

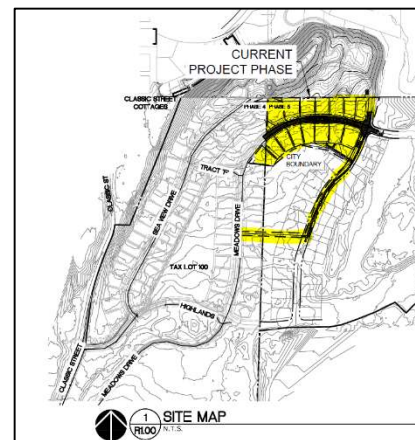
July 21, 2022

Ralph Henderson, PE. rhenderson@mcknze.com
Mackenzie
PO Box 14310
Portland, OR 97293

**Re: City of Manzanita (PWS ID #00505) Highlands Subdivision – Phase 5 (PH V)
Conditional Approval - PR #114-2022**

Dear Mr. Henderson,

Thank you for submitting plans for the Highlands (formerly Pacific Dunes #8) Subdivision – Phase V located in Manzanita, OR. The plans & land use compatibility statement (LUCS) were received Jul 7, 2022. A \$3,300 review fee payment was received July 11, 2022.



PH V (lots 68-82) is assigned plan review (PR) # 114-2022 and complements PH I (lots 1-16) previously granted Final Approval on March 22, 2022, under PR# 38-2020 and PH II-IV (lots 17-67) previously granted Conditional Approval on April 5, 2022, under PR# 48-2022. The overall project includes a new pump station to serve a total of 72 lots completed in 5 phases (PH I-V), with lots ranging from 5,200-sqft to 8,868-sqft developed on 64.18 acres encompassing 3 tax lots all within Township 3 North, Range 10 West annexed into the City of Manzanita near the vicinity of Classic St. and Necarney City Rd as shown in site maps on pages 4-7 of this letter (Section 29D – TL 100, Section 29AD – TL 200, Section 28 – TL 1401). The phases of the Highlands Subdivision development are tabulated below.

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100*
III	TL100	13	30-42	
IV	TL100 & 1401	15	53-67	
V		15	68-82	114-2022

*PS includes a single Amtrol WellXTrol pressure tank and a Grundfos pump skid with two 12-gpm duty pumps and one 85-gpm high demand pump, which pump out of the Meadows Drive distribution main and into the Highlands Drive main at that intersection.

The project is approved for construction as shown in the submitted plans, provided the following conditions are met:

1. An AWG #18 (minimum) tracer wire is installed per [OAR 333-061-0050\(8\)\(k\)](#):
Nonconductive water pipe (plastic or other material) that is not encased in conductive pipe or casing must have an electrically conductive wire or other approved conductor for locating the pipe when the pipeline is underground. The wire shall be No. 18 AWG (minimum) solid copper with blue colored insulation. Ends of wire shall be accessible in water meter boxes, valve boxes or casings, or outside the foundation of buildings where the pipeline enters the building. The distance between tracer lead access locations shall not be more than 1,000 feet. Joints or splices in wire shall be waterproof.
Tracer wire AWG was not specified in the trench detail on sheet R5.11.
AWG #12 is specified in the water service detail on sheet R5.11.
2. Air valves are placed at high elevations per [OAR 333-061-0050\(8\)\(i\)](#):
 - (i) Air-relief valves shall be installed at high points where air can accumulate. The breather tube on air-relief valves shall be extended above ground surface and provided with a screened, downward facing elbow;
3. The design ensures 20 psi to be maintained at all service meters per [OAR 333-061-0050\(8\)\(e\)](#).
 - (e) Distribution piping shall be designed and installed so that the pressure measured at the property line in the case of Community water systems, or at the furthest point of water use, in the case of a TNC of the type described in subsection (d) of this section, shall not be reduced below 20 psi;
4. Locations where waterlines cross sanitary sewer lines meet requirements in [OAR 333-061-0050\(9\)](#). This is addressed on sheet R5.10 of the plans for Phase V.
5. Disinfection and bacteriological testing of new facilities conforms to [OAR 333-061-0050\(10\)](#).

When the project is complete, please respond if the project was completed as planned and according to the conditions listed above. A [Request for Project Final Approval](#) is also required to be submitted. Written correspondence should reference plan review #114-2022 and water system ID #00505 and can be e-mailed to me at evan.e.hofeld@dhsosha.state.or.us.

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City of Manzanita (PWS #00505) Highlands Drive (Pacific Dunes #8) Subdivision – Ph V

Conditional Approval (PR#114-2022)

July 21, 2022

Until we receive verification that the project was completed with the conditions listed above met and we have granted Final Approval for the project, the waterlines and pump station are not approved for use. If you have any questions or would like this information in an alternate format, please feel free to contact me at any time at 971-200-0288 or via e-mail at evan.e.hofeld@dhsosha.state.or.us.

Sincerely,



Evan Hofeld, Regional Engineer
Oregon Health Authority – Drinking Water Service

Cc: Dan Weitzel, Manzanita Water Department

dweitzel@ci.manzanita.or.us

Jaime Craig, Tillamook County Public Health

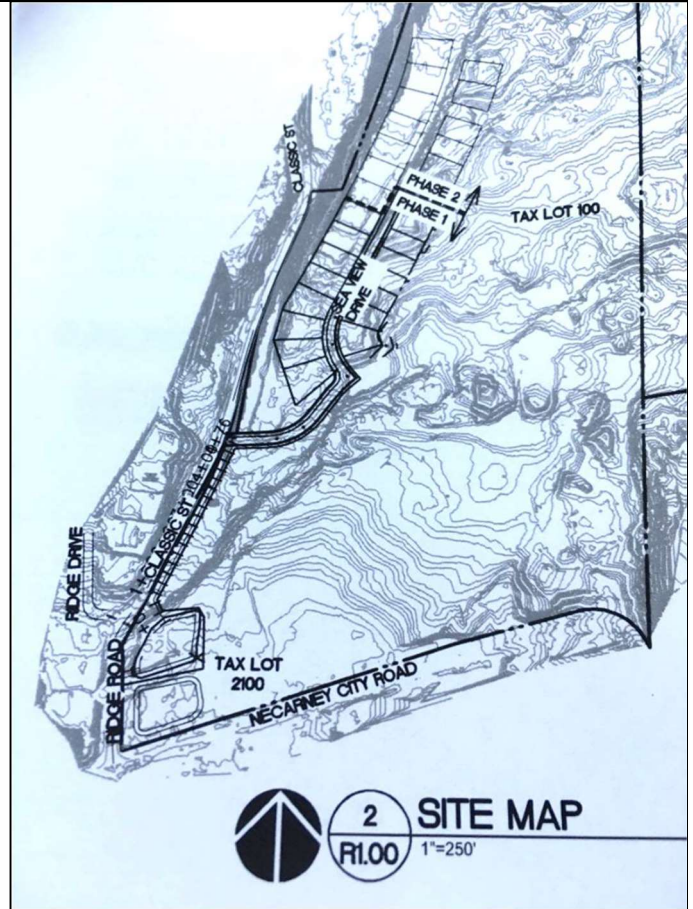
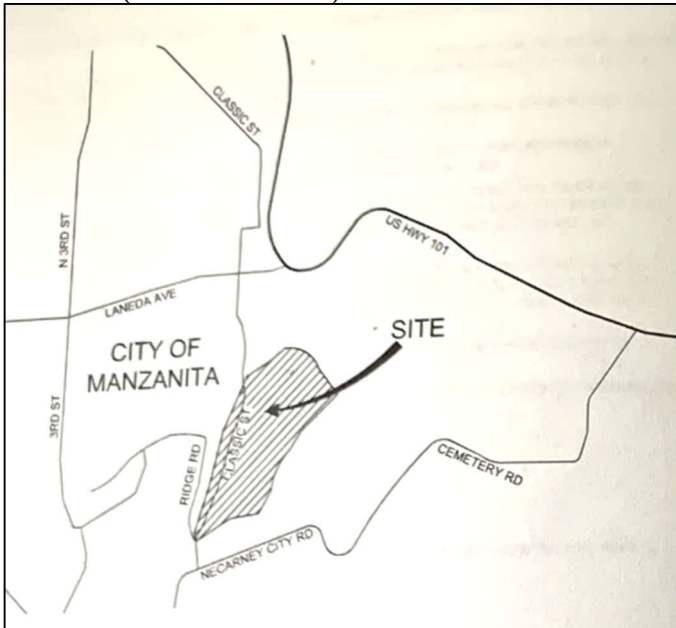
jcraig@co.tillamook.or.us

Maps Related to PH I of the Highlands Subdivision:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100
III	TL100	13	30-42	
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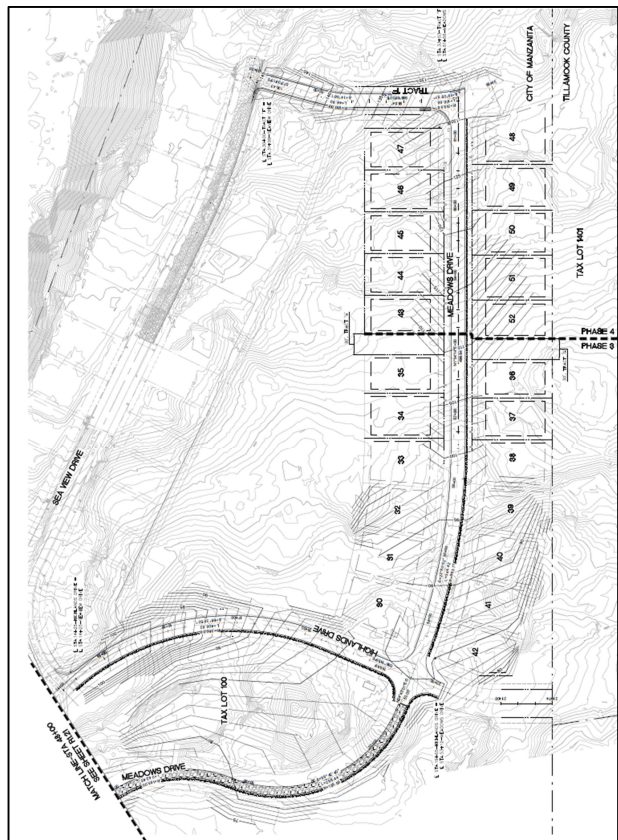
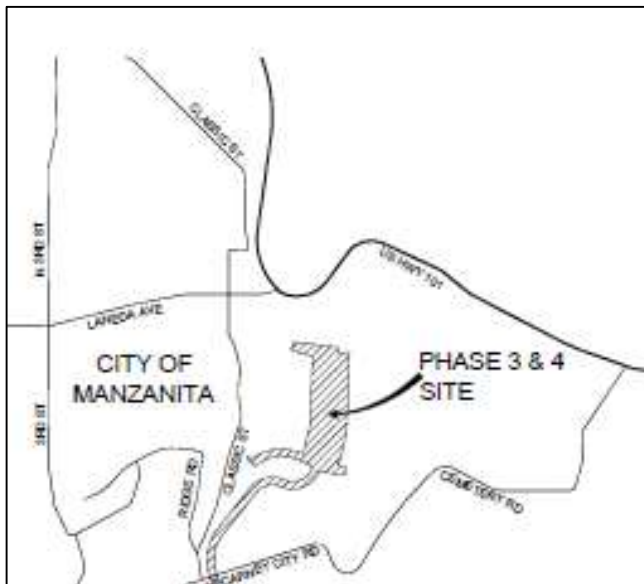
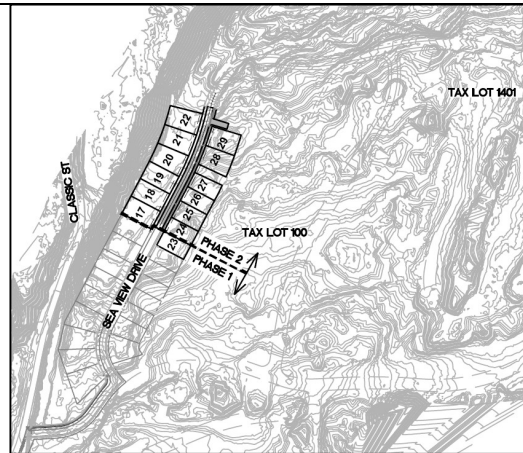
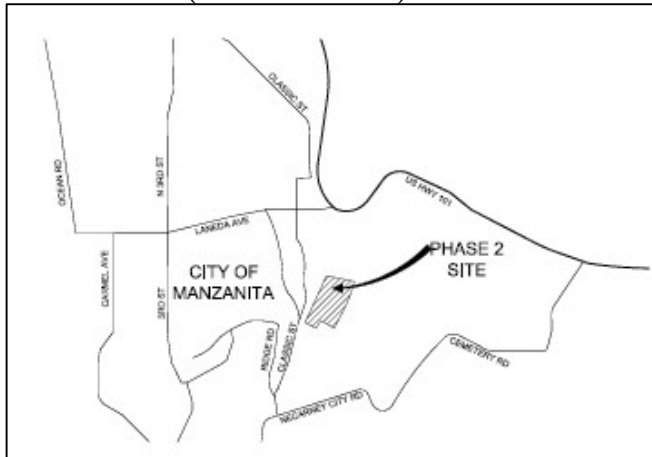
Phase I (PR #38-2020)



Maps Related to PH II-IV of the Highlands Subdivision:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100
III	TL100	13	30-42	
IV	TL100 & 1401	15	53-67	
V		15	68-82	114-2022

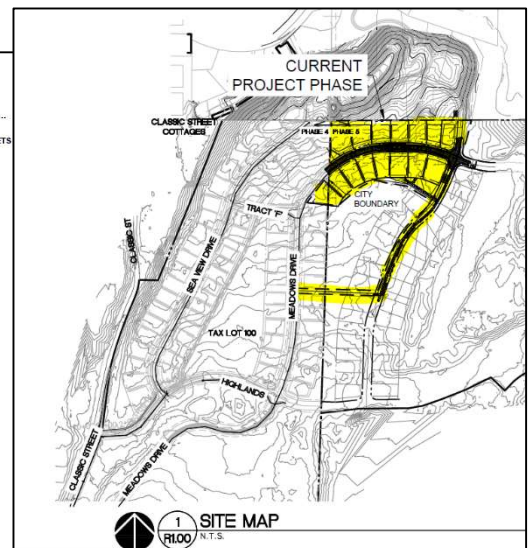
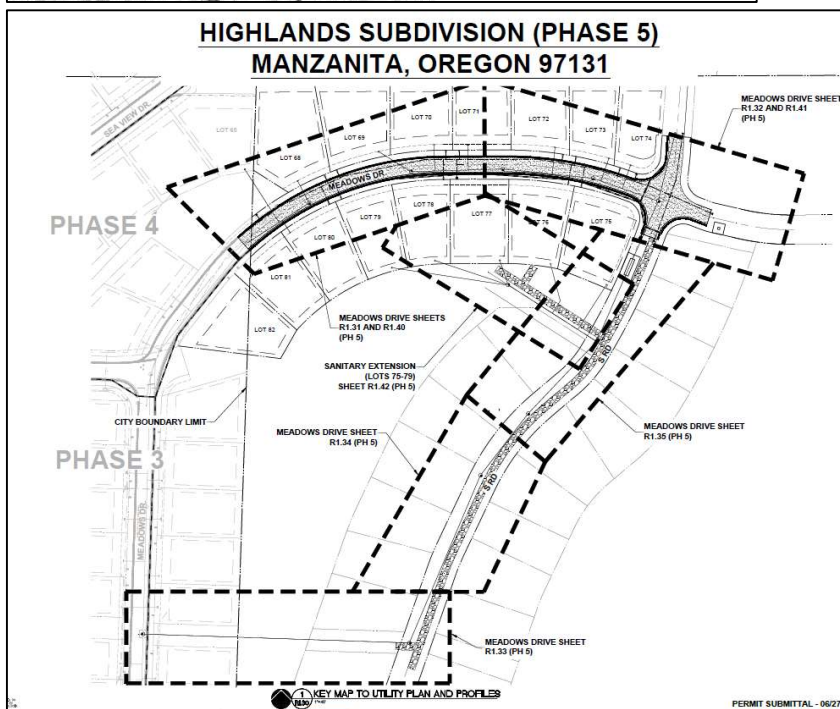
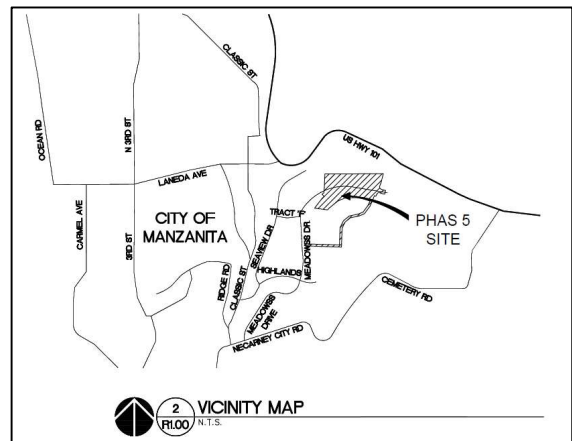
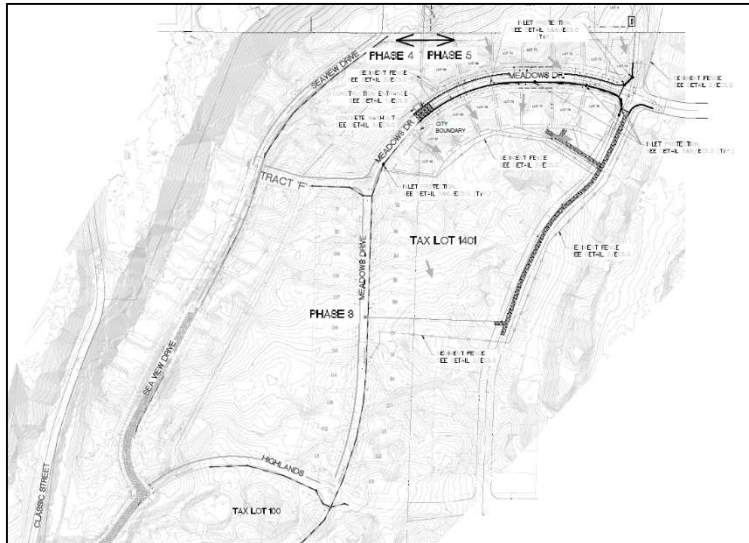
Phase II-IV (PR #48-2022)



Maps Related to PH V of the Highlands Subdivision:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100
III	TL100	13	30-42	
IV	TL100 & 1401	15	53-67	
V		15	68-82	114-2022

Phase V (PR #114-2022)



KEY MAP TO
UTILITY PLAN
AND PROFILES

R1.30

2160454.04

PERMIT SUBMITTAL - 06/27/2022

Pump Station & Pressure Tank

Pumps specified:

Two 12 gpm at 49.6 feet of TDH duty pumps (Grundfos CRI 3-2 A-FGJ-A-E-HQQE or approved equal)

One 85 gpm at 49.6 feet of TDH high demand pump (Grundfos CRI A-FGJ-A-E-HQQE or approved equal)

