

**CHESHIRE INLAND WETLANDS AND WATERCOURSES COMMISSION
PUBLIC HEARING
TUESDAY, SEPTEMBER 17, 2013
TOWN HALL 84 SOUTH MAIN STREET
COUNCIL CHAMBERS AT 7:30 P.M.**

Members present: Charles Dimmick, Kerrie Dunne, Dave Brzozowski, Earl Kurtz, Will McPhee and Thom Norback.

Member Absent: Robert de Jongh.

Staff: Suzanne Simone.

Dr. Dimmick served as chairman pro-tem.

I. CALL TO ORDER

Dr. Dimmick called the meeting to order at 7:30 p.m.

II. PLEDGE OF ALLEGIANCE

All present recited the pledge of allegiance.

III. ROLL CALL

Ms. Dunne called the roll.

Members in attendance were Charles Dimmick, Kerrie Dunne, Dave Brzozowski, Earl Kurtz, Will McPhee and Thom Norback.

IV. DETERMINATION OF QUORUM

Dr. Dimmick determined there were enough members present for a quorum. He stated six out of seven were present so that takes care of there being a quorum.

Dr. Dimmick stated there were starting with a public hearing.

V. BUSINESS

Ms. Dunne read the legal call to open the public hearing for the following item:

1. Permit Application	APP	#2013-025
Town of Cheshire	DOR	9/03/13
330 & 355 Blacks Road	PH	9/17/13

Bridge Replacement

MAD

10/22/13

Dr. Dimmick explained that the ground rules for our public hearings are that the applicant gets to present followed by questions from members of the Commission and staff, followed by any questions from members of the public, followed by comments from the public and if necessary a possible reply by the applicant.

Walter Gancarz, Town Engineer was present on behalf of the Town of Cheshire.

Mr. Gancarz said he was going to do a brief introduction of what is planned and then turn it over to representatives from Milone and MacBroom who will go into a little bit more detail.

Mr. Gancarz explained that the Blacks Road bridge over Honey Pot Brook has a very low sufficiency rating and priority rating by the State; its analyzed as a 49 for sufficiency and a 47 for priority – what these numbers mean is they are kind of just like grades in schools – it would be like getting a 49 or 47 on a test – its failing.

Mr. Gancarz said it's (the bridge) is built in 1960 so it's more than 50 years old so it's past its life expediency.

Mr. Gancarz said the abutments have been undermined and are in a state of somewhat of a failure.

Mr. Gancarz stated that the “double-t” deck units are also deteriorating so there's not question it has to be replaced – it's beyond repair.

Mr. Gancarz said they did look at three different alternatives before selecting the one they did. He said originally they were kind of hopeful and thought they could get by with a box culvert here but we have the existing sanitary sewer interceptor which serves the northerly third of town that runs under the bridge and its really just below the bottom of the stream at this point in time so they wouldn't be able to fit a box culvert in.

Mr. Gancarz said so what has been proposed and what will be shown in more detail is a bridge put on concrete abutments that is supported by micro-piles which are small piles drilled and then pre-stress deck units.

Mr. Gancarz said the hydrologic opening will a little larger than it currently is so it will help pass the flood flows better however for major storms like a 100 year storm really what happens in this location is that there's such a back water from the Quinnipiac River that is really what controls so you can make it wider and wider it really doesn't do anything – you're getting the back water flooding but it certainly will help (a) with

the safety of the traveling public by having a better bridge and (b) for lesser storms to pass the flood flow.

Mr. Gancarz said it's located in the same location as the existing one so there's really going to be somewhat minimal disturbance of the area.

Mr. Gancarz said he's met with the Mitchells which are the upstream property owners – they've signed off that they have received notification and he filed that with Suzanne (Simone) today.

Mr. Gancarz said they (the Mitchells) didn't have concerns understood certainly their main concern is just to try to minimize how many trees get cut down – they kind of like their rural setting out there and he thought they could accommodate that because we're really not going to be going much farther than the existing foot print.

Mr. Gancarz said they do have a State grant for this – approximately 31% of the cost of this will actually come in the form of a State grant under the local bridge program.

Mr. Gancarz said they have this scheduled to go to referendum this fall for the town's portion and if that's successful our plan would be to get it constructed starting late spring after the normal spring thaw.

Mr. Gancarz said with that he'd turn it over to Kirshor (Patel).

Mr. Patel (Structural Engineer, and Project Manager with Milone and MacBroom) said as Walter (Gancarz) mentioned the existing bridge is failing that's the reason why they are replacing it.

Mr. Patel said just to go over a few things that we have done up to date- we have done a subsurface boring investigation program where we've drilled two borings – they've done one on the east side and one on the west side just to figure out what our abutments are going to look like for baring capacity and so forth.

Mr. Patel said Terracon did them (the borings) and the soils were actually pretty good decent material but because of the low clearance of the existing bridge and the 27" sewer main we still had to but the new proposed bridge on micro-piles so that way they could avoid the additional disturbance to the 27" sewer main.

Mr. Patel said like Walter (Gancarz) mentioned we did a type study – we looked at three options; this alternative was the best option where we are putting it on micro-piles and its on micro-piles with stub abutments basically and then they have pre-stressed deck units.

Mr. Patel said so basically the construction is we would put drill micro-piles at 3' on center and where the sewer main is at the center of the road they will try to span that over and then they would build our abutments from there – the stub abutments which are concrete and then they would place the pre-stressed deck units over that.

Mr. Patel said basically the construction sequence – he said just to kind of go over the water handling while we're building this – basically they are actually widening the bridge by about 5' – the existing span is about 15' and its on stone abutments so what they can do is we've calculated the two year storm and we've figured out basically how much water needs to pass through underneath the bridge without disturbing anything else.

Mr. Patel said so we will install our sediment and erosion control measure per the plan and then we'll remove the existing deck.

Mr. Patel said also we're going to need to close the bridge so the roadway is going to be closed – there's going to be a detour plan; basically Creamery Road is a parallel road to it so they are going to use that – that bridge also needs to get replaced but it won't happen at the same time.

Mr. Patel said so they're going to close the road basically and then they will install the sediment and erosion control and what they are proposing for the water handling is just using sand bags – 3 by 3 by 3 sand bags in place; once they remove the top of the deck they can place the water handling plan as shown; once that's done we can remove the existing stone abutments and then after that they can install the micro-piles and then from there we can install the concrete abutments and then we could place back once that's installed they can actually removed the sand bags in between before they can put on the deck again so that they can easily remove those.

Mr. Patel said once the deck is on - actually the traffic can you know we could actually start the traffic so trying to limit the amount of closure for the roadway.

Mr. Patel said we're anticipating the whole construction to be about four months but basically the road will probably be closed for about two months because they'll have like a one month prior to it and probably one month after to install the railings, the curbs and the final grading of the roadway and repaving it so we're anticipating it to be about four months construction but we're hoping that the road is only closed for about two months.

Mr. Patel said he'd now hand it over to Matt (Sanford) to go over the impacts.

Matthew Sanford, professional certified soil scientist, professional soil scientist and an associate with Milone and MacBroom addressed the Commission.

Mr. Sanford said he was going to take a step back for a second and kind of take you back to existing conditions and the first thing that they did was before they actually did anything on the site was go to the NRCS Soil Survey to look up the potential for wetland soils along Honey Pot Brook.

Mr. Sanford said if you look at the NRCS Soil Survey map and that's part of your (the Commission's) package with the application that shows that you do have the Bash silt loam flood plain soil along Honey Pot Brook both on the upstream side and downstream side of the bridge – that is what was flagged on the site.

Mr. Sanford said so what you have on your plans is actually two regulated resource lines – there's a wetland line and then there's a ordinary high water mark line; the wetland line is represented by a triangle pattern (on the plans) and is located (Mr. Sanford pointed to a point on the plans) and it runs long Blacks Road on the upstream side of the bridge also along the downstream side is runs along this embankment (shown on the plans) which is basic top of bank and on the left side (he said when he talks left-bank-right-bank he's always facing downstream in direction) and in this case it would be up towards the ceiling and then left bank there's a wetland line there as well.

Mr. Sanford said in addition to that you see an interior line – ordinary high water mark.

Mr. Sanford explained that the ordinary high water mark parallels the river and that's typically the line where you get a two year storm event so that's where you see a rack line.

Mr. Sanford said if you go out there after a significant rain event you'll see a rack line of edged debris along the river channel and that's what's representing the ordinary high water mark – that's an important resource line specially for the Corp of Engineers and DEP – they want to see what that ordinary high water mark is so that's why you see two different regulated resource lines on your plans.

Mr. Sanford said in addition to that we have FEMA flood plain – this is a Zone A so that means it does not have flood elevations assigned to it – there are Zone A's just downstream of the bridge but in this particular location it does not have flood plain elevations associated with it but it is mapped as a flood Zone A under a flood plain.

Mr. Sanford said in addition to that the last resource area is obviously your upland review area.

Mr. Sanford said in terms of impacts – our total impact number to the actual wetlands and watercourse is approximately 26,000 SF or .06 acres give or take – those are for the activities associated with obviously the replacement of the structure.

Mr. Sanford said the wetlands themselves – he said if you're been out there and had a chance to do a site walk on the upstream side is a large flood plain along this side (shown on the plan) so the right bank of the Honey Pot Brook – that has a diversity of Elms, Hickories, Red Maples, even some Hemlock mixed in, understory – it actually has Christmas Fern and there's also Skunk Cabbage within that particular wetland.

Mr. Sanford said on the left bank it predominantly upland vegetation – Hemlocks, White Pines, Oaks and understory – predominately Maple Leaf Viburnum so mostly upland vegetation right along the immediately along the wetland.

Mr. Sanford said on the downstream side right bank is actually primarily shrubs – Silky Dogwood, Winged Euonymus, Autumn Olive is this side of the wetland area; left bank more of a flood plain broad area – Silky Dogwood, Bittersweet and Spice Bush out in that area.

Mr. Sanford said so those are your flood plain systems in terms of functions and values obviously Honey Pot Brook is a fishery resource – it has flood plain attenuation because it has a flood plain associate with it – a FEMA flood plain.

Mr. Sanford said shoreline stabilization – he said the shoreline for the most part or the bank is stable – you will notice – I’ll go through in a second that they are proposing additional stabilization measures – there’s also some nutrient absorption that does take place during higher storm events within the flood plain wetlands so those are your primary functions and values of that particular wetland system – he said we don’t believe we’re impacting those particular functions as part of this project and we are maintaining fish passage – we’re maintaining all those particular important functions that the wetland provides.

Mr. Sanford said there is Natural Diversity Database on the site. He said they’ve had some initial correspondence with DEP specifically Dawn McKay – Box Turtle is the species of concern in this area.

Mr. Sanford said she (Dawn McKay) did request that when we do submit anything to DEP because they’ll probably have to submit some plans to DEP as part of this process – they’ll review it then and comment; typical comments will be installation of silt fence, apprising the contractor of what the Box Turtle looks like, implementing a management plan within the contract documents so that will all be part of the plan as we move forward.

Mr. Sanford said in terms of getting back to the proposed conditions and what we’re doing out there in term of restoring the nature sub-straight and stabilizing some of the under cut banks – you’ll notice on the plans specifically on the left bank – along this outside bend of Honey Pot Brook you’ll see a row of boulders being placed along this bank.

Mr. Sanford said their water resource engineers took a site visit out there – documented that that particular side of the bank has undercutting going on so when water – during higher flows comes directly perpendicular into that bank and cuts the bank but at a very low elevation so you have undercutting going on at that location and one of the recommendations from the water resource engineers was to actually place boulders along this bank – kind of tucking them into that – that undercut bank; that would be done by simply walking a machine up the river instead of trying to cut a accessway through the wetlands or upland vegetation – we’re trying to maintain the upland vegetation as is – we’re

trying to minimize that clearing so that activity would actually occur by walking the machine up the actual Honey Pot Brook.

Mr. Sanford said in addition to the boulders you'll see that this is the area underneath the proposed bridge is going to be restored to a natural sub-straight condition – that's important both from a fishery stand point from a velocity stabilization standpoint within the structure itself and also important for restoring some "inmacrovert" habitat that will be temporarily lost as part of this construction.

Mr. Sanford said in addition to that storm water improvement measures currently – catch basins, discharge – a set of catch basins on left bank of the river currently discharge to this location here (pointed to on the plans); on the right bank they currently discharge here (pointed to on the plans). He said what they are actually calling for is replacing those catch basins with deep sumps that capture any sediment that may flow off the roads during the wintertime.

Mr. Sanford said in addition on this particular side (shown on the plans) you see we also have a rip-rap dissipater – plunge pool to also capture and dissipate velocities before it gets into the stream.

Mr. Sanford said on the right bank side these will be deep sumps again and these will actually outlet right directly through the headwall of the abutment of the bridge and directly into the stream but there's scour protection just below that outfall.

Mr. Sanford said and with that – those are the wetlands and impacts.

Dr. Dimmick said he wanted to know while your doing some of this – like walking a machine up to place to bounders would it be of any value if they put a floating silt curtain in across the stream of would that not do any good.

Mr. Sanford said it all depends on the flow that you have there – if we are subject to doing it during low flow condition we may not be able to really properly install a silt loam – it can be considered if they are doing it during high flow.

Mr. Sanford said the other thing might be – DEP Fisheries Division doesn't like to put silt loams or turbidity curtains in the stream because of fish passage issues but that's not to say they couldn't implement that on this particular project as long as they were okay with that.

Dr. Dimmick said he was just wondering whether it would be of value or not under those circumstances. He said he knew if you had a different set of conditions it would be appropriate – with a through flowing stream it's kind of fifty-fifty.

Mr. Sanford said and plus also you're velocity that's out there – you have very little flow going through there – the silt just sits on the rock and doesn't really capture anything for you.

Mr. Sanford said they'll have to see it when construction occurs.

Dr. Dimmick said he was thinking there are certain phases of your activity where you're going to stir up more sediment than in other phases.

Mr. Sanford stated absolutely.

Dr. Dimmick asked if other members of the Commission have questions at this point – no questions were asked.

Dr. Dimmick asked if staff had any questions – no questions were asked.

Dr. Dimmick asked if any members of the public had questions.

Dr. Dimmick said let the record show that nobody seems to have any questions.

Dr. Dimmick opened it for comments from either the Commission or the public at this point.

Mr. Kurtz stated it was well throughout and well planned.

Dr. Dimmick closed the public hearing at 7:50 p.m.

Dr. Dimmick thanked the gentleman (Mr. Gancarz and Mr. Patel); he said they will not have action on it tonight – we'll probably turn it over to staff for work when they get to the regular part of the meeting.

VI. ADJOURNMENT

The public hearing was adjourned at 7:50 p.m. by the consensus of Commission members present.

Respectfully submitted:

**Carla Mills
Recording Secretary
Cheshire Inland Wetland and
Watercourse Commission**

