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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

CIVIL ENGINEERING

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|  |  |  | 1  H | A | Z | A | R | D | O | U | S | M | A | T | E | R | I | A | L |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  R |  |  |  |  | 3  R |  |  |  |  |
|  |  |  |  |  |  | 4  U |  |  |  |  |  |  |  |  | 5  S |  | 6  O | R | D | I | N | A | N | C | E |  |  |  |  |
|  |  |  |  |  |  | N |  |  |  |  |  | 7  R |  |  | P |  |  |  |  | D |  |  |  |  | S |  |  |  |  |
|  |  |  |  | 8  S |  | D |  |  |  |  |  | E |  | 9  F | R | O | N | T | A | G | E |  |  |  | I |  |  |  |  |
|  |  |  |  | A |  | E |  | 10  B |  |  |  | Z |  |  | A |  |  |  |  | E |  |  |  |  | D |  |  |  |  |
|  |  |  |  | N |  | V |  | U |  |  |  | O |  |  | W |  |  | 11  P |  | L |  | 12  E | A | S | E | M | E | N | T |
|  |  |  |  | I |  | E |  | F |  |  |  | N |  |  | L |  |  | E |  | I |  |  |  |  | N |  |  |  |  |
|  |  | 13  T |  | T |  | L |  | F |  |  |  | I |  |  |  |  |  | 14  R | U | N | O | F | F |  | T |  |  |  |  |
|  |  | R |  | A |  | O |  | E |  | 15  C |  | N |  |  |  |  |  | V |  | E |  |  |  |  | I |  |  |  |  |
|  |  | A |  | R |  | P |  | R |  | U |  | G |  |  | 16  C |  |  | I |  |  |  |  |  |  | A |  |  |  |  |
|  |  | F |  | Y |  | A |  | Z |  | R |  |  | 17  E | R | O | S | I | O | N |  |  | 18  E | F | F | L | U | E | N | T |
|  |  | F |  | S |  | B |  | O |  | B |  |  |  |  | M |  |  | U |  | 19  H |  |  |  |  |  |  |  |  |  |
|  | 20  S | I | T | E | P | L | A | N |  | C |  | 21  B | E | R | M |  |  | S |  | I |  |  | 22  G |  |  |  | 23  F |  |  |
| 24  I |  | C |  | W |  | E |  | E |  | U |  |  |  |  | E |  |  |  |  | G |  |  | R |  |  |  | E |  |  |
| N |  | C |  | E |  |  |  |  | 25  S | T | A | N | D | A | R | D | S |  |  | H |  | 26  P | A | R | K | W | A | Y |  |
| F |  | A |  | R |  | 27  G |  |  |  |  |  |  |  |  | C |  |  |  |  | W |  |  | D |  |  |  | S |  |  |
| R |  | L |  |  |  | R |  |  |  | 28  A | B | U | T | T | I | N | G |  | 29  P | A | R | C | E | L |  |  | I |  |  |
| A |  | M |  |  |  | O |  |  |  |  |  |  |  |  | A |  |  |  |  | Y |  |  |  |  |  |  | B |  |  |
| S |  | I |  |  | 30  S | U | S | T | A | I | N | 31  A | B | I | L | I | T | Y |  |  |  |  |  |  | 32  M |  | L |  |  |
| T |  | N |  |  |  | N |  |  |  |  |  | D |  |  |  |  |  |  |  |  |  |  | 33  R |  | E |  | E |  |  |
| R |  | G |  | 34  I | N | D | U | S | T | R | I | A | L |  |  | 35  G | R | E | E | N | F | I | E | L | D |  |  |  |  |
| U |  |  |  |  |  | W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | T |  | I |  |  |  |  |
| C |  |  |  |  | 36  V | A | C | A | N | T |  |  |  |  | 37  P |  |  |  | 38  W | A | T | E | R | T | A | B | 39  L | E |  |
| T |  |  |  |  |  | T |  |  |  |  |  |  |  |  | E |  |  |  |  |  |  |  | O |  | N |  | A |  |  |
| U |  |  | 40  I | M | P | E | R | V | I | O | U | S | S | U | R | F | A | C | E |  |  |  | F |  | S |  | N |  |  |
| R |  |  |  |  |  | R |  |  |  |  |  |  |  |  | M |  |  |  |  |  |  |  | I |  | T |  | D |  |  |
| E |  |  |  |  |  |  |  | 41  L | I | G | H | T | R | A | I | L | T | R | A | N | S | I | T |  | R |  | U |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | T |  |  |  |  |  |  |  |  |  | I |  | S |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 42  R | E | D | E | V | E | L | O | P | M | E | N | T |

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| --- | --- |
| **Across**  **1.** a substance or material capable of posing an unreasonable risk to health, safety, or property when transported in commerce  **6.** a law or regulation adopted by a public agency, usually a city or county  **9.** front of a lot that is usually defined as the side nearest the street  **12.** the right to use property owned by another for specific purposes or to gain access to another property  **14.** water from rain or snow that is not absorbed into the ground but instead flows over less permeable surfaces into streams and rivers  **17.** the loosening and transportation of rock and soil debris by wind, rain, or running water  **18.** a discharge of pollutants, with or without treatment, into the environment  **20.** a plan, to scale, showing uses and structures proposed for a parcel of land. includes both natural and man-made features.  **21.** a mound of earth usually 2-6 feet high designed to shield and buffer uses like parking areas. also used to minimize water run-off  **25.** a rule or measure establishing a level of quality or quantity that must be complied with or satisfied  **26.** an expressway or freeway designed for non-commercial traffic; usually located within a strip of landscaped park or natural vegetation  **28.** having property or zone district boundaries in common  **29.** a lot in single ownership or under single control usually considered a unit for purposes of development  **30.** development that meets the needs of the present without compromising the ability of future generations to meet their own needs  **34.** a land use classification often divided into "heavy industrial" uses (construction yards, quarrying, factories) and "light industrial" uses like research and development, and less intensive warehousing and manufacturing  **35.** farmland and open areas where the lack of prior industrial or commercial activity means that the threat of contamination is lower than in urbanized areas  **36.** lands or buildings that are not actively used for any purpose  **38.** the upper surface of groundwater, or the level below which the soil is seasonally saturated with water  **40.** a surface through which water cannot penetrate, like a roof, road, sidewalk, or paved parking lot  **41.** streetcars or trolley cars that typically operate entirely in mixed traffic  **42.** building new construction on a site that has pre-existing uses or renovating existing uses on a site | **Down**  **2.** a line connecting the highest points along a ridge  **3.** land designated in the city or county general plan and zoning ordinance for buildings consisting only of dwelling units  **4.** areas where topographic, geographic, and/or soil conditions indicate a significant danger to future occupants  **5.** the spreading of a city and its suburbs over rural land at the fringe of an urban area  **7.** an amendment to the map and/or text of a zoning ordinance to effect a change in the nature, density or intensity of uses allowed in a zoning district  **8.** a system of subterranean conduits that carries refuse liquids or waste matter to plant where the sewage is treated  **10.** an area of land separating 2 distinct land uses that softens or mitigates the effects of one land use on the other  **11.** permeable; allows something to pass through it  **13.** a strategic set of physical changes to streets to reduce vehicle speeds and volumes. (i.e. curb extensions, widened sidewalks, speed humps, traffic circles)  **15.** a ramp opening in a curb where vehicles or wheel chairs may enter or leave the roadway  **16.** a land use classification that permits facilities for the buying and selling of commodities and services  **19.** inter-regional roadway that is part of the state transportation system  **22.** leveling or smoothing the contours of a property; the rate of rise or descent of a sloping surface  **23.** capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors  **24.** public services and facilities like sewage-disposal systems, water-supply systems, schools, roads, transit systems, etc  **27.** water under the earth's surface  **31.** americans with disabilities act; federal law that requires businesses and public facilities be accessible to individuals with disabilities  **32.** the dividing area, either paved or landscaped, between opposing lanes of traffic on a roadway  **33.** to add materials/devices to an existing building or system to improve its operation, safety, or efficiency  **37.** a specific authorization from a planning body to engage in a particular type of development or activity  **39.** the occupation or use of land or water area for any human activity |

   grade       greenfield       hazardous material       highway       impervious surface       ordinance       parcel       parkway       permit       redevelopment       residential       rezoning       runoff       retrofit       sanitary sewer       site plan       sprawl       standards       water table       pervious       LAND USE       infrastructure       groundwater       frontage       feasible       erosion       effluent       easement       curb cut       commercial       buffer zone       berm       ada       abutting       industrial       light rail transit       median strip       ridgeline       sustainability       traffic calming       undevelopable       vacant