside. Owner has indicated this manhole has problems with caving on the sides.

Waypoint 259:

On field border, concrete fragment by side of field ditch resembles what may have been 1/4 of an old manhole. There is a 4-inch white tubing, 8 feet tall sticking out of the ground. It connects with a 6-inch white plastic tube in the ground. There is open water 42 inches beneath the surface, going down to 56 inches in total depth. This structure is probably part of an irrigation structure. The ground surface has been disturbed here, and is settling.

Waypoint 260: (Duplicate of Waypoint 587- See that waypoint)

Just to the west, 30 feet, is a white 1 1/2 inch plastic pipe standing straight up with a piece of rebar in the middle. During the Summer of 2006, operator of this farm confirmed that these white plastic "poles" with rebar in the middle indicate, or are lined up with the locations of buried manholes at some distance out in the field. These were placed as markers to get the attention of persons working the fields.

Waypoint 261:

A brick manhole 5 feet deep. Can peek through the wooden board cover. Tile on the bottom is covered in mud. Top 1/6th of the tile is visible on the south side. Estimated to be 8-inches. Water is entering from the south, and exiting to the north. The exiting tile is not visible.

Waypoint 262:

Manhole in plowed field on farm boundary. Water is running through this manhole which is 5 feet deep to the mud at the bottom. The top of this manhole is 26 inches in diameter (seen frequently in this district) with a diameter at the base of 4 feet. An 8-inch tile enters from the southeast, and exits to the northwest. A 6-inch clay tile enters from straight south in the southwest corner of the manhole.

Waypoint 263:

Location in middle of field road. See a circular pattern of melted snow surrounded by a light 1-inch covering of snow. Could this be indicative of an underground manhole? Perhaps there is an underground cavity beneath this point which is warmer than the surrounding dirt, thus melting

the snow. While this may be a bit speculative, the locations line up with the overall tile line configuration. Owner of the farm on the east side of this field road, Mr. Alfred Muth, indicates that he has buried at least 2 manholes along this field road between Waypoints 263 and 238,239. The previous owner made a point of indicating that driving on the field road with heavy loads would cause the manholes to cave in. This in fact happened over the years as Mr. Muth related.

(Note: Waypoint numbers 264 to 431 not used.)

Waypoint 432:

A brick manhole 4 feet deep to a dirt bottom. Tile is not visible. Manhole is covered with boards.

Waypoint 433:

A brick manhole with board cover, with tile at bottom of 4 foot depth. There is 6-inch clay tile at the bottom, and water is running from the south to the north. Two lines enter from the south side, adjacent to one another. One line from straight south enters at the 5:00 position. A second enters just adjacent to the east of it. The exiting tile is oriented straight north, at the 1:00 position.

Waypoint 434:

Manhole on boundary between parcels. Cannot be entered.

Waypoint 435:

Small sinkhole just south of waypoint 434 in the open field. This may be directly over a line which connects to the manhole at Waypoint 434.

Waypoint 436:

Manhole on boundary between parcels straight east of Waypoint 434. This cannot be entered at the moment.

Waypoint 437:

An open drain for the district, on the north side of a higher berm. This drain is carrying water.

Waypoint 438:

Open drain running south from here. On the south side of east-west field road.

Waypoint 439:

A circular-shaped "dip" in the field road. Could this be a remnant of an old sunken manhole?

Waypoint 440:

The open drain bends at this point from a straight north-south orientation to one pointing downslope to the north northeast.

Waypoint 441:

A round "hole" which is 3 feet deep and 5 feet across. Could this be a sinkhole or a manhole?

Waypoint 442:

Location of a bend in open ditch, flowing toward this point from the west-southwest and making a turn bearing directly eastward along the south side of CR BB.

Waypoint 443:

Location of open ditch under CR BB going straight north from this point. Standing on the culvert under Road BB on the south side of road where culvert begins.

Waypoint 444:

Location on the bottom of open ditch on the north side of CR BB, and water structures (east-west pipe).

Waypoint 445:

Standing in the bottom of the open ditch, this is the location of a water control structure.

Waypoint 446:

Standing in the bottom of the open ditch, ditch goes straight north from this location.

Waypoint 447: (See also Waypoint 604 – duplicate waypoints)

Manhole with 4" concrete top. Cannot enter at this time.

Waypoint 448:

Standing on the south side of an east-west field road over the north-south open drain of the district.

Waypoint 449:

Standing on the north side of the road opposite Waypoint 448 over the open drain.

Waypoint 450:

Manhole on the west side of an open drain. Has a 4-inch thick concrete top. This manhole has been repaired in the past.

Waypoint 451:

On the north side of an east-west field road directly over an open drain.

Waypoint 452:

A culvert under a field entry road for the east-west open drain of the district. This point is at the east end of the culvert, just at a bend in the main open drain, which, coming from straight south, bends at a right angle toward the west.

Waypoint 453:

A "sunken" manhole with a concrete top at the same location as Waypoint 452. Cannot enter. One side of this manhole has fallen out due to being exposed from local erosion. It is the outlet for the district's main 15-inch tile line which enters the open ditch at this point and proceeds westward.

Waypoint 454:

A concrete drop structure/flume for the district's open drain. It is 5 feet deep, 8 feet wide, and 30 feet long.

(Note: Waypoint numbers 455 and 456 not used.)

Waypoint 457:

The district's open drain dumps into Timpas Creek at this waypoint.

Waypoint 458:

The beginning of the district's open drain on the Alfred Muth Farm. It is on the north side of Hwy 10, an east-west blacktop highway, approximately 900 feet east of the center of the south edge of Section 2, T24S, R56W. This point is taken standing on the top of the culvert under the highway, and over the drain. At this location, the drain is 3 feet deep, and approx. 5 feet wide. Walter Tucker has made a repair in the tile line approximately 10 feet to the north of this point on the west side of the open ditch.

Waypoint 459:

A depression in the road. Might it be the location of an old manhole?

Waypoint 460:

A manhole with 4-inch thick concrete top. Cannot enter.

Waypoint 461:

Recent sink that has been filled in.

Waypoint 462:

Manhole constructed of brick that is 6 feet deep. There is straw and mud at the bottom, mid-level with the tile outlets. A 6-inch tile line inlets from the south at the 5:00 position, and an 8 or 10-inch tile inlets from the southwest. Tile outlets to the northeast (size undetermined).

Waypoint 463:

Manhole approximately 5 feet deep, with mud, etc. at the bottom. Mud is mid-level with the tile outlets. An 8-inch tile enters from the south at the 5:00 position. Two lines enter from the southwest, a 6-inch clay tile, and a 4-inch white plastic line. Tile exits to the northeast, size undetermined.

(Note: Waypoint numbers 464 to 579 not used.)

Waypoint 580:

Center of intersection of Roads CR Z and CR 23. Taken to establish survey baselines. Not shown on maps.

Waypoint 581:

White pole marker consisting of white plastic pipe 1 ¾" in diameter with rebar in center, indicating buried manhole north or south in field in line with this marker.

Waypoint 582:

White pole marker consisting of white plastic pipe 1 ¾" in diameter with rebar in center, indicating buried manhole north or south in field in line with this marker.

Waypoint 583:

Same description with the following additional note: Just west of a north-south field road. The concrete ditch begins in the northeast corner of the intersection.

Waypoint 584:

White pole marker as above situated on the north side of a concrete ditch which is on the north side of the field east-west field road.

Waypoint 585:

White pole marker as above situated on the north side of a concrete ditch which is on the north side of the field east-west field road.

Waypoint 586:

White pole marker as above situated on the north side of a concrete ditch which is on the north side of the field east-west field road.

Waypoint 587:

White pole marker as above situated on the north side of a concrete ditch which is on the north side of the field east-west field road. Is a repeat of Waypoint 260 taken at a previous time.

Waypoint 588:

White pole marker as before, with the exception that it is broken at the base.

Waypoint 589:

Point taken 8 feet offset to the south of a white pole marker, separated by a field irrigation ditch.

Waypoint 590:

Point taken 8 feet offset to the south of a white pole marker, separated by a field irrigation ditch.

Waypoint 591:

Same description as Waypoint 589, the last in an east-west row of 4 along the south edge of the field.

(Note: Waypoint numbers 592 to 595 not used.)

Waypoint 596:

Location of a manhole, constructed of brick. Tile at the base is 6-inch, non-belled clay tile.

Waypoint 597:

Location of a suspected sinkhole, possibly connecting Larson's tile line & Schlagel tile line in grass field adjacent to the east.

Waypoint 598:

Location of a sinkhole, which has been previously repaired. The tile here is 6-inch, non-belled clay tile. This is not a manhole location.

Waypoint 599:

Location of a benchmark at the centerlines of both County Road BB (east-west) and Rd 24 (north-south). Taken at the corners of the sections to establish the survey baseline point in order to plot the location of 5 manholes in the northeast quarter of Section 2.

Waypoint 600:

Location of the crossing of the centerlines of Highway 10 (east-west) and Road 24 (north-south). Surveyors have indicated that there is a benchmark at this location marking the section corners. A dip in the highway paving was noted, indicating a potential location of the uncovering and recovering of a benchmark.

Waypoint 601:

Location of benchmark/section corner marker at the intersection of Highway 10 (east-west) and Road 23(north-south). This benchmark, on advice from the surveyor, is located in the middle of the westbound lane on the centerline of Road 23. A slight depression /patch was located which might be the spot where the benchmark was uncovered for survey work, and subsequently recovered by asphalt.

Waypoint 602:

Approximate location of benchmark (from Surveyor's notes) of Section corner on the intersection of Road 23 (north-south) and Road Z (east-west). This is located on the centerline of Road 23, 10 to 12 feet south of the centerline of Road Z, per the Surveyor's notes. It was not immediately obvious where the point/patch was located. This location is on the south edge of the blacktop covering of Road Z, at a distance of 10 – 12 feet from the centerline of the east-west road, and exactly on the centerline of Road 23. This location was used to establish the beginning point of the survey for the buried manholes on the Diamond A farm, in order to plot the location of the manholes based on survey courses.

Waypoint 603:

Location of tile line, on the west side of an open ditch. Diamond A is the owner on this location.

Waypoint 604:

Location of a manhole.

Waypoint 605:
Location of a patch to the tile line.

Waypoint 606:
Location of a patch to the tile line.

Waypoint 607:
Location of ditch restructuring, application of rip-rap.

Waypoint 608:
In this general area, a couple of patches have been done to the tile line. Rip-rap has been placed along the banks of the open ditch.

Waypoint 609:
Standing on the west bank of open ditch, 6 to 10 feet across at the top, and approximately 6 feet deep, opposite what appears to be a tile outlet. Can see white plastic pipe at the bottom of the ditch, probably 10 inches in size. Line would be coming from the east, westward downhill, dumping into the ditch at this point. (Nov. 13, 2006) Mr. Muth indicates the pipe at the bottom of the ditch is probably not the incoming tile line indicated above. During construction/repair activities on the buried manhole at this location (see Waypoint 201), Mr. Muth indicated that they could not find the tile line entering from the southeast at this location. We have left the line on the maps, however, based on the possibility it is in the vicinity.

Waypoint 610:
Location of a patch in the tile line about 10 years ago.

Waypoint 611:
This appears to be the location of a manhole. It is buried or covered with some dirt, but very shallow.

Waypoint 612:
Location of the tile line.

Waypoint 613:
Location of a buried manhole. The tile line makes a slight bend here toward the south (22 degree angle).

(Note: Waypoint number 614 not used.)

Waypoint 615:
Location of tile line. It is belled at this location. The line was patched here in 2006.

Waypoint 616:
Location of a patch. This point is taken directly over the line.

Waypoint 617:
Location of a buried manhole.

Waypoint 618:
Location of a patch in the main line.

Waypoint 619:
Location taken directly over the main line.

Waypoint 620:

Location of sinkhole in middle of field road, Section 11. Sinkhole has just developed, is approximately 30" deep, and round, 18" in diameter. Mr. Muth reports in June, 2007 that this was a misaligned tile. It was repaired in June. There was no evidence of other tile or a manhole present.

Waypoint 621:

Location of brick manhole with wood cover. Through a hole in the cover, wate is observed, and measured approximately 30 inches from the surface of the manhole, which is 2-4" above the surrounding ground level.

Waypoint 622:

Location of brick manhole with wooden cover just to the southwest of manhole located at Waypoint 621. Distance between manholes is approximately 11 feet.

Waypoint 623:

Location of brick manhole with wooden cover southwest of Waypoint 622. Through a hole in the cover, water is observed approximately 31" from the surface. It is moving in the manhole, and is clear.

Waypoint 624:

Location of brick manhole with wooden cover. Water is approximately 3 feet beneath the cover lid, and is clear, and is moving.

Waypoint 884:

Location of manhole buried 3-4 feet deep. Taken on 3/13/07, when a sink was exposed. Walter Tucker excavated the area and discovered the 15" main was broken. There is a manhole here, previously unknown in its location, which contains the junction with a 6" clay tile line going out of the manhole toward the southeast.

Notes on Repairs made:

1. The open ditch was cleaned from Highway 10 to the outlet in 1985.
2. Line was repaired at Waypoint 133 in 1980.
3. Location of patches in the main line performed by Walter Tucker during the last 10 years include Waypoints 605, 606, 608, 610, 613, 615, 616, 618.
4. Locations where the open ditch has been restructured, and/or rip-rapped on the sides by Walter Tucker during the last 10 years include Waypoints 607, and 608.
5. Repair of 15" line, manhole at waypoint 884, mid-March, 2007.
6. Repair of main line – 14" clay tile at waypoint 620.

Statistics of the Drainage district infrastructure:

Area of District: 85,849,508 sq. ft. = 1,970.83 acres

Length of tile: 124,982 feet = 23.67 miles

Length of open drain: 11,944 feet = 2.26 miles

Existing Manholes: 72

Following is a spreadsheet of the waypoint logs showing the waypoint number (ident), the occasion of taking the waypoint, or what it was (Type), Latitude and Longitude readings, and the date and time (Comment) when the waypoint was taken. On the page following these logs is a key to the items under "Type".

Ident	Type	Lat	Long	Comment	Model
102	ManhBur	0	0		Survey
104	ManhBur	0	0		Survey
105	ManhBur	0	0		Survey
106	ManhBur	0	0		Survey
107	ManhBur	0	0		Survey
108	ManhBur	0	0		Survey
109	ManhBur	0	0		Survey
110	ManhBur	0	0		Survey
111	ManhBur	0	0		Survey
112	ManhBur	0	0		Survey
113	ManhBur	0	0		Survey
114	ManhBur	0	0		Survey
115	ManhBur	0	0		Survey
116	ManhBur	0	0		Survey
117	ManhBur	0	0		Survey
118	ManhBur	0	0		Survey
119	ManhBur	0	0		Survey
120	ManhBur	0	0		Survey
121	ManhBur	0	0		Survey
122	ManhBur	0	0		Survey
123	ManhBur	0	0		Survey
124	ManhBur	0	0		Survey
126	ManhBur	0	0		Survey
127	ManhBur	0	0		Survey
128	ManhBur	0	0		Survey
129	ManhBur	0	0		Survey
130	ManhBur	0	0		
131	FieldObs	0	0		
132	FieldObs	0	0		
133	RepairsCar	0	0		
201	ManhBur	37.99998407	-103.6424252	20-Apr-05	Handheld
228	Manhole	37.98564004	-103.6390346	12/1/2005 9:42	GPSMAP 76
229	Manhole	37.98570542	-103.6403943	12/1/2005 9:48	GPSMAP 76
230	Manhole	37.98938088	-103.6384638	12/1/2005 9:55	GPSMAP 76
231	Manhole	37.98941432	-103.6436754	12/1/2005 10:04	GPSMAP 76
232	Manhole	37.98951072	-103.6450481	12/1/2005 10:10	GPSMAP 76
233	Manhole	37.98949806	-103.6479547	12/1/2005 10:19	GPSMAP 76
234	Manhole	37.98643079	-103.6460078	12/1/2005 10:28	GPSMAP 76
235	Manhole	37.98658845	-103.6453948	12/1/2005 10:37	GPSMAP 76

Ident	Type	Lat	Long	Comment	Model
236	Manhole	37.98582461	-103.6431728	12/1/2005 10:45	GPSMAP 76
237	Manhole	37.98575831	-103.6417682	12/1/2005 10:52	GPSMAP 76
238	Manhole	37.98207723	-103.6439795	12/1/2005 11:28	GPSMAP 76
239	Manhole	37.98207387	-103.644012	12/1/2005 11:35	GPSMAP 76
242	Manhole	37.98165025	-103.6430498	12/6/2005 13:48	GPSMAP 76
243	Manhole	37.98096344	-103.6415837	12/6/2005 13:55	GPSMAP 76
244	Manhole	37.98040981	-103.6404052	12/6/2005 13:58	GPSMAP 76
245	Manhole	37.97849623	-103.6428292	12/6/2005 14:13	GPSMAP 76
246	Manhole	37.97798057	-103.6416347	12/6/2005 14:18	GPSMAP 76
247	Manhole	37.97712134	-103.6428495	12/6/2005 14:24	GPSMAP 76
248	Manhole	37.98158479	-103.6381535	12/6/2005 14:39	GPSMAP 76
249	Manhole	37.9798473	-103.6392097	12/6/2005 14:47	GPSMAP 76
250	SurfDrainStr	37.99682032	-103.6423771	12/9/2005 11:25	GPSMAP 76
251	SurfDrainStr	37.99683927	-103.6424317	12/9/2005 11:29	GPSMAP 76
252	OpenDitch	37.99665109	-103.6425713	12/9/2005 11:30	GPSMAP 76
253	Manhole	37.97195365	-103.6417419	12/9/2005 14:00	GPSMAP 76
254	Sinkhole	37.9693198	-103.6407832	12/9/2005 14:18	GPSMAP 76
255	Sinkhole	37.97109098	-103.6429271	12/9/2005 14:26	GPSMAP 76
256	Sinkhole	37.97115359	-103.6429308	12/9/2005 14:26	GPSMAP 76
257	Manhole	37.97358074	-103.6429028	12/9/2005 14:31	GPSMAP 76
258	Manhole	37.97225732	-103.6463015	12/9/2005 14:43	GPSMAP 76
259	FieldObs	37.97192213	-103.647223	12/9/2005 14:49	GPSMAP 76
260	FieldObs	37.97188072	-103.6473575	12/9/2005 14:55	GPSMAP 76
261	Manhole	37.97348075	-103.6452165	12/9/2005 15:01	GPSMAP 76
262	Manhole	37.97521857	-103.6428917	12/9/2005 15:16	GPSMAP 76
263	ManhBur	37.97502863	-103.6440977	12/9/2005 15:28	GPSMAP 76
432	Manhole	37.97794227	-103.6392301	3/10/2006 15:06	GPSMAP 76
433	Manhole	37.97796305	-103.640454	3/10/2006 15:10	GPSMAP 76
434	Manhole	37.98159585	-103.6373631	3/10/2006 15:45	GPSMAP 76
435	Sinkhole	37.98140206	-103.6373682	3/10/2006 15:46	GPSMAP 76
436	Manhole	37.9815858	-103.6361415	3/10/2006 15:48	GPSMAP 76
437	OpenDitch	37.98958339	-103.6450205	3/10/2006 16:11	GPSMAP 76
438	OpenDitch	37.9894554	-103.6450243	3/10/2006 16:12	GPSMAP 76
439	FieldObs	37.99109465	-103.6449906	3/10/2006 16:16	GPSMAP 76
440	OpenDitch	37.99302542	-103.6449538	3/10/2006 16:19	GPSMAP 76
441	FieldObs	37.99319758	-103.6448758	3/10/2006 16:20	GPSMAP 76
442	OpenDitch	37.99646988	-103.6431833	3/10/2006 16:24	GPSMAP 76
443	OpenDitch	37.99649754	-103.6425826	3/10/2006 16:25	GPSMAP 76
444	OpenDitch	37.99670742	-103.6425585	3/10/2006 16:25	GPSMAP 76
445	OpenDitch	37.99682376	-103.6424445	3/10/2006 16:26	GPSMAP 76
446	OpenDitch	37.99691387	-103.6424053	3/10/2006 16:26	GPSMAP 76
447	Manhole	38.00216773	-103.6423892	3/10/2006 16:35	GPSMAP 76
448	OpenDitch	38.0037193	-103.6423236	3/10/2006 16:38	GPSMAP 76
449	OpenDitch	38.0038089	-103.6423333	3/10/2006 16:38	GPSMAP 76
450	Manhole	38.00386162	-103.6423216	3/10/2006 16:41	GPSMAP 76

Ident	Type	Lat	Long	Comment	Model
451	OpenDitch	38.00754388	-103.6422532	3/10/2006 16:45	GPSMAP 76
452	OpenDitch	38.01094165	-103.6422613	3/10/2006 16:47	GPSMAP 76
453	Manhole	38.01089287	-103.6422497	3/10/2006 16:48	GPSMAP 76
454	SurfDrainStr	38.01096059	-103.6445323	3/10/2006 16:51	GPSMAP 76
457	OpenDitch	38.01076379	-103.6464573	3/10/2006 16:55	GPSMAP 76
458	OpenDitch	37.98234235	-103.6439669	3/10/2006 17:10	GPSMAP 76
459	FieldObs	37.98530862	-103.6444622	3/10/2006 17:13	GPSMAP 76
460	Manhole	37.98827983	-103.6455869	3/10/2006 17:24	GPSMAP 76
461	Sinkhole	37.9876304	-103.6488097	3/24/2006 11:29	GPSMAP 76
462	Manhole	37.97491623	-103.6566261	3/24/2006 11:46	GPSMAP 76
463	Manhole	37.97453905	-103.6584127	3/24/2006 11:53	GPSMAP 76
581	FieldObs	37.97182214	-103.654017	7/18/2006 12:19	GPSMAP 76
582	FieldObs	37.9718301	-103.6526227	7/18/2006 12:22	GPSMAP 76
583	FieldObs	37.9718275	-103.6519487	7/18/2006 12:24	GPSMAP 76
584	FieldObs	37.97184242	-103.6512342	7/18/2006 12:28	GPSMAP 76
585	FieldObs	37.97187109	-103.6497352	7/18/2006 12:29	GPSMAP 76
586	FieldObs	37.97187117	-103.6484874	7/18/2006 12:31	GPSMAP 76
587	FieldObs	37.97187218	-103.6473623	7/18/2006 12:34	GPSMAP 76
588	FieldObs	37.97500055	-103.6473245	7/18/2006 12:38	GPSMAP 76
589	FieldObs	37.97493878	-103.6484867	7/18/2006 12:44	GPSMAP 76
590	FieldObs	37.97491891	-103.6498812	7/18/2006 12:46	GPSMAP 76
591	FieldObs	37.97491782	-103.6511526	7/18/2006 12:47	GPSMAP 76
596	Manhole	37.99205722	-103.6445694	9/14/2006 18:16	GPSMAP 76
597	FieldObs	37.99133345	-103.644998	9/14/2006 18:27	GPSMAP 76
598	Sinkhole	37.99472149	-103.6431673	9/14/2006 18:40	GPSMAP 76
599	FieldObs	37.99652184	-103.6377931	9/15/2006 10:58	GPSMAP 76
600	FieldObs	37.9822426	-103.6379161	9/15/2006 11:03	GPSMAP 76
601	FieldObs	37.98220924	-103.6562587	9/15/2006 11:40	GPSMAP 76
602	FieldObs	37.96763563	-103.6563859	9/15/2006 11:54	GPSMAP 76
603	TileLoc	38.00353842	-103.6423423	9/22/2006 10:19	GPSMAP 76
604	Manhole	38.00217602	-103.6423651	9/22/2006 10:22	GPSMAP 76
605	Repairs-car	37.99997619	-103.6424012	9/22/2006 10:26	GPSMAP 76
606	Repairs-car	37.99864481	-103.6424045	9/22/2006 10:28	GPSMAP 76
607	FieldObs	37.99788013	-103.64241	9/22/2006 10:31	GPSMAP 76
608	Repairs-car	37.99736682	-103.6424198	9/22/2006 10:32	GPSMAP 76
609	TileOutlet	37.99999748	-103.6423888	9/22/2006 10:45	GPSMAP 76
610	Repairs-car	38.00004006	-103.642394	9/22/2006 10:46	GPSMAP 76
611	ManhBur	38.00753659	-103.6422896	9/22/2006 11:00	GPSMAP 76
612	TileLoc	37.99384668	-103.6445543	9/22/2006 11:18	GPSMAP 76
613	ManhBur	37.99316581	-103.6449089	9/22/2006 11:20	GPSMAP 76
615	Repairs-car	37.98858737	-103.6449584	9/22/2006 11:29	GPSMAP 76
616	Repairs-car	37.98977357	-103.6450317	9/22/2006 11:35	GPSMAP 76
617	ManhBur	37.99037531	-103.6450217	9/22/2006 11:37	GPSMAP 76
618	Repairs-car	37.99210332	-103.6449866	9/22/2006 11:41	GPSMAP 76
619	TileLoc	37.99261906	-103.6449914	9/22/2006 11:42	GPSMAP 76
884	ManhBur	37.99279198	-103.6450009	3/13/2007 13:10	GPSMAP 76

Ident	Type	Lat	Long	Comment	Model	Seclocn
620	Repairs-car	37.9789258	-103.6440298	4/26/2007 11:15	GPSMAP 76	11
621	Manhole	37.97707013	-103.6451107	4/26/2007 11:28	GPSMAP 76	11
622	Manhole	37.97704976	-103.6451404	4/26/2007 11:29	GPSMAP 76	11
623	Manhole	37.97665279	-103.6458047	4/26/2007 11:30	GPSMAP 76	11
624	Manhole	37.9765129	-103.6460378	4/26/2007 11:32	GPSMAP 76	11
884	ManhBur	37.99279198	-103.6450009	3/13/2007 13:10	GPSMAP 76	2

ArcView Field Title	Possible Entry	Explanation Key
Ident		GPS Waypoint Identification Number
Lat		Latitude of reading
Lon		Longitude of reading
Comment		Date and time of reading
Type		
	Manhole	Manhole
	ManhBur	Buried Manhole
	ObsPoint	observation point - generally vert. Pipe extending to tile line from surface
	Inlet	Inlet, or beginning of line
	TileOutlet	End of tile line dumping into seep ditch, or open drain
	BurOutl	Outlet of a tile drain that is buried beneath the surface
	OpenDitch	Open drainage ditch. Seep Ditch
	TileLoc	Location of Tile Line
	TileJunc	Loc. of Tile Junction where more than two lines meet
	TileElbow	Loc. of Elbow in tile line where line bends
	TileRdCross	Crossing of Tile Line under Road
	DitchRdCro	Crossing of Open Ditch under Road
	CanalTileCross	Crossing of Tile Line under Canal
	RepairsCar	Location of point where tile has been repaired: generally visible soil disturbance
	Sinkhole	Loc. of place where soil has washed down into tile line, leaving an open hole
	Openhole	Open hole in ground, varying depths and sizes. Relates to tile location.
	FieldObs	Location of relevant condition observed in the field relating to the possible location of tile lines.
	SurfDrainStr	Structure for drainage of surface water. May be culvert, or similar structure.

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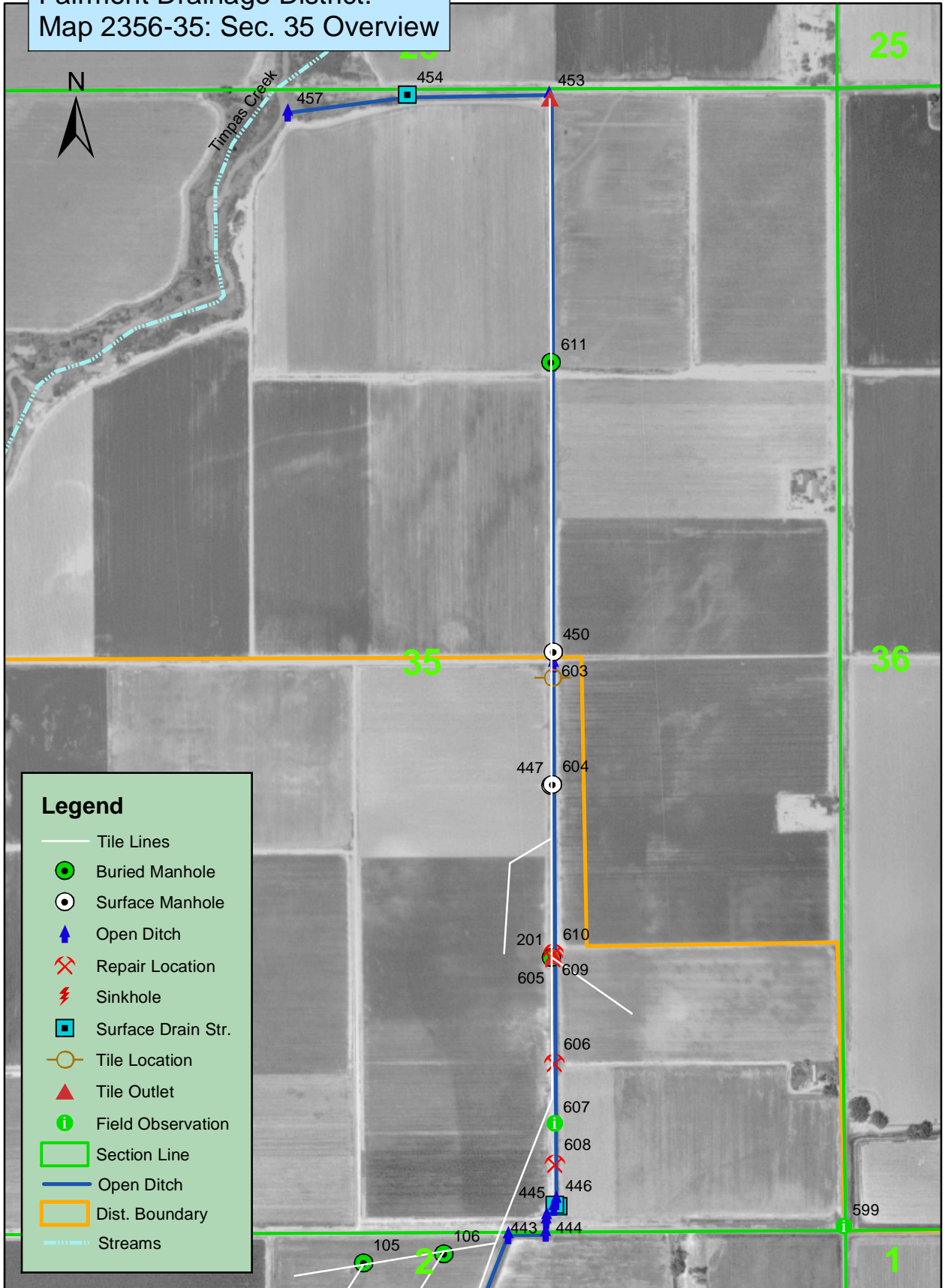
Ident	Type	SecLocn	Shown on Overview Map #:	Also shown on Map #:	Also shown on Map #:	Also shown on Map #:
102	ManhBur	2	2456-2			
104	ManhBur	2		2456-2b		
105	ManhBur	2	2456-2			
106	ManhBur	2	2456-2			
107	ManhBur	11	2456-11-W1/2	2456-10		
108	ManhBur	11	2456-11-W1/2	2456-10		
109	ManhBur	11	2456-11-W1/2	2456-11-W1/2d		
110	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
111	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
112	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-11-W1/2b	
113	ManhBur	11	2456-11-W1/2	2456-11-W1/2b		
114	ManhBur	11	2456-11-W1/2	2456-11-W1/2b	2456-11-E1/2	
115	ManhBur	11	2456-11-W1/2	2456-11-W1/2b		
116	ManhBur	11	2456-11-W1/2	2456-11-W1/2b		
117	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-11-W1/2b	
118	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
119	ManhBur	11		2456-11-W1/2d		
120	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
121	ManhBur	11	2456-11-W1/2		2456-10	
122	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
123	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
124	ManhBur	11	2456-11-W1/2	2456-11-W1/2d	2456-11-W1/2c	
126	ManhBur	11	2456-11-W1/2	2456-11-W1/2a	2456-11-W1/2c	
127	ManhBur	11	2456-11-W1/2	2456-11-E1/2	2456-11-W1/2a	2456-11-W1/2c
128	ManhBur	11	2456-11-W1/2	2456-11-E1/2		
129	ManhBur	11	2456-11-W1/2	2456-10		
130	ManhBur	1	2456-2			
131	FieldObs	11	2456-11-E1/2	2456-11c		
132	FieldObs	11	2456-11-E1/2	2456-11-W1/2	2456-2	
133	RepairsCar	11	2456-11-E1/2	2456-11-W1/2		
201	ManhBur	35	2356-35	2356-35e		
228	Manhole	2	2456-2			
229	Manhole	2	2456-2			
230	Manhole	2	2456-2			
231	Manhole	2	2456-2			
232	Manhole	2		2456-2f	2456-2g	
233	Manhole	2	2456-2			
234	Manhole	2	2456-2			
235	Manhole	2	2456-2			
236	Manhole	2	2456-2			
237	Manhole	2	2456-2			
238	Manhole	11		2456-11a		
239	Manhole	11	2456-11-E1/2	2456-2	2456-11a	
242	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-2	
243	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-2	
244	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-2	
245	Manhole	11	2456-11-E1/2	2456-11-W1/2		
246	Manhole	11	2456-11-E1/2	2456-11-W1/2		

Ident	Type	SecLocn	Shown on Overview Map #:	Also shown on Map #:	Also shown on Map #:	Also shown on Map #:	
247	Manhole	11	2456-11-E1/2	2456-11-W1/2			
248	Manhole	11	2456-11-E1/2	2456-2	2456-11b		
249	Manhole	11	2456-11-E1/2	2456-2			
250	SurfDrainStr	35		2356-35g			
251	SurfDrainStr	35		2356-35g			
252	OpenDitch	35		2356-35g	2456-2a		
253	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-11c		
254	Sinkhole	11	2456-11-E1/2				
255	Sinkhole	11		2456-11c			
256	Sinkhole	11	2456-11-E1/2	2456-11-W1/2	2456-11c		
257	Manhole	11	2456-11-E1/2	2456-11-W1/2			
258	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-11-W1/2a		
259	FieldObs	11		2456-11-W1/2a	2456-11-W1/2c		
260	FieldObs	11	(See # 587: Duplicate of that point)				
261	Manhole	11	2456-11-E1/2	2456-11-W1/2			
262	Manhole	11	2456-11-E1/2	2456-11-W1/2			
263	ManhBur	11	2456-11-E1/2	2456-11-W1/2			
432	Manhole	11	2456-11-E1/2				
433	Manhole	11	2456-11-E1/2	2456-11-W1/2			
434	Manhole	12		2456-11b			
435	Sinkhole	12	2456-11-E1/2	2456-2	2456-11b		
436	Manhole	12	2456-11-E1/2	2456-2			
437	OpenDitch	2		2456-2f	2456-2g		
438	OpenDitch	2	2456-2	2456-2f	2456-2g		
439	FieldObs	2		2456-2e			
440	OpenDitch	2		2456-2b	2456-2c	2456-2d	
441	FieldObs	2		2456-2c			
442	OpenDitch	2		2456-2a			
443	OpenDitch	2	2456-2	2456-2a			
444	OpenDitch	35		2356-35g	2456-2a		
445	OpenDitch	35	2356-35	2356-35g			
446	OpenDitch	35	2356-35	2356-35f	2356-35g	2456-2	
447	Manhole	35	2356-35	2356-35d			
448	OpenDitch	35		2356-35c			
449	OpenDitch	35	2356-35	2356-35c			
450	Manhole	35	2356-35	2356-35c			
451	OpenDitch	35		2356-35b			
452	OpenDitch	35	2356-35	2356-35a			
453	Manhole	35	2356-35	2356-35a			
454	SurfDrainStr	35	2356-35				
457	OpenDitch	35	2356-35				
458	OpenDitch	2	2456-2	2456-11-E1/2	2456-11-W1/2	2456-11a	
459	FieldObs	2	2456-2				
460	Manhole	2	2456-2	2456-2f			
461	Sinkhole	2	2456-2				
462	Manhole	10	2456-10	2456-11-W1/2			
463	Manhole	10	2456-10				
581	FieldObs	11	2456-11-W1/2	2456-10			

Ident	Type	SecLocn	Shown on Overview Map #:	Also shown on Map #:	Also shown on Map #:	Also shown on Map #:
582	FieldObs	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
583	FieldObs	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
584	FieldObs	11	2456-11-W1/2	2456-11-W1/2d	2456-10	
585	FieldObs	11	2456-11-W1/2	2456-11-W1/2d	2456-11-W1/2c	
586	FieldObs	11	2456-11-W1/2	2456-11-W1/2a	2456-11-W1/2c	
587	FieldObs	11		2456-11-W1/2a	2456-11-W1/2c	
588	FieldObs	11	2456-11-E1/2	2456-11-W1/2b		
589	FieldObs	11		2456-11-W1/2b		
590	FieldObs	11		2456-11-W1/2d	2456-11-W1/2b	
591	FieldObs	11		2456-11-W1/2d		
596	Manhole	2	2456-2	2456-2d	2456-2e	
597	FieldObs	2	2456-2	2456-2e		
598	Sinkhole	2	2456-2	2456-2b		
599	FieldObs	2	2456-2			
600	FieldObs	2	2456-2	2456-11-E1/2		
601	FieldObs	2	2456-11-W1/2	2456-10		
602	FieldObs	11	2456-11-W1/2	2456-10		
603	TileLoc	35	2356-35	2356-35c		
604	Manhole	35	2356-35	2356-35d		
605	Repairs car	35		2356-35e		
606	Repairs car	35	2356-35	2356-35e		
607	FieldObs	35	2356-35	2356-35f		
608	Repairs car	35	2356-35	2356-35f	2456-2	
609	TileOutlet	35	2356-35	2356-35e		
610	Repairs car	35	2356-35	2356-35e		
611	ManhBur	35	2356-35	2356-35b		
612	TileLoc	2	2456-2	2456-2b		
613	ManhBur	2		2456-2b	2456-2c	
615	Repairs car	2	2456-2	2456-2f		
616	Repairs car	2	2456-2	2456-2e	2456-2f	2456-2g
617	ManhBur	2	2456-2	2456-2e	2456-2f	
618	Repairs car	2	2456-2	2456-2d	2456-2e	
619	TileLoc	2	2456-2	2456-2c	2456-2d	
620	Sinkhole	11	2456-11-E1/2	2456-11-W1/2	2456-11e	
621	Manhole	11	2456-11f			
622	Manhole	11	2456-11-E1/2	2456-11-W1/2	2456-11f	
623	Manhole	11	2456-11g			
624	Manhole	11	2456-11-E1/2	2456-11-W1/2		
884	ManhBur	11		2456-2c	2456-2d	

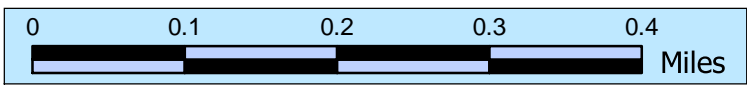
TOWNSHIP	Section	MAP DESIGNATION	ADD'L PAGES
T23S, R56W Otero County	35	2356-35	a,b,c,d,e,f,g
T24S, R56W Otero County	2	2456-2	a,b,c,d,e,f,g
	10	2456-10	(none)
	11	2456-11-E1/2	a,b
	11	2456-11-W1/2	a,b,c,d

Fairmont Drainage District:
Map 2356-35: Sec. 35 Overview



Legend

- Tile Lines
- Buried Manhole
- ⊙ Surface Manhole
- ▲ Open Ditch
- ✂ Repair Location
- ⚡ Sinkhole
- Surface Drain Str.
- Tile Location
- ▲ Tile Outlet
- i Field Observation
- ▭ Section Line
- Open Ditch
- ▭ Dist. Boundary
- Streams



Fairmont Drainage District:
Map 2356-35a:
Close-up view of main outlet
into open drain

26

CR CC

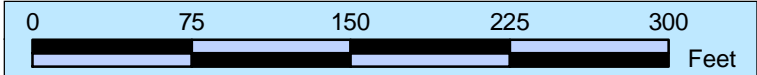
452
453

35



Legend















- Tile Lines
- Buried Manhole
- Surface Manhole
- ↩ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- ▣ Surface Drain Str.
- Tile Location
- ▲ Tile Outlet
- ⓘ Field Observation
- ▭ Section Line
- Open Ditch
- ▭ Dist. Boundary

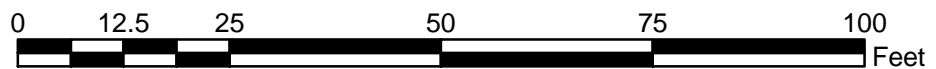


Fairmont Drainage District:
Map 2356-35b:
Close-up: Waypoints 611 & 451

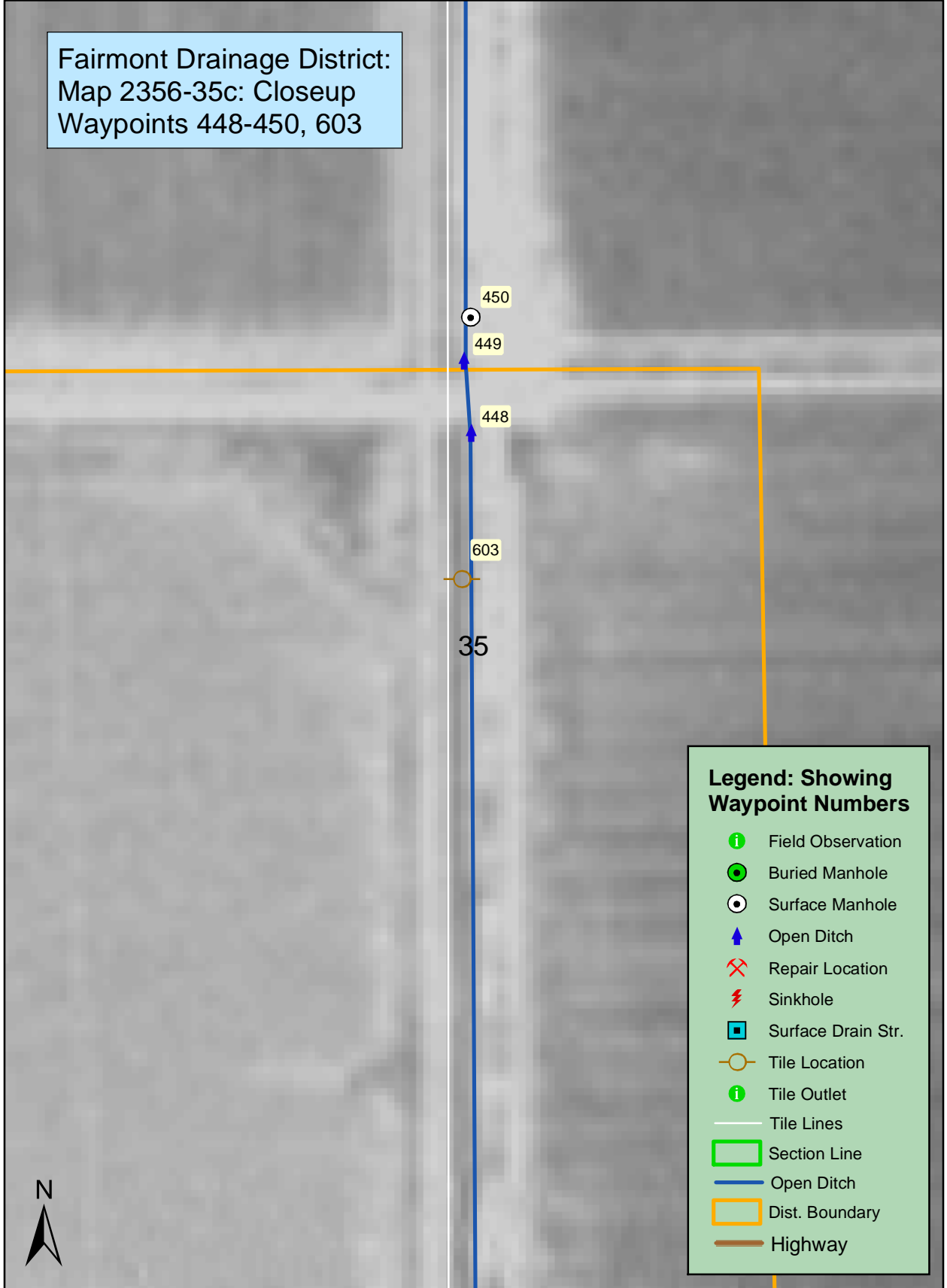
35
611
451

**Legend: Showing
Waypoint Numbers**

-  Field Observation
-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Tile Outlet
-  Tile Lines
-  Section Line
-  Open Ditch
-  Dist. Boundary
-  Highway

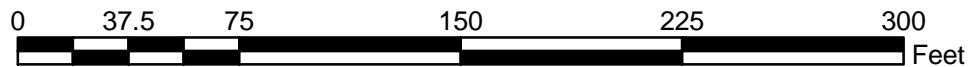


Fairmont Drainage District:
 Map 2356-35c: Closeup
 Waypoints 448-450, 603

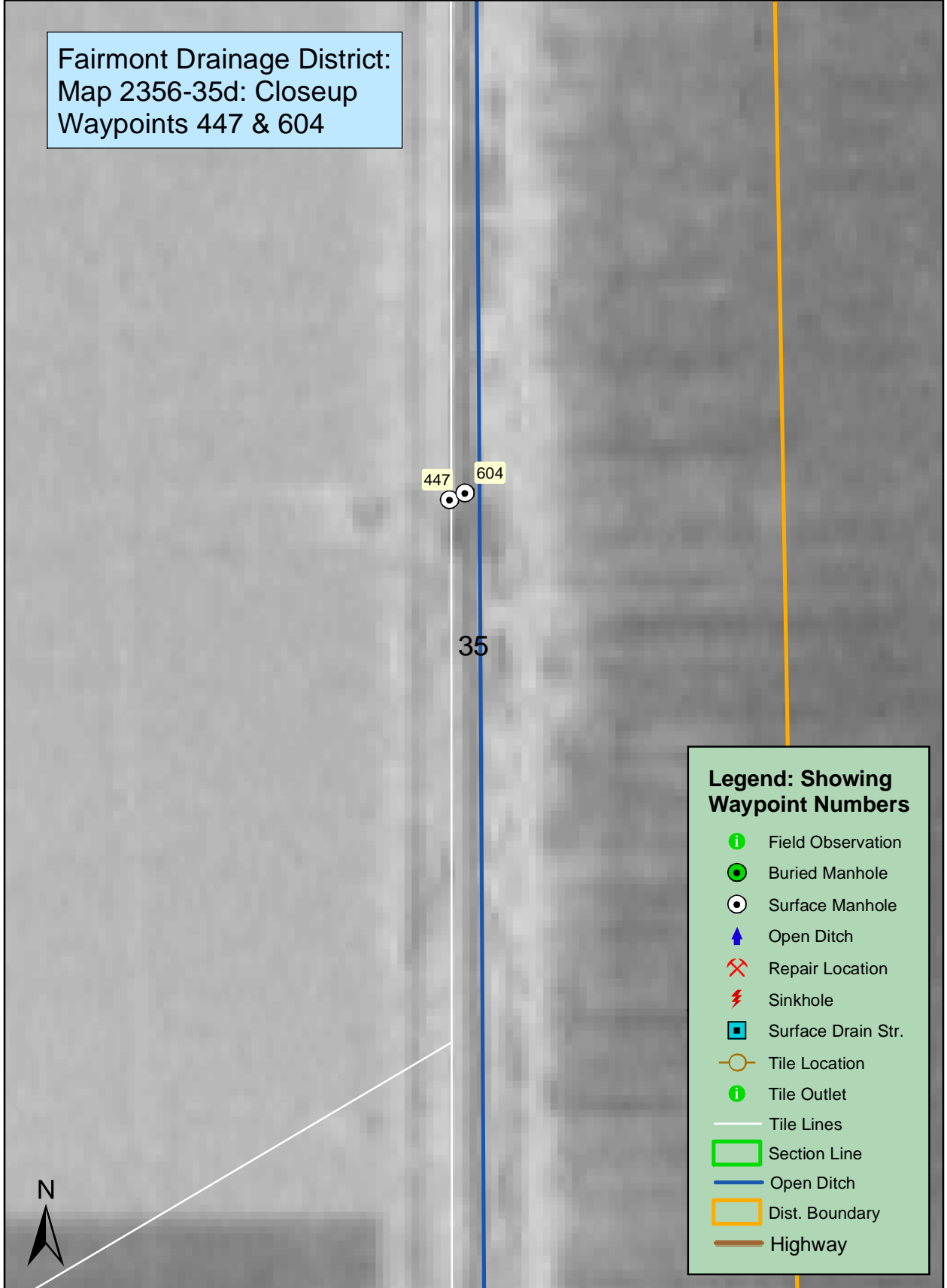


Legend: Showing Waypoint Numbers

- Field Observation
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway

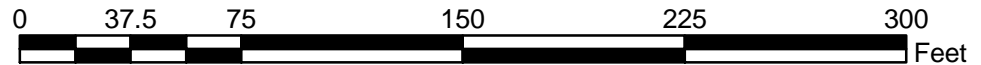


Fairmont Drainage District:
Map 2356-35d: Closeup
Waypoints 447 & 604

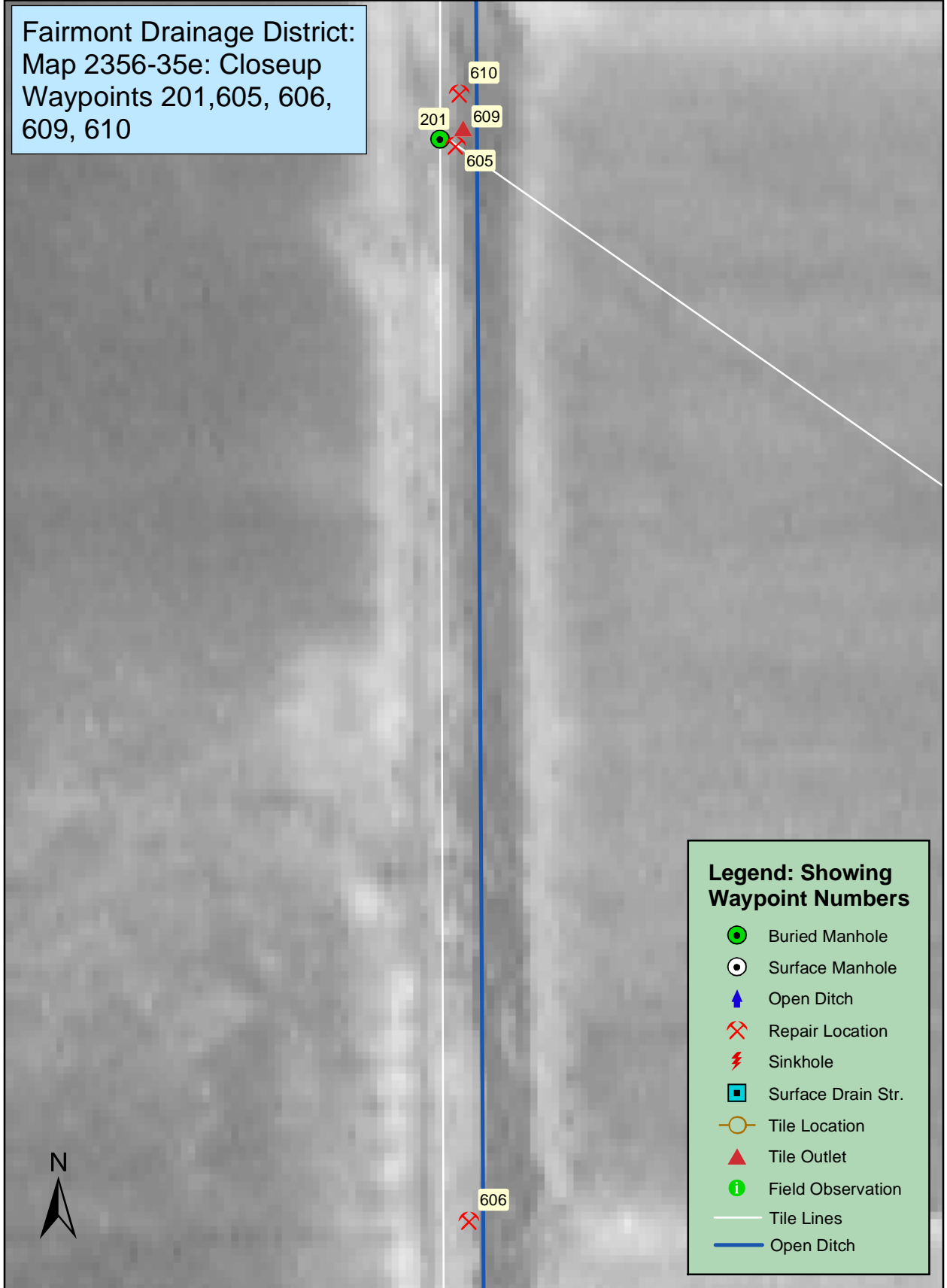


Legend: Showing Waypoint Numbers

- Field Observation
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway



Fairmont Drainage District:
Map 2356-35e: Closeup
Waypoints 201, 605, 606,
609, 610

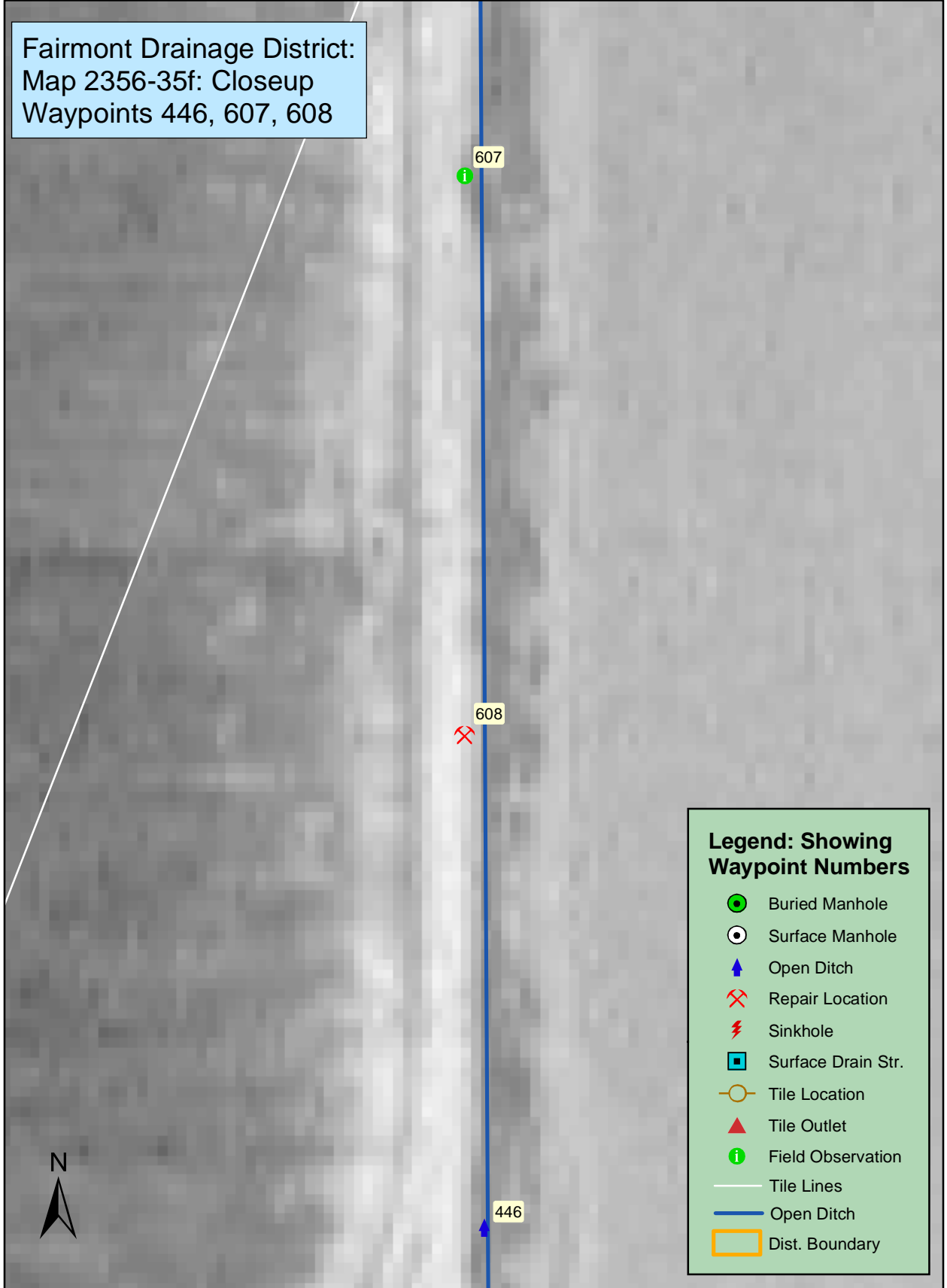


**Legend: Showing
Waypoint Numbers**

- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Surface Drain Str.
- Tile Location
- ▲ Tile Outlet
- Field Observation
- Tile Lines
- Open Ditch

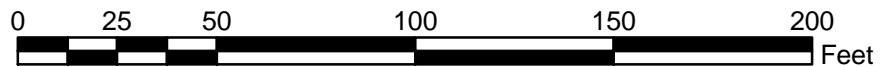
0 37.5 75 150 225 300 Feet

Fairmont Drainage District:
Map 2356-35f: Closeup
Waypoints 446, 607, 608

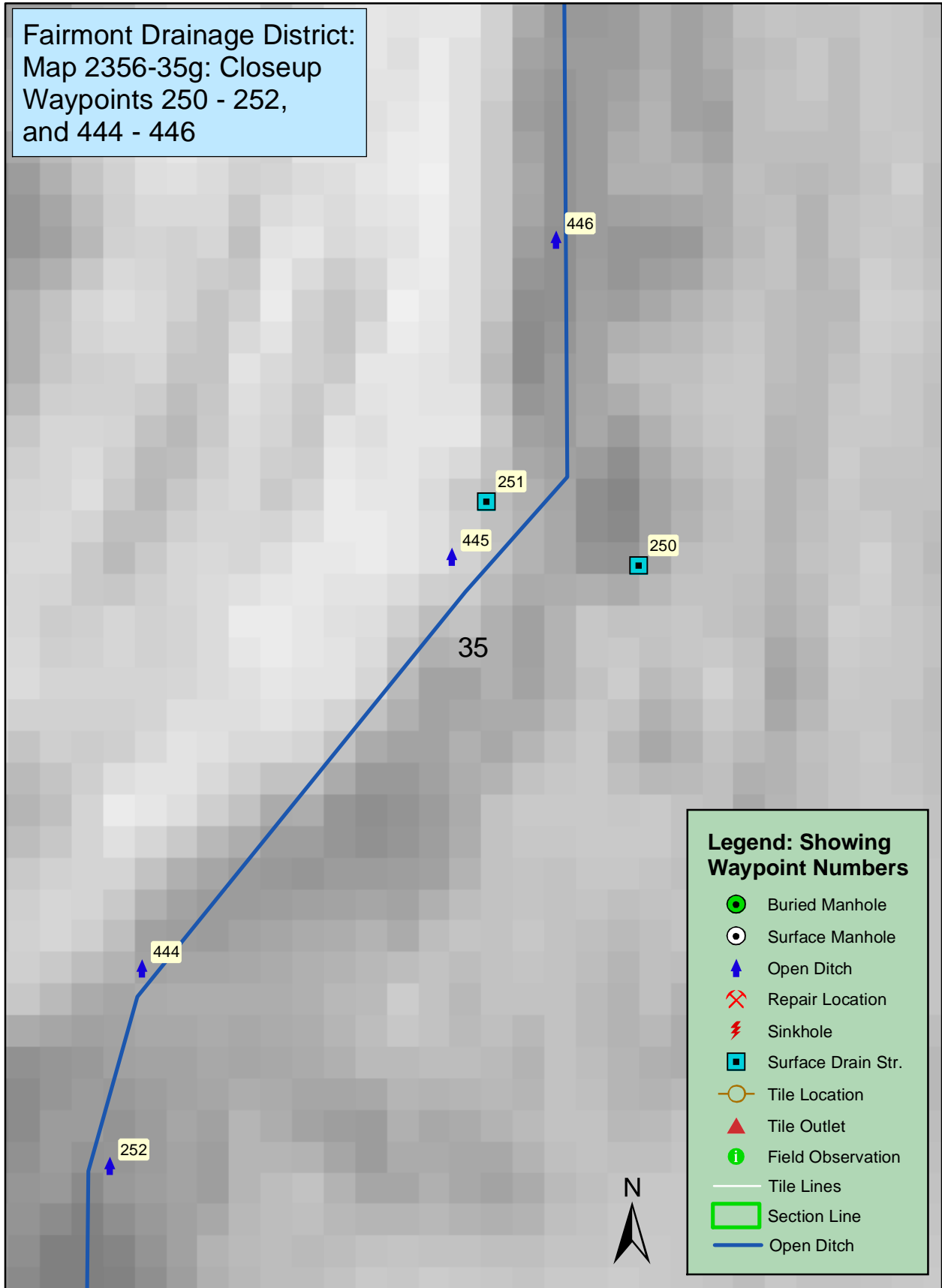


**Legend: Showing
Waypoint Numbers**

- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Field Observation
- Tile Lines
- Open Ditch
- Dist. Boundary

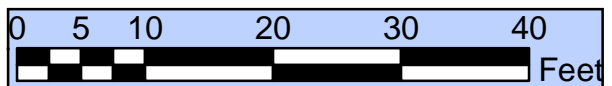


Fairmont Drainage District:
 Map 2356-35g: Closeup
 Waypoints 250 - 252,
 and 444 - 446

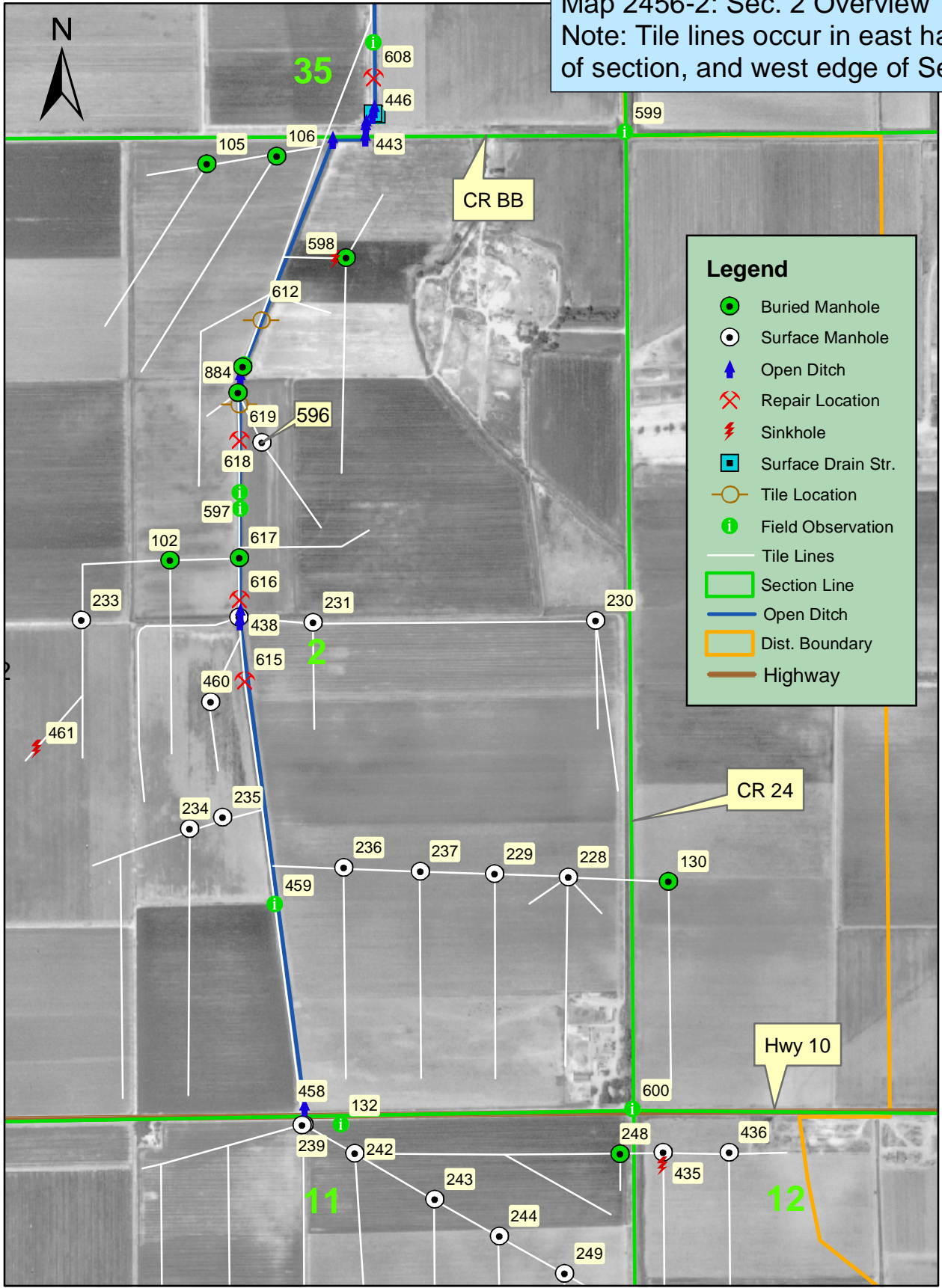


**Legend: Showing
Waypoint Numbers**

-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Tile Outlet
-  Field Observation
-  Tile Lines
-  Section Line
-  Open Ditch

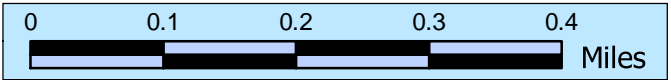


Fairmont Drainage District:
 Map 2456-2: Sec. 2 Overview
 Note: Tile lines occur in east half of section, and west edge of Sec. 1

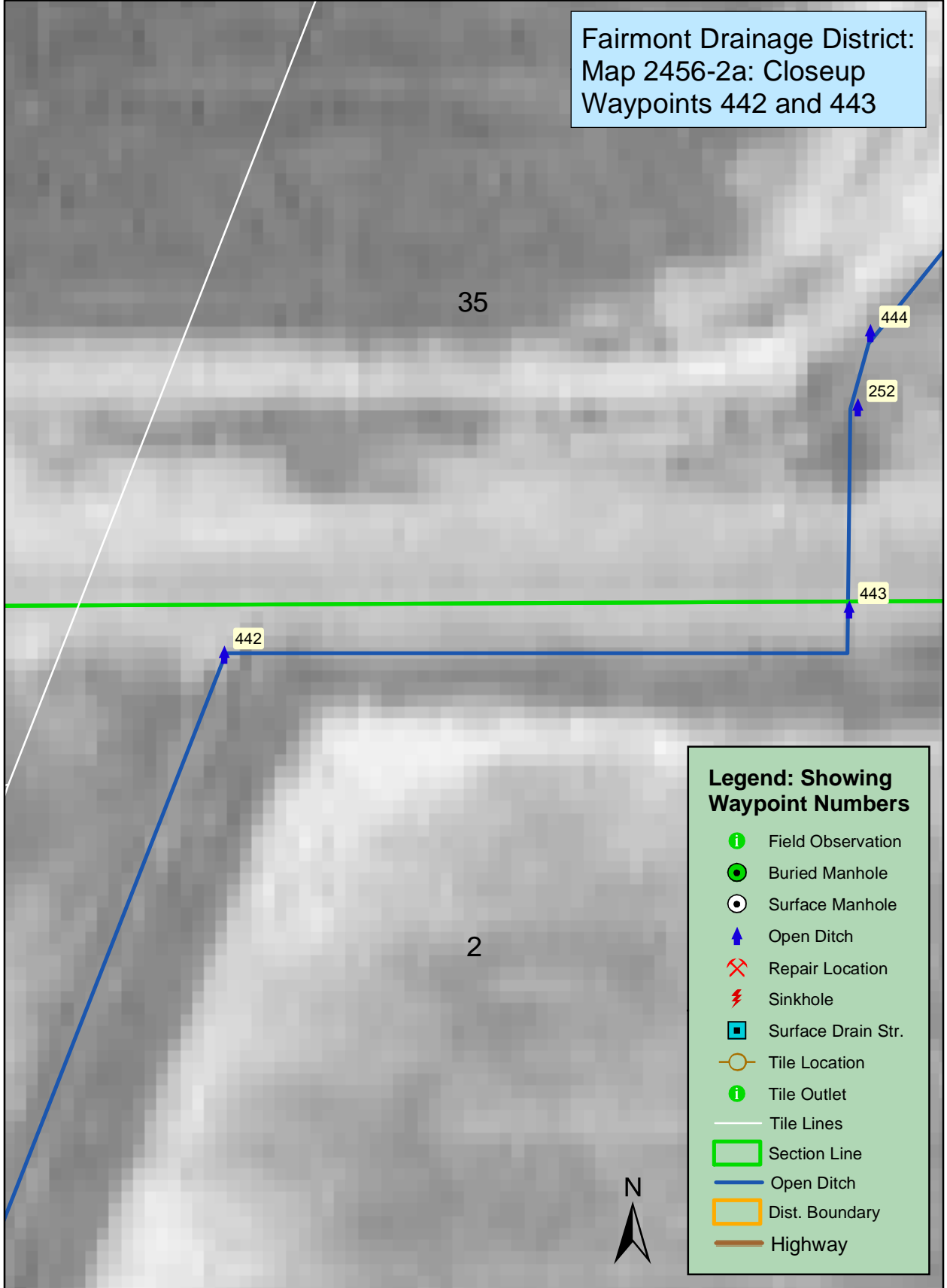


Legend

- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Surface Drain Str.
- Tile Location
- i Field Observation
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway



Fairmont Drainage District:
Map 2456-2a: Closeup
Waypoints 442 and 443



35

2

442

444

252

443

**Legend: Showing
Waypoint Numbers**

- Field Observation
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway

0 20 40 80 120 160 Feet

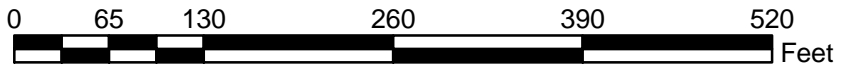


Fairmont Drainage District:
Map 2456-2b: Closeup
Waypoints 104, 598, & 612

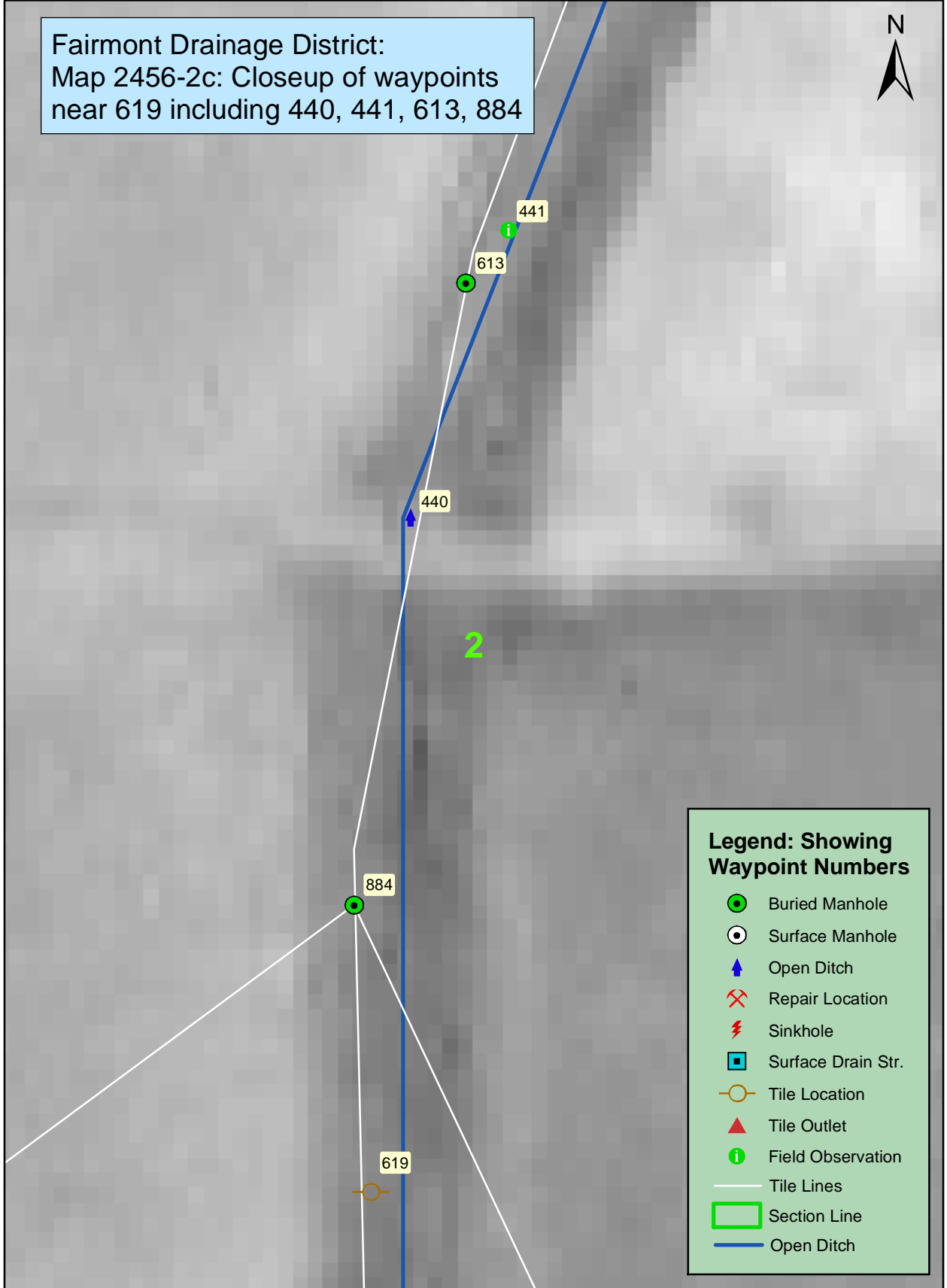


Legend: Showing Waypoint Numbers













- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Field Observation
- Tile Lines
- Section Line
- Open Ditch

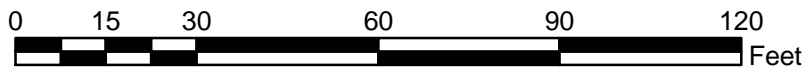


Fairmont Drainage District:
 Map 2456-2c: Closeup of waypoints
 near 619 including 440, 441, 613, 884

















Legend: Showing Waypoint Numbers

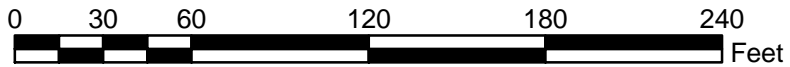
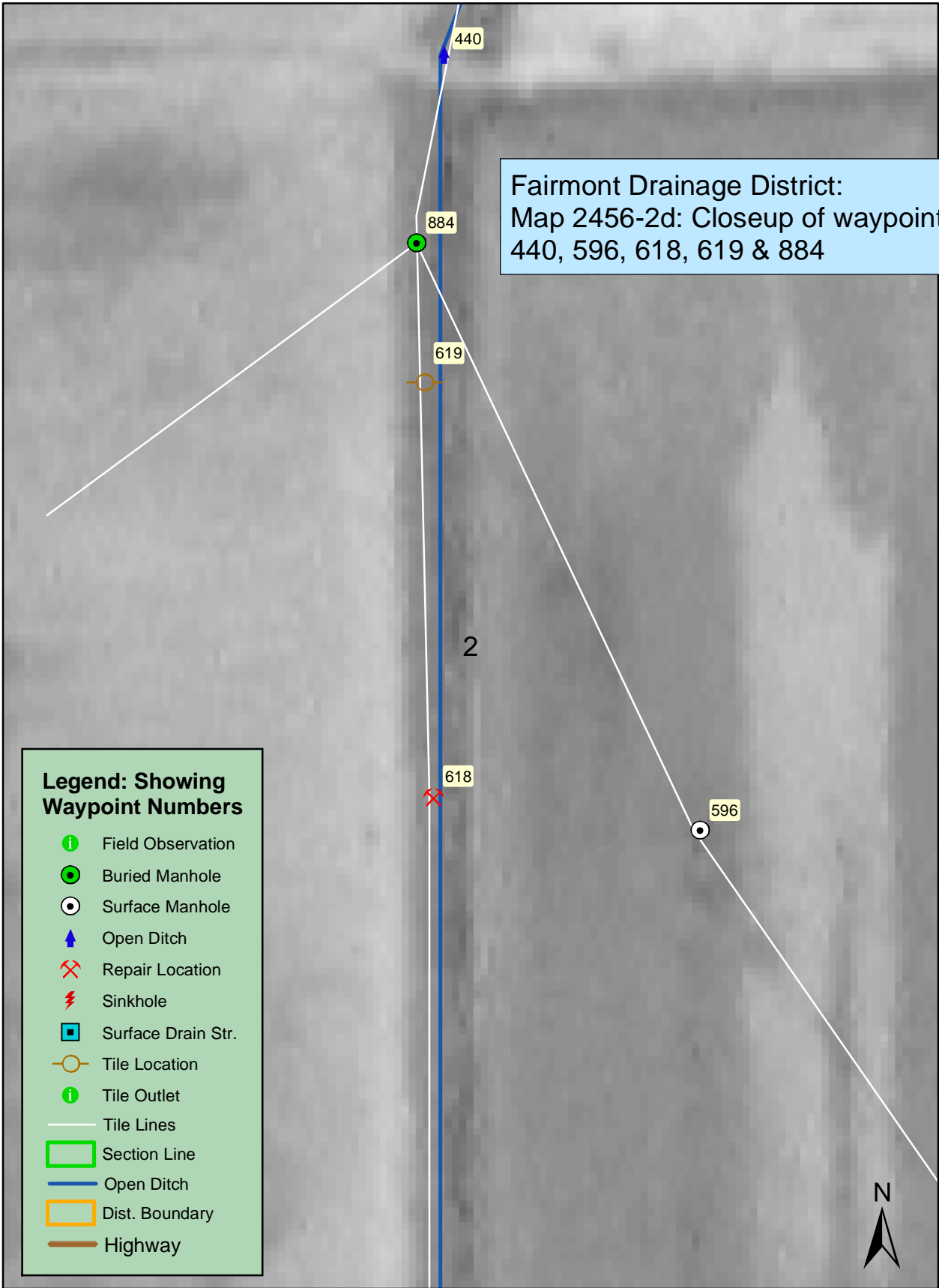
-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Tile Outlet
-  Field Observation
-  Tile Lines
-  Section Line
-  Open Ditch



Fairmont Drainage District:
 Map 2456-2d: Closeup of waypoints
 440, 596, 618, 619 & 884

Legend: Showing Waypoint Numbers

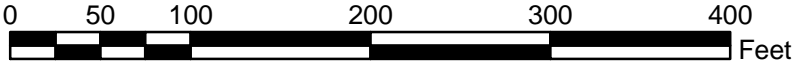
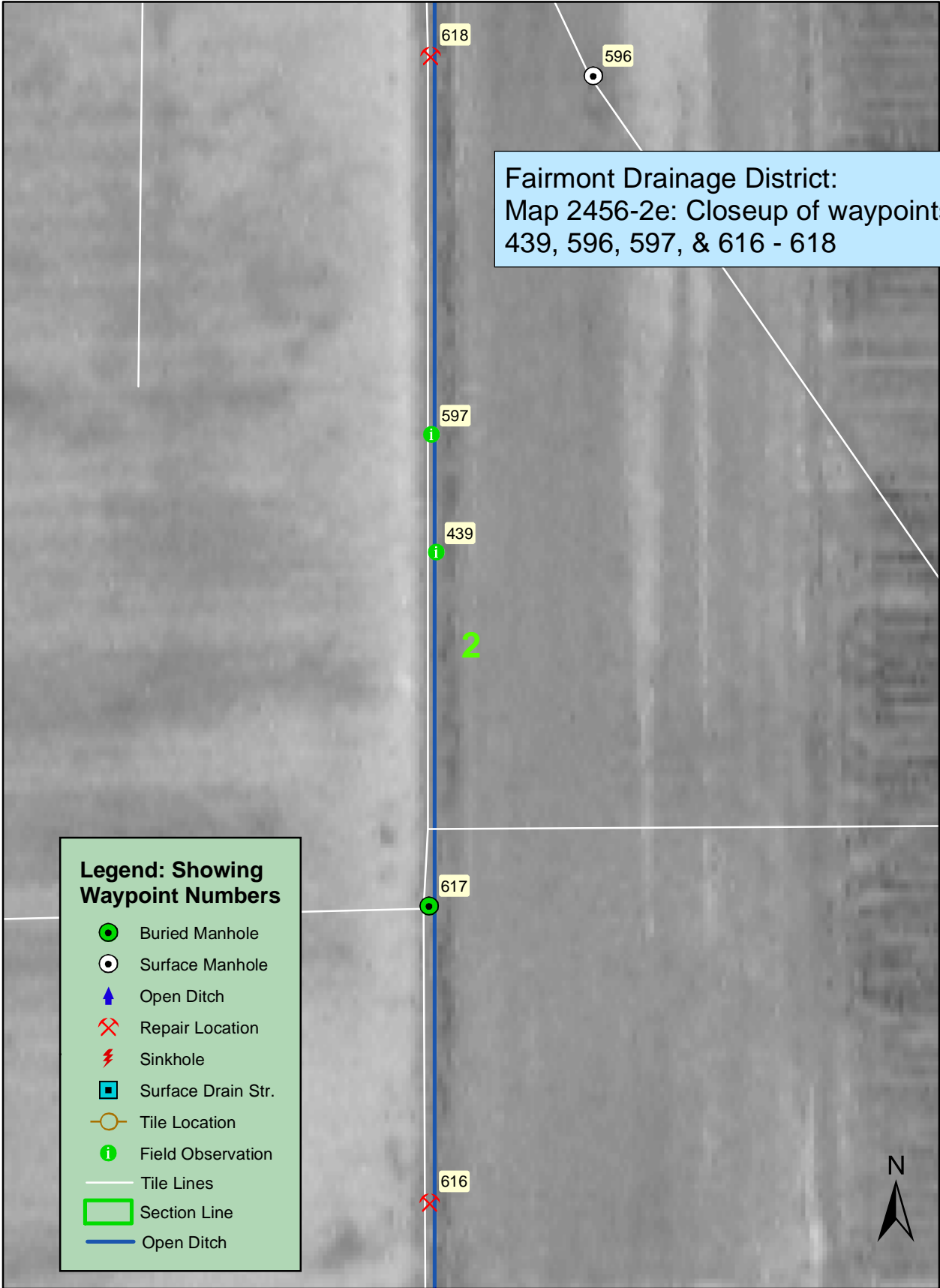
-  Field Observation
-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Tile Outlet
-  Tile Lines
-  Section Line
-  Open Ditch
-  Dist. Boundary
-  Highway



Fairmont Drainage District:
Map 2456-2e: Closeup of waypoints
439, 596, 597, & 616 - 618

Legend: Showing Waypoint Numbers

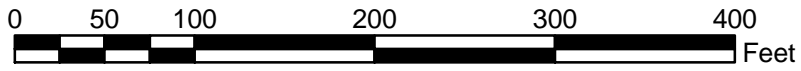
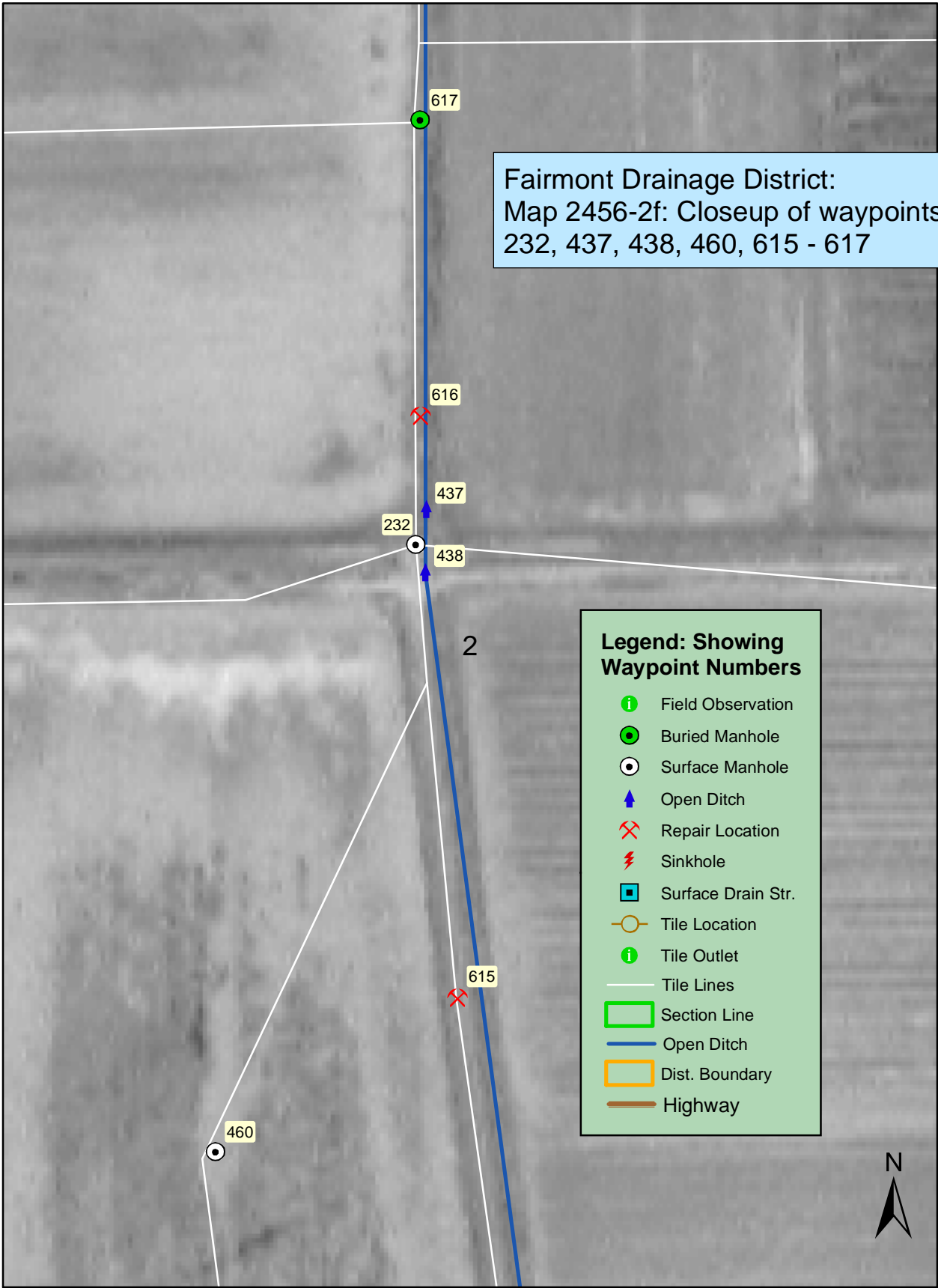
- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- ▣ Surface Drain Str.
- Tile Location
- Field Observation
- Tile Lines
- ▭ Section Line
- Open Ditch

















Fairmont Drainage District:
 Map 2456-2f: Closeup of waypoints
 232, 437, 438, 460, 615 - 617

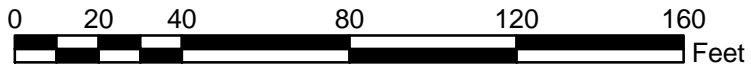
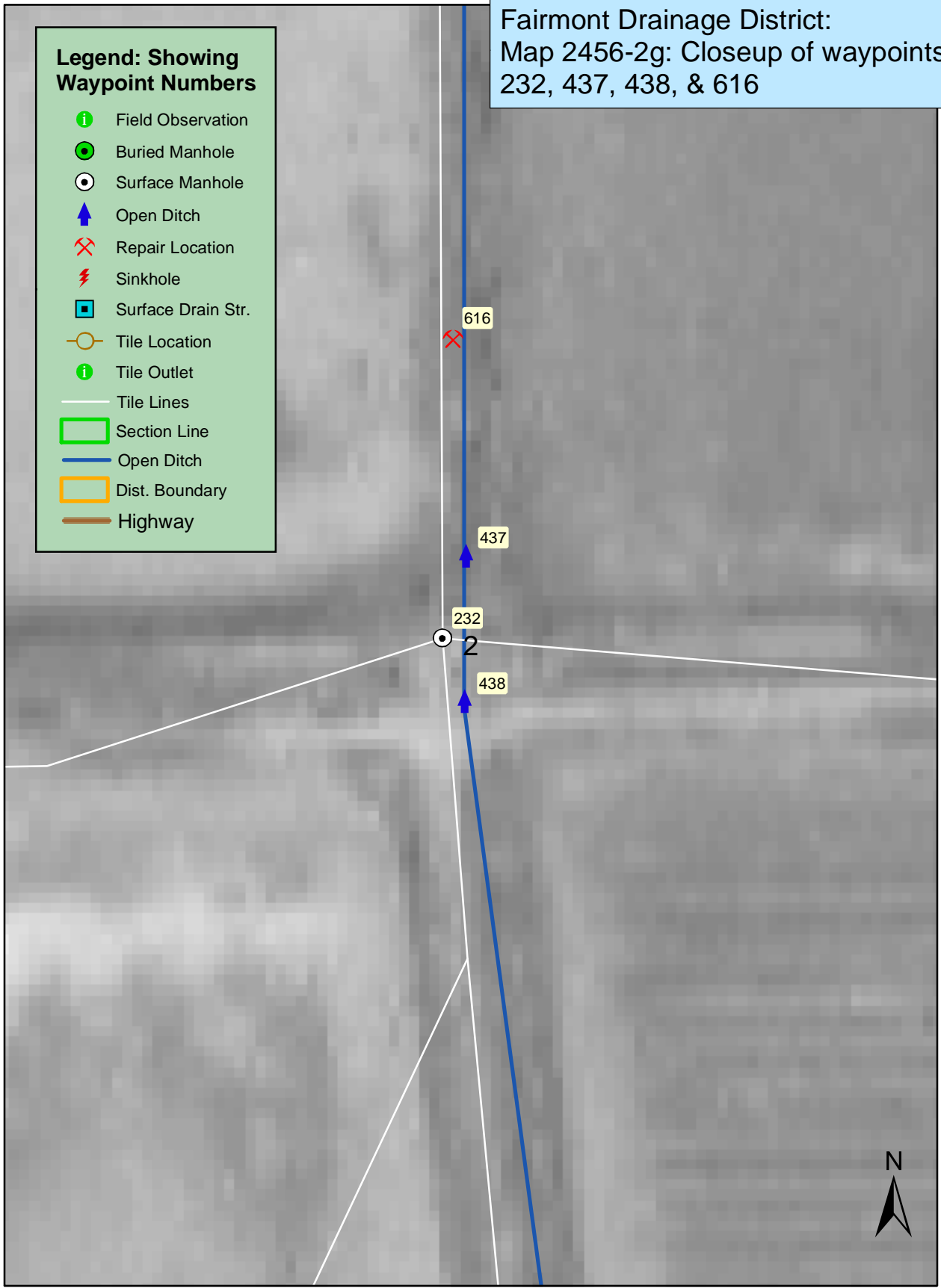
Legend: Showing Waypoint Numbers

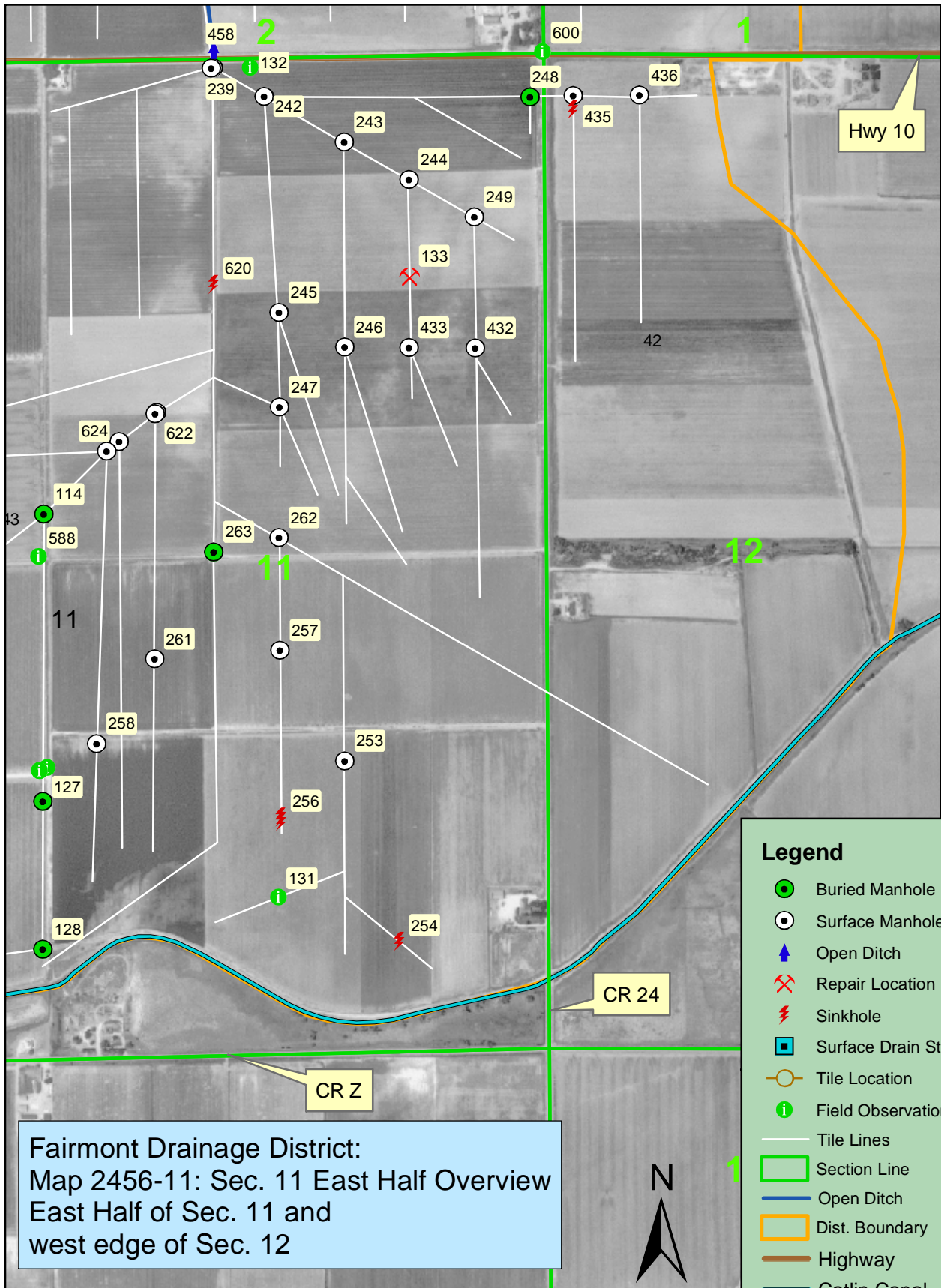
- Field Observation
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway



Fairmont Drainage District:
Map 2456-2g: Closeup of waypoints
232, 437, 438, & 616

- Legend: Showing Waypoint Numbers**
-  Field Observation
 -  Buried Manhole
 -  Surface Manhole
 -  Open Ditch
 -  Repair Location
 -  Sinkhole
 -  Surface Drain Str.
 -  Tile Location
 -  Tile Outlet
 -  Tile Lines
 -  Section Line
 -  Open Ditch
 -  Dist. Boundary
 -  Highway

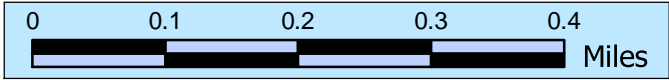


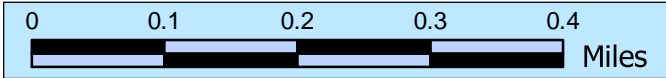
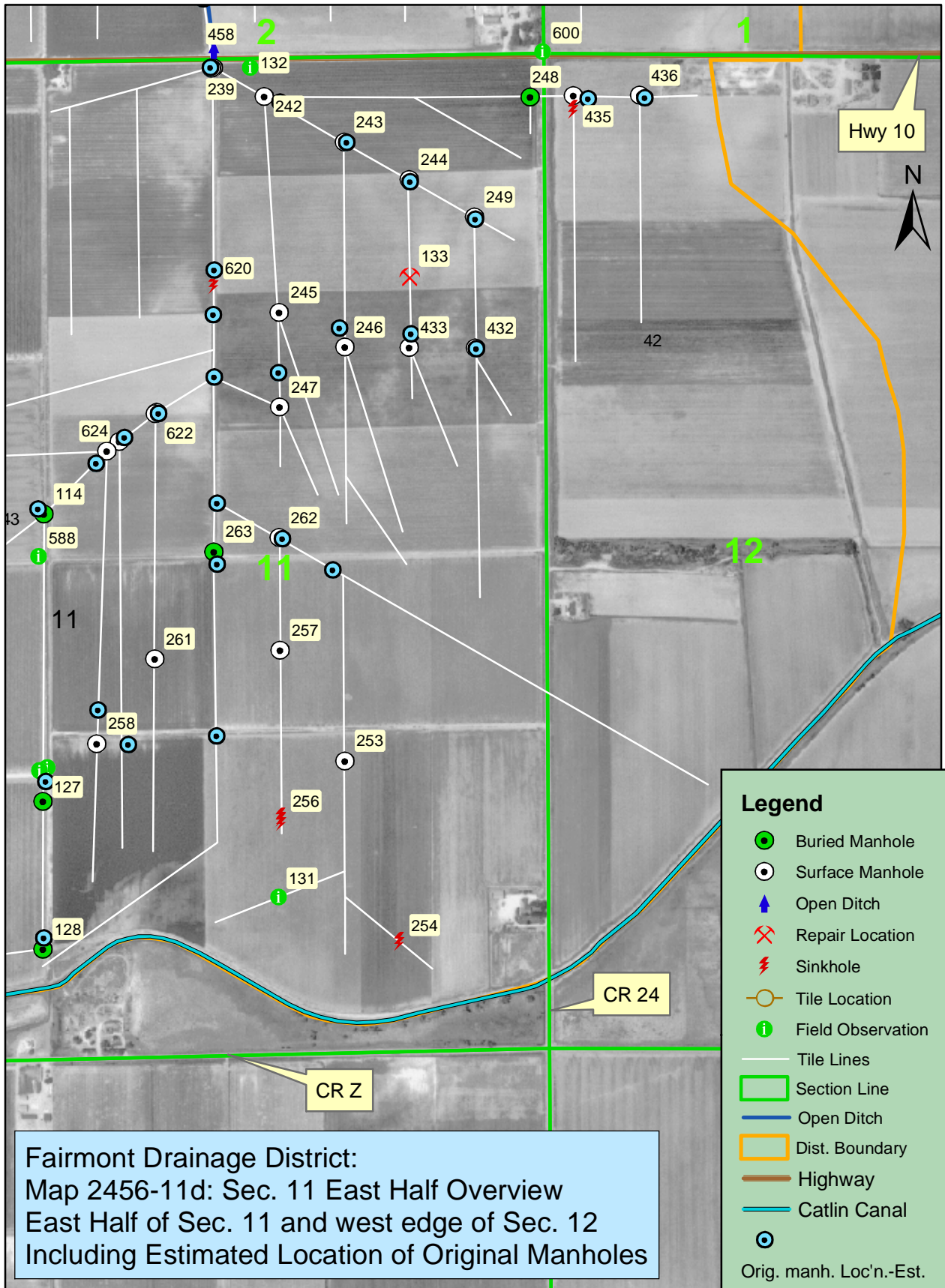


Fairmont Drainage District:
 Map 2456-11: Sec. 11 East Half Overview
 East Half of Sec. 11 and
 west edge of Sec. 12

Legend















- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Field Observation
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway
- Catlin Canal

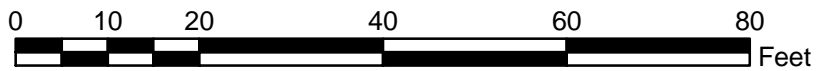
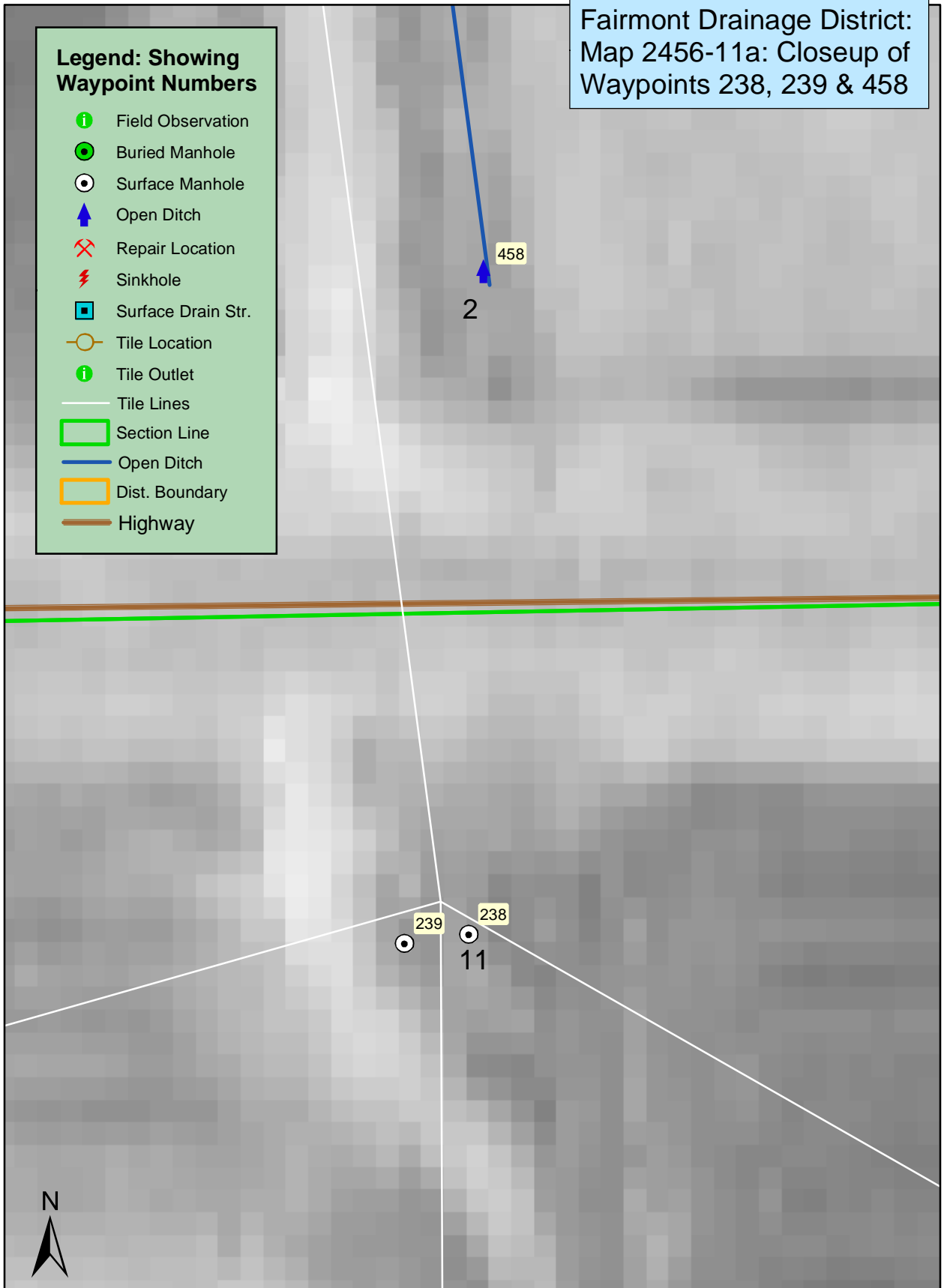




Fairmont Drainage District:
Map 2456-11a: Closeup of
Waypoints 238, 239 & 458

**Legend: Showing
Waypoint Numbers**

-  Field Observation
-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Surface Drain Str.
-  Tile Location
-  Tile Outlet
-  Tile Lines
-  Section Line
-  Open Ditch
-  Dist. Boundary
-  Highway

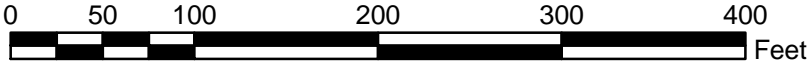


Fairmont Drainage District:
 Map 2456-11b: Closeup of
 Waypoints 248, 434, 435, & 600



**Legend: Showing
Waypoint Numbers**

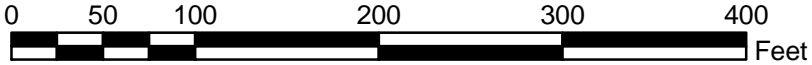
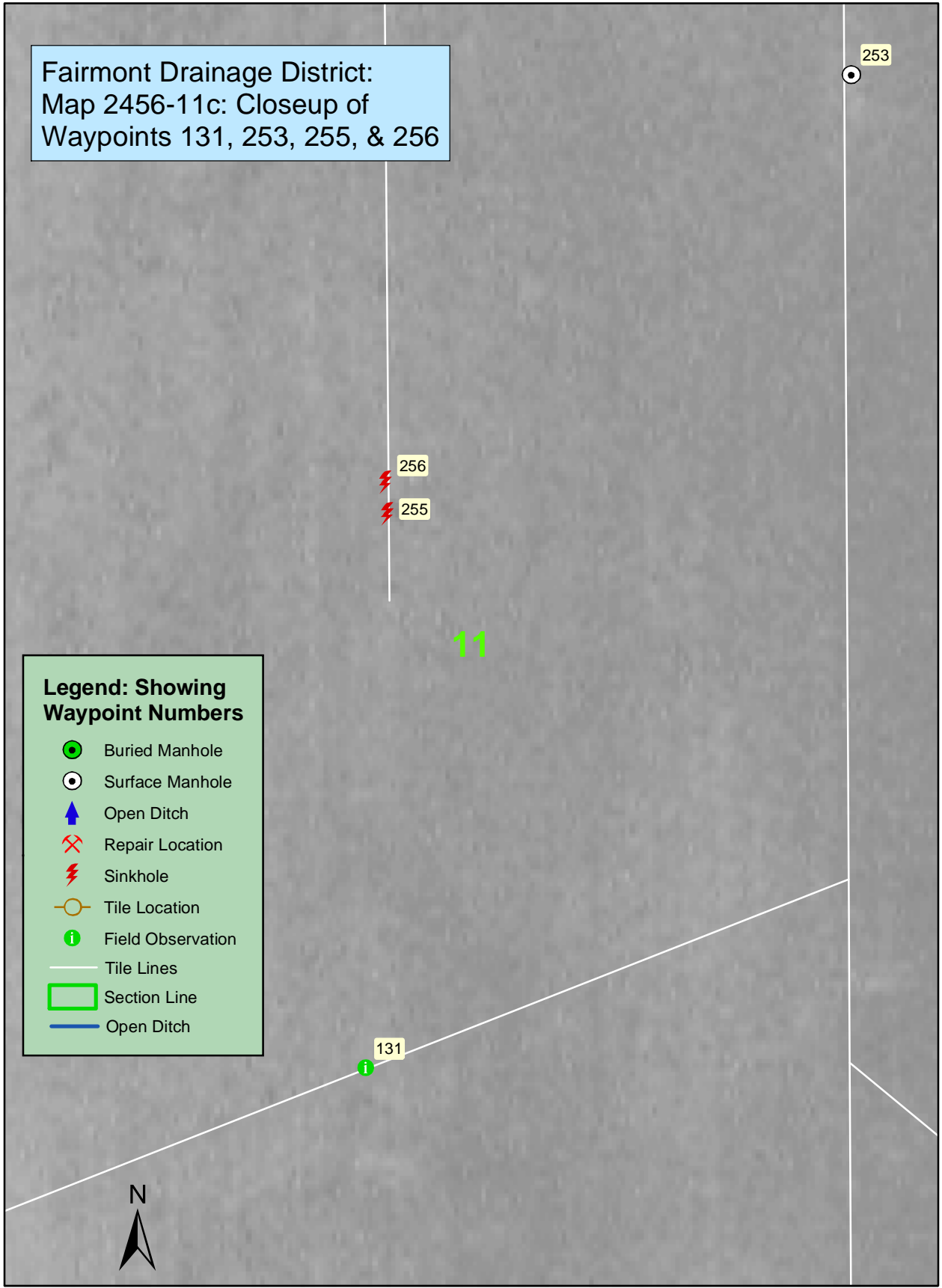
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Field Observation
- Tile Lines
- Section Line
- Open Ditch
- Highway



Fairmont Drainage District:
Map 2456-11c: Closeup of
Waypoints 131, 253, 255, & 256

**Legend: Showing
Waypoint Numbers**

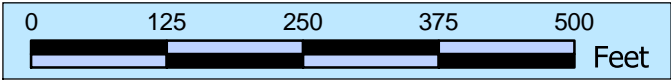
- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Tile Location
- i Field Observation
- Tile Lines
- ▭ Section Line
- Open Ditch



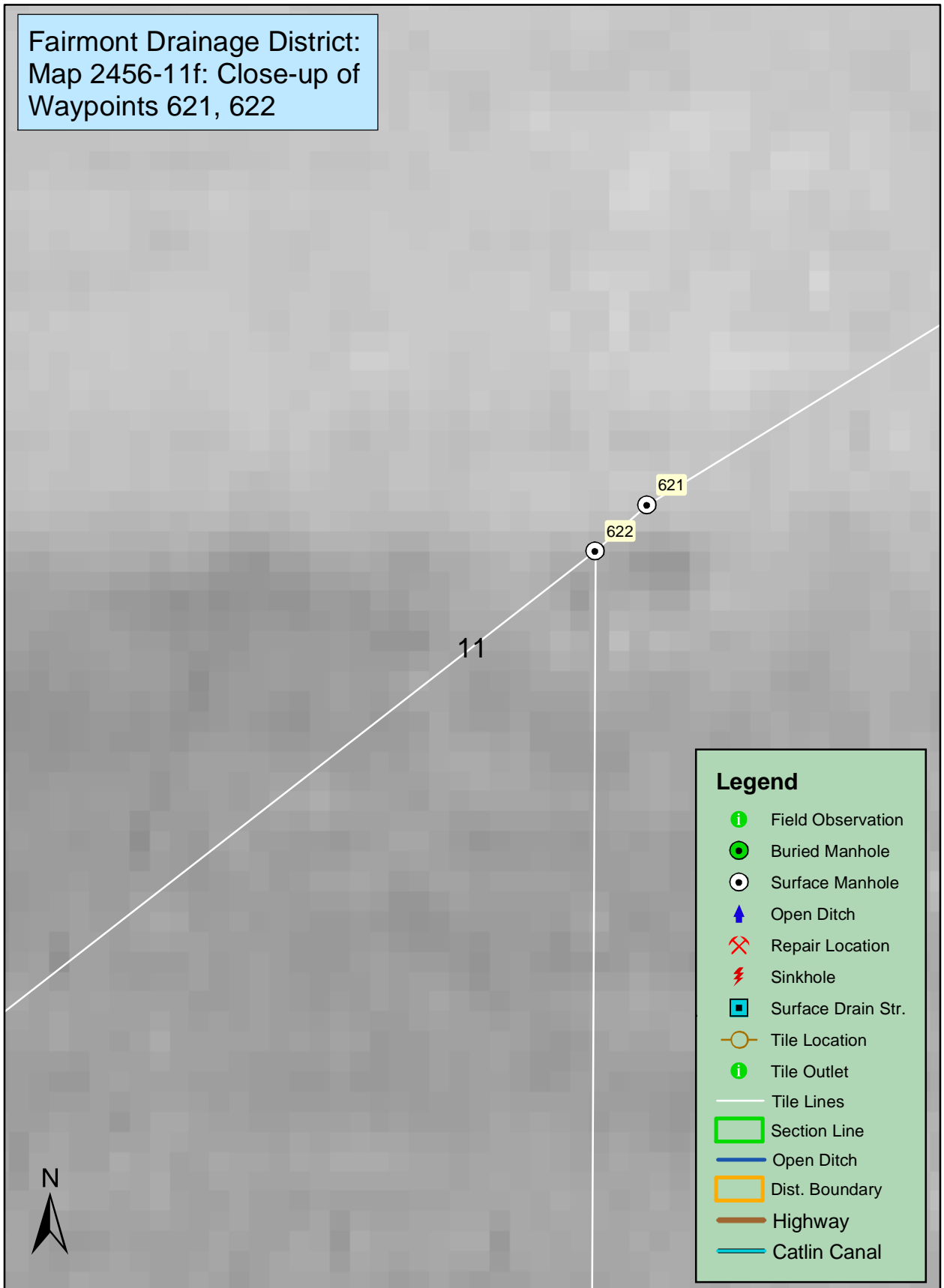
Fairmont Drainage District:
 Map 2456-11e: Sec. 11: SW 1/4 of NE 1/4
 Including Estimated Location of Original Manholes
 Waypoints 620 (sinkhole), 245, 247, & 622

Legend

- Field Observation
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Surface Drain Str.
- Tile Location
- Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway
- Catlin Canal
- Orig. Manh. Loc'n.-Est.

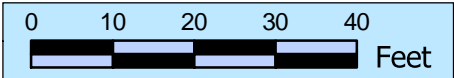


Fairmont Drainage District:
Map 2456-11f: Close-up of
Waypoints 621, 622



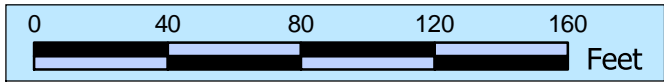
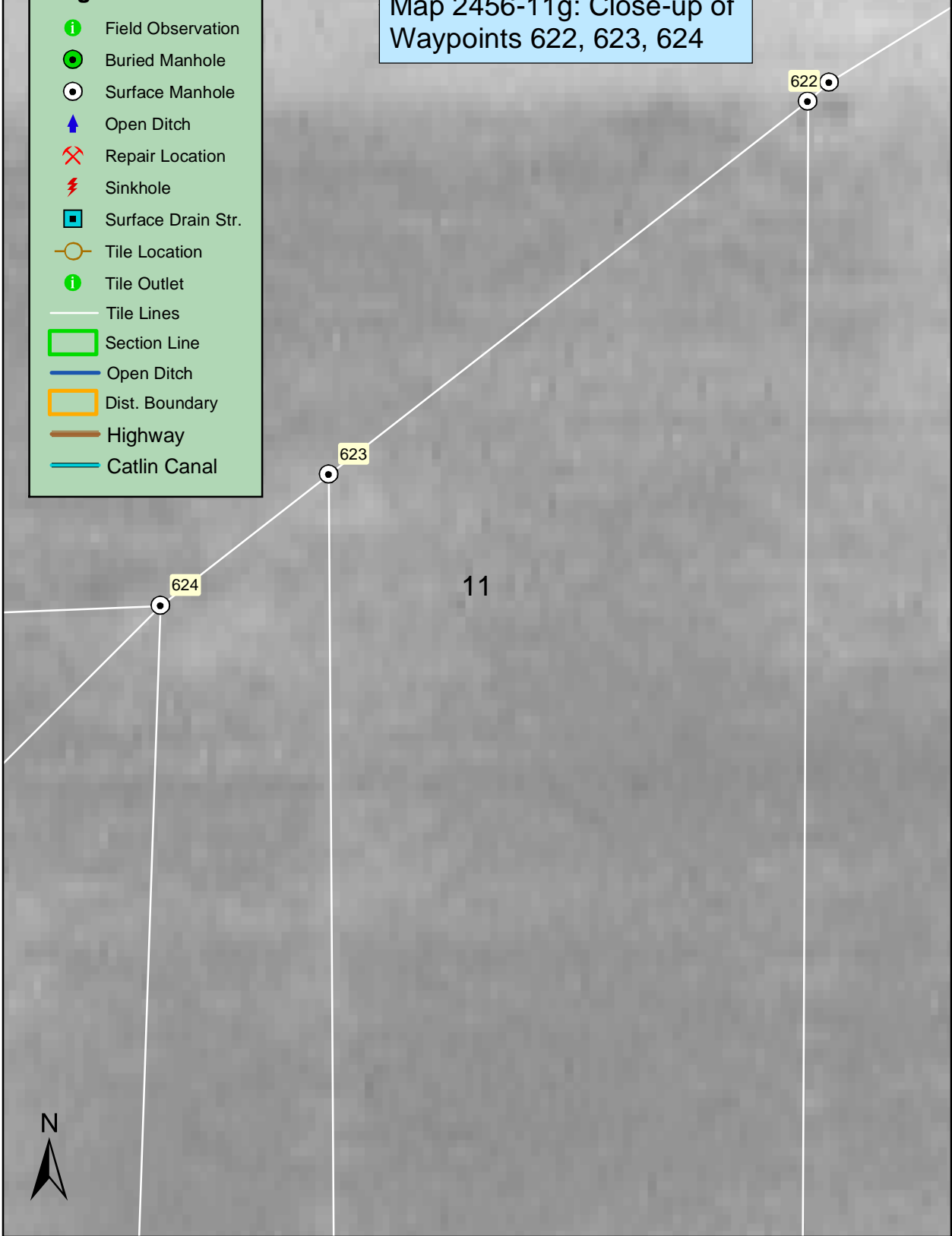
Legend

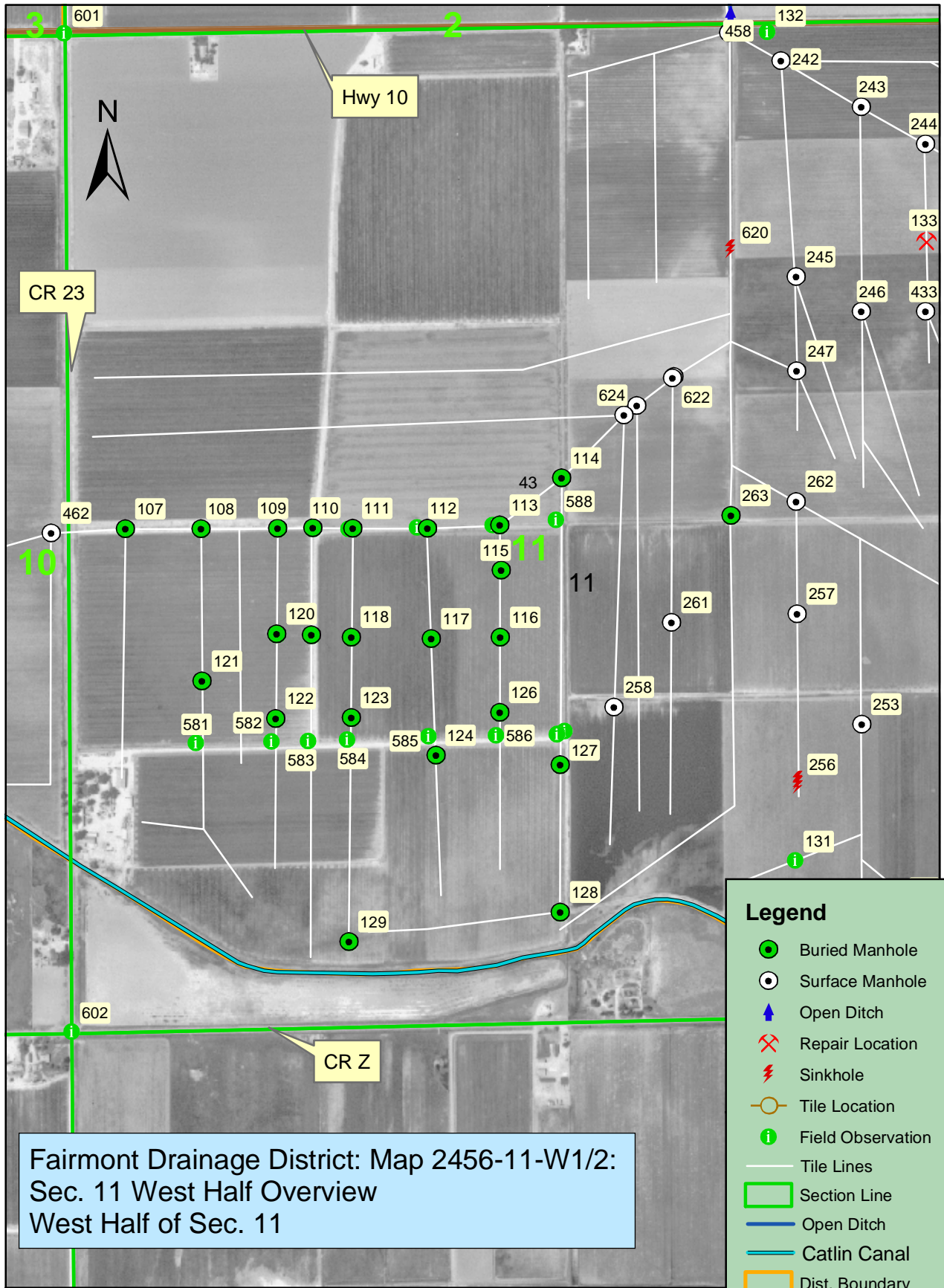
- i Field Observation
- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Surface Drain Str.
- Tile Location
- i Tile Outlet
- Tile Lines
- Section Line
- Open Ditch
- Dist. Boundary
- Highway
- Catlin Canal



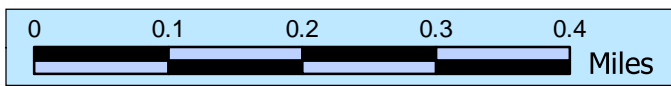
Fairmont Drainage District:
Map 2456-11g: Close-up of
Waypoints 622, 623, 624

- Legend**
- Field Observation
 - Buried Manhole
 - Surface Manhole
 - Open Ditch
 - Repair Location
 - Sinkhole
 - Surface Drain Str.
 - Tile Location
 - Tile Outlet
 - Tile Lines
 - Section Line
 - Open Ditch
 - Dist. Boundary
 - Highway
 - Catlin Canal





Fairmont Drainage District: Map 2456-11-W1/2:
 Sec. 11 West Half Overview
 West Half of Sec. 11

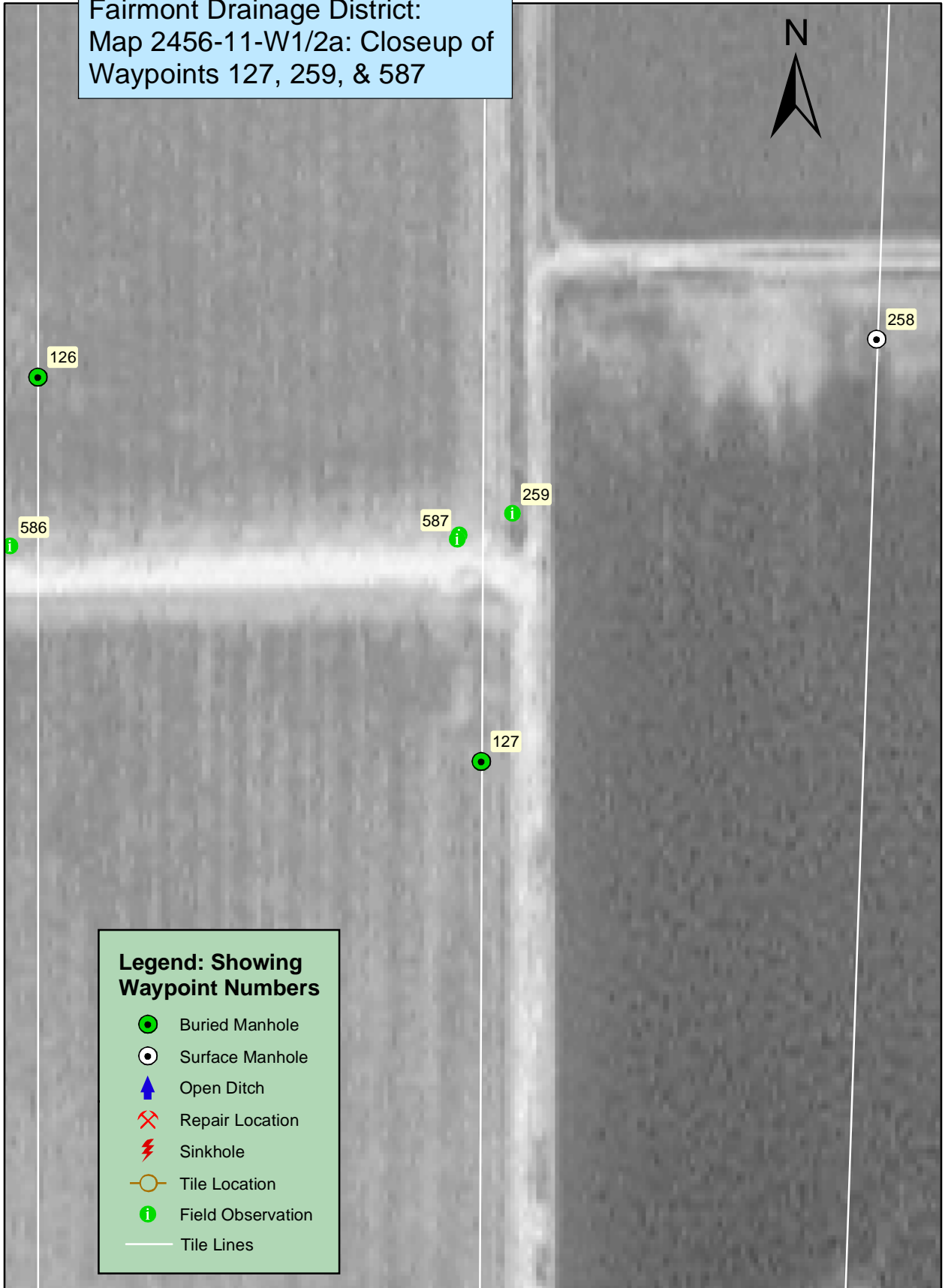


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Legend

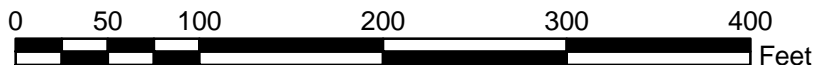
- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Tile Location
- Field Observation
- Tile Lines
- Section Line
- Open Ditch
- Catlin Canal
- Dist. Boundary
- Highway

Fairmont Drainage District:
Map 2456-11-W1/2a: Closeup of
Waypoints 127, 259, & 587

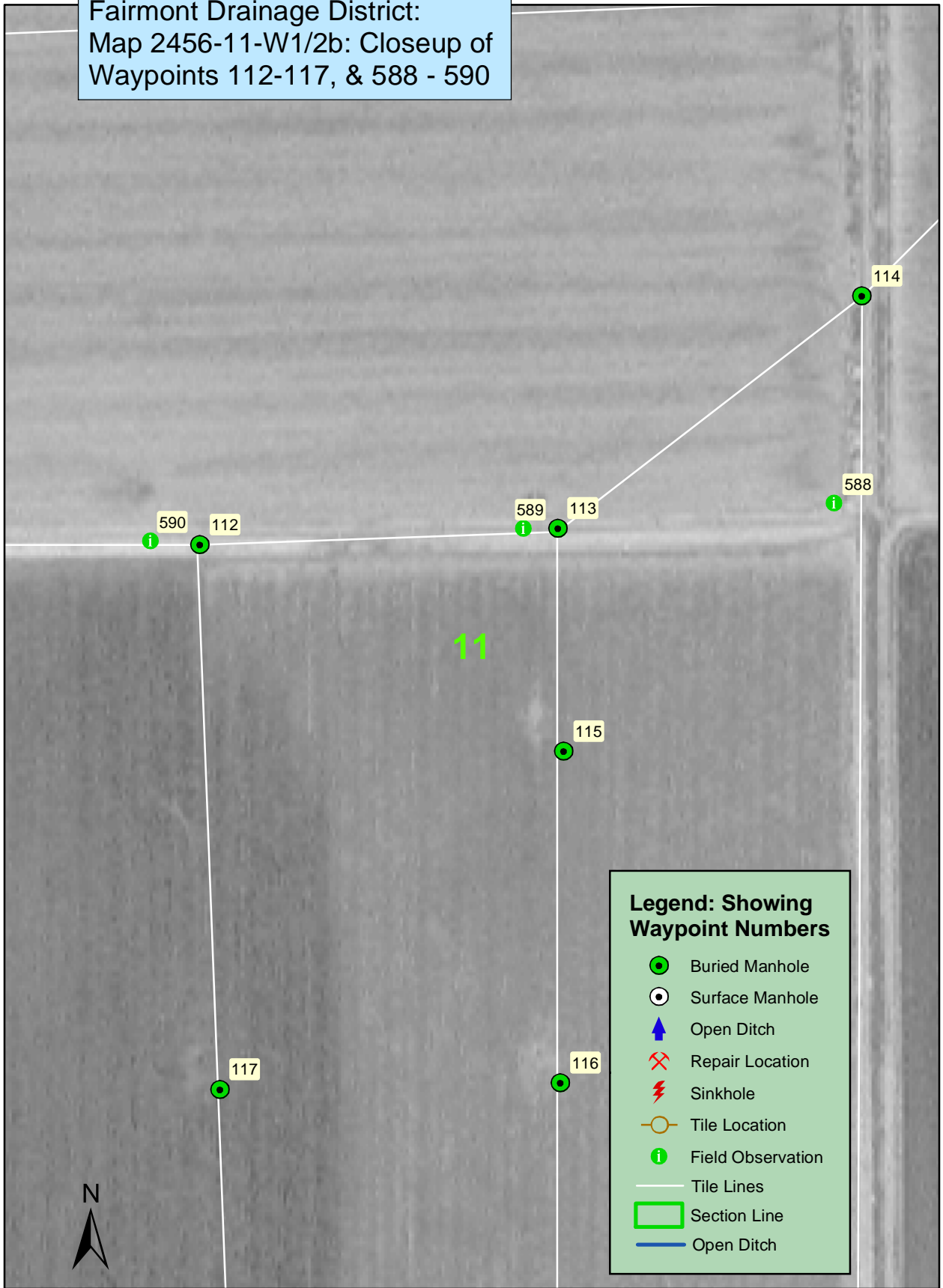


**Legend: Showing
Waypoint Numbers**

-  Buried Manhole
-  Surface Manhole
-  Open Ditch
-  Repair Location
-  Sinkhole
-  Tile Location
-  Field Observation
-  Tile Lines

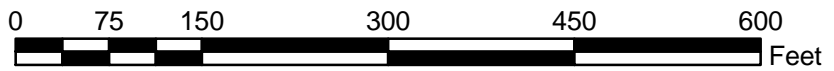


Fairmont Drainage District:
Map 2456-11-W1/2b: Closeup of
Waypoints 112-117, & 588 - 590

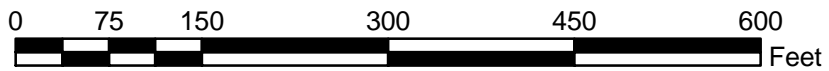
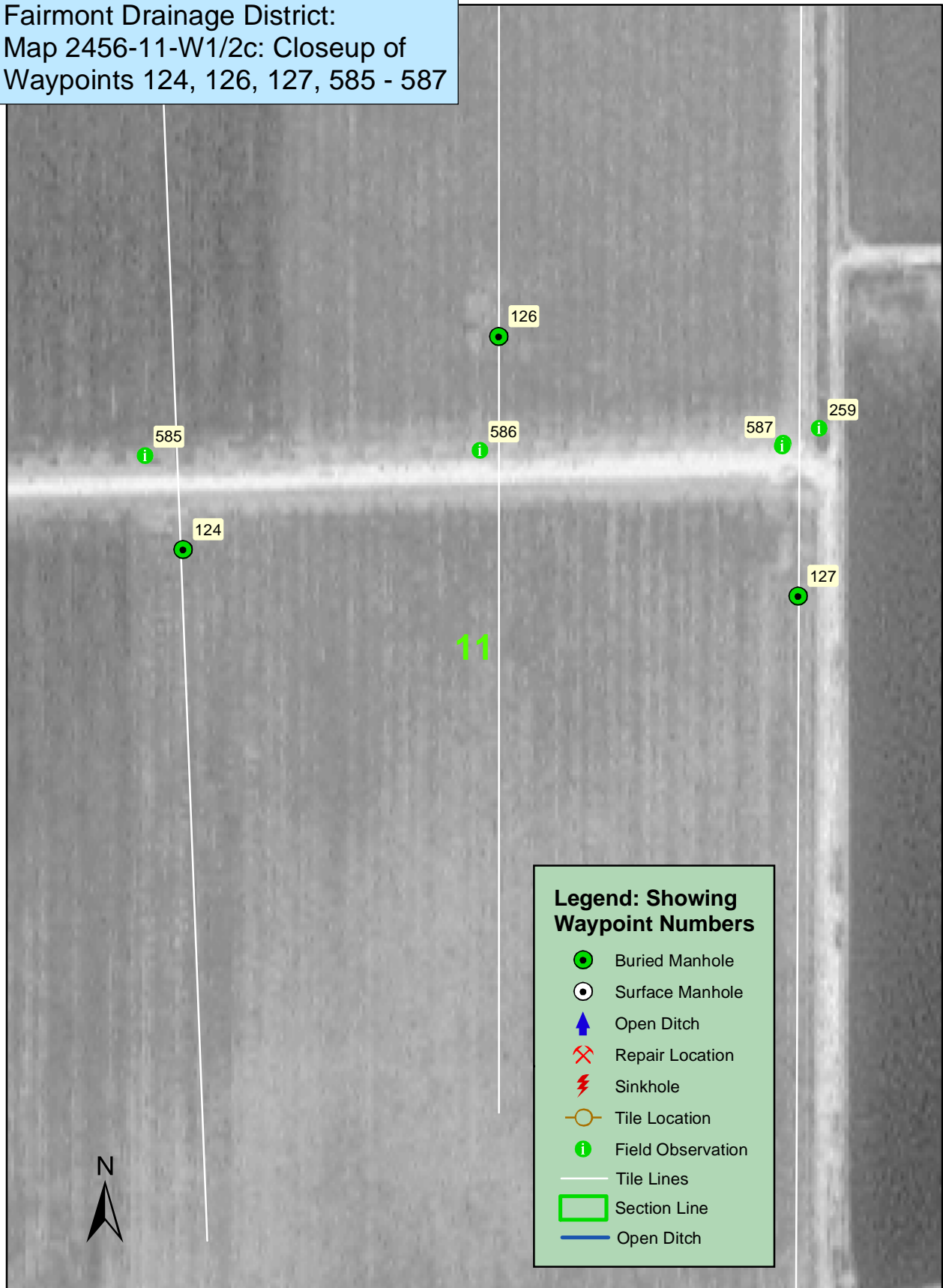


**Legend: Showing
Waypoint Numbers**

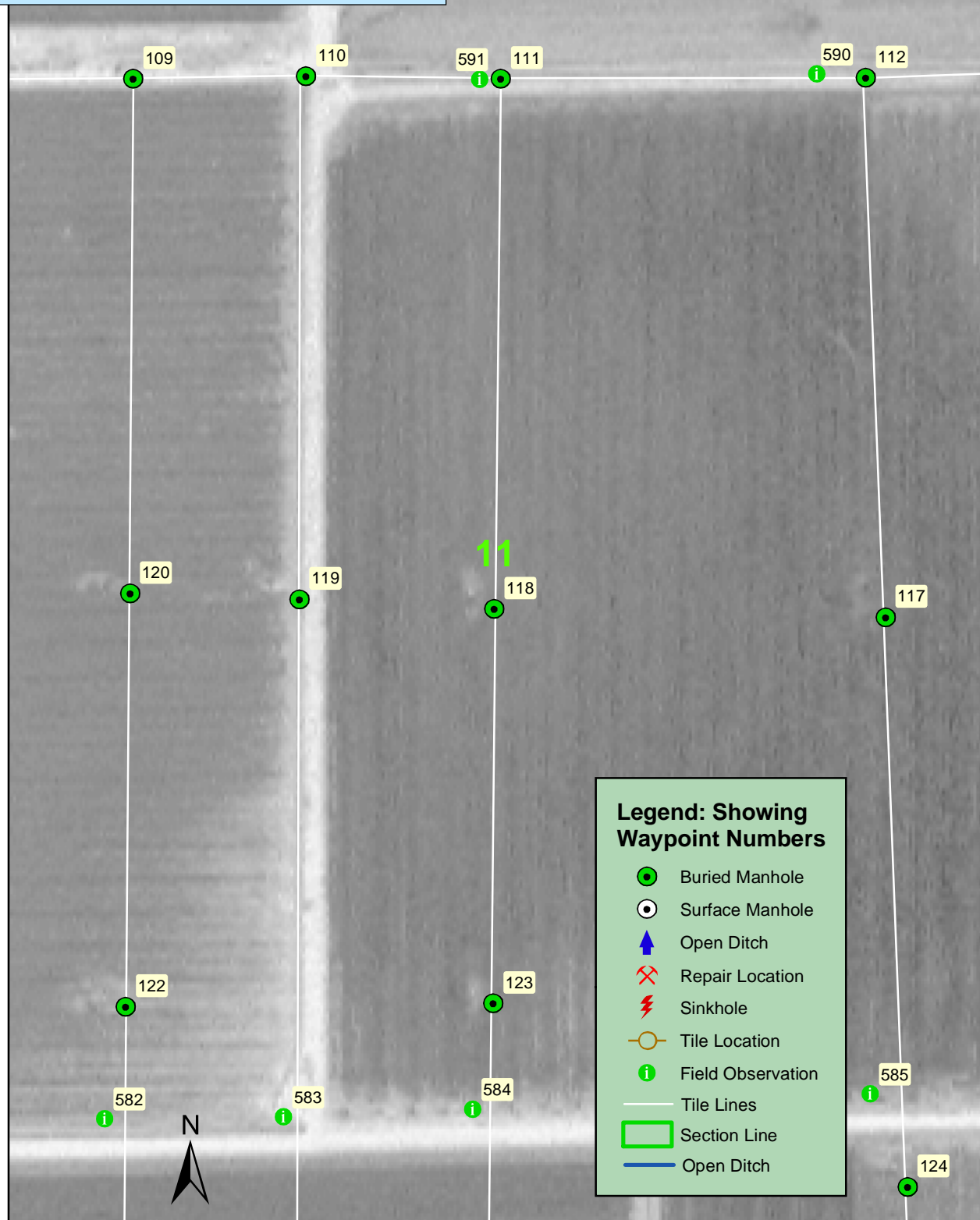
- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✂ Repair Location
- ⚡ Sinkhole
- Tile Location
- Field Observation
- Tile Lines
- ▭ Section Line
- Open Ditch



Fairmont Drainage District:
Map 2456-11-W1/2c: Closeup of
Waypoints 124, 126, 127, 585 - 587

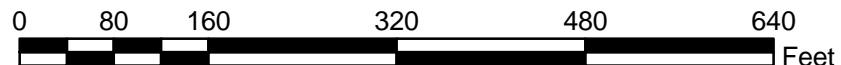


Fairmont Drainage District:
 Map 2456-11-W1/2d: Closeup of
 Waypoints 109 - 112, 117 - 120,
 122 - 124, 582 - 585, 590, & 591

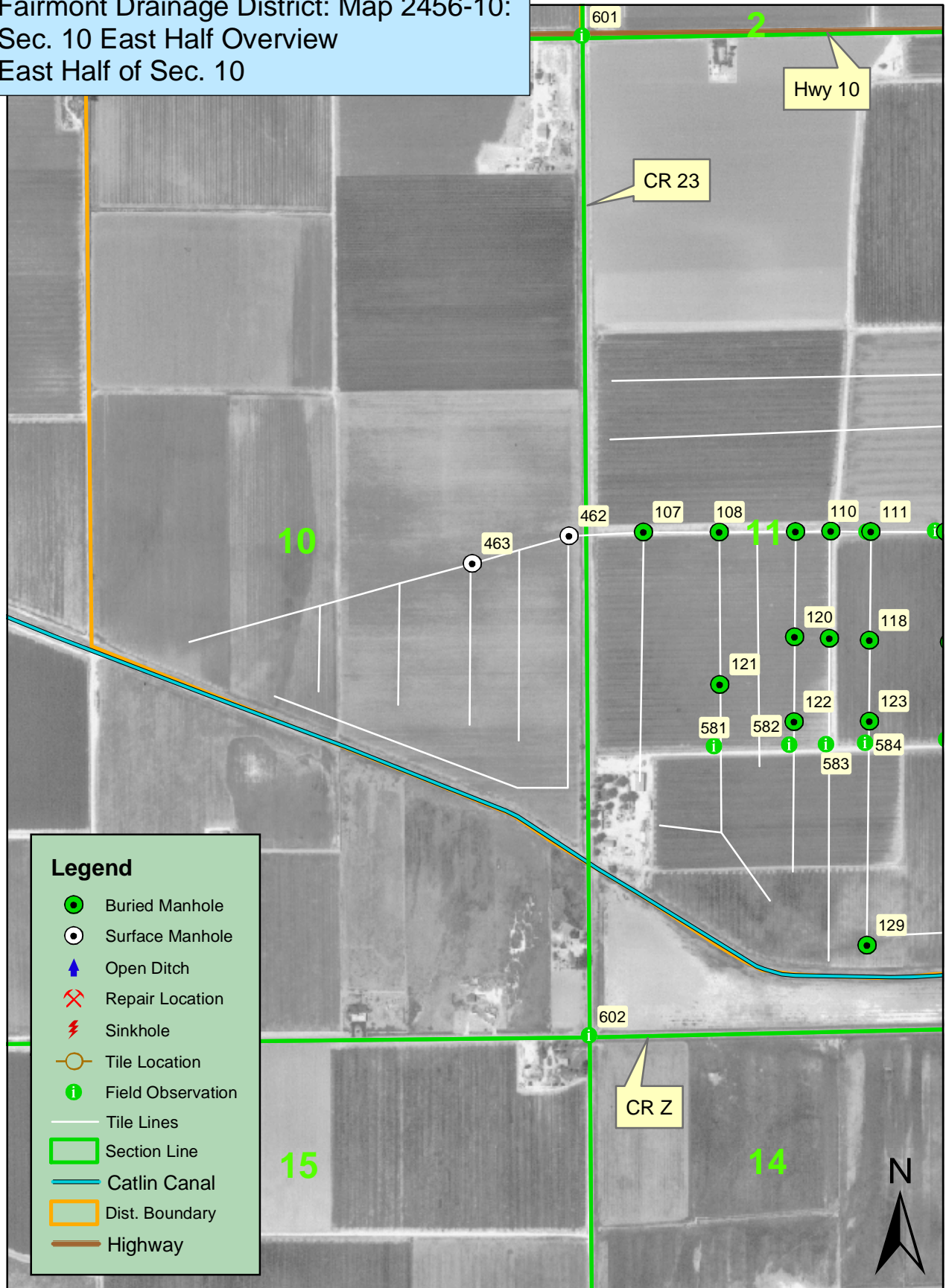


Legend: Showing Waypoint Numbers

- Buried Manhole
- Surface Manhole
- Open Ditch
- Repair Location
- Sinkhole
- Tile Location
- Field Observation
- Tile Lines
- Section Line
- Open Ditch

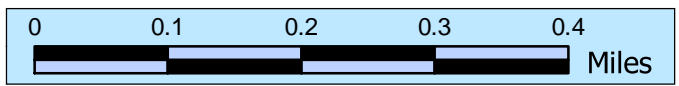


Fairmont Drainage District: Map 2456-10:
 Sec. 10 East Half Overview
 East Half of Sec. 10



Legend

- Buried Manhole
- Surface Manhole
- ▲ Open Ditch
- ✕ Repair Location
- ⚡ Sinkhole
- Tile Location
- i Field Observation
- Tile Lines
- Section Line
- Catlin Canal
- Dist. Boundary
- Highway



Irrigated by Catlin Consolidated Canal Co.

GENERAL

Rocky Ford

LOCATION: STATE Colorado COUNTY Otero NEAR Swink-6 mi.S.E. of/

ACRES: GROSS 1900 ASSESSED 909 SUSTAINING 909

UNIT OF ASSESSMENT (1) Percentage of benefits

TOTAL UNITS: ORIGINAL -- SUSTAINING --

UNITS OF ASSESSMENT PER ACRE: AVERAGE \$ 67% MAXIMUM \$ 100% MINIMUM \$ 25%

LIABILITY FOR DISTRICT OBLIGATIONS Each tract liable for 100% of ass'ts. levied against it

LOCATION OF ASSESSMENT RECORDS M. F. Miller, La Junta, Colorado

LAND: BAD ALKALI 1 %; SLIGHT ALKALI 25 %; HIGH WATER TABLE -- %; TREND stable

ELEVATION 4200 FT. AVERAGE GROWING SEASON 164 DAYS April 26 TO October 8

PRECIPITATION IN INCHES: ANNUAL AVERAGE 12.13; CHARACTERISTICS OF RAINFALL 78% from 4/1 to 10/1

Erratic-maximum 21.8"; minimum 5.9"; maximum daily 6.2". Intense storms in summer.

ECONOMIC & FINANCIAL CONDITIONS

GENERAL TAXES ON LAND AND IMPROVEMENTS: AVERAGE \$ 2.00 PER ACRE

CAPITAL DEBT AS OF October 1 1942; BONDS \$ none @ % PAYABLE 19

WARRANTS \$ @ % PAYABLE 19; OTHER DEBTS \$ @ % PAYABLE 19

NET CAPITAL DEBT: \$, ADJUSTED TO AN EQUIVALENT % BASIS \$

OR \$ none PER SUSTAINING (1)

B. & I. ASSESSMENTS FOR PERIOD 1932-41 AVERAGED \$ none PER (1) acre of 100% land

O. & M. ASSESSMENTS FOR PERIOD 1932-41 AVERAGED \$ 0.58 PER (1) " " " "

ESTIMATED FUTURE ANNUAL ASSESSMENTS PER SUSTAINING (1) acre of land with 100% benefits

B. & I. \$ none O. & M. \$ (1) \$1

HISTORY AND TREND OF DEBT AND ASSESSMENTS District issued \$25,000 of serial bonds in 1918, payable 1919-28. Paid cash for \$22,000 of construction costs. Bonds paid out as per schedule. No B&I assessments since 1928 and none anticipated in future.

THESE LANDS ARE all SUBJECT TO OTHER ASSESSMENTS BY Reorganized Catlin Consolidated Canal Company.

PHYSICAL CONDITIONS

EFFECTIVENESS OF SYSTEM AND ADEQUACY OF PAST MAINTENANCE Tile drainage system. System generally effective on entire area to extent that it keeps water table and alkali under control. Soil is tight however and tile lines are shallow, with result that in seasons of above normal water supply and rainfall, the drainage on the flatter lands is slow and they are inclined to become too wet for maximum results. Past maintenance satisfactory.

AREA HAS not BEEN ZONED. (SEE ZONE DESCRIPTIONS IF IT HAS BEEN ZONED)

EXPECTED FUTURE ADEQUACY OF MAINTENANCE

Future adequacy of system may be expected to same degree as in the past. System will be adequately maintained.

CHARACTER OF FLOODS (2) No hazard

RECOMMENDATIONS: APPRAISAL FACTORS IN (3) Dollars per acre of land with 100% assessed benefit

TOTAL DEDUCTION \$ none UNTIL 19 19

ANNUAL B. & I. \$ none ANNUAL O. & M. \$1 F.L.B. and L.B.C. loans

(1) Dollar of assessed benefits, or dollar of assessed valuation, or acre- district's method of assessment

(2) Supplement by attaching gage record tables where available

(3) % of assessed benefits, or % of assessed valuation, or dollars per acre

(SEE REVERSE SIDE FOR ADDITIONAL INFORMATION)

LAND LOCATION 1 MILES SW OF Swink - 6 mi. S.E. of Rocky Ford
 IN Otero COUNTY. TOWNSHIP 23,24S RANGE 56W

ORGANIZATION

DATE OF ORGANIZATION July 13, 1917 UNDER LAW OF 1911
 AMENDMENTS TO ORIGINAL ORGANIZATION --- farm assessed
 ACRES: GROSS 1900 , ASSESSED 909 , SUSTAINING 909 (Irregular parts of each/
 UNIT OF ASSESSMENT (1) Percentage of benefits
 TOTAL UNITS: ORIGINAL --- SUSTAINING ---
 UNITS OF ASSESSMENT PER ACRE: AVERAGE \$ 67% , MAXIMUM \$ 100% , MINIMUM \$ 25%
 LIABILITY FOR DISTRICT OBLIGATIONS each tract liable for 100% of ass'ts levied against it
 NAME AND ADDRESS OF SECRETARY M. F. Miller, La Junta, Colorado
 LOCATION OF ASSESSMENT RECORDS " " " "

TYPE OF LAND

GENERAL Rectangular area of bench land - U.S.B.R. classification: Cl. 1 - 64%;
 Cl. 2 - 33%; Cl. 5 & 6 - 3%. 1850 acres in cultivation.

TOPOGRAPHY

Gently sloping to undulating
 SOILS: PREDOMINANT TYPES Rocky Ford clay loam - 45%; Minnequa clay loam - 33%; Rocky
 Ford loam - 15%; Apishapa clay loam - 4%; Ft. Lyon gravelly loam - 3%.
 PER CENT OF AREA: BAD ALKALI 1 % , SLIGHT ALKALI 25 % , HIGH WATER TABLE -- %
 TREND stable

CLIMATE

ELEVATION 4200 FT., AVERAGE GROWING SEASON 164 DAYS April 26 TO October 8
 RAINFALL AT Rocky Ford STATION 6 MILES FROM DISTRICT 12.13
 LENGTH OF RECORD 53 YEARS 1888 TO 1941 , ACCURACY good
 CHARACTERISTICS OF RAINFALL 78% from 4/1 to 10/1. Erratic - maximum 21.8"; minimum 5.9";
 maximum daily 6.2". Intense storms of short duration in summer months.

CROPS

CROPS	:% OF AREA:	CROPS	:% OF AREA:	CROPS	:% OF AREA:
ALFALFA	: 28	POTATOES	:	onions	: 8
CLOVER	:	SUGAR BEETS	: 14	melons	: 6
OTHER HAY	:	beans	: 4	gardens and other	: 2
PASTURE	: 3	feed crops	: 4	:	:
CEREALS	: 13	vine crops	: 1	:	:
CORN	: 14	tomatoes	: 1	:	:
SORGHUMS	: 2	:	:	:	:

SOURCE OF INFORMATION U.S.B.R. survey & W.C. reports ACCURACY fair
 YIELDS AND TRENDS Moderately good to good yields usually obtained. Trend
 from melons to corn and onions in recent years.
 DISPOSITION OF CROPS Cash crops comprise about 50% of total. Remainder fed
 to livestock and dairy cattle on farms.

ECONOMIC CONDITIONS

NO. OF FARMS 14 . TENANCY APPROX. 40 %. CONDITION OF FARM IMPROVEMENTS Generally
 fair to good.

GENERAL CHARACTER OF FARMS AND FARMERS

Good farms and good farmers of American
 nationality.

GENERAL TAXES ON LAND AND IMPROVEMENTS: AVERAGE \$ 2.00 PER ACRE
 TRANSPORTATION FACILITIES A.T. & S.F. Ry. and U.S. Hy. No. 50 at Swink - maximum
 haul 4 miles. Good, graveled roads in district.
 MARKETING FACILITIES Sugar factories at Swink and Rocky Ford. Canning factory,
 elevators, onion storage, seed houses and packing sheds at Rocky Ford.
 Outlet for cash crops and surplus feed crops is very good.

(1) Dollar of assessed benefits, or dollar of assessed valuation, or acre - district's method of assessment

FAIRMOUNT DRAINAGE DISTRICT

OPERATION AND MAINTENANCE ACCOUNT AS OF **October 1** 19 **42**

ASSETS		:	LIABILITIES	
CASH ON HAND	:\$313.11	:	WARRANTS OUTSTANDING	:\$
ASSESSMENTS RECEIVABLE	:	:	OTHER	:
MISCELLANEOUS RECEIVABLE	:	:		:
TOTAL	:\$313.11	:	TOTAL	:\$ none

CAPITAL DEBT SCHEDULE

INDEBTEDNESS	: AMOUNT	:	INT. RATE	:	AMOUNT PER UNIT	:	REPAYMENT PERIOD
BONDS	:\$:	%	:	PER	:	
BONDS	:	:	%	:	PER	:	
BONDS	:	:	%	:	PER	:	
WARRANTS	:	:	%	:	PER	:	
OTHER	:	:		:	PER	:	
TOTAL	:\$ none	:	%	:	PER	:	

NOTE: IF ANNUAL PAYMENTS ARE VARIABLE ATTACH DETAILED REPAYMENT SCHEDULES

CAPITAL DEBT ACCOUNT AS OF 19

ASSETS		:	LIABILITIES	
CASH ON HAND	:\$:	WARRANTS OUTSTANDING	:\$
CURRENT ASSESSMENTS RECEIVABLE	:	:	BOND PRINCIPAL UNMATURED	:
DELINQUENT ASSESSMENTS RECEIVABLE	:	:	BOND PRINCIPAL DELINQUENT	:
MISCELLANEOUS RECEIVABLE	:	:	INTEREST DELINQUENT	:
	:	:		:
TOTAL	:\$ none	:	TOTAL	:\$ none

CAPITAL DEBT IF ALL ASSESSMENTS ARE COLLECTED..... \$
 ESTIMATED CURRENT AND DELINQUENT ASSESSMENTS COLLECTIBLE.....
 NET CAPITAL DEBT.....
 NET DEBT ADJUSTED TO AN EQUIVALENT 6% BASIS.....
 NET ADJUSTED DEBT PER SUSTAINING (1)..... none

PAST ANNUAL ASSESSMENTS IN DOLLARS PER acre of land with 100% benefits											
ITEM:	19 32	: 19 33	: 19 34	: 19 35	: 19 36	: 19 37	: 19 38	: 19 39	: 19 40	: 19 41	: AVE.
A :	:	:	:	:	:	:	:	:	:	:	:
B :	:	:	:	:	:	:	:	:	:	:	none
SUB :	:	:	:	:	:	:	:	:	:	:	:
TO- :	:	:	:	:	:	:	:	:	:	:	:
TAL :	:	:	:	:	:	:	:	:	:	:	:
C :	1.00	: 1.00	: 1.00	:	:	:	.67	: .80	: .67	: .67	: .58
TOTAL:	:	:	:	:	:	:	:	:	:	:	:

A - WARRANTS. B - BONDS & INTEREST. C - O. & M.

ESTIMATED FUTURE ANNUAL ASSESSMENTS PER SUSTAINING (1) acre of land with 100% benefits
 ANNUAL B. & I. \$ none ANNUAL O. & M. \$ 1.00
 HISTORY AND TREND OF DEBT AND ASSESSMENTS District issued \$25,000 of serial bonds in 1918, payable 1919-28. Paid cash for \$22,000 of construction costs. Bonds paid out as per schedule. No B&I assessments since 1928. Regular O&M assessments may be anticipated at costs somewhat in excess of those of the last 10 years.

THESE LANDS ARE all SUBJECT TO OTHER ASSESSMENTS BY Reorganized Catlin Consolidated Canal Co.

(1) Dollar of assessed benefits, or dollar of assessed valuation, or acre - district's method of assessment

DRAINAGE DISTRICTS - CONSTRUCTION
FAIRMOUNT DRAINAGE DISTRICTCONSTRUCTION

COST OF CONSTRUCTION: ORIGINAL \$ 47,000
 OUTLET OF SYSTEM: STREAM Timpas Creek
 EFFECT OF BACKWATER none

PRESENT UNPAID \$ none
 SEC. 35 TWP. 23S R. 56W

LENGTH OF MAIN DRAIN 4 MILES; LATERALS 18 MILES. TOTAL LENGTH 22 MILES
 ADEQUACY OF SYSTEM Entirely a tile system with brick manholes located at short distances apart on main drain and principal laterals. Tile laid at depths 3 to 5 feet. Large amount of 6" tile. System sufficiently adequate to keep water table under control and permit cultivation of entire area. Flat lands inclined to get too wet in above normal water supply or rainfall years, and care must be used in the application of irrigation water.

PROBABLE NEW CONSTRUCTION none contemplated.

GENERAL EFFECTIVENESS OF SYSTEM AND ADEQUACY OF PAST MAINTENANCE

System generally effective on entire area to extent outlined above. Trunk lines and main laterals running free at time of inspection. Small tile lines frequently become clogged and some farmers in area claim that repairs are not made promptly. Others say that repairs are made in a reasonable time. Maintenance has been sufficient in past to keep system functioning satisfactorily.

FUTURE MAINTENANCE: ANNUAL COST (1) \$ 1. per acre of land with 100% benefits.
 EXPECTED FUTURE ADEQUACY

System may be expected to function satisfactorily and be kept in repair in the future. Its adequacy will probably continue about as in the past; i.e., to keep water table under control and prevent any further alkali encroachment but drainage on the flatter lands through the center of the district will be slow in seasons of above normal water supply or rainfall.

Estimated annual costs - \$600.00.

(1) Dollar of assessed benefits, or dollar of assessed valuation, or acre-district's method of assessment