

RESOLUTION NO. .

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

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RESOLUTION DIRECTING THE COUNTY EXECUTIVE’S OFFICE, COUNTY ATTORNEY, AND COUNTY DEPARTMENTS TO DEVELOP AN ORDINANCE FOR THE BOARD’S CONSIDERATION, CREATING A COMPREHENSIVE PERMITTING PROCESS GOVERNING THE COMMERCIAL DEPLOYMENT AND OPERATION OF HUMANOID ROBOTS WITHIN SAN MATEO COUNTY

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, that

WHEREAS, the past several years have seen a rapid proliferation of humanoid robotics development and commercial deployment at the national level, and San Mateo County, along with the rest of the Silicon Valley, is particularly likely to see early and accelerating commercial deployment of humanoid robots; and

WHEREAS, the deployment of untethered, autonomous or semi-autonomous humanoid robots (“Mobile Humanoid Robots”) in commercial environments, such as restaurants and retail stores, introduces novel public safety and health challenges, including navigating Americans with Disabilities Act (“ADA”) accessibility requirements; emergency evacuation interference; unpredictable physical interactions with patrons, others in the environment, and other objects; and severe fire and hazardous materials (“HazMat”) risks associated with the high-capacity lithium-ion batteries required to power Mobile Humanoid Robots; and

WHEREAS, lithium-ion battery fires are prone to a phenomenon known as “thermal runaway,” which causes rapid ignition, re-ignition, and the emission of highly

toxic gases, and managing these specific incidents requires specialized first-responder training, extended containment protocols, and dedicated HazMat equipment that exceed standard structural firefighting capabilities; and

WHEREAS, evaluating the historical safety data and manufacturing track record of Mobile Humanoid Robot units is necessary to prevent the deployment of defective, recalled, or experimentally unproven technologies in public-facing spaces; and

WHEREAS, the rapid displacement of human workers by Mobile Humanoid Robots in the service sector threatens the local economic welfare by potentially increasing reliance on County-funded social safety net programs and decreasing the local tax base; and

WHEREAS, the County possesses the fundamental police power to regulate commercial activities to protect the health, safety, and general economic welfare of its residents; and

WHEREAS, the Board desires that staff work to develop for the Board's consideration an ordinance regulating the use of Mobile Humanoid Robots by businesses to protect the health, safety, and general economic welfare of the County's residents, including by setting forth a comprehensive, mandatory permitting process for businesses seeking to deploy such robots; and

WHEREAS, County staff, including County Executive, County Attorney's Office, and other departmental staff, as appropriate, are well-situated to develop for

the Board's consideration a proposed ordinance regulating the use of Mobile Humanoid Robots; and

WHEREAS, the proposed ordinance regulating the use of Mobile Humanoid Robots should incorporate the following four principles: (1) protecting public health and safety; (2) ensuring HazMat and fire preparedness; (3) mitigating economic impacts on human workers; and (4) incorporating robust enforcement mechanisms; and

WHEREAS, to protect the public health and safety, staff is directed to consider incorporating in the proposed ordinance, to the extent feasible, requirements that applicants for a permit to operate a Mobile Humanoid Robot must establish that the subject robots meet ADA and sanitation standards, have accessible emergency "kill switches," have a clean manufacturer safety record free of active recalls or patterns of catastrophic failure (or have otherwise addressed concerns about such recalls or patterns), and will be supervised at all times by a trained, on-site human; and

WHEREAS, to address the severe risks of "thermal runaway" fires, staff is directed to consider incorporating into the proposed ordinance, to the extent feasible, requirements that the robot's lithium-ion batteries must meet appropriate certification standards and that businesses must pay an annual cost-recovery fee dedicated to specialized fire and HazMat equipment and training for local first responders; and

WHEREAS, to ensure economic impacts from deployment of Mobile Humanoid Robots on human workers are mitigated, staff is directed to consider

incorporating into the proposed ordinance, to the extent feasible, requirements that businesses submit an Economic Impact Assessment detailing projected job losses resulting from deployment of subject Mobile Humanoid Robots and certify that they will mitigate workforce impacts, including through mechanisms such as redeploying affected human workers, providing mandated severance, or paying into a County Automation Impact Fee retraining fund; and

WHEREAS, to incorporate robust enforcement mechanisms, staff is directed to consider incorporating into the proposed ordinance, to the extent feasible, a mandatory, comprehensive permitting scheme, that provides for appropriate fees, the availability of administrative fines and civil and criminal penalties for non-compliance, and a requirement for businesses that operate Mobile Humanoid Robots to report any issues that arise after a permit issued to ensure that there is up-to-date reporting and oversight over Mobile Humanoid Robots being deployed within the County.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board of Supervisors of the County of San Mateo directs the County Executive to work with appropriate staff to prepare an ordinance for consideration by the Board of Supervisors to establish a permitting process for businesses seeking to deploy Mobile Humanoid Robots that complies with the principles and considerations set forth in this Resolution.

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