

**AGENDA**  
**REGULAR DRAINAGE MEETING**  
**Wednesday, January 27, 2020 9:30 AM**  
**Large Conference Room**

**Due to Covid-19 health concerns, this meeting is open to the public via conference call only. The meeting date and time will remain the same. You may call at that time to access the meeting by following the instructions below:**

**To access the meeting call: 1-(312)-626-6799, when prompted enter meeting ID code: 820 7567 2007**

**You can also access the meeting online at:**  
**<https://us02web.zoom.us/j/82075672007>**

1. Open Meeting
2. Approve Agenda
3. Approve Minutes

Documents:

[01\\_13\\_21 - DRAINAGE MINUTES.PDF](#)

4. DD 143 WO 241 - Discuss W Possible Action - Tree Removal

Documents:

[DD 143 - WO 167 SURVEYORS REPORT 01\\_02\\_2020.PDF](#)  
[DD 143 - WO 167 SURVEYORS REPORT - SUPPLEMENT 01\\_02\\_2020.PDF](#)

5. DD's Big 4, 41, 77, 123 & 143 - Discuss W Possible Action - Pay Estimate #6

Documents:

[DDS BIG 4 MAIN, 41, 77, 123 AND 143 -6771.2- HANDS ON COMPL LETTER W PAY ESTIMATE 6 - 12\\_09\\_20.PDF](#)

6. DD H-F 4-53 - Discuss W Possible Action - Joint County Meeting  
Franklin County has provided dates available to meet with their Trustees to discuss Joint DD Work Orders #143, #296, #303.

Documents:

[DD H-F 4-53 FRANKLIN CO WO 143 - 6500.2 - INVESTIGATION SUMMARY 01\\_06\\_20.PDF](#)  
[DD H-F 4-53 WO 296 - 6500.4 - INVESTIGATION SUMMARY 01\\_07\\_21.PDF](#)  
[DD H-F 4-53 WO 303 - 6500.5 - INVESTIGATION SUMMARY 01\\_06\\_21.PDF](#)

7. Discuss W Possible Action - IDDA Membership
8. Discuss W Possible Action - Drainage Assessment Project
9. Approve Minutes



10. Other Business

11. Adjourn Meeting

**REGULAR DRAINAGE MEETING**  
**Wednesday, January 13, 2021 9:30 AM**

**This meeting was held electronically and in-person due to Covid-19 concerns.**

1/13/2021 - Minutes

1. Open Meeting

Hardin County Drainage Chairperson BJ Hoffman opened the meeting. Also in attendance were Trustee Lance Granzow; Trustee Renee McClellan; Jolene Pieters, Auditor; Lee Gallentine, Clapsaddle-Garber Associates (CGA); Landowner Ron Vierkandt; Mathew Weiser Aureon; Adam Seward, Honey Creek Land Improvement; Michael Pearce, Network Specialist; and Denise Smith, Drainage Clerk.

2. Approve Agenda

Motion by McClellan to approve the agenda. Second by Granzow. All ayes. Motion carried.

3. Approve Minutes

Motion by McClellan to approve the minutes of Regular Drainage Meeting dated 01-04-2021. Second by Granzow. All ayes. Motion carried.

4. Approve Claims For Payment

Motion by Granzow to approve the claims for payment with pay date of Friday, January 15, 2021. Second by McClellan. All ayes. Motion carried.

DD 42 WO 297 CCTV Tile, Truck Mileage, Telev Truck Williams Excavation LLC      \$1,283.00

5. Discuss W Possible Action - Aureon Drainage Utility Permits 2019-1, 2019-2 & 2019-4

Smith stated we invited Mathew Weiser of Aureon in today to discuss the as-builts submitted by Aureon on their open Drainage Utility Permits, we had some questions and concerns on our end, and asked Gallentine to cover the technical aspects of that. Gallentine stated the purpose of the permit is ensure that the District facility is not impacted, they are 100 year old tile, and with the economy the way it is the District can not afford to pay for a repair that they did not cause or that the utility caused. Gallentine stated that was the purpose of the permit and on the two western most districts Aureon crossed, that seemed to go okay, the contractor called us and exposed the tile and CGA came out and verified that everything was cleared and shot that, and after that it dropped off, we never heard from one of Aureon's contractors again. Gallentine stated Smith reached out to Weiser, Weiser submitted as-builts, and really the as-builts are lacking any data that shows whether the tile was even found, cleared or not, Gallentine can not tell anything distinctly from the as-builts as to any impacts on the district facility. Weiser stated he had read some of the stuff, and asked once the frost was out of the ground, are there things Aureon can do to make sure the tiles were not impacted. Gallentine stated he thinks there are, his role is you apply for the permit, the Trustees approve it and CGA is out there as the eyes and ears for the District, so anything that is an after the fact inspections, that is up tot the Trustees as to what they will allow or not allow, we have had contractors in the past that have blown it off, they come back after the fact and expose the tile and expose their facility, and let us know, we go out and shoot them, we get the clearance verified between your lines and the facility, and we report back to the Trustees, if that is what the Trustees choose. Gallentine stated there is a lot of districts impacted by these permits.

Weiser stated from Aureon's standpoint, we do apologize, when we were communicating with our contractor, they needed to work with you guys, and it seems like they started to but we don't know where the disconnect or miscommunication fell off after that. Hoffman stated he offered a remedy, we have some great in-county contractors that do this work, day in and day out, if you would like us to provide you with their information, Hoffman knows Aureon has some agreements with their own contractors. but this is a really delicate. touchy situation. Hoffman stated the guy sitting to Weiser's left (Vierkandt) can tell you that drainage will make or break a producer, and on their private tile, most people are very diligent about what happens with that, and if you are ever really considering what can we do to make this better, Hoffman would really consider getting the list of our local contractors that are so good at it. Smith stated she can provide that list to Weiser, the other issue for us that was a little concerning, was that this is a large scope of work for Aureon, so there were a lot of district facilities crossed. Smith referenced the list of district facilities that was pulled from their original permit applications. Smith noted the areas highlighted are the district facilities crossed according to Aureon's permits, Smith will make sure Weiser has this list as well. Smith stated this information was on the original letter we sent you in September, but will include this with the list of local contractors as well.

Granzow stated another thing Weiser could do would be to reach out to Gallentine, and asked if some of these were GPS'ed already. Gallentine stated we may have already gotten GPS coordinates on some of these if there was a repair done or something like that, we may have coordinates already so that your contractor is not out there going, where is the tile at, we can say it is right here, this will not be the majority of them, but it could save time for you. Weiser stated from an Aureon perspective, if in the future it is exposed and it is found that Aureon damaged or impacted that tile, we do come back and fix them. Granzow asked what about the damages to the crops in the field, for example, it was in a drainage district, and you drowned out 40 acres of corn, at \$5.00/bushel corn, at 200 bushels/acre, that can add up pretty quickly. Weiser does not personally know how that was handled in the past. Granzow stated he doubted insurance would even come close to covering it, it would go to court, Hoffman stated unless you have really good errors and omissions. Granzow stated that is why we are trying to do this up front, so that that doesn't happen. Gallentine stated on the open ditches, on those the open ditch is there so we can shoot that, we would need your facility located so we can get a depth on it. Gallentine stated those two are a little bit different that you will run into, tile you will need to uncover it and locate it, and for an open ditch, we will just need Aureon's facility located. Gallentine stated the open ditch ones we could possibly do before frost is out.

Weiser stated we definitely want to help and make things right, and to make sure we are doing things right moving forward. Hoffman stated we know you are not the contractor, and whether it is this or a tree contractor that comes in after the derecho, some of the outside of the area contractors don't know what the lives and livelihoods revolve around drainage, and the timing is everything. Hoffman stated they don't realize that if you flood that 40 acre parcel, that is his livelihood, that is the reason, we are not here to beat you down, the contractors are subs of subs of subs, and someone from Louisiana or Texas doesn't understand why it is so critical to mark things, McClellan added and to be monitored, with as many districts as we have in the county. Hoffman referenced the large drainage district map, and noted all of the colored/shaded areas are drainage districts within Hardin County. Hoffman asked what the percentage was of the county that lies in a drainage district. Granzow replied 49.8%, Gallentine noted that 49.8% is all artificially drained. McClellan stated Grundy County has only one drainage district. Hoffman stated this is just as much about finding a solution, that may be through educating you so you understand that this is a big deal. Smith stated she can email the maps to Weiser, Weiser stated he would like to receive the maps. Gallentine stated that these are 100 year old hand drawn maps, and what you see on the GIS is a scan of those that has been drawn over, so we have had contractors from Georgia say I got the coordinates off GIS, the tile is right here, Gallentine will let them know, no it is not, you are on top of the hill, Gallentine points out it will be at the bottom of the hill, the contractor asks how do you know, well they dug it by hand and they didn't put it here on top of the hill. Gallentine noted that they are hand drawn and a lot of the maps will note the size of the tile.

Weiser asked if some the tiles are in GIS and they correlate with the hand drawn maps. Gallentine stated if you go to Hardin County's Beacon website, it has all of the tiles on it, but the GIS coordinates we have would be the most reliable. Hoffman stated that is why we ask you to engage with Gallentine and his people, we have had other contractors that didn't believe the value of working with Gallentine and CGA and then all of a sudden they get a contractor who has done private tile work in that field, and they can say we know exactly where that tile is and if you build relationships with people like Mr. Vierkandt, they can tell you information better than any map, because their Grandpa or Great-Grandpa hand dug these facilities with a spade. Gallentine stated a lot of times it isn't something we would know, if you talk to the landowner they can tell you the tile is right there, how do they know that, because there is a wire wrapped around the fence, it may not mean anything to us, but the landowners have a system.

Hoffman asked if we are all squared away. Smith will email that information out to Weiser, the local contractor list, list of district facilities crossed and then maps of those same districts as well. Gallentine stated if Weiser wants to start on any of the open ditches this winter, just let us know. Weiser stated he would email Gallentine and that Aureon would probably get the contractors that did the work involved again, they will be around. Gallentine asked Weiser to copy the Drainage Clerk in on those emails as well, Weiser stated he would. The Trustees thanked Weiser for his time and participation in today's meeting.

## 6. DD 14 WO 291 - Discuss W Possible Action - Investigation Summary

Hoffman stated contractor Adam Seward was having zoom issues, so Seward joined the meeting by phone. Gallentine stated this investigation and repair we did that hooks around Ron Vierkandt's place, by Buckeye, we ended up finding that the restriction was some private tiling that had been done, two connections came into the district main straight across from each other. Gallentine stated that was restricting drainage, and then there was a pop can and grocery bag that had gotten in there that fully blocked that. Gallentine stated after that, the Trustees had asked Gallentine to look at what CGA's costs were for finding the issue versus watching the issue be repaired, so Gallentine did that breakdown and the Trustees had asked Seward to do the same. Gallentine stated he went back through their time, and after it was discovered, the time we just spent watching the repair and documenting it

ended up being \$795 of that total bill. Granzow stated the reason we asked them to do this was that Iowa Code states it is the landowner's responsibility to pay these bills because it was due to private tile, Granzow asked if that was correct. Hoffman stated it was correct, Hoffman asked for verification of CGA's dollar amount. Gallentine stated it was \$795, basically the time we spent on the 8<sup>th</sup> and a little bit of time on the 9<sup>th</sup>.

Hoffman asked Seward to provide his numbers. Seward stated on that particular repair, on the two laterals that came in, Seward estimated around 4 hours with 2 pieces of equipment that came in, and we had to put it back to how Gallentine and the County expect repairs to be done, Seward stated we came in right around \$2,200, give or take about \$100, on what Seward felt that segment of the costs should be. Hoffman asked if it was \$2,200, \$2,100 or \$2,300. Seward stated it was \$2,240 to be exact, Hoffman stated that was what he needed to know, because close enough was not exact. Seward stated the reason he gave him that was because this was all a estimation to begin with, on that particular project, Seward said \$2,240 would be correct, Hoffman stated he just didn't want the County to guess it to be \$1,000 and guesstimate that would be ok.

Hoffman gave Vierkandt the floor. Vierkandt stated he feels responsible for it and has mentioned that before, he has no problem with it, it was done in 2013, and Vierkandt was unaware it was done that way. Hoffman stated that comes to a grand total of \$3,035, can we invoice Vierkandt for that. Vierkandt stated yes. Hoffman asked Smith if she would rather have Gallentine and Seward invoice Vierkandt for that individually or do you want it to come through the Clerk's office. Gallentine stated we have already been paid. Smith stated it should come through the Auditor's office as CGA and Seward have both been paid. Hoffman stated Smith will get an invoice out to Vierkandt.

Granzow asked if Vierkandt has contacted the installer of the original private tile. Vierkandt stated he would not do that. Granzow stated his reason for contacting the installer would be so that it does not continue to happen with the line of business that they are in. Vierkandt stated that he does tiling every year, every year he tries to do between \$10,000 to \$30,000 worth of tiling every year, and if Vierkandt went after or brought the installer in here, he will end up paying that \$3,000 again, as some time or another the installer will add that \$3,000 right back on to Vierkandt's costs. Granzow stated he would just not want to see this happen anywhere else. Hoffman stated you might privately remind him that this has been an issue. Vierkandt stated he will, but has not done so yet, his next tiling job, if he uses this installer, which he has not used since 2013, he will bring it to his attention, but he will not go on a witch hunt. Hoffman stated we did not want you to bring him in here, we want you to have that customer/consumer business relationship. Gallentine stated he knows who it is, and could have easily called him but didn't because he did not want to go on that witch hunt. Hoffman stated we want to build relationships. Vierkandt stated he has done business for a few years, and you will end up paying for it some way, the man that he used to have years ago, before 2013, retired, and he was the one guy who would crawl in the ditch and done all the hookups, chances are, these were a couple of rookies, and he can't blame them for that. Granzow asked if that was in 2013, Vierkandt stated yes, in 2013. Granzow stated since then we have introduced hook-ups with what we call inserted tees, and asked if Vierkandt was aware of those. Vierkandt stated the job repair done by Seward, the finished job was just super, it was very good. Hoffman stated that was good to hear. Vierkandt stated he would say to Seward his hunting skills need to be improved, we were so close, Vierkandt stated he was not with them onsite all the time which Seward can attest to, but we were within 20' of the plug, all we had to do was run a tape in there and Vierkandt presumes it wasn't done but doesn't know for sure as he wasn't there, then we called Williams and had them televise it which really wasn't necessary.

Vierkandt stated he is not afraid to talk to anyone and tell them how he felt, but the finished job was first class, and should have been done that way 7 or 8 years ago.

Motion by McClellan to direct the Drainage Clerk to send an invoice to Ron Vierkandt regarding the \$3,035 charge for drainage repair to private tile in DD 14 on Work Order 291. Second by Granzow.

In additional discussion on the motion the Trustees thanked Vierkandt.

All ayes. Motion carried.

Gallentine stated Vierkandt also had something else he wanted to talk to the Trustees about on DD 14 if the Trustees would allow it. The Trustees agreed, Vierkandt stated while he was hear for the DD 14 Landowners Meeting back in November, Vierkandt wanted to start at the bottom of the tile and do this repair, and we put in this fix. Vierkandt stated when thought about it later, he thought that probably wasn't a smart thing to do and Vierkandt spoke with Gallentine today. Vierkandt stated maybe we should have a drainage meeting, and maybe we should start from the bottom and go all the way through Sweeney's where the majority of the blowouts have been, Vierkandt thinks if we get to his line fence. Vierkandt stated in his line fence, he can only think of two blowouts, in 20 years, there was a third one right under D41, but that was a different deal. Vierkandt stated so anyway, he thinks we need another Landowner's meeting, maybe no one but Vierkandt is thinking this way. Hoffman stated he

spoke with one of the landowner's, Cynthia Iorger. Vierkandt stated we may have a problem there. Hoffman stated we can all talk about it at a Landowner's meeting, but attendance is key, Vierkandt stated there is not too many of us, we are a smaller district, Vierkandt stated there may only be 14 of us. Smith stated that sounded correct. Hoffman stated as he explained to Cynthia Iorger, and for the record, that if you don't come to landowner's meetings, or send something in writing or leave a comment by phone, how can you or I know what that landowner is thinking.

Vierkandt stated he spoke with Gallentine this morning about the difference in the cost between a fix and a bid, and Gallentine stated a bid was no doubt about it. Gallentine stated the more pipe you do you typically get a better price up to a certain point, per foot it is going to be far cheaper to do 2,000' than it is 20' per foot. Vierkandt stated from what he gathered that in the meetings before, if we go to the bid from the start down at the bottom up to the top, if we bid it we can change the size of the tile, we do not have to stick with the same size tile as you would in a repair. Hoffman stated an improvement would have to go to bid, Smith stated it would also have to have a hearing, Hoffman stated that was correct, it would have to go through that whole process. Vierkandt stated he is thinking that is what we are going to have to do. Gallentine stated what we choose to do in the next year, dictates what happens with it for the next 50 to 100 years on that tile, if we replace 100' at the lower end, and we don't up-size it, no one will probably ever up-size it. Vierkandt stated by law we can't up-size it as a repair. Gallentine stated yes, in a way we are kind of locking ourselves in, so Gallentine does not mind if the landowners are meeting, it will still be up to the Trustees, how we left it was we were just going to see how many feet we can get with the \$35,000, Gallentine has not contacted contractors yet so that would be fine.

Granzow asked if we did some televising in that area, Gallentine stated we did and it was not good, we did it from Iorger's ground, and did not know how much we got into Strothcamp's which is at the lower end, if it all. Vierkandt stated that isn't too many feet. Granzow stated he thought we should try to put together a landowners meeting, review the televising and then approach the topic of an improvement, and then see if we need a hearing, Granzow would like the landowners to have their input on an improvement, and if only one person shows up and says let's do an improvement, everyone else had their choice and did not show up. Gallentine stated Cynthia Iorger had called in and talked to Hoffman after the fact so there are some other interested landowners that were not there at the last landowner meeting, it was just Vierkandt and Jack Runge. Vierkandt agreed it was he and Runge. Gallentine stated he does not think it hurts and he always values landowner input on the front end, rather than the back end, it is much easier than on the back end. Vierkandt stated we can go from the 14" down at the bottom, if want a bigger size than the 14" it is the only thing we can do. Granzow stated it may be the time to do it, Gallentine stated if it isn't now, this will dictate to what happens to this tile in our lifetimes.

Vierkandt stated he did dig it up, the 14" tile, about 3 weeks ago on the other side of D41, when the last time it was done in Vierkandt's 80 acres where he lives, Paul Williams run a camera through there. Vierkandt stated it showed in there a tee that Vierkandt had put in when he retiled the area in 1980, had some of that plastic stuck in there the same way, this bothered Vierkandt so we got rural water out there and dug it up, and a piece of the 14" tile, when we got down to it, we could pick the top half up off the tile, it was cracked all the way through, so we know it is not good, but the way it was, there was an edge of plastic inside a 14" that was up a couple of inches, and Williams camera could not go over it, Vierkandt left it alone and did not go any farther with it. Gallentine stated we know they are cracked, we just don't know whether they are cracked on the top, or the top and the side, or the top, bottom and the sides, everywhere. Vierkandt stated this one was cracked on the side, is that better or worse, Gallentine replied he liked them better when they were cracked on the side rather than the top, once the top cracks, they start to vee down in on themselves, at least if the sides crack you might have a top and bottom half that will support each other, if you got quarter circles that doesn't work so well. Vierkandt stated he had done this before in the same area of Section 27, and he does not have 14" tile but he has a 15" culvert, so Vierkandt fixed both of them with a 15" piece of culvert instead of putting tile back in them. Gallentine stated most things will last longer than that clay will at this point, it is 110-120 years old at this point. Vierkandt stated that even those that go back around, we haven't repaired that that much, and the dollars are scaring them, so if people want to just go to Vierkandt's line fence, we can control a lot of this.

Smith stated she did speak with Cynthia Iorger this week after Iorger spoke with Hoffman, Iorger had some questions about the waiver process, and what that process looks like to spread your drainage payments out over 10 years if you need to, Smith discussed those details with Iorger, who had some concerns about cost, and how soon she would be assessed so she could do some financial planning for that, Smith explained we can't assess for the project until it is complete, and we have had a completion on that. Smith stated we would be looking at least 2022 before we even consider assessing for that. Vierkandt stated you should lower your interest rate, Granzow stated we already did, we went from 6% to 5%, pay attention we might jump it back up to 6% before too long, Vierkandt stated CD's have, Granzow stated we are not encouraging people to use us as a financing tool.

Vierkandt stated he would just like to void that fix, until we have a landowners meeting. Gallentine stated we won't move on anything until we have that meeting. Granzow asked for open dates on the calendar, Granzow would like a landowners meeting yet this winter. Smith asked if the Trustees would like to look at February 17<sup>th</sup> at 11:00.

Motion by Granzow to hold a DD 14 Landowner's Meeting, Wednesday, February 17, 2021 at 11:00 am in the Large Conference Room of the Hardin County Courthouse. Second by McClellan. All ayes. Motion carried.

The Trustees thanked Seward for his participation. Smith will mail out Meeting Notices, and asked Vierkandt if he would like a copy of the list of landowners in the District, Vierkandt said he would. Vierkandt asked if the smaller landowners who may be on the fringe edges of the district get equal vote on a project. Gallentine stated the Trustees are the ones who have the official vote. Granzow stated we have done it numerous ways, sometimes listening to opinions and people talking is the best. The Trustees thanked Vierkandt for coming in today to visit with them.

#### 7. DD 42 WO 297 - Discuss W Possible Action - Contractor Update

Gallentine stated this was the work order across from Sweeney's acreage in Cynthia Ioerger's field, we dug down and pulled out about 50' of tile and we were still chasing it, so we stopped, and the tile is about 1/3 to 1/2 full of dirt. We went upstream, found another blowout, dug down there, and found that was just a previous repair that had shifted somewhat and there wasn't much silt. The Trustees had ordered CGA to televise the tile, downstream where there was silt, we couldn't get in to televise, upstream where there wasn't silt we televised, and once we got downstream we realized there are two tile out there. Gallentine stated we assume that the one that is clear is the district tile, and the other one which is about 1/3 to 1/2 full of silt is private tile, we haven't gone back through the history to make sure they haven't put in two tile at one time, that is our assumption. All the maps Gallentine has looked at show just one tile, assuming that is correct, what do you want CGA/contractor to do with the 50' that is pulled out now.

Granzow stated first we need to go back through the books to find out if there are two tiles, or if they are entitled to two tiles. Gallentine agreed and asked if the Trustees wanted CGA to do that or have the Drainage Clerk go back through those files. Granzow did not know if the Clerk had the ability to do that. Smith stated she can go through what we have in the files and see what we have got. Hoffman stated let's start with the Clerk and see what we have, if we come to a dead end then we can enlist CGA.

Motion by Granzow to authorize the Clerk to go through the files, and if she needs assistance to take it over, then she has the authority to enlist CGA to do that. Second by McClellan. All ayes. Motion carried.

Granzow stated from there, the 50' of tile, if we deem it not to be the district's tile, then we need to put it back, what we took out, it's not our job to fix private tile, but if we took it out we need to put it back, we can't leave it exposed, or contact the landowner to see what they want, maybe they don't even want it hooked up. McClellan asked how you determine which is which, the older one would probably be the district tile. Gallentine stated our assumption is that the district tile is typically the deeper one and the clearer one because it carries more flow. Granzow stated you televised down it, Gallentine stated we did televise down it, and we know where it is at, the reason we discovered this was because the one over here that we are chasing, when we televise it, the camera locator is 20' away on the other side of the waterway. Granzow stated it could be an abandoned tile. Gallentine stated yes, it could just be a 100' chunk of abandoned tile that goes nowhere, the tough thing is the way this fall has been, there has not been enough water flow to tell an abandoned one from an active one, it is pretty dry out there still.

Granzow asked if the original work order request was brought to us on the abandoned one. Gallentine stated, yes, the original complaint was brought to us on the one we feel is not district tile. Granzow asked if the requestor is responsible for that. Gallentine stated he did not think the original requestor, which was Dave Sweeney, was aware that there are two tiles out there. Granzow stated the question is asked, McClellan asked if Sweeney did not know there was private tile there. Gallentine stated he does not think the requestor was aware, but he would have to check, Gallentine thinks his assumption was he thinks it was district tile. Smith asked what the proximity of the tiles to one another, Gallentine stated they are 20' apart, Smith stated that is not very far apart. Gallentine stated they run the same direction, it is not like we are district and they are tied in; they are both running the same direction. Granzow asked if they could be parallel tile that are both district tile, they ran those until prior to 1986. Gallentine stated correct, prior to the Sodbuster Act. Granzow stated he would think they could both be considered as district. Gallentine stated the other thing you want to look at, like on those early, early maps, like on DD 21, they showed a district tile, and they also showed a tile that was in existence to the district tile, when they created the district, they adopted the private tile too. Granzow stated that could be the case here also, Gallentine stated that may be this case.

Granzow stated he wanted to make sure and the reason he is doing this is because if it is district or could be considered district, they would be much farther ahead accepting it. Gallentine stated that either way, we need to document that there are two tiles out there, and they are entitled to that drainage capacity in the future. Granzow stated that is what he wanted to make sure of in the future, otherwise it could come to some point that the EPA

could shut down any expansion of drainage. Gallentine stated for instance, this is DD 42, but if we had this going on in DD 14, the answer to Ron Vierkandt, we can combine the capacity of those two into one tile. Gallentine stated that is where we are at right now, we have televised and those are the findings.

Granzow motioned to deem it not to be district tile, the Clerk shall bring the results of the review of files to the Trustees. Second by McClellan. All ayes. Motion carried.

Smith stated she would review the files and get results to Gallentine as soon as possible.

Hoffman asked if we would have to adjourn and reconvene later, how many of the next agenda items would involve Gallentine. Smith stated they are all Investigation and repair Summaries remaining on the agenda, and it would be up to Gallentine, but Smith thought these could be addressed next week if we needed to. Gallentine stated he saw nothing in Agenda items 8 through 13, that could not wait a week to be addressed, items 14 through 16, you would have to ask Smith. Smith stated 14 through 16 would be brief.

8. DD 20 WO 302 - Discuss W Possible Action - Investigation / Repair Summary

Hoffman stated items 8 – 13 we will move to table until next week.

Motion by McClellan to table agenda items 8 through 13 until the January 13, 2021 Drainage Meeting. Second by Granzow. All ayes. Motion carried.

9. DD 4-53 WO 303 - Discuss W Possible Action - Investigation Summary  
Tabled until January 13, 2021 Drainage Meeting.

10. DD 4-53 WO 296 - Discuss W Possible Action - Investigation Summary  
Tabled until January 13, 2021 Drainage Meeting.

11. DD H-F 4-53 Franklin Co. WO #143 - Discuss W Possible Action - Investigation Summary  
Tabled until January 13, 2021 Drainage Meeting.

12. DD 143 WO 305 - Discuss W Possible Action - Investigation Summary  
Tabled until January 13, 2021 Drainage Meeting.

13. DD 146 WO 228 - Discuss W Possible Action - Investigation / Repair Summary  
Tabled until January 13, 2021 Drainage Meeting.

14. DD's Big 4, 41, 77, 123 & 143 - Discuss W Possible Action - Claims For Crop Damages

Smith stated you had directed her to reach out to all of the landowners in this multi-district project in which Hands On Construction was the contractor, which would have been DD's Big 4, 41, 77, 123 and 143, we do not have DD 128 done yet, Gallentine was going to contact Dean Bright and see where we are with that. Smith sent a letter out to all the landowners that were affected by work and the only Crop Damage Claim returned to us was the original Damage Claim Chris Blome submitted to us clear back in 2018. Smith stated we have the Crop Damage Claim from Blome for the Trustees to review today, this was the one where he had done some seeding himself, because the contractor did not get that completed, Blome had submitted the claim with .07 acres of soybeans damaged and that was verified by CGA, and as for Blome's seeding cost, he has included an invoice for \$214 for his seeding costs. Smith stated she does not know if the Trustees would like her to deduct that \$214 seeding cost from the final payment to the contractor's Final Pay Estimate #6, so Smith would need some clarification on that. Gallentine checked the files. Hoffman asked if it was in the original estimate that the contractor would complete the seeding. Gallentine stated there was seeding in the bid, but we bid by acres, and we bid .3 acres, but we only paid him for .04 acres, the contractor was not paid for the seeding that Chris Blome performed. Hoffman stated then we will not need to make a deduction on the final pay. Hoffman would accept a motion to approve the amount of \$214 for seeding in one motion and then we will do crop damage in another motion.

Motion by McClellan to approve the \$214 for seeding on the waterway on Drainage Claim for Crop Damages 2020-01 to Chris Blome. Second by Granzow.

In additional discussion on the motion, Gallentine added that is a very reasonable amount, Hoffman stated the fact that he has the Theisen's receipt attached, Gallentine stated he did not mark it up any, he was seeding .94 acres for \$214, contractor price was \$1,500 an acre, so there was significant cost savings by having Blome do it. Granzow asked, out of curiosity, we did pay the contractor for seeding. Gallentine stated no, his bid price at \$1,500

per acre. Granzow asked but we payed none, Gallentine stated we paid for .04 acres, a little bit of seeding was done down by the headwall that the contractor did, the landowner did not seed that part. Granzow stated so we are well within the contract anyway, Gallentine stated yes.

All ayes. Motion carried.

Hoffman stated up next, we have the crop damages, of which \$251.62, of which \$18.81 is paid to the landowner and \$232.81 paid to Chris Blome. Smith stated the Crop Damage for the soybeans is actually just \$37.62, Blome would like 50% of the \$37.62 crop damage to go to the landowner, and 50% to himself, so Smith has split that out as \$18.81 to the landowner and \$18.81 plus the \$214.00 seeding to go to Chris Blome for a total of \$232.81 to Blome. Hoffman stated that makes more sense.

Granzow motioned for the \$37.62 to be split equally and paid out Chris Blome and the landowner for the crop loss on Drainage Claim for Crop Damages #2021-01. Second by McClellan. All ayes. Motion carried.

15. DD 25 WO 209 - Discuss W Possible Action - Claim For Crop Damage 2021-2

Smith stated this was a crop damage claim submitted in 2020 by David Fincham, this was for the remainder of his crop damage, we had paid him out previously on his 2019 acres and work continued in to 2020, so this would be payment for crop damages on that final year of work done in his field, it comes to a total of \$1,931.16, Fincham also requests that his payment be split 50/50 with himself and his tenant, Alvin Clark.

Motion by Granzow to approve payment of \$1,931.16 on 2020 damages, split equally between the landowner and tenant on Drainage Claim for Crop Damages 2021-02. Second by McClellan.

In additional discussion on the motion, Granzow asked if these were all verified acres. Gallentine stated yes, this is on DD 25, and a lot of times we wait to deal with these on the completion hearing, but we probably won't get to completion until spring now, there is a few punch-list items left, Gallentine stated he would recommended we go ahead and get this paid.

All ayes. Motion carried.

Smith stated she will include this payment and the payment on Claim # 2021-01 in next week's claims.

16. Discuss W Possible Action - Iowa Drainage District Association Membership

Granzow stated Annette Sweeney discussed with him that there is a lot of activity going on at the Statehouse, and she thought we should be involved in this and Hardin County should have a say in this. Granzow stated it sounds like IDDA are the lobbyists up there, and without Hardin County's input Sweeney thought that leaves Hardin County out unless we hire our own lobbyist or join them, and it seems like a lot of activity this year is going to be on drainage. McClellan stated over the years, she and the previous Drainage Clerks had always gone to their meetings/trainings in Ft. Dodge, and McClellan used to sit on the Committee with John Torbert, McClellan is not opposed to joining. Granzow stated the one thing that we opposed to it is how do you fairly pay for that, the County should not be responsible for paying for this bill, it is for the districts, it is not for half of the County. McClellan stated this is another one of those things we should pay out of the mass assessments, Granzow stated he addressed that to Smith, who said we are getting close. Smith stated she has two or three districts left to figure for the Trustees, and does not have a final number for you but can give you a rough estimate of where she is now, this includes all districts in Tyler that we have assessment and classification schedules entered in Tyler, which also includes joint districts with other counties, if we look at assessing all districts we are at 11,110 parcels, which is where Smith is at roughly, the numbers the Trustees had given Smith in the past to look at doing a minimum assessment for a three tiered schedule, what would this look like at a \$500 assessment, a \$1,000 assessment and a \$2,000 assessment per district. Smith stated if we look at the \$500 assessment on all districts, that will generate \$129,390, at \$1,000 assessment on all districts that would generate \$224,101 and a \$2,000 assessment would generate \$436,969. McClellan asked what the assessment levels were. Smith stated \$500, \$1,000 or \$2,000. Hoffman stated it would then go to classification, Smith stated yes, it would be split between landowners based on their classification, Smith has a spreadsheet set up that you can plug in the amount you would like to assess at, whether it be for a project or something like this, and it bases each landowners payment on the percentage from their classification schedule.

Smith stated if you want to look at doing something like this, it is a big project, the other counties that Smith spoke to that have done this in the past, said that they have quit doing it this way because doing all districts in one fell swoop is a ton of work, Smith stated getting the spreadsheets ready was not as difficult as she thought it would be once Smith understood the classifications better, however generating the assessments for 11,100 parcels is a lot



of time, and a lot of paper, and Smith does not know what kind of level of funding the Trustees are looking to generate. Smith stated we have talked in the past about this may cover some of the Drainage Clerk position's salary, possibly some to be used for legal fees when we look at things like the IRUA dispute that would affect all districts. Granzow stated or for something like joining the IDDA. Hoffman stated for him he looks at this and wonders and it may be something we need ask a legal opinion, when we look at a CWC thing, could some of that money be transferred to Attorney Darrell Meyer for legal representation, or does that have to go to attorney Mike Richards. Granzow stated he thought it would have to go to Mike Richards. Hoffman stated either way, now that Richards has all the legal documents from the litigation, Hoffman is thinking we should have something on hand for this or when we have rainy days in Drainage. McClellan stated you also don't want a bunch of money sitting there. Hoffman stated correct, he is thinking that what is Mike Richards hourly rate, around \$250 an hour, \$100,000 will not go very far if you have a big legal battle. Granzow stated but it could be assessed again. Smith stated we could look at what dollar amount you would like to assess at, and then look at would you split the group of districts, rather than assessing the whole group, you could assess the first group of districts the first year, the second group of district the second year, the third group the third year because of the work load, it could be a rolling assessment every three years a district would be assessed for administrative costs. Smith stated her only concern going into this year is that we have a special election in March, we have another office employee that will be out on a medical leave, this spring is concerning for Smith, and Smith believes the way Tyler is set up, it is set up so assessments would have to go out in the spring on May 1st the way it is set up currently, to change that Smith does not know how to do that, and would have to do some research to see if that could be changed if the Trustees wanted to look at a September assessment date. If the Trustees want any assessments to be done, we probably need to agenda this as a Discuss with Possible Action item, so that if you want to make an action to direct Smith to do something, she can begin that process sooner rather than later.

Granzow likes that except for the fact that who is the first loser, and also if we are going to do that, that the three year rolling assessment is one motion so if you have to adjust that the following year to adjust it up, you can't. Hoffman stated the one thing he would like to add, if we were to do that, if it is a set of three or four, he is fine with that, but Hoffman would like it to sunset after its' first cycle through, that way a new Board would have to take explicit action to redo it, because if at the end of four years you are sitting on it, Granzow stated you could be sitting on \$100,000, Hoffman stated yes, he wants everyone to go through the cycle once and re-evaluate, if you have gone through all that money, then you have to go on to that next tier, that is just one point of consideration. Hoffman stated he does not want to overtax everyone, but also would like to allow people down the road to re-evaluate it. Granzow stated he thinks you will run short.

Gallentine stated the other thing he would say about IDDA's fee is based off their County's number of drained acres, Gallentine does not know where they got their 168,000 acre number on the invoice. Smith stated she had an email from previous clerk Schlemme that questions that number of acres, it was dated 6/27/2018, Schlemme had some communication with John Torbert, who says the number of acres reported are on the honor system and Schlemme says the number of acres reported are 110,000 not the 168,000 the IDDA mentions in this invoice, Torbert replied that Hardin County's membership dues would be based on a different number than we have now, the rate has changed since 2018. Smith stated she thinks there is some questioning we can do to Torbert and say if we are interested in this, how would this change our membership costs.

Hoffman asked the Trustees if they would like Smith to check on that and bring it back next week. McClellan stated yes, Hoffman definitely would like to be engaged in anything that is going on in the Capitol, Hoffman's second question is can we appoint one of the Trustees to be the representative person, just something to ponder and think about, and does not want to come back next Wednesday and ask, who wants to be volun-told who does it. Hoffman stated it goes back to our CICS where we have no constituent authority and they are taxing and spending money that doesn't really impact them. Granzow stated but, on that Board, they really wouldn't be taxing or spending money, it would all come back to us. Hoffman stated he expected it would be like an ISAAC meeting, where we would expect the Clerk to be there and we would pay her for her time and expenses to be engaged in that. Granzow stated he would have to see what kind of set-up they have before he knows who he would appoint. Gallentine stated he knows the only voting members are county landowners, Gallentine stated he know CGA is a member, but CGA is a different class of membership, CGA can't vote on anything or proposed legislation. Hoffman stated he would want the Clerk to go to everything. Smith stated she attended the 2019 annual IDDA conference meeting, and that was a very valuable resource tool because she got to meet and speak with other Drainage Clerks that attended, and that is valuable. Gallentine stated he thought the 2020 meeting was canceled due to Covid and only a virtual business meeting was held. Smith agreed, she had looked that 2020 event up.

Gallentine stated they have a quarterly newsletter and have legal staff if you have questions. Hoffman's suggestion would be to see if the IDDA can straighten out the acres issue, have them send us a packet and invoice and when you get that, bring it back to us. McClellan asked if Gallentine recalled that years ago the IDDA was involved with a railroad lawsuit, Gallentine stated that was the Des Moines Waterworks lawsuit, the IDDA was involved in that, that is what the county Mutual Protection portion of the invoice is for. McClellan stated she thought there was a lawsuit with the railroad before the Des Moines Waterworks suit was filed. Gallentine stated when the Trustees went to

court with DD 55 against the Union Pacific Railroad, the IDDA may have written a brief agreeing with your position versus the railroad's, but Gallentine thinks they did that on their own. Gallentine stated the optional Mutual Protection fund listed on the invoice for \$2,100 that is what that goes to, is just that legal fund for things like that, Gallentine knows if something drainage related comes up Sweeney usually gives him a call to get his take on it because there have been something out there. Granzow asked if Franklin County was an IDDA member. Gallentine stated they were but thinks that they dropped last year, they do have a new Supervisor, and does not know if they are going to join back up. McClellan stated she know it is not in our budget. Gallentine stated he does not know how Franklin County funded their membership. Granzow stated he does not think it is the responsibility of Hardin County to fund this membership, this a Drainage District membership, and we are to that edge where we can assess, and we are at that point something needs to be assessed anyway. Smith stated when we look at doing that mass assessment, there are a couple of other costs you will have to consider, which will be postage, envelopes and mailing costs, if you mail out 11,000 notices, some can be combined into one envelope, some districts have one landowner that owns more than one parcel in a district, so some notices can be combined to save costs, but you could still be looking at \$5,000 to \$6,000 in postage costs that would have to be assessed.

Hoffman noticed one of our small costs that adds up quickly, is paying for the Drainage notices that come out of Rural Services, and that should not be the County's expense, Granzow agreed. Hoffman stated he is surprised an Auditor has not said something, as we are Trustees not Supervisors paying for the notices, Hoffman means our outside auditor, like Bowman & Miller. Smith stated she does try to invoice those costs back to the districts, when we get notices for hearings or Drainage elections, Smith does invoice those costs back to the district after they have been paid so that there is some recoup to the County. Granzow stated we need to realize this is not County business, this is District business, all of this is, and they should rent the facility to be honest, it sounds terrible when Granzow stated this, but we are not joining the districts that have Private Trustees, we are only joining for the ones managed by the Supervisors acting as Trustees. Gallentine noted that the acreage on the invoice from IDDA would be less. Smith stated that is a good point and did not pull those districts out the potential assessment numbers. Gallentine noted DD 3 is a big district. Smith stated she would have to pull those districts out of the potential assessment numbers. Granzow stated he did not have a hard time assessing them as Smith is still the drainage clerk for those districts as well, and still do work for those districts as well. Smith stated that she does do work for the Private Trustee districts as well. Smith asked if that is something the Trustees would like to do if they go down this path of potential assessments, is to invite those private Trustees into a meeting and present this to them. Hoffman stated you can always send the chair of those private Trustee districts the information to let them join on their own.

Granzow stated he felt there were two choices we can give them, is one, either join with us in the assessment or start charging an assessed value to their districts for use of the Clerk, it is the County's responsibility. Hoffman stated why is it someone's responsibility who isn't in a colored area on the map. Gallentine stated sometimes the Private Trustees district's, not all the time, but sometimes, those districts may take more of the Clerk's time than one that isn't. Smith stated that was very much the case, and that is something we don't communicate about because the Supervisors are not the Trustees for those districts. Smith completed a recent research project for DD 3, where she pulled all the historical files and went through them to try and find out if there was a subdistrict ever created back in the 1960s or 1970s. Gallentine stated even just with claims, every week the Clerk approves claims, but Gallentine knows that there are times the Clerk has to try and track down the private Trustees for approval to pay the claims. Smith stated sometimes it is tough to get the vouchers back from the private Trustees. Granzow stated there should be an hourly rate assigned to that. Smith stated to let her know if they would like to bring this back as an agenda item or two separate agenda items next week and asked if the Trustees wanted an agenda item for IDDA membership and one for potential assessment. The Trustees stated yes, as two separate items, Granzow stated he felt the IDDA membership needed to act faster than slower at this point. Smith stated she will reach out to John Torbert of the IDDA today, Hoffman stated let's see if we can get the acres reduced with the private Trustees. Granzow stated he feels comfortable in saying we are interested in joining, but we need to see the cost with the adjusted acres. McClellan asked if the Clerk had the information on the adjusted acres, Smith stated she could pull that information.

#### 17. Other Business

#### 18. Adjourn Meeting

**HARDIN COUNTY, IOWA**

**2020**



**SURVEYOR'S  
REPORT  
ON MAIN TILE  
RIGHT OF WAY  
DRAINAGE FOR  
DISTRICT NO. 143  
HARDIN COUNTY,  
IOWA**



I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA

*Zeb J. Stanbrough*  
ZEB J. STANBROUGH, P.L.S.

*1-2-2020*

DATE

LICENSE NUMBER: 19957  
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021  
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# **Surveyor's Report on Main Tile Right of Way for Drainage District No. 143 Hardin County, Iowa**

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# **Surveyor's Report on Main Tile Right of Way for Drainage District No. 143 Hardin County, Iowa**

## **1.0    INTRODUCTION**

- SCOPE OF WORK – The Hardin County Board of Supervisors, acting as District Trustees, requested Clapsaddle-Garber Associates to determine the current easement width of the Main tile of Drainage District No. 143 through the City of Radcliffe. This report will summarize the history of establishment for said Drainage District 143 and the establishment of City of Radcliffe along with the surrounding subdivisions. At the Drainage District 143 Landowner Meeting held on April 24, 2019 the results of the investigation for Work Order #167 were discussed and reviewed by the District Trustees and landowners. For reference, a copy of the meeting minutes is included in Appendix A and a copy of the Investigation Summary for Work Order #167 (as considered at the April 24, 2019 Drainage District 143 Landowner Meeting) is included in Appendix B. As a result of this meeting, the District Trustees requested Clapsaddle-Garber Associates to move ahead with the Surveyor's Report to determine the width of the easement for the Main tile through the City of Radcliffe.
- LOCATION – The area of investigation was limited to the upper end of the Main tile located in Section 29, Township 87 North (T87N), Range 22 West (R22W), Hardin County, Iowa. Specifically, the downstream limit was where the Main tile crosses the east side of Section 29 (center of East Street aka County Highway S27) at approximately  $\frac{3}{8}$  mile north of Highway #175. It then goes west on Ionia Street with the upstream limit being where the Main tile crosses the south right of way line of Ionia Street at approximately  $\frac{3}{4}$  mile, which is just west of May Street. For reference, a copy of a Drainage District No. 2 map by Reigles Engineering Company, showing said limits is included in Appendix C.

- 2.0 PARTIAL DISTRICT HISTORY – The following is a summary of the pertinent history (prior to 2014) of the main of Drainage Districts No. 2 (renamed 143 later) and 143 as obtained from the Hardin County Auditor's drainage minutes and records and those of Clapsaddle-Garber Associates. The partial Drainage District History also includes recorded subdivision that are on file in the *Hardin County Recorder's office*.

1881, Jun. 8     *Original Town Radcliffe*

1883, Nov. 9     *Rumper's Addition*

1884, May 23     *Stukenberg's Addition*

1895, Jul. 16     *Rumpers Fourth Addition*

1901 Jun. 6     *Drake and Dallard's Addition*

1903, Aug. 15     Petition and Bond for establishment of Drainage District No. 2 was filed. Said petition indicated that a main drain, sub-mains, and laterals should be installed. Specifically, it indicated that the main should start on the west side of Section 32, run northeast and east into Section 29 to Ionia Street. There it should run east on Ionia Street to the east side of Section 29 where it would continue southeast and terminate in an open ditch.

1903               E.E. Fox is appointed as the Engineer for the project and an Engineer's Report was filed for this project. Although no copies of said report could be located, it is known to have existed as E.E. Fox revised it through a letter dated Sept. 10, 1903.

1903, Aug. 27     Publication of Notice of Drainage District No. 2 establishment.

1903, Sept. 29     Notice to Contractors for construction of Drainage District No. 2 facilities with a bid date of Nov. 11, 1903.

1906, Mar. 1     Publication of Notice of Drainage District No. 2 establishment.

1906, Jul. 7     Publication of Notice to Contractors for construction of Drainage District No. 2 facilities with a bid date of Aug. 6, 1906.

1906, Aug. 14     Construction bond with Austin Rorem for construction of Drainage District No. 2 facilities was filed.

3.0 INVESTIGATION – All investigation for this report was limited to office work only. Said investigation included to looking for right of way information for the Drainage District 143 within the City of Radcliffe. The following Hardin County offices were searched for any information regarding Drainage District 143 right of way within the City of Radcliffe:

- County Auditor's Office
  - Transfer books – Nothing was found related to Drainage District 143 right of way
  - Current plat books – Nothing was found related to Drainage District 143 right of way
  - Old plat books – Nothing was found related to Drainage District 143 right of way
- County Engineer's Office
  - Field books – Nothing was found related to Drainage District 143 right of way
  - Sherman Township field book – Nothing was found related to Drainage District 143 right of way
- County Recorder's Office
  - Record subdivisions – Nothing was found related to Drainage District 143 right of way

City of Radcliffe offices were not searched for any information in regard to Drainage District 143 right of way as it is not believed that the city would have any pertinent Drainage District records that would date back to the early 1900's. A review of the district history shows that the City of Radcliffe existed prior to the Drainage District 143 establishment and therefore the right of way were platted existed prior to said Drainage District 143.

4.0 DISCUSSION AND CONCLUSIONS – Based on the above, it appears that no width was ever stated for to Drainage District 143 right of way and that no damages paid for taking the land to establish said right of way. As the City of Radcliffe and its surrounding subdivisions were established prior to Drainage District 143, it would logical that the existing street right of way for Ionia Street (66 feet) would have been used for the Drainage District 143 right of way through the City of Radcliffe. This would explain why no damages had been paid. Essentially, the right of way for Ionia Street and Drainage District 143 right of way are one and the same from East Street (aka County Highway S27) to east side of Cleveland Street. See attached City of Radcliffe map included in Appendix D.

5.0 RECOMMENDATIONS – Definition of the Drainage District 143 right of way would help define where maintenance could be done in the future to protect and ensure Main tile performance. Therefore, it is recommended that the Hardin County Board of Supervisors, acting as District Trustees, should take action to accomplish the following:

- Approve the Surveyor's Report as prepared by Clapsaddle-Garber Associates.
- Hold the required hearing on the proposed Surveyor's Report.

NOTE: It should be noted that Ionia street right of way and Drainage District 143 right of way may be one and the same, but trees outside of right of way may be influencing and/or having a negative effect of the Main tile performance.

## **DRAINAGE DISTRICT 143 LANDOWNER MEETING**

4/24/2019 - Minutes

### **1. Open Meeting**

Hardin County Drainage District Board of Trustee, Lance Granzow, opened the meeting. Also present was Trustee, Lance Granzow; Landowners Taylor Roll, Jacob Handsaker, Kris Bell, Paul Handsaker, Phyllis Drake, Jim and Helen Granzow, Doris Eike, Bryan Drake, Calvin Hyland, Carole Topp, Kathy Houck, Curt Groen, Kim and Hope Boddard; Lee Gallentine and Zeb Stanbrough with Clapsaddle-Garber Associates; Drainage Clerks Becca Junker and Tine Schlemme.

### **2. Approve Agenda**

Hoffman moved, Granzow seconded to approve the agenda as presented. All ayes. Motion carried.

### **3. Explanation Of Project**

Gallentine explained at the hearing for the upper end of the main tile that was back in 2017 it was requested that instead of just worrying about trees in the golf course, the entire route to the main tile be looked at for possible trees causing root issues. CGA went out and took an inventory of all the trees within 50 feet of the main tile. Referring to the Investigation Summary, Gallentine explained the trees that were a main concern due to species were highlighted. Gallentine then directed the meeting back to the Trustee's to talk about the Landowner Meeting that took place in Radcliffe that he was not in attendance of.

Granzow explained that at the Radcliffe meeting the idea was to break up the project into different targeted sections so that it did not exceed the \$50,000 threshold. Following the Radcliffe meeting, it was brought to the Trustee's attention that the Code of Iowa specifically states that separating any project to keep under the \$50,000 threshold cannot be done. The Trustee's then decided to hold another landowners meeting to decide what the next step in clearing the tile would be.

### **4. Comments/Discussion**

Hoffman explained that his duty as a drainage district trustee is to make sure the facility is flowing water. He expressed that he does not want to stand in front of the landowners and say they have to do one thing or another, but it is his duty to in fact do something so that the facility is flowing water properly. He addressed the written and verbal responses that were received by the landowners who could not make the meeting. There were more responses of no than there were of yes to move forward. He said that his initial opinion is to go with the voice of no but there has to be an understanding by not doing anything, if things get bad and there become damages, the Trustees will have to take action right away.

Granzow then explained that there are tree roots in the tile, they can be left or they can be taken out. There are trees growing, they can be left or they can be cut down. He does not want to demolish the town, but it is his feeling the trees need to come out. If that means ordering an easement then they need to order one. The Trustees need to protect the facilities. The tree roots are going to keep growing and keep blocking the infrastructure and could cause more damage resulting in tearing up the entire title versus jet cleaning now.

The Trustees then opened the floor for discussion.

Landowners brought up cutting problematic trees down and then jet cleaning the tile. While discussing this option, Gallentine informed the landowners that jetting the tile is an option but depending what kind of jet is used, it could possibly damage the tile. There would also have to be an access point every 500-1000 feet which adds to costs. If the tile is damaged during the jetting process then there will be added costs for replacing the tile completely.



There was discussion on how much of the tile has roots blocking the flow of water. After reviewing the footage that was taken, Schlemme came up with an estimated 1000 feet of blocked tile. Roll then added that 1/3 of it has roots in the tile. It was discussed that if trees were cut, it was still very important to do something with the roots that are already in the tile.

Lining the tile through the urban area was discussed. Once the tile was lined, there would be no need to do anything with the trees because the lining would block the roots from causing problems in the tile. Granzow then stated that they are saving the trees in the district at the expense of the people who do not want the trees. The larger expense of this project is falling on the farm ground rather than the people in town. It was brought up classifying on assessed value rather than drainage benefit and it was discussed that there would have to be a petition and a possible election that majority of the landowners agree on. Schlemme informed the landowners that if this was something they wanted to do, it would be important to get legal advice.

It was then brought up by a landowner that if CGA is going to be making a report, he would like them to also look into how much it would cost to install a new tile to the side of Ionia Street. He wanted to compare the price of lining the tile to the price of installing new tile that is not under the roadway as repairing tile under the roadway is expensive.

#### 5. Possible Action

Hoffman moved, Granzow seconded to instruct CGA to prepare a report and plans for a few different options.

- 1) CGA is to prepare a report and costs to partially and fully line the facility.
- 2) CGA is to prepare a report and costs to cut trees and clean the tile.
- 3) CGA is to prepare a report and costs to install a new tile to the side of Ionia.
- 4) CGA is to determine the current easement.

Hoffman informed the landowners that once CGA has completed the reports, another landowners meeting will be scheduled to go over the results. He also thought it would be beneficial for there to be a vendor who supplies the slip lining present to discuss and explain their products and educate both the landowners and Trustees.

#### 6. Other Business

Hoffman thanked everyone who was present for partaking in quality, constructive dialogue.

#### 7. Adjourn Meeting

Hoffman moved, Granzow seconded to adjourn the meeting. All ayes. Motion Carried.

## Drainage District:

143

## Investigation Summary:

- At the Hearing on Engineer's Report for Repairs to Upper End of Main Tile, the District Trustees requested an inventory of trees within the 50' of the Main Tile from the west end of town to the east end of town (i.e. west side of the golf course) be performed.
- CGA staff performed a site visit along the Main Tile route and found the following trees within 50' of the Main Tile (unless noted otherwise):
  - 3 Walnuts (28"-36")
  - 1 Buckeye (12")
  - 3 Oak (6"-36")
  - 12 Brush or Brush Lines
  - 1 Cedar (24")
  - 4 Blue Spruce (8"-15")
  - 13 Apple (2"-24")
  - 2 Honey Locusts (24"-36")
  - 10 Ash (10"-48")
  - 4 River Birch (24"-36")
  - 22 Soft Maple (2"-48")
  - 12 Hard Maple (8"-48")
  - 3 Mulberry (6")
  - 1 Boxelder (24")
  - 1 Sycamore (48") at 54' from tile

## Contractor Time and Materials (spent while CGA was on-site):

None as only investigation was performed

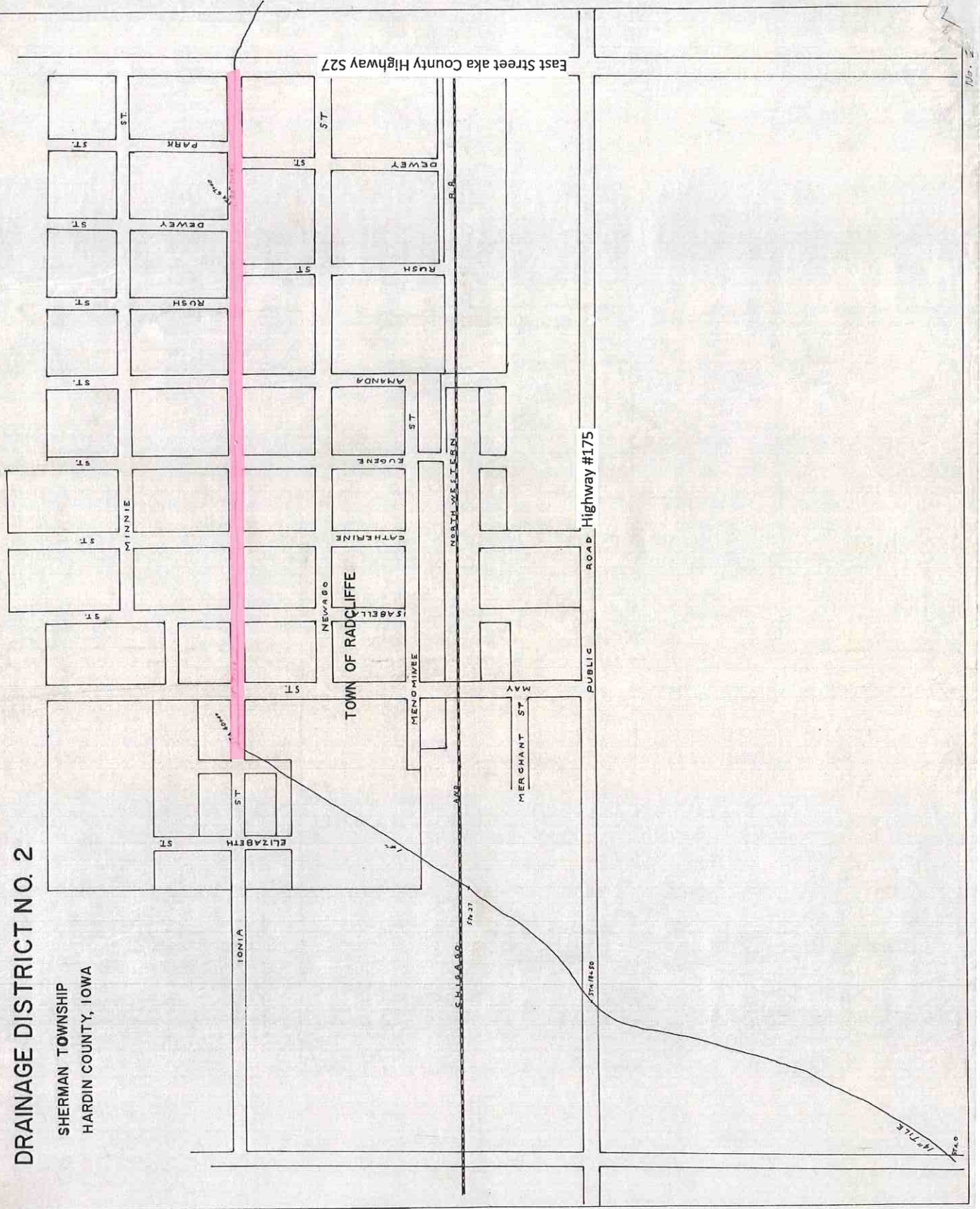
## Additional Actions Recommended:

Although all trees are capable of producing tree roots which can negatively impact tile, the above yellow highlighted trees species are some that we typically find majorly impacting tile negatively. If the District Trustees do not pursue lining the Main tile, they may wish to pursue removal of at least the yellow highlighted trees as it is CGA's opinion that they will eventually (or may already be) negatively impacting the Main Tile. It is also our opinion that the cost of removal of just these trees would be over \$50,000. This cost is high enough that a hearing and engineer's report would be required.



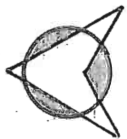
# DRAINAGE DISTRICT NO. 2

SHERMAN TOWNSHIP  
HARDIN COUNTY, IOWA

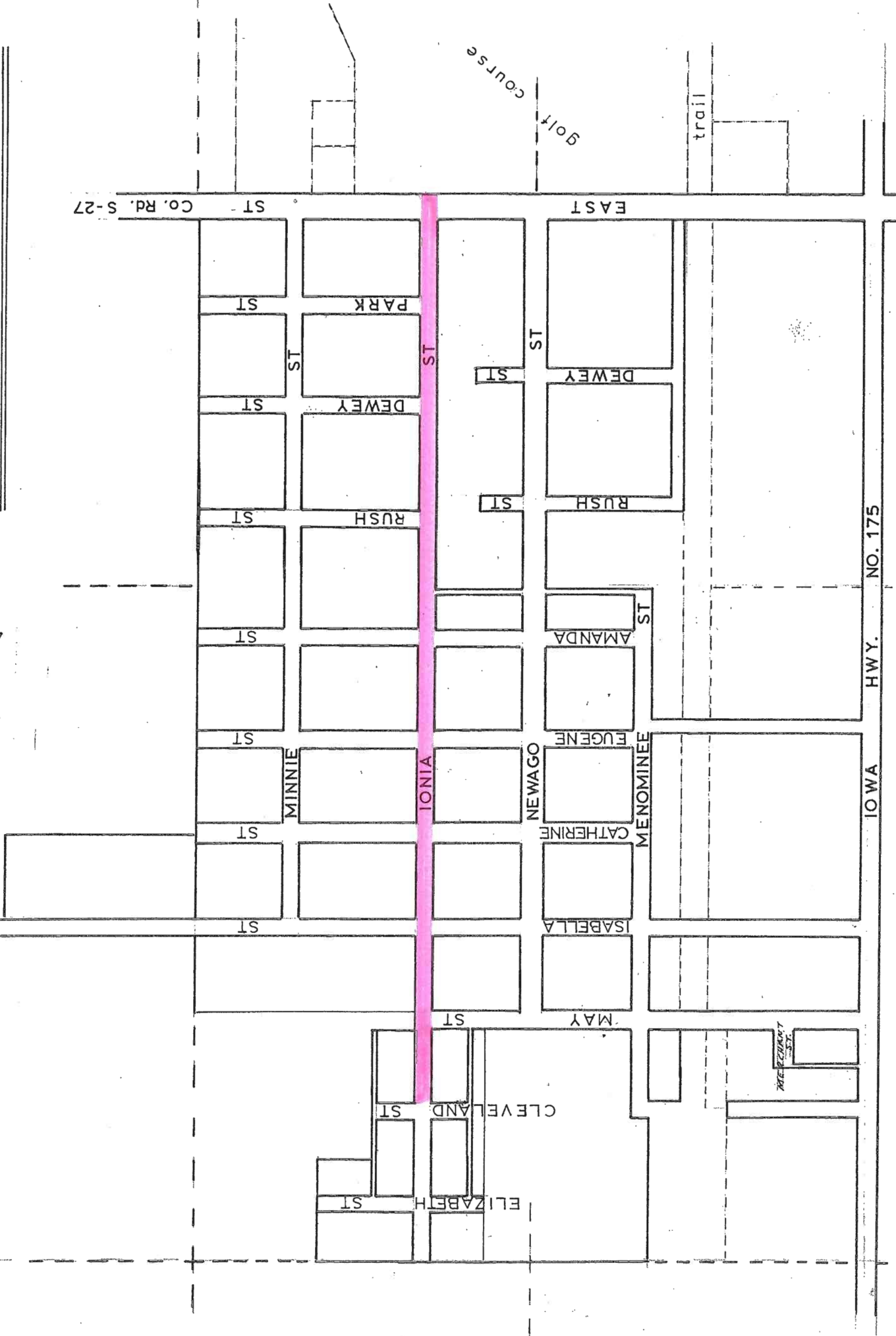




NORTH



# CITY OF RADCLIFFE, IOWA



HARDIN COUNTY, IOWA



2020



**SUPPLEMENT TO  
ENGINEER'S  
REPORT  
ON REPAIRS TO  
UPPER END OF  
MAIN TILE OF  
DRAINAGE  
DISTRICT NO. 143  
HARDIN COUNTY**



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA

LEE O. GALLENTINE, P.E.

DATE

LICENSE NUMBER: 15745  
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2020  
PAGES OR SHEETS COVERED BY THIS SEAL:  
SHOWN ON TABLE OF CONTENTS

**CGA**  
ENGINEERS • LAND SURVEYORS

**CLAPSADDLE-GARBER ASSOCIATES OFFICE LOCATIONS**

16 East Main Street, PO Box 754 | Marshalltown, IA 50158  
1523 S. Bell Avenue, Suite 101 | Ames, IA 50010  
5106 Nordic Drive | Cedar Falls, IA 50613  
739 Park Avenue | Ackley, IA 50601  
511 Bank Street | Webster City, IA 50595

**Project Office**  
739 Park Avenue  
Ackley, IA. 50601  
Phone: 641-847-3273  
Fax: 641-847-2303

# **Supplement to Engineer's Report on Repairs to Upper End of Main Tile of Drainage District No. 143, Hardin County, Iowa**

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Repair General Route and Location Map	App. C
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Opinion of Probable Construction Costs – Partial Tile Lining	App. E
Opinion of Probable Construction Costs – Tile Cleaning and Tree Removal	App. F
Opinion of Probable Construction Costs – Offset Tile Replacement	App. G

# **Supplement to Engineer's Report on Repairs to Upper End of Main Tile of Drainage District No. 143, Hardin County, Iowa**

## **1. INTRODUCTION**

- **SCOPE OF WORK** – The Hardin County Board of Supervisors, acting as District Trustees, requested Clapsaddle-Garber Associates to investigate and report concerning repairs to the upper end of the main tile of Drainage District No. 143. At the hearing held on August 16, 2017 and several landowner meetings since, the original Engineer's Report, subsequent investigation results (copy included in Appendix A for reference), and subsequent repair results were discussed and reviewed by the District Trustees. As a result, at the landowner meeting held on April 24, 2019 the District Trustees requested Clapsaddle-Garber Associates to move ahead with this supplement for additional options to reinstate the capacity of the Main tile along Ionia Street.



2. REPAIR METHODS – To repair the issues discussed in the original report along Ionia Street that haven't already been repaired, there are several options, but the following are some of the ones discussed at the above mentioned hearings and meetings:

Full Tile Lining

- Remove tree roots and debris from the existing Main tile by either jet cleaning or mechanical cutting.
- Prevent roots from infiltrating the existing Main tile again by installing a CIPP liner.
- For reference, the general route and location of said cutting and lining are shown on the map included in Appendix C.

Partial Tile Lining

- Remove tree roots and debris from the existing Main tile by either jet cleaning or mechanical cutting. This would be only where tree root infiltration has previously been identified (assumed to be  $\frac{1}{3}$  of length of the full tile lining length based on April 24, 2019 meeting minutes).
- Prevent roots from infiltrating the existing Main tile again by installing a CIPP liner in this same length.
- For reference, the general route and location of said cutting and lining are shown on the map included in Appendix C.

Tile Cleaning and Tree Removal

- Remove tree roots and debris from the existing Main tile by either jetting cleaning or mechanical cutting.
- Remove trees identified as problematic within 50 feet of either side of the existing Main tile. For reference, they are highlighted yellow in subsequent investigation results included in Appendix A.
- For reference, the general route and location of said cutting are shown on the map included in Appendix C.

Offset Tile Replacement

- Install a new Main tile on either the north side or south side of Ionia Street pavement (depending upon number of existing utilities at these locations). The offset Main tile would connect to the existing Main tile in the golf course and would connect back into the existing Main tile west of May Street.
- Remove trees within 50 feet of either side of the rerouted Main tile.
- For reference, the general route and location of said replacement is shown on the map included in Appendix C.

With the above-mentioned repairs, the following should be noted:

- All of the above options would only remove obstructions in the Main tile at locations of proposed work. Any obstructions at other locations would remain in the existing Main tile.
- All private connections repairs would be reconnected to the Main tile after repairs.
- Repair of any of the key issues identified under the discussions and conclusions of the original report (except roots and rock/soil) on the existing Main tile have either been



completed are not necessary for cleaning and/or lining. For reference, a table stating said spot locations is included in Appendix B.

- All options would require installation of access manholes in the area of repair.
- The Offset Tile Replacement option would abandon the existing Main tile in place.
- All options except the Full Tile Lining option would require future monitoring for additional tree growth and root infiltration.
- The Offset Tile Replacement option would not provide for reconnection of any private connections on the opposite side of Ionia Street that the offset Main tile is installed (assumed number of private connections to be half of total for other options).
- The Tile Cleaning and Tree Removal option would involve removing trees outside of the existing right of way of Ionia Street.
- The pipe sizes used are those that are currently manufactured that most closely meet or exceed the current main tile size.
- It is our understanding of Iowa Code that the removal of hedges, trees, and obstructions is a power given to the Drainage District Trustees through Iowa Code Chapter 468.138 and 468.139.
- Repairs have historically been viewed as not having an impact on jurisdictional wetlands. As such, individual landowners should consult with applicable staff at the Hardin County NRCS office to verify the existence of said jurisdictional wetlands and that there will be no impact on them.

Per Iowa Code Chapter 468.126, the above actions would be considered a repair. As such, Subsection 1, paragraph c of Chapter 468.126 states "If the estimated cost of the repair does not exceed fifty thousand dollars, the board may order the work done without conducting a hearing on the matter. Otherwise, the board shall set a date for a hearing. . ." The opinion of probable construction cost contained in the Opinion of Probable Construction Costs section of this report exceeds said \$50,000 limit. Therefore, a hearing will be required. Per Iowa Code Chapter 468.126.1.g, the right of remonstrance does not apply to the proposed repairs.

3. OPINION OF PROBABLE CONSTRUCTION COSTS – Using the above methods of repair, an itemized list of project quantities and associated opinions of probable construction costs was compiled and is included in Appendices D, E, F and G of this report. A summary of said costs (to the nearest dollar) are as follows:

METHOD	DRAINAGE COEFF.	TOTAL COST
Full Tile Lining	Existing	\$ 455,366
Partial Tile Lining	Existing	\$ 270,944
Tile Cleaning and Tree Removal	Existing	\$ 342,616
Offset Tile Replacement	Existing	\$ 455,022

It should be noted that said costs include materials, labor, and equipment supplied by the contractor to complete the necessary improvement and includes applicable engineering, construction observation, and project administration fees by Clapsaddle-Garber Associates. However, said costs do not include any interest, legal fees, county administrative fees, crop damages, other damages, previous repairs, engineering fees to date, wetland mitigation fees, or reclassification fees (if applicable). As always, all costs shown are opinions of Clapsaddle-Garber Associates based on previous lettings on other projects. Said costs are just a guideline and are not a guarantee of actual costs.

4. RECOMMENDATIONS – There is a definite need to perform one of the repairs from the original report or this supplement. The repair would remove some or all of the current restrictions to the Main tile and extend the life span of the Main tile. Therefore, it is recommended that the Hardin County Board of Supervisors, acting as District Trustees, should take action to accomplish the following:
- Approve the Supplement to Engineer's Report as prepared by Clapsaddle-Garber Associates.
  - Hold the required hearing or hearings on the proposed repair.
  - Adopt one of the recommendations of the Original Report or Supplement to Engineer's Report.
  - Direct Clapsaddle-Garber Associates to prepare plans and specifications for the proposed repair.
  - Direct Clapsaddle-Garber Associates to proceed with receiving bids from interested contractors.
  - Award contract to the lowest responsible contractor.
  - If desired or required by Iowa Code, proceed with reclassification proceedings.

### Drainage District:

143

### Investigation Summary:

- At the Hearing on Engineer's Report for Repairs to Upper End of Main Tile, the District Trustees requested an investigation of who owned the fiber optic utilities that were bored through the Main Tile.
- Based on information from the Iowa One-Call service, it appeared that the most likely utility at issue was Radcliffe Telephone Company.
- Contacted Radcliffe Telephone Company via telephone on November 11, 2018 and they indicated that they use orange conduit for their fiber optic line.
- Attached photographs (Pic #1 and Pic #2) from CCTV inspection clearly show that conduit bored through the Main Tile is orange. The locations of said fiber optic lines being bored through the Main Tile are shown on the attached CCTV Investigation Map.

### Contractor Time and Materials (spent while CGA was on-site):

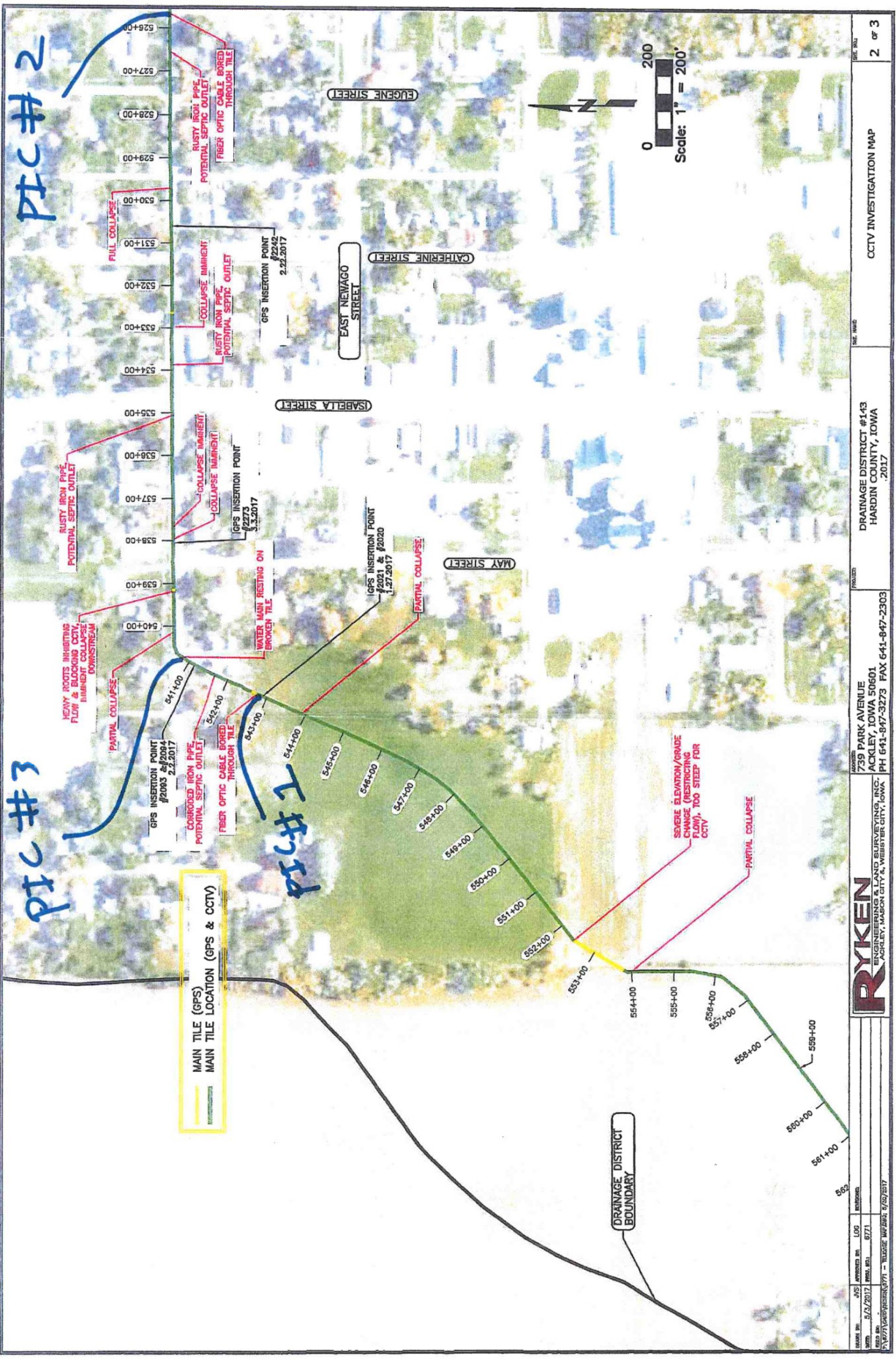
None as only investigation was performed.

### Additional Actions Recommended:

Radcliffe Telephone Company should remove their fiber optic lines from the Main Tile and repair the Main Tile at these two locations. The repair should be observed, documented, and performed to applicable Drainage District standards. It is CGA's opinion that this should be done at no cost to the drainage district unless there is an agreement or Iowa Code section that states otherwise.









PIC #1

2/2/2017

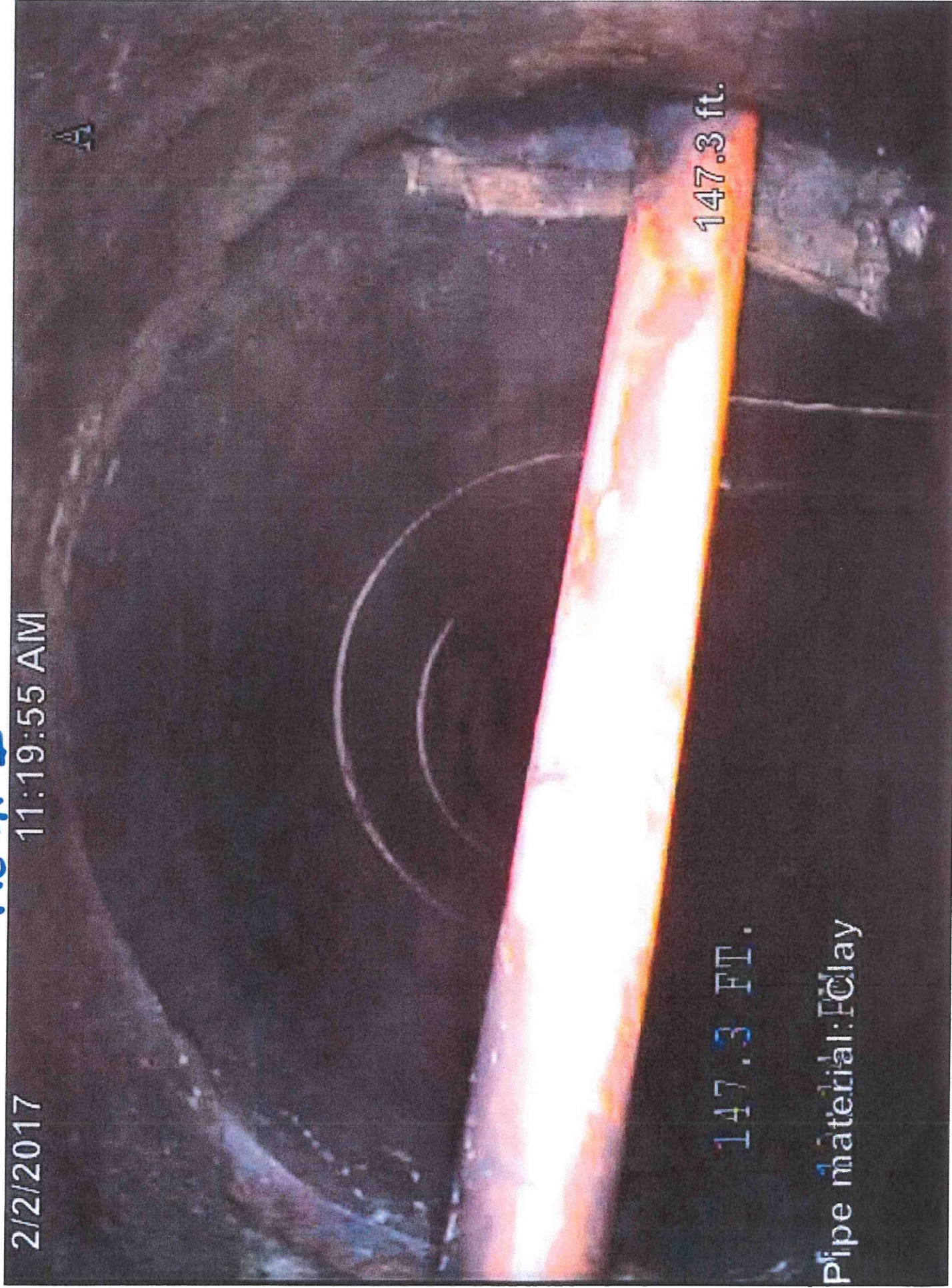
11:19:55 AM

A

147.3 ft.

147.3 FT.

Pipe material: FClay





PEC # 2

2/22/2017

11:09:44 AM

P

491.7 ft.

491.7 FT.

Pipe material: EC clay





PEC # 3

2/2/2017

9:35:31 AM

F

32.5 ft.

32.5 FT.

Pipe material: Clay



## Drainage District:

143

## Investigation Summary:

- At the Hearing on Engineer's Report for Repairs to Upper End of Main Tile, the District Trustees requested an inventory of trees within the 50' of the Main Tile from the west end of town to the east end of town (i.e. west side of the golf course) be performed.
- CGA staff performed a site visit along the Main Tile route and found the following trees within 50' of the Main Tile (unless noted otherwise):
  - 3 Walnuts (28"-36")
  - 1 Buckeye (12")
  - 3 Oak (6"-36")
  - 12 Brush or Brush Lines
  - 1 Cedar (24")
  - 4 Blue Spruce (8"-15")
  - 13 Apple (2"-24")
  - 2 Honey Locusts (24"-36")
  - 10 Ash (10"-48")
  - 4 River Birch (24"-36")
  - 22 Soft Maple (2"-48")
  - 12 Hard Maple (8"-48")
  - 3 Mulberry (6")
  - 1 Boxelder (24")
  - 1 Sycamore (48") at 54' from tile

## Contractor Time and Materials (spent while CGA was on-site):

None as only investigation was performed

## Additional Actions Recommended:

Although all trees are capable of producing tree roots which can negatively impact tile, the above yellow highlighted trees species are some that we typically find majorly impacting tile negatively. If the District Trustees do not pursue lining the Main tile, they may wish to pursue removal of at least the yellow highlighted trees as it is CGA's opinion that they will eventually (or may already be) negatively impacting the Main Tile. It is also our opinion that the cost of removal of just these trees would be over \$50,000. This cost is high enough that a hearing and engineer's report would be required.





**Drainage District:**

143

**Investigation Summary:**

At the Hearing on Engineer's Report for Repairs to Upper End of Main Tile, the District Trustees requested an opinion of probable construction cost to line the existing Main tile from the west end of town to the east end of town (i.e. west side of the golf course).

**Contractor Time and Materials (spent while CGA was on-site):**

None as only investigation was performed

**Additional Actions Recommended:**

Based on conversations with some lining companies and recent bid letting for sanitary sewer lining, CGA drafted the attached Engineer's Opinion of Probable Construction Costs. Said opinion is just below \$500,000. This cost is high enough that a hearing and engineer's report would be required.





By: Z.J.S.  
 Date: 11/21/2018  
 Checked By: L.O.G.  
 Date: 11/21/2018

### Engineer's Opinion of Probable Construction Costs

Project: Main Tile for D.D. #143

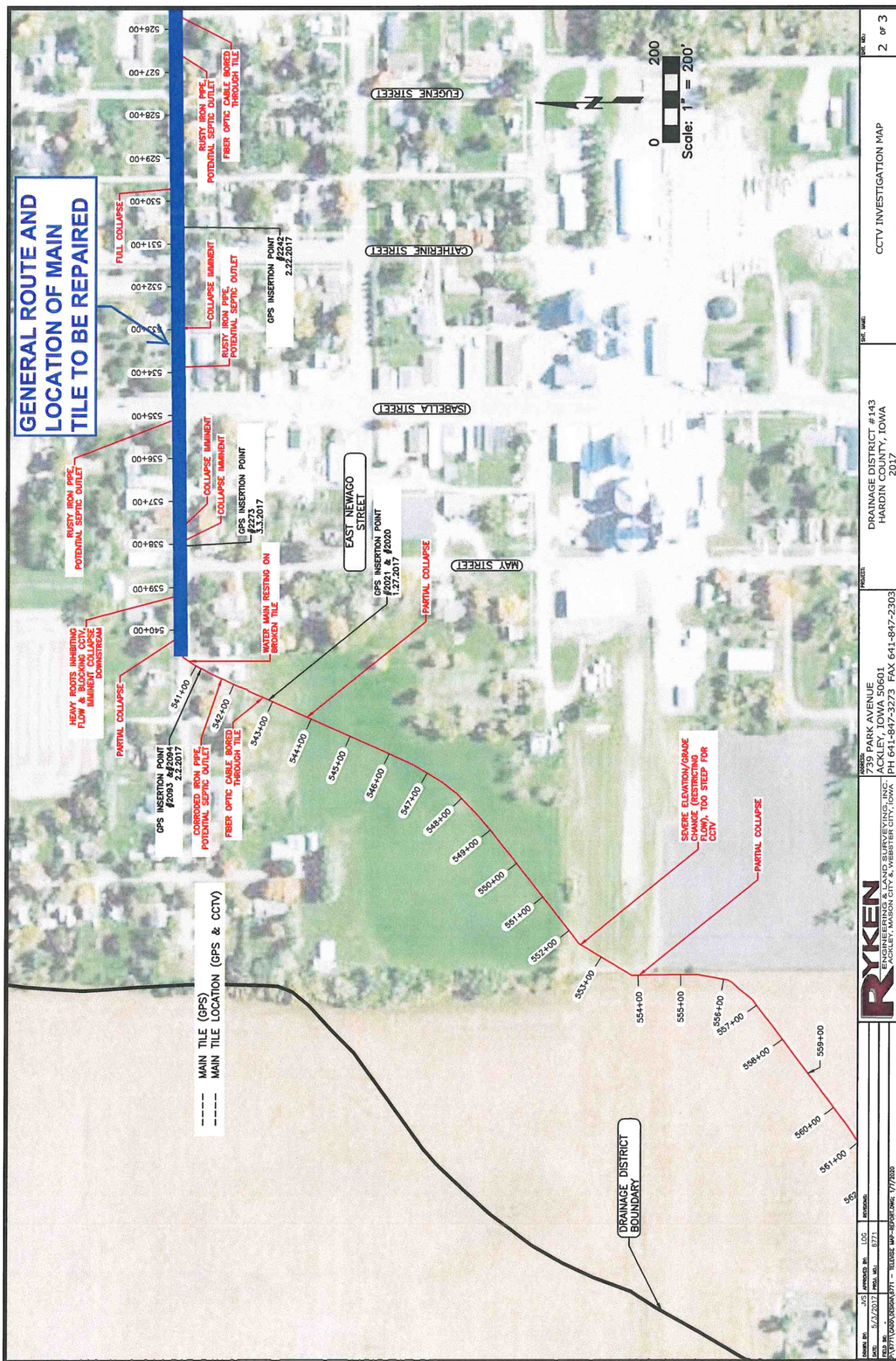
Location: City of Radcliffe, Hardin County, Iowa

TILE LINING	ITEM #	DESCRIPTION	Unit Cost	Units	Quantity	Units	Total Cost
		<b>CONSTRUCTION COSTS</b>					
	101	TILE CLEANING	\$ 5.00	LF	4609	LF	\$ 23,045.00
	102	14-INCH TILE LINING	\$ 35.00	LF	1315	LF	\$ 46,025.00
	103	18-INCH TILE LINING	\$ 50.00	LF	2558	LF	\$ 127,900.00
	104	20-INCH TILE LINING	\$ 60.00	LF	736	LF	\$ 44,160.00
	105	ACCESS MANHOLES	\$ 10,000.00	EA	9	EA	\$ 90,000.00
	106	REINSTATE TAP	\$ 200.00	EA	87	EA	\$ 17,400.00
	107	REMOVE AND REPLACE ASPHALT	\$ 60.00	SY	150	SY	\$ 9,000.00
	108	TRAFFIC CONTROL	\$ 5,000.00	LS	1	LS	\$ 5,000.00
		<b>CONSTRUCTION SUBTOTAL</b>					\$ 362,530.00
		Contingency (10%)					\$ 36,253.00
		<b>CONSTRUCTION TOTAL</b>					\$ 398,783.00
		Engr. & Const. Observation (25%)					\$ 99,695.75
		<b>TOTAL DISTRICT COST</b>					\$ 498,478.75

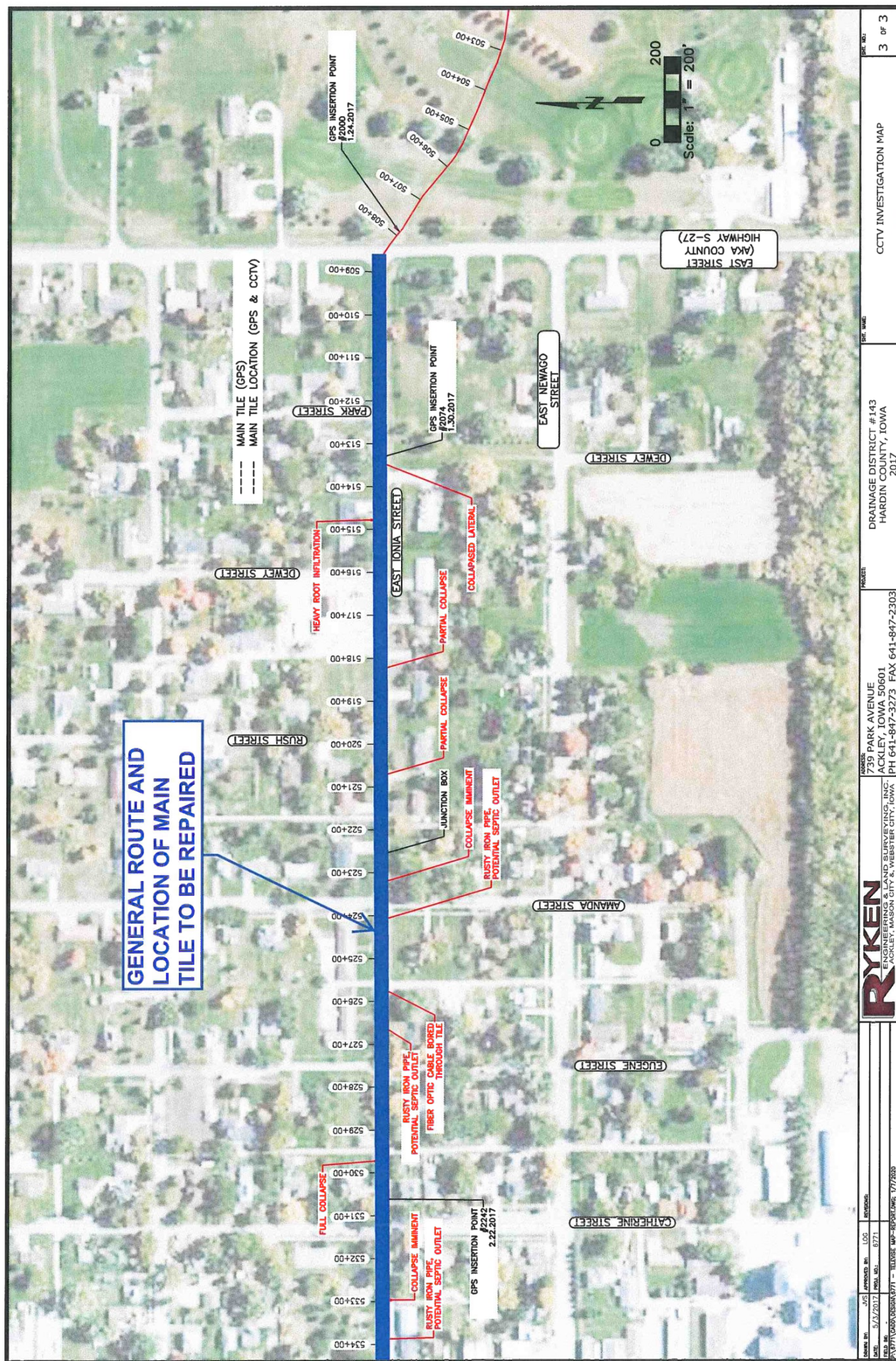
## Tabulated Defects

Total	GPS #2273		GPS #2273		GPS #2242		GPS #2242		GPS #2094		GPS #2074		GPS #2000	
	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream
Total Length Televised (ft)	108	538	804	552	198	122	931	194	484	735	1/24/2017			
Date:	3/3/2017	3/3/2017	2/22/2017	2/22/2017	2/22/2017	2/2/2017	1/30/2017	2/2/2017	1/30/2017	1/24/2017				
	63	286	552	122	484	735	1/24/2017							
Top crack (ft)	63	286	552	122	484	735	1/24/2017							
Side crack (ft)	30	128	62	9	418	21								
Bottom crack (ft)	53	0	0	0	423	6								
Partial or imminent collapse (#)	4	10	9	3	22	4								
Debris (ft)	4	20	0	195	69	597								
Offset Joint (#)	8	14	15	8	232	45								
Soil/voids visible in offset joint (#)	7	6	9	5	25	18								
Holes (non-fixed) (#)	1	5	6	3	4	1								
Holes (fixed) (#)	1	2	0	2	6	1								
Iron pipe, potentially septic outlet	0	2	2	0	0	0								
Water main crushing	1	0	0	0	1	0								













By: L.O.G.  
 Date: 1/7/2020  
 Checked By: L.O.G.  
 Date: 1/7/2020

### Engineer's Opinion of Probable Construction Costs

Project: Main Tile for D.D. #143 (Ionia Street Only)

Location: City of Radcliffe, Hardin County, Iowa

FULL TILE LINING	ITEM #	DESCRIPTION	Unit Cost	Units	Quantity	Units	Total Cost
		<b>CONSTRUCTION COSTS</b>					
	1000	TILE CLEANING	\$ 5.00	LF	3275	LF	\$ 16,375.00
	1001	18-INCH OR 20-INCH TILE LINING	\$ 70.00	LF	2525	LF	\$ 176,750.00
	1002	22-INCH OR 24-INCH TILE LINING	\$ 95.00	LF	750	LF	\$ 71,250.00
	1003	ACCESS MANHOLES	\$ 10,000.00	EA	4	EA	\$ 40,000.00
	1004	PRIVATE CONNECTIONS	\$ 200.00	EA	60	EA	\$ 12,000.00
	1005	REMOVE AND REPLACE ASPHALT	\$ 60.00	SY	80	SY	\$ 4,800.00
	1006	TRAFIC CONTROL	\$ 10,000.00	LS	1	LS	\$ 10,000.00
		<b>CONSTRUCTION SUBTOTAL</b>					\$ 331,175.00
		Contingency (10%)					\$ 33,117.50
		<b>CONSTRUCTION TOTAL</b>					\$ 364,292.50
		Engr. & Const. Observation (25%)					\$ 91,073.13
		<b>TOTAL CONSTRUCTION COST</b>					\$ 455,365.63



By: L.O.G.  
 Date: 1/7/2020  
 Checked By: L.O.G.  
 Date: 1/7/2020

### Engineer's Opinion of Probable Construction Costs

Project: Main Tile for D.D. #143 (Ionia Street Only)

Location: City of Radcliffe, Hardin County, Iowa

PARTIAL TILE LINING	ITEM #	DESCRIPTION	Unit Cost	Units	Quantity	Units	Total Cost
		<b>CONSTRUCTION COSTS</b>					
	2000	TILE CLEANING	\$ 20.00	LF	1100	LF	\$ 22,000.00
	2001	18-INCH OR 20-INCH TILE LINING	\$ 100.00	LF	850	LF	\$ 85,000.00
	2002	22-INCH OR 24-INCH TILE LINING	\$ 125.00	LF	250	LF	\$ 31,250.00
	2003	ACCESS MANHOLES	\$ 10,000.00	EA	4	EA	\$ 40,000.00
	2004	REINSTATE TAP	\$ 200.00	EA	20	EA	\$ 4,000.00
	2005	REMOVE AND REPLACE ASPHALT	\$ 60.00	SY	80	SY	\$ 4,800.00
	2006	TRAFIC CONTROL	\$ 10,000.00	LS	1	LS	\$ 10,000.00
		<b>CONSTRUCTION SUBTOTAL</b>					\$ 197,050.00
		Contingency (10%)					\$ 19,705.00
		<b>CONSTRUCTION TOTAL</b>					\$ 216,755.00
		Engr. & Const. Observation (25%)					\$ 54,188.75
		<b>TOTAL CONSTRUCTION COST</b>					\$ 270,943.75



By: L.O.G.  
 Date: 1/7/2020  
 Checked By: L.O.G.  
 Date: 1/7/2020

### Engineer's Opinion of Probable Construction Costs

Project: Main Tile for D.D. #143 (Ionia Street Only)

Location: City of Radcliffe, Hardin County, Iowa

TILE CLEANING AND TREE  
REMOVAL

ITEM #	DESCRIPTION	Unit Cost	Units	Quantity	Units	Total Cost
<b>CONSTRUCTION COSTS</b>						
3000	TILE CLEANING	\$ 5.00	LF	3275	LF	\$ 16,375.00
3001	TREE REMOVAL	\$ 3,000.00	EA	48	EA	\$ 144,000.00
3002	SEEDING AND RESTORATION	\$ 500.00	EA	48	EA	\$ 24,000.00
3003	ACCESS MANHOLES	\$ 10,000.00	EA	4	EA	\$ 40,000.00
3004	PROTRUDING TAP GRINDING	\$ 1,000.00	EA	10	EA	\$ 10,000.00
3005	REMOVE AND REPLACE ASPHALT	\$ 60.00	SY	80	SY	\$ 4,800.00
3006	TRAFFIC CONTROL	\$ 10,000.00	LS	1	LS	\$ 10,000.00
<b>CONSTRUCTION SUBTOTAL</b>						\$ 249,175.00
Contingency (10%)						\$ 24,917.50
<b>CONSTRUCTION TOTAL</b>						\$ 274,092.50
Engr. & Const. Observation (25%)						\$ 68,523.13
<b>TOTAL CONSTRUCTION COST</b>						\$ 342,615.63





By: L.O.G.  
 Date: 1/7/2020  
 Checked By: L.O.G.  
 Date: 1/7/2020

### Engineer's Opinion of Probable Construction Costs

Project: Main Tile for D.D. #143 (Ionia Street Only)

Location: City of Radcliffe, Hardin County, Iowa

OFFSET TILE REPLACEMENT

ITEM #	DESCRIPTION	Unit Cost	Units	Quantity	Units	Total Cost
<b>CONSTRUCTION COSTS</b>						
4000	24" DUAL WALL POLYPROPYLENE OR RCP TILE	\$ 55.00	LF	750	LF	\$ 41,250.00
4001	18" DUAL WALL POLYPROPYLENE OR RCP TILE	\$ 45.00	LF	2525	LF	\$ 113,625.00
4002	24" x 18" POLYPROPYLENE OR RCP REDUCER	\$ 650.00	EA	1	EA	\$ 650.00
4003	CONCRETE COLLAR	\$ 400.00	EA	2	EA	\$ 800.00
4004	PRIVATE CONNECTIONS	\$ 500.00	EA	30	EA	\$ 15,000.00
4005	SEEDING AND RESTORATION	\$ 20,000.00	LS	1	LS	\$ 20,000.00
4006	DRIVEWAY OR SIDEWALK REMOVAL & REPLACEMENT	\$ 2,000.00	EA	15	EA	\$ 30,000.00
4007	REMOVE AND REPLACE ASPHALT	\$ 80.00	SY	620	SY	\$ 49,600.00
4008	ACCESS MANHOLES	\$ 10,000.00	EA	4	EA	\$ 40,000.00
4009	TRAFFIC CONTROL	\$ 20,000.00	LS	1	LS	\$ 20,000.00
<b>CONSTRUCTION SUBTOTAL</b>						\$ 330,925.00
Contingency (10%)						\$ 33,092.50
<b>CONSTRUCTION TOTAL</b>						<b>\$ 364,017.50</b>
Engr. & Const. Observation (25%)						\$ 91,004.38
<b>TOTAL CONSTRUCTION COST</b>						<b>\$ 455,021.88</b>



December 7, 2020

Drainage District Trustees  
1215 Edgington Ave, Suite 1  
Eldora, IA 50627

RE: Repairs to Big 4, DD 41, DD 77, DD 123, and DD 143  
Project Completion Letter

Dear Trustees:

Hand On Excavating has completed the work required by the plans and specifications of the above referenced projects including removals, replacements, and repairs as shown/included on the attached as-built plan sheets and Pay Estimate No. 6. Also attached for your file are copies of the lien waivers from suppliers and subcontractors that Hands On submitted to us.

To the best of my knowledge, Hands On has completed their work on the above referenced projects in general accordance with the plans, specifications, Change Orders, District Trustees direction, and field instructions. The majority of this is documented in the construction observation report and pictures books what we have generated (to be transmitted under a separate cover). Therefore, I recommend that the Drainage District contact landowners where the construction occurred to verify whether they have any damage claims to be filed. Barring none, I recommend that the District Trustees accept their portion of the above referenced projects as complete and authorize final payment (including release of retainage) to the Contractor in the amount of \$15,266.03 per the attached final pay estimate. Also, please note that the only remaining project on the contract with Hands On is DD 128, which we are currently working on finalizing also.

If you have any questions with regards to the items in this letter, please contact me by phone at 641-847-3273 or by email at [LGallentine@cgaconsultants.com](mailto:LGallentine@cgaconsultants.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "Lee Gallentine", written over a horizontal line.

Lee Gallentine, PE & PLS  
Clapsaddle-Garber Associates

Clapsaddle-Garber Associates, Inc.

739 Park Avenue • Ackley, Iowa 50601 • Telephone 641-847-3273 • Fax 641-847-2303

[www.cgaconsultants.com](http://www.cgaconsultants.com)

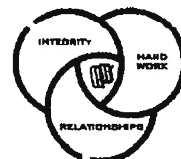


## RECEIPT AND WAIVER OF LIEN

TO WHOM IT MAY CONCERN:

This is to certify that product purchased from Prinsco, Inc, sold to Hands On Excavating been paid in full, and the material is free and clear of any liens or encumbrances by Prinsco Inc, as of April 1, 2020.

LeAnn Nord  
Prinsco Inc  
FPA



**UNCONDITIONAL WAIVER AND RELEASE UPON PAYMENT**

TO WHOM IT MAY CONERN:

Whereas the undersigned WILLIAMS UNDERGROUND

has been paid and has received payment in full for labor, services, equipment and/or material furnished to Hands On Excavating LLC for the job know as HARDIN COUNTY DRAINAGE DISTRICTS THROUGH 4/1/2020 located in the city/county of HARDIN COUNTY, State of Iowa.

The undersigned does hereby release any right to lien on the above referenced job to the following extent. This release covers a complete payment for labor, services, equipment or materials furnished through the date signed below, and does not cover items furnished after this date.

Dated this 19<sup>th</sup> day of September, 2020

Company: WILLIAMS UNDERGROUND

By: Paul C. Bell  
(Signature)

**\*\*Lien Waivers need to be returned before next payment will be processed\*\***

Please Return to:  
Hands On Excavating LLC  
3305 Ziegler Ave  
Radcliffe, IA 50230

**UNCONDITIONAL WAIVER AND RELEASE UPON PAYMENT**

TO WHOM IT MAY CONERN:

Whereas the undersigned FORTERRA PIPE & PRECAST

has been paid and has received payment in full for labor, services, equipment and/or material furnished to Hands On Excavating LLC for the job know as HARDIN COUNTY DRAINAGE DISTRICTS  
THROUGH 4/1/2020 located in the city/county of HARDIN COUNTY  
\_\_\_\_\_, State of Iowa.

The undersigned does hereby release any right to lien on the above referenced job to the following extent. This release covers a complete payment for labor, services, equipment or materials furnished through the date signed below, and does not cover items furnished after this date.

Dated this 1<sup>ST</sup> day of APRIL, 2020

Company: Forterra

By: [Signature]

(Signature)

**\*\*Lien Waivers need to be returned before next payment will be processed\*\***

Please Return to:  
Hands On Excavating LLC  
3305 Ziegler Ave  
Radcliffe, IA 50230

**UNCONDITIONAL WAIVER AND RELEASE UPON PAYMENT**

TO WHOM IT MAY CONERN:

Whereas the undersigned Martin Mariotto

has been paid and has received payment in full for labor, services, equipment and/or material furnished to Hands On Excavating LLC for the job know as Hardin County Drainage District located in the city/county of Hardin, State of Iowa.

The undersigned does hereby release any right to lien on the above referenced job to the following extent. This release covers a complete payment for labor, services, equipment or materials furnished through the date signed below, and does not cover items furnished after this date.

Dated this 6<sup>th</sup> day of October, 2020

Company: Martin Mariotto

By: [Signature]  
(Signature)

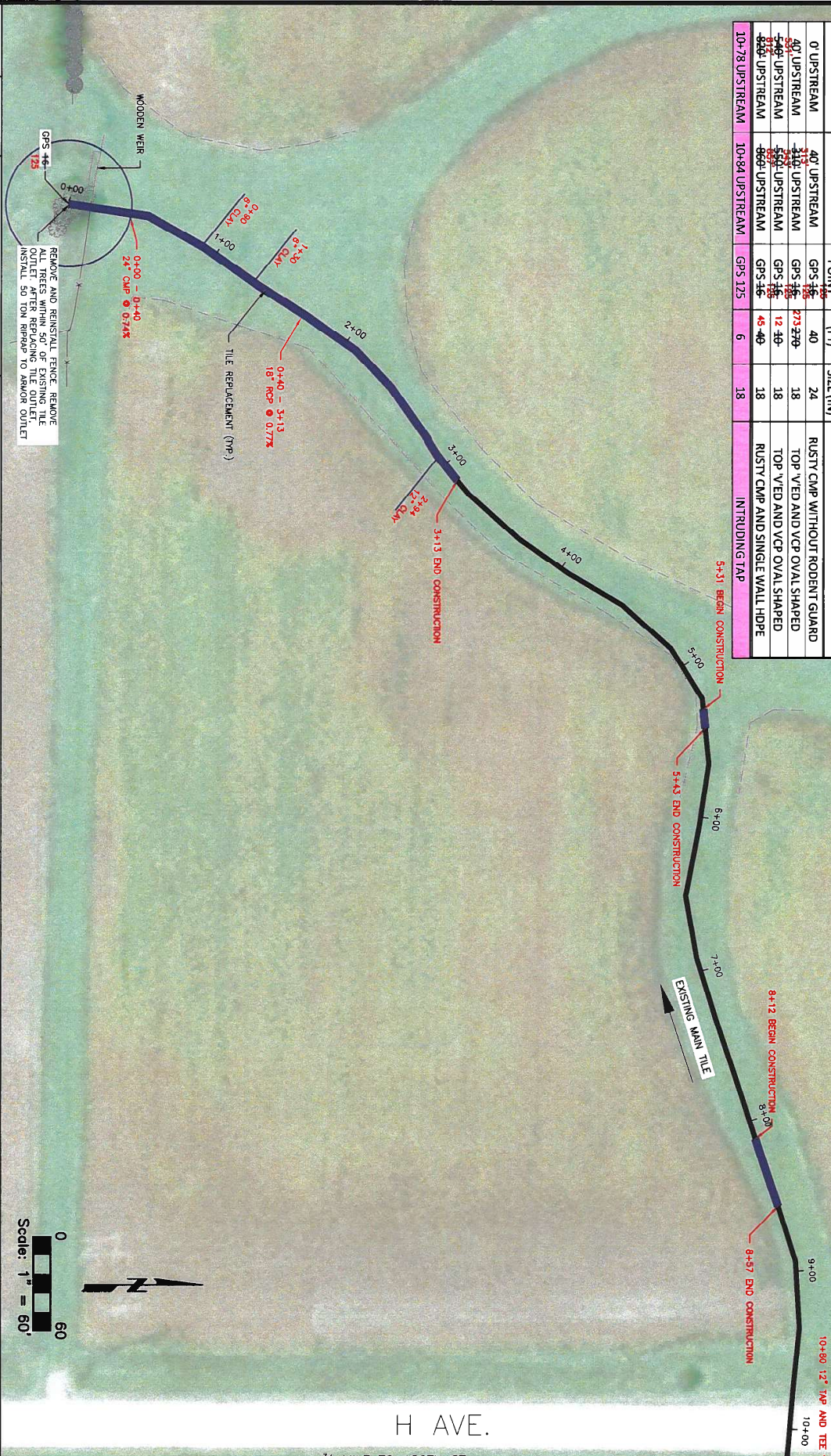
**\*\*Lien Waivers need to be returned before next payment will be processed\*\***

Please Return to:  
Hands On Excavating LLC  
3305 Ziegler Ave  
Radcliffe, IA 50230



# REPLACEMENT SCHEDULE

START LOCATION	END LOCATION	FROM POINT	LENGTH OF PIPE (FT)	REPAIR SIZE (IN)	REASON FOR REPLACEMENT
0' UPSTREAM	40' UPSTREAM	GPS 16	40	24	RUSTY CMP WITHOUT RODENT GUARD
40' UPSTREAM	312' UPSTREAM	GPS 16	272	18	TOP VED AND VCP OVAL SHAPED
312' UPSTREAM	558' UPSTREAM	GPS 16	246	18	TOP VED AND VCP OVAL SHAPED
558' UPSTREAM	866' UPSTREAM	GPS 16	308	18	RUSTY CMP AND SINGLE WALL HDPE
866' UPSTREAM	10+84 UPSTREAM	GPS 125	6	18	INTRUDING TAP



DD 41 MAIN TILE REPAIRS  
HARDIN COUNTY, IOWA  
2018

DATE: 2018-02-13

DESIGNED BY: LGS

REVISIONS:

DATE: 2018-02-13

DESIGNED BY: LGS

REVISIONS:

CGA

Chippendale-Gardner Associates, Inc.

1000 W. 1st St., Suite 200

Des Moines, Iowa 50319

515.281.7332

www.chippendalegardner.com

739 PARK AVENUE

ACKLEY, IOWA 50601

PH 641-847-3273 FAX 641-847-2303

PROJECT:

HARDIN COUNTY 2018 REPAIRS

HARDIN COUNTY, IOWA

2018

DD 41 MAIN TILE REPAIRS - ALTERNATE

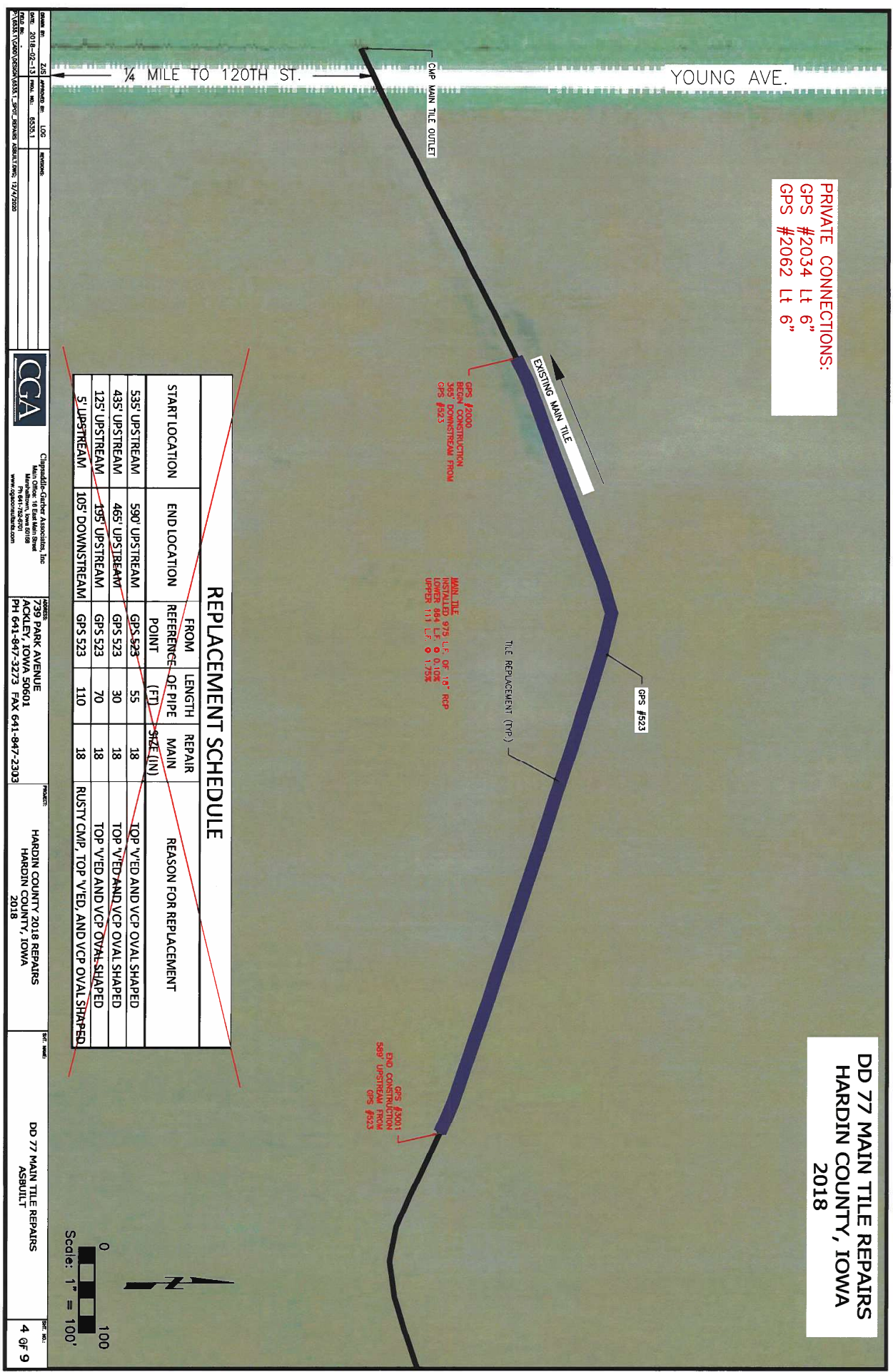
AS BUILT

6 OF 9



# DD 77 MAIN TILE REPAIRS HARDIN COUNTY, IOWA 2018

PRIVATE CONNECTIONS:  
GPS #2034 Lt 6"  
GPS #2062 Lt 6"



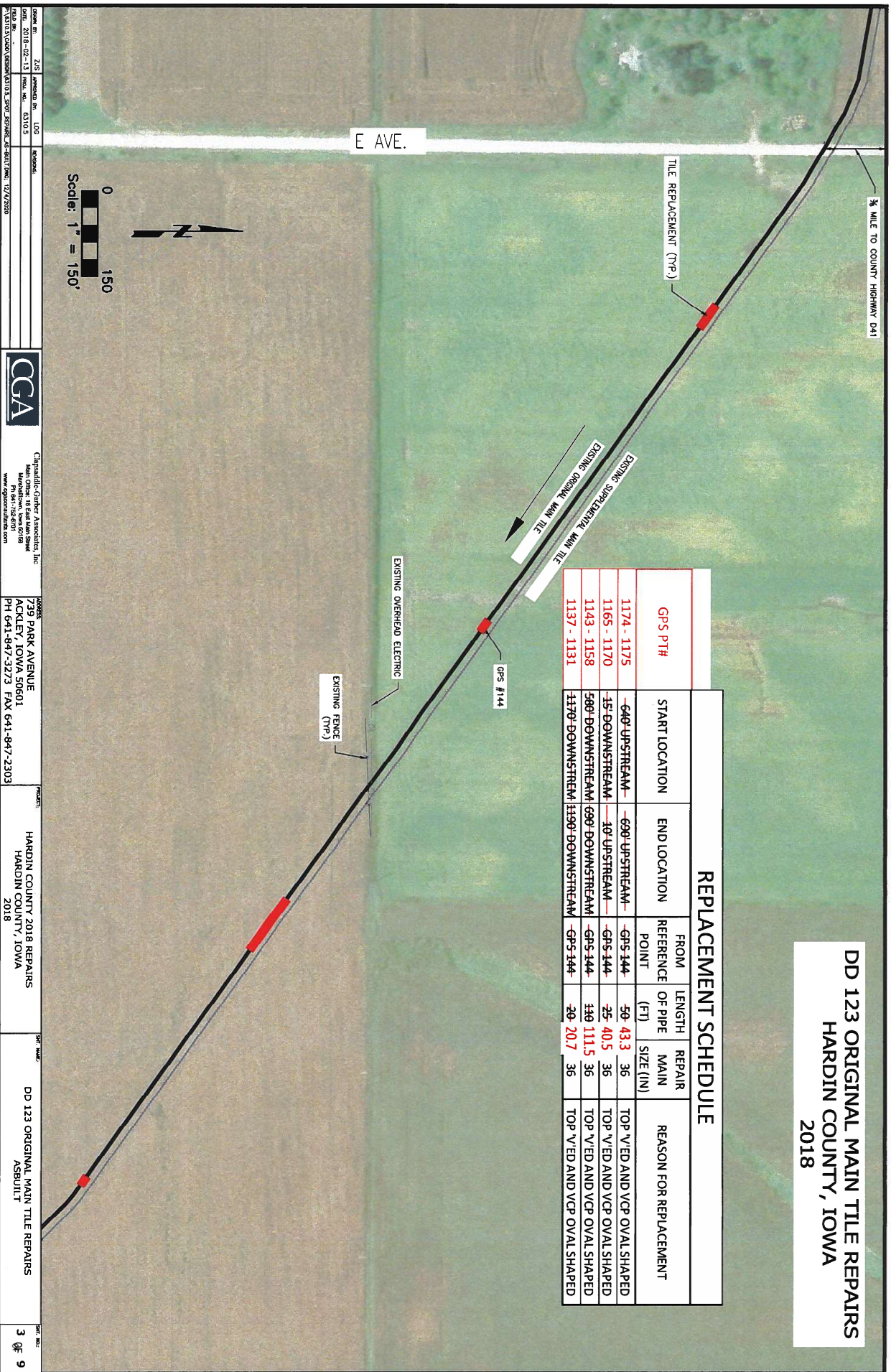
## REPLACEMENT SCHEDULE

START LOCATION	END LOCATION	FROM REFERENCE POINT	LENGTH OF PIPE (FT)	REPAIR MAIN SIZE (IN)	REASON FOR REPLACEMENT
535' UPSTREAM	590' UPSTREAM	GPS 523	55	18	TOP V'ED AND VCP OVAL SHAPED
435' UPSTREAM	465' UPSTREAM	GPS 523	30	18	TOP V'ED AND VCP OVAL SHAPED
125' UPSTREAM	195' UPSTREAM	GPS 523	70	18	TOP V'ED AND VCP OVAL SHAPED
5' UPSTREAM	105' DOWNSTREAM	GPS 523	110	18	RUSTY CMP, TOP V'ED, AND VCP OVAL SHAPED



# DD 123 ORIGINAL MAIN TILE REPAIRS HARDIN COUNTY, IOWA 2018

REPLACEMENT SCHEDULE						
GPS PT#	START LOCATION	END LOCATION	FROM REFERENCE POINT	LENGTH OF PIPE (FT)	REPAIR MAIN SIZE (IN)	REASON FOR REPLACEMENT
1174 - 1175	-640' UPSTREAM-	-690' UPSTREAM-	GPS 144	50	43.3	TOP V/ED AND VCP OVAL SHAPED
1165 - 1170	-15' DOWNSTREAM-	-10' UPSTREAM-	GPS 144	25	40.5	TOP V/ED AND VCP OVAL SHAPED
1143 - 1158	-580' DOWNSTREAM-	-690' DOWNSTREAM-	GPS 144	110	11.5	TOP V/ED AND VCP OVAL SHAPED
1137 - 1131	-1170' DOWNSTREAM-	-1190' DOWNSTREAM-	GPS 144	20	20.7	TOP V/ED AND VCP OVAL SHAPED



DRAWN BY: JCS  
 DATE: 2018-02-13  
 PROJECT: DD 123 ORIGINAL MAIN TILE REPAIRS  
 HARDIN COUNTY, IOWA  
 2018

CHECKED BY: LCO  
 DATE: 2018-02-13  
 PROJECT: DD 123 ORIGINAL MAIN TILE REPAIRS  
 HARDIN COUNTY, IOWA  
 2018

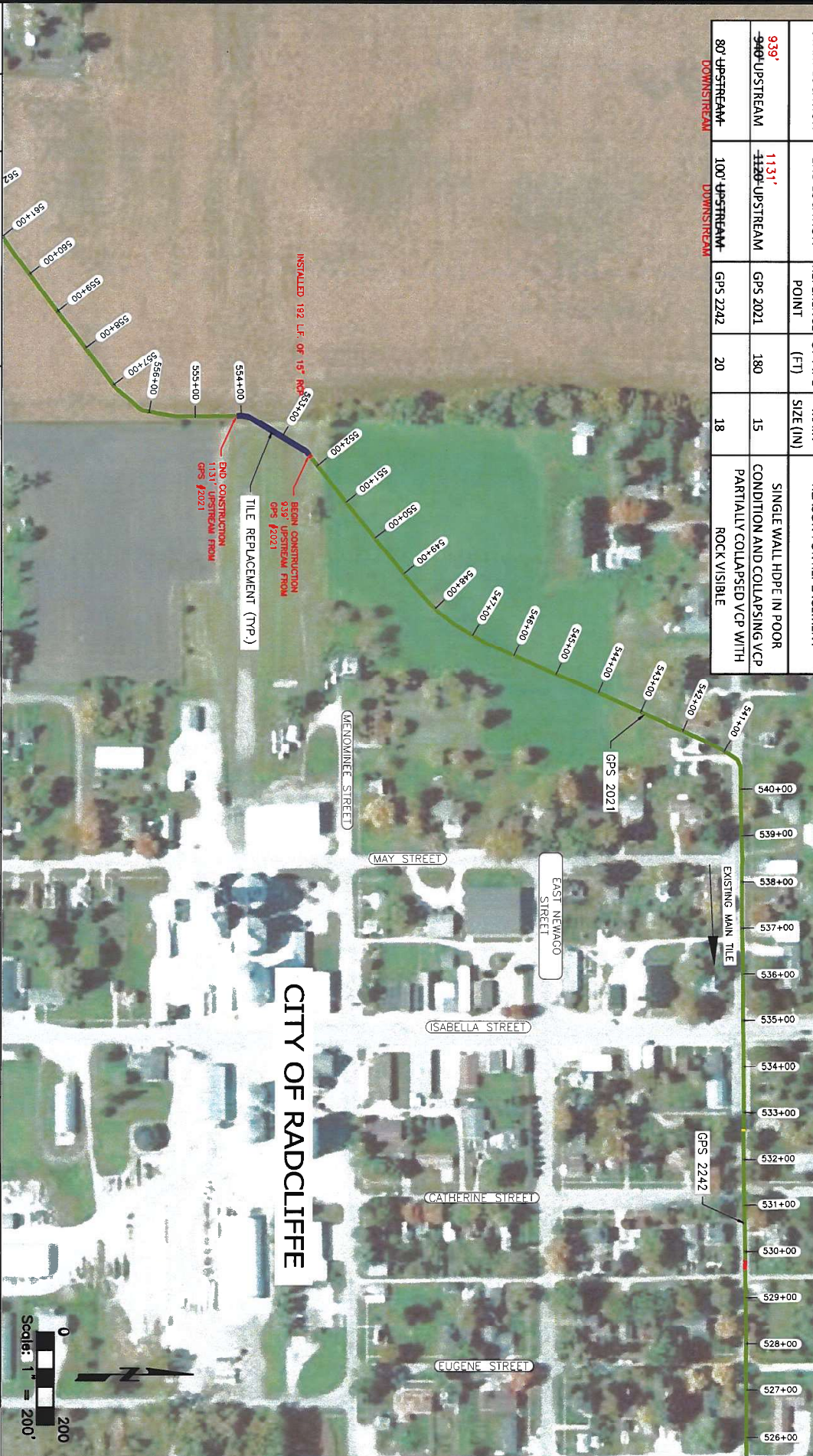
CGA  
 CONSULTING GEOTECHNICAL ASSOCIATES, INC.  
 739 PARK AVENUE  
 JACKSON, IOWA 50601  
 PH 641-847-3273 FAX 641-847-2303

DD 123 ORIGINAL MAIN TILE REPAIRS  
 HARDIN COUNTY, IOWA  
 2018



# DD 143 MAIN TILE REPAIRS HARDIN COUNTY, IOWA 2018

REPLACEMENT SCHEDULE					
START LOCATION	END LOCATION	FROM REFERENCE POINT	LENGTH OF PIPE (FT)	REPAIR MAIN SIZE (IN)	REASON FOR REPLACEMENT
939' UPSTREAM	1131' UPSTREAM	GPS 2021	180	15	SINGLE WALL HDPE IN POOR CONDITION AND COLLAPSING VCP
80' UPSTREAM DOWNSTREAM	100' UPSTREAM DOWNSTREAM	GPS 2242	20	18	PARTIALLY COLLAPSED VCP WITH ROCK VISIBLE



DATE: 2018-02-13

DESIGNER: CGA

PROJECT: DD 143 MAIN TILE REPAIRS

DATE: 2018-02-13

DESIGNER: CGA

PROJECT: DD 143 MAIN TILE REPAIRS

DATE: 2018-02-13

DESIGNER: CGA

PROJECT: DD 143 MAIN TILE REPAIRS

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DESIGNER: CGA

PROJECT: DD 143 MAIN TILE REPAIRS

DATE: 2018-02-13

DESIGNER: CGA

PROJECT: DD 143 MAIN TILE REPAIRS

**PAY ESTIMATE NO. 6 (FINAL EXCEPT DD 128)**

Repairs To Big 4, DD 41, 77, 123, 128, and 143

PROJECT NUMBER 6771.2

12/3/2020

**CONTRACTOR**Hands On Excavating, LLC  
3305 Ziegler Ave.  
Radcliffe, Iowa 50230**OWNER**Hardin County Trustees  
1215 Edgington Ave., Ste 1  
Eldora, Iowa 50627**ENGINEER**Clapsaddle-Garber Associates  
739 Park Avenue  
Ackley, Iowa 50601**BIG 4 DIVISION BID ITEMS**

Item No.	Description	Estimated Quantity	Unit	Installed Quantity	Unit Price	Extended Price
1	Main Open Ditch Slough Grading	0.2	AC	0.2	\$ 6,800.00	\$ 1,360.00
2	Main Open Ditch Bank Grading	80	LF	80	\$ 19.25	\$ 1,540.00
3	Surface Drain Cleanout	3	EA	3	\$ 800.00	\$ 2,400.00
4	Surface Drain Inlet Grading	3	LOC	3	\$ 320.00	\$ 960.00
5	Riprap	380	TN	363.3	\$ 38.46	\$ 13,972.52
6	Surface Drain (36")	40	LF	80	\$ 87.50	\$ 7,000.00
7	Surface Drain Removal	1	LOC	1	\$ 850.00	\$ 850.00
8	Permanent Seeding	0.5	AC	1	\$ 2,556.00	\$ 2,556.00
9	Seeding Warranty	1	LS	2	\$ 750.00	\$ 1,500.00

**DD 41 DIVISION ALTERNATE BID**

101AL	24" Ø CMP Tile Outlet	40	LF	40	\$ 62.75	\$ 2,510.00
102AL	18" Ø RCP Tile	320	LF	336	\$ 52.81	\$ 17,744.16
103AL	Type PC-2 Concrete Collar	6	EA	8	\$ 350.00	\$ 2,800.00
104AL	Private Tile Connection	2	EA	4	\$ 250.00	\$ 1,000.00
105AL	Fence Removal and Replacement	1	LS	1	\$ 500.00	\$ 500.00
106AL	Tree Removal	1	LS	1	\$ 300.00	\$ 300.00
107AL	Tile Removal	360	LF	376	\$ 2.00	\$ 752.00
108AL	Riprap	50	TN	43.52	\$ 45.11	\$ 1,963.19
109AL	Permanent Seeding	0.3	AC	0.04	\$ 1,500.00	\$ 60.00
110AL	Seeding Warranty	1	LS	1	\$ 500.00	\$ 500.00

**DD 77 DIVISION BID**

*201rev	18" Ø RCP Tile	970	LF	975	\$ 48.79	\$ 47,570.25
*202rev	Type PC-2 Concrete Collar	2	EA	2	\$ 350.00	\$ 700.00
*203rev	Private Tile Connection	4	EA	2	\$ 250.00	\$ 500.00
*204rev	Tile Removal (Crush in-place)	860	LF	860	\$ 1.00	\$ 860.00
*205rev	Tile Removal (Offsite Disposal)	110	LF	110	\$ 1.00	\$ 110.00

**DD 123 DIVISION BID**

301	36" Ø RCP Tile	205	LF	216	\$ 92.20	\$ 19,915.20
302	Type PC-2 Concrete Collar	8	EA	8	\$ 350.00	\$ 2,800.00
303	Tile Removal	205	LF	216	\$ 5.00	\$ 1,080.00





**DD 128 DIVISION BID**

**401	8" Ø HDPE <b>FLEX</b> Dual Wall Tile w/o Rock Bedding	985	LF	852	\$ 10.01	\$ 8,528.52
402	8" Ø HDPE Dual Wall Wyc	1	EA	1	\$ 60.00	\$ 60.00
403	8" Ø x 22½" HDPE Dual Wall Bend	1	EA		\$ 40.00	\$ -
404	Type PC-2 Concrete Collar	2	EA	2	\$ 350.00	\$ 700.00
405	Private Tile Connection	3	EA	3	\$ 350.00	\$ 1,050.00
406	15" Ø Hickenbottom Intake	1	EA	1	\$ 650.00	\$ 650.00
407	8" Ø Hickenbottom Intake	1	EA	1	\$ 150.00	\$ 150.00
408	Top Soil Salvage, Stockpile, and Respread	1	LS	0.4	\$ 3,200.00	\$ 1,280.00
409	Channel Grading (Fill and Borrow)	12	STA	6.667	\$ 450.00	\$ 3,000.00
410	Debris, Junk, and Rubble Removal	12	STA	12	\$ 200.00	\$ 2,400.00
411	Intake Removal	1	EA		\$ 300.00	\$ -
412	Tile Removal	20	LF	20	\$ 5.00	\$ 100.00
413	Tree Removal	12	STA	7	\$ 400.00	\$ 2,800.00
414	Permanent Seeding	0.9	AC		\$ 1,500.00	\$ -
415	Seeding Warranty	1	LS		\$ 500.00	\$ -

**DD 143 DIVISION BASE BID**

501	18" Ø RCP Tile	20	LF	20	\$ 56.32	\$ 1,126.40
502	15" Ø RCP Tile	180	LF	192	\$ 33.75	\$ 6,480.00
503	Type PC-2 Concrete Collar	4	EA	4	\$ 350.00	\$ 1,400.00
504	Private Tile Connection	3	EA		\$ 350.00	\$ -
505	6" ACC Pavement	120	SY	33.33	\$ 90.70	\$ 3,023.03
506	Pavement Removal	120	SY	33.33	\$ 3.84	\$ 127.99
507	Tile Removal	200	LF	212	\$ 2.00	\$ 424.00
508	Tree Removal	1	LS	1	\$ 200.00	\$ 200.00
509	Permanent Seeding	0.2	AC	0.15	\$ 1,500.00	\$ 225.00
510	Seeding Warranty	1	LS	1	\$ 1,062.50	\$ 1,062.50
511	Traffic Control	1	LS	1	\$ 200.00	\$ 200.00

I have reviewed the work claimed to be completed by the Contractor as reflected above and recommend payment of

**\$ 15,266.03**

to the Contractor

Lee Gallentine, Project Engineer

TOTAL WORK COMPLETED TO DATE \$ 168,790.75

10% RETENTION \$ 2,071.85

AMOUNT DUE LESS RETENTION \$ 166,718.90

PREVIOUSLY PAID \$ 151,452.87

AMOUNT DUE AT THIS TIME **\$ 15,266.03**

\* - Approved as part of Change Order #1

\*\* - Approved as part of Change Order #3

Note: For pay estimate #1, \$25,262.41 was for DD 41, \$44,996.67 was for DD 77, and \$7,734.66 was for DD 143.

For pay estimate #2, \$21,678.12 was for DD 123.

For pay estimate #3, \$28,924.66 was for Big 4.

For pay estimate #4, \$11,824.67 was for DD 128.

For pay estimate #5, \$6,822.00 was for DD 128 and \$4,209.68 was for DD 143.

For pay estimate #6, \$2,324.59 was for DD 143, \$2,117.08 was for DD 123, \$4,743.58 was for DD 77,

\$2,866.93 was for DD 41, and \$3,213.85 was for Big 4.



## Drainage District:

#4-53; Lat 4 & 4B

## Investigation Summary:

- Farm manager and tenant in the SE¼ Section 34, Township 90 North, Range 21 West reported a lack of drainage from the Laterals 4B1, 4B2, and 4B3.
- Visual observation found multiple areas of excess moisture and issues within the south half of said Section 34 and the NE¼ of Section 4, Township 89 North, Range 21 West as follows:
  - Lateral 4:
    - Ponding upstream and downstream of the Lateral 4 & Hardin Road (Highway C73) intersection.
    - Excessive Ponding near the Lateral 4 & 4B connection.
    - Excessive ponding upstream and downstream of the Lateral 4 & 30<sup>th</sup> Street intersection.
  - Lateral 4B:
    - Multiple wet areas found upstream of the 4 & 4B connection on both sides of Hardin Road (Highway C73).
    - A collapsed intake on the south side of Hardin Road (Highway C73).
    - Excess moisture near the connection of 4B & 4B4.
    - Ponding and pieces of broken tile near the intersection of Lateral 4B & the abandoned railroad.
    - Excess moisture near the connection of Lateral 4B & 4B2.
  - Lateral 4A:
    - A missing VCP wye at the connection with a private tile that is pulling soil into the Lateral tile (repaired under Hardin County Work Order 303).
    - A large amount of tile shards at the intersection of 4A and the east fenceline in the NW¼ of Section 4.
- Excavated the 15-inch VCP Lateral 4 tile upstream of its connection with the Lateral 4B tile, then moved intermittently further downstream to where it was found to be 15-inches, then 18-inches, then 20-inches in diameter. In said excavations found a large amount of debris in the tile taking up approximately 1/4 to 1/3 of the flowline. Above said debris was approximately 3-inches of water flowing slowly
- Excavated Lateral 4 again on the north side of Hardin Road (Highway C73) and found the tile to be relatively free of debris, and again, water flowing slowly at approximately 3-inches deep. At said excavation, also found a 4-inch HDPE private tile protruding approximately 2-3-inches into Lateral 4.
- Excavated the 18-inch VCP Lateral 4B tile approximately 300-feet upstream of its connection with the Lateral 4 tile and found it to have approximately 3-inches of slow-moving water in the flowline. Then excavated at the location where Lateral 4B intersects with the abandoned railroad East of Juniper Ave. and found the 15-inch VCP tile to have approximately 1 to 2-inches of debris in the flowline, with approximately 1 to 2-inches of slow flowing water above.
- All tiles broken in the process of investigation were temporarily repaired with dual wall HDPE tile of matching size and temporary fabric wrap at joints, then backfilled with on-site soil. All tiles that had an exploratory hole cut in the side were patched with engineering fabric and an HDPE tile cover, then backfilled with on-site soil.

## Contractor Time and Materials (spent while CGA was on-site):

See attached Tabulated Contractor Time and Materials Sheet.



### Additional Actions Recommended:

From the observations made, it is difficult to find a definitive cause for the reported lack of drainage. However, the following items are apparent:

- There is silt/debris in the flowline of both the Lateral 4 and Lateral 4B tiles.
- There is a hump in the Lateral 4 tile, wherein the downstream limits of the exploratory excavation were found to be higher in elevation than the upstream excavations and there is very little fall in the Lateral 4 tile north of Hardin Road.

Neither of these observations by themselves are likely significant enough to be the cause of the reported problems, and current conditions make it difficult to pin down an exact location or cause. The District Trustees may consider one of the following recommended actions:

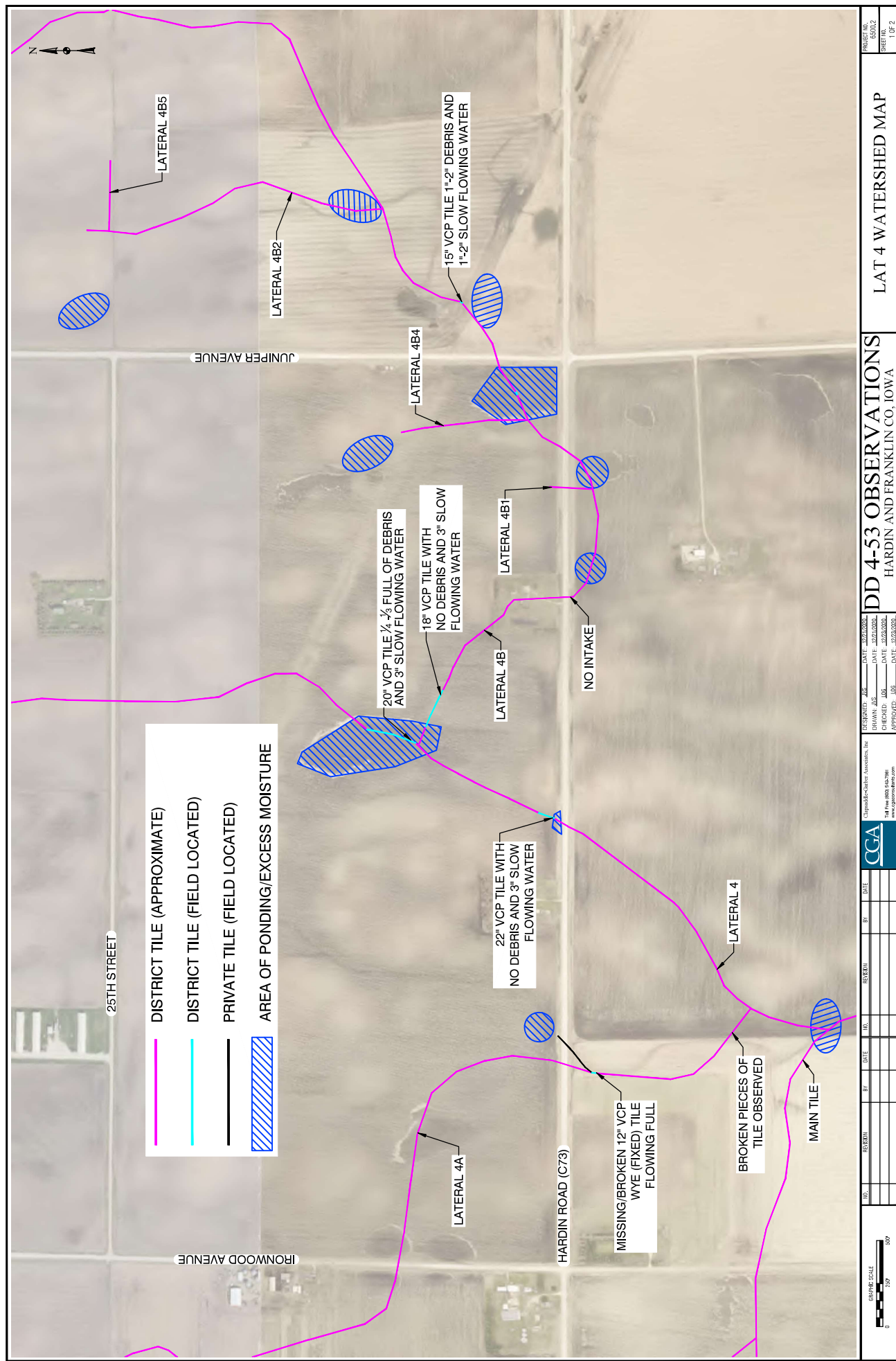
- Order CCTV inspections to be conducted at broad intervals to determine the overall condition of the tiles at issue and potentially find the cause. This may, however, be hindered by the amount of silt in the tiles at issue.
- Order more exploratory excavations at 100 to 200-foot intervals to potentially find differentials in flow, elevations, or silt that might indicate the location of problems.
- Wait until the issue becomes more pronounced so that a more definite location of the cause might be more easily found using the above-mentioned methods.

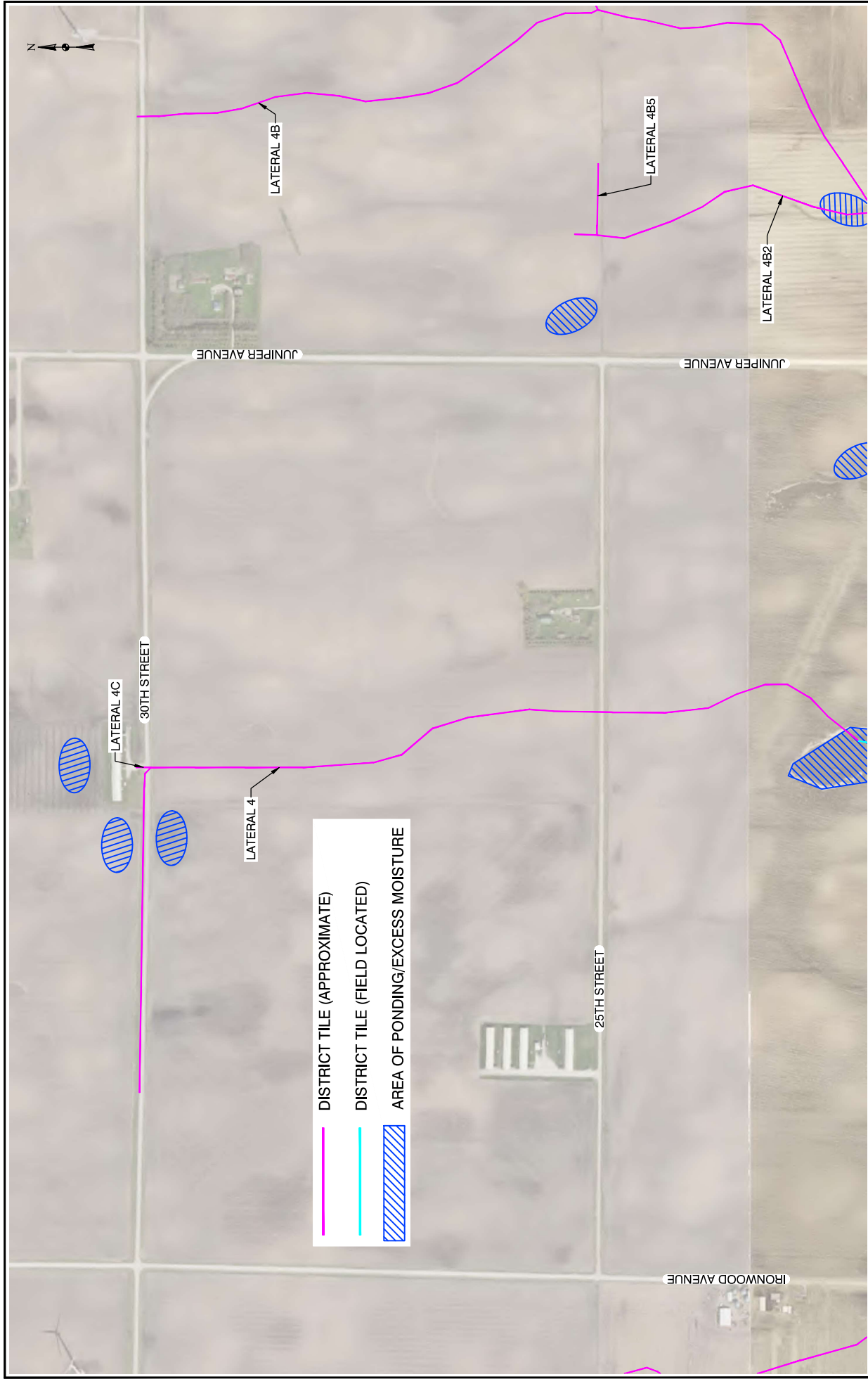




## Tabulated Contractor Time and Materials

Date	Totals	11/30/2020	12/1/2020	12/7/2020
Workman (hrs)	28 1/2	5	17	6 1/2
Backhoe (hrs)	14 1/4	2 1/2	8 1/2	3 1/4





GRAPHIC SCALE  
0 250' 500'

NO.	REVISION	BY	DATE	NO.	REVISION	BY	DATE

CGA  
Chapman-Stallier Associates, Inc.  
1414 First Street, Suite 200  
Franklin, Iowa 50525

DESIGNED: JAS	DATE: 12/21/2020
DRAWN: JAS	DATE: 12/21/2020
CHECKED: JAS	DATE: 12/21/2020
APPROVED: JAS	DATE: 12/21/2020

**DD 4-53 OBSERVATIONS**  
HARDIN AND FRANKLIN CO, IOWA

**LAT 4 WATERSHED MAP**

PROJECT NO.	55542
SHEET	2 OF 2



Warrant #

**DRAINAGE WORK ORDER  
REQUEST FOR REPAIRS**  
FRANKLIN COUNTY, IOWA

Work Order #: 143Fund #: 51162*laterals not divided  
out for release*District # F-H 4-53Lateral 4B1, 4B2 + 4B3Date 9/6/19Township LeeSection 34 <sup>SE 1/4</sup>Twp 90Rge 21Repair requested by Mike Nissley, Farm ManagerAddress PO Box 606, Iowa Falls, IAPhone 641-648-4285Landowner Corabel & Jerry MarkAddress PO Box 606, Iowa Falls, IAPhone 641-648-4285Site available for repair now? ☐ YES ☒ NODate available After harvestIdentification of repair: Broken or plugged tileRequest taken by Julie PralleOriginal cost of the district \$ F = \$24,540.31 (60%) Hardin = \$16,429.50 (40%)Potential wetlands? ☐ YES--Repair existing tile only☒ NO--Repair and maintain tile

Repair assigned to \_\_\_\_\_

Date \_\_\_\_\_

**"ATTENTION: Engineer & Contractor - PLEASE contact the person requesting this repair****BEFORE beginning ANY work at this location."**

Please send statement for services to:  
**FRANKLIN COUNTY AUDITOR**

ATTN: DRAINAGE  
PO Box 26  
Hampton, IA 50441

auditor@co.franklin.ia.us

Phone: (641) 456-5622

Fax: (641) 456-6001

Please include the GPS coordinates of the location of the  
repair on your bill to Franklin County  
(For example, 93°18'39.67 W 42°39'31.7 N)  
Thank you!!

Latitude: \_\_\_\_\_

Longitude: \_\_\_\_\_



## RESOLUTION 2016-18

FRANKLIN COUNTY  
INVESTIGATION OF DRAINAGE DISTRICTS PER REQUESTS

NOW, on this 31<sup>st</sup> day of May, 2016, the following resolution was presented to the Board of Supervisors acting as Drainage District Trustees:

WHEREAS, said Trustees believe that it is in the best interests of drainage districts that individuals, landowners, or entities making requests for district investigation of repairs be responsible for the costs of those investigations in the event that the source of the need for repairs would be privately owned tile and not part of the drainage district facilities or no problem is found and the drainage district facility is anything other than open ditch.

BE IT RESOLVED that in the event any individual or entity makes a request to the drainage district to investigate proposed repairs which require the district to expend funds to determine the location of needed repairs, feasibility of repairs, or any other costs incurred in connection with investigating the request and that in the event in the course of investigation it is discovered that the drainage tile or related structures needing repair are not under the drainage district's control, then the individual, landowner, or entity requesting the investigation shall be responsible for payment of any expenses incurred by the district. If said investigation results in no problem discovered, said requestor is responsible for payment of any expenses incurred by the district. This does not apply to drainage district facilities that are open ditches. If the investigation in the district finds a problem with district facilities, then said district will be responsible for payment of any expenses incurred by the district as allowed by Iowa Code.

The Board of Supervisors acting as Drainage District Trustees authorize the Franklin County Auditor to prepare the necessary form for the individual, landowner, or entity to execute prior to any investigation (except open ditches) in a form necessary to carry out the intent of this resolution.

BE IT DULY ADOPTED this 31<sup>st</sup> day of May, 2016, with the vote thereon being as follows:

AYES: Eberling, MoVloker, Nolte

NAYS:

ABSENT/NOT VOTING:

FRANKLIN COUNTY BOARD OF SUPERVISORS

Corey Eberling  
Corey Eberling, Chairman

Gary MoVloker  
Gary MoVloker

Michael Nolte  
Michael Nolte

I have read and agree to the terms of this Resolution:

Corbett Mark & Terry Mark  
As Michael P. Vloker, Agent  
Requestor

9/6/19  
Date

F-H-4-53  
Drainage District

ATTEST:

Michele S. Giddings  
Michele S. Giddings, Auditor & Clerk to Board

CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

04/14/2020

PROJECT NUMBER:

DD WO # 143

DAYS OF WEEK:

S M W T F S

COUNTY, ROUTE, ROAD:

6500.2/DD# F-H 4-53  
SOUTH OF 25TH STREET  
EAST OF JUNIPER AVE

SHEET NO.

1 OF 1

LOCATION:

JDD# F-H 4-53 LAT 4-B-2 W 1/4 SW 1/4  
34-90-21 FRANKLIN

MID 20'S TO MID 30'S CLOUDY  
& WINDY

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB  
NAME, ITEM NO. AND LOCATION

8:44 A.M. OBSERVER CALLED MIKE NISSELY ABOUT BROKEN OR  
PLUGGED TILE AND LEFT A MESSAGE.

9:47 A.M. MIKE CALLED BACK AND LEFT MESSAGE WITH TENANTS  
NUMBER LANDON ALDINGER 515-689-1842.

10:50 A.M. OBSERVER CALLED LANDON AND HE WOULD STOP BY  
TOD LOOK AT THINGS WITH ME.

11:10 A.M. LANDON ON SITE. LANDON SAID IN 2018 IT WAS  
WET BUT COULD STILL FARM PLACES. 2019 IT WAS  
WET ENOUGH THAT SOME SPOTS NOT PLANTED OR HARVESTED.  
LANDON SHOWED OBSERVER WATER STANDING IN FIELD  
EAST SIDE OF ACREAGE SOUTH OF 30TH STREET 532.8' ± EAST  
OF EAST ROW JUNIPER AVENUE WITH COUNTY BEEHIVE UNDER  
WATER WITH 85' NE-SW X 270' ± NW-SE AREA OF FIELD WITH  
STANDING WATER. COUNTY MAP SHOWS JDD. F-H 4-53 LAT 4B RUNS  
EAST OF 1/4 MILE LINE & WET AREA IS BETWEEN 532.8'  
700'. LANDON ALSO NOTED THAT WHEN CREW WAS  
PUTTING ON ANHYDROUS THEY DID NOT SEE ANY AREAS  
THAT WERE BLOWN OUT OR WATER VISIBLE, OBSERVER  
RODE OUT WITH FOUR WHEELER AND ONLY FOUND AREA  
THAT WAS DARK WITH NO CROP & REWORKED. SEE -  
ATTACHED SHEET 1 AND AREA NORTH OF ABANDONED  
RAILROAD TRACKS SEE ATTACHED SHEET 2. LAT 4-B2 OR  
LAT 4B ARE NOT NEAR THESE LOCATIONS

11:40 A.M. LANDON LEFT SITE. 12:13 P.M. PICTURE # 33478

12:31 P.M. PICTURE # 3348 SEE PICTURE FOR DETAILS.

12:30 P.M. DONE WITH THIS SITE.

I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

Dean Pearson

Date Prepared:

04/14/2020

Reviewed by:

☐ Engineer

Date Reviewed



SHEET #1

# Beacon<sup>™</sup> Franklin County, IA

https://beacon.schneidercorp.com/application.aspx?appid=150&layerID=1&72&pageTypeID=1&pageID=975

Layers - Map Search Compare Results Report Soil Report

Layers Legend

- Quick Links:
- [Property Search](#)
  - [View Map](#)

Layers:

- ☒ Geographic Township
- ☒ Corporate Limits
- ☒ Roads
- ☐ Road ROW
- ☐ Cadastre Lines
- ☐ Lot Lines
- ☐ Road Dimensions
- ☐ Sections
- ☐ Subdivision Annotations
- ☐ Subdivisions
- ☐ Lot Annotations
- ☐ Railroad Annotations
- ☐ Railroad ROW
- ☐ Water
- ☐ Parcel Dimensions
- ☒ Parcels
- ☐ Cartography
- ☐ Enterprise Zones
- ☐ Soils
- ☐ CSR Soils
- ☐ Conservation Lands
- ☐ Two Mile Boundary
- ☐ School Districts
- ☐ Voting Districts
- ☐ Zoning
- ☐ Flood Boundary
- ☐ Drainage Districts
- ☐ Land Use
- ☒ 2017 Imagery
- [Restore Layer Defaults](#)



Parcel ID: 143440002  
Sec/Twp/Rng: 34-90-21  
Property Address: 34-90-21  
District: Brief Tax Description  
143440002  
NE SE  
NOTE: Not to be used on legal documents

Alternate ID's  
Class: A  
Acreage: 39.75

Owner Address: Mark Corbell Revocable Trust  
C/O Nishy and Nishy  
PO Box 606  
Iowa Falls, IA 50126

Results:

Parcel ID: 143440002  
Owner: Mark Corbell  
Revocable Trust  
C/O Nishy and Nishy (OEO)  
Acres: 39.75  
View Results | Soil Report | Google



Type here to search





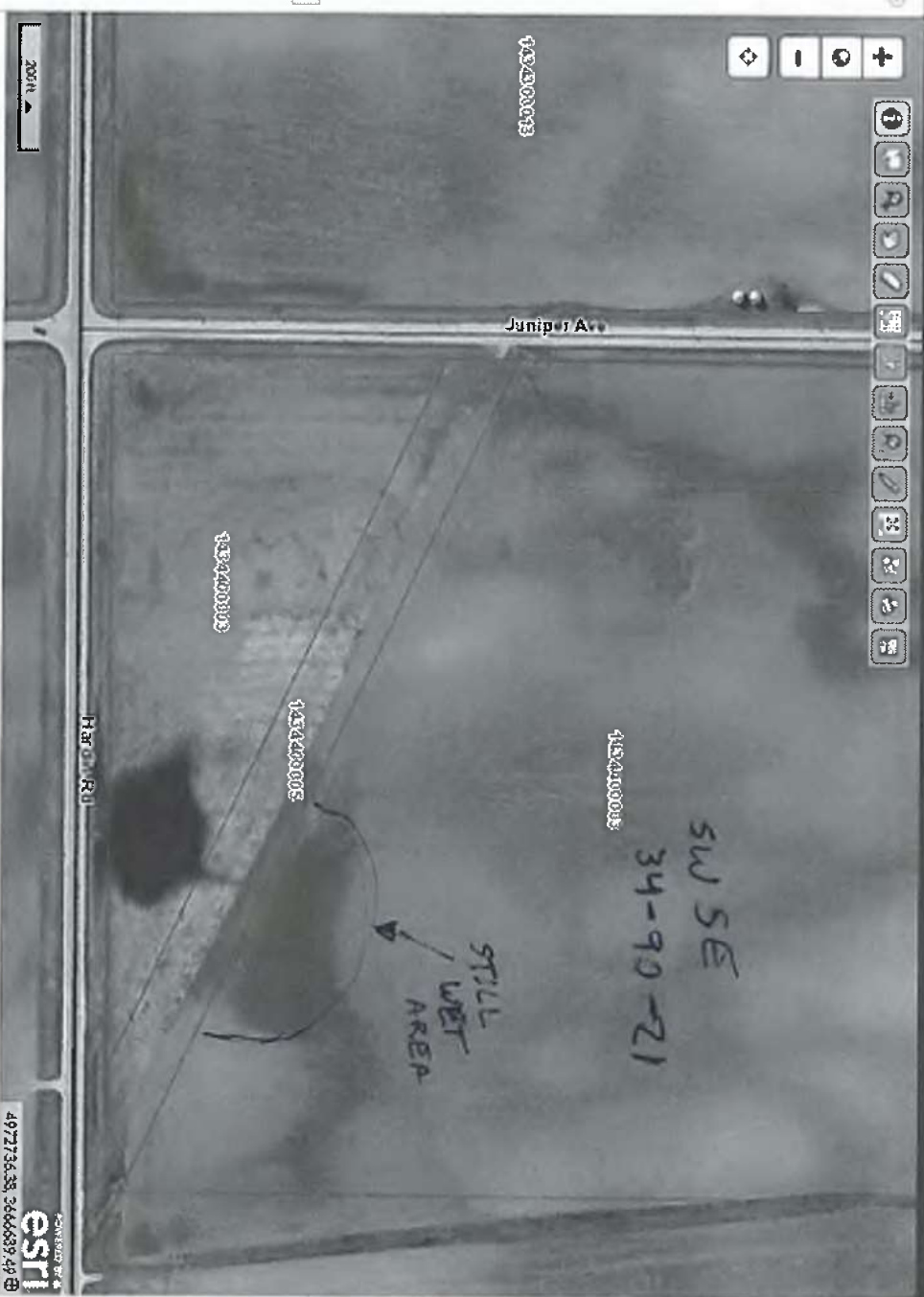
SHEET 2

- Quick Links:
- ☐ Property Search
  - ☐ View Map

Layers:

- ☒ Geographic Township
- ☒ Corporate Limits
- ☒ Roads
- ☐ Road ROW
- ☐ Cadastre Lines
- ☐ Lot Lines
- ☐ Road Dimensions
- ☐ Sections
- ☐ Subdivision Annotation
- ☐ Subdivisions
- ☐ Lot Annotation
- ☐ Railroad Annotation
- ☐ Railroads
- ☐ Railroad ROW
- ☐ Water
- ☐ Parcel Dimensions
- ☒ Parcels
- ☐ Cartography
- ☐ Enterprise Zones
- ☐ Soils
- ☐ CSR Soils
- ☐ Conservation Lands
- ☐ Two Mile Boundary
- ☐ School District
- ☐ Voting Districts
- ☐ Zoning
- ☐ Flood Boundary
- ☐ Drainage Districts
- ☐ Land Use
- ☒ 2017 Imagery

Beacon™ Data



Parcel ID: 1434400002  
Sec/Twp/Rng: 34-90-21  
Property Address:  
District:  
Brief Tax Description:

Alternate ID: a  
Class: A  
Acreage: 39.75  
Owner Address: Mark Corabel Revocable Trust  
C/O Nisly and Nisly  
PO Box 606  
Dow Falls, IA 50125

4972736.38 3666639.49  
esri

Result:  
Parcel ID: 1434400002  
Owner: Mark Corabel  
Revocable Trust  
C/O Nisly and Nisly (DEO)  
Acre: 39.75  
View Report | Soil Report | Google

Type here to search



N-S SEE SHEET #2  
PICTURE # 3347 IS LOOKING SOUTH AT 255' X 72' E-W WET  
AREA THAT WAS REWORKED & WET AT ONE TIME, LAT 4-BZ OR  
LAT 4-B NOT NEAR THIS AREA ACCORDING TO MAP

PICTURE # 3348 IS LOOKING NORTH AT 72' E-W X 255' N-S  
AREA THAT WAS WET AND HAS BEEN REWORKED. LAT 4B-2  
OR LAT 4B NOT IN THIS AREA





6/1/20

650.2

S	<del>M</del>	T	W	T	F	S
---	--------------	---	---	---	---	---

6500. 101

OF

Jumper

DD. 00 4-53 FRANKLIN/HARDIN

As usual there are multiple things that need repaired. Please look drawings to DD5 is already completed.

WATER AREAS IN LAT 4-B SHED ARE  
PROGRESSIVELY BEING PICKED UP BY  
COUPONS @ 4 TO LAT 4

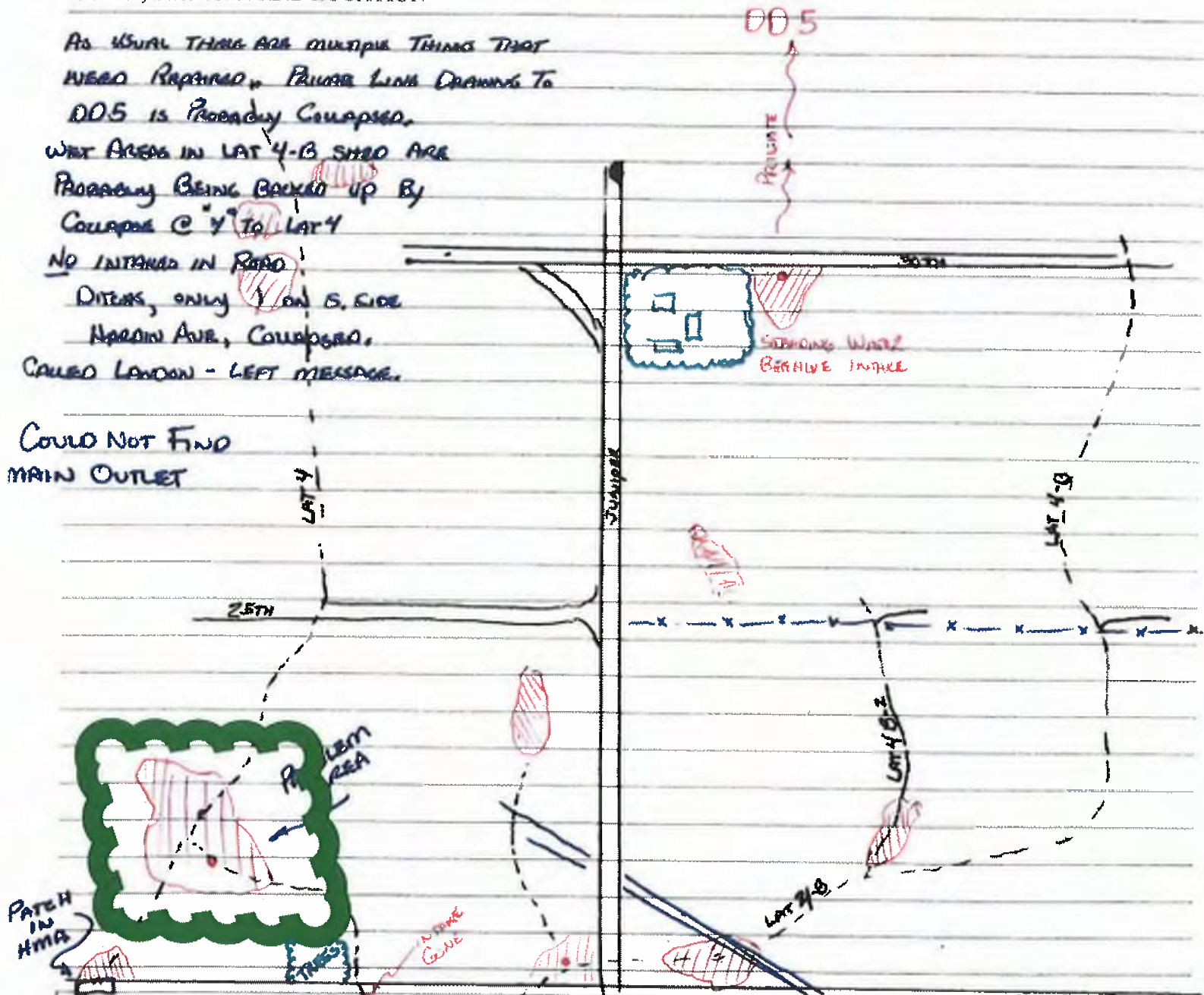
NO INTEREST IN R&D

DIVERS, ONLY 1 on S. side

Neeson Ave, Campbell, CA

Called London - Left message.

COULD NOT FIND  
MAIN OUTLET



☒ Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Full On

6/1/20

Reviewed by:

Engineer

Date Reviewed



Problem Area @ LAT 4 / LAT 4B CONNECTION



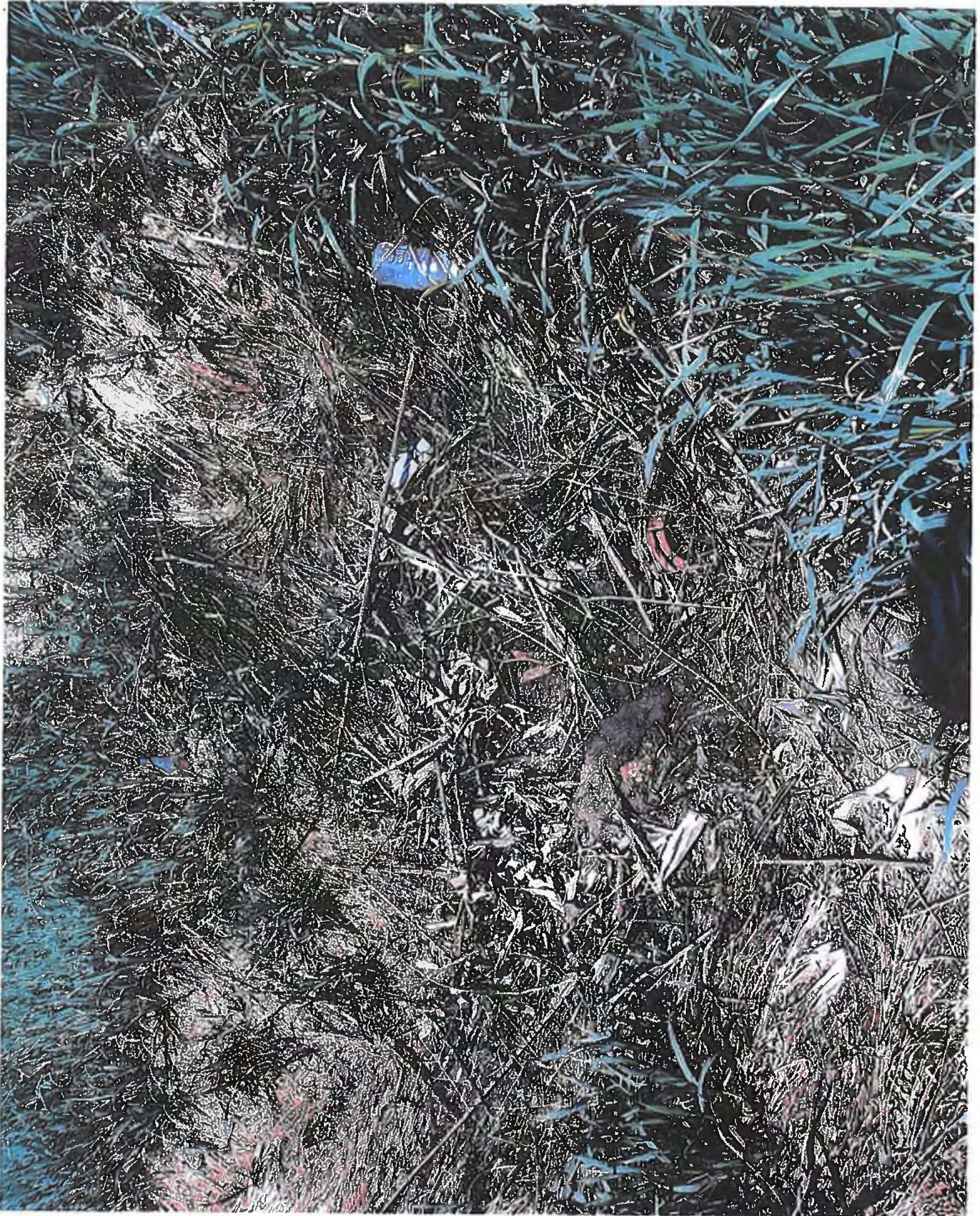


LOOKING DOWNSTREAM ON LAT 4B PASS AUSTREES + COTTONWOOD



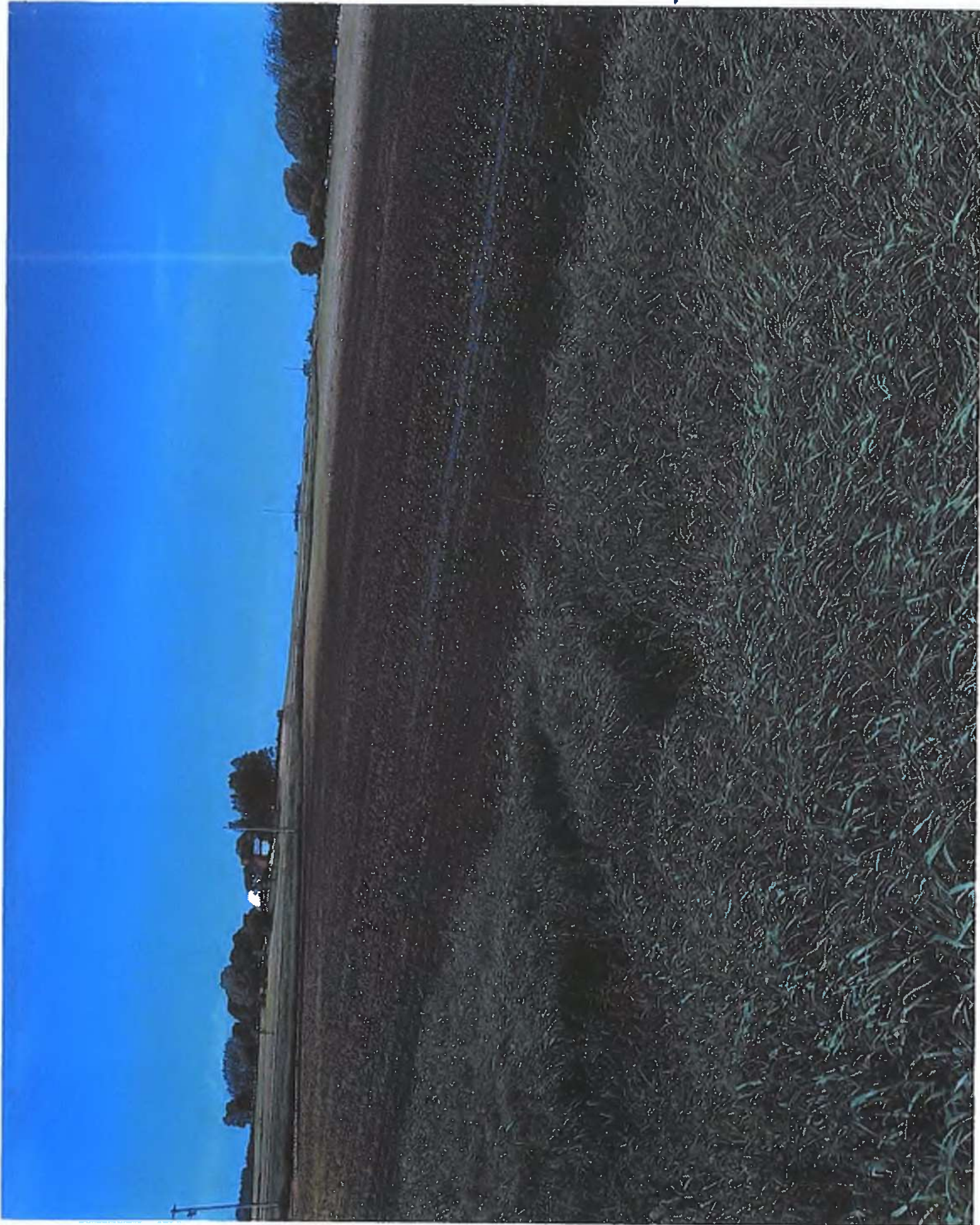


COLLAPSED INTAKE ON LAT 40, S. SIDE HARDIN ROAD (HMA) C73





LOOKING DOWNSTREAM ON LAT 4/B FROM JUNIPER ST. (N-5)





LOOKING DOWNSTREAM ON LOT 4B @ OLD RR. TIM CHARD (Purple)



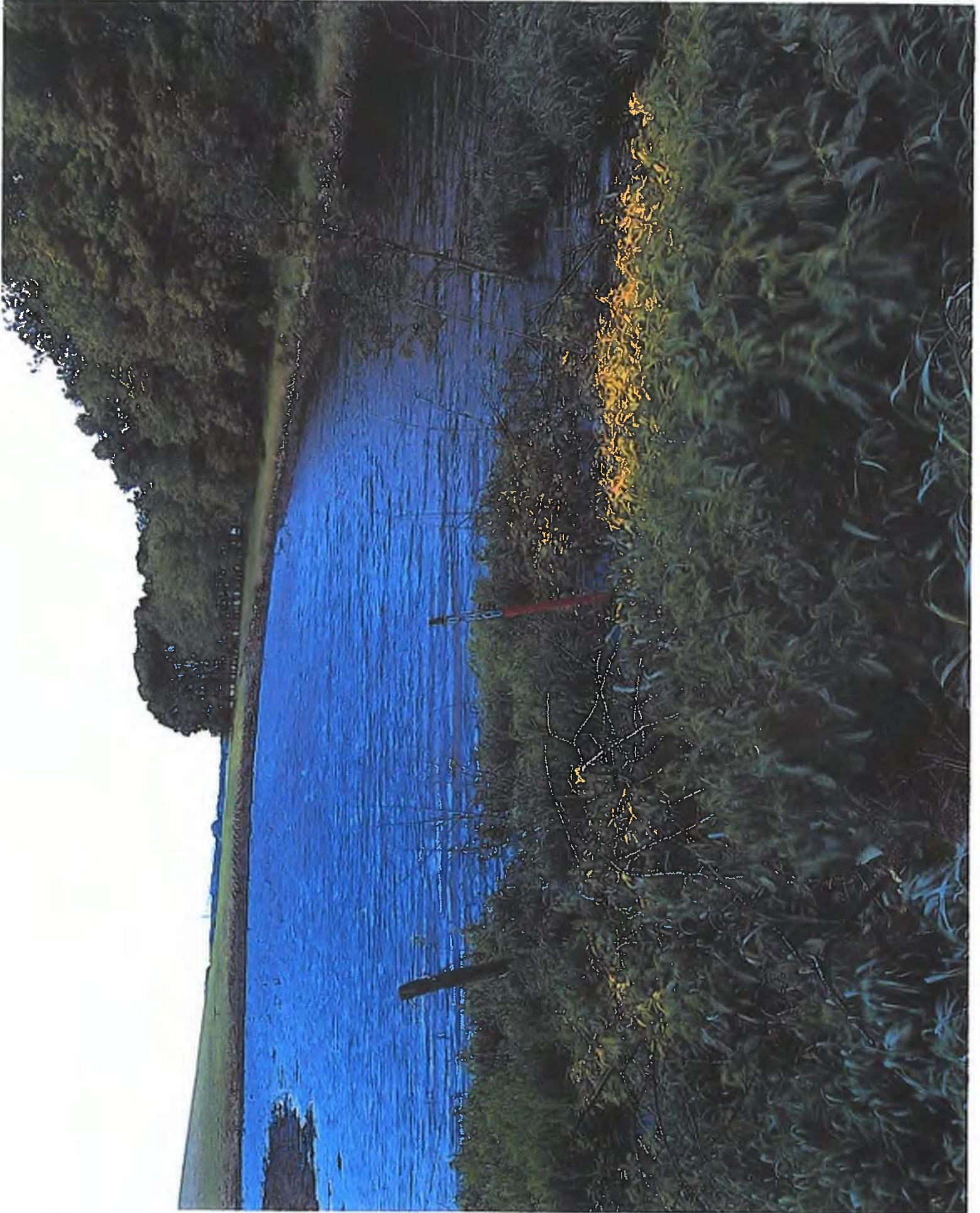


Looking upstream on LAT413 @ OLD RR



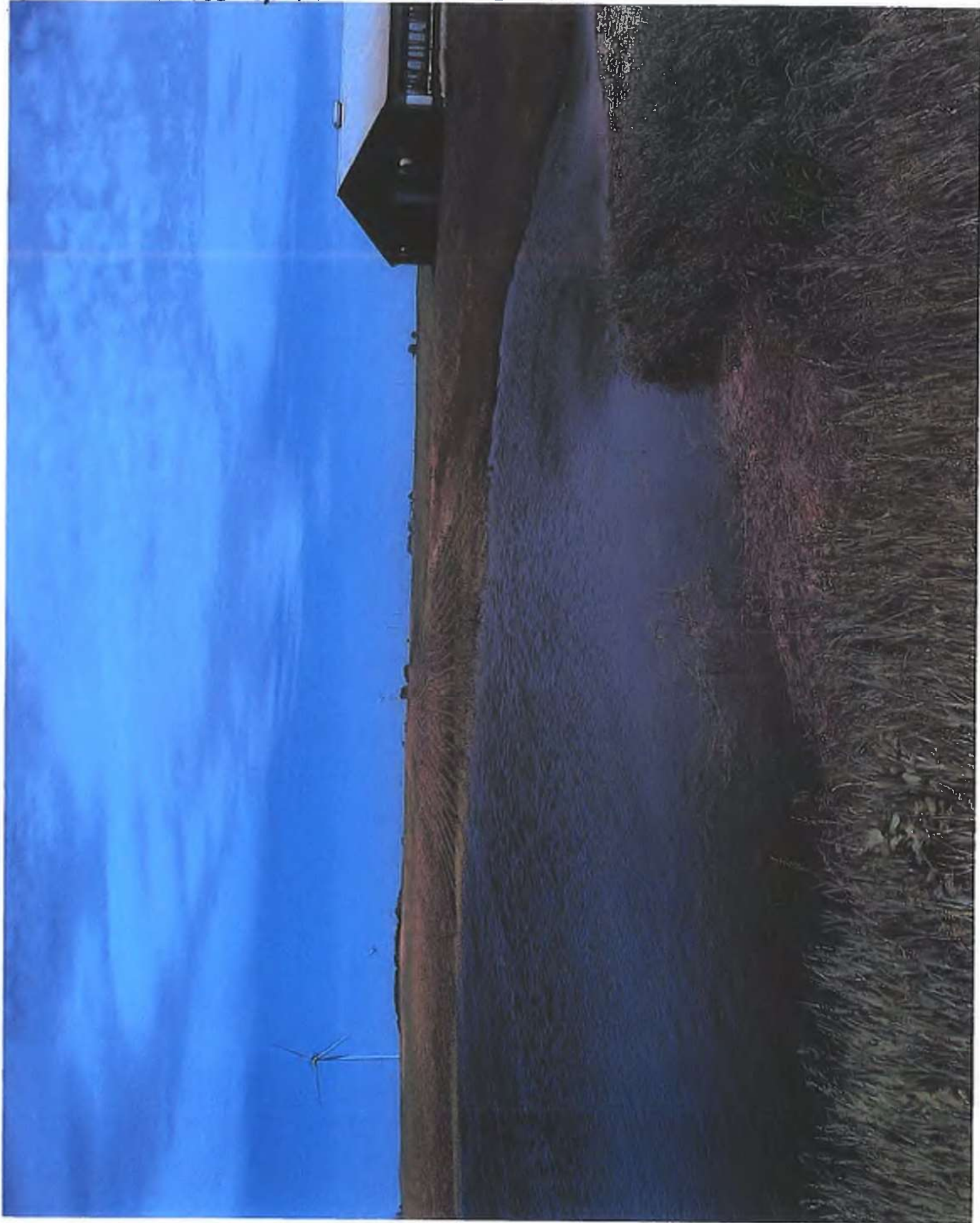


Looking upstream on Private Line in DD5 @ 30th St.



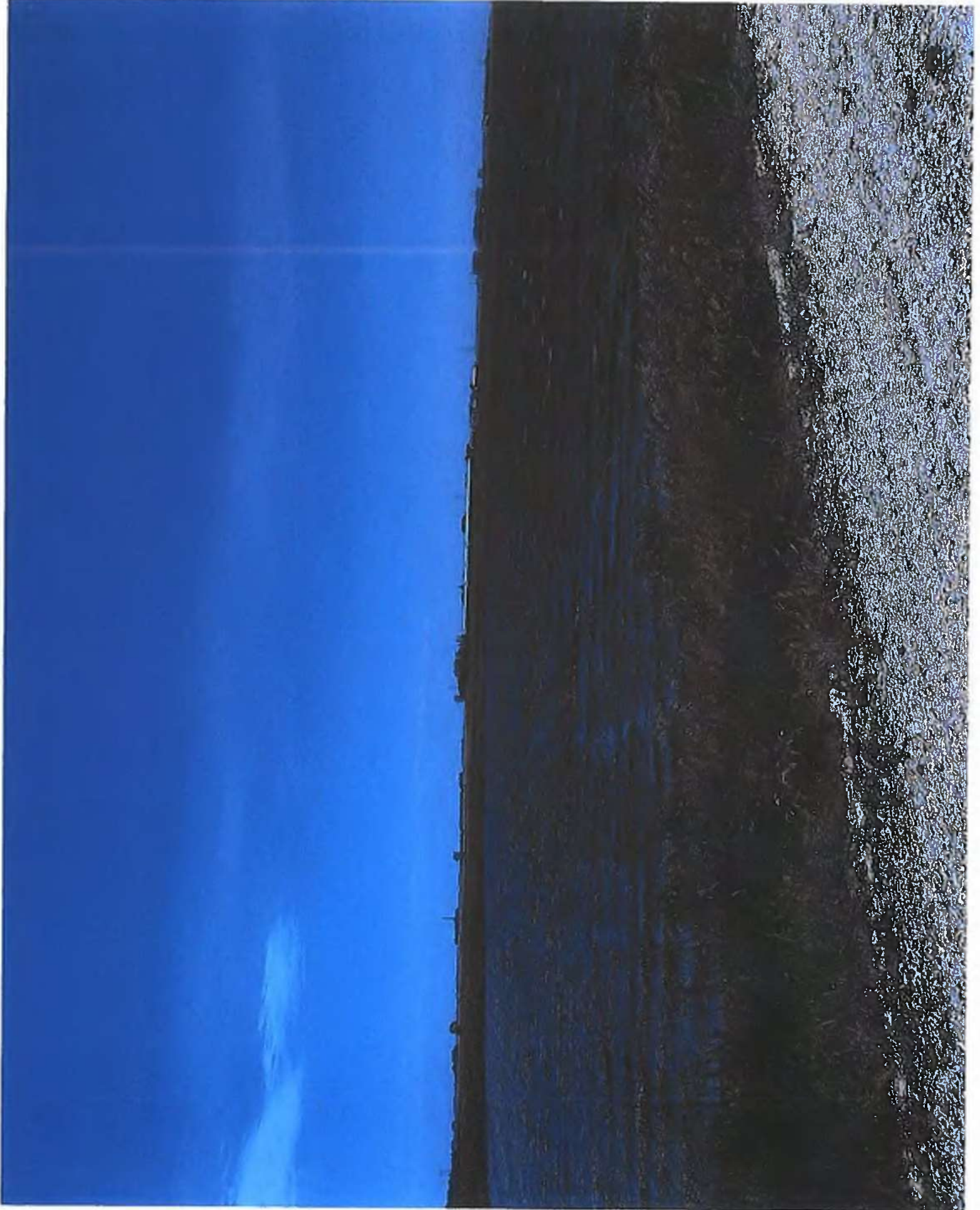


Looking upstream on Lat 4 @ 30th St.





Looking downstream on Lat 4 @ 30th St.



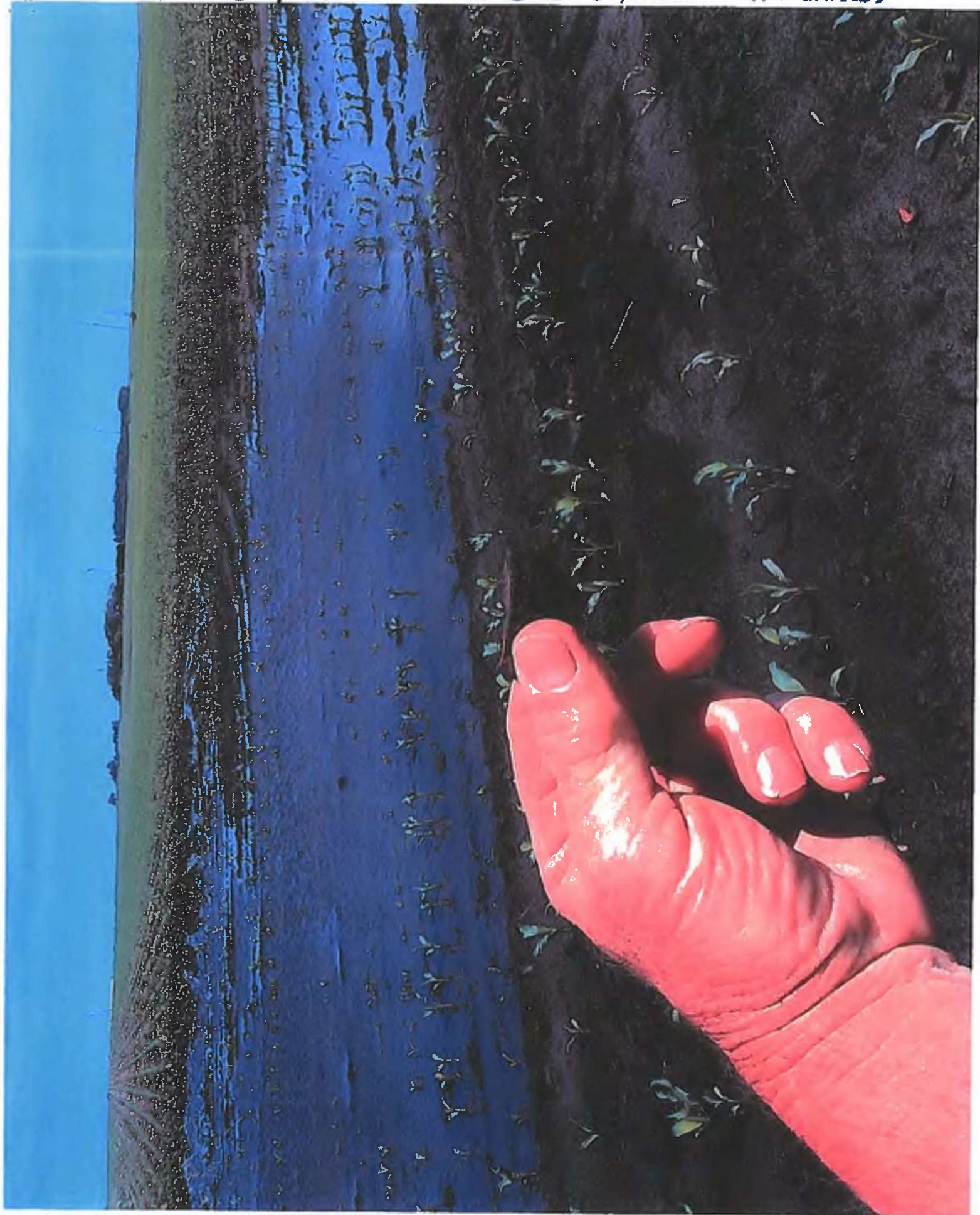


LOOKING UPSTREAM ON LAT 4 @ C73



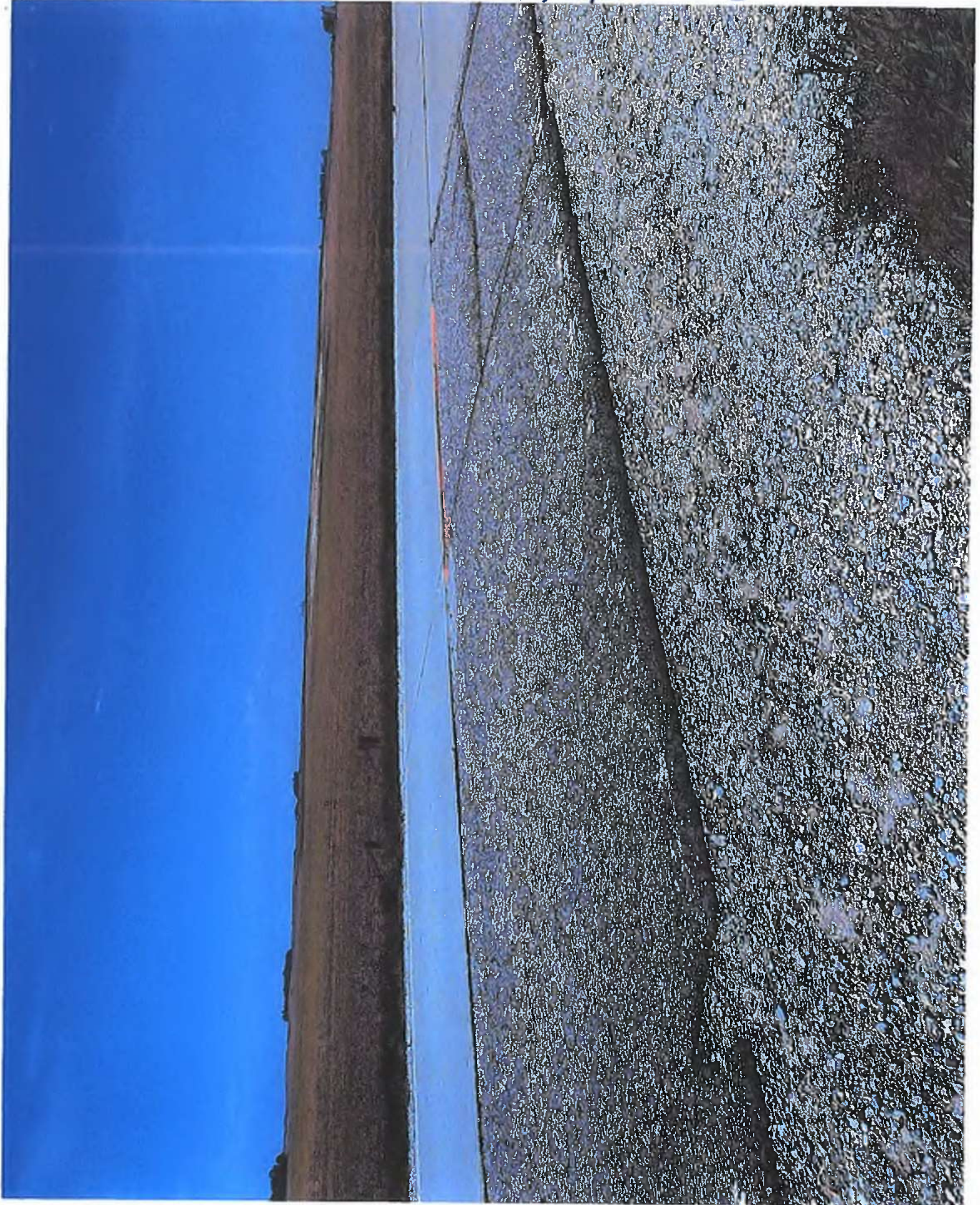


LOOKING UPSTREAM ON LAT 4 @ C73, LOTS OF TILACITAROS





LOOKING DOWNSTREAM @ LAT 4, REPAIR IN C73





OUTLET AREA FOR JDD 4-53, CANT FIND EASILY, CANT HEAR WATER





CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

6/12/20

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF 1

PROJECT NUMBER:

6500.2

COUNTY, ROUTE, ROAD:

DD F.H. 4-33

LOCATION:

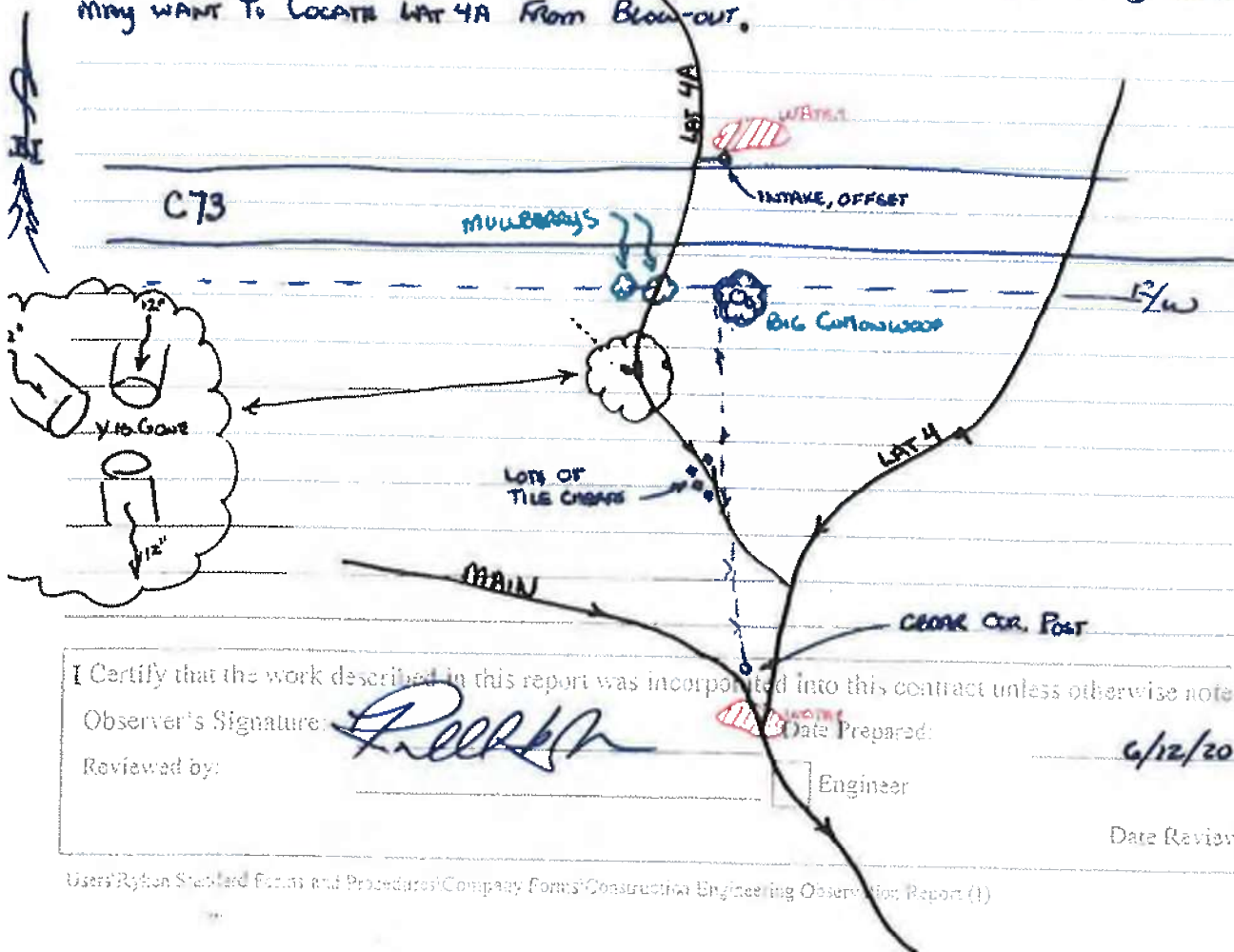
HARDIN ROAD SOUTH

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR SUB NAME, ITEM NO. AND LOCATION

Sunny, 70°, calm, drying day

Parked on S. Side Hardin Rd. (C73), walked to Blow-out in Field Found 12" x 12" x 12" Clay Y Gove. Looks Like Farmer was Digging Hole and Exposed Tile. Lat 4A is Visibly Flaming, Priv. Lat To NW, not so much. Tile is Full 1" Above Tile Top. Walked downstream to Lat 4A - Lat 4 connection. Lots of Tile Channels on Surface, no water standing. Walked downstream to Lat 4 - main connection, some water standing, no blow-outs. Walked back to C73, lined up 12" clay Lat 4A to NE to Mulberry Tree @ R/W, Cottonwood Tree to East may be @ 100'. Walked north across C73, found wet spot/tile channels and 6" steel intake in N ditch of C73 (E-W) across from Cottonwood Tree (that has Bicycle in Crown,

Repair Blow-out with man. HOPE "Y", Pump up with short sticks of HOPE/LOVE. COLLARS, ROCK. Tile is 3' deep. Remove @ Least the Mulberry on R/W may want to locate Lat 4A from Blow-out.



I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

[Signature]

Date Prepared:

6/12/20

Reviewed by:

Engineer

Date Reviewed

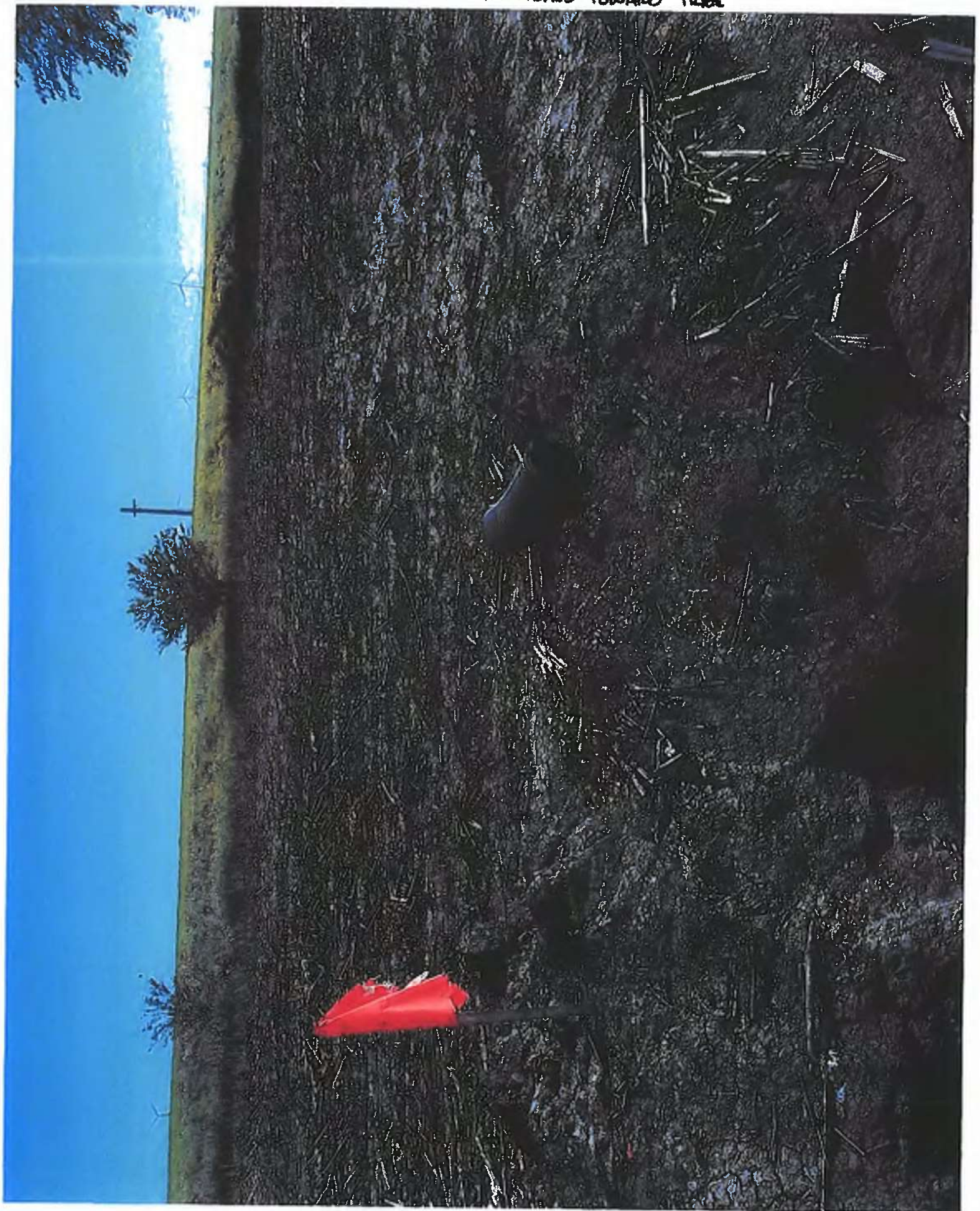


missing "y"



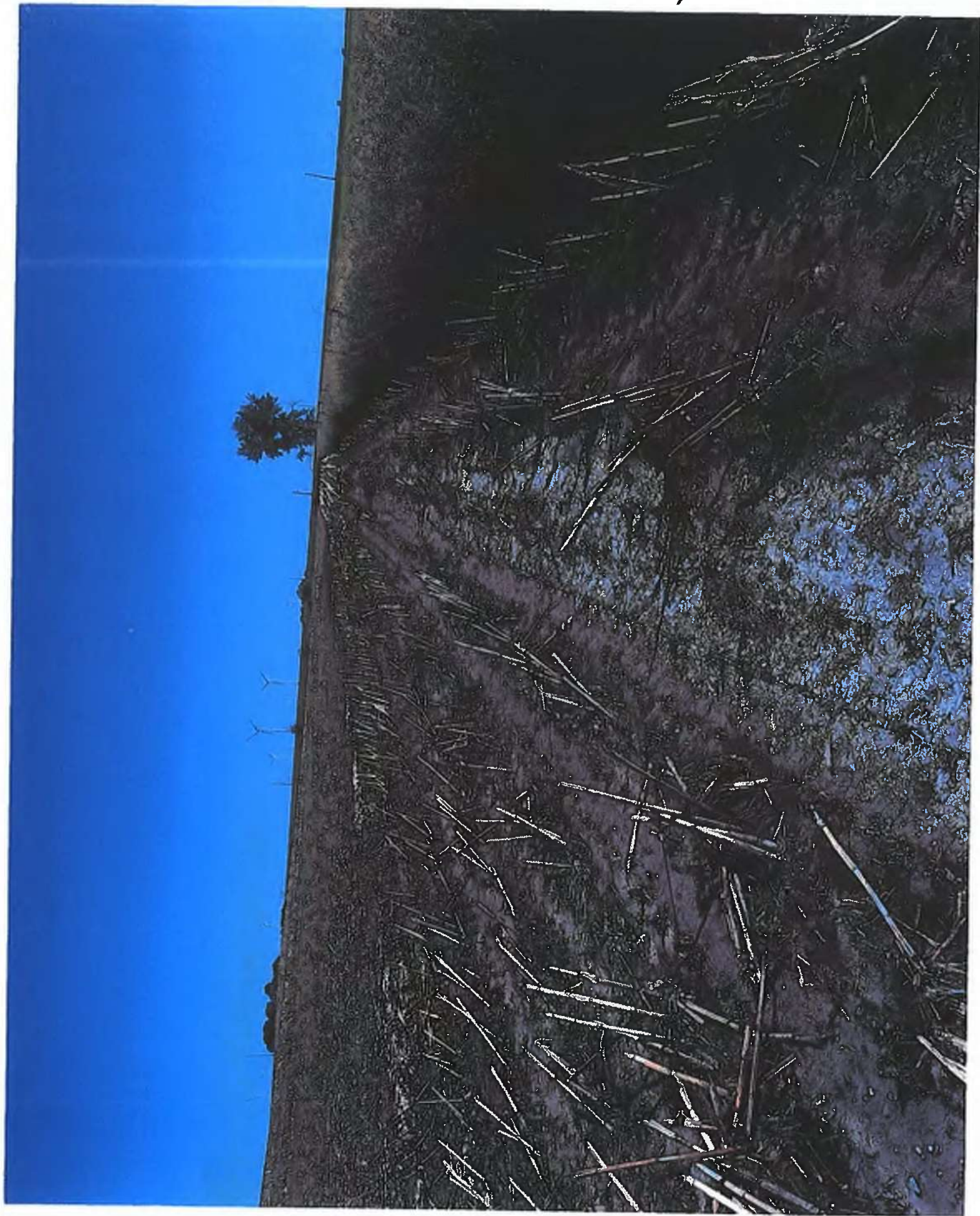


LOOKING N. LAT 4A HEADS TOWARD TREE





LOOKING N. ALONG FENCE @ TIRE/FENCE XING LATHA



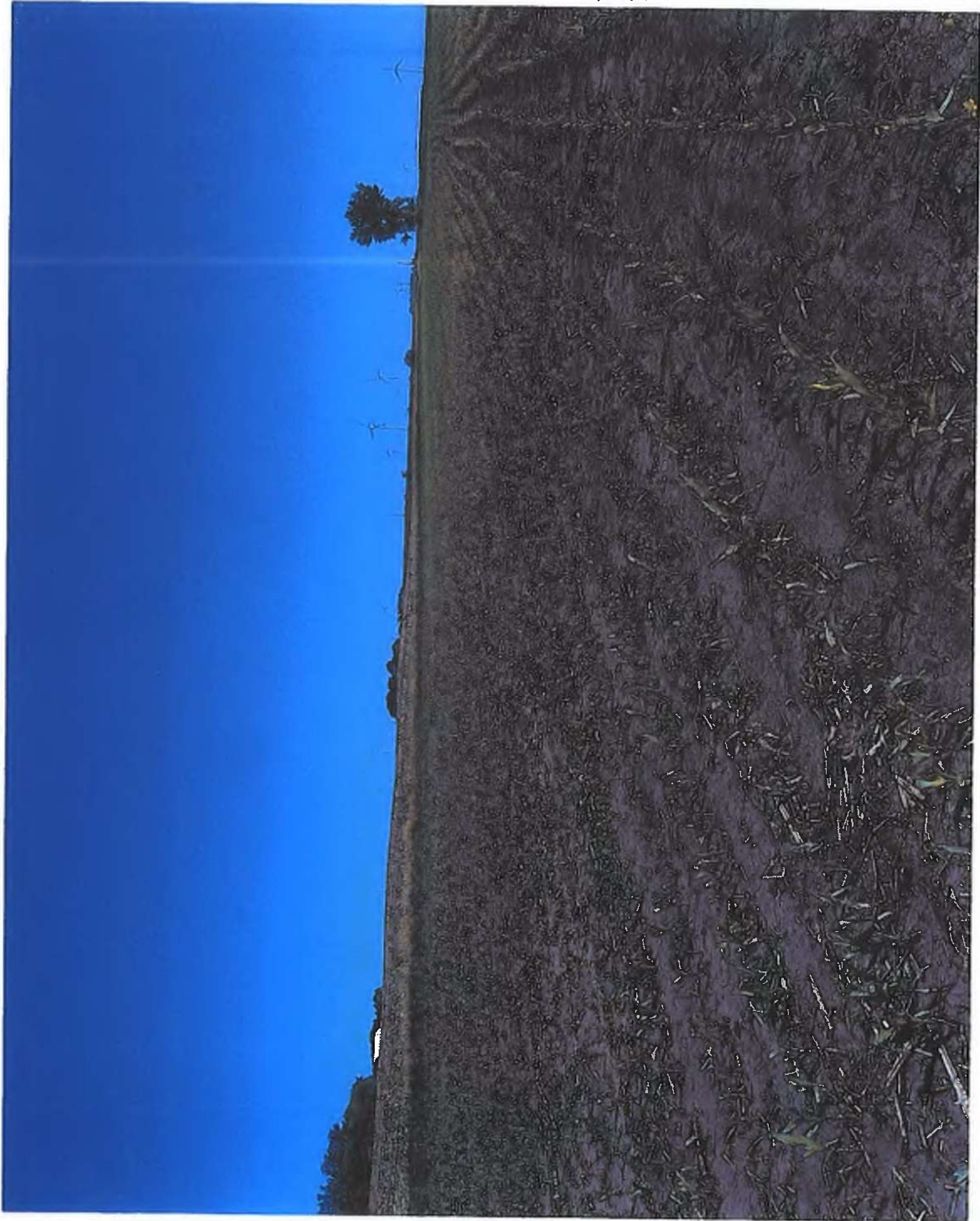


LOOKING N/E ON LAT 4 ROUTE @ LAT 4A CONNECTION AREA



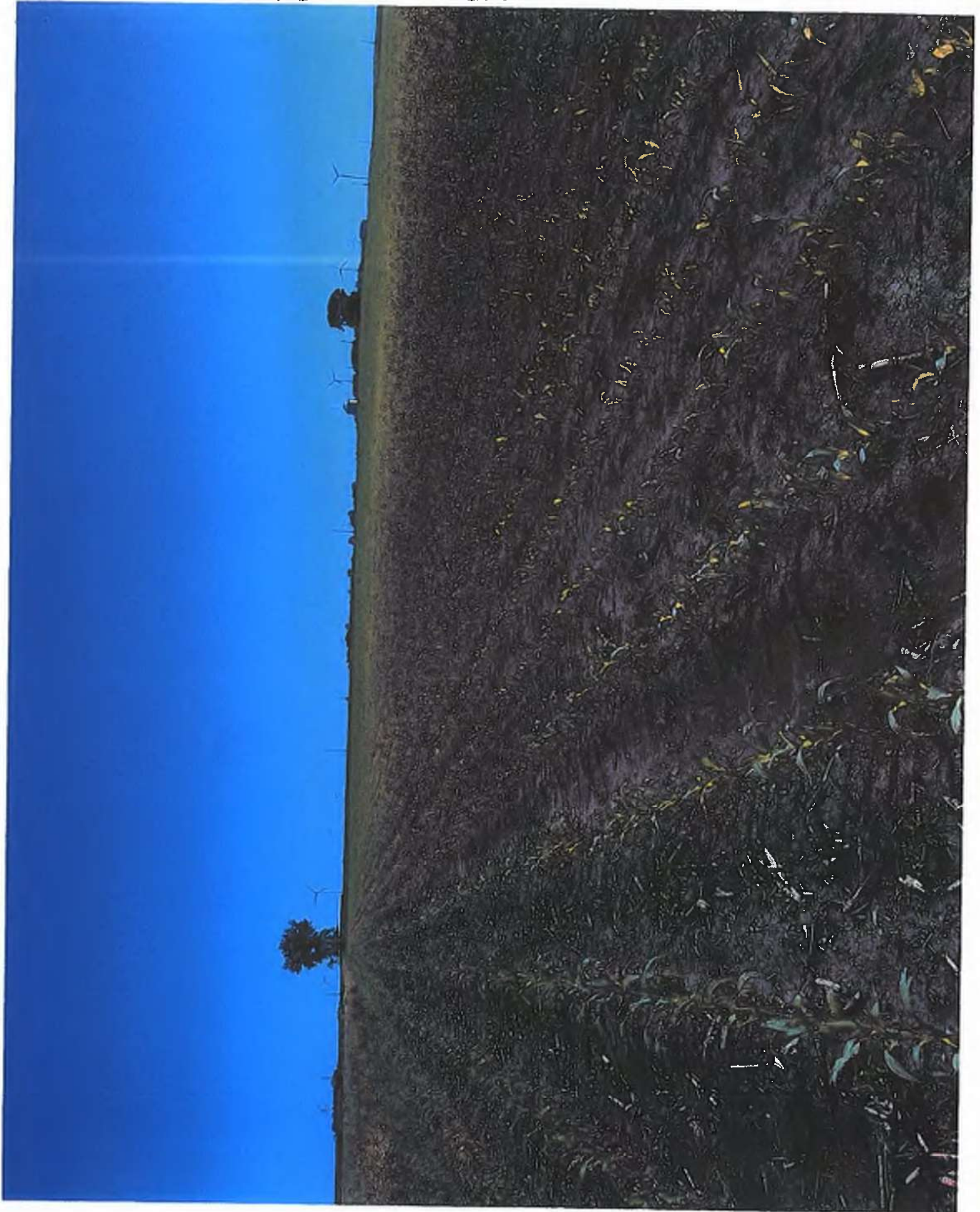


LOOKING NW @ LAT 4A ROUTE FROM LAT 4



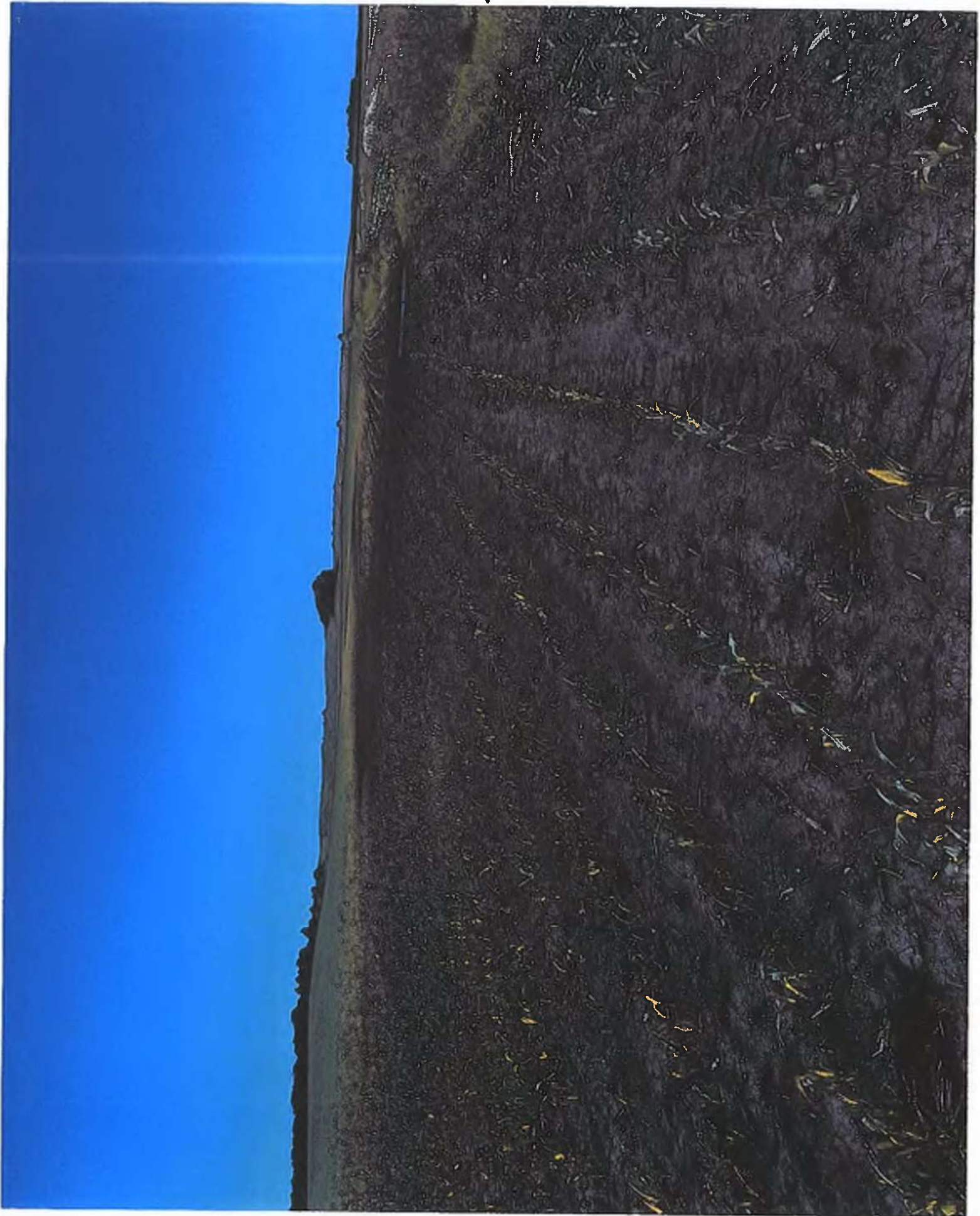


Looking N. down Fence



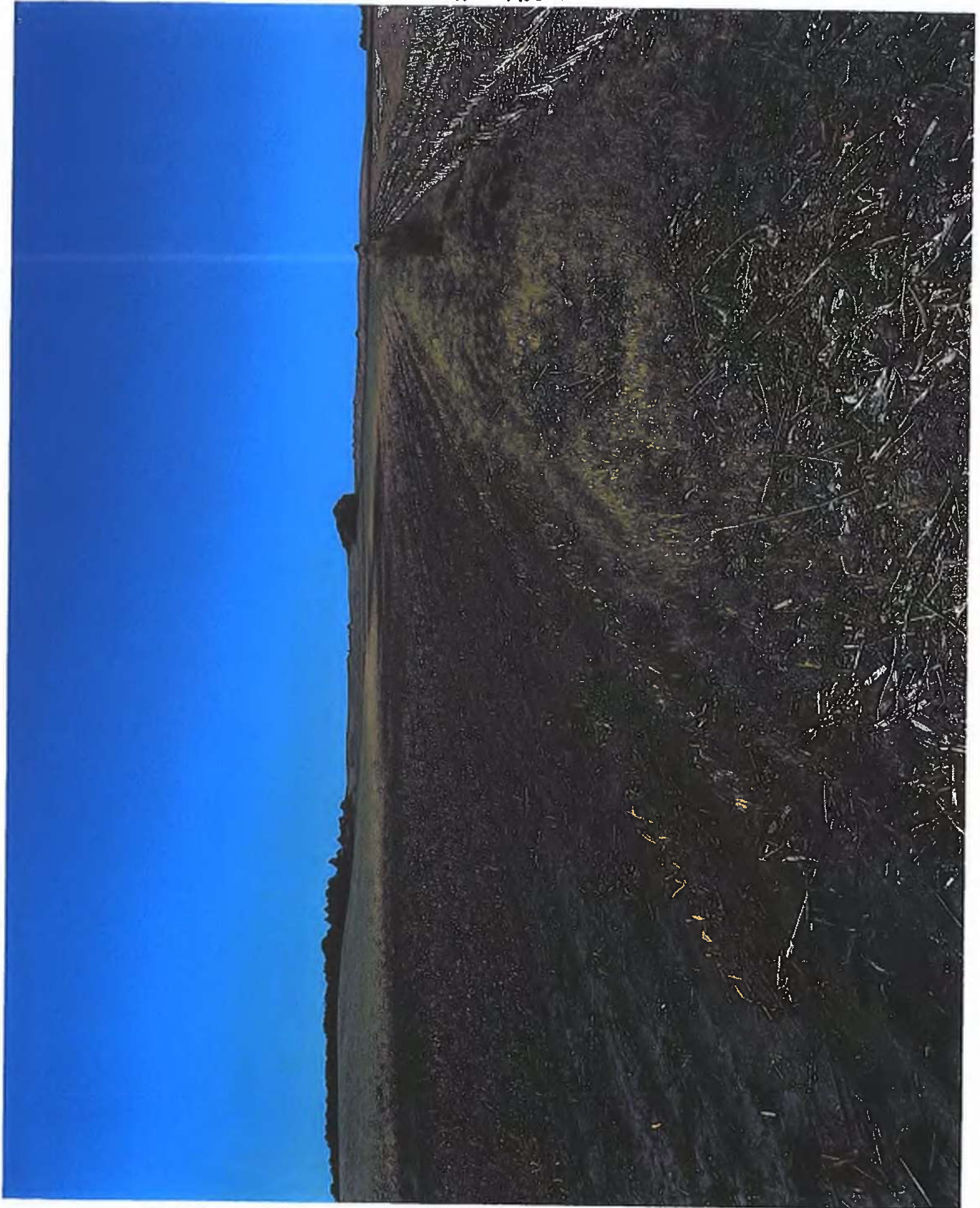


Water Stagnant over Top main

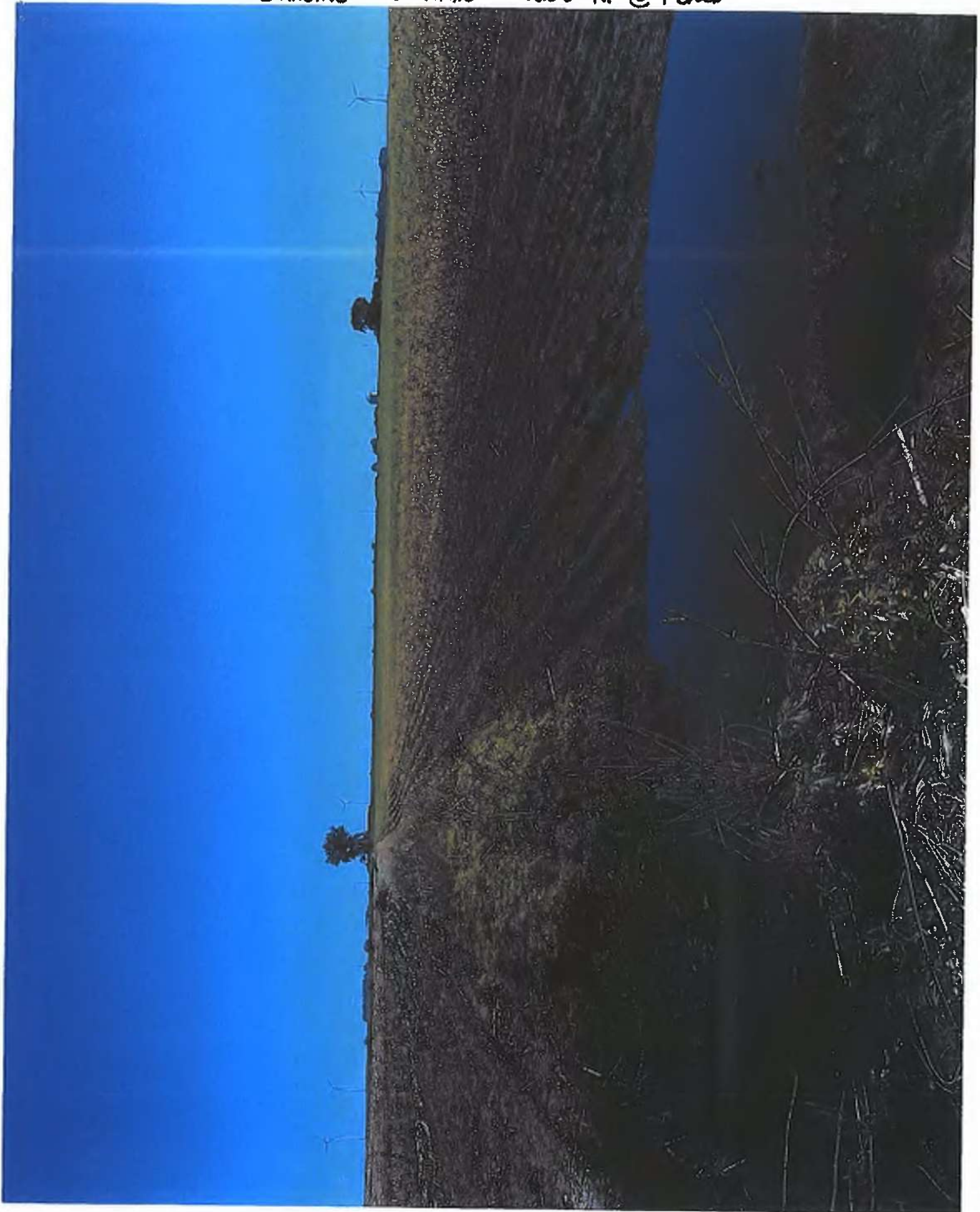




Looking SE @ main Route

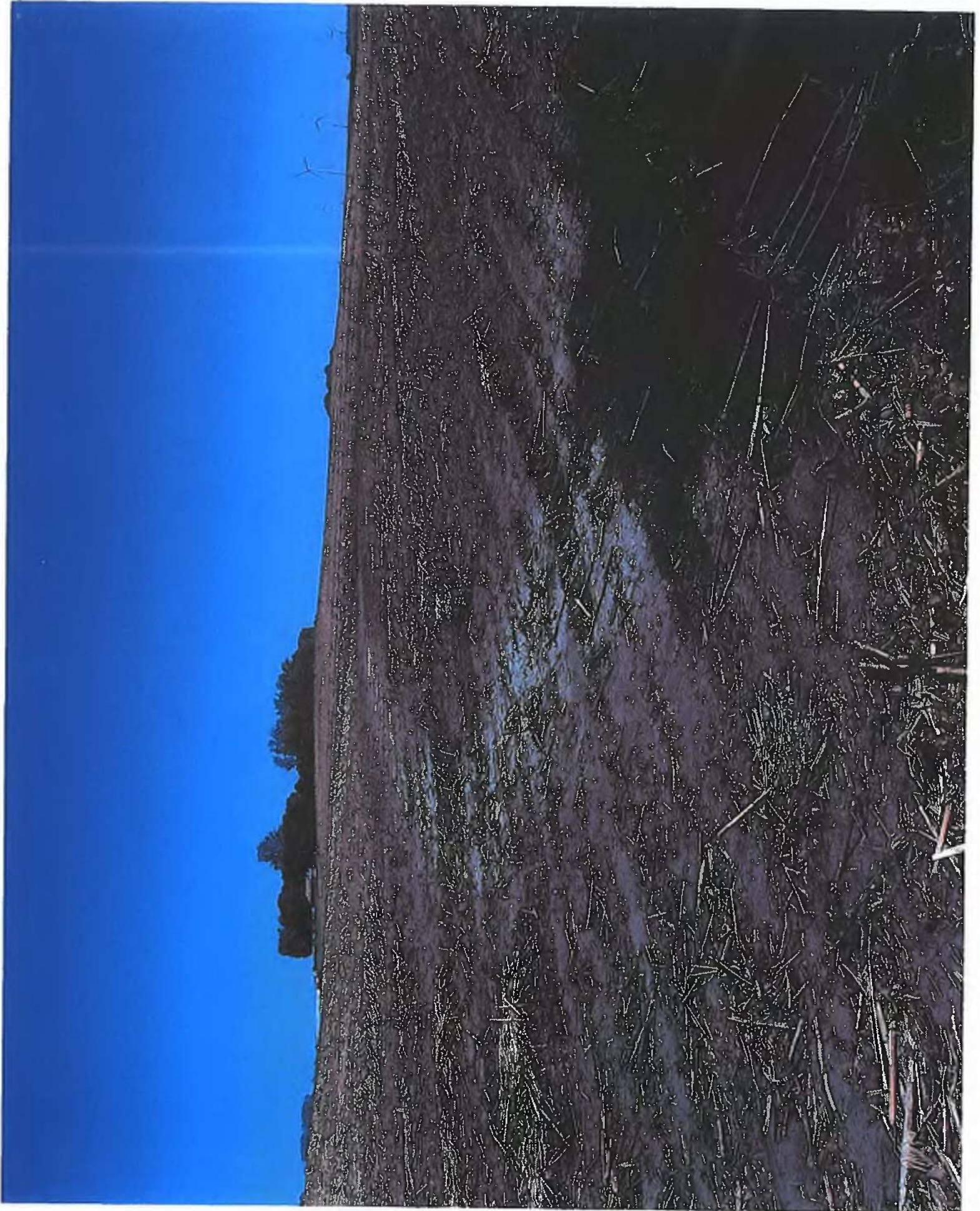


STANDING ON MAIN LOOKING N. @ Fence





MAIN ROUTE



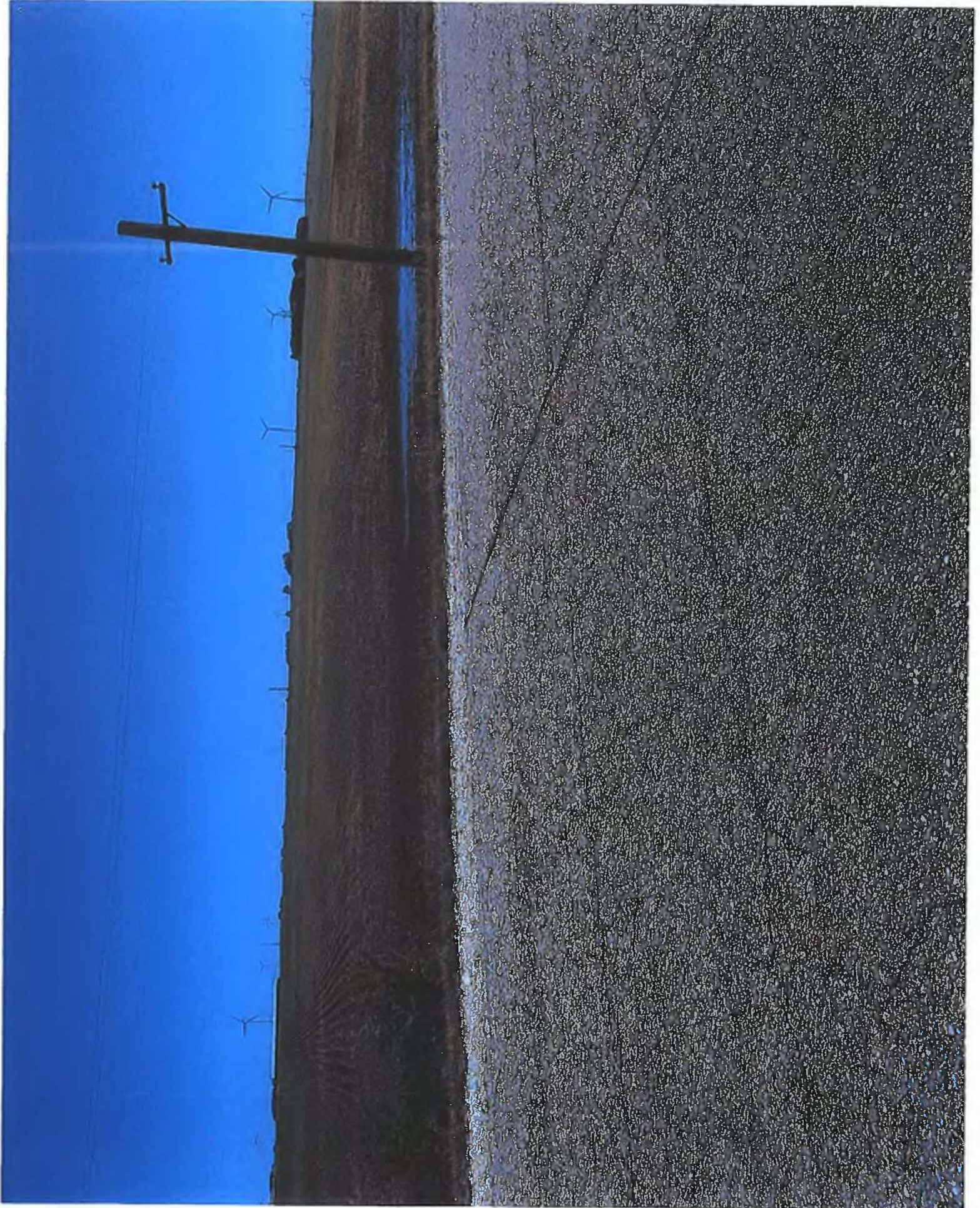


COTTONWOOD TREE E. OF LAT 4A @ S. R/W Hwy





LOOKING N. ON LAT 4A





GRAND PIPER ON INTAKE OFFSET NEEDS WORK





CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

11-30-20

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF

PROJECT NUMBER:

6500.2

COUNTY, ROUTE, ROAD:

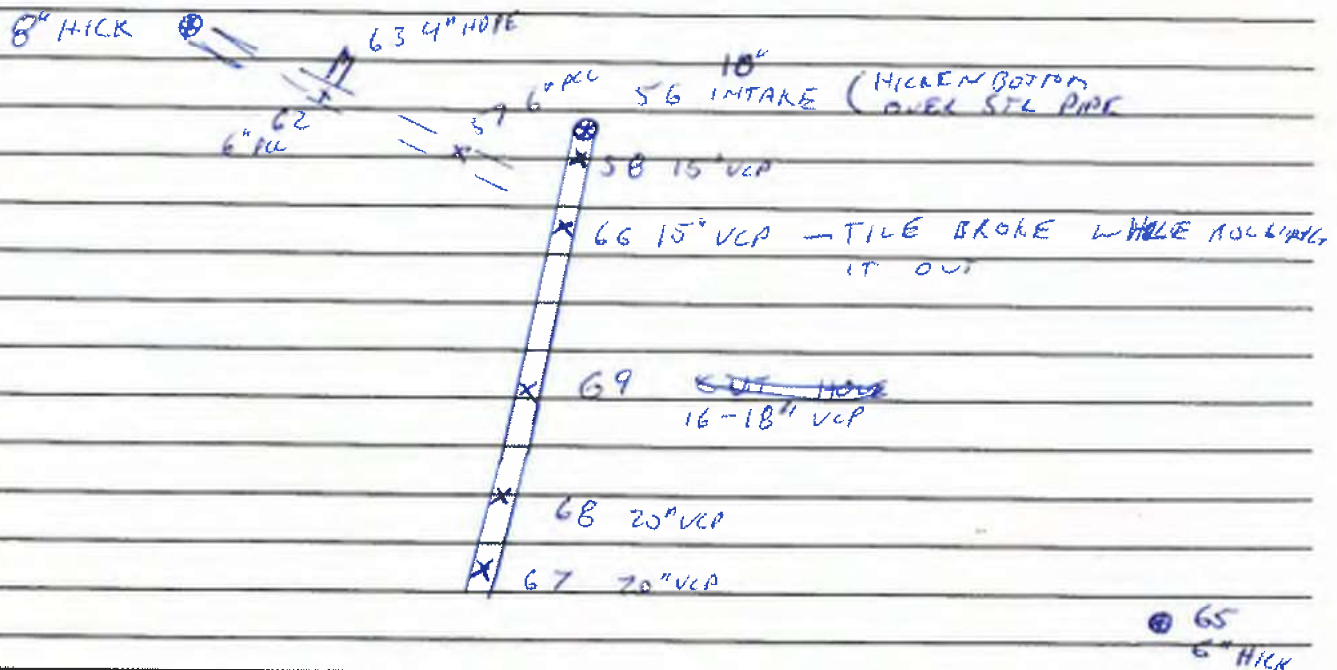
DD F-H 4-53

LOCATION:

N OF C-73 + W OF JUMPER

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB NAME, ITEM NO. AND LOCATION

- 1:30 STARTED EXCAVATING ON W SIDE OF INT. #56  
FND 6" PCC TILE (DRY) @ #57 EXCAVATED  
EIMORE + FND A TEE #62 OF PREVIOUS 6" PCC TILE  
+ A 4" HDPE #63 HEADING N. PCC TILE APPEARS TO BE  
HEADING TO 8" INTAKE @ #64
- 2:15 STARTED EXCAVATING ON S. SIDE OF INT @ #58  
FND 15" VCP TILE RUNNING N-S @ #58 + #66  
LOCATED S. TO PT #67 TILE IS TIGHT AT THIS LOCATION  
STUCK A TILE PROBE FLAG DOWN CRACK + IT CAME UP  
DRY. TILE @ 66 IS SITTING 1/2 FULL OF WATER NOT FLOWING
- 3:50 STARTED EXCAVATING @ 67 FND 20" VCP + @ 68  
FND 16" OR 18" VCP @ 69



I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

*[Signature]*

Date Prepared:

12-1-20

Reviewed by:

Engineer

Date Reviewed

CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

12-1-20

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF

PROJECT NUMBER:

6500.2

COUNTY, ROUTE, ROAD:

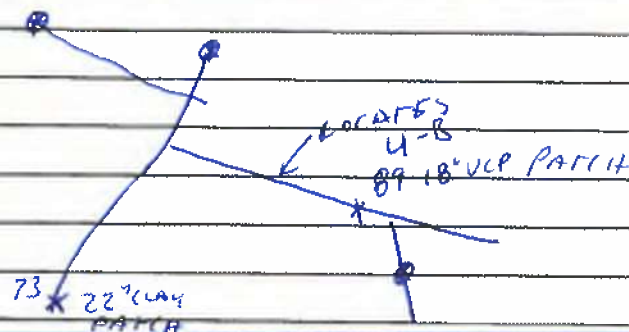
DD FH 4-53

LOCATION:

N. OF C-73 + W. OF JUNIPER

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB  
NAME, ITEM NO. AND LOCATION

- 8:15 ARRIVED ON SITE SET UP BASE @ #12 (GAS MON 8022)  
CUT A HOLE IN THE TOP OF TILE @ 69 TILE HAS  
HAS ROCKS IN FLOW LINE W/ 3" OF SLOW FLOWING WATER  
9:30 STARTED LOOKING FOR TILE @ N ROW OF C-73 FND  
22" VCP @ #73 TILE IS FLOWING SLOWLY @ 3" DEEP  
A 4" FIELD TILE IS STICKING INTO TILE @ 2' ± FURTHER  
N.  
12:00 STARTED LOOKING FOR TILE @ INT #65 FND 5" CLAY  
TILE + STARTED LOCATING FND TILE @ #79, 80, + 83  
RAN LOCATOR N.  
2:00 FND TILE @ #89 CUT HOLE IN TOP TILE HAS 3" OF  
WATER AND IS FLOWING SLOWLY  
3:00 CREW BLEW A HOSE ON THE BACKHOLE AND HAD TO  
REPAIR IT. I SCOUTED THE 6 NW QUA OF THE  
INTERSECTION OF JUNIPER + C-73 FOUND A 8" HICKY-  
BOTTOM INTAKE W/ A HOPE TILE RUNNING N-S 3' E OF  
INTAKE @ 90  
4:45 PICKED UP BASE AND LEFT SITE CREW WAS GOING TO  
BACK FILL HOLES



I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

*Chris King*

Date Prepared:

12-1-20

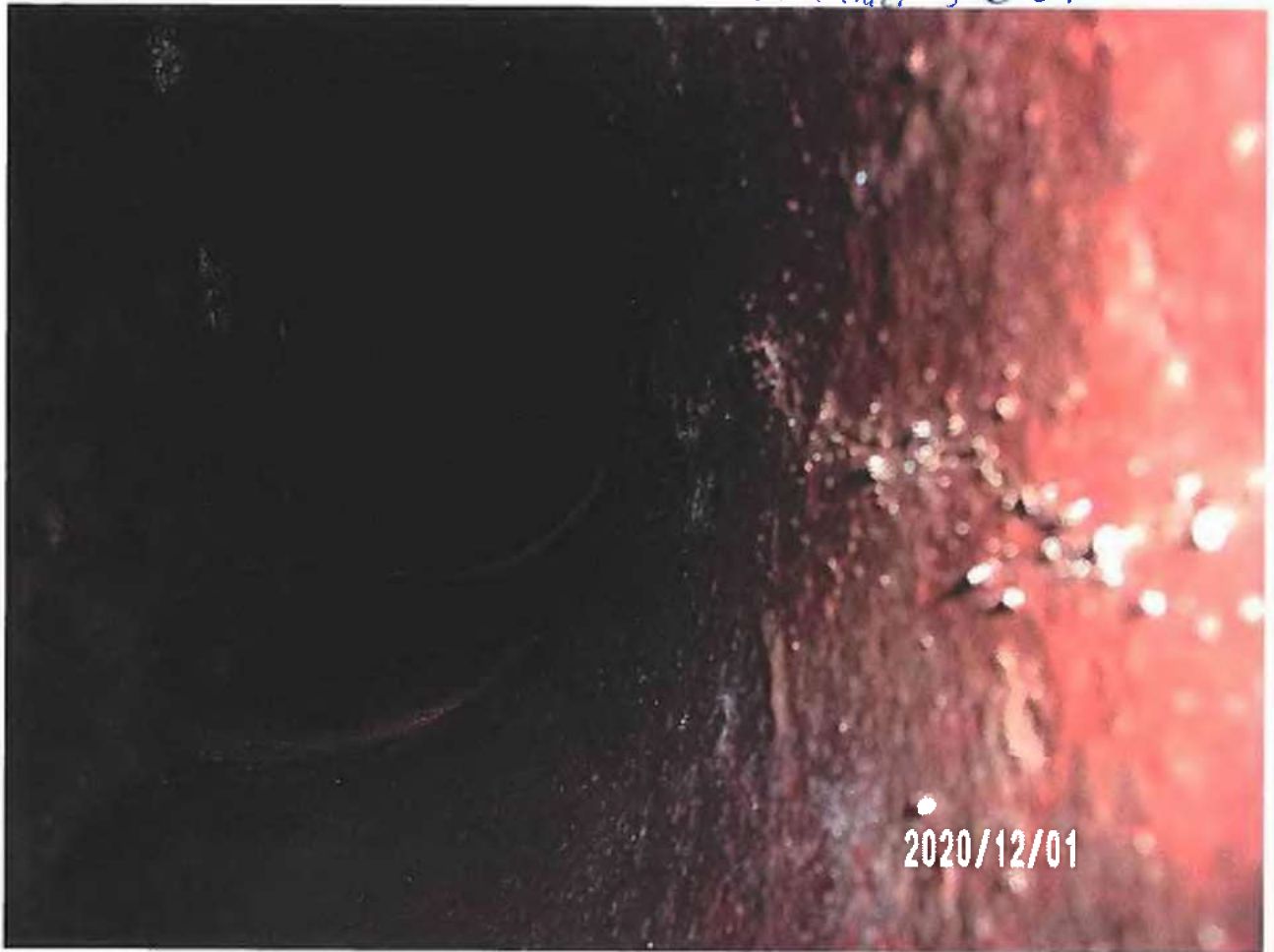
Reviewed by:

☐ Engineer

Date Reviewed



LOOKING S @ 69



2020/12/01



2020/12/01

LOOKING N @ 69

LOOKING N@ 69



2020/12/01



2020/12/01

LOOKING S@ 73



Looking N @ 73



Looking N. @ 73

LOOKING N @ 73



2020/12/01



2020/12/01

LOOKING N @ 73



TILE @ 73



LOOKING W @ 89

LOOKING E @ 89



2020/12/01



2020/12/01

LOOKING E @ 89



LOOKING E @ 89



HOLE @ 89



PATCH @ 89



PATCH AT 89



LOOKING E @ 90



CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

12-7-20

PROJECT NUMBER:

6500.2

COUNTY, ROUTE, ROAD:

NE JUNIPER/C-73

LOCATION: LAT B-4

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF 1

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB  
NAME, ITEM NO. AND LOCATION

8:40 ARRIVED ON SITE 2 MAN CREW (RUSS/FRANK) W/  
1 BACKHOE + 1 TRUCK CREW SAID THAT THEY HAD DRY  
FIT THE PATCH IN HARDIN CO. THEY WERE WORKING  
ON REPAIR @ 66

9:15 CREW STARTED DIGGING ON OF RR + FND A 10" CLAY (#91)  
RUNNING N-S THIS TILE IS FULL OF DIRT FND 15" CLAY  
TILE RUNNING N-S OPENED TILE @ 92 TILE HAS 1"-2"  
OF DEBRIS + WATER IN THE BOTTOM OF TILE THE REST  
OF THE TILE IS IN GOOD CONDITION. CREW PATCHED  
TILE @ 92

CREW PATCHED TILE @ 73 + 69

CREW PATCHED BRO REPAIRED BROKEN TILE @ 66 W/  
A 2' PIECE OF HOPE DUAL WALL TILE + WRAPPED IT  
W/ FABRIC.

12:00 CREW MOVED TO OTHER JOB

I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:



Date Prepared:

12-7-2020

Reviewed by:

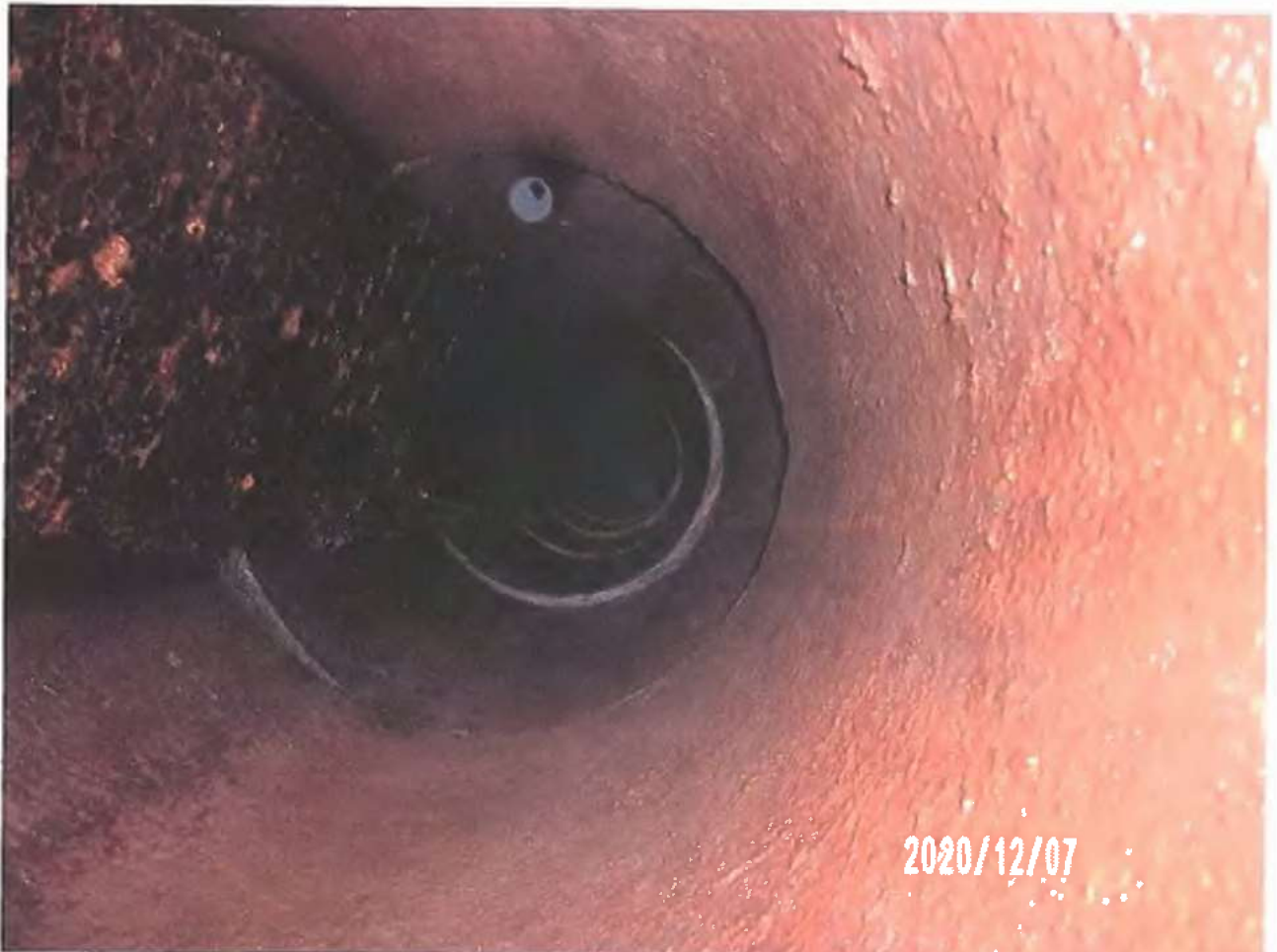
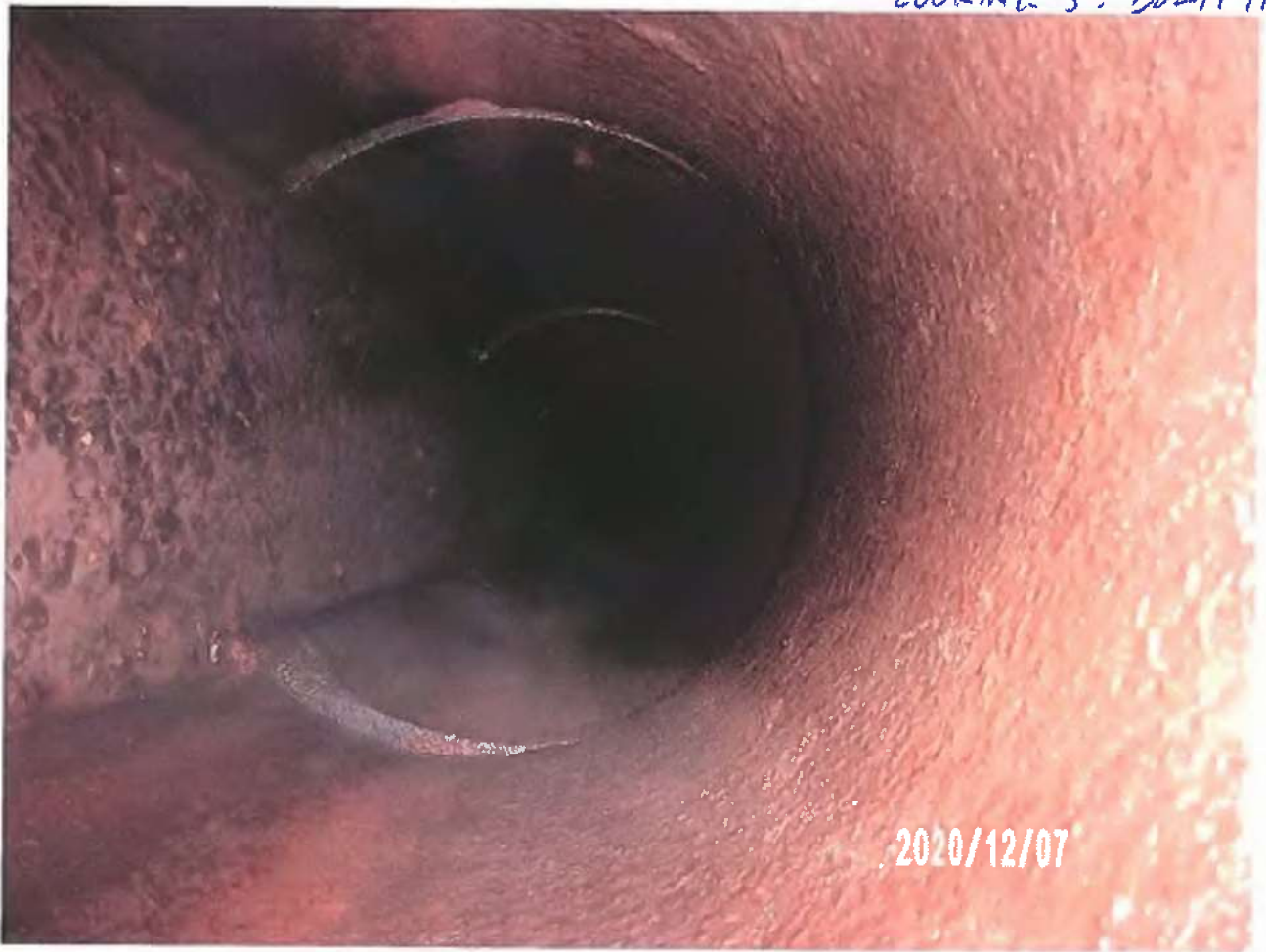


Engineer

Date Reviewed



LOOKING S. DOWN TILE @ 92



LOOKING N. UP TILE @ 92



10" TILE @ 91



CLEARING DIRT AROUND #92



PATCH @ 92



PATCH @ 92



PATCH @ 73



PATCH @ 69





PATCH @ 66

6500 2020-12-07 cs

1,3666160.310,4968629.670,1166.150,gps 8022  
2,3666160.310,4968629.670,1166.150,Autonomous Setup  
3,3665601.308,4985365.258,1153.705,gps 8039  
4,3662686.568,4971781.373,1146.882,2.5' dia sinkhole  
5,3662687.541,4971779.329,1143.094,top existing 32" vcp 2.77'to fl  
6,3662685.287,4971776.399,1147.833,gs above tile  
7,3662691.009,4971783.732,1148.264,gs above tile  
8,3663330.530,4968801.041,1150.586,4.5'n-s\*5.5'e-w  
9,3663332.192,4968805.303,1150.554,top 10" vcp 0.88'to fl  
10,3663284.607,4968738.850,1153.044,2.5' dia sinkhole  
11,3663286.605,4968735.137,1153.508,8" dia sinkhole  
12,3663327.463,4968798.394,1150.579,top 10" vcp 0.88'to fl  
13,3663335.000,4968803.834,1152.886,top 5" vcp full dirt  
14,3663330.888,4968795.343,1152.932,top 5" vcp full dirt  
15,3663696.190,4968805.479,1162.175,fence e-w  
16,3663695.365,4968720.301,1159.861,fence e-w  
17,3663333.674,4968808.383,1154.979,gs above existing tile  
18,3663325.979,4968795.250,1155.014,gs above existing tile  
19,3663287.204,4968739.933,1151.305,top existing 10" vcp 0.88' to fl  
20,3663284.675,4968736.599,1151.305,top existing 10" vcp 0.88' to fl  
21,3663281.406,4968733.016,1155.472,gs above existing tile  
22,3663298.207,4968754.179,1155.152,gs above existing tile  
23,3665601.320,4985365.261,1153.716,gps 8039  
24,3663440.572,4972146.722,1152.562,cpt 34 ir  
25,3663121.599,4972576.733,1144.300,gs above existing tile  
26,3662854.138,4972856.960,1140.237,top 36" cmp outlet 3.01' to fl  
27,3663115.447,4972584.564,1144.271,gs above existing tile  
28,3663118.687,4972580.097,1140.912,top 34" vcp 2.78' to fl  
29,3663300.267,4968762.985,1153.228,BLOWOUT  
30,3663300.214,4968758.654,1151.097,TOP 10"CLAY CLEAN  
31,3663305.081,4968765.715,1150.771,TOP 10"CLAY CLEAN  
32,3671144.512,4972728.155,1195.694,top tile -4.05  
33,3671061.498,4972739.434,1196.657,top tile -4.05  
34,3670738.067,4972767.542,1195.245,crop dmg 2020-6-8  
35,3670771.277,4972767.593,1195.233,crop dmg 2020-6-8  
36,3670770.462,4972641.626,1193.078,crop dmg 2020-6-8  
37,3670736.726,4972636.791,1192.239,crop dmg 2020-6-8  
38,3671512.707,4972786.250,1189.171,top 5" hdpe single wall  
39,3671509.830,4972785.764,1192.291,gs  
40,3671509.599,4972799.553,1192.261,crop dmg 2020-6-8  
41,3671539.260,4972801.985,1192.368,crop dmg 2020-6-8  
42,3671540.052,4972739.157,1192.600,crop dmg 2020-6-8  
43,3671507.872,4972743.015,1192.506,crop dmg 2020-6-8  
44,3671474.166,4972743.142,1195.877,tree os 33'+-s  
45,3671475.598,4972729.307,1195.925,tree os 33'+-s  
46,3671475.813,4972719.495,1196.002,tree os 33'+-s  
47,3671455.090,4972744.540,1192.909,top cmp 18"  
48,3671493.900,4972744.641,1193.147,top cmp 18"  
49,3666044.827,4967907.559,1156.912,TOP CLAYTILE @BLOWOUT



6500 2020-12-07 cs

50,3665195.129,4966858.093,1156.976,LOW WET AREA  
51,3666091.534,4967940.481,1159.703,gs tile locate  
52,3666120.642,4967976.600,1159.936,gs tile locate  
53,3666156.036,4968022.468,1159.921,gs tile locate  
54,3666176.084,4968044.347,1160.241,gs tile locate  
55,3666247.982,4968121.293,1157.127,int 8" cmp fl  
56,3667364.250,4969908.144,1156.485,int 10" hick fl  
57,3667362.860,4969874.822,1158.138,top pcc 6" nw-se  
58,3667352.683,4969905.385,1157.781,top 15" vcp n-s  
59,3667205.816,4969877.603,1161.446,gs tile locate  
60,3667135.035,4969857.761,1161.397,gs tile locate  
61,3667087.745,4969834.074,1161.682,gs tile locate  
62,3667434.389,4969795.562,1158.315,top 6x6x4 tee  
63,3667435.049,4969796.055,1158.332,top hdpe 4" n  
64,3667485.773,4969737.456,1161.183,int 8" hick  
65,3666779.953,4970174.911,1163.503,int 6" hick  
66,3667299.828,4969895.147,1157.625,top 15" vcp 1.28' to fl  
67,3667076.270,4969827.174,1158.243,top 20" vcp  
68,3667104.562,4969844.067,1158.202,top 20" vcp  
69,3667150.913,4969862.605,1157.434,top 16" 18" vcp  
70,3666021.796,4967902.974,1157.055,top 10" clay 0.95 to fl  
71,3666048.785,4967909.858,1156.979,top 10" clay 0.90 to fl  
72,3666051.869,4967907.293,1157.120,top 10" clay 0.90 to fl  
73,3666267.996,4969388.082,1156.906,top 22" clay  
74,3666293.230,4969401.072,1163.438,gs tile locate  
75,3666326.644,4969410.758,1163.661,gs tile locate  
76,3666361.776,4969420.926,1163.792,gs tile locate  
77,3666742.611,4970176.033,1163.597,gs tile locate  
78,3666699.571,4970182.051,1163.554,gs tile locate  
79,3666802.245,4970171.072,1159.947,top 5 clay  
80,3666681.406,4970183.461,1160.163,top 5 clay  
81,3666832.370,4970167.948,1164.081,gs tile locate  
82,3666884.145,4970161.938,1164.659,gs tile locate  
83,3666905.915,4970159.744,1158.913,top 6 clay  
84,3666918.111,4970138.911,1164.448,gs tile locate  
85,3666939.141,4970096.684,1164.700,gs tile locate  
86,3666962.405,4970047.413,1164.611,gs tile locate  
87,3666989.862,4969991.061,1163.530,gs tile locate  
88,3667021.781,4969918.846,1162.411,gs tile locate  
89,3666932.784,4970109.017,1158.626,top 18 vcp  
90,3666489.494,4971867.481,1162.503,int 8" hick fl  
91,3666811.651,4972398.548,1165.263,962 10 n-s  
92,3666813.848,4972384.939,1162.370,962 15 n-s  
93,3666502.204,4972037.848,1162.566,952 -3.4 to fl  
94,3666041.730,4967906.459,1153.072,421 10  
95,3666047.861,4967907.178,1153.058,421 10 tee  
96,3666047.852,4967909.056,1152.927,421 10 45elbow

## Drainage District:

#4-53

## Investigation Summary:

- Landowner in the NW¼ NE¼ Section 4, Township 89 North, Range 21 West reported a blowout/sinkhole with standing water in the field over the assumed Lateral 4A tile route, just south of where it crosses Hardin Road (Highway C73).
- This reported issue was the same as Work Order #303.

## Contractor Time and Materials (spent while CGA was on-site):

None recorded, as work was completed under a separate Work Order.

## Additional Actions Recommended:

See the summary provided with Work Order #303 for actions taken and recommended.







# Drainage Work Order Request For Repair

## Hardin County

**Date:** 6/9/2020

**Work Order #:** WO000000296

**Drainage District:** DDs\DD F-H 4-53 (51213)

**Sec-Twp-Rge:** 04-89-21 **Qtr Sec:** N1/2 SE1/4

**Location/GIS:** 89-21-04-200-002

**Requested By:** Jim Ziesman

**Contact Phone:** (641) 648-4933

**Contact Email:** Cell - 641-640-0419

**Landowner (if different):** \_\_\_\_\_

**Description:** DD F-H 4-53 - Landowner Jim Ziesman reports blowout with standing water in field on district tile in parcel #892104200002, located near where tile enters field in grassy waterway.

**Repair labor, materials and equipment:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Repaired By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Please reference work order # and send statement for services to:**

Hardin County Auditor's Office  
Attn: Drainage Clerk  
1215 Edgington Ave, Suite 1  
Eldora, IA 50627  
Phone (641) 939-8111  
Fax (641) 939-8245

**For Office Use Only**

**Approved:** \_\_\_\_\_ **Date:** \_\_\_\_\_





6500 2020-12-07 cs

1,3666160.310,4968629.670,1166.150,gps 8022  
2,3666160.310,4968629.670,1166.150,Autonomous Setup  
3,3665601.308,4985365.258,1153.705,gps 8039  
4,3662686.568,4971781.373,1146.882,2.5' dia sinkhole  
5,3662687.541,4971779.329,1143.094,top existing 32" vcp 2.77'to fl  
6,3662685.287,4971776.399,1147.833,gs above tile  
7,3662691.009,4971783.732,1148.264,gs above tile  
8,3663330.530,4968801.041,1150.586,4.5'n-s\*5.5'e-w  
9,3663332.192,4968805.303,1150.554,top 10" vcp 0.88'to fl  
10,3663284.607,4968738.850,1153.044,2.5' dia sinkhole  
11,3663286.605,4968735.137,1153.508,8" dia sinkhole  
12,3663327.463,4968798.394,1150.579,top 10" vcp 0.88'to fl  
13,3663335.000,4968803.834,1152.886,top 5" vcp full dirt  
14,3663330.888,4968795.343,1152.932,top 5" vcp full dirt  
15,3663696.190,4968805.479,1162.175,fence e-w  
16,3663695.365,4968720.301,1159.861,fence e-w  
17,3663333.674,4968808.383,1154.979,gs above existing tile  
18,3663325.979,4968795.250,1155.014,gs above existing tile  
19,3663287.204,4968739.933,1151.305,top existing 10" vcp 0.88' to fl  
20,3663284.675,4968736.599,1151.305,top existing 10" vcp 0.88' to fl  
21,3663281.406,4968733.016,1155.472,gs above existing tile  
22,3663298.207,4968754.179,1155.152,gs above existing tile  
23,3665601.320,4985365.261,1153.716,gps 8039  
24,3663440.572,4972146.722,1152.562,cpt 34 ir  
25,3663121.599,4972576.733,1144.300,gs above existing tile  
26,3662854.138,4972856.960,1140.237,top 36" cmp outlet 3.01' to fl  
27,3663115.447,4972584.564,1144.271,gs above existing tile  
28,3663118.687,4972580.097,1140.912,top 34" vcp 2.78' to fl  
29,3663300.267,4968762.985,1153.228,BLOWOUT  
30,3663300.214,4968758.654,1151.097,TOP 10"CLAY CLEAN  
31,3663305.081,4968765.715,1150.771,TOP 10"CLAY CLEAN  
32,3671144.512,4972728.155,1195.694,top tile -4.05  
33,3671061.498,4972739.434,1196.657,top tile -4.05  
34,3670738.067,4972767.542,1195.245,crop dmg 2020-6-8  
35,3670771.277,4972767.593,1195.233,crop dmg 2020-6-8  
36,3670770.462,4972641.626,1193.078,crop dmg 2020-6-8  
37,3670736.726,4972636.791,1192.239,crop dmg 2020-6-8  
38,3671512.707,4972786.250,1189.171,top 5" hdpe single wall  
39,3671509.830,4972785.764,1192.291,gs  
40,3671509.599,4972799.553,1192.261,crop dmg 2020-6-8  
41,3671539.260,4972801.985,1192.368,crop dmg 2020-6-8  
42,3671540.052,4972739.157,1192.600,crop dmg 2020-6-8  
43,3671507.872,4972743.015,1192.506,crop dmg 2020-6-8  
44,3671474.166,4972743.142,1195.877,tree os 33'+-s  
45,3671475.598,4972729.307,1195.925,tree os 33'+-s  
46,3671475.813,4972719.495,1196.002,tree os 33'+-s  
47,3671455.090,4972744.540,1192.909,top cmp 18"  
48,3671493.900,4972744.641,1193.147,top cmp 18"  
49,3666044.827,4967907.559,1156.912,TOP CLAYTILE @BLOWOUT

6500 2020-12-07 cs

50,3665195.129,4966858.093,1156.976,LOW WET AREA  
51,3666091.534,4967940.481,1159.703,gs tile locate  
52,3666120.642,4967976.600,1159.936,gs tile locate  
53,3666156.036,4968022.468,1159.921,gs tile locate  
54,3666176.084,4968044.347,1160.241,gs tile locate  
55,3666247.982,4968121.293,1157.127,int 8" cmp fl  
56,3667364.250,4969908.144,1156.485,int 10" hick fl  
57,3667362.860,4969874.822,1158.138,top pcc 6" nw-se  
58,3667352.683,4969905.385,1157.781,top 15" vcp n-s  
59,3667205.816,4969877.603,1161.446,gs tile locate  
60,3667135.035,4969857.761,1161.397,gs tile locate  
61,3667087.745,4969834.074,1161.682,gs tile locate  
62,3667434.389,4969795.562,1158.315,top 6x6x4 tee  
63,3667435.049,4969796.055,1158.332,top hdpe 4" n  
64,3667485.773,4969737.456,1161.183,int 8" hick  
65,3666779.953,4970174.911,1163.503,int 6" hick  
66,3667299.828,4969895.147,1157.625,top 15" vcp 1.28' to fl  
67,3667076.270,4969827.174,1158.243,top 20" vcp  
68,3667104.562,4969844.067,1158.202,top 20" vcp  
69,3667150.913,4969862.605,1157.434,top 16" 18" vcp  
70,3666021.796,4967902.974,1157.055,top 10" clay 0.95 to fl  
71,3666048.785,4967909.858,1156.979,top 10" clay 0.90 to fl  
72,3666051.869,4967907.293,1157.120,top 10" clay 0.90 to fl  
73,3666267.996,4969388.082,1156.906,top 22" clay  
74,3666293.230,4969401.072,1163.438,gs tile locate  
75,3666326.644,4969410.758,1163.661,gs tile locate  
76,3666361.776,4969420.926,1163.792,gs tile locate  
77,3666742.611,4970176.033,1163.597,gs tile locate  
78,3666699.571,4970182.051,1163.554,gs tile locate  
79,3666802.245,4970171.072,1159.947,top 5 clay  
80,3666681.406,4970183.461,1160.163,top 5 clay  
81,3666832.370,4970167.948,1164.081,gs tile locate  
82,3666884.145,4970161.938,1164.659,gs tile locate  
83,3666905.915,4970159.744,1158.913,top 6 clay  
84,3666918.111,4970138.911,1164.448,gs tile locate  
85,3666939.141,4970096.684,1164.700,gs tile locate  
86,3666962.405,4970047.413,1164.611,gs tile locate  
87,3666989.862,4969991.061,1163.530,gs tile locate  
88,3667021.781,4969918.846,1162.411,gs tile locate  
89,3666932.784,4970109.017,1158.626,top 18 vcp  
90,3666489.494,4971867.481,1162.503,int 8" hick fl  
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92,3666813.848,4972384.939,1162.370,962 15 n-s  
93,3666502.204,4972037.848,1162.566,952 -3.4 to fl  
94,3666041.730,4967906.459,1153.072,421 10  
95,3666047.861,4967907.178,1153.058,421 10 tee  
96,3666047.852,4967909.056,1152.927,421 10 45elbow



## Drainage District:

#4-53, Lat 4A

## Investigation/Repair Summary:

- Landowner in the NW¼ NE¼ Section 4, Township 89 North, Range 21 West reported a blowout on the east side of HH avenue, south of the building site over the assumed route of the Main tile.
- Visual observation of the area described did not find any signs of a blowout/sinkhole over the Main tile but did find excess water/moisture in the area where the blowout was reported to be. Further observation of the parcel found a blowout/sinkhole over the connection between a private tile and the assumed Lateral 4A tile south of Highway C73.
- Upon excavation, the two upstream tiles were found to be 10-inch VCP tiles, with the west tile being approximately 60% full of sediment and no flowing water, while the east tile was found to be generally clear of significant debris and freely flowing water. The downstream 10-inch VCP was found to be collapsed and was excavated until cracked, but round, VCP tile was found. Downstream from this excavation, the tile was found to have a small amount of sediment in the base, with freely flowing water above. Upon running a locating cable up the east tile, found that it went diagonally (northeast) towards an intake located on the other side of Hardin Road (Highway C73).
- Repaired the connection with a 10-inch dual wall HDPE, 10-inch HDPE tee, and 10-inch HDPE 45° elbow. Repaired the surrounding tiles with rock bedding and backfill, 10-inch dual wall HDPE, and ¾ concrete collars at each connection to the original VCP tiles.

## Contractor Time and Materials (spent while CGA was on-site):

See attached Tabulated Contractor Time and Materials Sheet.

## Additional Actions Recommended:

While the tiles repaired are near the Lateral 4A historical location, the 10-inch VCP tile that was found does not match the historical 14-inch diameter which is associated with the Lateral 4A in this location. Due to the topography, it appears that the west tile in this repair would be the likely Lateral 4A tile (if the Lateral 4A was one of the two). Given that this tile is over half filled with sediment, CGA recommends the following actions:

- Further investigation be conducted to determine if any of the tiles repaired is actually the Lateral 4A tile.
- If said west tile is confirmed to be Lateral 4A, determine the extent of the filling of the Lateral 4A with sediment and why the tile was installed as a 10-inch VCP instead of the record 14-inch VCP.
- If all the repaired tiles are determined to be private, the landowner should be made aware and the Trustees may determine how the repair should be billed.



## Tabulated Contractor Time and Materials

Date	Totals	11/30/2020	12/7/2020
Workman (hrs)	11 1/2	6	5 1/2
Backhoe (hrs)	5 3/4	3	2 3/4
10" Dual Wall HDPE (ft)	30		30
1" Clean Bedding Rock	Yes		
Concrete Collars	Yes		
10"x10"x10" Dual Wall HDPE Tee (ea)	1		1
10"x45° Dual Wall HDPE Elbow( ea)	1		1





# Drainage Work Order Request For Repair

## Hardin County

**Date:** 10/20/2020

**Work Order #:** WO00000303

**Drainage District:** DDs\DD F-H 4-53 (51213)

**Sec-Twp-Rge:** 04-89-21 **Qtr Sec:** \_\_\_\_\_

**Location/GIS:** 89-21-04-200-002

**Requested By:** Jim Zeisman

**Contact Phone:** (641) 648-4933

**Contact Email:** \_\_\_\_\_

**Landowner (if different):** \_\_\_\_\_

**Description:** DD F-H 4-53 - Landowner Jim Zeisman reports blowout in field just east of HH Ave, not too far in field from the Rd and south of building site. Location is flagged, crops harvested. In same parcel as WO 296.

**Repair labor, materials and equipment:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Repaired By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Please reference work order # and send statement for services to:**

Hardin County Auditor's Office  
Attn: Drainage Clerk  
1215 Edgington Ave, Suite 1  
Eldora, IA 50627  
Phone (641) 939-8111  
Fax (641) 939-8245

For Office Use Only

**Approved:** \_\_\_\_\_ **Date:** \_\_\_\_\_

6500.5



8921031

892103

892104200003

892104200005

892104200002

892104200004

J.D.D.  
F-H 4-53

892104100002

892104100004

01

03





# Inspector's Project Diary

Project: <u>DD F-H 4-53</u>			
CGA PN: <u>6500.5</u>		Days Charged:	Report No.
Contractor:		<u>Fri</u>	Date: <u>10/23/20</u>
Superintendent:	Weather Conditions: <u>Windy, cold, damp</u>	Precip.: <u>1 1/2" RAIN Yesterday</u>	Proj. Mgr. <input checked="" type="checkbox"/> <u>LEE GAUNTHER</u>
		Temp. Hi: <u>38</u> °	Temp. Low: <u>25</u> °
INSPECTOR:		Contractor:	
Time Arrived:	Time Left:	Time Arrived:	Time Left:
<p>1. General Remarks and Work Accomplished:</p> <p><u>Called Jim LIESMAN TWICE, NO ANSWER. DROVE OUT WITH 4x4 TO FIND 2ND BLOW-OUT IN FIELD, SHOT BLOW-OUT FROM THIS SPRING #49, DROVE TO DISCUSSION IN FILE, (E. OF HH AVE, AND S. OF ACREAGE) FOUND WET AREA #50. JIM'S SON ARRIVED, TALKED TO HIM, HE CALLED HIS DAD, JIM, HE ARRIVED AND TOLD MR. THUR WAS JUST THE 1 BLOW-OUT FROM THIS SPRING, HE CALLED IN TO DRAINAGE CLERK, TOLD THEM CROPS WERE OUT, THEY DIDN'T KNOW ANYTHING ABOUT IT. MADE OUT NEW REPORT.</u></p>			
2. Changes or Extra Work Ordered:			
3. Test Samples Taken:			
4. Visitors to Site:			
5. Other Work Crews or Project (utilities, subcontractors, etc.) and Work Done:			
6. Attachments (total sheets attached <u>0</u> ):			



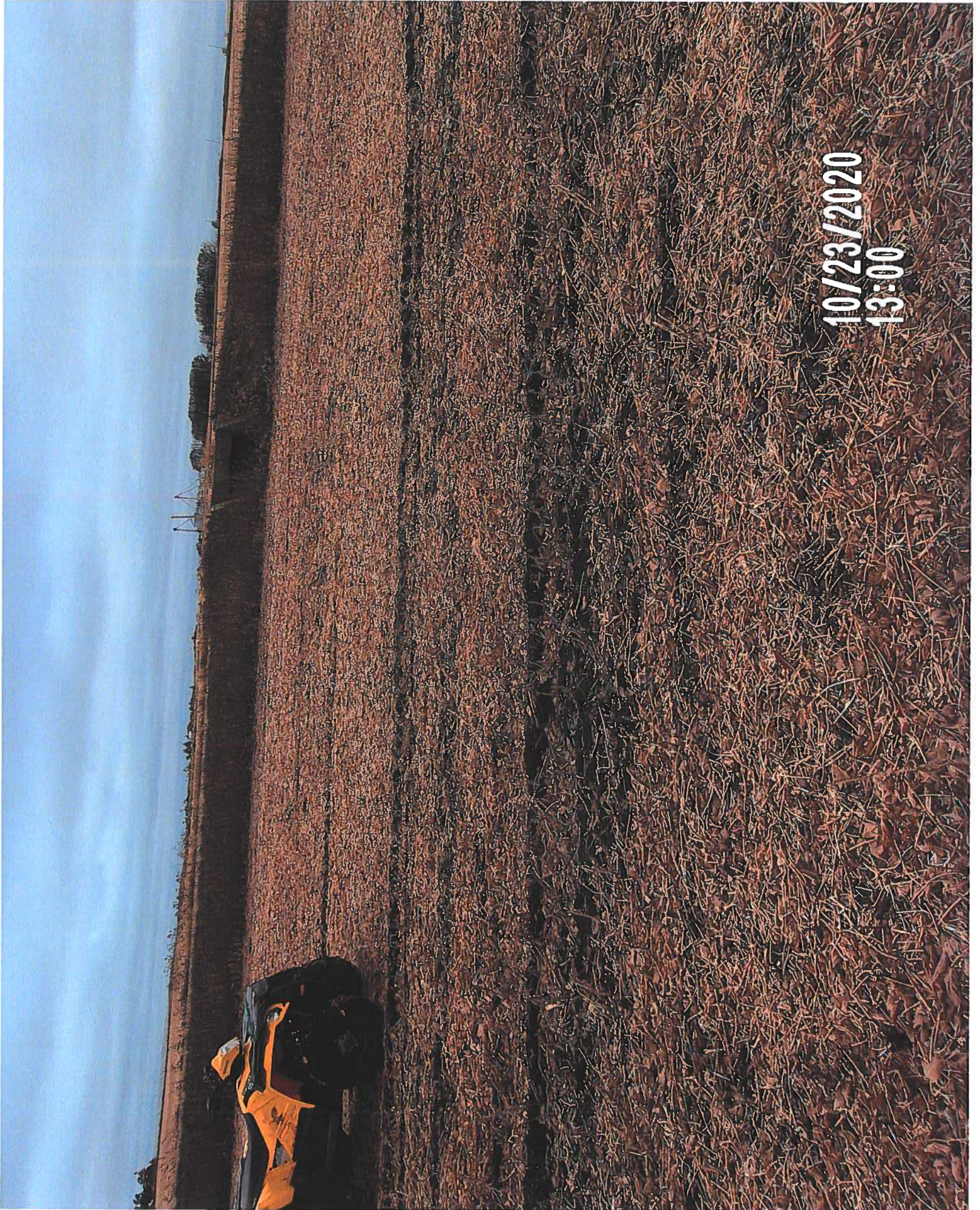
ORIGINAL SPRING 2020 Blow-out #49

10/23/2020  
12:44





WET SPOT E. OF HH. AVE, S. OF AERRAGE, NO BLEW-OUT



10/23/2020  
13:00



CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

11-30-20

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF

PROJECT NUMBER:

6500.4 + 5

COUNTY, ROUTE, ROAD:

E-73 DO F.H. 4-53

LOCATION:

LAT 4A S. OF C-73 & E.H.H

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB  
NAME, ITEM NO. AND LOCATION

8:20 ARRIVED ON SITE SET UP BASE @ 2 (8022)

8:40 TALKED TO CREW <sup>(RUSS & FRANK)</sup> SAID THAT WE ARE GOING  
TO S. END OF PROJECT 1ST

9:00 STARTED EXCAVATING @ SINK HOLE @ 49

9:30 EXPOSED THE 'Y' @ THE BLOWOUT TILE IS SITTING  
60% FULL RAN THE LOCATOR DOWN THE TILE &  
HIT A PLUG 6' ± DOWN THE TILE

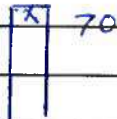
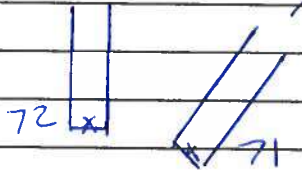
11:50 CREW LEFT SITE TO GET MATERIALS

1:00 CREW CALLED & SAID THAT THEY NEED TO GET SUPPLIES  
AND WILL NOT BE ABLE TO FINISH THE REPAIR UNTIL  
TOMORROW.

55

C-73

LOCATES 51-54



I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

*Ann Humphrey*

Date Prepared:

12-1-20

Reviewed by:

☐ Engineer

Date Reviewed



START OF DAY



2020/11/30



2020/11/30

LOOKING S. DOWN TO



@ 70 LOOKING @ 71 + 72



2020/11/30



2020/11/30

LOOKING N. DOWN @ 71



LOOKING N. @ 72



2020/11/30



2020/11/30

LOOKING N. @ 72



▲  
@ 72 Looking S. to 70



Looking NW @ 71 + 72

CONSTRUCTION ENGINEERING  
OBSERVATION REPORT

DATE:

12-7-20

DAYS OF WEEK:

S M T W T F S

SHEET NO.

1 OF 1

PROJECT NUMBER:

6500.5

COUNTY, ROUTE, ROAD:

DD F.H. 4-53

LOCATION:

LAT 4A S. OF C-73 E. OF H.H.

DESCRIPTION OF WORK AND MATERIAL USED FOR EACH OPERATION, INCLUDING CONTRACTOR/SUB  
NAME, ITEM NO. AND LOCATION

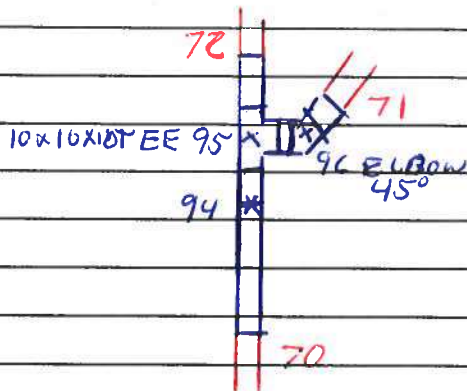
1200 STARTED REPAIRING TILE PLACED A 10X10X10  
TEE @ 95 + A 45° ELBOW @ 96

2:15 POURED 3 COLLARS @ 70, 71, + 72

2:45 PICKED UP THE BASE OF AND LEFT THE SITE  
CREW WAS GOING TO ANOTHER JOB WHILE THE  
PCC CURES AND WILL COME BACK TO FILL IT IN.

CREW PLACED 1.5' OF ROCK ABOVE TILE

CREW POURED 1 CU YD OF PCC



I Certify that the work described in this report was incorporated into this contract unless otherwise noted.

Observer's Signature:

*Chris A. [Signature]*

Date Prepared:

12-7-20

Reviewed by:



Engineer

Date Reviewed



START OF DAY



2020/12/07



2020/12/07

PIPE DRY FIT



DRY FIT TILE



2020/12/07



2020/12/07

S: COLLAR



**CONCRETE INC.**

COUNTY LINE & 101 AVE  
1000 FALLS

**WARNING**  
(IRRITATING TO THE SKIN AND EYES)  
CAUTION: PORTLAND CEMENT, FINE SAND, STEEL DUST AND OILS. PRO-  
LONGED CONTACT MAY CAUSE BURNS. AVOID CONTACT WITH EYES AND  
FACIAL EXPOSURE. WASH IMMEDIATELY WITH WATER. IF EYES ARE AT A HAZARDOUS  
LEVEL, IMMEDIATELY CALL 911 FOR ASSISTANCE. IF EYES ARE AT A HAZARDOUS  
LEVEL, IMMEDIATELY CALL 911 FOR ASSISTANCE. IF EYES ARE AT A HAZARDOUS  
LEVEL, IMMEDIATELY CALL 911 FOR ASSISTANCE.

**PROPERTY DAMAGE RELEASE**  
(TO BE SIGNED IF DELIVERY TO BE MADE INSIDE CURB LINE)  
Dear Customer: The driver of this truck is authorized to  
RELEASE to you the prior responsibility to all the extent that the size  
and weight of this truck may prevent it from being driven to the point of  
delivery. It is your responsibility to have adequate space to receive this truck  
and to ensure that the driver of this truck is not responsible for any damage to  
your property or to the property of others. If you agree to this release, please  
sign and return this form to the driver of this truck. If you do not agree to  
this release, please do not sign and return this form to the driver of this truck.  
The driver of this truck is not responsible for any damage to your property or  
to the property of others. If you agree to this release, please sign and return  
this form to the driver of this truck. If you do not agree to this release, please  
do not sign and return this form to the driver of this truck.

**Excessive Water is Detrimental to Concrete Performance**  
H<sub>2</sub>O Added by Request/Authorized By  
GAL. X

**WEIGHMASTER**

**NOTICE:** A SIGNATURE BELOW INDICATES THAT I HAVE READ THE HEALTH WARNING,  
NOTICE AND SUPPLIER WILL NOT BE RESPONSIBLE FOR ANY DAMAGE CAUSED WHEN  
DELIVERING INSIDE CURB LINE.

**LOAD RECEIVED BY:**  
X

QUANTITY	CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1.00	EA	INTERCHARGE		
1.00	CY	TRUCK INCH.		
1.00	CY	INTERCHARGE		

**RETURNED TO PLANT** **LEFT JOB** **FINISH UNLOADING** **DELAY EXPLANATION** **CYLINDER TEST TAKEN** **TIME ALLOWED**

**LEFT PLANT** **ARRIVED JOB** **START UNLOADING** **TIME DUE**

**TOTAL ROUND TRIP** **TOTAL AT JOB** **UNLOADING TIME** **DELAY TIME**

**GRAND TOTAL**

**2020/12/07**



S. COLLAR



2020/12/07



2020/12/07

N. 2 COLLARS



6500 2020-12-07 cs

1,3666160.310,4968629.670,1166.150,gps 8022  
2,3666160.310,4968629.670,1166.150,Autonomous Setup  
3,3665601.308,4985365.258,1153.705,gps 8039  
4,3662686.568,4971781.373,1146.882,2.5' dia sinkhole  
5,3662687.541,4971779.329,1143.094,top existing 32" vcp 2.77'to fl  
6,3662685.287,4971776.399,1147.833,gs above tile  
7,3662691.009,4971783.732,1148.264,gs above tile  
8,3663330.530,4968801.041,1150.586,4.5'n-s\*5.5'e-w  
9,3663332.192,4968805.303,1150.554,top 10" vcp 0.88'to fl  
10,3663284.607,4968738.850,1153.044,2.5' dia sinkhole  
11,3663286.605,4968735.137,1153.508,8" dia sinkhole  
12,3663327.463,4968798.394,1150.579,top 10" vcp 0.88'to fl  
13,3663335.000,4968803.834,1152.886,top 5" vcp full dirt  
14,3663330.888,4968795.343,1152.932,top 5" vcp full dirt  
15,3663696.190,4968805.479,1162.175,fence e-w  
16,3663695.365,4968720.301,1159.861,fence e-w  
17,3663333.674,4968808.383,1154.979,gs above existing tile  
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22,3663298.207,4968754.179,1155.152,gs above existing tile  
23,3665601.320,4985365.261,1153.716,gps 8039  
24,3663440.572,4972146.722,1152.562,cpt 34 ir  
25,3663121.599,4972576.733,1144.300,gs above existing tile  
26,3662854.138,4972856.960,1140.237,top 36" cmp outlet 3.01' to fl  
27,3663115.447,4972584.564,1144.271,gs above existing tile  
28,3663118.687,4972580.097,1140.912,top 34" vcp 2.78' to fl  
29,3663300.267,4968762.985,1153.228,BLOWOUT  
30,3663300.214,4968758.654,1151.097,TOP 10"CLAY CLEAN  
31,3663305.081,4968765.715,1150.771,TOP 10"CLAY CLEAN  
32,3671144.512,4972728.155,1195.694,top tile -4.05  
33,3671061.498,4972739.434,1196.657,top tile -4.05  
34,3670738.067,4972767.542,1195.245,crop dmg 2020-6-8  
35,3670771.277,4972767.593,1195.233,crop dmg 2020-6-8  
36,3670770.462,4972641.626,1193.078,crop dmg 2020-6-8  
37,3670736.726,4972636.791,1192.239,crop dmg 2020-6-8  
38,3671512.707,4972786.250,1189.171,top 5" hdpe single wall  
39,3671509.830,4972785.764,1192.291,gs  
40,3671509.599,4972799.553,1192.261,crop dmg 2020-6-8  
41,3671539.260,4972801.985,1192.368,crop dmg 2020-6-8  
42,3671540.052,4972739.157,1192.600,crop dmg 2020-6-8  
43,3671507.872,4972743.015,1192.506,crop dmg 2020-6-8  
44,3671474.166,4972743.142,1195.877,tree os 33'+-s  
45,3671475.598,4972729.307,1195.925,tree os 33'+-s  
46,3671475.813,4972719.495,1196.002,tree os 33'+-s  
47,3671455.090,4972744.540,1192.909,top cmp 18"  
48,3671493.900,4972744.641,1193.147,top cmp 18"  
49,3666044.827,4967907.559,1156.912,TOP CLAYTILE @BLOWOUT

6500 2020-12-07 cs

50,3665195.129,4966858.093,1156.976,LOW WET AREA  
51,3666091.534,4967940.481,1159.703,gs tile locate  
52,3666120.642,4967976.600,1159.936,gs tile locate  
53,3666156.036,4968022.468,1159.921,gs tile locate  
54,3666176.084,4968044.347,1160.241,gs tile locate  
55,3666247.982,4968121.293,1157.127,int 8" cmp fl  
56,3667364.250,4969908.144,1156.485,int 10" hick fl  
57,3667362.860,4969874.822,1158.138,top pcc 6" nw-se  
58,3667352.683,4969905.385,1157.781,top 15" vcp n-s  
59,3667205.816,4969877.603,1161.446,gs tile locate  
60,3667135.035,4969857.761,1161.397,gs tile locate  
61,3667087.745,4969834.074,1161.682,gs tile locate  
62,3667434.389,4969795.562,1158.315,top 6x6x4 tee  
63,3667435.049,4969796.055,1158.332,top hdpe 4" n  
64,3667485.773,4969737.456,1161.183,int 8" hick  
65,3666779.953,4970174.911,1163.503,int 6" hick  
66,3667299.828,4969895.147,1157.625,top 15" vcp 1.28' to fl  
67,3667076.270,4969827.174,1158.243,top 20" vcp  
68,3667104.562,4969844.067,1158.202,top 20" vcp  
69,3667150.913,4969862.605,1157.434,top 16" 18" vcp  
70,3666021.796,4967902.974,1157.055,top 10" clay 0.95 to fl  
71,3666048.785,4967909.858,1156.979,top 10" clay 0.90 to fl  
72,3666051.869,4967907.293,1157.120,top 10" clay 0.90 to fl  
73,3666267.996,4969388.082,1156.906,top 22" clay  
74,3666293.230,4969401.072,1163.438,gs tile locate  
75,3666326.644,4969410.758,1163.661,gs tile locate  
76,3666361.776,4969420.926,1163.792,gs tile locate  
77,3666742.611,4970176.033,1163.597,gs tile locate  
78,3666699.571,4970182.051,1163.554,gs tile locate  
79,3666802.245,4970171.072,1159.947,top 5 clay  
80,3666681.406,4970183.461,1160.163,top 5 clay  
81,3666832.370,4970167.948,1164.081,gs tile locate  
82,3666884.145,4970161.938,1164.659,gs tile locate  
83,3666905.915,4970159.744,1158.913,top 6 clay  
84,3666918.111,4970138.911,1164.448,gs tile locate  
85,3666939.141,4970096.684,1164.700,gs tile locate  
86,3666962.405,4970047.413,1164.611,gs tile locate  
87,3666989.862,4969991.061,1163.530,gs tile locate  
88,3667021.781,4969918.846,1162.411,gs tile locate  
89,3666932.784,4970109.017,1158.626,top 18 vcp  
90,3666489.494,4971867.481,1162.503,int 8" hick fl  
91,3666811.651,4972398.548,1165.263,962 10 n-s  
92,3666813.848,4972384.939,1162.370,962 15 n-s  
93,3666502.204,4972037.848,1162.566,952 -3.4 to fl  
94,3666041.730,4967906.459,1153.072,421 10  
95,3666047.861,4967907.178,1153.058,421 10 tee  
96,3666047.852,4967909.056,1152.927,421 10 45elbow