

**ARTICLE 16A**  
**PIRO PLANNED INDUSTRIAL, RESEARCH, AND OFFICE DISTRICT**

**SECTION 16A.00      INTENT**

The intent of the PIRO District is to encourage the development of a high quality office, research and industrial environment, in campus-type settings with generous landscaping, low intensity lot coverage, and preserving significant natural features. Such areas are often visible from freeways, in high image locations and can impact the impression the Township makes on visitors and travelers, which influences the marketability of the land and the community.

The PIRO District is intended to provide a desirable location for larger office, light industrial, and limited heavier industrial uses as provided in the table of permitted and special uses provided below. The District provides opportunities for enterprises to locate office facilities with laboratories or small assembly or distribution sites nearby. By integrating these uses into a planned development, potential impacts of the heavier uses may be mitigated.

The distribution of land uses in the PIRO District is regulated in three sub-districts: PIRO-A (Research and Office), PIRO-B (Light Industry), and PIRO-C (General Industry). The sub-districts are designated to ensure that appropriate land transitions occur and that potential use incompatibilities are avoided. The planned location of these sub-districts is illustrated and described in the Future Land Use Plan chapter of the Tyrone Township Master Plan. Development of PIRO-zoned land shall be consistent with this Plan, as determined by the Township. The boundaries of the sub-districts as illustrated on the Future Land Use Map are general, allowing for flexibility when rezoning to one or more of the PIRO sub-districts. When reviewing a potential rezoning, the Township shall consider the proposed location and range of uses that would be permitted in the context of the overall PIRO planned district, to ensure that the purpose and intent of these regulations will be maintained, including proper land transitions and protections from negative impacts and incompatible uses. The Township's Zoning Map shall identify the boundaries of each sub-district as it is adopted, and the land within each sub-district shall be regulated as provided herein.

Use of the Planned Unit Development (PUD) process is encouraged for sites larger than 20 acres. This will provide additional flexibility to the property owner and designer, and further enable coordination among various on-site uses.

**SECTION 16A.01      APPLICABILITY OF SUB-DISTRICT**

The PIRO District is a combination of three sub-districts: the PIRO-A (Research and Office), PIRO-B (Light Industry), and PIRO-C (General Industry) districts. The sub-districts are mapped zoning districts that impose requirements in addition to the general requirements that apply throughout the PIRO District.

**SECTION 16A.02      TABLE OF PERMITTED AND SPECIAL LAND USES**

The following “Table of Permitted and Special Land Uses in the PIRO District” designates the land uses permitted in each of the sub-districts.

- A. Permitted Uses.** All uses listed in the following and signified with a letter “P” shall be uses permitted by right in the corresponding PIRO sub-district.
- B. Special Land Uses.** All uses listed in the following “Table of Permitted and Special Land Uses in the PIRO District” and signified with a letter “S” shall be permitted special land uses in the corresponding sub-district, subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 23.
- C. Uses Not Permitted.** Uses not permitted in a particular sub-district are designated with the letters “NP”.
- D. Accessory Uses.** Buildings, structures, and uses customarily accessory to any permitted or special land use shall be permitted as approved during site plan review, in accordance with Section 21.02.
- E. Summary Table of Permitted and Special Land Uses in the PIRO District.** The table below lists uses permitted as follows: “P” = Permitted Use; “S” = Special Land Use; and “NP” = Use Not Permitted.

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
High technology service uses including computer information transfer, communication, distribution, management, processing, administrative, laboratory, experimental, developmental, technical, or testing services.	P	P	S

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Any use with the principal function of conducting research, design testing, and pilot or experimental product development	P	P	S
High technology industrial or research use including but 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 but not including heavy manufacturing or stamping	P	P	S
Data processing / computer centers, including service and maintenance of electronic data processing equipment and software development	P	P	P
Research labs / testing facilities	P	P	P
Corporate offices	P	P	P
General / professional offices for any of the following occupations: executive, administrative, professional, accounting, writing, clerical, stenographic, drafting and sales	P	P	S
Alarm and security businesses, phone message centers, telemarketing businesses	P	P	NP
College / university / vocational schools, and any use charged with the principal function of technical training provided all instruction, training and testing is conducted within a completely enclosed building	P	P	S
Outdoor instruction, training and testing accessory to a permitted use	NP	S	S
Conference centers	S	S	NP

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Assembly halls, display halls, banquet centers, convention centers or similar place of assembly, excluding movie theaters	S	S	NP
Hospitals, clinics and medical offices; medical laboratories; sports medicine, physical therapy, and 24-hour emergency or urgent care	S	S	NP
<p>Offices of manufacturers agents, sales representatives and others requiring display area and limited warehousing, subject to the following:</p> <ul style="list-style-type: none"> <li>a. Display areas shall not be for selling to the general public and shall be for restricted use of wholesale buyers and specialized merchandise not available to the public.</li> <li>b. Display areas shall be within a totally enclosed structure.</li> <li>c. Warehousing shall be accessory to the office, sales or display area, and shall be limited to quantities to support the display area and sales staff. Outbound shipment by tractor trailer or semi-truck type vehicles shall be prohibited in the PIRO-A (Research and Office) sub-district.</li> </ul>	S	P	NP
Messenger services, mailing and delivery services, all limited to drop-off and pick-up facilities. Processing, sorting or distribution functions other than to serve the district shall not be permitted.	S	P	NP
Indoor recreation facilities	S	S	NP
Religious institutions, churches	S	S	NP

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
<p>Uses secondary to principal permitted uses:</p> <ul style="list-style-type: none"> <li>a. Restaurants or other places serving food or beverage, but not including drive-in/fast food, or drive-through restaurants</li> <li>b. Child care centers</li> <li>c. Personal service establishments, such as but not limited to: repair shops, tailor shops, beauty parlors or barber shops, laundries or dry cleaners</li> <li>d. Business services such as printing, copying or mailing</li> <li>e. Corporate fitness centers, health spas, indoor recreation facilities</li> <li>f. Office equipment and office supply sales and rental</li> <li>g. Banks, credit unions, savings and loan associations, and similar financial institutions, including drive-through and walk-up automatic teller machines on the face of the building. No free-standing or kiosk-type automatic teller machines shall be permitted separate from a financial institution.</li> </ul>	S	S	S
<p>Publicly owned buildings, libraries, post offices, telephone exchange buildings, and public utility offices. (Storage yards, electrical transformer stations, and gas regulator stations are not permitted in the PIRO-A (Research and Office) sub-district.</p>	P	P	NP
<p>Public or private parks and open space</p>	P	P	P

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Motor vehicle fueling stations	NP	S	S
<p>Manufacturing, assembly, processing, fabrication, packaging, or treatment of the following from previously prepared materials:</p> <ul style="list-style-type: none"> <li>• agricultural products;</li> <li>• food products;</li> <li>• furniture and fixtures;</li> <li>• converted paper and paper board products;</li> <li>• textiles and canvas products;</li> <li>• pharmaceuticals including biological products, drugs, medical and pharmaceutical preparations;</li> <li>• glass products made of purchased glass;</li> <li>• professional, scientific and controlling instruments;</li> <li>• photographic and optical goods;</li> <li>• office equipment;</li> <li>• electrical instruments;</li> <li>• small appliances; and</li> <li>• monuments and burial vaults.</li> </ul>	NP	P	P
Light assembly, fabrication, or packaging of jewelry, silverware, musical instruments and parts, toys, novelties, sporting and athletic goods, office and artist's materials, signs and advertising displays.	NP	P	P
Tool and die, jobbing and machine repair	NP	P	P
Building trade and landscape contractors; building and landscape materials and wholesalers.	NP	SP	P

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Contractors equipment yards	NP	S	P
Printing, publishing, duplicating and photographic processing plants	NP	P	P
Radio, TV and cellular microwave relay and transmitting antennas; television broadcasting and receiving towers, dishes or antennas; public utility electrical receiving transforming stations, wireless communications towers (subject to Section 21.32).	NP	S	S
Public utility and telecommunications buildings	NP	P	P
Composting centers	NP	S	S
Essential services without outside storage	P	P	P
Essential services with outside storage permitted	NP	S	P
Transportation facilities, including passenger transit facilities, truck and motor freight terminals, maintenance and service yards	NP	S	S
Air transportation companies, airports	NP	NP	P
Wholesaling, warehousing, distribution, refrigerated and general storage of any product or commodity which is permitted to be manufactured in the district.	NP	P	P
Mini-warehouses and self-storage facilities	NP	S	P
Outdoor storage and display	NP	S	P
Vehicle Repair - Major	NP	NP	S
Vehicle Maintenance and Repair - Minor	NP	S	S
Bottling plants	NP	NP	P

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Lumber yards (non-retail), including sale of wood, plastic, fabric, synthetic specialties, wood patterns, concrete and cinder block products	NP	S	P
Central laundries, laundry services, dry cleaning and dyeing plants	NP	NP	P
<p>Manufacturing, processing, fabricating, packaging, treating or assembling the following:</p> <ul style="list-style-type: none"> <li>• Prefabricated buildings and structural members</li> <li>• Chemical products and plastics, excluding petroleum plants</li> <li>• Leather and leather products</li> <li>• Stone, clay and glass products such as: flat glass, pressed or blown glass and glassware; brick and block;</li> <li>• Concrete, abrasives, asbestos and other non-metallic mineral products.</li> <li>• Wood containers</li> <li>• Aluminum, bronze, copper-base alloy and other nonferrous castings</li> <li>• Heavy machinery such as engines and turbines, farm machinery, industrial machinery</li> <li>• Transportation equipment, such as motor vehicles, motor vehicle equipment and parts, motorcycles, bicycles and parts</li> </ul>	NP	S	P
Light assembly, fabrication, packaging of small items – from previously processed and prepared materials	NP	P	P
Vehicles, equipment and machinery sales and service for farm, construction, and industry	NP	S	S
Asphalt and concrete mixing plants	NP	NP	S



Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
Slaughter houses	NP	NP	S
Junk/Salvage/Used materials yards, recycling centers	NP	NP	S
Petroleum oil and gas processing plants	NP	NP	S
Explosive, toxic and hazardous materials receiving, handling, storing, and production.	NP	NP	S
Propane storage and sales; bulk storage of refined petroleum products, with or without a retail outlet	NP	S	S
Retail sales of propane, and accessory storage of limited quantities to support the retail operation	NP	S	S
Wind and solar energy production facilities, not including oil or gas production, processing, sweetening plants, or related operations	NP	S	S
Outdoor / open air entertainment venues	NP	NP	S
Adult uses	NP	NP	S
Uses of the same nature or class as uses listed in this district, as determined by the Planning Commission based on the standards of Section 21.44.	S	S	S
Medical Marijuana Caregiver Operation. A registered primary caregiver subject to the standards of Section 21.55 of this Ordinance, the Michigan Medical Marihuana Act, as amended, and the regulations of the State of Michigan Department of Community Health adopted pursuant to the Michigan Medical Marihuana Act, as amended.	NP	S	S
Utility-scale Solar Energy Facilities	S	S	S

Uses	PIRO-A Research and Office *	PIRO-B Light Industry**	PIRO-C General Industry***
"NP" – Use Not Permitted			
"P" – Permitted Use			
"S" – Special Land Use			

**Footnotes**

- \* Outdoor storage and display of goods and materials is prohibited.
- \*\* Outdoor storage and display of goods and materials requires special approval.
- \*\*\* Outdoor storage and display of goods and materials is permitted.

**SECTION 16A.03 GENERAL REQUIREMENTS FOR ALL PIRO DISTRICT USES**

Consistent with the intent of this district, the following conditions are required to be met by all uses in the PIRO District, irrespective of the sub-district in which they are located.

- A. Non-Residential Uses.** Residential uses shall not be permitted in the PIRO District, except that caretaker quarters may be permitted, as provided under Section 21.10 Dwellings in Nonresidential Districts.
- B. Physical Features and Site Relationships.** All development in the PIRO District shall minimize its impact on the natural environment and adjacent properties. Site design shall preserve and incorporate any natural features unique to the site. Specifically:
  - 1. Topography and Grading.** Site improvements shall be designed to minimize changes to the existing topography when possible. Use of existing topography and vegetation is encouraged for screening, buffering, and transition of uses and developments. Grading should be blended with the contours of adjacent properties.
  - 2. Existing Site Features.** The site design shall retain existing site features that are worthy of preservation as determined by the Planning Commission. The design shall also incorporate natural site amenities, such as creeks, wetlands, views, trees, natural ground forms, and similar features into the overall site design.
  - 3. Building Orientation.** The site design shall be sensitive to the existing terrain, existing buildings in the surrounding area in terms of size, design, and orientation of buildings. Outdoor spaces shall be sensitive to views, climate, the nature of outdoor activities that could occur in association

with the project, and other factors deemed relevant by the Planning Commission.

- 4. Building Relationship.** The design of buildings shall neither impair nor interfere with the development or enjoyment of other properties in the area. Through site planning and design, projects proposed near dissimilar land uses shall carefully address potential negative impacts on existing uses. These impacts may include, but are not limited to, traffic, parking, circulation and safety issues, light and glare, noise, odors, dust control, and security concerns. Consistent with the purpose of the PIRO District, creation of a campus-like environment is encouraged and should be reflected in the site design and relationship between buildings. A variety in building size and massing shall be encouraged provided that architectural and spatial consistency can be maintained through the use of proportion, height, materials and design.
  - 5. Applicability to Entire Site.** Site plans must address the entire parcel whenever new development is proposed, be it an addition to an existing structure, development or redevelopment of a portion of a site, or development or redevelopment of the entire site. Site plans shall address the need for improvements throughout the site to assure that proposed construction will be in compliance with this Article.
- C. Building Design.** The design of buildings in the PIRO District shall meet the standards of Section 23.18 Architectural Standards and this Article, and shall be compatible with the natural and man-made surroundings, protect property values in the district, and blend harmoniously with the overall development of the district. All proposed development shall be subject to review by the Architectural Review Committee per Section 23.18 G. The Architectural Review Committee shall be responsible for reviewing for compliance with the requirements of this Section and Section 23.18.
- 1. Materials and Colors.** Building materials and colors shall relate well and be harmonious with other buildings planned or existing within the surrounding area. For multiple building developments, building design shall be coordinated throughout the project to support a campus-like character. Buildings shall provide architectural variety, but enhance the overall character of the district. Architectural features and details - such as, but not limited to archways, colonnades, towers, contrasting bases, contrasting masonry courses or bands of color, stone or accent features, cornices, cupolas, or peaked rooflines – are encouraged.
  - 2. Mass.** The mass and proportion of larger buildings shall be made to appear smaller by varying building lines and rooflines to provide a series of smaller scale sections.

3. **Entrance.** All buildings shall have at least one main public entrance. Main entrances to buildings shall incorporate devices such as canopies, roof overhangs, recessed entranceways, or other similar features to provide protection from the elements. Main entrances shall be clearly defined to public view.
4. **HVAC.** All roof top ventilation or mechanical equipment shall be completely shielded from view in all directions accessible by the public from the highest ground elevation within three hundred (300) feet of the structure.

**D. Building Length / Required Offsets.**

1. Any portion of a building face that exceeds 150 feet in width shall contain a setback or offset of at least five feet in the building face at a maximum distance of 100 feet between setbacks or offsets.
2. A vertical offset, or change in roofline, is encouraged in conjunction with any horizontal offset in order to create further interest and articulation of the facade.

**E. Utilities.** All utilities constructed within the site, including but not limited to: service lines, transmission lines, appurtenances and accessories, shall be placed underground. Any utility pad, where required to be placed above ground because of size, shall be fully screened by a masonry wall and further obscured by landscaping or may be fully enclosed in a dedicated building constructed consistent with these regulations. Utility meters shall also be located in screened areas.

**F. Access.**

1. **Road Access.** Access to any site, including required acceleration and deceleration lanes, shall meet the standards of MDOT or the Livingston County Road Commission (LCRC), as appropriate and satisfy the standards of Section 21.54 – Access Management, of this Zoning Ordinance. In those instances where the Planning Commission finds that the dimensions or configuration of a site and/or neighboring sites will result in an excessive number of ingress and egress points onto a public thoroughfare, the Planning Commission may limit such access points by requiring cross access between sites, marginal access (frontage) roads, service drives, and/or shared driveways to prevent vehicular congestion or other traffic impairment.
2. **Cross Access Agreement.** In the case where shared service roads, parking area connections, or similar cross access is required between adjacent lots, the owners of such lots shall submit to the Township Board a properly executed agreement, to be recorded and run with the land, describing that

the property owners are responsible for building, repairing, maintaining, and clearing the shared service roads and parking area connections. The agreement should also state that the service roads and parking areas will not impede vehicle flow but facilitate the safe and efficient movement of traffic.

3. **Pedestrian; Non-motorized Vehicular Circulation.** All developments shall provide sidewalks or other paved pedestrian and non-motorized vehicular circulation routes to the satisfaction of the Planning Commission.
- 4 **Paved Primary Road Access Required.** All sites shall have at least one property line abutting a paved, County primary road, or shall be a part of a larger development planned to provide access directly onto or from a paved, County primary road. See Section 2.01 DEFINITIONS, under the definition of STREET – PRIMARY ROAD for list of County primary roads in the Township.

**G. Service Areas.**

1. **Location.** Loading zones, on-site service drives, loading ramps, truck docks and wells, overhead doors, and similar access and service facilities shall be located at the side or rear of the building, shall be located entirely within the lot lines of the site, and physically separated from public streets.
2. **Screening.** Service areas shall be screened from view from common public areas, general parking areas, public or private roads, service drives, and adjacent land unless that land is similarly zoned and similarly situated. Screening shall comply with the requirements of Article 21A and shall, in the determination of the Planning Commission, be sufficient to effectively reduce the adverse effects of the proposed use, in particular, glare of headlights, lighting, noise, unsightly areas such as, but not limited to, loading zones, dumpsters, and unsightly views. Where necessary to effectively mitigate off site impacts of the use, the Planning Commission may require additional measures, such as greater setbacks, obscuring walls, berms, grade changes, and similar devices.

- H. Required Open Space.** Total open space within a PIRO development shall not be less than 20% of the total developable area. Such open space shall not include parking areas, loading spaces, access aisles, or required building setback areas consistent with the standards of Section 21.51. In addition to those features permitted as open space under Section 21.51 of this Ordinance, open space may include landscaping and buffer areas and green space (provided they exceed the minimums required by this Ordinance), active or passive recreation space, storm water basins which utilize best management practices to provide for an aesthetic site amenity at the discretion of the Planning Commission based upon review of the specific solution, developed outdoor spaces intended for the users

of the site, and other open spaces as recommended by the Planning Commission to be consistent with the intent of this Article.

Where a development site includes portions of the Open Space sub-area of the PIRO district as described in the Township Master Plan, the master planned Open Space land shall be included in the protected open space for that site in at least the percentage required above.

- I. **Wastewater Treatment.** All uses in the PIRO district shall be connected to a publicly owned and operated sanitary sewer. Wastewater disposal shall comply with all applicable federal, state, and local standards and regulations.
- J. **Landscaping.** Landscaping shall be provided for as required by Article 21A of this Ordinance, and in accordance with the specific requirements for the PIRO A, B and C sub-districts.
- K. **Site Plan.** Site plan approval shall be required in accordance with the requirements of Article 23. If the proposed use is identified as a special land use, special land use approval shall be required in accordance with the standards in Article 22.

#### **SECTION 16A.04 SUB-DISTRICT BOUNDARIES**

The PIRO-A (Research and Office), PIRO-B (Light Industry) and PIRO-C (General Industry) sub-district boundaries shall be as established on the Official Zoning Map. The PIRO sub-districts may be adopted or amended according to the Zoning Ordinance amendment procedures in Article 3. The permitted location of each sub-district and land uses shall be based on the Tyrone Township Future Land Use Map for the PIRO area. The boundaries of the sub-districts as illustrated on the Future Land Use Map are general, allowing for flexibility when rezoning to one or more of the PIRO sub-districts. When reviewing a potential rezoning, the Township shall consider the proposed location and range of uses that would be permitted in the context of the overall PIRO planned district, to ensure that the purpose and intent of these regulations will be maintained, including proper land transitions and protections from negative impacts and incompatible uses.

#### **SECTION 16A.05 PIRO-A (RESEARCH AND OFFICE) PERMITTED USES AND STRUCTURES**

- A. **Permitted Principal Uses.** The uses designated as Permitted Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-A (Research and Office) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 23.

- B. Special Land Uses.** The uses designated as Special Land Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-A (Research and Office) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 22.
- C. Permitted Accessory Uses.** Buildings, structures, and uses customarily accessory to any permitted principal uses shall be permitted as approved during site plan review, in accordance with Section 21.02.
- D. Prohibited Uses.** In the PIRO-A (Research and Office) sub-district, the following uses shall not be permitted:
1. Any use that provides a drive-through, drive-up, or pick-up window as either principal or accessory to the permitted or special land use, except as provided in Section 16A.02.E.
  2. Any uses which employs stamping in the manufacturing and assembly process of any product or material.
  3. Any use which involves manufacturing, processing and assembling from basic raw materials.
  4. Terminals, including truck, rail and bus.
  5. Retail sales, except as provided in Section 16A.02.E.
  6. Petroleum storage, sales, processing and production.
  7. Hazardous materials handling and similar related uses.
  8. The following uses or similar uses 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, lights, waste, noise or vibration shall be considered as not meeting the minimum standards of this Ordinance as to performance and potential negative impact on surrounding properties:
    - a. Processing of corrosive acid, cement, lime, gypsum or plaster.
    - b. Distillation of bone, 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. Processes using steam or board hammers or forging presses.

- g. Tanning, curing or storage of skins or hides.
- h. Processing sulfurous, sulfuric, nitric, picric, carbolic, hydrochloric or other corrosive acid.

**SECTION 16A.06 PIRO-A (RESEARCH AND OFFICE) DEVELOPMENT STANDARDS**

Buildings and uses in the PIRO-A (Research and Office) sub-district shall comply with the following requirements, in addition to all applicable requirements of the PIRO District and this Zoning Ordinance.

- A. Outdoor Storage.** Outdoor storage of goods, materials, inventory or equipment shall be prohibited.
- B. Outdoor Sales and Display.** Outside sales or display of goods, materials, inventory or equipment shall be prohibited.
- C. Pedestrian Circulation.** Sidewalks shall be provided along all public streets and major thoroughfares. Interior sidewalks shall be provided within the development to provide circulation on site and between developments.

- 1. Dimensions.** Interior sidewalks shall be a minimum four feet in width except where such walks directly abut a parking area. In cases where sidewalks abut a parking area, a minimum width required shall be seven feet. Sidewalks located along public streets shall be five feet in width.
- 2. Locations.** Pedestrian access to building entrances from public sidewalks and parking areas shall be provided. The pedestrian access routes shall be designed to separate pedestrian and vehicular traffic, and shall not detract from the design of the building and adjacent properties. Pedestrian linkages between adjacent uses shall be provided and emphasized.
- 3. Design.** Unintentional pedestrian routes, which provide unsafe "shortcuts" and tend to damage landscape areas, shall be discouraged by providing appropriately located pedestrian routes along with pedestrian friendly barriers such as decorative fencing, feature walls, or landscaping to protect inappropriate pedestrian routes.

Pedestrian access routes shall be buffered from the street, vehicular traffic, and parking areas through the use of green space and landscaping where possible. Pedestrian amenities such as benches, gazebos, and water features along pedestrian access routes are strongly encouraged.

- 4. Sidewalk Feasibility Determination.** In cases where sidewalk installation is found to be impractical or not feasible, the Planning Commission may



recommend and the Township Board may approve, waiver of sidewalk construction. In such cases, the Planning Commission shall review the site to determine the feasibility and practicality of the installation of the required sidewalk, considering the following features of the site and the surrounding area as well as planned future development:

- a. The existing grades where sidewalk would be required, especially referencing pertinent structures and proposed future development;
- b. The apparent and expected use by pedestrians;
- c. Site-specific features impacting the feasibility of the installation of a sidewalk;
- d. Future and/or expected utility, structure, or road installations, improvements or modifications;
- e. Any plan created by or utilized by the Township concerning the installation of sidewalks, walking paths, bike paths or other pedestrian resources in the area;
- f. Possibility of alternative installations, i.e. elevated boardwalks, bridges or pedestrian resources in the area; and
- g. Any other engineering consideration or environmental feature likely to impact the practicality and feasibility of the installation of sidewalks.

The Planning Commission shall determine and recommend to the Township Board, whether the installation of a sidewalk on any given site or parcel is practical or feasible based on the above factors. In making its recommendation, the Planning Commission may request and consider comments from the Township engineer, other consultants, experts, the public and agencies with jurisdiction.

Upon a determination that the installation of a sidewalk on a particular lot, unit or parcel is impractical or not feasible, a sum shall be paid, equivalent to the estimated cost of providing the otherwise-required sidewalk improvement. The estimated amount shall be paid by the applicant to the Township in lieu of the installation of the sidewalk.

**D. Landscaping.** In addition to the requirements of Article 21A, sites shall be subject to the following requirements:

- 1. Screening.** Where landscaping is required for proposed screening, the Planning Commission shall insure that the landscape plan meets the following objectives:

- a. The proposed plan effectively forms a complete visual and physical separation between the two unlike land uses.
  - b. The proposed plan forms a transition zone between the unlike uses, affords sufficient protection and is compatible with the character of the adjacent unlike, less intense area.
  - c. The proposed plan effectively reduces the adverse effects of the proposed use, in particular, glare of headlights, lighting from parking areas, noise, unsightly areas such as trash pickup points and contrasting views such as parking areas and access drives.
- 2. Buffer or green area.** When the landscape treatment is required as a buffer or green area, the Planning Commission shall insure that the plan proposed meets the following objectives:
- a. The proposed plan breaks up the area and the proposed plan material creates a partial visual separation.
  - b. The proposed plan forms a transition zone which helps break up the visual pattern of paving areas.
  - c. The proposed plan, through the use of plant material, creates a ground and overhead area which consists of plant material which is more compatible with the general character of the Township and the residential districts in the Township.
- 3. Setbacks.** All setback areas shall be landscaped with lawn, trees, shrubs and/or other plantings and may include reflecting pools, retaining walls and other landscape construction harmonious with the overall landscape scheme. The use of grade changes to enhance screening or landscape interest shall be encouraged.
- 4. Foundation plantings.** All buildings within the PIRO-A (Research and Office) sub-district shall provide foundation plantings around the perimeter of the building.
- 5. Right-of-way planting.** Street trees shall be installed parallel, adjacent to, and outside of the right-of-way of any shared access drives and roads, internal or public, at a maximum interval of 1 deciduous shade tree, minimum 2 ½ inches in caliper, per each 40 linear feet of roadway frontage. In cases where shared drives are proposed as private, the requirement for street trees shall be required at the same interval.
- 6. Exceptions.** The Planning Commission may approve alternatives to the above landscape standards as it deems necessary to accommodate

peculiar circumstances, unforeseen problems to protect the natural vegetation or to achieve the intent of this article.

- E. Pavement Required.** Parking lots, driveways and service roads shall be surfaced with concrete or bituminous materials as specified by the Township Engineer.
- F. Minimum Lot Area.** The minimum lot area in the PIRO-A (Research and Office) sub-district shall be three acres. The Planning Commission may recommend, and the Township Board may approve a lot area smaller than three acres, if such smaller lot is part of an overall development plan that meets the intent of the PIRO-A (Research and Office) sub-district.
- G. Maximum Building Coverage.** The percentage of the lot area covered by buildings shall not exceed 40% of the total lot area.

**SECTION 16A.07 PIRO-B (LIGHT INDUSTRY) PERMITTED USES AND STRUCTURES**

- A. Permitted Principal Uses.** The uses designated as Permitted Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-B (Light Industry) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 23.
- B. Special Land Uses.** The uses designated as Special Land Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-B (Light Industry) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 22.
- C. Permitted Accessory Uses.** Buildings, structures, and uses customarily accessory to any permitted principal uses shall be permitted as approved during site plan review, in accordance with Section 21.02.
- D. Prohibited Uses.** In the PIRO-B (Light Industry) sub-district, the following uses shall not be permitted:
  - 1. Any use that provides a drive-through, drive-up, or pick-up window as either principal or accessory to the permitted or special land use, except as provided Section 16A.02.E.
  - 2. Any uses which employs stamping in the manufacturing and assembly process of any product or material.
  - 3. Any use which involves manufacturing, processing and assembling from basic raw materials.
  - 4. Terminals, including truck, rail and bus.

5. Retail sales, except as provided in Section 16A.02.E.
6. Hazardous materials handling and similar related uses.
7. The following uses or similar uses 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, lights, waste, noise or vibration shall be considered as not meeting the minimum standards of this Ordinance as to performance and potential negative impact on surrounding properties:
  - a. Processing of corrosive acid, cement, lime, gypsum or plaster.
  - b. Distillation of bone, 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. Processes using steam or board hammers or forging presses.
  - g. Tanning, curing or storage of skins or hides.
  - h. Processing sulfurous, sulfuric, nitric, picric, carboic, hydrochloric or other corrosive acid.

**SECTION 16A.08 PIRO-B (LIGHT INDUSTRY) DEVELOPMENT STANDARDS**

- A. **Outdoor Storage.** Outdoor storage of goods, inventory, materials, or equipment shall be prohibited within the PIRO-B (Light Industry) sub-district unless specifically approved through special land use approval and site plan approval.
  1. **Screening.** All outdoor storage shall be screened from view, using an opaque fence or decorative masonry wall, dense evergreen buffer or other method satisfactory to the Township. All such screening shall be a minimum of six (6) feet tall, but may be required to be higher where the surrounding terrain, including roadways, would allow for off-site view of the storage area.
  2. **Location.** Outdoor storage shall not be permitted in any required setback area and must be located behind the front building line.
  3. **Service or repair facilities.** All service and repair facilities shall be contained within an enclosed building except for the storage of repaired and wrecked cars. All areas used to store repaired or wrecked vehicles shall be located behind the building and screened from view off site.

4. **Separate approval for outdoor sales or display.** Approval of outdoor storage does not constitute approval of outdoor sales or display; see Sections 12A.03.H and 12A.04.F.
- B. Outdoor Sales and Display.** Outside sales or display of goods, inventory, materials, or equipment shall be prohibited within the PIRO-B (Light Industry) sub-district unless specifically approved through special land use approval and site plan approval.
1. **Location.** No outdoor sales or display shall be permitted in required setback areas for a principal building.
  2. **Building on site.** Outdoor sales or display shall be permitted only if there is a building on the site that houses the principal use.
  3. **Prohibited sales or display.** Outdoor sales or display of lumber, building materials, loose products such as soil, block, rocks, mulch and similar items, junk, used or wrecked vehicle or parts shall not be permitted. There shall be no outdoor display in conjunction with vehicle servicing and collision repair establishments.
  4. **Display surface.** All outdoor sales or display areas shall be surfaced with asphalt or concrete or other similar dust-proof surface.
  5. **Buffering.** Where an outdoor display area abuts a street, landscaping shall be provided so as to buffer and breakup the appearance of the outdoor display without circumventing the total view of the product, as determined by the Planning Commission.
- C. Landscaping.** In addition to the requirements of Article 21A, sites shall be subject to the following requirements:
1. **Screening.** Where landscaping is required for proposed screening, the Planning Commission shall insure that the landscape plan meets the following objectives:
    - a. The proposed plan effectively forms a complete visual and physical separation between the two unlike land uses.
    - b. The proposed plan forms a transition zone between the unlike uses, affords sufficient protection and is compatible with the character of the adjacent unlike, less intense area.
    - c. The proposed plan effectively reduces the adverse effects of the proposed use, in particular, glare of headlights, lighting from parking areas, noise, unsightly areas such as trash pickup points and contrasting views such as parking areas and access drives.

2. **Buffer or green area.** When the landscape treatment is required as a buffer or green area, the Planning Commission shall insure that the plan proposed meets the following objectives:
    - a. The proposed plan breaks up the area and the proposed plan material creates a partial visual separation.
    - b. The proposed plan forms a transition zone which helps break up the visual pattern of paving areas.
    - c. The proposed plan, through the use of plant material, creates a ground and overhead area which consists of plant material which is more compatible with the general character of the Township and the residential districts in the Township.
  3. **Setbacks.** All setback areas shall be landscaped with lawn, trees, shrubs and/or other plantings and may include reflecting pools, retaining walls and other landscape construction harmonious with the overall landscape scheme. The use of grade changes to enhance screening or landscape interest shall be encouraged.
  4. **Foundation plantings.** All buildings within the PIRO-B (Light Industry) sub-district shall provide foundation plantings around the perimeter of the building.
  5. **Right-of-way planting.** Street trees shall be installed parallel, adjacent to and outside of the right-of-way of any shared access drives and roads, internal or public, at a maximum interval of 1 deciduous shade tree, minimum 2 ½ inches in caliper, per each 40 linear feet of roadway frontage. In cases where shared drives are proposed as private, the requirement for street trees shall be required at the same interval.
  6. **Exceptions.** The Planning Commission may approve alternatives to the above landscape standards as it deems necessary to accommodate peculiar circumstances, unforeseen problems to protect the natural vegetation or to achieve the intent of this article.
- D. **Minimum Lot Area.** The minimum lot area in the PIRO-B (Light Industry) sub-district shall be three acres. If the site is part of a larger subdivision or condominium development, with road access from other than a County primary road, the minimum lot area shall be one acre.
- E. **Maximum Building Coverage.** The percentage of the lot area covered by buildings shall not exceed 40% of the total lot area.

**SECTION 16A.09 PIRO-C (GENERAL INDUSTRY) PERMITTED USES AND STRUCTURES**

- A. Permitted Principal Uses.** The uses designated as Permitted Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-C (General Industry) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 23.
- B. Special Land Uses.** The uses designated as Special Land Uses in Section 16A.02.E, Table of Permitted and Special Land Uses for the PIRO-C (General Industry) sub-district shall be permitted subject to review and approval of the Planning Commission in accordance with the standards and procedures of Article 22.
- C. Permitted Accessory Uses.** Buildings, structures, and uses customarily accessory to any permitted principal uses shall be permitted as approved during site plan review, in accordance with Section 21.02.
- D. Prohibited Uses.** In the PIRO-C (General Industry) sub-district, the following uses shall not be permitted:
1. Any use that provides a drive-through, drive-up, or pick-up window as either principal or accessory to the permitted or special land use, except as provided in Section 16A.02.E.
  2. Retail sales, except as provided in Section 16A.02.E.
  3. Hazardous materials handling and similar related uses.
  4. The following uses or similar uses 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, lights, waste, noise or vibration shall be considered as not meeting the minimum standards of this Ordinance as to performance and potential negative impact on surrounding properties:
    - a. Processing of corrosive acid, cement, lime, gypsum or plaster.
    - b. Distillation of bone, 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. Processes using steam or board hammers or forging presses.
    - g. Tanning, curing or storage of skins or hides.

- h. Processing sulfurous, sulfuric, nitric, picric, carbolic, hydrochloric or other corrosive acid.

**SECTION 16A.10 PIRO-C (GENERAL INDUSTRY) DEVELOPMENT STANDARDS**

**A. Outdoor Storage.** Outdoor storage of goods, inventory, materials, or equipment may be permitted within the PIRO-C (General Industry) sub-district subject to special land use and/or site plan review and approval, as required by Section 16A.02.E for the principal use.

1. **Screening.** All outdoor storage shall be screened from view, using an opaque fence or decorative masonry wall, dense evergreen buffer or other method satisfactory to the Township. All such screening shall be a minimum of six (6) feet tall, but may be required to be higher where the surrounding terrain, including roadways, would allow for off-site view of the storage area.
2. **Location.** Outdoor storage shall not be permitted in any required setback area and must be located behind the front building line.
3. **Loose materials.** The storage of any soil, fertilizer, or other loose, unpackaged materials shall be contained so as to prevent any affects on adjacent uses.
4. **Service or repair facilities.** All service and repair facilities shall be contained within an enclosed building except for the storage of repaired and wrecked cars. All areas used to store repaired or wrecked vehicles shall be located behind the building and screened from view off site.
5. **Separate approval for outdoor sales or display.** Approval of outdoor storage does not constitute approval of outdoor sales or display; see Sections 12A.03.H and 12A.04.F.

**B. Outdoor Sales and Display.** Outside sales or display of goods, inventory, materials, or equipment may be permitted within the PIRO-C (General Industry) sub-district subject to special land use and/or site plan review and approval, as required by Section 16A.02.E for the principal use.

1. **Location.** No outdoor sales or display shall be permitted in required setback areas for a principal building.
2. **Building on site.** Outdoor sales or display shall be permitted only if there is a building on the site that houses the principal use.
3. **Prohibited sales or display.** Outdoor display of junk, used or wrecked vehicle or parts shall not be permitted. There shall be no outdoor display in conjunction with vehicle servicing and collision repair establishments.



- 4. Display surface.** All outdoor sales or display areas shall be surfaced with asphalt or concrete or other similar dust-proof surface.
- 5. Buffering.** Where an outdoor display area abuts a street, landscaping shall be provided so as to buffer and breakup the appearance of the outdoor display without circumventing the total view of the product, as determined by the Planning Commission.
- C. Setbacks.** In order to reduce the off-site impacts of General Industry uses within the PIRO District, including but not limited to outdoor storage, truck staging and loading areas, outdoor operations, noise, dust, fumes, lights, hours of operation and others, the Planning Commission may modify the setback requirements of this Ordinance.
- D. Minimum Lot Area.** The minimum lot area in the PIRO-C (General Industry) sub-district shall be three acres. If the site is part of a larger subdivision or condominium development, with road access from other than a County primary road, the minimum lot area shall be one acre.
- E. Maximum Building Coverage.** The percentage of the lot area covered by buildings shall not exceed 40% of the total lot area.

REVISIONS:

- 2013 JANUARY – Added PIRO District, creating new Article 16A.
- 2013 OCTOBER – Section 16A.02.E, added Medical Marijuana to summary table.
- 2014 SEPTEMBER – Revised sewer connection requirements (Section 16A.03.I).
- 2015 JANUARY - Amended the permitted and special uses in this district.
- 2019 JULY – Section 16A.02 to include Utility-scale Solar Energy Facilities.