City of Newburyport Joint Public Hearing Planning Board and Planning & Development Subcommittee October 19, 2016

The meeting was called to order at 7:03 PM.

1. Roll Call

In attendance for the Planning Board: James Brugger, Sue Grolnic, Joe Lamb, Jim McCarthy, Leah McGavern, Andrew Shapiro, Bonnie Sontag, Mary Jo Verde, and Don Walters.

In attendance for the Planning & Development Subcommittee of the Council: Councilor Ed Cameron, Councilor Barry Connell, and Councilor Jared Eigerman

Andrew Port, Director of Planning and Development, City Engineer Jon-Eric White, Councilor Larry Giunta, and Councilor Charles Tontar were also present.

2. Planning Board and Planning & Development Subcommittee of the Council Public Hearing

a) Proposed amendment regarding provisions for sidewalks and trees Continued from 10/5/16

Chairman McCarthy said the board did not want the regulation to be completely optional, as Councilor Giunta's amendment provided, but current mandatory regulation triggers should be tweaked. Councilor Cameron wanted to maintain the existing regulation to collect history for at least six months or a year before making any changes. Councilor Eigerman said two triggers already in place were both substantial, that of requesting zoning relief and spending considerable funds on an upgrade. Implementation issues were at the board level. Councilor Connell agreed there was insufficient implementation experience and advised against revising the ordinance. A future amendment should address the issue that a \$100,000 rehab will be diminishing percentage of a \$400,000 property whose price is rising rapidly. Councilor Cameron said the amendment should come before the full City Council.

Public comment open.

Councilor Giunta, Ward 5, said there were situations where sidewalk repair or replacement did not make sense; the boards and the DPS had no voice in that. For example, there was no sense in adding 40 square feet of asphalt sidewalk when the sidewalk would dead-end on either side.

Public comment closed.

Board members favored changing the monetary value trigger to increasing the square footage of a home. Otherwise, the board's recommendation remained the same. Councilor Cameron said the amendment would stay in committee. Councilor Giunta's concerns would be addressed in one more meeting.

Ed Cameron made a motion to close the hearing for the subcommittee. Jared Eigerman seconded the motion and all members voted in favor.

3. New Business

a) Evergreen Commons LLC c/o Lisa Mead, Esq. 18 Boyd Drive and 15 Laurel Road Preliminary Subdivision Plan (2016-PSP-01)

Chairman McCarthy said the applicant had received feedback that the board preferred a full secondary access and the OSRD plan. A large amount of information on the project had been received. The board had agreed to continue the OSRD proposal to Nov 4th.

Steve Sawyer, engineer, DCI, 120 Middlesex Avenue, Somerville, presented the conventional yield plan. The 23-plan set submitted included lot configuration, drainage, and profile. Christiansen & Sergi (CSI) comments on catch basin spacing, hydrants, and stormwater would not be addressed at this stage. Responses were received from the Water Department, Conservation Commission agent, Tree Commissioner, and the Energy & Recycling Department. Comments on wetland lines and viability of lots were incorporated in the plans. Lot size was 25,000 square feet lot compared to the OSRD average lot size of 11-13,000 square feet. Construction within the Isolated Land Subject to Flooding (ISLF) was outside the 25-foot No Disturb area. No variance was required but a Conservation Commission permit was needed. A grading plan would allow lots on the 15% slope areas by special permit. Attorney Mead said Dan Lynch, Water Distribution Manager, needed the detail in a definitive plan before he could make final comments. Molly Ettenborough, Energy & Recycling Manager, wanted to know who would pay for streetlights. Crispin Miller, Tree Commission Chairman, wanted to know who would pay for street trees. Chairman McCarthy said those details would not be addressed at this stage.

Phil Christiansen, CSI, said lots near the wetlands (ISLF) and the 15% slope on both the OSRD and yield plan met a reasonable application of the rules and regulations. Houses were outside the 25-foot No Build area. ISLF requirements and sloped lots could be handled by grading.

James Brugger made a motion to continue the Preliminary Subdivision Plan to November 2nd, 2016. Andrew Shapiro seconded the motion and eight members voted in favor. Joe Lamb abstained.

Motion Approved.

During the course of discussion and consideration of this application, plan(s), supporting material(s), department head comments, peer review report(s), planning department comments and other related documents, all as filed with the planning department as part of this application and all of which are available in the planning department, were considered.

4. Old Business

a) Evergreen Commons LLC c/o Lisa Mead, Esq. 18 Boyd Drive and 15 Laurel Road OSRD Special Permit (2016-SP-03) Continued from 9/21/16

Director Port presented an image of the applicant's parallel processes for pursuing both a traditional subdivision and an OSRD. The board preferred the OSRD and Mr. Sawyer presented updates to the plan. The access road moved from the end of Laurel Road to Brown Avenue. One lot lost in the process reduced the yield plan to 43 lots. Lot buildings were over 50 feet from the No Disturb area. The ISLF would need reconfiguring from 220,000 square feet to 290,000 square feet. The Boyd Drive connection was removed to address neighborhood concerns but the trail connection remained. The exit was altered to address concerns about headlights directed at homes. The secondary access, now a full public street that tied into Brown Avenue, included a full stop for vehicles and a sidewalk on one side that connected to trails and open space. Two to four trips would depart in this direction. Two cul de sacs were left in tact. Connectivity between the two subdivisions left 22 acres of open space. No lots were on the 15% grade; 14% was the steepest grade on the plan. Lot 21 clipped the 100-foot buffer. Houses would be 75-100 feet from the ISLF. The quality of the wetland resource would be maintained and improved. Attorney Mead said the addition of a different lot required re-advertising the public hearing.

Jay Billings, owner and Principal Hydrogeologist, Northeast Geoscience (NGI), 97 Walnut Street, Clinton, MA, presented new information on the water. Products used at the golf course per operator's receipts were mostly fertilizers, fungicides, insecticides, herbicides, and nematocides. Modern products did not appear on a water compound analysis. The golf course was in compliance with the special permit issued. The chemical industry was constantly developing new products that were not mobile in the environment and broke down quickly. Ground water samples were representative of what could be expected for a golf course. Sodium and chloride were slightly elevated, most likely from road salt. Potassium and sulphur were slightly elevated due to fertilizers. There were 1.8 parts per billion of a volatile organic compound called isopropyl toluene that was not often seen and for which there was no drinking water standard. He had never seen the compound before and did not know the source. The material's presence was not a large concern and the discovery would be communicated to the Water Department. No synthetic organic compounds were detected in the recharge area for Well #2, such as 2,4-D (a widely used selective herbicide for killing dandelions and broadleaf weeds), Roundup (glyphosate), and Dicamba (a selective herbicide). He felt certain Dicamba was in use on recharge area lawns but it did not show in the ground water. Nitrogen loading calculations shown were discussed as typical of what came from lawn, cropland, and golf course fertilizers. He had used existing conditions to simulate the development conditions. Replacing portions of the golf course in Zone II with the OSRD would reduce nitrate concentrations in Well #2.

Mr. Billings addressed selective comments in letters from AECOM, the City Engineer, and Geosphere. The primary consideration was the definition of contaminate, which was not on the list of definitions in the City's Water Resource Protection District (WRPD) ordinance. The regulation appeared similar to the DEP-recommended regulation except for one item. AECOM used the Safe Water Drinking Act's definition of contaminate. By that standard, every drinking

water well in Massachusetts was contaminated, including Newburyport Wells #1 and #2. NGI used the Merriam Webster definition of contaminate, 'something that made a place or substance no longer suitable for use.' By that standard, Well #1 and #2 were not contaminated. AECOM focused particularly on sodium. The OSRD's roads would cause road salt to make its way to Well #2, increasing sodium by 8%. The newly revised road layout increased sodium by 10%. The drinking water guideline was 20 mg/L, a taste threshold. Almost every well in Massachusetts was over 20 mg/L. The development's sodium projection was between 27-29 mg/L. AECOM's standard sodium threshold of 30-60 mg/L was lower than NGI's threshold however, there was no legal threshold to which to adhere. Public drinking water has a sodium content of 39.5 mg/L in part due to sodium in the chemicals added at the water treatment plant. He did not consider 29 mg/L to be an issue. AECOM disagreed because they used a different definition and threshold. The water was already contaminated by AECOM's standard. AECOM's letter said any new development presented a risk of contamination, an interpretation that would prevent future septic system installations and had implications for landowners and home expansions. The AECOM standard would prohibit any new construction in Zone II altogether despite that by law the DEP accepted residential development in Zone II.

Geosphere's letter was concerned with the potential for contamination if proposed sewer lines failed. Failure had never been an issue for the 30-50 year old sewer lines already surrounding Well #2 on three sides. Proposed sewer lines would be built to modern standards and inspected by the City before they were accepted. Older sewer lines were at greater risk of leaking than new ones. In 1999, Geosphere identified the golf course as a potential source of contamination but not residential development. However, the 2016 Geosphere report recommended keeping the golf course rather than constructing residential development. Chemicals used on a golf course were better today but still a potential source of contamination. The City engineer's letter said glyphosate had reached the well. Mr. Billings found no evidence in his analysis to support that statement. All three letters were correct in describing concerns about emerging contaminates, but that concern was unrelated to the project. The risks of emerging contaminates were present whether or not the development was constructed and no land use was associated with the issue. In Mr. Billings' opinion, the development was more desirable than the golf course.

Member comments: Where was it stated that septic systems were allowed by the City ordinance? Mr. Billings said section XIX-G, Prohibited Uses, mentioned a sewage amount limit of 440 gallons per acre per day and nitrate loading at 500 mg/L per acre.

Doug Gove, AECOM Technology Corp., 66 Long Wharf, Boston agreed his definition of contamination, 'any substance or matter in water,' differed from NGI's. He was particularly focused on the word 'contribute' in the ordinance language 'likely to cause or contribute to contamination.' The project would contribute to the problem by adding to existing contamination. No secondary contaminate level existed for sodium in drinking water, as referenced by NGI. Drinking water guidelines in an EPA Advisory and a Mass DEP Notification were 20 mg/L for sodium for taste and sodium-sensitive individuals. Activities on the site would increase sodium contamination, particularly from the roadway.

The applicant had claimed that reducing the managed golf course turf would improve water quality at the well. That statement ignored that the golf course, with its 22 conditions for how the

course was constructed and operated by a certified superintendent regarding the types of chemicals that could be added, where they could be added, how often, and at what rate, was no ordinary golf course. Water quality was good at Well #2 because of those conditions. Managing conditions and restrictions effectively for 38-44 homeowners who could purchase numerous products containing unregulated chemicals with unknown properties was not practical and supported a case that the development could not improve water quality. Some homes currently in Zone II were there before the zone was delineated and only two homes had been built since the delineation. There was no precedence for a large development in Zone II.

The extent of the bedrock high cannot be confirmed by only one point of measurement. Possibly more than 50% of the groundwater flowed toward Well #2. Most buildings are located on a portion of the site where the groundwater flow toward Well #2 is undisputed. Water had been above the bedrock high twice in the last 10 years. Any activity on the site both during and after construction could impact seasonal high water and Well #2. The closer new structures are built to groundwater, the more diminished the ground's ability to filter out contaminates. With only two feet of buffer between foundations and groundwater supply, a typical home contaminate like gasoline could easily infiltrate. Stormwater infiltration structures and pools were also concerns. In 1973-74, a gravel pit had exposed the groundwater table and was filled with salt marsh fill. The resulting sodium and chloride increase in water was such that the fill had to be removed, proving that what happens at the site would have a direct link to the water quality. Re-infiltration of stormwater was another concern.

The development would both increase the risk of contamination and add to chemicals already present. The validity of managing homeowner restrictions over time was questionable. The site was within 700 feet of the well. Contaminate travel time was a few weeks to a few months. Numerous reports proved a direct link between pesticides and lawn care chemicals and the quality of groundwater.

A board member asked if the golf course chemicals should be on prohibited list? Mark Owen, hydrogeologist, AECOM, said many chemicals broke down into other chemicals as they traveled through groundwater. Some should be regulated. Other chemicals had unknown effects. Some chemicals stayed in the ground water without changing. The more conservative definition of contaminate was supported by the fact that there was no data for all chemicals or for the concentrations that could impact people. Changes in the water's chemistry would have an unknown effect and created concerns that the well could be compromised. Chairman McCarthy asked if Mr. Owen was satisfied with the nitrate loading calculations Mr. Owens said yes.

Attorney Mead disagreed with the opinions of the neighbors' attorney and both City attorneys. Her arguments were documented in a letter. The board had been asked to consider the applicability of an ordinance provision that in her opinion was not applicable. The board had no experience with residential development in Zone II.

Section E made no reference to provisions in Section F, nor did Section F reference provisions in Section E. The sections were completely separate contrary to the three attorneys' opinions. Section F (10) should be read only in the context in which it was written. Residential uses were allowed by-right unless there was a septic system, which required a permit. Proposed homes

would be on public water and sewer. Further, the language did not appear in the final ordinance. A Supreme Court ruled that when language was removed from the final version of an ordinance, its removal was considered to be intentional. The language was changed so that the ordinance would not be illegal regarding the Uniformity Clause. The other attorneys' interpretations violate the Uniformity Clause. The Rubin and Rudman letter cited the Lorden case in which a land court ruled that uses allowed by-right could not be made subject to a special permit; the two were mutually exclusive. The board could apply special permit criteria that existed within WRPD with reasonable terms and conditions, but special permit criteria did not modify permitted uses. The board could not take a prohibited use and apply it to a permitted use because of the application of the Uniformity Clause.

Attorney Mead said Director Port directed AECOM in an email to address a contaminate standard that did not apply in the WRPD. AECOM's Paragraph 13 obfuscated the discussion by referring to chemicals not in use. Salting roads around the wellhead would cause sodium to increase, but the City could change practices around the wellhead to reduce sodium. Well #2's sodium was lower than in the City's overall water. If building a residential development in Zone II was a public health risk, the AECOM and Geosphere reports would have said so and they did not because there was no evidence that development was a risk. If Mr. Talkington was concerned about residential development in Zone II, he did not list development as a possible contaminate in 1992. Should the City take every house around Zone II by eminent domain? The proposed OSRD has offered restrictions placed on homeowners' use of potential contaminates.

Public comment open.

Peter Durning, resident, 12 Arthur Welch Drive, and attorney, Mackie Shea, PC, 20 Park Plaza, Boston, represented 11 Boyd Drive residents. He said Attorney Mead's interpretation contradicted three other attorneys. The proposal required a special permit that promoted preservation of natural resources, including aquifers, and sound environmental practices. The findings that proved otherwise should guide the board's decision. All peer review letters cited the potential hazards of unregulated private structures to contribute to the contamination of water that was untreated prior to distribution (but for some slight pH modification). Emerging contaminates was another potential hazard. The public drinking water system was exposed to many threats. The City's limited water resources should be maximized.

Jon Eric White, City Engineer, explained his opinion that glyphosates had reached the well. Lab reports showing no glyphosate detection were equated with detection at some level less than .6 in his experience. The site's bowl shape prevented runoff from discharging through a surface flow into the Merrimack River; 100% of runoff went directly into the aquifer. Unregulated chemicals sold at the hardware store to 38 homeowners would end up in the aquifer. Even the City's sewer ordinance disallowed a septic system within 300 feet of a public sewer.

Director Port read an excerpt from Rubin and Rudman's letter, "Here, Section XIX-F (10) is not an outright prohibition which unravels the as-of-right residential use, but rather a type of performance standard that a proposed project must comply with. While as-of-right uses are allowed in the WRPD, each project must demonstrate the ability to satisfy the requirement based on expert testimony relative to the details of the individual development proposed as well as site

conditions (i.e. depth to groundwater, soil permeability, travel time from infiltration to the groundwater, transport to the well, etc.)." AECOM's contaminate definition was preferable to one from a dictionary. The ultimate contribution could be an increase of any number of substances. AECOM's letter concluded that the project would contribute to an increase in contaminates by citing previous history of the hydrological interrelationship between the site and Well #2. Director Port contrasted the Oleo Woods OSRD homeowner's association's role to that of the Evergreen OSRD homeowner's association who would inevitably bear responsibility for the quality of the City's water supply. Abiding by ordinance conditions, the development team carried the burden of proof that there would be no contribution to contaminates in the water.

Frank Giacalone, Director of Public Health, asked if sample testing at the well found any pesticides? Mr. Billings said no. Mr. Giacalone said in considering whether it was safer to have a golf course or a residential development, the golf course had both control of and a detailed record of substances used whereas the applicant had not proved how it was possible to monitor substances used by 38-44 individual homeowners. Self-policing was insufficient. Attorney Mead said the proposed included monitoring wells and a homeowner's association with one licensed individual to handle yard care at each home.

Ray Talkington, Geosphere Environmental Management, Inc., 51 Portsmouth Avenue, Exeter, NH, had represented Boyd Drive residents for the 1999 zoning project. He followed certain guidelines set forth by the EPA and other agencies. Updating the overlay district had addressed new things going on in the district but not anything related to tonight's discussion. His knowledge of the site was extensive. He disagreed with the applicant's statement that it was not possible to claim the project would contaminate what already existed as contaminated. The applicant claimed one thing and yet proposed something else. He differed with the applicant's statement that there was no significant adverse impact. In fact, the proposed project would disturb all the soils with construction. Chemicals absorbed in the soil profile below the turf would leach it into the subsurface and find their way to the well water. Chemicals not part of any testing analysis could get in. He required more information about the monitoring of irrigation wells at the golf course, however the requirements of the ordinance were not satisfied. The 32year old well could last 55 years. Its replacement could be located closer to the development. Alternative, highly transmissive aquifers with sand and gravel locations for new wells were scarce. Here, there was sufficient land with potentially new sources for groundwater supply. No other reason was needed to protect the land and prevent the aguifer from further degradation.

Don Rogers, 10 Brown Avenue, had seen the golf course flooded. A resident had paddled a canoe around it. The development, densely packed into a small area, increased the concentration of any contaminates that would otherwise be spread out over a larger area. Attorney Mead said the project would increase contaminates. The mayor and City Council were against the project. Risking one part of the public water supply could create a health issue for the entire City.

Public comment closed.

Chairman McCarthy asked for 30 years of annual testing data from the golf course. Attorney Mead did not know where that data could be found. Chairman McCarthy said the golf course might not be in compliance. Attorney Mead said the whole site was tested. One monitoring well

existed from the beginning. Chairman McCarthy said the research supported that the well was a strategic asset. If other water sources were jeopardized, the well became more valuable. The bowl shape of the site was not standard. Without the last 30 years of test data to show what was in the bowl, he was concerned about standing and open water, ponding, and what was in the groundwater. A further concern was anything getting into the aquifer, particularly when the claylined lake overflowed into people's yards and interacted with the aquifer. Many variables influenced the potential for contamination. If the well became contaminated after houses were built, the potential for a multi-million dollar liability existed because water went directly into the distribution system. Neither the City nor the homeowners should assume that liability. Any actions would follow all rules to limit liability to the City.

Board members understood the risk of contamination but there was no exact definition. They asked the Conservation Agent to check on: 1) any alteration of bordering vegetative wetland, regarding prohibited uses, 2) ask engineers about item #3, earth removal within a specified number of feet of high groundwater, and 3) Section I, with respect to retention ponds requiring a special permit under the WRPD. Should the City take over certain areas in Zone II? Concerns about resource contamination raised the issue of consistent practices within the City's water resources as a whole. Placing Well #2 on a stream from the Artichoke would contaminate clean water. Plan improvements were appreciated, but limited natural resources were worth protecting and the primary consideration was the strategic asset. Concerns about foundations raising the groundwater level and how water would be dispersed when many flooding and standing water issues already existed were discussed. Mr. Sawyer said at a minimum, foundations were two feet above the high water level. He did not propose going below two feet because that would require mitigation. Adherence to stringent regulations for managing stormwater and a detailed enhanced treatment plan would be presented at the design stage. Members asked how water drained from the bowl? Mr. Sawyer said water ponded in the ISLF area and slowly leached into the ground. Basements would sit above the ISLF elevation in those areas.

The applicant requested a continuance to November 4th to allow the various board and commissions and City Council to meet.

Andrew Shapiro made a motion to continue the OSRD Special Permit to November 4th. Don Walters seconded the motion and eight members voted in favor. Joe Lamb abstained.

Motions Approved.

During the course of discussion and consideration of this application, plan(s), supporting material(s), department head comments, peer review report(s), planning department comments and other related documents, all as filed with the planning department as part of this application and all of which are available in the planning department, were considered.

5. General Business

a) The minutes of 10/05/16 were approved. Bonnie Sontag made a motion to approve the minutes. James Brugger seconded the motion and all members voted in favor.

Motion Approved.

During the course of discussion and consideration of this application, plan(s), supporting material(s), department head comments, peer review report(s), planning department comments and other related documents, all as filed with the planning department as part of this application and all of which are available in the planning department, were considered.

6. New Business continued

b) Harris Street Six Realty Trust, Mark L. Janos, Trustee 6 Harris Street DOD Special Permit (2016-SP-06)

Leah McGavern made a motion to continue DOD Special Permit to November 2nd. Mary Jo Verde seconded the motion and all members voted in favor.

Motion Approved.

During the course of discussion and consideration of this application, plan(s), supporting material(s), department head comments, peer review report(s), planning department comments and other related documents, all as filed with the planning department as part of this application and all of which are available in the planning department, were considered.

7. General Business, continued

b) Approval Not Required - 1 New Pasture Road (2016-ANR-10)

Director Port showed plans for the lot split. The new lot would be acquired by the City for construction of a new lift station that benefited development in the Business/Industrial Park and the Smart Growth District, where new growth was currently on hold due to capacity issues.

Don Walters made a motion to approve the ANR. Bonnie Sontag seconded the motion and all members voted in favor.

Motion Approved.

During the course of discussion and consideration of this application, plan(s), supporting material(s), department head comments, peer review report(s), planning department comments and other related documents, all as filed with the planning department as part of this application and all of which are available in the planning department, were considered.

8. Adjournment

James Brugger made a motion to adjourn. Leah McGavern seconded the motion and all members voted in favor.

The meeting adjourned at 9:44 PM.

Respectfully submitted -- Linda Guthrie