

ARTICLE XVIII

TAR TECHNOLOGY AND RESEARCH DISTRICT

PURPOSE

Advances in industry and technology have created uses which are related to industry and office uses, but may not be appropriate or function adequately in a typical industrial or office zoning district. These uses have been identified as "high tech" uses. The purpose of the Technology and Research District (TAR) District is to provide an environment where high tech uses and functions such as engineering, design, research and development, photonics/optics, computer assisted design, robotics search, numerical control equipment (CAD/CAM), prototype development and limited manufacturing, biotechnology, lasers, medical research, food; and materials testing, telecommunications, and related storage, warehousing and limited assembly operations associated with principal permitted uses can be located.

The TAR District is intended to be developed in a campus-type environment, with generous landscaping and attractive buildings, where permitted uses will not be negatively impacted by the elements and conditions (such as extensive heavy truck traffic) commonly found in a traditional Industrial District. Such areas are often visible from freeways and high image locations.

SEC. 18.1 PRINCIPAL PERMITTED USES

No building or land shall be used and no building shall be erected except for one or more of the following specified uses, unless otherwise provided in this Ordinance:

1. Laboratories, offices and other facilities for basic and applied research, experimentation, testing, product design, technology development, consulting and business development.
2. Business schools and training facilities.
3. Office buildings, providing for uses such as corporate offices in accordance with the purpose of this district, including any of the following occupations: Executive; administrative; professional; accounting; engineering; planning; architecture; drafting; writing; clerical; stenographic; and sales provided that no display shall be visible from the exterior of the building, and that such sales shall be clearly incidental to the principal office use in the determination of the Planning Commission.
4. Data processing and computer centers, including service and maintenance of electronic data processing equipment.
5. Any use charged with the principal function of research in the area of photonics/optics, robotics, and electronic equipment.

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SEC. 18.1 PRINCIPAL PERMITTED USES

6. A high technology service use, which has as its principal function the providing of services including computer information transfer, communication, distribution, management, processing, administrative, laboratory, experimental, developmental, technical, or testing services.
7. A high technology industrial use, which has as its principal function light manufacturing, assembly, fabrication or machining from processed materials. Such uses shall include but are not limited to agricultural technology, biological or pharmaceutical research, software technology, telecommunications, biomedical technology, fluid transfer and handling technology, defense and aerospace technologies or other technology oriented or emerging industrial or business activity. Permitted high technology industrial uses shall not include heavy manufacturing, heavy stamping operations, any manufacturing from raw unprocessed materials or uses specifically prohibited in Section 18.3.
8. Research, development, engineering, design, assembly, fabrication and limited light manufacturing of high-technology equipment, including equipment involved in any high technology industrial activity as defined in Subsection 7 above, instrumentation or associated computer software.
9. Engine product research, fluid transfer and handling product research, development, engineering, design, testing, assembly, production, and related office, sales and administrative uses.
10. Accessory structures and uses customarily incidental to the above permitted uses, subject to the following:
 - (a) Accessory storage of products and materials necessary to the permitted operation may be provided within the building. Outdoor storage shall be prohibited.
 - (b) Child care centers, recreation and fitness facilities, cafeterias, health care services, financial services and similar uses may be permitted as accessory uses, if such uses are located wholly within the principal building (except for outdoor recreation and fitness facilities), conducted primarily for the convenience of the employees of the principal use and have no exterior advertising or displays.

SEC. 18.2 SPECIAL LAND USES

The following uses shall be considered special land uses in this district and shall be permitted only after review and approval by the Planning Commission in accordance with the procedure and standards as found in Section 2.7 of this Ordinance and further subject to the requirements listed below:

1. Medical offices, clinics research, and medical supply facilities, including auxiliary or accessory laboratories. Such uses may include sports medicine, medical wellness, physical therapy, physical medicine, and similar facilities. Substance abuse (drugs and alcohol)

treatment facilities, and facilities principally for emergency services or that provide 24 hour services shall not be permitted.

2. Motels and hotels.
3. Publicly owned and operated buildings and facilities, such as fire stations.
4. Outdoor uses, such as testing facilities for prototype products and facilities used for training employees in activities applicable to the permitted use. Such facilities shall be screened from adjacent properties and street rights-of-way in accordance with Section 26.11, Methods of Screening.
5. Banks, credit unions and other similar financial services.
6. Public utility transformer stations, substations and gas regulator stations without service or storage yards shall comply with the requirements of Section 26.12, Areas Requiring Screening and/or Buffering, and shall provide a front yard setback of not less than fifty (50) feet, irrespective of the yard requirements of the district in which it is located, and two side yard and a rear yard setback of not less than twenty-five (25) feet in width each.
7. Retail uses which in the determination of the Planning Commission are incidental and complementary to the principal technology and research uses, including the following business services such as printing, copying and mailing.
8. Restaurants or other places serving food and/or beverages without open front windows, drive-ins or drive through service, and located within a building containing one or more other principal uses.
9. Corporate fitness centers, health spas, racquetball clubs, bowling alleys or similar forms of recreation, except as otherwise provided herein.
10. Child care centers subject to the standards of Section 28.64.
11. Limited accessory outdoor storage subject to the following:
 - (a) Evidence satisfactory to the Planning Commission shall be provided that the open storage is essential to the approved principal permitted use.
 - (b) Open storage of raw materials, junk vehicles which are wrecked, disabled, worn out, abandoned, or incapable of movement, waste materials, parts, assemblies, and similar items shall be prohibited.
 - (c) Evidence satisfactory to the Planning Commission shall be provided that the storage cannot reasonably be enclosed in a building.

- (d) Evidence satisfactory to the Planning Commission that the storage will not cause an undue hardship to other uses or the Township.
 - (e) All open storage shall be completely screened on all sides by a decorative masonry or brick obscuring wall which matches the main building, or a berm eight (8) feet in height, located a minimum of twenty-five (25) feet from the street setback line when the area abuts a streets. An eight (8) foot wide planting strip shall be located on the street side of the wall or berm. When the side and/or rear yard does not abut a street, the wall or berm shall be located on the property line. The combined use of a wall and a berm shall be permitted.
 - (f) Within the intent of this Section, the Planning Commission may approve alternatives as it deems necessary to accommodate peculiar or unforeseen circumstances.
12. Wireless communication facilities, subject to the conditions of Section 28.11.
13. Any other use of the same nature or class as uses listed in this district as either a principal permitted use or a special land use which the Planning Commission finds not to be inconsistent with the purpose of this Article, and which will not impair the present or potential use of adjacent properties. When considering other uses, the Planning Commission shall review the nature, function and proposed location of the use to ensure that it will not conflict with other permitted uses in the district.

SEC 18.2A USES SPECIFICALLY PROHIBITED (added 3/14/10) (Refer also to sec 18.3)

No building or land shall be used and no building shall be erected for any use which would be in violation of any State or Federal Law.

SEC. 18.3 USES SPECIFICALLY PROHIBITED

No building or land shall be used and no building shall be erected for any of the following uses:

- 1. The following uses shall be considered as not meeting the minimum standards of this Ordinance as to performance and potential negative impacts on surrounding properties:
 - (a) Processing of corrosive acid, cement, lime, gypsum or plaster.
 - (b) Distillation of bone, coal, tar, petroleum refuse, grain or wood.
 - (c) Processing or storage of explosives.
 - (d) Processing of fertilizer or storage of compost.
 - (e) Processing of products from animal refuse or offal including glue, size or gelatin.
 - (f) Processing using steam or board hammers or forging presses.

- (g) Tanning, curing or storage of raw, green or salted skins or hides.
 - (h) Manufacturing of sulphurous, sulfuric, nitric, picric, carbolic, hydrochloric or other corrosive acid, however the use of corrosive acids in connection with any permitted use is not prohibited.
 - (i) Petroleum or asphalt refining, mixing or manufacturing.
 - (j) Slaughtering of animals, stock yards, livestock feeding yards.
 - (k) Manufacturing or disposal, above or below ground; of nuclear or radioactive materials.
 - (l) Processing of garbage, offal, dead animals, refuse, rancid fats.
2. Any use which may create unusual danger for fire, explosion, toxic or noxious matter, radiation, or which may cause noxious, offensive, unhealthful or harmful odors, fumes, dust, smoke, light, waste, noise or vibration.
 3. Warehousing, truck transfer or distribution centers as a principal use.

SEC. 18.4 DEVELOPMENT REQUIREMENTS

All principal permitted uses and special land uses shall comply with all applicable provisions of the Zoning Ordinance, including, but not limited to the following:

1. Site plan and development approval for all uses as specified in Article 29 of this Ordinance.
2. Off-street parking for all uses as specified in Article 24 of this Ordinance.
3. Off-street loading and unloading for all uses as specified in Article 24 of this Ordinance. The Planning Commission may modify such requirements, if in its sole determination, the use does not require the number of loading spaces specified in Article 24.
4. Landscaping, screening and land use buffers for all uses shall be in accordance with Article 26 of this Ordinance.
5. Signs for all uses as specified in Article 25 of this Ordinance, except that pole signs shall not be permitted, and except that the Planning Commission may consider alternative materials for the base and/or sign, provided the sign:
 - (a) Is in keeping with the architecture and character of the principal building and/or established company logo;
 - (b) Does not constitute a traffic hazard; and
 - (c) Is constructed with durable and weather resistant materials.

6. Special Provisions, as specified in Article 28 of this Ordinance.
 7. Height, area, lot coverage and yard regulations as specified in Article 20 Schedule of Regulations of this Ordinance.
 8. The following specific requirements shall apply within the TAR Technology and Research District:
 - (a) **Machines Permitted.** All machines are permitted when installed and operated so as not to allow a noise, odor, fumes, dust, smoke, glare or radioactive material exceeding the limits set by Section 28.5, Environmental Performance Standards. In no case shall such impacts be detectable from districts in which residence occupancy is permitted within the Charter Township of Plymouth.
 - (b) **Environmental Performance Requirements.** Compliance with Section 28.5, Environmental Performance Requirements, is required for all uses.
 - (c) **Landscaping and Screening.**
 - 1) **Setback Landscaping:** All setback areas shall be landscaped with lawns, trees, shrubs and/or other plants, and may include reflecting pools, retaining walls and other landscape construction harmonious with the overall landscape scheme.
 - 2) **Parking and Loading Location and Screening:** Parking and loading areas may be located in side and rear setback areas, but shall be prohibited from the front yard setback. Further, all doors designed for vehicles and loading docks and truck wells shall not be located on the front of the building, and shall be screened from view from any road.

Parking provided in a side yard setback adjacent to a street shall be provided with a ten (10) foot landscaped greenbelt, adjacent to that street. On a corner lot, one of the front yards may be designated a side yard. Parking and loading areas shall be screened in compliance with Article 26 of this Ordinance.
 - (d) **Source of Power.** Power for any manufacturing or heating process or activity shall be derived only from electrical energy, smokeless fuels, such as gas or oil, or smokeless solid fuels containing less than twenty (20) percent of the volatile content on a dry basis.
 - (e) **Yard Grading and Drainage** as specified in Section 28.15 of this Ordinance.
 - (f) **Emergency Access.** All buildings shall be readily accessible by fire and emergency vehicles and shall comply with the Township Fire Prevention Ordinance.
 - (g) **Sidewalks** as specified in Section 28.16 of this Ordinance.
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- (h) Exterior lighting shall comply with the standards as specified in Section 28.8, Exterior Lighting.
- (i) The method of trash removal shall be presented to the Planning Commission for approval. If Dumpsters and similar waste receptacles are proposed, they shall be screened in a manner acceptable to the Planning Commission subject to the requirements of Section 28.9, Waste Receptacles.
- (j) Fencing, and Screen Walls. Fences and screen walls shall require review and approval by the Planning Commission as a part of the Site Plan Approval. In a TAR Technology Research District protective or security fencing shall be considered a structure enclosing a piece of land or separating contiguous land, either in whole or part, serving the purpose of preventing intrusion onto or across a lot of record or any parcel or tract of unplatted land from without or straying from within. The following shall govern the height, location and placement of protective or security fencing:
 - 1) Permit Required: In the TAR District it shall be unlawful for any person to build, repair or relocate a protective or security fence without first having secured a Zoning Compliance and/or Building Permit from the Department of Building and Code Enforcement.
 - 2) Maximum Height: The maximum height of a protective or security fence shall be six (6) feet.
 - 3) Material: Fences will not be constructed of old or used material unless such material shall be reasonably sound in the judgment of the Department of Building and Code Enforcement. Fences shall not be made of or contain barbed we, electric current or charges of electricity or sharp or pointed projections of any kind; provided if such fence is constructed of pickets, the pickets shall be made of not less than one (1) inch by three (3) inch material and shall have an angle at the top of not less than ninety (90) degrees. The fence shall comply with the requirements of applicable requirements of the State Construction Code enforced by the Township. Plastic or other type of strips intertwined in cyclone fencing shall be prohibited.
 - 4) Placement: Except as part of a special land use approval, no fence shall be built closer to the street than the front setback line applicable to the premises pursuant to the Article 20 Schedule of Regulations, provided no fence shall be built closer to the street than the established front building line along side streets or in front of the building closest to the streets on the fenced premises.
- (k) Building Design Standards.
 - 1) All exterior building facades shall be of the same finish material as the front facade of the main building and all materials used shall be recognized as

finished materials (standard concrete or cinder block shall not be permitted). The exterior finish and scale of the buildings shall be harmonious with the surroundings area and natural environment. Building shall comply with Section 28.14, Building Design Standards.

- 2) Elevators, stairways, tanks, heating and air conditioning equipment, vents, ducts, pipes and other similar apparatus shall be screened from view from off-site by a penthouse or structure equal in height to the height of the equipment being screened. The outside finish materials shall be the same as or complimentary to the building facade finish materials to which it is attached. The Planning Commission may modify this requirement at site plan review.
 - 3) In accordance with the established development pattern, any such building which is located on a site with Beck Road frontage shall be finished in brick.
 - 4) Building elevations and landscaping provided on sites which abut a limited access highway shall be of equal importance and present an attractive appearance, comparable to the building front.
- (1) Environmental Features.
- 1) The developer shall make every attempt to preserve any natural features on the site which exist prior to development. Existing natural features shall be shown in the site plan.
 - 2) If natural features need to be altered or removed, it shall be the responsibility of the developer to provide a written report explaining the rationale for such actions.