Critical Areas Report for 2501 NE Kresky Avenue & XXXX NE Kresky Avenue Chehalis, Washington

Prepared for: Raindrop Properties, LLC 1955 Salzer Valley Rd Centralia, WA 98531-8924

Project # 102.21

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SIGNATURE PAGE

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INTRODUCTION

Purpose and Need

Loowit Consulting Group, LLC (LCG) was retained by Raindrop Properties, LLC (Applicant) to complete a critical areas investigation and report at 2501 NE Kresky Avenue and another unaddressed adjoining property (Subject Site) in the northeastern portion of the city of Chehalis, Washington (Figure 1 & 2). The Applicant has proposed the construction of an apartment complex and a commercial office building, both with associated parking, to be served by publicly owned utilities (Figure 3). Mapped critical areas within the subject site prompted the City of Chehalis to request an evaluation of critical areas according to Chehalis Municipal Code (CMC) Chapter 17.21 – Critical Areas.

Site Description

The subject site consists of two parcels totaling approximately 24.37 acres of commercial and timber property. Site specifics include:

Site Address: See Table 1

<u>Current Owner</u>: See Table 1

<u>Tax Parcel Number</u>: See Table 1

Legal Description: Section 20, Township 14 North, Range 2 West, W.M.

<u>Property Size</u>: Approximately 24.37 acres

<u>Jurisdiction</u>: City of Chehalis

Table 1: Summary of Subject Site

Parcel #	Address	Owner	Acres
021629002000	XXXX NE Kresky Avenue	Raindrop Properties, LLC	12.00
021630003000	2501 NE Kresky Avenue	Raindrop Properties, LLC	12.37
		Total (acres)	24.37

The subject site is located north of NE Kresky Avenue at the intersection of NE Hampe Way and NE Kresky Ave. in the northern portion of Chehalis, Washington (Figure 1). The subject site consists of moderately sloped forested property in the north and a commercial building with associated parking in the south.

Land uses adjacent to the subject site include:

- To the North Vacant land & forestry
- To the South Commercial retail & multi-family residential
- To the East Forestry and mining
- To the West Commercial retail

METHODS

Desktop Review

Prior to visiting the subject site, LCG conducted a desktop review of readily available mapping resources and other pertinent information including:

- Lewis County Web Map
 (http://ims.lewiscountywa.gov/webmaps/composite2/viewer.htm).

 This source provided parcel information, aerial photographs, physical attributes, and other information from the Lewis County Assessor.
- US Fish and Wildlife Service National Wetlands Inventory Wetlands Mapper (https://www.fws.gov/wetlands/data/mapper.html). This mapping source depicts wetlands and streams throughout the United States.
- US Department of Agriculture Natural Resources Conservation Service Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx). This source depicts mapped soils including hydric soils throughout the United States.
- Washington Department of Natural Resources Forest Practices Application Mapping Tool (https://fpamt.dnr.wa.gov/default.aspx). This mapping source depicts streams and wetlands in Washington State.
- Washington Department of Fish and Wildlife Salmonscape
 (http://apps.wdfw.wa.gov/salmonscape/map.html). This mapping source depicts streams and fish distribution in Washington State.
- Washington Department of Fish and Wildlife Priority Habitat and Species (http://apps.wdfw.wa.gov/phsontheweb/). This mapping source depicts priority habitats and species throughout Washington State.

State Regulations

Wetlands are regulated by Washington Department of Ecology (Ecology) under the Water Pollution Control Act and the Shoreline Management Act. The State Environmental Policy Act (SEPA) process is also used to identify potential wetland-related concerns early in the permitting process. All proposed direct and identified indirect impacts to wetlands are reviewed and approved/denied by Ecology using the regulations previously listed.

Streams are regulated by Washington Department of Fish and Wildlife under the State Hydraulic Code, Chapter 77.55 Revised Code of Washington. Projects involving activities within,

over, or beneath jurisdictional streams are subject to the Hydraulic Project Approval (HPA) permitting process administered by WDFW.

Federal Regulations

Wetlands and streams are regulated as "waters of the United States" under Section 404 of the Clean Water Act. Section 404 regulations are administered by the US Army Corps of Engineers (USACE).

Local Regulations

Wetlands, streams, and other critical areas are regulated by the Chehalis Municipal Code (CMC) Chapter 17.21 – Critical Areas.

Field Investigations

On January 17, 2023, LCG visited the subject site to collect site information (Appendix A), and flagged the Ordinary High Water Mark (OHWM) on an unnamed tributary of Salzer Creek in the northeast corner of the subject site. Conditions at the site were considered normal because vegetation was intact, no recent soil grading was observed, and no recent ditching was observed. Weather conditions at the time of the site investigation consisted of overcast skies with a high of 46.4°F and 0.02 inches of rain the previous 24 hours. Recorded climatological history from the Chehalis Airport two weeks prior to visiting the site was characterized with high temperatures ranging from 45.5 to 58.2°F and low temperatures ranging from 32.7 to 47.9°F. Total recorded precipitation two weeks prior to the site visit (January 3 – January 16) was recorded at 3.30 inches (Table 2, Appendix B).

Table 2: Weather Data at Chehalis Airport, Washington.

Date	Minimum Temp (Deg F)	Maximum Temp (Deg F) Total Precipitation					
1/3/2023	36.4	45.5	0.00				
1/4/2023	32.7	45.9	0.13				
1/5/2023	37.9	58.2	0.04				
1/6/2023	39.7	53.5	0.28				
1/7/2023	37.2	48.5	0.57				
1/8/2023	37.0	49.4	0.50				
1/9/2023	36.2	53.2	0.26				
1/10/2023	35.1	51.2	0.00				
1/11/2023	41.7	56.3	0.16				
1/12/2023	46.5	52.9	0.54				
1/13/2023	47.9	52.9	0.26				
1/14/2023	43.0	55.5	0.03				
1/15/2023	42.2	46.8	0.51				
1/16/2023	41.3	48.4	0.02				

		Total:	3.30
1/17/2023	41.7	46.4	0.18

Data from Agweathernet

Site investigation work tasks included:

- Documentation of current site conditions
- Documentation of adjacent land uses
- Flagging OHWM of streams

Wetlands were evaluated according to methods outlined in the U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).

Vegetation

Vegetation at the site is a mix of trees, shrubs, forbs, and grasses typical of the slopes surrounding the Chehalis/Centralia urban area. Table 3 summarizes vegetation observed at the subject site.

Table 3: Vegetation Observed

Scientific Name	Common Name	Wetland Indicator Code
Acer circinatum	Vine Maple	FAC
Acer macrophyllum	Big Leaf Maple	FACU
Alnus rubra	Red Alder	FAC
Anthoxanthum odoratum	Sweet Vernal Grass	FACU
Chamerion angustifolium	Fireweed	FACU
Cirsium arvense	Canada Thistle	FAC
Corylus cornuta	Beaked Hazelnut	FACU
Cytisus scoparius	Scotch Broom	UPL
Dactylis glomerata	Orchard Grass	FACU
Daucus carota	Queen Anne's Lace	FACU
Digitalis purpurea	Foxglove	FACU
Fraxinus latifolia	Oregon Ash	FACW
Hedera helix	Common Ivy	FACU
Holcus lanatus	Velvet Grass	FAC
Holodiscus discolor	Oceanspray	FACU
Hypochaeris radicata	Hairy Cat's Ear	FACU
llex aquifolium	English Holly	FACU
Juncus effusus	Softrush	FACW
Leucanthemum vulgare	Oxeye Daisy	FACU
Lotus corniculatus	Birds Foot Trefoil	FAC
Mahonia nervosa	Oregon Grape	FACU

Oemleria cerasiformis	Indian Plum	FACU
Phalaris arundinacea	Reed Canary Grass	FACW
Plantago lanceolata	English Plantain	FACU
Poa pratensis	Kentucky Bluegrass	FAC
Polystichum munitum	Sword Fern	FACU
Populus balsamifera	Black Cottonwood	FAC
Prunus emarginata	Bitter Cherry	FACU
Pseudotsuga menziesii	Douglas Fir	FACU
Pteridium aquilinum	Bracken Fern	FACU
Ranunculus repens	Creeping Buttercup	FAC
Rhamnus purshiana	Cascara	FAC
Ribes sanguineum	Red Flowering Currant	FACU
Rubus armeniacus	Himalayan Blackberry	FAC
Rubus laciniatus	Evergreen Blackberry	FACU
Rubus ursinus	Trailing Blackberry	FACU
Rumex crispus	Curled Dock	FAC
Salix scouleriana	Scouler's Willow	FAC
Sambucus racemosa	Red Elderberry	FACU
Schedonorus arundinaceus	Tall Fescue	FAC
Symphoricarpos albus	Snowberry	FACU
Thuja plicata	Western Red Cedar	FAC
Trifolium repens	White Clover	FAC
Tsuga heterophylla	Western Hemlock	FACU
Vaccinium parvifolium	Red Huckleberry	FACU
Wotland Indicator Codo		

Wetland Indicator Code

OBL = Obligate (Almost always occur in wetlands)

FACW = Facultative Wetland (Usually occur in wetlands, but may occur in non-wetlands)

FAC = Facultative (Occur in wetlands and non-wetlands)

FACU = Facultative Upland (Usually occur in non-wetlands, but may occur in wetlands)

UPL = Obligate Upland (Almost never occur in wetlands)

Soils

According to the US Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey for Lewis County, more than half the soils at the site are mapped as Melbourne Group loam, a very deep, well-drained soil found on foothills in the local area. Two lobes of a deposit of Buckpeat silt, a soil common on mountain slopes, comprise the rest of the soils on the site. The Buckpeat silt deposit divides the Melbourne deposits in the west half of the site, as well as the east half, alternating across the site from east to west. On-site soils are summarized in Table 4 and Figure 4.

Table 4: Soil Summary.

Soil #	Soil Name	Slope %	Hydric %				
27	Buckpeak silt loam	30-65	0				
130	Melbourne loam	0-8	5				
131	Melbourne loam	8-15	0				
132	Melbourne loam	15-30	0				

Historic land disturbance activities including fill placement, agricultural activities, timber harvest, and general grading may have altered natural soil conditions at the site resulting in soils that may be somewhat different than those mapped by NRCS.

Hydrology

The subject site generally slopes moderately to the northwest towards Salzer Creek, a Type S (Shoreline) stream, which flows north to south approximately 900 feet west of the subject site. According to the WADNR Forest Practices Application Mapping Tool, there are two mapped unnamed Type U (Unknown) streams, tributaries of Salzer Creek, located in the northeast portion of the site. Both streams are depicted to enter the subject site along the eastern property boundary in the north half of the northern tax parcel before merging, and flowing as one offsite across the northern site boundary, approximately 400 feet from the northeast corner of the subject site. LCG's field study did not support the WADNR map depiction, instead locating only a single Type Ns (Non-fish, seasonal) stream onsite. The observed stream originates in the southeast corner of the northern tax parcel, and flows on a northerly trend through the midsection of the site before exiting at approximately the midpoint of the northern subject site boundary. After exiting the site, the seasonal stream curves west on the neighboring property, roughly paralleling the northern site boundary, gradually converging with the northwestern corner of the subject site from whence it continues a southwest trend on neighboring properties. It eventually merges with Salzer Creek approximately 1000 feet away from the subject site. No evidence of a second onsite stream was noted.

The National Wetlands Inventory depicts no wetlands on the subject site, with the nearest wetlands, associated with Salzer Creek, approximately 1000 feet to the west (Figure 6) of the subject site. LCG's field study confirms that no wetlands exist on the subject site.

Mapping

Stream OHWM flagging, roads, property boundaries, topography, and other site features were derived from public mapping sources with additional site features surveyed by Butler Surveying, Inc.

RESULTS and DISCUSSION

Wetlands

LCG did not locate any wetlands on or adjacent to the subject site.

Streams

LCG located a single unnamed Type Ns (Non-fish, seasonal) stream (Stream "A") on the subject site. The stream originates in the southeast corner of the northern tax parcel of the subject site, and flows through the midsection of the parcel before exiting the site at approximately the midpoint of the northern property boundary. Upon exiting the subject site, it bends west, and continues its flow 20 feet north of, and quasi-parallel to, the northern boundary of the subject site. The stream intersects the northwest corner of the northern tax parcel, and continues on a southwest trend on the neighboring properties before merging with Salzer Creek (Type S) approximately 1000 feet west of the subject site.

Stream Buffers

According to Chehalis Municipal Code (CMC) *Chapter 17.25.030.B*, the City of Chehalis requires buffers on all jurisdictional streams. Stream "A" is a Type Ns stream requiring a minimum 50-foot-wide buffer measured from the demarcated Ordinary High Water Mark (OHWM) (Table 5).

Table 5: Stream Summary.

Stream ID	Type ^A	Buffer ^B (feet)
Stream A	Ns	50

A WAC 222-16-030: Type Ns (nonfish, seasonal)

CONCLUSIONS

A single unnamed jurisdictional stream (Stream "A") was located through the midsection of the northern tax parcel and immediately north of the northern property boundary (Figure 3). Stream "A" (Type Ns – Non-fish, seasonal) requires a minimum 50 foot wide buffer measured landward of the ordinary high water mark (OHWM).

The current development plan for the subject site includes a road crossing of Stream "A", which will require a permit from the City of Chehalis and a Hydraulic Project Approval (HPA) from Washington Department of Fish and Wildlife. Mitigation for stream and buffer impacts can be accomplished with on-site enhancement of the stream corridor including removal of invasive species, installation of native plants, incorporation of woody material, etc.

^B CMC 17.25.030.B

LIMITATIONS

The findings and conclusions contained in this document were based on information and data available at the time this document was prepared and evaluated using standard Best Professional Judgment. LCG assumes no responsibility for the accuracy of information and data generated by others. Local, State, and Federal regulatory agencies may or may not agree with the findings and conclusions contained in this document.

REFERENCES

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Washington Department of Fish and Wildlife Priority Habitat and Species (http://apps.wdfw.wa.gov/phsontheweb/).

FIGURES

Figure 1 – Site Location Map
Figure 2 – Parcel Map
Figure 3 - Site Map
Figure 4 – Soils Map
Figure 5 - National Wetlands inventory Map
Figure 6 – Stream Map

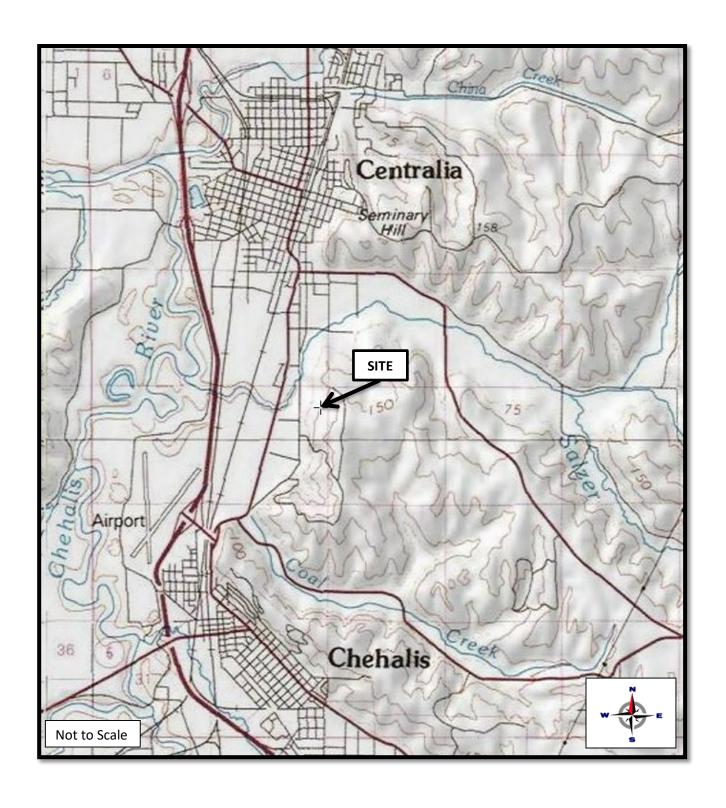


Figure 1
Site Location Map
Hampe Multi Family

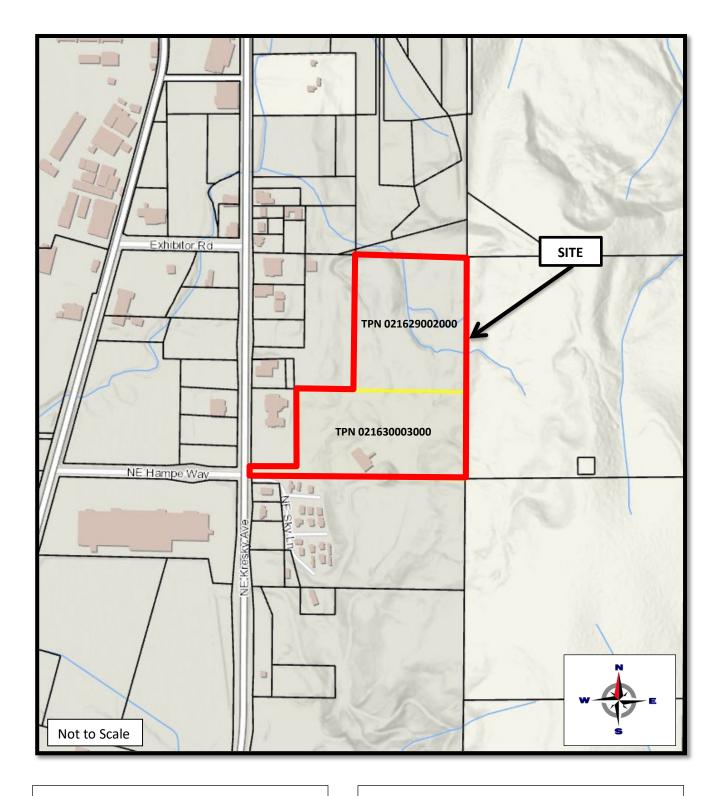
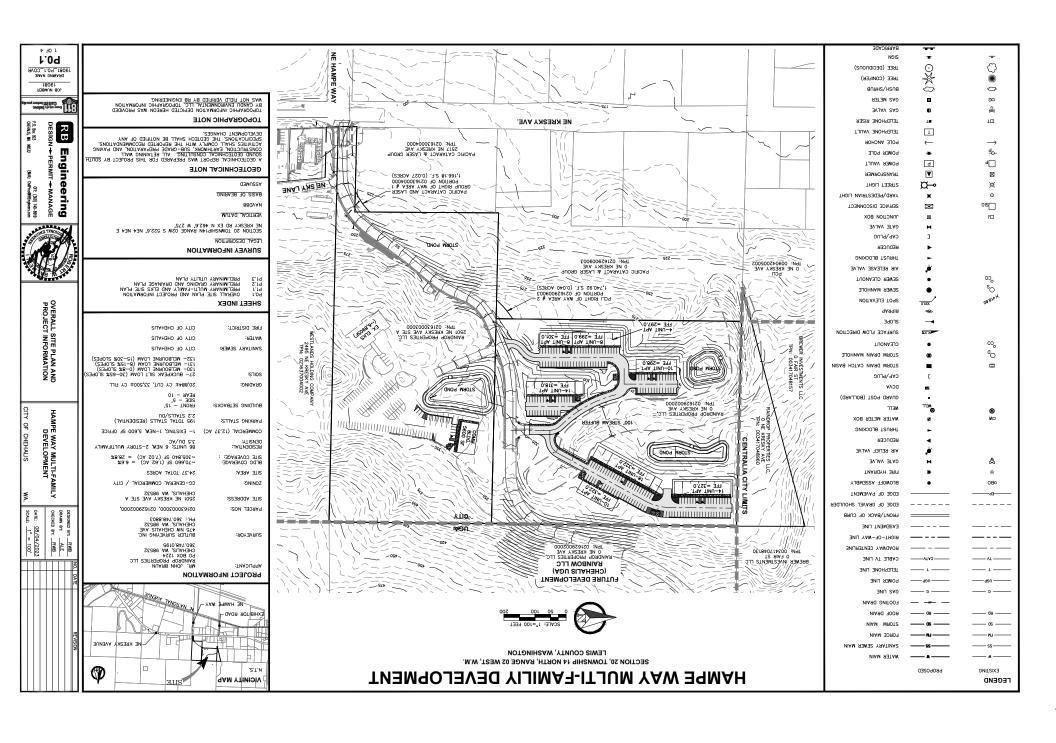


Figure 2
Parcel Map
Hampe Multi Family





Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
27	Buckpeak silt loam, 30 to 65 percent slopes	11.1	44.7%		
130	Melbourne loam, 0 to 8 percent slopes	0.4	1.5%		
131	Melbourne loam, 8 to 15 percent slopes	12.1	49.0%		
132 Melbourne loam, 15 to 30 percent slopes		1.2	4.8%		
Totals for Area of Interest		24.7	100.0%		

Figure 4
Soils Map
Hampe Multi Family

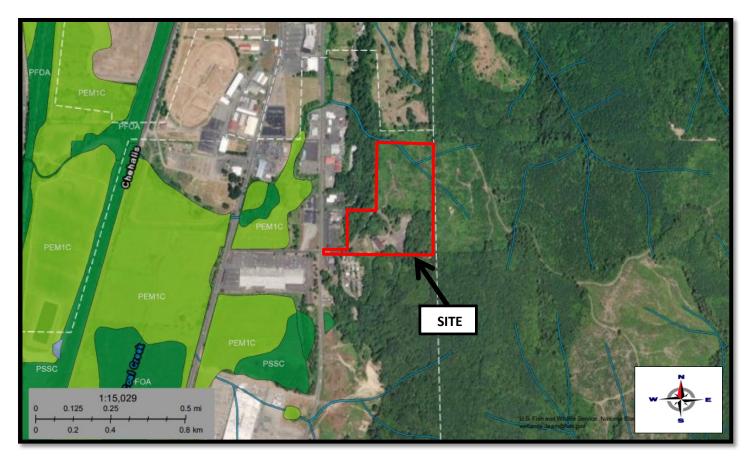




Figure 5
National Wetlands Inventory Map
Hampe Multi Family

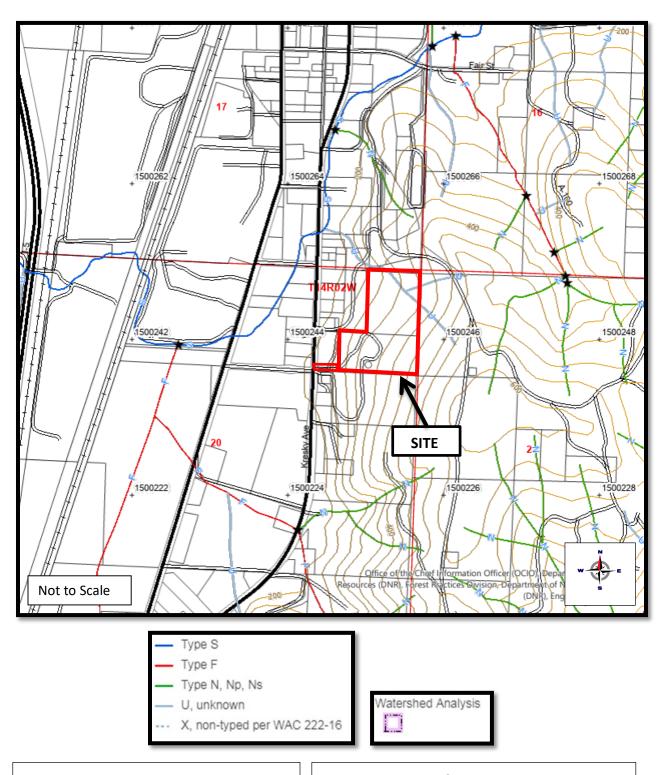


Figure 6
Stream Map
Hampe Multi Family

APPENDIX A – CLIMATOLOGICAL SUMMARY

Daily Data | AgWeatherNet at Washington State University

Date	Date	Min°E	Avg°F	Max°F	Avg1.5m DP°F	Avg1.5m RH%	Avg1.5m LWu.	AvgDir	Avg Speedmph	2m MaxGustmph	2 in. °F	Min°F	Avg°F	AvgSoilVWC%	TotPrecin	TotalSolarRadMJ/m²	EToin	ETri
Date	Date	IVIIII I	Avgı	IVIAA I	DF I	IXI 1/0	Lvvu.	AvgDii	Speedilipli	waxGustiiipii	•	IVIIII I	Avgı	Avg30IIVVC /8	TOUTTECH	Total Solal Radivis/III	LIUIII	L 1111
2023/01/03	3	36.4	40.0	45.5	37.4	90.5	0.05	N	0.0	0.0	41.6	43.1	43.4	41.8	0.00	2.65	0.01	0.01
2023/01/04	4	32.7	39.3	45.9	36.7	90.8	0.05	N	0.0	0.0	41.2	42.8	43.1	41.7	0.13	2.07	0.01	0.01
2023/01/05	5	37.9	48.3	58.2	40.4	76.0	0.02	N	0.0	0.0	43.2	42.9	43.2	42.2	0.04	2.71	0.01	0.01
2023/01/06	6	39.7	46.1	53.5	42.3	87.0	0.08	N	0.0	0.0	44.2	44.0	44.3	42.4	0.28	2.38	0.01	0.01
2023/01/07	7	37.2	44.1	48.5	43.3	97.0	0.16	N	0.0	0.0	44.7	44.6	44.8	43.9	0.57	1.36	0.01	0.01
2023/01/08	8	37.0	42.8	49.4	41.3	94.7	0.13	N	0.0	0.0	43.8	44.4	44.7	43.5	0.50	2.30	0.01	0.01
2023/01/09	9	36.2	44.4	53.2	41.1	88.9	0.10	N	0.0	0.0	43.7	44.2	44.5	43.5	0.26	2.52	0.01	0.01
2023/01/10	10	35.1	43.2	51.2	41.0	92.1	0.07	N	0.0	0.0	44.1	44.5	44.8	43.1	0.00	4.22	0.01	0.01
2023/01/11	11	41.7	48.0	56.3	40.1	75.6	0.02	N	0.0	0.0	44.4	44.6	44.8	42.4	0.16	3.64	0.01	0.01
2023/01/12	12	46.5	49.9	52.9	48.1	93.5	0.17	N	0.0	0.0	46.6	45.2	45.6	43.9	0.54	1.19	0.01	0.01
2023/01/13	13	47.9	50.3	52.9	48.5	93.7	0.13	N	0.0	0.0	47.9	46.4	46.7	43.6	0.26	1.70	0.01	0.01
2023/01/14	14	43.0	48.8	55.5	46.3	91.2	0.08	N	0.0	0.0	48.2	47.2	47.4	43.1	0.03	4.81	0.01	0.01
2023/01/15	15	42.2	44.8	46.8	42.2	90.9	0.10	N	0.0	0.0	46.1	46.9	47.5	43.9	0.51	2.23	0.01	0.01
2023/01/16	16	41.3	44.3	48.4	40.6	86.9	0.03	N	0.0	0.0	45.0	46.1	46.4	43.2	0.02	3.39	0.01	0.01
2023/01/17	17	41.7	43.9	46.4	41.2	90.2	0.06	N	0.0	0.0	44.9	45.8	45.9	43.6	0.18	3.17	0.01	0.01

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